# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# Program Outcomes (POs) and Course Outcomes (COs)

G T Road, near Putli Ghar, Amritsar, Punjab, 143002

Phone:0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# FACULTY OF HUMANITIES

# Program Outcomes (POs) and

## **Course Outcomes (COs)**

G T Road, near Putli Ghar, Amritsar, Punjab, 143002

Phone: 0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

Name of Program: BA (Punjabi)

ਕੋਰਸ ਦਾ ਨਾਮ: ਚੋਣਵੀਂ ਪੰਜਾਬੀ

ਕਲਾਸ: ਬੀ. ਏ. ਸਮੈਸਟਰ: ਪਹਿਲਾ

ਕੋਰਸ ਦਾ ਉਦੇਸ਼ : ਸੁਖਨ ਦੇ ਸੂਰਜ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ – ਸੰਗ੍ਰਹਿ ਵਿਚ ਸ਼ਾਮਿਲ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ। ਉਨ੍ਹਾਂ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਬਾਰੇ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰਨੀ। ਨਾਵਲ 'ਸਿਮਟਦਾ ਆਕਾਸ਼' ਦੇ ਵਿਸ਼ੈ ਅਤੇ ਪਾਤਰਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ। ਭਾਰਤੀ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਦੀਆਂ ਵਿਭਿੰਨ ਸੰਪਰਦਾਵਾਂ ਧੁਨੀ ਸੰਪਰਦਾ , ਰਸ ਸੰਪਰਦਾ ਆਦਿ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ।

#### Course Outcomes

#### ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਦੀਆਂ ਸੰਭਾਵਨਾਵਾਂ:

ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਵਿਚ ਪੰਜਾਬੀ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਨਗੇ। ਵਿਦਿਆਰਥੀ ਸਲੇਬਸ ਤੋਂ ਇਲਾਵਾ ਉਨ੍ਹਾਂ ਦੇ ਰਚਨਾ – ਸੰਸਾਰ ਬਾਰੇ ਜਾਣ ਸਕਣਗੇ।ਨਾਵਲ 'ਸਿਮਟਦਾ ਆਕਾਸ਼' ਪੜ੍ਹਣ ਨਾਲ ਸਮਾਜ ਵਿਚ ਨਸ਼ੇ ਵਰਗੀ ਅਲਾਮਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਅਤੇ ਜਾਗਰੂਕਤਾ ਵਧੇਗੀ।

#### ਬੌਧਿਕ ਹੁਨਰ :

ਵਿਦਿਆਰਥੀ ਕਵੀਆਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਪ੍ਰਤੀ ਸੰਵੇਦਨਸ਼ੀਲਤਾ ਅਤੇ ਮਾਨਵੀ ਗੁਣਾਂ ਨਾਲ ਲਬਰੇਜ਼ ਹੋਣਗੇ। ਨਾਵਲ ਵਿਚ ਨਸ਼ਿਆਂ ਬਾਰੇ ਪੜ੍ਹ ਕੇ ਇਸ ਦੇ ਦੂਰਗਾਮੀ ਨਤੀਜਿਆਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਹੋਣਗੇ ਅਤੇ ਆਪਣੇ ਆਸ-ਪਾਸ ਵੀ ਸਭ ਨੂੰ ਇਸ ਅਲਾਮਤ ਤੋਂ ਦੂਰ ਰਹਿਣ ਲਈ ਪ੍ਰੇਰਿਤ ਕਰਨਗੇ।

#### ਅਮਲੀ ਹੁਨਰ :

ਕਵੀਆਂ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਕੋਲੋਂ ਪੜ੍ਹਾਇਆ ਜਾਏਗਾ ਅਤੇ ਕਵਿਤਾ ਵਿਚਲੀ ਲੈਅ ਅਤੇ ਅਣਦਿਸਦੇ ਵਿਸਰਾਮ ਚਿੰਨ੍ਹਾਂ ਦੀ ਮਹੱਤਤਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ । ਨਾਵਲ ਦੇ ਪਾਤਰਾਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਵੰਡ ਕੇ ਪੜ੍ਹਾਇਆ ਜਾਵੇਗਾ ਤਾਂ ਜੋ ਉਹ ਨਾਵਲੀ ਪਾਠ ਵਿਚਲੇ ਯਥਾਰਥ ਨੂੰ ਸਮਝ ਸਕਣ ।

#### ਵਿਸ਼ੇ ਨੂੰ ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ :

ਸਮਾਜ ਵਿਚ ਨਸ਼ੇ ਨੂੰ ਰੋਕਣ ਲਈ ਨੌਜਵਾਨ ਪੀੜ੍ਹੀ ਨੂੰ ਪ੍ਰਭਾਵੀ ਭੂਮਿਕਾ ਨਿਭਾਉਣ ਲਈ ਲਾਮਬੱਧ ਕੀਤਾ ਜਾਵੇਗਾ । ਕਵਿਤਾਵਾਂ ਵਿਚਲੇ ਵਿਭਿੰਨ ਵਿਸ਼ਿਆਂ ਬਾਰੇਸੋਚਣ ਅਤੇ ਅਮਲ ਕਰਨ ਲਈ ਯਤਨ ਕੀਤੇ ਜਾਣਗੇ ।

ਕਲਾਸ : ਬੀ. ਏ. ਸਮੈਸਟਰ : ਦੂਜਾ

ਕੋਰਸ ਦਾ ਉਦੇਸ਼ :

ਇਸ ਕੋਰਸ ਦਾ ਉਦੇਸ਼ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਸਾਹਿਤ ਸੰਬੰਧੀ ਗਿਆਨ ਦੇਣਾ ਹੈ । ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸਕ ਪਰਿਪੇਖ ਦੀ ਗੱਲ ਕਰਦਿਆਂ ਵਿਭਿੰਨ ਸਾਹਿਤਿਕ ਵਿਧਾਵਾਂ ਨਾਲ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜੋੜਨਾ । ਪੰਜਾਬੀ ਕੋਸ਼ਕਾਰੀ ਅਤੇ ਵਿਆਕਰਣ ਨੂੰ ਪਰਿਭਾਸ਼ਤ ਸ਼ਬਦਾਂ ਦੇ ਅਰਥਾਂ ਤੇ ਭਾਸ਼ਾ ਦੇ ਨੇਮਾਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਉਣਾ । ਪੰਜਾਬੀ ਸਾਹਿਤ ਬਾਰੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਜਾਗਰੂਕ ਕਰਨਾ ।

ਇਸ ਪ੍ਰੋਗਰਾਮ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ :

- 1. ਇਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਸਮਝਣ ਦੇ ਸਮਰਥ ਹੋਣਗੇ।
- 2. ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਦਾ ਅਧਿਐਨ ਤੇ ਵਿਸ਼ਲੇਸ਼ਣ ਕਰਨ ਦੇ ਯੋਗ ਹੋਣਗੇ ।
- 'ਮੰਚ ਘਰ' ਪੁਸਤਕ ਨੂੰ ਪੜ੍ਹਦਿਆਂ ਵਿਦਿਆਰਥੀ ਰੰਗ-ਮੰਚ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰਦੇ ਹੋਏ ਆਪਣੇ ਅੰਦਰ ਕਲਾਕਾਰੀ ਹੁਨਰ ਨੂੰ ਜਾਣ ਸਕਣਗੇ ।
- ਅਜੋਕੇ ਸਮੇਂ ਵਿਚ ਕੋਸ਼ ਦਾ ਮਹੱਤਵ ਬਹੁਤ ਜ਼ਿਆਦਾ ਹੈ , ਵਿਦਿਆਰਥੀ ਇਸ ਦੀ ਕਾਰਜਾਤਮਕਤਾ ਅਤੇ ਪ੍ਰਸੰਗਿਕਤਾ ਨੂੰ ਸਮਝਦੇ ਹੋਏ ਸ਼ਬਦਾਂ ਸੰਬੰਧੀ ਵਿਸਤ੍ਰਿਥ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰ ਸਕਣਗੇ।

ਕਲਾਸ: ਬੀ. ਏ. ਸਮੈਸਟਰ: ਤੀਜਾ

ਕੋਰਸ ਦਾ ਉਦੇਸ਼ : ਸੁਖਨ ਦੇ ਸੂਰਜ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ – ਸੰਗ੍ਰਹਿ ਵਿਚ ਸ਼ਾਮਿਲ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ । ਉਨ੍ਹਾਂ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਬਾਰੇ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰਨੀ । ਨਾਵਲ 'ਸਿਮਟਦਾ ਆਕਾਸ਼' ਦੇ ਵਿਸ਼ੈ ਅਤੇ ਪਾਤਰਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ । ਭਾਰਤੀ ਕਾਵਿ-ਸ਼ਾਸਤਰ ਦੀਆਂ ਵਿਭਿੰਨ ਸੰਪਰਦਾਵਾਂ ਧੁਨੀ ਸੰਪਰਦਾ , ਰਸ ਸੰਪਰਦਾ ਆਦਿ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦੇਣਾ ।

#### Course Outcomes

#### ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਦੀਆਂ ਸੰਭਾਵਨਾਵਾਂ:

ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਵਿਚ ਪੰਜਾਬੀ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਨਗੇ। ਵਿਦਿਆਰਥੀ ਸਲੇਬਸ ਤੋਂ ਇਲਾਵਾ ਉਨ੍ਹਾਂ ਦੇ ਰਚਨਾ – ਸੰਸਾਰ ਬਾਰੇ ਜਾਣ ਸਕਣਗੇ ।ਨਾਵਲ 'ਸਿਮਟਦਾ ਆਕਾਸ਼' ਪੜ੍ਹਣ ਨਾਲ ਸਮਾਜ ਵਿਚ ਨਸ਼ੇ ਵਰਗੀ ਅਲਾਮਤ ਬਾਰੇ ਜਾਣਕਾਰੀ ਅਤੇ ਜਾਗਰੂਕਤਾ ਵਧੇਗੀ ।

#### ਬੌਧਿਕ ਹੁਨਰ:

ਵਿਦਿਆਰਥੀ ਕਵੀਆਂ ਦੀਆਂ ਰਚਨਾਵਾਂ ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਪ੍ਰਤੀ ਸੰਵੇਦਨਸ਼ੀਲਤਾ ਅਤੇ ਮਾਨਵੀ ਗੁਣਾਂ ਨਾਲ ਲਬਰੇਜ਼ ਹੋਣਗੇ। ਨਾਵਲ ਵਿਚ ਨਸ਼ਿਆਂ ਬਾਰੇ ਪੜ੍ਹ ਕੇ ਇਸ ਦੇ ਦੂਰਗਾਮੀ ਨਤੀਜਿਆਂ ਪ੍ਰਤੀ ਸੁਚੇਤ ਹੋਣਗੇ ਅਤੇ ਆਪਣੇ ਆਸ-ਪਾਸ ਵੀ ਸਭ ਨੂੰ ਇਸ ਅਲਾਮਤ ਤੋਂ ਦੂਰ ਰਹਿਣ ਲਈ ਪ੍ਰੇਰਿਤ ਕਰਨਗੇ।

#### ਅਮਲੀ ਹੁਨਰ:

ਕਵੀਆਂ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਕੋਲੋਂ ਪੜ੍ਹਾਇਆ ਜਾਏਗਾ ਅਤੇ ਕਵਿਤਾ ਵਿਚਲੀ ਲੈਅ ਅਤੇ ਅਣਦਿਸਦੇ ਵਿਸਰਾਮ ਚਿੰਨ੍ਹਾਂ ਦੀ ਮਹੱਤਤਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ । ਨਾਵਲ ਦੇ ਪਾਤਰਾਂ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਵੰਡ ਕੇ ਪੜ੍ਹਾਇਆ ਜਾਵੇਗਾ ਤਾਂ ਜੋ ਉਹ ਨਾਵਲੀ ਪਾਠ ਵਿਚਲੇ ਯਥਾਰਥ ਨੂੰ ਸਮਝ ਸਕਣ ।

#### ਵਿਸ਼ੇ ਨੂੰ ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ :

ਸਮਾਜ ਵਿਚ ਨਸ਼ੇ ਨੂੰ ਰੋਕਣ ਲਈ ਨੌਜਵਾਨ ਪੀੜ੍ਹੀ ਨੂੰ ਪ੍ਰਭਾਵੀ ਭੂਮਿਕਾ ਨਿਭਾਉਣ ਲਈ ਲਾਮਬੱਧ ਕੀਤਾ ਜਾਵੇਗਾ । ਕਵਿਤਾਵਾਂ ਵਿਚਲੇ ਵਿਭਿੰਨ ਵਿਸ਼ਿਆਂ ਬਾਰੇਸੋਚਣ ਅਤੇ ਅਮਲ ਕਰਨ ਲਈ ਯਤਨ ਕੀਤੇ ਜਾਣਗੇ ।

ਕਲਾਸ : ਬੀ. ਏ. ਸਮੈਸਟਰ : ਚੌਥਾ

#### ਕੋਰਸ ਦਾ ਉਦੇਸ਼ :

ਵਿਦਿਆਰਥੀ ਵਿਚ ਸਾਹਿਤ ਪੜ੍ਹਨ ਦੀ ਰੁਚੀ ਪੈਦਾ ਕੀਤੀ ਜਾਵੇਗੀ । ਬੌਧਿਕ ਪੱਧਰ ਤੇ ਵਿਕਾਸ ਕੀਤਾ ਜਾਵੇਗਾ । ਆਲੋਚਨਾਤਮਕ ਰੁਚੀਆਂ ਪੈਦਾ ਕੀਤੀਆਂ ਜਾਣਗੀਆਂ । ਵਿਦਿਆਰਥੀ ਨੂੰ ਆਪਣੀ ਮਾਂ ਬੋਲੀ ਵਿਚ ਸੰਚਾਰ ਕਰਨ ਲਈ ਪ੍ਰੇਰਿਤ ਕੀਤਾ ਜਾਵੇਗਾ ।

#### Course Outcomes

#### ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਦੀਆਂ ਸੰਭਾਵਨਾਵਾਂ :

ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਬਾਰੇ ਜਾਣ ਸਕਣਗੇ । ਵਿਦਿਆਰਥੀ ਸਲੇਬਸ ਤੋਂ ਇਲਾਵਾ ਹੋਰ ਸਾਹਿਤਕਾਰਾਂ ਬਾਰੇ ਵਿ ਜਾਣ ਸਕਣਗੇ ।

#### ਬੌਧਿਕ ਹੁਨਰ :

ਸਾਹਿਤ ਵਿਚ ਸਮਾਜ ਦੀ ਪੇਸ਼ਕਾਰੀ ਹੋਣ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਪ੍ਰਤੀ ਸੰਵੇਦਨਸ਼ੀਲ ਹੋਣਗੇ ।

#### ਅਮਲੀ ਹੁਨਰ:

ਸ਼ਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਕੋਲੋਂ ਪੜ੍ਹਾਇਆ ਜਾਵੇਗਾ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ।

#### ਵਿਸ਼ੇ ਨੂੰ ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ :

ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਜਾਣੂੰ ਹੁੰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਵਿਚਲੇ ਵਿਸ਼ਿਆਂ ਬਾਰੇ ਸੋਚਣ ਤੇ ਅਮਲ ਕਰਨ ਦੇ ਉਪਰਾਲੇ ਕੀਤੇ ਜਾਣਗੇ ।

ਕਲਾਸ : ਬੀ. ਏ. ਸਮੈਸਟਰ : ਚੌਥਾ

#### ਕੋਰਸ ਦਾ ਉਦੇਸ਼ :

ਵਿਦਿਆਰਥੀ ਵਿਚ ਸਾਹਿਤ ਪੜ੍ਹਨ ਦੀ ਰੁਚੀ ਪੈਦਾ ਕੀਤੀ ਜਾਵੇਗੀ । ਬੌਧਿਕ ਪੱਧਰ ਤੇ ਵਿਕਾਸ ਕੀਤਾ ਜਾਵੇਗਾ । ਆਲੋਚਨਾਤਮਕ ਰੁਚੀਆਂ ਪੈਦਾ ਕੀਤੀਆਂ ਜਾਣਗੀਆਂ । ਵਿਦਿਆਰਥੀ ਨੂੰ ਆਪਣੀ ਮਾਂ ਬੋਲੀ ਵਿਚ ਸੰਚਾਰ ਕਰਨ ਲਈ ਪ੍ਰੇਰਿਤ ਕੀਤਾ ਜਾਵੇਗਾ ।

#### Course Outcomes

#### ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਦੀਆਂ ਸੰਭਾਵਨਾਵਾਂ :

ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਬਾਰੇ ਜਾਣ ਸਕਣਗੇ । ਵਿਦਿਆਰਥੀ ਸਲੇਬਸ ਤੋਂ ਇਲਾਵਾ ਹੋਰ ਸਾਹਿਤਕਾਰਾਂ ਬਾਰੇ ਵਿ ਜਾਣ ਸਕਣਗੇ ।

#### व्यपिव गुठव :

ਸਾਹਿਤ ਵਿਚ ਸਮਾਜ ਦੀ ਪੇਸ਼ਕਾਰੀ ਹੋਣ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਪ੍ਰਤੀ ਸੰਵੇਦਨਸ਼ੀਲ ਹੋਣਗੇ ।

#### ਅਮਲੀ ਹੁਨਰ:

ਸ਼ਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਕੋਲੋਂ ਪੜ੍ਹਾਇਆ ਜਾਵੇਗਾ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ।

#### ਵਿਸ਼ੇ ਨੂੰ ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ :

ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਜਾਣੂੰ ਹੁੰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਵਿਚਲੇ ਵਿਸ਼ਿਆਂ ਬਾਰੇ ਸੋਚਣ ਤੇ ਅਮਲ ਕਰਨ ਦੇ ਉਪਰਾਲੇ ਕੀਤੇ ਜਾਣਗੇ ।

ਕਲਾਸ : ਬੀ. ਏ. ਸਮੈਸਟਰ : ਪੰਜਵਾਂ

#### ਕੋਰਸ ਦਾ ਉਦੇਸ਼ :

ਇਸ ਕੋਰਸ ਦਾ ਉਦੇਸ਼ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਕਾਵਿ ਸੰਗ੍ਰਹਿ (1700 ਈ. ਤੱਕ) ਪੁਸਤਕ ਵਿਚ ਦਰਜ ਕਵਿਤਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਸੰਬੰਧੀ ਭਰਪੂਰ ਜਾਣਕਾਰੀ ਪ੍ਰਦਾਨ ਕਰਨਾ ਹੈ। ਸਲੇਬਸ ਵਿਚ ਸ਼ਾਮਲ ਵਾਰਤਕ ਪੁਸਤਕ 'ਜ਼ਿੰਦਗੀ ਦੀ ਰਾਸ' ਵਿਚ ਦਰਜ ਲੇਖਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਲੇਖਕ ਦੀ ਵਿਚਾਰਧਾਰਾ ਬਾਰੇ ਚਰਚਾ ਕਰਨੀ ਹੈ।ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਨਾਟਕ ਦੀ ਵਿਧਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਪਾਲੀ ਭੁਪਿੰਦਰ ਦੁਆਰਾ ਰਚਿਤ ਨਾਟਕ 'ਚੰਦਨ ਦੇ ਓਹਲੇ' ਬਾਰੇ ਨਿਠ ਕੇ ਚਰਚਾ ਕਰਨੀ ਹੈ।

#### Course Outcomes:

#### ਇਸ ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ :

ਇਸ ਕੋਰਸ ਨਾਲ ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਕਵਿਤਾ (1700 ਈ. ਤੱਕ) ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਹਾਸਿਲ ਕਰ ਸਕਣਗੇ ।ਵਾਰਤਕ ਦੀ ਵਿਧਾ ਨੂੰ ਸਮਝਣ ਦੀ ਸਮਰਥਾ ਵਿਚ ਵਾਧਾ ਹੋਵੇਗਾ । ਨਾਟਕ 'ਚੰਦਨ ਦੇ ਓਹਲੇ' ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਵਿਚ ਦਰਪੇਸ਼ ਸਮੱਸਿਆਵਾਂ ਬਾਰੇ ਜਾਗਰੂਕ ਹੋ ਸਕਣਗੇ।

#### ਬੌਧਿਕ ਹੁਨਰ :

ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਰੂਪ ਕਵਿਤਾ(1700 ਈ. ਤੱਕ) ਨੂੰ ਸਮਝਣ ਦੇ ਯੋਗ ਹੋਣਗੇ। ਵਾਰਤਕ ਪੁਸਤਕ 'ਜ਼ਿੰਦਗੀ ਦੀ ਰਾਸ' ਅਤੇ ਨਾਟਕ 'ਚੰਦਨ ਦੇ ਓਹਲੇ' ਨੂੰ ਪੜ੍ਹ ਕੇ ਇਨ੍ਹਾਂ ਪੁਸਤਕਾਂ ਵਿਚਲੇ ਥੀਮਿਕ ਪਾਸਾਰਾਂ ਨੂੰ ਸਮਝਣ ਅਤੇ ਅਧਿਐਨ ਕਰਨ ਦੇ ਯੋਗ ਹੋਣਗੇ।

#### ਅਮਲੀ ਹੁਨਰ :

ਸਲੇਬਸ ਵਿਚ ਦਰਜ ਕਵਿਤਾਵਾਂ, ਵਾਰਤਕ ੳਤੇ ਨਾਟਕ ਨੂੰ ਲੈਕਚਰ ਅਤੇ ਵਿਚਾਰ ਚਰਚਾ ਨਾਲ ਸਮਝਾਇਆ ਜਾਵੇਗਾ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਲੇਬਸ ਸੰਬੰਧੀ ਵਿਸ਼ਿਆਂ ਤੇ ਲਿਖਤ ਕਾਰਜ ਦਿੱਤਾ ਜਾਵੇਗਾ। ਸਮੂਹਿਕ ਵਿਚਾਰ ਵਟਾਂਦਰੇ ਦੀ ਤਕਨੀਕ ਨੂੰ ਅਪਣਾਉਂਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਸਾਹਿਤ ਅਧਿਐਨ ਦੀ ਰੁਚੀ ਵਿਕਸਤ ਕੀਤੀ ਜਾਵੇਗੀ।

#### ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ:

ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਰੂਪ ਕਵਿਤਾ (1700 ਈ. ਤੱਕ) , ਵਾਰਤਕ(ਜ਼ਿੰਦਗੀ ਦੀ ਰਾਸ) ਅਤੇ ਨਾਟਕ (ਚੰਦਨ ਦੇ ਓਹਲੇ) ਨੂੰ ਸਮਝਣ ਅਤੇ ਅਧਿਐਨ ਕਰਨ ਦੇ ਯੋਗ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀਆਂ ਵਿਚ ਸਾਹਿਤ ਪੜ੍ਹਨ ਅਤੇ ਅਧਿਐਨ ਕਰਨ ਦੀ ਯੋਗਤਾ ਵਿਚ ਵਾਧਾ ਹੋਵੇਗਾ ਅਤੇ ਖੋਜ ਮੁਲਕ ਪਹੁੰਚ ਵਿਧੀ ਦੇ ਧਾਰਣੀ ਬਣਨਗੇ ।

ਕਲਾਸ : ਬੀ. ਏ. ਸਮੈਸਟਰ : ਛੇਵਾਂ

#### ਕੋਰਸ ਦਾ ਉਦੇਸ਼ :

ਵਿਦਿਆਰਥੀ ਵਿਚ ਸਾਹਿਤ ਪੜ੍ਹਨ ਦੀ ਰੁਚੀ ਪੈਦਾ ਕੀਤੀ ਜਾਵੇਗੀ । ਬੌਧਿਕ ਪੱਧਰ ਤੇ ਵਿਕਾਸ ਕੀਤਾ ਜਾਵੇਗਾ । ਆਲੋਚਨਾਤਮਕ ਰੁਚੀਆਂ ਪੈਦਾ ਕੀਤੀਆਂ ਜਾਣਗੀਆਂ । ਵਿਦਿਆਰਥੀ ਨੂੰ ਆਪਣੀ ਮਾਂ ਬੋਲੀ ਵਿਚ ਸੰਚਾਰ ਕਰਨ ਲਈ ਪ੍ਰੇਰਿਤ ਕੀਤਾ ਜਾਵੇਗਾ ।

#### Course Outcomes

#### ਕੋਰਸ ਨਾਲ ਹੋਣ ਵਾਲੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਦੀਆਂ ਸੰਭਾਵਨਾਵਾਂ:

ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਬਾਰੇ ਜਾਣ ਸਕਣਗੇ । ਵਿਦਿਆਰਥੀ ਸਲੇਬਸ ਤੋਂ ਇਲਾਵਾ ਹੋਰ ਸਾਹਿਤਕਾਰਾਂ ਬਾਰੇ ਵੀ ਜਾਣ ਸਕਣਗੇ ।ਇਸ ਤੋਂ ਇਲਾਵਾ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਵਿਭਿੰਨ ਰੂਪਾਂ ਨਾਟਕ, ਜੀਵਨੀ, ਸਵੈ-ਜੀਵਨੀ ਅਤੇ ਸਫ਼ਰਨਾਮਾ ਦੀ ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਤੱਤਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਪ੍ਰਾਪਤ ਕਰ ਸਕਣਗੇ।

#### ਬੌਧਿਕ ਹੁਨਰ :

ਸਾਹਿਤ ਵਿਚ ਸਮਾਜ ਦੀ ਪੇਸ਼ਕਾਰੀ ਹੋਣ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਪੜ੍ਹ ਕੇ ਸਮਾਜ ਪ੍ਰਤੀ ਸੰਵੇਦਨਸ਼ੀਲ ਹੋਣਗੇ ।ਵਿਦਿਆਰਥੀ ਸਾਹਿਤ ਦੀਆਂ ਵਿਭਿੰਨ ਪ੍ਰਵਿਰਤੀਆਂ, ਸਾਹਿਤ ਰੂਪਾਂ ਅਤੇ ਪੰਜਾਬੀ ਛੰਦ ਸ਼ਾਸਤਰ ਬਾਰੇ ਅਧਿਐਨ ਕਰਨਗੇ ।

#### ਅਮਲੀ ਹੁਨਰ:

ਸ਼ਾਹਿਤ ਦੇ ਇਤਿਹਾਸ ਨੂੰ ਵਿਦਿਆਰਥੀਆਂ ਕੋਲੋਂ ਪੜ੍ਹਾਇਆ ਜਾਵੇਗਾ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਜਾਵੇਗੀ।ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਦੀ ਵਿਹਾਰਕ ਆਲੋਚਨਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਉਨ੍ਹਾਂ ਕੋਲੋਂ ਲਖਿਤ ਰੂਪ ਵਿਚ ਸਾਹਿਤ ਆਲੋਚਨਾ ਕਰਵਾਈ ਜਾਵੇਗੀ।

#### ਵਿਸ਼ੇ ਨੂੰ ਵਿਹਾਰਕ ਪੱਧਰ ਤੇ ਵਰਤਣ ਦਾ ਹੁਨਰ :

ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਸਾਹਿਤ ਦੇ ਰੂਪਾਂ ਬਾਰੇ ਜਾਣੂੰ ਹੁੰਦੇ ਹੋਏ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਾਹਿਤ ਵਿਚਲੇ ਵਿਸ਼ਿਆਂ ਬਾਰੇ ਸੋਚਣ ਤੇ ਅਮਲ ਕਰਨ ਦੇ ਉਪਰਾਲੇ ਕੀਤੇ ਜਾਣਗੇ ।

#### Name of Program: BA (with Hindi)

#### Course Outcomes

बी.ए.

#### Sem - I

पेपर - आधुनिक कविता, व्याकरण तथा अनुवाद

Col छात्राओं को अनुवाद लेखन की जानकारी

Co2 छात्राओं को व्याकारणिक सिद्दांतों की जानकारी

Co3 छात्राओं को हिन्दी साहित्य का परिचय

Co4 छात्राओं को कार्यालिपी हिन्दी का बोध

#### Sem - II

पेपर – गद्य साहित्य : सैद्दांतिकी, व्याकरण तथा पत्रकारिता

Col छात्राओं को मीडिया लेखन में कौशल ज्ञान

Co2 छात्राओं को समकालीन साहित्य की जानकारी

Co3 छात्राओं को प्रशासनिक शब्दावली का बोध

Co4 गद्य साहित्य की विधाओं का सूक्ष्म ज्ञान

#### Sem - III

पेपर – मध्ययुगीन काव्य, इतिहास, व्याकरण तथा काव्यांग

Co1 छात्राओं को हिन्दी साहित्य के इतिहास से अवगत करवाना

Co2 मध्यकालीन हिन्दी काव्य का मुख्य अध्ययन

Co3 छात्राओं को हिन्दी व्याकरण का व्यावहारिक ज्ञान

Co4 मध्यकालीन काव्य का आलोचनात्मक अध्ययन

#### Sem - IV

पेपर – उपन्यास, नाटक : सैद्धांतिकी, व्याकरण तथा भक्तिकाल

Col छात्राओं को भक्तिकाल का समीक्षात्मक अध्ययन

Co2 गद्य की विधाओं की शास्त्रीय समीक्षा

Co3 मुंशी प्रेमचन्द के 'निर्मला' उपन्यास के माध्यम से सामाजिक समस्याओं के प्रति संवेदनशील दृष्टिकोण निर्मित करना।

Co4 छात्राओं को हिन्दी व्याकरण का व्यावहारिक ज्ञान प्रदान करना।

#### Sem -V

पेपर – विशिष्ट कवि एवं काव्य सिद्धान्त, कामकाजी हिन्दी तथा रीतिकाल

Col छात्राओं को हिन्दी साहित्य विशेषकर रीतिकाल का सुबोध

Co2 भाषा का सुक्ष्य अध्ययन

Co3 कार्यालयी हिन्दी के प्रयोग की सुझबुझ का प्रतिपादन

Co4 भारतीय संस्कृति एवं साहित्य से सम्बन्धित विशिष्ट संदर्भों की ग्रहणता।

#### Sem -VI

पेपर – लघु विधा – आधुनिक काल, निवन्ध लेखन तथा परिभाषिक शब्दावली

Col राजभाषा हिन्दी का रचनात्मक लेखन

Co2 समकालीन साहित्य का मुल्यांकन

Co3 विभिन्न गद्य विधाओं की सैद्धांतिक एवं व्यावहारिक समीक्षा यथा—रेखाचित्र, संस्मरण, पात्रावृन्त, पत्र लेखन

Co4 परिभाषिक शब्दावली का बोध व प्रयोग।

#### Name of Program: BA (sociology)

Name of Programme: B.A. (Bachelor of Arts)

#### Course Outcomes

#### Semester I

#### Paper: Fundamentals of Sociology I

- CO 1: Students will acquire detail knowledge regarding the emergence of Sociology and its Basic concept.
- CO 2: Student will understand the subject matter of sociology, enlist the area of study.
- CO 3: Student will able to learn about the various aspects related to the society, community and social institutions and their importance in human life.
- CO 4: Student will be able to analysis the process of socialization and will understand importance of agencies of socialization.

#### Semester II

#### Paper: Fundamentals of Sociology II

- CO 1: Students will able to explain about the social structure and function of the norms and values in the civilized society.
- CO 2: Student will understand about the role and status in the life and the importance of culture.
- CO 3: Students will acquire the ability to understand the socio-economic background of individuals and groups.
- CO 4: Student will come to know about the role of formal and informal agencies of Social Control.

#### Semester III

#### Paper: Society in India

- CO 1: Students will be able to understand about the Indian society and its diverse pattern in terms of languages, culture and regional uniqueness etc.
- CO 2: Students will know about the origin of caste system and different theories of the caste.
- CO 3: The students will learn about the national and international relevant social issues like communalism, gender and human rights.
- CO 4: Students will be able to understand the social institutions and types of the societies and their differences.

#### Semester IV

#### Paper: Social Change in India

- CO 1: Students will understand regarding about the concept of social change and its difference perspectives.
- CO 2: The students will learn about the various factors of social change and their relevance.
- CO 3: The students will acquire the knowledge about the different processes of social change like westernization, sanskritization, modernization, urbanization, industrialization etc.
- CO 4: Students will develop the analytical ability to understand the social problems and find out the solutions.

#### Semester V

#### Paper: Social Thought

- CO 1: Students will learn about the fundamental sociological perspectives and theories.
- CO 2: The student will able to understand the emergence of capitalism and class struggle.
- CO 3: The students will developed the critical thinking to understand the social issues like suicidal tendencies in the society.
- CO 4: Students will learn about the theoretical perspectives and its applicability to understand the society.

#### Semester VI

#### Paper: Social Research

- CO 1: The students will acquire the knowledge about the research methods and scientific techniques.
- CO 2: Students will learn about different types of Research designs and its uses.

#### Name of Programme: B.A. (Political Science)

#### **Course Outcomes**

#### Semester-I

#### **Paper: Principles of Political Science**

- CO 1: To acknowledge the modern and traditional viewpoint of normative and realistic approach
- CO 2: To build the relationship of Political Science with other subject like Economics, History, Sociology and Psychology
- CO 3: To discuss the social contract theory Hobbes, Locke and Rousseau and evolutionary theory and liberal, Marxian, and Gandhian views of state.
- CO 4: To gain knowledge of Welfare State: Concept and Functions of Welfare State.
- CO 5: To analyse electorates and electoral Systems.

#### **Semester-II**

#### Paper: Modern political theory

- CO 1: To build understanding of the political system: its meaning, characteristics and Functions, political culture characteristics and its types, political socializations different agencies.
- CO 2: To recognize the rights and duties
- CO 3: To examine the environmental Protection: issue and efforts made at national and international level to protect environment
- CO 4: To identify the concepts of liberty, justice, equality, and democracy Semester-III

#### **Paper: Indian constitution**

- CO 1: To build understanding the making of constitution
- CO 2: To identify the rights and duties
- CO 3: To examine Indian federalism through Centre-state relations
- CO 4: To evaluate the structures of government at the State level and National Level
- CO 5: To pursue detailed study of High Court and Supreme Court in India.

#### **Semester-IV**

#### **Paper: Indian Political System**

- CO 1: To examine the role of Political parties in Indian Democracy.
- CO 2: To evaluate the Election Commission and electoral process in India.
- CO 3: To research the process of interaction between society and politics in contemporary India Caste, tribe, and religion.
- CO 4: To create awareness about sociopolitical structure of India.
- CO 5: To evaluate India's foreign policy and make analytical study of relevance of India's Nonalignment Policy.

#### **Semester-V**

#### Paper: Comparative Political Systems (UK & USA)

- CO 1: To apply the methodology of comparative analysis within the discipline of political science.
- CO 2: To analyse the Contemporary problems in the countries under consideration in light of the conceptual frameworks presented in class.
- CO 3: To evaluate and complete an analysis of the institutions, political behavior and political ideas of another country comparing these attributes to the U.S and U.K model.
- CO 4: To build the comparison between the Political Systems of UK, USA and India.

#### Semester-VI

#### Paper: International Politics: Theory and Practice

- CO 1: To analyses the key historical events which shaped the international system in the  $20^{th}$  century.
- CO 2: To build the concepts of basic structures of the contemporary international system; and the key actors, institutions, and their functions.
- CO 3: To categorize the role of individual and cultural values and perceptions, and the importance of empirical evidence in analyzing international problems.
- CO 4: To conclude the role of International and regional organizations, economic groups in current pandemic phase.

#### Name of Programme: B.A. (Psychological)

#### Semester-I &II Paper: Basic Psychological Processes

- CO 1: Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- CO 2: Students will respect and use critical and creative thinking, skeptical inquiry and the scientific approach to solve problems related to behavior and mental processes.
- CO 3: Students will understand and apply psychological principles to personal, social, and organizational issues.
- CO 4: Students will be able to weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.
- CO 5: Students will recognize, understand, and respect the complexity of sociocultural and international diversity.

#### Semester-III &IV

#### Paper: Experimental Psychology

- CO 1: Students will have the opportunity to develop a deep understanding and broad knowledge of the general theoretical and scientific principles of psychology.
- CO 2: Students will acquire in-depth knowledge in specialized areas of their subject.
- CO 3: They will have the opportunity to acquire and demonstrate bibliographic skills to search out information appropriate to a particular topic.
- CO 4: They will have experience in compiling written reviews of key topics in psychology in which they will be expected to have knowledge, depth of understanding, and a critical appreciation of the strengths and weaknesses of theoretical claims and research evidence or conceptual argument.
- CO 5: They will have the opportunity to discuss in detail aspects of research or enquiry.

#### Semester-V &VI

#### Paper: Abnormal Psychology

Upon successful completion, students will have the knowledge and skills and should be able to:

- CO 1: identify and describe major terms and concepts in abnormal psychology.
- CO 2: describe and apply major theories of abnormal psychology.
- CO 3: describe the symptomatology associated with major mental disorders and apply to case examples.
- CO 4: think critically about issues and changes in psychiatric nomenclature.
- CO 5: think critically about ethical, legal, cultural and contemporary topics in abnormal psychology.
- CO 6: demonstrate preliminary knowledge of the main empirically based approaches available to treat or manage the conditions covered in the course.

#### Name of Programme: B.A. (Education)

#### After completion of the program, the students will develop ability:

- Understanding of the role of philosophy in Education.
- The Development of an understanding of functions of Education.
- The Development of an understanding of the Educational Contribution and Philosophy of Educational Thinkers.
- Understanding of the meaning, nature, scope of educational sociology, scientific research methodology and educational psychology.
- Understanding of the concept of Teaching and the Methods of teaching.
- Understanding of the meaning and scope of Educational Psychology.

#### Course Outcome: B.A. Education

- 1. Acquiring skills in lucid presentation and ideas in Education, involving various social works which proves their social aim in education.
- 2. To gather knowledge about social stratification and prove their knowledge by project method.
- 3. Understanding the basis of literary criticism and theories.
- 4. Linking literature to social constructions and thereby gaining an understanding of the interplay of power and representation.
- 5. Imparting a sound knowledge of education and the effects of attitude, behaviour and cultural osmosis

Summary	Description
Concept and scope of education	Gathering knowledge of education and help them about problem solving method
Aims of education	Start your education with a fixed aim and by this aim you may success in life .
Report of delor's commission 1996	Students know about their education and they get knowledge about learning to be ,learning to be etc.
Concept and scope of educational philosophy	Know about philosophy, which give the students source of knowledge and they also know why it is necessary in our life.
Relation between education and philosophy	To provide the student the golden opportunity to know about co-relation between the two main subject though they have one subject education.
Child, a main factor of education	To provide the students about the childrens attitude and role in education system.
Teacher Is also a main factor of education	To provide the students about the duties of the teacher and how is it possible to prepare a good relation between teacher and student.
Curriculum in education	To provide the students about their curriculum and wants to understand about their subject knowledge.
School vision and functions	Learning to recognise the functions of educational institute and role of the students to prepare a better environment for their institution.
Indian school of philosophy	To provide the students about knowledge of Indian philosophy and by the Indian philosophy they know about the source of knowledge.

#### Name of Programme: B.A. (Geography)

#### Class B.A. Geography Semester Ist

Objectives of the course: This course represents the interface between physical aspects of Geography and Geology, Oceanography, Glaciology etc. The course aims to sensitise the student to this interface. The course aims to familiarize the student with the conceptual framework for understanding the existing geomorphological landscapes and related processes. The course is designed to provide the student with a theoretical and empirical framework for understanding landscape evolution and the characteristics of individual types of geomorphic landscapes

#### **Course Outcomes**

#### (a) Knowledge and Understanding:

The student can explain principal terms, definition and theories (e.g. conceptual approaches in geomorphology)

The student can describe landforms and land forming in different climatic zones and tectonic regimes.

The student can explain different theories and models for landscape evolution.

The student can discuss the development of micro to mega scale landforms and their life spans.

The student can assess the mode of formation, age and history for landforms in world.

(b) Intellectual Cognitive/Analytical skill:

#### Student are able to:

Apply a precise geological language to describe and discuss geological processes, phenomena and theories.

Demonstrate the ability to function individually, in cooperation and ethically with others.

Acknowledge, evaluate and communicate the role of humans in and our dependency and impact on the earth system.

Use libraries and scientific databases to retrieve relevant information, including the proper citation of sources.

#### **Practical skills:**

- Students are able to:
- Use field-based techniques to obtain and work with earth science data.
- Plan and carry out geomorphological field investigation (including, observation, interpretation, report)
- Search and find relevant information to elucidate geomorphological problems.
- Compare and discuss the formation of large scale landforms involving both exogenous and endogenous processes.

#### Program: B.A. Geography (Practical) Semester: II nd

#### **Objective:**

Geography is an amalgam of physical as well as social sciences and as such it is necessary for the students to go through laboratory exercises particularly to show directions and bearings and different methods of representing

relief. Knowledge of directions and bearings is essential and an introduction to weather maps is also required

#### **Course Outcomes:**

#### A. Knowledge and Understand

#### Students will

- Choose an approved book from the resource list or another book approved by the teacher. While reading the book the students should keep in mind the theme
- As the students read their book they should take detailed chapter notes. In their chapter notes the students should identify characteristics that represent the seven elements and examples of the geographical theme
- After reading their book the students should create collage that illustrates the elements found in their particular book
- Once completed the students will be expected to give a brief book talk where they will discuss the overview of their book.

#### **B.** Intellectual Cognitive/ Analytical Skills:

#### Students will be able to

- use a variety of maps and documents to interpret human movement, changing environmental preferences and settlement patterns, and the diffusion of ideas, technological innovations, and goods.
- relate current events to the physical and human characteristics of places and regions
- construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.
- show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments

#### C. Practical Skills

#### Student will learn to:

- 1. To apprise the students with symbolization of different types of geographical data and depiction on map
- 2. To provide training in application of various graphical methods of depicting geographic data.
- 3. To train the students to interpret the information at different scale.

#### Class B.A. Geography Semester IIIrd

#### **Course Outcomes**

- (a) Knowledge and understanding
- Students will demonstrate a proficiency in knowledge of essential concepts of physical and
- human geography including:
- Describing human-environment, and nature-society interactions as well as global human and
- environmental issues.

• Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.

#### (b) Intellectual Cognitive/Analytical Skill:

- Students will demonstrate the ability to analyze, interpret, and draw conclusion about geographic problems and information including:
- Demonstrating proficiency in using geographical research tools including spatial statistics, cartography, remote sensing, GIS and GPS.
- Applying knowledge of global issues to a unique scientific problem.
- Identifying human and environmental issues on global, regional, and local scales and critically assess various perspectives on the issue.

#### Program: B.A. Geography (Practical) Semester: IVth

#### **Objectives of the Courses:**

- 1. To apprise the students with symbolization of different types of geographical data and depiction of various spatial data.
- 2. To provide training in application of various graphical methods of depicting geographic data.
- 3. To train the students to interpret the topographical sheets at different scales course Content

#### **Course Outcomes:**

#### A. Knowledge and Understanding:

Students will

- Choose an approved book from the resource list or another book approved by the teacher. While reading the book the students should keep in mind the theme
- As the students read their book they should take detailed chapter notes. In their chapter notes the students should identify characteristics that represent the seven elements and examples of the geographical theme
- After reading their book the students should create collage that illustrates the elements found in their particular book
- Once completed the students will be expected to give a brief book talk where they will discuss the overview of their book.

#### B. IntellectualCognitive/ Analytical Skills:

Students will be able to

- use a variety of maps and documents to interpret human movement, changing environmental preferences and settlement patterns, and the diffusion of ideas, technological innovations, and goods.
- relate current events to the physical and human characteristics of places and regions
- construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.
- show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments

#### Class B.A. Geography Semester Vth

#### **Objectives of Course:**

Students will get an introduction to the main regions of the world in terms of both their uniqueness and similarities. They will thus gain a perspective about social and cultural diversity of the world.

Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes.

#### **Course Outcomes**

- (a) Knowledge and understanding
- Students will develop a solid understanding of the concepts of "space," "place" and "region" and their importance in explaining world affairs.
- Students will understand general demographic principles and their patterns at regional and global scales.
- Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers.
- Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes

#### (b) Intellectual Cognitive/Analytical Skill:

- Students will be exposed to historical, economic, cultural, social and physical characteristics of regions, notably how they came to be, their main role and function and how they are changing.
- Students will see how human activities and the regional environment interact, particularly how societies reflect their regional environment.

#### Class B.A. Geography Semester Vth

#### **Objectives of Course:**

 To apprise the students with symbolization of different types of geographical data and depiction of various spatial data.

• To provide training in application of various graphical methods of depicting geographic data.

• To train the students to interpret the topographical sheets at different scales course Content

#### **Course Outcomes**

#### (a) Knowledge and understanding

Students will

• Choose an approved book from the resource list or another book approved by the teacher. While reading the book the students should keep in mind the theme.

• As the students read their book they should take detailed chapter notes. In their chapter notes the students should identify characteristics that represent the seven elements and examples of the geographical theme.

 After reading their book the students should create collage that illustrates the elements found in their particular book.

 Once completed the students will be expected to give a brief book talk where they will discuss the overview of their book.

#### (b) Intellectual Cognitive/Analytical Skill:

Students will be able to

• use a variety of maps and documents to interpret human movement, changing environmental preferences and settlement patterns, and the diffusion of ideas, technological innovations, and goods.

• Relate current events to the physical and human characteristics of places and regions.

• construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

• show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments.

Course Name: Geography of India

Program: B.A. Geography Semester: VIth

**Objectives of the Courses:** 

1. To understand the regional setting of India in detail through physical and political maps.

2. To examine the pattern of select population characteristics.

3. To study the distribution of major crops, industries and transport links in the state.

4. To understand the intra regional variations in the select aspects

#### **Course Outcomes:**

#### - Knowledge and Understand):

#### Students will

- Choose an approved book from the resource list or another book approved by the teacher. While reading the book the students should keep in mind the theme
- As the students read their book they should take detailed chapter notes. In their chapter notes the students should identify characteristics that represent the seven elements and examples of the geographical theme
- After reading their book the students should create collage that illustrates the elements found in their particular book
- Once completed the students will be expected to give a brief book talk where they will discuss the overview of their book.

#### - IntellectualCognitive/ Analytical Skills:

#### Students will be able to

- use a variety of maps and documents to interpret human movement, changing environmental preferences and settlement patterns, and the diffusion of ideas, technological innovations, and goods.
- relate current events to the physical and human characteristics of places and regions
- construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.
- show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments

Name of Program: BA (Music)Course Outcomes

CO 1: Enables students to learn and exalts the human spirit and enhances the quality of life.

CO 2: Students will analyses the fundamental purpose to transmit cultural heritage, and music is

a powerful means for communicating that message.

CO 3: Student will understand the basic terminologies of music and learn to write the practical

compositions according to the Notation system.

CO 4: Demonstration and knowledge of theoretical aspects of ragas

CO 5: The student is able to give a practical demonstration of the prescribed ragasand is able to

demonstrate various aspects of ragas and their differentiation.

Semester: II

**Paper: Theory and Practical** 

CO 1: Students are able to explain and gain detailed knowledge about Tala system.

CO 2: Enable students to learn about history of music.

CO 3: Exhibit knowledge of current issues and trends in music education.

CO 4: Music uses one of the most powerful systems which can be used for the development of

critical thinking skills in all students.

CO 5: Students will gain knowledge about the ancient and medieval history of Percussion

instruments.

**Semester: III** 

**Paper: Theory and Practical** 

CO 1: Demonstrate competence in musicianship, to include: aural skills, and knowledge and

application of music theory.

CO 2: Students will learn about the life and contribution of the various artists and composers.

CO 3: The student understands the development of various musical forms and their features in

present musical forms.

CO 4: He gains knowledge about the role of Music in maintaining the traditional values of Indian

culture.

CO 5: The student studies in detail the theoretical aspects related to the Practical ragas

**Semester: IV** 

**Paper: Theory and Practical** 

CO 1: To learn about the various theoretical aspects related to instrument playing.

CO 2: Explanation of analytical study of the principles of compositions in Indian music.

CO 3: Exhibit knowledge of current issues and trends in music education.

CO 4: Students understand the chronological development of various technical terms, schools of vocal & instrumental music & their styles and musical instruments, their origin, development and present status.

CO 5: Students will understand the classical & folk terms & their interrelationship.

**Semester: V** 

**Paper: Theory and Practical** 

CO 1: Describe and explain the traditional function of their instrument in the band or or chestra.

CO 2: Demonstrate mastery of the following major scales - (concert pitch) Band - C,F, Bb, Eb,

Ab, Chromatic; Orchestra - D, G, C, F.

CO 3: Ability to perform musical compositions in prescribed Ragas & Talas.

CO 4: Students will demonstrate the application of knowledge related to the historyof music, including various time periods, historical figures, styles and genres in musical traditions.

CO 5: Acquaintance with the biographies of important musicians.

Semester: VI

**Paper: Theory and Practical** 

CO 1: Students are able to explain and demonstrate various aspects of talas and their various aspects.

CO 2: To know about the various ways to document & preserve Music and to know about the sound equipments.

CO 3: Demonstrate competence in musicianship, to include: aural skills, andknowledge and application of music theory.

CO 4: To gain knowledge about the various Interdisciplinary aspects of Music.

CO 5: Students will be able to create, analyze, and synthesize music as a means of supporting developing careers in music teaching and/or performance. (Theory and Musicianship).

#### Name of Program: BA (History)Course Outcomes

#### BA Semester I

#### Paper: Ancient Indian History 320B.C-1000A.D

- CO 1: The students will be able to illustrate the development of an Empire
- CO 2: Reviewing Ancient Indian civilisation in light of other ancient cultures.
- CO 3: Mind Mapping different cultures, architectural styles and literary writings.
- CO 4: How, when and where people first developed cultures, in terms of evolution, how they evolved from a primitive to a civilised man
- CO 5: Understand the various aspects of Ancient Indian History in terms of society, cultural, political relations and trade.
- CO 6: The students will highlight the various aspects of Ancient Indian Historyfrom the Indus Valley Civilisation to the Vardhanas.

#### **BA Semester II**

#### Paper: Medieval Indian History 1000-1707A.D

- CO 1: Formulating contribution of various dynasties towards medieval Indianculture.
- CO 2: How early medieval period witnessed wars among the regional kingdoms from North to South and late medieval period saw number of invasions by Mughals, Afghans and Turks.
- CO 3: Analysing various administrative, cultural and literary aspects of Medieval India
- CO 4: The student will be able to illustrate their knowledge in understanding the transition of European traders who by the end of 15th century will a formidable political force.
- CO 5: Understanding the emergence of various dynasties, their administration and final decline.
- CO 6: The student will be able to reproduce the basics of the medieval Indian history

#### **BA Semester III**

#### Paper: Modern Indian History 1707-1947A.D

- CO 1: The students will be able to formulate political fabric of India around 18thcentury
- CO 2: Appraise the beginning of the freedom struggle and the saga of partition.
- CO 3: Analyse how British transformed the economic, political and social fabric ofIndia. Was this transformation through acts or otherwise
- CO 4: Discover the emergence of socialist and communist movements in India

CO 5: Contrast the political, social , economic features of Delhi Sultanate and Mughal Dynasties

CO 6: Explain the theatrical part of the Medieval History

#### **BA Semester IV**

#### Paper: History of Punjab 1469-1799A.D

CO 1: Building the important pillars of Sikhism and its reason behind being the fifthlargest religion of the world.

CO 2: Appraise the role of Gurus towards the development of Sikhism.

CO 3: Co-relate the political conditions of Punjab with those of other kingdoms withrespect to Dal Khalsa and Misls.

CO 4: Articulate the role played by Banda Singh Bahadur and other Sikh Generals in the Sikh History.

CO 5: Describe the advent of Sikhism in Punjab and contribution of 10 Gurustowards the development of Sikh Panth.

CO 6: Highlighting the early life and contribution of the 10 Guru's towards the development of Sikh Panth.

#### **BA Semester V**

#### Paper: History of the World 1500-the present times

CO 1: The students will be able to illustrate the most comprehensive and broadestapproach to the question of who we are as both individual and members of the group.

CO 2: The Student will critically analyse the genesis and consequences of two World Wars which shaped the consequent international relations.

CO 3: Mind Mapping different cultures, architectural styles and literary writings inmodern Europe, China, USSR and America.

CO 4: The student will be able to assess the causes and impact of major revolutions of the world.

CO 5: Understand how renaissance and reformation shaped the world in comingcenturies.

CO 6: The students will highlight the emergence of Renaissance and Reformation.

#### **BA Semester VI**

#### Paper: History of Punjab 1799-1947 A.D

CO 1: Formulating a deep understanding of the saga of partition of Punjab in 1947 and further division of Punjab on linguistic basis in 1966 A.D

- CO 2: Contrasting the emergence and contribution of Socio-reform movements in Punjab.
- CO 3: Analysing various political, administrative, cultural and literary aspects of Punjab from 1799-1966 A.D
- CO 4: The student will be able to illustrate their knowledge in understanding the Anglo-Sikh relations in the 17th century..
- CO 5: Understanding the administration in Punjab during the 17th century
- CO 6: The student will be able to reproduce the early life of Ranjit Singh, along withhis conquests and the Misl policy

#### Name the Program: B.A.(Fine Arts)

### PAPER-A: FINE ARTS (DRAWING & PAINTING) (THEORY) SEMESTER: I

**Objective of the Course:** The aim of this course is to introduce:

- 1. The Art history of pre historic time.
- 2. Fundamentals of arts i.e, elements of art, Principle of Art, sixlimbs of art.
- 3. Painting of Ajanta caves.
- 4. Sculptures of Indus valley

#### **Course Outcomes**

- 1. Knowledge and understanding: Students will know the basic Elements and Principles of art to create an appropriate art. Students will get knowledge of Art of pre-historic time i.e. Painting and sculpture of ancient people, their techniques, subject matter and features.
- 2. Intellectual Skills: Students will able to apply the principles of art tocreate good artwork. And the will have general knowledge of art of painting and sculptures of pre-historic time.
- 3. Principal skills: students can create best by having knowledge of basic elements and principles.

#### **Course : Paper -B : Still life (Drawing) Practical**

**Course objective:** This course is to introduce the student's basic drawingand painting techniques of still object in different mediums.

#### **Learning outcomes:**

- 1. Knowledge and understanding: Students will get the knowledge of creating right proportion of objects, how tocreate volume, and study of light and shade.
- 2. Intellectual Skills: Examine various techniques of addingvolume, how the light and shades falls on object.
- 3. Practical skills: students will apply the techniques and will able tocreate 3D effect on paper by adding volume and light and shade.

#### **Course: Paper - C: Letter writing(Drawing) Practical**

**Course objective:** this course provides the knowledge of creative writing of different styles with ink or poster colors.

#### **Course outcomes:**

- 1. Knowledge and understanding: Students will get the knowledge of creating different styles of fonts of writing.
- 2. Intellectual skills: students will able to write in different styles.
- 3. Practical skills: students will able to use this skill in poster making.

#### Paper - A: Fine Arts (Drawing and painting) Theory

#### Semester II

**Course objective:** The aim of this course is to introduce the Students tothe History of Indian sculptures-

- 1. Mauryan sculpture
- 2.Bharhut sculpture
- 3.Sanchi stupa
- 4. Kushan period of art

#### **Learning outcomes:**

- Knowledge and understanding. Students will get the knowledge of History of the Indian sculptures under different period, their religion, their techniques of casting life size sculptures, culture and medium.
- Intellectual skills: Students will have general knowledge of Indian historical sculptures, they can think to create.
- Practical Skills: Students will able to use the techniques in this ownwork.

#### **Paper -B: Still life study (Practical)**

**Course objective:** This course is to introduce the student's basic drawingand painting techniques of 3 different Still objects in different mediums.

- 1. Knowledge and understanding: Students will get the knowledge ofcreating right proportion of objects, how to create volume, and study of light and shade.
- 2. Intellectual Skills: Examine various techniques of adding volume, how the light and shades falls on objects.
- 3. Practical skills: students will apply the techniques and will able tocreate 3D effect on paper by adding volume and light and shade.

#### Paper-C: Head study (Male/Female) Practical

Course objectives: The aim of this course is to study of skulls the Anatomy of human head

- 1. Male head
- 2. Female head

- 1. Knowledge and understanding: Students will get the knowledge ofhow to study the anatomy of human head.
- 2. Intellectual skills: students will have deeper understanding of creating right anatomy of human head.
- 3. Practical skills: Students will able to make human head in different profiles.

#### Paper -A: Fine Arts( Drawing and painting) Theory

#### **Semester III**

**Course objectives**: The aim of this course is to introduce the Studentswith history of Indian sculptures of

- Classical period: The guptas
- Post classical period: Ellora, Elephanta, Mahaballipuram, Chola Bronzes

#### **Learning outcomes:**

- Knowledge and understanding: The students will get deeper knowledge different Indian sculptures belongs to different period. They will also get the knowledge of religion subjectmatter and features of that particular period.
- Intellectual skills: Students will understand the symbolism values and religion aspects of the sculptures.
- Practical skills: Students will able to use this knowledgeand values in creating sculptures.

#### Paper-B: Design 2D and 3D Practical

**Course objectives:** This course provides knowledge of topics involvingstudy of 2-dimensional and 3- dimensional designs based on Folk Art forms.

#### **Learning Outcomes:**

- 1. Knowledge and understanding: Students will get the knowledge of how to create2-D and 3-D design. Students will get to know any folk motif with proper Shading is a 2-D design and cardboard pasted on handmadesheet in form of various folk motives os 3-D design any other material can also use to create 3-D.
- 2. Intellectual skills: Students will examine the difference between 2-D andthree designs.
- 3. Practical skills: Students will able to create 2-Digns and 3D designs byusing material of their choice. Course name: Paper-C (Head study) practical.

**Course objective:** This course provides the knowledge to study of structure of head in monochromatic color scheme.

- 1.Knowledge and understanding: Students will able to understand howto study draw structure of human head with different profiles.
- 2.Intellectual skills: Students will able to create right proportion byhaving knowledge of study of head.
- 3. Practical skills: Students will able to make live sketches or portraits.
- 4. Transferrable skills: Students will able to make sculptures by having knowledge of proportion.

#### Paper -A: Fine Arts( Drawing and painting) Theory

#### **Semester IV**

**Course objective**: This course will introduce the Students to the history of Miniature painting art.

- Early miniature painting (pala school)
- Western Indian miniature paintings (jain school)
- Mogul School of Art
- Rajasthani School of Art
- Pahari School of Art

#### **Learning outcomes:**

- 1. Knowledge and understanding: In this course Students will get knowledge of miniature painting of different schools of art.
- 2. Style of applying colours, subject matters of painting of different schools
- 3. Which school belongs to which king
- 4. Famous artists of different schools.
- 5. Intellectual skills: Students will able to examine the difference between paintings and able to know what that painting belongs to.
- 6. Practical skills: Students will able to create their own painting inminiature style.
- 7. Transferrable skills: Students can apply this knowledge orcolor scheme in their painting.
- 8. Transferrable skills: Students can apply this knowledge orcolor scheme in their painting.

#### **Paper-B: LANDSCAPE (Practical)**

Course objective: This course is to introduce the Students with study of nature ,how they can create a

2- D sheet of paper into 3D by painting landscape and create harmony.

- 1. Knowledge and understanding: Students will get deeper knowledge of study of clouds, trees, and foreground.
  - How to create perspective (idea of distance)
  - To create texture
  - To apply colors
- 2. Intellectual skills: Students will able to create beautiful landscape by having knowledge of perspective.
- 3. Practical skills: Students can have idea of how to compose the different elements on a sheet to create 3-D effect.

#### **Paper-C FULL LIFE STUDY Practical**

**Course objective**: This course provides the knowledge to the students Rendering of full life Study and study of muscles and bones should bedone in pencil or charcoal.

#### **Learning outcomes:**

- 1. Knowledge and understanding: Students will able to get deeper knowledge of study of full body. They get knowledge of drawing of structure of body, volume, proportion, tones and texture.
- 2. Intellectual skills: Students will able to create full life size figures on small sheet of paper.
- 3. Practical skills: Students will able to draw on 2-D and create3-D effect by adding volume.

#### Paper -A: Fine Arts( Drawing and painting) Theory

#### Semester V

**Course objectives:** This course is to introduce the Students with Historyof Modern Movement in Europe

- · Impressionism
- · Post impressionism
- · Expression
- · Cubism
- ·Surrealism

#### **Learning Outcomes:**

- 1. Knowledge and understanding: Students will get the deeper knowledge of History of the moments
- 2. History of European Art.
- 3. Artist of Europe belongs to different art moments.
- 4. Different styles of art of different moments.
- 5. Intellectual skills: Students will able to examine which artists belongsto which moment, what kind of the styles they used in Modern art moments
- 6. Practical skills: The students will able to apply the techniques of European art in their own artwork. They will able to get more innovative in their own style.

#### Paper-B: LANDSCAPE (On the spot) Practical

**Course objectives**: This course is to introduce the Students with the study of nature, arrangements of shape based on subjects like humanforms and animal forms.

- 1. Knowledge and understanding: The Students with get the deeperknowledge of How to show prospective in the landscape painting.
- 2. How to apply colors to show prospective and create harmony in thelandscape
- 3. Study of live nature on particular spot.
- 4. Arrangements of different subjects.

- 5. Intellectual skills: Students will able to set the large perspective of thespot on their smaller sheet or space .
- 6. Practical skills: Students will able to compose the different subjectson single sheet with perspective and can create harmony.

#### **Paper-C: Full life Drawing (practical)**

**Course objectives:** This course is to introduce the Students with rendering of full life study, structure, volume, proportion, tones andtexture in monochromatic colour.

#### **Learning outcomes:**

- 1. Knowledge and understanding: This course provides the knowledge of how to draw structure of full body, how to add volume, how to add tonesand textures.
- 2. Intellectual skills: Students will able to manage actual proportion ofbody on to given space of work.
- 3. Practical skills: Students will able to create live drawing and painting of the subject with volume, tones and texture in any medium.

#### Paper -A: Fine Arts( Drawing and painting) Theory

#### **Semester VI**

**Course objectives:** This course is to introduce the Students with various chools of Indian painting and famous artists of India and their works.

- Company school
- Bengal school
- Contemporary art and artists- Rabindranath Tagore, Amrita Shergill, Jamini Roy
- S. Shobha Singh, Dhanraj Bhagat, K.K. Hebber, M.F. Hussain, Satish Gujral.
- Kalighat painting

#### **Learning outcomes:**

- 1. Knowledge and understanding: Students will get deeper knowledge of Indian schools of painting and the artists belong to that school. This course will also give the knowledge of India's famous artists and their style of work.
- 2. Intellectual skills: Students will able to examine which work of art belongs to which school and the who is the artist of that school.
- 3. Practical skills: Students will able to learn their techniques and apply in their own style.

#### **Paper-B: Landscape Painting (painting)**

**Course objectives:** This course is to the Students with study of natural ,prospective, colors and its application in Harmony.

#### **Learning outcomes:**

- 1.Knowledge and understanding: The students will get deeper knowledge
- 2.Study of nature on the spot.
- 3. Study of objects.
- 4. How to set perspective
- 5. How to apply colors and create harmony.
- 6. Intellectual skills: Students will able to set actual perspective of landscapeon to given space of work.
- 7. Practical skills: Students will able to create real perspective on their space and can create harmony as well as 3-D effect on 2-D space by use of colors and knowledge of perspective.

#### **Paper-C: Full life Drawing (practical)**

**Course objectives**: This course is to introduce the Students with rendering of full life study, structure, volume, proportion, tones and texture in any medium.

- 1.Knowledge and understanding: this course provides the knowledge ofhow to draw structure of full body, How to add volume, how to add tones and textures.
- 2.Intellectual skills: Students will able to manage actual proportion of bodyon to given space of work.
- 3. Practical skills: Students will able to create live drawing and painting of the subject with volume, tones and texture in any medium.

#### Name of the Program: B.A. (HOME SCIENCE)

Course Name: Family Home Science Resource Management & Hygiene

**Semester: I** 

#### **Objectives of the course:**

The main aim of this course is to create awareness among the students regarding maximum utilisation of resources, in order to achieve maximum goal with in the given time period among the family.

#### **Course Outcomes**

#### **Knowledge & Understanding**

- Knowledge about the management of the resources in thefamily as well as in other spheres of life.
- Understanding of the maximum utilization of the available resources to meet their goals.
- To maintain the good hygienic & sanitary conditions of thesurroundings for better, healthy & disease free living.

#### **Intellectual, Cognitive/ Analytical skills:**

- After the completion of this course students will able to develop analytical skills & capabilities to resolve theproblems efficiently related to all the specific areas in the family & society either independently or with the support of concerned authorities.
- A course of action can be chalked out how hygienic conditions can be maintained.

#### Practical skills:-

This course will enable students:-

- Cleaning & polishing of household things.
- Colour Wheel
- Colour schemes- Monochromatic, Analogous, Complementary.
- Floor decoration of Alpana & Rangoli

#### Transferable skills:-

This will enable students to develop creativity in planning & renovating either their own houses or other sectors by using their skills. Can create awareness among the society for maintaining good hygienic conditions. Help to control various diseases which will help to achieve goal of healthy living. Develop a capacity to assess the outputs of colour schemes.

**COURSE NAME:** Family Resource Management & Physiology

**Semester: II** 

#### **Objectives of the course:**

The main aim of this course is to focus on one or more areas of specialization which includes home management, flower arrangements, resource & money planning with human physiology to cope up with daily life.

#### **Course Outcomes**

#### **Knowledge & Understanding**

- This course imparts knowledge about the processes involved in the home management with planning of various essential resources like time, money & energy.
- Understanding of the principles of work simplification & tools involved in money & time management.
- Human physiology which will help in better understanding of internal system of body.

#### **Intellectual, Cognitive & Analytical Skills**

- After the completion of course students will able to apply intellectual & analytical skills in the aspects of home resource management.
- Formulate strategies that will intellectually enable planning of time, money & energy well.
- Student will able to know a broader area of various system of human body.

#### **Practical Skills**

- Cleaning of window pane, Refrigerator, Food Processor, Microwave, Gas Burner, Cooking Range.
- Flower Arrangement- Fresh & Dry Arrangement.
- Table Manners, Table setting and Napkin Folding.
- Craft workshop- Glass Painting, pot painting, utility article likebag, magazine holder, pot holder etc.

#### **Transferable Skills:**

- Deliver students a quality of education through learning of management of various resources at home which they can apply in their day to day life.
- Generate multi-skilled capabilities that are course specific like flower arrangement, time utilisation & budget making that helps in leading smooth work flow in home as well as in society.

#### **Course Name:** Clothing Textiles

#### **Objectives of the course:**

The main aim of this course is to make students understand all the basic insights of clothing & textiles. Enable them to learn stitching & impart knowledge about different fabrics & yarns.

#### **Course Outcomes**

#### **Knowledge & understanding**

- This course imparts knowledge about the basis of textiles.
- Understands & define the key textile terms.
- Develop critical understanding of the techniques of yarn &fabric manufacture.
- Identify the fabric, yarn & fabrics for its appropriate use.
- To understanding the various aspects of stitching with the helpof sewing machine and by taking body measurement.

- Acquire knowledge of methods of laundry & stain removal.
- Helps in learning the methods of dying & finishing of fabrics.

# **Intellectual, Cognitive & Analytical Skills:**

- After the completion of this course students will be able to earn the various intellectual & analytical skills to use clothing textile in various innovative means.
- This will help them to apply their cognitive ideas in earning their livelihoods in the clothing & fashion industry.

#### **Practical Skills:**

- Clothing samples of the following:
  - a) Tacking, Hemming, Buttonhole stitch, Fasteners,
  - b) Seams-counter seam, run, fell, French seam.
  - c) Processes-continuous wrap, two piece placket opening, pleats, geathers into band, tucks.
  - d) Embrodry-10 fancy embroidery stitches. Draftingof the following:
    - a) Childs bodice block.
    - b) Sleeves-plain and puff sleeve.
    - c) Collars-flat and raised peter pan, cape collar, baby collar.
- Drafting and stitching of:
  - a) Bloomer
  - b) Childs frock gathered.
- Textile skills:
  - 1. Testing of cotton, Wool & Silk, Nylon by Burning test.
  - 2. Simple house hold dyeing of cotton fabric.
  - 3. Preparation of an article of Tie and Dye.
  - 4. Block printing.

#### **Transferable Skills:**

- > Deliver students a quality of education by learning various aspects of stitching with the help of sewing capabilities.
- ➤ Generate multi-skilled capabilities that are course specific like the aspects of dying, laundry methods, identifying fabric, yarn & fabrics that can help them to design & create fashion products for the society.

Course Name: Clothing Textiles, Part-II

**Semester: IV** 

# **Objectives of the course:**

The main aim of this course is to impart knowledge of different fibre, yarn & fabrics along with their properties. To master students in the basic elements of designing.

#### **Course Outcomes**

#### **Knowledge & understanding**

- Knowledge of selection of suitable cloths for the various age groups.
- To learn the care & storage of garments.
- To develop various bleaching & finishing techniques.
- Understanding of the study of basic weaves in fabric construction & types of yarn.
- To remove the basic stains on cloths.

**Intellectual, Cognitive & Analytical Skills**: After the completion of this course students will be able to earnvarious cognitive aspects of drafting & stitching.

- This will help to develop various analytical skills in case of bleaching & finishing of fabrics.
- Gain intellectual power to construct fabrics which will helpthem to make a position in fashion industry.

#### **Practical Skills:**

- In clothing, drafting & stitching of garments
- In textiles:
  - a. Fabric painting
  - b. Stencil printing
  - c. Stain removal

#### **Transferable Skills:**

- Deliver students quality of education of designing & selecting of suitable garments for their family & society.
- Helps to generate multi-skilled capabilities that are course specific like care & storage of garments, bleaching & stain removing.
- Enable students to grasp various aspects of clothing & textiles.

Course Name: Food & Nutrition & Child Development-I

Semester: V

# **Objectives of the course:**

- To introduce the students to the fundamentals of nutrition, food& health.
- To impart knowledge regarding etiology & management of nutritional deficiencies to life style disorders.
- To know about the various aspects of child development.

# **Course Outcomes**

# **Knowledge & understanding:**

- Knowledge of the various functions of food and its essentialconstituents.
- Helps in understanding the different methods of cooking.
- Acquired knowledge about various functions, recommended allowance, deficiency & sources of food nutrients with food preservation.
- Helps to know the importance of child development from infancy to childhood.
- Helps to know various aspects of child's motor, emotional & language development.

# **Intellectual, Cognitive & Analytical Skills:**

- After the completion of this course students will be able to know the various changes occur in the development of child from infancy to childhood.
- The better intellectual & analytical skills are understood by the students by knowing the deep aspects of food constituents & food nutrients.
- Basic cognitive advancement that occurs in child

#### **Practical skills:**

- Preparation of various dishes using different cooking methods involving different food groups and their combinations.
- Food preservation methods to safeguard the longevity of food items.

#### **Transferable Skills:**

- This will enable students to dispense the aspects of this course intheir day to day life.
- Help them to analyse various food constituents and their benefits with which they can serve society.
- Have clarity in understanding different cookingmethods.
- Identify & distinguish the deeper roots of child development.
- Enhance their ability to make food more nutritious for healthyliving.

# Course Name: Food & Nutrition & Child Development-II

Semester: VI

#### **Objectives of the course:**

- To introduce students to the concept of balance diet & mealplanning.
- To create awareness about the various diseases with itsnutritional interventions as therapeutic diets.
- To know about the various aspects of pregnancy & feedingof infant.

#### **Course Outcomes**

#### Knowledge & understanding:-

- This course imparts knowledge about the basic food groupsthat should be incorporate in diet to make it balance.
- Helps in understanding the meal planning for the middleincome group belongs to different ages.
- Acquiring knowledge about various therapeutic diets &modifications in normal diet.
- Helps to know about the role of family & school indevelopment of child.
- To know the various aspects of pregnancy with methods offamily planning & feeding of the infants.

# **Intellectual, Cognitive & Analytical Skills:**

After the completion of this course students will be able to know the concept of balanced diet & principles of meal planning.

- Details about the therapeutic diet modifications in various diseases that helps the society in living healthy life.
- Evaluate & analyse the adulterated food.
- Gain critical knowledge about the child development, pregnancy& feeding of infants.
- These intellectual aspect helps to analyze the society well.

#### **Practical skills:**

- Calculations of basic food constituents includes in diet
- Preparation of diet for different age groups.
- Cooking & serving of the meals
- Planning of low calories & low cost recipes.
- Methods to enhance nutritive value of food.

# **Transferable Skills:**

- This will enable students to dispense the aspects of this course intheir day to day life.
- Help them to analyse various food constituents and theirbenefits with which they can serve society.
- Have clarity in understanding different cooking methods
- Identify & distinguish the deeper roots of calculation of nutrients.
- Enhance their ability to make food more nutritious for healthy living.

#### **Name of Program: B.Sc (Economics)**

#### **Program Outcomes**

- PO 1: Communication of present findings and explanation of complex data.
- PO 2 : Demonstration of awareness of global historical and institutional forces (assess the role of domestic and international institutions)
- PO 3: Recognization of the role of ethical values in decision making.
- PO 4: Knowledge to develop conceptual models of behavior to predict responses to changes in policy and market conditions and investigate these changes.
- PO 5: Knowledge to make decisions in everyday life like desirability of a particular financial investment opportunity, impact of public policies on healthcare or higher minimum wage etc.

# **Program Specific Outcomes**

- Provide fundamental knowledge related to Micro Economic concepts like consumer behavior, producer behavior, market forms, distribution of income, etc.
- Descriptive analysis of Indian Economy and Indian economic problems.
- Understanding Macro Economic Variables, theories of Income and employment determination and various macro- economic conceptsessential for policy and decision making.
- Exposure to basic concepts and theories of International Trade and Public Finance enabling the students to understand the liaison between domestic policies and international scenario.
- Comprehension of Basic Concepts of Development Economics
- Analyzing data using various statistical techniques and methodsfor having practical application of economics

#### **Course Outcomes**

#### **SEMESTER I**

# **Core Course: Micro Economics**

- CO 1-Understand how demand and supply interact in various marketstructures to determine price and quantity of a good produced.
- CO 2- Understand the links between household behaviour and theeconomic models of demand.
- CO 3- Understand the links between production costs and the economic models of supply.
- CO 4 Apply economic reasoning to individual and firm behaviour.
- CO 5- Analyse the efficiency and equity implications of governmentinterference in markets.
- CO 6- Recognize the situations leading to market failure.

# **Core Course: Quantitative Techniques**

- CO 1- Basic concepts of statistics such as measures of central tendency, dispersion, skewness and kurtosis.
- CO 2- Elementary probability theory including probability distributions.
- CO 3- Methods of sampling and census.
- CO 4- Correlation and simple regression
- CO 5- Index numbers.
- CO 6- Know about various mathematical and quantitative techniques such as A.P, G.P, Simultaneous equations, Differentiation etc.
- CO 7- Demonstrate knowledge of applicability of various techniques to real life economic problems.

#### **SEMESTER II**

# **Core Course: Indian Economy**

CO 1- Will know the structure and state of Indian economy, emerging challenges for economy, different sectors and sectoral growth. Students will get the knowledge of reasons for slow growth, problems of the sectors and different solution strategies.

- CO 2- Will identify the situation of Indian Economy, better evaluate and understand the data and problems related to different indicators of growth of countries economy. Students will intellectually search solutions for different types of problem of whole economy.
- CO 3 Will deal with different types of data and problems of economy, students will become aware of state problems. They can be evaluated the solutions, paths for development of the economy.
- CO 4 Will able to analysis the data and economy and can apply any quantitative research technique to evaluate economy growth, different sector contribution and role of different sectors in the growth of any other economy.

# **Core Course: Quantitative Techniques**

- CO 1- Will have knowledge of primary statistical and mathematical tools for analyzing economic problems.
- CO 2- Become familiar about the various statistical techniques.
- CO 3- Explore the scope of the subject.
- CO 4- Learn about how to collect data, organize the data, present andanalyze the data and interpret the results.
- CO 5- Demonstrate knowledge about various techniques of presentingand organizing the data.
- CO 6- Demonstrate and access the various measures of averages, regression, correlation etc.
- CO 7- Cross sectional and inter temporal Comparison of data.
- CO 8- Interpret the data diagrammatically and applying the measuresof statistics to real economic situations and research field.

#### **Core Course: Calculus II**

- CO 1- Examine various techniques of integration and apply them to definite and improper integrals
- CO 2- Approximate definite integrals using numerical integration techniques and solve related problems,
- CO 3- Model physical phenomena using partial differential equations.
- CO 4- Compute limits of, differentiate, integrate and solve related problems involving functions represented parametrically or in polar coordinates.
- CO 5- Differentiate, and integrate functions represented using power series expansions, including Taylor series, and solve related problems.

# **Core Course: Calculus and Differential equations II**

- CO 1- Can write the definition of indefinite and definite integrals.
- CO 2-Can define the integral of the inverse trigonometric and hyperbolic functions.
- CO 3-Can state the Fundamental theorem of calculus
- CO 4-Can find general solutions to first order, second order and higher order homogeneous and non-homogeneous differential equations with constant and variable coefficients.
- CO 5-Can find the series solution of differential equation.
- CO 6- Select and apply appropriate methods to solve differential equations.
- CO 7-Apply power series method to find solution of Differential equations involving Bessel and Legendre equations.
- CO 8- Use fundamental theorem of calculus to evaluate integralinvolving algebraic and transcendental functions.

#### **SEMESTER III**

#### **Core Course: Analysis**

- CO 1- Can work within an axiomatic framework.
- CO 2- Knowledge of some simple technique for testing the convergence of sequences and series and confidence in applying them.
- CO 3- An understanding of how the elementary functions can be defined by power series with an ability to deduce some of their easier properties.

- CO 4- Express correctly the definitions of basic concepts from the course unit, for example the definition of the limit of a sequence.
- CO 5- Decide on the correctness or otherwise of statements involving the basic concepts from the course unit, providing justifications or counter examples as appropriate.

# **Core Course: Analytical Geometry**

- CO 1- Establish rectangular coordinate system in the plane and in the space, express concept of vector both geometrically and analytically, understand operations on vectors and the properties of these operations.
- CO 2- Estimate polar equations of conics and their graphs.
- CO 3- Study of conics like ellipse, parabola and hyperbola.
- CO 4- Express condition of parallel or perpendicular of the two lines
- CO 5- Use the polar coordinate system, relate it to the rectangular coordinate system and graph equations using polar coordinates.
- CO 6- Model real world situations with equations of conics.
- CO 7- Determine equation of curves when given information that determines the curve.

# **Core Course: Quantitative Techniques I**

- CO 1- Students will be able to understand some basic concepts of Quantitative Techniques.
- CO 2- They will also come to know the problems of Partial Derivatives and its applications in Economics.
- CO 3- They will learn to use of Maxima and Minima in Economics.
- CO 4- They will also understand the concept of Integration.
- CO 5- Students will be able to handle problems of maxima and minima.
- CO 6- It will enable the students to know the use of quantitative techniques in economics.
- CO 7- It will enable the students to learn economic applications ofintegration.

#### **Core Course: Macro Economics**

- CO 1-Know how to define various elements of Macro Economics.
- CO 2-Understand and explain the basic concepts associated with Macro Economics.
- CO 3- Define various terms related to Macro Economics
- CO 4-Think critically about the different theories of Macro Economics

#### **SEMESTER III**

# Core Course: International Trade and Public Finance

- CO 1- Develop the ability to explain concepts and theories related to International trade and Public Finance.
- CO 2- Develop the ability to understand the basic economic terms like tariffs and non-tariffs barriers, reciprocal demand, terms of trade, taxes, public expenditure etc.
- CO 3- Understand the effect of different policies made by governmenton international trade and revenue and expenditure of country.

#### **Core Course: International Economics and Public Finance**

- CO 1- Know how to define various elements of international trade.
- CO 2-Understand and explain the basic concepts associated with international trade and public finance.
- CO 3- Define various terms related to international Economics and public finance.
- CO 4-Think critically about the different theories of international trade.

# **Core Course:: Quantitative Techniques II**

- CO 1- Understand some basic concepts of statistics.
- CO 2- Understand the problems of linear and nonlinear regression.
- CO 3- Use of correlation ad regression in economics.
- CO 4-Understand the concept of probability and probability distributions.
- CO 5- Use of these statistical methods in forecasting, controlling and exploring data.
- CO 6- Students know various techniques of sampling.
- CO 7- Students also know about linear and nonlinear regression, probability and probability distributions.

#### **Core Course: Statics and Vector Calculus**

- CO 1- calculate vector and scalar derivatives of vector and scalar fields using the grad, div and curl operators in Cartesian and in cylindrical and spherical polar coordinates;
- CO 2- Use suffix notation to manipulate Cartesian vectors and their derivatives.
- CO 3- Calculate multiple integrals in two and three dimensionsincluding changing variables using Jacobians.
- CO 4- Calculate line and surface integrals and use the various integraltheorems.
- CO 5-Undertake the analysis of symmetric beams under vertical loadsand torsion of cylindrical shafts.
- CO 6- Use Green's theorem to evaluate line integrals.
- CO 7- Gradient vector fields and constructing potentials.

#### **Core Course: Dynamics**

- CO 1- Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- CO 2- Understand and use basic terms for the description of the motion of particles, vector functions and the fundamental laws of Newtonian mechanics.
- CO 3- Solve mechanics problems in one dimension that involve one ormore of the forces of gravity, friction and air resistance.
- CO 4- understand the concept of terminal speed, and use it in solving mechanics problems in one dimension.

#### **SEMESTER IV**

### **Core Course: Number theory**

- CO 1- Explore the use of arithmetical functions, the Mobius functionand the Euler totient function.
- CO 2- Solve systems of linear congruences with different moduli using the Chinese Remainder Theorem.
- CO 3- Prove results involving divisibility and greatest common divisors.
- CO 4- Can apply Euler-Fermat's Theorem to prove relations involving prime numbers.
- CO 5- Analyse the structure of real-world problems and plan solutionstrategies.
- CO 6- Communicate quantitative data verbally, graphically, symbolically and numerically.
- CO 7- Use mathematical concepts in problem-solving through integration of new material and modelling.

# **Core Course: Development Economics**

- CO 1- Develop the ability to explain core economic terms, concepts and theories related to development of an economy.
- CO 2- Demonstrate the ability to employ different policies to realize the growth objectives.
- CO 3- Have knowledge of conceptual models of Economic Development.
- CO 4- Have knowledge to policy determinants in the development of an economy.
- CO 5- Have deeper understanding of economic situation of an economyon different parameters and variables, and have the opportunity identify the relationship between the different economic variables for further used for policy making.

# **Core Course: Quantitative Techniques**

- CO 1- Students will understand the scope and categories of the subjects.
- CO 2- Students will know the techniques of data collection and the techniques and methods to apply and evaluate the result of economic variables and their relationships.
- CO 3- Students will able to understand and apply the methods to test the validity of economic theories.
- CO 4- They can further use the techniques for research purpose. They can also forecast the future values.
- CO 5- Students can get the knowledge of techniques that is how to apply different techniques and different formulas and their applicability on different types of data.
- CO 6- Students will be familiar with Quantitative methods and their application on economic variables.
- CO 7- Students will familiar with different techniques and able to use these techniques to analysis any applicable dimension of economic theory and variable.

#### **Core Course: ECONOMETRICS**

- CO 1- Students will understand the scope and categories of the subjects. Students will know the techniques of data collection and the techniques and models to apply and evaluate the result of economic variables and their relationships
- CO 2- Students will able to understand and apply the model to test the validity of economic theories, quantitative and qualitative and further can use the models for research purpose. They can also forecast the future values.
- CO 3- Students will be familiar with econometrics problems, detection tests for detecting the econometrics problem, consequences of econometrics problems and remedial measures to remove the emerging problem. Students will familiar with different techniques and able to use these techniques to analysis any applicable dimension of economic variables.
- CO 4 Students will able to analysis the data and economy and can apply any quantitative research technique. They will be able to use econometrics techniques for economic variables for evaluation, to test validity of economic theory and magnitude and forecast future values.

#### **SEMESTER V**

### **Core Course: Quantitative Methods for Economists**

- CO 1- Knowledge and understanding: Students will understand the scope and categories of the subjects. Students will know the techniquesof data collection and the techniques and methods to apply and evaluate the result of economic variables and their relationships.
- CO 2- Students will able to understand and apply the methods to test the validity of economic theories. They can further use the techniques for research purpose. They can also forecast the future values. Studentscan get the knowledge of techniques that is how to apply different techniques and different formulas and their applicability on different types of data.
- CO 3- Practical Skills: Students will be familiar with Quantitative methods and their application on economic variables. Students will familiar with different techniques and able to use these techniques to analysis any applicable dimension of economic theory and variable.
- CO 4- Transferable Skills: -Students will able to analysis the data and economy and can apply any quantitative research technique. They willbe able to use statistical and mathematical techniques for economic variables for evaluation, to test validity of economic theory and forecast future values.

# **Core Course: Numerical Analysis**

- CO 1- Solve an algebraic or transcendental equation using an appropriate numerical method.
- CO 2- Approximate a function using an appropriate numerical method.
- CO 3- Can solve a differential equation using an appropriate numerical method
- CO 4-Can evaluate a derivative at a value using an appropriate numerical method.
- CO 5- Analyze the error incumbent in any such numerical approximation,
- CO 6- Implement a variety of numerical algorithms using appropriate technology.
- CO 7- Compare the viability of different approaches to the numerical solution of problems arising in roots of solution of non-linear equations, interpolation ad approximation, numerical differentiation and integration, solution of linear systems.
- CO 8- Can code a numerical method in a modern computer language.

#### **SEMESTER VI**

#### **Core Course: Linear Algebra**

- CO 1- Develop an understanding of linear algebra in mathematics, natural and social sciences.
- CO 2- Use matrix algebra to analyze and solve equations arising inmany applications that require a background in linear algebra.
- CO 3- Utilize vector space terminology and describe how closely other vector spaces resemble R<sup>n</sup>.
- CO 4- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.

- CO 5- Represent mathematical information and communicate mathematical reasoning symbolically and verbally.
- CO 6- Interpret and analyze numerical data, mathematical concepts andidentify patterns to formulate and validate reasoning.

# **Core Course: Q.T.(Econometrics)**

- CO 1- Develop the ability to evaluate and can learn to apply different econometrics techniques.
- CO 2- Develop the ability to forecast the economic situation based on the data.
- CO 3- Students will understand the scope and categories of the subjects.
- CO 4- Students will know the techniques of data collection and models of econometrics to apply and evaluate the result of economic variables and their relationships.

# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# FACULTY OF FASHION DESIGNING

# Program Outcomes (POs) and

# **Course Outcomes (COs)**

G T Road, near Putli Ghar, Amritsar, Punjab, 143002

Phone:0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

#### Name of the Program: B.Sc FD

# **Program Outcomes**

- PO 1: The Program aims to give knowledge with facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, Computer Science, Economics, Quantitative Techniques, Bio-Informatics, Bio-technology etc.
- PO 2: Enable the students to understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevance in the day-to-day life.
- PO 3: The learners acquire the abilities in handling scientific instruments, scheduling and executing the experiments in laboratories and to draw logical inferences from the scientific experiments.
- PO 4: They become capable of thinking creatively, to propose innovative ideas in clarifying facts and figures and providing new solution to the problems.
- PO 5: To give them knowledge about developments in any science subject and how interdisciplinaryapproach helps in providing better solutions and new ideas for the sustainable developments.
- PO 6: The Program targets to develop scientific aptitude among the students to make them open-minded, critical and curious in order to deal with all aspects related to life.
- PO 7: To make them capable of applying their acquired knowledge and able to work on their own hencemake themselves self-reliant and self-sufficient.

# **Program Specific Outcomes**

- PSO 1: The students will have the basic foundation in designing and have the ability to visually represent it by illustrations, photographs, graphics and visual display of merchandising.
- PSO 2: The students will be able to convert their designs into a garment using appropriate construction techniques.
- PSO 3: The students will have a strong foundation and understanding of the garment manufacturing process and procedures.
- PSO 4: Successful graduates of the course are lucratively employed in various sectors- such as exporthouses, garment manufacturing units, leather companies, jewellery houses etc.

### **Course Outcomes**

#### Semester-I

# Paper I: Basic of Design and Illustration

- CO 1: To help students to understand and define design fundamental, elements and principles of design.
- CO 2: To enable students to demonstrate figure sketching and drawing.
- CO 3: To understand the what, why and how of illustration techniques
- CO 4: Students will be able interpret Fashion Design concepts and colour theories.

### **Paper II: Concept of Fashion**

- CO 1: Students will be able to find and discuss concepts related to the historical background of fashion
- CO 2: Students will be able to interpret, assess, purpose and apply various techniques related to drafting, draping.
- CO 3: Students will be able to interpret different fashion cycles and theories of fashion.
- CO 4: Students will be able to interpret social and psychological aspects of clothing.

# Paper III: Basics of Sewing-I

- CO 1: Students will able to define and construct various sleeves e.g. Puff, raglan, kimono etc.
- CO 2: Students will able to explain Yokes with fullness and without fullness
- CO 3: Students will able to understand and translate Construction of collars Flat and rolled, peter-pancollar
- CO 4: Student will be able to make use of Sewing machines and other basic sewing techniques used forGarment formation.

# **Paper IV: Basics of Computers**

- CO 1: Students will able to Define and understand the basics knowledge of computers.
- CO 2: Students will learn to compare between an operating system and an application Program.

- CO 3: Student will be able to identify General concept of MS-Word.
- CO 4: Student will be able to analyze Computer applications in various fields of fashion Industry.

# Paper V: Fiber to Fabric

- CO 1: Students will able to tell and identify different types of Fibers and yarns.
- CO 2: Students will be able to identify different fibers to know the fabric type with Microscopicappearance, burning test and solubility test.
- CO 3: To extend student's knowledge of fiber, sources of fibers, their definitions and properties
- CO 4: To provide students with understanding of yarn science and yarn properties.

#### **Semester-II**

# **Paper I: Traditional Textiles**

- CO 1: Students will able to summarize, differentiate & learn types of carpets, colored woven &printed textiles of India.
- CO 2: Students will be able to analyse various effects, texture and basics of art and design world.
- CO 3: To extend student's knowledge of traditional design and motifs of textiles.
- CO 4: To demonstrate applications of the traditional motifs on different textiles.

# **Paper II: Fabric Construction**

- CO 1: Students will be able to discover various techniques of weaving, knitting, felting & bonding.
- CO 2: Students will analyze different types of decorative fabric construction techniques.
- CO 3: To impart knowledge of fabric manufacture and fabric properties.
- CO 4: To enable students to understand fabric structures and to analyze them.

#### **Paper III: Basics of Computers**

- CO 1: Students will be able to apply the Professional presentation formations, different views of Power Point & animation effects.
- CO 2: Student will be able to explain basic Concepts of PowerPoint, CorelDraw & Photoshop.

#### **Semester-III**

# Paper I: Fashion Design and Illustration

- CO 1: Student will formulate the process to work from concept to finished products, includingknowledge of paints and surfaces.
- CO 2: Students will conclude the various design details and their use in fashion/textiles.
- CO 3: Students will be able to analyze two dimensional and three dimensional images.
- CO 4: To enable students to gain knowledge of figure sketching and drawing.

# **Paper II: Colour Concepts & Coloration**

- CO 1: Students will understand importance of colour & colour schemes.
- CO 2: Students will be able to originate different types of dyeing techniques on fabrics.
- CO 3: To impart knowledge of fashion design concepts.
- CO 4: To enable students to develop practical skills of printing

# Paper III: Pattern Making & Garment Construction

- CO 1: Students will be able to develop commercial paper patterns & make style reading sheets.
- CO 2: Students will able design and construct garments Salwar suit, blouse, Petticoat.
- CO 3: Student will be able to relate different aspects of pattern making and grading.
- CO 4: Student will be able to develop the concept of pattern making and draping.

# Paper IV: Needle Craft

- CO 1: It enables the students to classify methods of surface ornamentation on fabric using different techniques to produce value added products.
- CO 2: Students will learn to develop and explain practical skills in needle craft techniques

- CO 3: Students will be able learn methods of surface ornamentation of fabric using different techniquesto produce value-added products.
- CO 4: To enable the students to develop practical skills in needle craft techniques.

# Paper V: Knitting Technology

- CO 1: Students will be able to demonstrate types, characteristics & structure of knitted products
- CO 2: Students will summarize the knowledge of knitted garments.
- CO 3: Student will be able to analyze about knitting technology.
- CO 4: To enable students to develop practical skills of knitting.

#### Semester- IV

# **Paper I: Fashion Design and Illustration (CAD)**

- CO 1: Students will interpret fashion design concept on computer.
- CO 2: Students will gain working knowledge of Corel draw software and will apply hands onknowledge on details and croquies on computer.
- CO 3: To understand the fashion design concepts on computer.
- CO 4: To acquaint students with perception of CAD based application in fashion designing.

# **Paper II: History of Costumes**

- CO 1: Students will be able to build and develop costumes for men and women Indus valleycivilization, British period, Mauryan, Mughal period etc.
- CO 2: Students will summarize dresses of historic period
- CO 3: To acquaint the students with different types of costumes.
- CO 4: To assess opportunity for skill development in designing accessories.

# Paper III: Garment Construction & Draping

- CO 1: Students will apply concept of advance pattern making and different garment construction techniques.
- CO 2: Students will be able to learn Commercial pattern making techniques which will support studentsto work with industry.
- CO 3: To introduce concept of advanced garment construction.
- CO 4: To impart knowledge of different garment components.

#### Paper IV: Fashion Illustration & Appreciation

- CO 1: Student will discover to design theme based project.
- CO 2: Students will design and develop theme based collection on any type of theme.
- CO 3: To enable students to create designs by taking inspiration from different themes.

# Paper V: Pattern and Marker Making on Computer

- CO 1: This course aids in translating patterns and layouts according to body measurements.
- CO 2: Students will able to analyze skills of marker plan, pattern making & drawing using computers.
- CO 3: To impart the skills of marker plan, pattern making and drawing using computers.

# **Semester-V**

# Paper I: Fashion Illustration and Appreciation

- CO 1: The highly effective and superior study Program brings in opportunity to maximize creativeskills by collage making on different theme based collections.
- CO 2: Students will illustrate and develop garments by taking inspiration from historical period, monuments, traditional fabric, embroideries and many more themes.
- CO 3: Student will be able to appreciate and originate the Fashion Illustrations.

Paper II: Draping, Pattern Making and Construction
CO 1: Students will able to classify and drape stylized skirts, necklines, bodice & torso.
CO 2: Students will be able to Concept of draping and stitching will be utilized in developing garments for clients.
CO 3: Students will be able to construct garments on each theme: ☐ Night Wear ☐ Ethnic wear
Paper III: CAD (Computer Aided Design)
CO 1: Software helps the students to discover the design world, as maximum work is done onsoftware in design world.
CO 2: Software will help students to determine the process of creating technical drawing with the use of computer aided designing.
CO 3: Students will be able to Design different outfits using themes like:   Flora and Fauna   Traditional Fabric and embroidery
CO 4: Student will be able to imagine Minimum 2 designs and create the same on computers.
Paper IV: Internship for Design and Construction of Garments
CO1: Students will be able to adapt designers to work closely with garment technologists and sample machinists. The role could also involve liaising with manufacturers (often based overseas) to make sure designs are reproduced accurately.
CO 2: Students will able to examine and perceive industrial working methods.
CO 3: Students will be able to justify, how management plays an important role in every field.
Paper V: Leather Technology
CO 1: Students will explain Packaging of product –importance and various materials used for packaging. CO 2: Students will be able to summarize leather manufacturing process.
CO 3: To impart knowledge about Leather technology.
CO 4: To enable students to develop practical skills of leather Product Formation.
Semester-VI
Paper I: Fashion Illustration and Appreciation
CO 1: To classify framework for students to understand the basic concept of illustration.
CO 2: It helps students to interpret different types of color medium in illustration.
CO 3: Students will be able to appreciate work of western and Indian designers
CO 4: Student will be able to illustrate the innovative dresses by the use of appropriate mediums and different presentation skills by taking inspiration of famous western and Indian designers.
Paper II: Pattern Making and Construction
CO 1: This course helps students to perceive, design and develop different types of female garmentsaccording to theme based pattern.
CO 2. It halps students in Construction of garments on each theme: \(\pi\) Office wear \(\pi\) Evaning wear

- CO 2: It helps students in Construction of garments on each theme:  $\Box$  Office wear  $\Box$  Evening wear
- CO 3: Students will be able to design and construct any innovative garment based on previous paper.

# **Paper III: Computer Aided Design**

- CO 1: Students will able to originate, and develop designs on Corel draw & AdobePhotoshop
- CO 2: It helps students in Designing and Construction of outfits on the themes □ Season/Casual wear □ Party wear ☐ Sportswear/ Uniform (School)
- CO 3: It helps students in Draping simulation of designs.

# Paper IV: Survey and Project Report

- CO 1: Support the student with ability to discover a style that is distinctively consistent.
- CO 2: Helps student to develop ability to manage the process of emerging designs through creativity and preparing graduates to work with fashion industry.

- CO 3: After completion of the project students will be able to support working on different types of field project.
- CO 4: After doing survey on any Indian state, the student will be able to □ Make a project report □ Design any 10 garments taking it as inspiration

# Paper V: Fashion industry, Marketing and Management

- CO 1: After studying this course the students should be able to apply various marketing & management aspects to their projects and understand marketing techniques to run any business effectively.
- CO 2: Students will be able to inspect the Career & job roles in fashion industry.
- CO 3: Students will perceive how management plays an important role in every field of fashion.
- CO 4: After completion of the project students will be able define and differentiate Indian and global fashion.

# Name of Program: B.Voc (Fashion Styling & Grooming)

#### **Program Outcomes**

PO1: To sculpt young minds with design thinking, instil passion and flare for designing and help aspiring students to become successful designers, entrepreneurs and industry ready professionals.

PO 2: Confident young Entrepreneur or Designer with their indigenous designs.

PO-3 Garment Industry Professional or freelance consultant who will excel in the job responsibility entrusted on him or her.

PO-4 Understanding Theories & Principles of behind Fabric Construction, Textile Science, History of Art, Textile, Costumes, Fashion theories, Styles, Marketing and Merchandising PO-5 Develop skill to apply software tools knowledge to design and create prototypes.

PO-6 To visually communicate ideas in the form of artistic fashion illustrations, graphic illustration, styling, fashion photography and visual display of merchandise.

# **Program Specific Outcomes**

PSO1- Assistant Fashion Designer / Fashion Stylist

PSO2- Fashion Illustrator / 3D Illustrator

PSO3- Quality Head

**PSO4-** Cosmetologist

PSO5- Entrepreneur / Garment stores / Boutique

PSO6- Fashion Designer

PSO7- Hairstylist

PSO8- Makeup Artist

# **Course Outcomes**

After completing each course three year Degree in Fashion Designing, the students will be able:-

#### Semester I

# Core course- Fashion Art and Design Development

- CO 1 introduction to basic art media and their application
- CO 2 learn principles and elements of design
- CO 3 learns colour dimensions and colour harmonies
- CO 4 learns the basic techniques of sketching.

#### **Core course- CAD**

- CO 1 introduction to Photoshop
- CO 2 understand different designing tool
- CO 3 Designing different styles of garments for kids wear by using CAD software
- CO 4 Introduction to MS Word

# **Core course- Styling & Grooming**

- CO 1 understand importance and benefits of Yoga and Aerobics
- CO 2 know the skin types of our skin
- CO 3 know the maintenance of face and hair

#### Semester II

#### **Core course- Fashion Illustration**

- CO 1 knowledge of basic Croquies and different proportion figure and fleshing out body
- CO 2 understand formulation of hands, feet, legs, arm and face
- CO 3 Sketching of Various garments details
- CO 4 Rendering texture of fabric

# **Core course- Pattern Making & Construction**

- CO 1 introduction to Infant Garments
- CO 2 understand Pattern Making, Layout, Cutting & Stitching of Infant Garments

#### **Core course - Textile Studies**

- CO 1 Identify and classify the basic textile fibers
- CO 2 understands the properties and manufacturing of different fibers.
- CO 3 understand the methods of yarn manufacturing
- CO 4 knowledge of different types of fabrics
- CO 5 understand difference between woven and non-woven fabrics

#### Core course - CAD

- CO 1 Introduction to Corel Draw
- CO 2 know about new features of Corel Draw
- CO 3 know working with drawing, text, formatting and alignment tools

# **Core course – Portfolio Development**

- CO 1 Illustrate theme based garments for kids
- CO 2 Develop the basic theme board, mood board, colour board
- CO 3 Prepare the spec sheet, construct the pattern and garment

# **Core course – Styling & Grooming**

- CO 1 Understand detailed knowledge of Manicure and pedicure
- CO 2 Gain knowledge about the manicure and pedicure tools
- CO 3 Demonstrate basic Hair styling
- CO 4 Practice causal Makeup

#### **SEMESTER III**

# Core course- fashion design and illustration

- CO 1 Illustrate different designs and styles of various garment details collars, necklines, sleeves, cuffs for Women's wear
- CO 2 Sketching of Silhouette
- CO Create the new techniques of Rendering Texture of fabrics
- CO 4 Illustrate the Garment Designing for various figures

# **Core course- Apparel Construction**

- CO 1 Develop paper pattern and Drafting for Kids wear
- CO 2 Construction of different types of skirts for kids
- CO 3 construction of basic garments for females
- CO 4 prepare drafting foe women's wear

# **Core course- Surface ornamentation**

- CO1 understand the printing techniques
- CO2 understand different types of prints
- CO3 prepare different articles of different methods of printing

#### **Core course- Needle Craft**

- CO 1 understand the different types of embroidery stitches
- CO 2 capable of designing embroidery by different stitches.
- CO 3 Elaborate the techniques of create the different stitch with hand

#### **Core course- Pattern and Marker Making on Computer**

- CO 1 impart the skills of marker plan, pattern making and drawing using computers
- CO 2 knowledge of basic principles of marker making on computer (cutting and layout)
- CO 3 development of Sloper, manipulation of darts and seams, seam allowances

# **Core course- Personal Hygiene & Safety Precautions**

- CO 1 learn about self-grooming
- CO 2 learns Treatments of different Types of Oily, Dandruff and Dry hairs
- CO 3 gain knowledge about Accidents due to Chemicals and electrical equipment in Saloon.

#### **SEMESTER IV**

#### **Core course- Fashion Illustration**

- CO 1 understand collage making for moodboard and storyboard using different themes
- CO 2 creates different boards for the particular garments.
- CO 3 to illustrate various costumes according to the theme

# **Core course- Apparel Construction and Draping**

- CO 1 More Knowledge in creative designs and idea for draping
- CO 2 Understand and identify the principles of designs and fullness
- CO 3 Identify the techniques for draping
- CO 4 design and develop the individual parts of the garment
- CO 4 construction of different garments according to the theme

#### **Core course- Surface Ornamentation**

- CO 1 develops skills in dyeing of fabrics
- CO 2 understand different types of dyes
- CO 3 understand dyeing defects

#### **Core course- CAD**

- CO 1 gains the knowledge in CAD software.
- CO 2 illustrate different types of garments using Computer Aided Designing
- CO 3 Design different outfits using themes

#### **Core course- Overview of Fashion Industry**

- CO 1 introduced to fashion Industry Indian and global market
- CO 2 knowledge of Job opportunities in Apparel sector at different levels
- CO 3 knowledge of leading domestic & International Brands in the area of Apparels
- CO 4 understand Retail Organisational Structure store

#### **Core course- Hair Care**

- CO 1 knowledge of hair care
- CO 2 understand hair treatments
- CO 3 able to perform skills in the areas of hair cutting, hair styling, advance hair treatments Hair coloring,
- CO 4 Identify and deliver chemical services

# **SEMESTER VI**

# **Core course- Design Process**

- CO 1 Develop the basic theme board, mood board, colour board
- CO 2 Illustrate the garment design with backdrops

- CO 3 Prepare the spec sheet, construct the pattern and garment
- CO 4 Develop different designs and styles for Men's Apparel
- CO 5 Summarize the cost calculation for the Men's Garment

# **Core course- Apparel Production (Workshop)**

- CO 1 Examine suitable fabrics, colors and designs for patterns
- CO 2 Construct the garment as per the pattern and drafting procedure
- CO 3 Develop different designs and styles for Men's Apparel on different themes
- CO 4 Construct and rephrase basic and modify patterns

#### **Core course-History of Costumes**

- CO 1 understands different costumes from earlier times to present time.
- CO 2 understands different costumes of various regions of India

#### **Core course-Printed Textiles**

- CO 1 develop textile designs on different themes
- CO 2 application of designs on fabric using different printing techniques

#### **Core course - CAD**

- CO 1 introduce to Richpeace CAD software
- CO 2 prepare designs on different themes using Richpeace designing tools

# **Core course - Portfolio Development**

- CO 1 Capable to make Curriculum Vita
- CO 2 Theme based designs for Kids/ Female
- CO 3 Develop the basic theme board, mood board, colour board

# **Core course - Apparel Production**

- CO 1 designing of theme base garments for kids/ Female
- CO 2 prepare paper pattern layout for different garments
- CO 3 construction of theme based garments

# **Core course - Knitting and Quality Control**

- CO 1 understand the knitting process
- CO 2 Identify the quality concepts, and importance of quality control in textile industry
- CO 3 understand quality control in packaging and labelling
- CO 4 understand the quality parameters in knitting

# **Core course - Advance Draping**

- CO 1 learn advance technique in draping
- CO 2 Draping of stylised yokes and hemlines

# **Core course - Exhibition / Fashion Show / Display (Project)**

- CO 1 Able to put up an exhibition
- CO 2 Learn different techniques of display
- CO 3 Able to prepare portfolio

# Name of Program: M.Sc (FD&M)

# **Program Outcomes**

- PO 1: This Program brings together the graduates who wish to enhance their skills and gives them an opportunity to develop their careers in a particular direction.
- PO 2: The Program provides in-depth knowledge of particular subject and arouses interest of the students towards research in that particular field.
- PO 3: The Program tends to expertise students in practical work and experiments based on the same so that they can analyze the data effectively.
- PO 4: The students will be able to exhibit the capability to study the social and ethical aspects as well as cognizance of ethical facets of research and development work.
- PO 5: The masters of science Program provides the candidate with understanding, general proficiency, and methodical abilities on an advanced level required in industry, consultancy, education, entrepreneurship or public administration etc.

# **Program Specific Outcomes**

- PSO 1: This course enables the students to go for various fashion designing industries, film industry and teaching related jobs.
- PSO 2: This course includes training, project and guest lectures collaborated with industries help to learn from real life situations.
- PSO 3: Hands on experience by working on live projects to develop a sense of problem solving critical thinking in order to gain real life understanding
- PSO 4: This course offers subjects like communication and soft skills to enhance personality and employability.
- PSO 5: This course also provides golden opportunity for the students to organize fashion show and create professional portfolios.

#### **Course Outcomes**

#### **Semester-I**

#### **Paper I: Fashion Illustration**

- CO 1: To classify framework for students to understand the basic concept of illustration.
- CO 2: It helps students to interpret different types of color medium in illustration.
- CO 3: Students will be able to appreciate work of western and Indian designers
- CO 4: Student will be able to illustrate the innovative dresses by the use of appropriate mediums and different presentation skills by taking inspiration of famous western and Indian designers.

# **Paper II: Product Development Workshop**

- CO 1: Students will able to design and develop different types of garments for kids.
- CO 2: Students will learn developing the designs planned or thought & an implementation to the thinking is given by drafting of different designs.
- CO 3: To enable the students to apply the knowledge of design process in making a collection

# Paper III: Pattern Making and Grading

- CO 1: Students will be able to determine sleeve and adult bodice block with metric system
- CO 2: Various design technique and styles are explored in drafting of different types of collars, sleeves, skirts. Contoured pattern, dart manipulation & grading.
- CO 3: Students learn and apply techniques of up grading and down grading
- CO 4: To understand the importance of pattern development and apply the knowledge of pattern development for creating structural designs

# **Paper IV: Computer Aided Fashion Designing**

- CO 1: This course leads to success in education & employment as computer skills are integral to all areas of study. The students will gain knowledge of Adobe Illustrator and Adobe Photoshop in detail.
- CO 2: Students will also learn to design fashion details, accessories, figure drawing of male, female and kids on computers.
- CO 3: Knowledge of draping simulation on Adobe Photoshop is also perceived.
- CO 4: To enable students to handle tools of Adobe Illustrator & Photoshop to create fashion and design Illustration

# **Paper V: History of Indian Costumes**

- CO 1: Ability to relate art of historical costumes of men and women during Indus valley civilization, British period, Mauryan, Mughals and traditional costumes of India.
- CO 2: Students will appraise knowledge of— Headgears, footwear, handbags, belts, gloves, earrings, necklaces and bangles which will further helps them in designing.
- CO 3: To acquaint the students with different types of costumes.
- CO 4: To assess opportunity for skill development in designing accessories.

#### Semester-II

# **Paper I: Fashion Illustration**

- CO 1: It will help students illustrate basic block figures- Male and female.
- CO 2: Students will make use of various effects, texture and basics of art and design world to foster creativity of the students.
- CO 3: To understand the what, why and how of illustration techniques
- CO 4: Students will be able interpret Fashion Design concepts and colour theories.

# Paper II: Product Development- Workshop

- CO 1: Students will able to apply the knowledge of design process in making collection of female wear.
- CO 2: Students will learn developing the designs planned or thought & an implementation to the thinking is given by drafting of different designs.
- CO 3: To enable the students to apply the knowledge of design process in making a collection of women wear.

# Paper III: Pattern Development & Draping

- CO 1: Students will understand and create pattern for the collection
- CO 2: It provides technical knowledge of draping in developing patterns and designing via draping.
- CO 2: The students will learn to develop draped patterns of basic foundation patterns along with variation in collar, sleeve and neckline.

#### **Paper IV: Computer Aided Fashion Designing**

- CO 1: To enables student to improve working on pattern making and grading software (Rich piece).
- CO 2: Student will appraise and assess design projects which help to increase productivity and efficiency of work
- CO 3: Student maximize the process of creating technical drawing with the use of software.

# Paper V: Fashion Merchandising and Marketing

- CO 1: Students will able to explain role & responsibility of Fashion Merchandiser.
- CO 2: The students experiment with material availability in market, fashion forecast, upcoming trends and demands of the consumers.
- CO 3: Students will perceive, how management plays an important role in every field of fashion.
- CO 4: After completion of the project students will be able d e f i n e a n d d i f f e r e n t i a t e Indian and global fashion.

#### **Paper VI: Traditional Indian Embroideries**

- CO 1: To translate beauty of garments with embroidery, painting and other decorative materials
- CO 2: To know and choose appropriate fabric suited to the design of the garment with special reference to colour, texture and design of fabric by visit to any textile museum, craft cluster/craft area.
- CO 3: This course will help student to understand and create documentation of the selected craft.

#### **Semester-III**

# Paper I: Product Development- Workshop

- CO 1: Students will able to develop different types of male garment.
- CO 2: This course helps students to evaluate and incorporate drafting casual, traditional, street and formal wear for male garments.
- CO 3: The student will be able to understand process of Design Development  $\square$  Research  $\square$  Finalization of Theme  $\square$  Sourcing  $\square$  Finalization of designs  $\square$  Measurements and specification sheets.
- CO 4: The student will be able to analyze, evaluate and submit the documentation of the design process.

# **Paper II: Advance Draping**

- CO 1: Students will be able to apply the knowledge of draping in developing patterns and designs by different designs.
- CO 2: The concept of contouring used in draping to make off shoulder and padded evening gowns will also be taught by which students will be able to modify handling fitting problems in designing.
- CO 3: The student will be able to Drape and stitch any designed garment.

# **Paper III: Computer Aided Fashion Designing**

- CO 1: Students will be able to elaborate designing through use of Adobe Illustrator &Photoshop and hence create fashion & design illustrations.
- CO 2: It allows students for greater modeling and even provides a basis for virtual networking.
- C O 3: Helps the student to interpret that in designing world, CAD is extremely important and widely used to design and develop products to be used by consumers.

# **Paper IV: Surface Ornamentation**

- CO 1: Students will utilize skills to beautify garments with embroidery, printing, crochet, macramé and other decorative materials
- CO 2: Students will be able to incorporate the above and develop apparels.
- CO 3: To know and choose appropriate fabric suited to the design of the garment with special reference to surface ornamentation.
- CO 4: This course will help student to understand and create documentation of the selected craft.

# **Paper V: Global Costumes**

- CO 1: To develop knowledge of costumes related to men and women like Babylonian costumes, Persian, Egyptian, Greek, Roman period etc.
- CO 2: To determine the use of Headgears, footwear, handbags, belts, gloves, earrings, necklaces and bangles globally and hence help in planning and designing according to the world's culture.
- CO 3: To acquaint the students with different types of costumes.
- CO 4: To assess opportunity for skill development in designing accessories.

# **Paper VI: Seminar-Indian Traditional Textiles**

- CO 1: The students will gain knowledge about the traditional textiles of India.
- CO 2: Students will be able to apply traditional fabrics of different states of India with emphasis on texture, design and colour to any design of their choice.

#### Semester-IV

#### **Paper I: Portfolio Development**

- CO 1: Student will learn that Portfolio development is the important part of designing to expose students to real work like situation and improve male, female and kids garments with various boards, specs, cost sheets and garment collection.
- CO 2: The student will learn that the art portfolio is an expression of graduating student's creativity, design/ability, technical expertise, illustration and presentation skills.
- CO 3: It explains and evaluates the students inclination towards the particular segment of the industry by identifying the target customers, design requirements and pricing

# Paper II: Product Development- Workshop

- CO 1: Students will able to construct different types of kid, male or female garments.
- CO 2: Students will able to apply the knowledge of design process in making a collection
- CO 3: The student will be able to understand process of Design Development 

  Research
- $\square$  Finalization of Theme  $\square$  Sourcing  $\square$  Finalization of designs  $\square$  Measurements and specification sheets.
- CO 4: The student will be able to analyze, evaluate and submit the documentation of the design process.

# Paper III: Fashion Merchandising and Retailing

- CO 1: Students will able discuss about various retail organizational structure store.
- CO 2: Students will learn the role of Customer identification, customer, planning and role of buyer.
- CO 3: Students will perceive how management plays an important role in every field of fashion.
- CO 4: After completion of the project students will be able define and differentiate Indian and global fashion.

# **Paper IV: Textile Chemistry**

- CO 1: Students will able to learn and identify different types of Fibres
- CO 2: To interpret different fibres through Microscopic appearance, burning test and solubility test for to know the fabric type.
- CO 3: The student will be able to do Fabric Identification on the basis of fabric construction. 

  Woven knitted 

  Non-woven 

  Fabric analysis on the basis of the thread count
- CO 4: The student will be able to do Collection and identification of fabric Construction techniques Woven  $\square$  Non- Woven  $\square$  Knitted and Dyeing of Fabric  $\square$  Cotton with natural dyes and Direct dyes  $\square$  Wool with acid dyes  $\square$  Silk with basic dyes

# Paper V: Project Report/Design Project

- CO 1: This course helps the students in developing the knowledge and versatility of students and helps them in boosting their career by designing through research.
- CO 2: It involves application of learned skills in designing and developing to the major project report.
- CO 3: It explains and evaluate the students inclination towards the particular segment of the industry by identifying the target customers, design requirements and pricing
- CO 4: The student will be able to analyze, evaluate and submit the documentation of the design process.

# Name of Program: Diploma in Stitching & Tailoring

# **Program Outcomes**

- PO-1 Knowledge of Garment Designing
- PO-2 Analysis, identification and usage of various fabrics.
- PO-3 Apply knowledge of design elements and principles in product design work
- PO-4 analyze and use color units effectively in their design process.

# **Program Specific Outcomes**

- PSO 1: Own a Boutique
- PSO 2: Hobby classes in stitching and printing.

#### **Course Outcomes**

- CO1: Understanding of Garment Designing.
- CO2: Knowledge of identification and usage of various fabrics.
- CO3: Understanding of color units

#### **SEMESTER I**

# **Core course- Clothing Construction (Theory)**

- CO 1: theoretical knowledge of different parts of sewing machine
- CO 2: theoretical knowledge of different stitching equipment
- CO 3: understand colour concept
- CO 4: understand fashion terms

# **Core course- Fashion Designing & Construction (Practical)**

- CO 1 capable to create stitches by hand.
- CO 2 able to create garments for toddlers
- CO 3 able to do basic embroidery stitches

# **Core course- Scale Drawing (Practical)**

- CO 1 understand basic colour schemes
- CO 2 capable to formulate basic fashion figure and features
- CO 3 capable to incorporate basic elements and principle of design.

# **Core course- Dress Designing & Style Reading (Practical)**

- CO 1 able to make estimation of fabric for kids wear garment
- CO 2 able to construct kids wear garment

#### Semester-II

# **Core course- Clothing Construction (Theory)**

- CO 1 understand care of garments
- CO 2 understand household dyeing technique
- CO 3 understand different printing technique
- CO 4 understand different types of fibres to make fabric

# **Core course- Fashion Designing & Construction (Practical)**

CO 1 : capable to construct ladies garment CO 2 : Renovation remodelling of garment

CO 3: understand traditional Indian embroideries

# **Core course- Scale Drawing (Practical)**

CO 1 capable to do sketching of female figure

CO 2 learn to make fashion accessories

# **Core course- Dress Designing & Style Reading (Practical)**

CO 1 Able to do designing garments for ladies

CO 2 Understanding of fabric and material

# Name of Program: Diploma Course in Cosmetology

# **Program Outcomes**

- PO-1 Perform basic skin care services including skin analysis, facials, makeup application and superfluous hair removal.
- PO-2 Perform natural nail services including manicuring and pedicuring.
- PO-3 Perform hair care services for all types of hair including hair analysis, hair cutting, hairstyling, hair coloring and lightening, permanent waving and chemical relaxing.
- PO-4 Demonstrate customer service skills, self-growth and personal development

# **Program Specific Outcomes**

**PSO1** Cosmetologist

**PSO2** Hair Stylist

PSO3 Make Up Artist

**PSO4 Salon Sales Consultant** 

PSO5 Skin Specialist

**PSO6** Hair Color Specialist

#### **Course Outcomes**

After completing each course one year Diploma in Cosmetology, the students will be able:-

# **SEMESTER I**

# Core course- Paper I

- CO 1 knowledge of importance of Personal Grooming
- CO 2 knowledge ofbasic etiquettes of beautician
- CO 3 enhance their personality using different grooming techniques
- CO 4 learn basicsteps of massage
- CO 5 gain knowledge of different types of facial.
- CO 6 knowledge of standard measurements of eyebrows, color co- ordination for different advancemake-ups such as basic, professional and corrective make-ups

#### **Core course- Paper II**

- CO 1 awareness about Body Fitness with Yoga
- CO 2 Students will have knowledge of Hair Structure and types of hair, different hair treatments such as applying hair shampoo, conditioner, chemicals and mehandi
- CO 3 different hair cut and different hair style

# **Core course- Paper III**

CO 1: Develop professional attitude and knowledge of hair & skin care, manicure, pedicure, beauty treatments comprising of casual makeup, party makeup, bridal makeup, making of eye brows, eye lashes, facial & skin treatments, hina applications, massage & hair styling techniques and methods

# **Core course- Paper IV**

- CO 1: Analyze different hair structures and hair treatments such as applying hair shampoo, conditioner and chemicals
- CO 2: Demonstrate practical of different hair cuttings and hair styles

#### **SEMESTER II**

### Core course- Paper I

CO 1: Knowledge of standard measurements of eyebrows, color co-ordination for different advance make-ups such as basic, professional and corrective make-ups

CO 2 : Gain knowledge of different make-ups and preparation for make-ups such as vanity set up whichinclude techniques to setup vanity by using different enhanced equipment

CO 3: Perform natural nail services including manicuring and pedicuring.

# Core course- Paper II

CO 1: Knowledge of fitness & diet for a healthy look

CO 2: Gain knowledge of general principles of a balanced diet and nutrition

CO 3: Knowledge to ensure adherence to safety measures in parlours

CO 4: Gain knowledge of hair coloring, hair priming, straightening and setting

# **Core course- Paper III**

CO 1 : Capable of handling different machineries

CO 2: Capable of applying advance manicure and pedicure techniques

CO 3 : Capable of professional and corrective make-ups

CO 4: Demonstrates different basic and advance make-up.

CO 5: Gain knowledge of different types of spa treatments such as hair, hand Body Spa

# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# FACULTY OF COMPUTER SCIENCE

Program Outcomes (POs) and

**Course Outcomes (COs)** 

G T Road, near Putli Ghar, Amritsar, Punjab, 143002

Phone: 0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

# Name of Program: BCA

#### **Program Outcomes**

At the end of three year (6 Semester) BCA Program, the students will be able to:-

PO1: Improve their computer literacy, their basic understanding of operative systems and a working.

Develop criteria to organize and present different type of works in academic and professional environments.

PO2: Knowledge of software commonly used in academic and professional environments.

PO3: Learn how to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software. Develop the skills to present ideas effectively and efficiently.

PO4: Do Academic and Professional Presentations - Designing and delivering an effective presentation and developing the various IT skills to the electronic databases.

PO5: Develop IT-oriented security issues and protocols. Design and implement a web page. Improve communication and business management skills, especially in providing technical support. Serve as the System Administrators with thorough knowledge of DBMS.

# **Program Specific Outcomes**

PSO1: Understand analyses and develop computer Programs in the areas related to algorithms, web design, and mobile application design.

PSO2: Apply standard software engineering process and strategies in software project development using open-source Programming environment to deliver a quality product for business success.

PSO3: To demonstrate advanced skills in the effective analysis design and realization of business system utilizing contemporary information technology.

#### **Course Outcomes**

After completing each course under three-year BCA Program, the students will be able: -

#### **SEMESTER I**

# **Core Course- Paper-I- Introduction to Programing C-I**

- CO 1- Knowledge and Understanding: On successful completion of this subject the students have the Programing ability in C Language.
- CO 2- Intellectual Cognitive/ Analytical Skills: Enhancing Logical Thinking and Reasoning Skills through Collaborative Learning in C Programing.
- CO 3- Practical Skills: Students would be capable of developing various applications to solve deluge of real-world problems. They can also learn to make system software as well as application software. These existing languages could become base for developing new languages which can inherent its features. On the backend of various embedded systems, these languages are deployed.
- CO 4- Transferable Skills: In many multinational companies they can work effectively in a group or team to achieve goals and can show initiative and leadership abilities.

# Core Course-Paper-II-Introduction to Computers and Information Technology

- CO 1- Understand the basic terminology of computers.
- CO 2- Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components.
- CO 3- Understand the difference between an operating system and an application PROGRAM, and what each is used for in a computer.

- CO 4- Describe some examples of computers and state the effect that the use of computer technology has had on some common products.
- CO 5- Identify the applications of computer in daily life.
- CO 6- Understand the practical concepts of MS Word, MS Excel and MS PowerPoint.

# **Core Course- Paper-III- Applied & Discrete Mathematics**

- CO 1- Students develop knowledge about basic matrix operations including sums, products, and transpose.
- CO 2- Students develop knowledge about how to Simplify and evaluate basic logic statements including compound statements, implications, inverses, converses, and contrapositives using truth tables and the properties of logic. Express a logic sentence in terms of predicates, quantifiers, and logical connectives
- CO 3- Students learn to apply the operations of sets and use Venn diagrams to solve applied problems; solve problems using the principle of inclusion-exclusion.
- CO 4- Determine the domain and range of a discrete or non-discrete function, graph functions.

# **Core Course- Paper-IV- Communication Skills**

- CO 1- Students will be able to understand and apply knowledge of human communication and language processes as they occur across various contexts, e.g., interpersonal, intrapersonal, small group, organizational, media, gender, family, intercultural communication, technologically mediated communication, etc. from multiple perspectives.
- CO 2- Students will be able to find, use, and evaluate primary academic writing associated with the communication discipline.
- CO 3- Students will develop knowledge, skills, and judgment around human communication that facilitate their ability to work collaboratively with others. Such skills could include communication competencies such as managing conflict, understanding small group processes, active listening, appropriate self-disclosure, etc.

### **SEMESTER II**

# **Core Course- Paper-I- Introduction to Programing C-II**

- CO 1- Develops the ability to analyze a problem, develop an algorithm to solve it.
- CO 2- Develops the use of the C Programing language to implement various algorithms, and develops the basic concepts and terminology of Programing in general.
- CO 3- Introduces the more advanced features of the C language.

# **Core Course- Paper-II- Principles of Digital Electronics**

- CO 1- Able to convert numbers from one number system to another.
- CO 2- Can represent information using Binary Codes.
- CO 3- Able to draw Logic circuit Diagrams and write Truth Tables for the functions.
- CO 4- Learn to solve and minimize expressions of Boolean Algebra.
- CO 5- Can draw Combinational Circuits and Sequential Circuits.
- CO 6- Able to perform address selection in semiconductor memory chips.

# CoreCourse- Paper-III-Numerical Methods & Statistical Techniques

- CO 1- Develop appropriate numerical methods to approximate a function.
- CO 2- Perform an error analysis for various numerical methods
- CO 3- Develop appropriate numerical methods to solve a differential equation
- CO 4- Derive appropriate numerical methods to solve a linear system of equations

- CO 5- Derive appropriate numerical methods to evaluate a derivative at a value
- CO 6- Prove results for various numerical root finding methods
- CO 7- Derive appropriate numerical methods to calculate a definite integral.
- CO 8- Code various numerical methods in a modern computer language.

#### SEMESTER - III

# **Core Course- Paper-I- Computer Architecture**

- CO 1- Students will know what are registers, various types of registers and interfacing various registers.
- CO 2- Students will learn about the architecture of common bus system.
- CO 3- Students will learn about the different micro-operations used.
- CO 4- Students will learn about Design of basic computer.
- CO 5- Students will learn about Instruction Cycle, Interrupt Cycle.
- CO 6- Students will understand about various kinds of memories used, memory hierarchy.
- CO 7- Students will learn about I/O interface, DMA controller, modes of data transfer.
- CO 8- Students will learn about difference between pipeline and vector processing.

# Core Course- Paper-II- Database Management System

- CO 1- Knowledge & Understanding: Databases and their design & development
- CO 2- Intellectual Cognitive/analytical skills: Normalization of Databases.
- CO 3- Practical Skills: Using SQL and PL/SQL.
- CO 4- Transferable skills: Usage of DBMS design and administration.

# **Core Course- Paper-III- Computational Problem-Solving Using Python**

- CO 1- Knowledge & Understanding: Python Programing.
- CO 2- Intellectual Cognitive/ analytical skills: Application development.
- CO 3- Practical Skills: Programing for application development and data science.
- CO 4-Transferable skills: Ability to define a practical problem, Data structure and Modular approach.

#### **SEMESTER – IV**

# Core Course- Paper-I-Data Structure & File Processing

- CO 1- Define basic static and dynamic data structures and relevant standard algorithms for them: stack, queue, dynamically linked lists, trees, graphs, heap, priority queue, hash tables, sorting algorithms.
- CO 2- Demonstrate advantages and disadvantages of specific algorithms and data structures,
- CO 3- Select basic data structures and algorithms for autonomous realization of simple Programs or Program parts
- CO 4- Determine and demonstrate bugs in Program, recognize needed basic operations with data structures
- CO 5- Formulate new solutions for Programing problems or improve existing code using learned algorithms and data structures,
- CO 6- Evaluate algorithms and data structures in terms of time and memory complexity of basic operations.
- CO 7- Design, builds and develops Programs of varying levels of complexity.
- CO 8- Ability to analyze the solution alternatives and choose the optimum one

# **Core Course- Paper-II- Information System**

- CO 1- Knowledge & Understanding: Software Development LifeCycle (SDLC) Development.
- CO 2- Intellectual Cognitive/ analytical skills: System Analysis and Design.
- CO 3- Develop Practical Skills: System Design Tools.
- CO 4- Transferable skills: Software requirement specification, S/W Design Tools, SDLC skills.

# **Core Course- Paper-III- Internet Applications**

- CO 1- know how to define internet, www, various protocols, understand the working of internet
- CO 2- Able to create email id and use it for sending online mails and attachments
- CO 3- Students will understand and be able to describe the differences between internet and intranet.
- CO 4- Able to create HTML based web pages, Dynamicity to web page using JavaScript, Create email ids, Surf net using shortcuts.

# **Core Course- Paper-IV- System Software**

- CO 1- Examine computer users' needs in order to design, construct, test and maintain computer application software or systems.
- CO 2- Apply relevant methods to assess the important application development and deployment challenges involved in adopting various cloud architectures.
- CO 3- Create software and web applications that are intuitive for use by a wide range of users.
- CO 4- Lead and participate effectively in teams in the software development process.
- CO 5-Use appropriate resources to stay well-informed of the latest industrydevelopment tools and techniques.

# SEMESTER - V

#### **Core Course- Paper-I- Computer Networks**

- CO 1- Students will know what is network, its types.
- CO 2- Students will learn about the different topologies used in network.
- CO 3- Students will understand different protocols used in internet.
- CO 4- Students will understand and be able to describe the differences between intranet, extranet and internet.
- CO 5- Students will understand about various multiplexing and switching techniques used in networks.
- CO 6-Students will learn about various services provided by network.

# **Core Course- Paper-II- Web Technologies**

- CO 1- Outline the history of the web, and technologies that makes the web pages and publishing them.
- CO 2-Make the web pages more dynamic and interactive.
- CO 3-Design to create structure of web page, to store the data in web document, and transport information through web. Design to be reusable the software components in a variety of different environments.
- CO 4- Install Tomcat Server and execution of Programs on server side.
- CO 5- Design a dynamic web application using ASP.NET

# **Core Course- Paper-II- Operating System**

- CO 1- Describe the important computer system resources and the role of operating system in their management policies and algorithms.
- CO 2-Understand the process management policies and scheduling of processes by CPU
- CO 3- Evaluate the requirement for process synchronization and coordination handled by operating system
- CO 4- Describe and analyze the memory management and its allocation policies.
- CO 5- Identify use and evaluate the storage management policies with respect to different storage management technologies.
- CO 6- Identify the need to create the special purpose operating system

# Core Course- Paper-III- Java Programming Language

- CO 1- Students will Implement Object Oriented Programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
- CO 2-Can identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem.
- CO 3- Able to Evaluate how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
- CO 4-Able to understand and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
- CO 5- Able to Design, implement, test, debug, and document Programs that use basic data types and computation, simple I/O, conditional and control structures, string handling and functions.
- CO 6- Understand the importance of Classes & objects and will be able to implement it along with constructors, Arrays and Vectors.
- CO 7- Can develop computer-based systems.

#### SEMESTER - VI

# **Core Course- Paper-I- Computer Graphics**

- CO 1- Knowledge to list the basic concepts used in computer graphics.
- CO 2- Will understand to implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.
- CO 3- Knowledge to describe the importance of viewing and projections.
- CO 4- Knowledge to define the fundamentals of animation, virtual reality and its related technologies.
- CO 5- Will understand a typical graphics pipeline
- CO 6- Can design an application with the principles of virtual reality

# **Core Course- Paper-II- Software Engineering**

- CO 1- Able to Understand the issues affecting the organisation, planning, control of software based systems development.
- CO 2-Will Complete the analysis and design of software intensive systems.
- CO 3- Can Read and understand the professional and technical literature on software engineering.

# Name of Program: B.Sc (IT)

# **Program Outcomes**

- PO 1: Will have the ability to communicate computer science concepts, designs, and solutions effectively and professionally. Apply knowledge of computing to produce effective designs and solutions for specific problems. Identify, analyze, and synthesize scholarly literature relating to the field of computer science; and use software development tools, software systems, and modern computing platforms.
- PO 2: Work in a collaborative manner with others on a team, contributing to the management, planning and implementation of a computer system.
- PO 3: Independently propose a small scale research project, plan its execution, undertake its development, evaluate its outcome and report on its results in a professional manner.
- PO 4: Advance knowledge through innovation and knowledge creation. Pursue life-long learning in practice. Interpret and present theoretical issues and empirical findings.
- PO 5: Develop knowledge of scientific theories and methods, gain experience in working independently with scientific questions and their ability to express clearly on academic issues keeping in view legal, ethical, social security and issues.
- PO 6: Communicate effectively in written and oral context with specialized and non-specialized audiences.
- PO 7: Identify information technology related problems, analyze them and design the system or provide the solution for the problem.
- PO 8: Apply current technical concepts and practices in the core information technologies of human computer interaction, information management, Programming, networking, and web systems and technologies.
- PO 9: Function in multidisciplinary teams by working cooperatively, creatively and responsibly as a member of a team.
- PO 10: Recognize the need to engage in lifelong learning through continuing education and research.

# **Program Specific Outcomes**

- PSO1: Gains understanding about techniques, technologies and methods used in managing and implementing information technology systems.
- PSO2: Widens and deepens understanding of computing technologies and covers high level concept that enable the effective management and planning of IT project and services.
- PSO3: High level strategy and design in-depth technical specializations, management and planning of IT project and services.

# **Course Outcomes**

After completing each course under three-year BSc (IT) Program, the students will be able: -

#### **SEMESTER I**

# **Core Course- Paper-I- Fundamentals of Computer**

- CO 1- Understand the basic terminology of computers, Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components
- CO 2- Understand the difference between an operating system and an application Program, and what each is used for in a computer
- CO 3- Describe some examples of computers and state the effect that the use of computer technology has had on some common products

- CO 4- Identify the applications of computer in daily life
- CO 5- Understand the practical concepts of MS Word, MS Excel and MS PowerPoint

# **Core Course- Paper-II- Introduction to Programing – C**

- CO 1- Knowledge and Understanding: On successful completion of this subject the students have the Programming ability in C Language.
- CO 2- Intellectual Cognitive/ Analytical Skills: Enhancing Logical Thinking and Reasoning Skills through Collaborative Learning in C Programming.
- CO 3- Practical Skills: Students would be capable of developing various applications to solve deluge of real-world problems. They can also learn to make system software as well as application software. These existing languages could become base for developing new languages which can inherent its features. On the backend of various embedded systems, these languages are deployed.
- CO 4- Transferable Skills: In many multinational companies they can work effectively in a group or team to achieve goals and can show initiative and leadership abilities.

# **Core Course- Paper-III-Applied & Discrete Mathematics**

- CO 1- Students develop knowledge about basic matrix operations including sums, products, and transpose.
- CO 2- Students develop knowledge about how to Simplify and evaluate basic logic statements including compound statements, implications, inverses, converses, and contrapositives using truth tables and the properties of logic. Express a logic sentence in terms of predicates, quantifiers, and logical connectives
- CO 3- Students learn to apply the operations of sets and use Venn diagrams to solve applied problems; solve problems using the principle of inclusion-exclusion.
- CO 4- Determine the domain and range of a discrete or non-discrete function, graph functions.
- CO 5- Solve problems using recurrence relations and recursion to analyze algorithms and Programs such as finding Fibonacci numbers and Tower of Hanoi problems.
- CO 6- Solve problems using divide-and-conquer recurrence relations such as the fast multiplication algorithm and binary search.
- CO 7- Describe binary relations between two sets; determine if a binary relation is reflexive, symmetric, or transitive or is an equivalence relation; combine relations using set operations and composition.
- CO 8- Evaluate Boolean functions and simplify expression using the properties of Boolean algebra; apply Boolean algebra to circuits and gating networks.

#### **SEMESTER II**

# **Core Course- Paper-I- Principles of Digital Electronics**

- CO 1- Able to convert numbers from one number system to another.
- CO 2- Can represent information using Binary Codes.
- CO 3- Able to draw Logic circuit Diagrams and write Truth Tables for the functions.
- CO 4-Learn to solve and minimize expressions of Boolean Algebra. CO 5- Can draw Combinational Circuits and Sequential Circuits.
- CO 6-Able to perform address selection in semiconductor memory chips.

# Core Course- Paper-2- Introduction to Programming C++

- CO 1- Able to know how to do Programming in C++ environment.
- CO 2- Able to understand and implement the concepts of object- oriented approach using C++.
- CO 3- Able to acquire in depth knowledge and develop software in C++ CO 4- Able to identify different class attributes, member functions, base class and derived class and their relationships among them, learn how to reuse the code using polymorphism.
- CO 5- Learn to solve a real-life existing problem using the features of C++.
- CO 6- Learn to develop software/ big and complex Programs for a complex problem.

#### **Paper-3- Numerical Methods & Statistical Techniques**

- CO 1- Develop appropriate numerical methods to approximate a function.
- CO 2- Perform an error analysis for various numerical methods
- CO 3- Develop appropriate numerical methods to solve a differential equation
- CO 4- Derive appropriate numerical methods to solve a linear system of equations
- CO 5- Derive appropriate numerical methods to evaluate a derivative at a value
- CO 6- Prove results for various numerical root finding methods
- CO 7- Derive appropriate numerical methods to calculate a definite integral.
- CO 8- Code various numerical methods in a modern computer language.

#### SEMESTER III

## **Core Course- Paper-I- Introduction to Python**

- CO 1- Knowledge & Understanding: Python Programming.
- CO 2- Intellectual Cognitive/ analytical skills: Application development.
- CO 3- Practical Skills: Programming for application development and data science.
- CO 4-Transferable skills: Ability to define a practical problem, Data structure and Modular approach.

#### **Core Course- Paper-II- Data Structure**

- CO 1- Define basic static and dynamic data structures and relevant standard algorithms for them: stack, queue, dynamically linked lists, trees, graphs, heap, priority queue, hash tables, sorting algorithms.
- CO 2- Demonstrate advantages and disadvantages of specific algorithms and data structures,
- CO 3- Select basic data structures and algorithms for autonomous realization of simple Programs or Program parts
- CO 4- Determine and demonstrate bugs in Program, recognize needed basic operations with data structures
- CO 5- Formulate new solutions for Programming problems or improve existing code using learned algorithms and data structures,
- CO 6- Evaluate algorithms and data structures in terms of time and memory complexity of basic operations.
- CO 7- Design, build and develop Programs of varying levels of complexity.
- CO 8- Formulate new solutions for Programming problems or improve existing code using learned algorithms and data structures,
- CO 9- Evaluate algorithms and data structures in terms of time and memory complexity of basic operations.

# Paper-III-System Analysis & Design

- CO 1- gather data to analyse and specify the requirements of a system.
- CO 2- Can design system components and environments.
- CO 3- Can build general and detailed models that assist Programs in implementing a system.
- CO 4- Can design a database for storing data and a user interface for data input and output, as well as controls to protect the system and its data.

#### **SEMESTER IV**

#### Paper-I-Database Management System

- CO 1- Knowledge & Understanding: Databases and their design & development
- CO 2- Intellectual Cognitive/ analytical skills: Normalization of Databases.
- CO 3- Practical Skills: Using SQL and PL/SQL.
- CO 4- Transferable skills: Usage of DBMS design and administration.

# **Paper-II-Internet Applications**

- CO 1- know how to define internet, www, various protocols, understand the working of internet
- CO 2- Able to create email id and use it for sending online mails and attachments
- CO 3- Students will understand and be able to describe the differences between internet and intranet.
- CO 4- Able to create HTML based web pages, Dynamicity to web page using javascript, Create email ids, Surf net using shortcuts

# Paper-III- Java & Web Designing

- CO 1- Implement Object Oriented Programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
- CO 2- Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem.
- CO 3- Evaluate how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
- CO 4- understand and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
- CO 5- Design, implement, test, debug, and document Programs that use basic data types and computation, simple I/O, conditional and control structures, string handling and functions.
- CO 6-Understand the importance of Classes & objects and will be able to implement it along with constructors, Arrays and Vectors.
- CO 7- Develop computer-based systems.
- CO 8- Deploy the tools for software projects documentation.

# **Core Course- Paper-IV-Web Technologies**

- CO 1- Outline the history of the web, and technologies that makes the web pages and publishing them.
- CO 2-Make the web pages more dynamic and interactive.
- CO 3-Design to create structure of web page, to store the data in web document, and transport information through web. Design to be reusable the software components in a variety of different environments.
- CO 4- Install Tomcat Server and execution of Programs on server side. CO 5- Create and manipulate web media objects using editing software.
- CO 6- Incorporate aesthetics and formal concepts of layout and organization to design websites that effectively communicate using visual elements.
- CO 7- Conceptualize and plan an internet-based business that applies appropriate business models and web technologies.
- CO 8- Combine multiple web technologies to create advanced web components.
- CO 9- Design websites using appropriate security principles, focusing specifically on the vulnerabilities inherent in common web implementations.
- CO 10- Incorporate best practices in navigation, usability and written content to design websites that give users easy access to the information they seek.

#### **SEMESTER V**

# **Core Course- Paper-I-Computer Networks**

- CO 1- Students will know what is network, its types.
- CO 2- Students will learn about the different topologies used in network.
- CO 3- Students will understand different protocols used in internet.
- CO 4- Students will understand and be able to describe the differences between intranet, extranet and internet.
- CO 5- Students will understand about various multiplexing and switching techniques used in networks
- CO 6-Students will learn about various services provided by network.

#### **Core Course- Paper-II-Operating System**

- CO 1- Describe the important computer system resources and the role of operating system in their management policies and algorithms.
- CO 2-Understand the process management policies and scheduling of processes by CPU
- CO 3- Evaluate the requirement for process synchronization and coordination handled by operating system
- CO 4- Describe and analyze the memory management and its allocation policies.
- CO 5- Identify use and evaluate the storage management policies with respect to different storage management technologies.
- CO 6- Identify the need to create the special purpose operating system

# **Core Course- Paper-III-E-Business**

- CO 1- Demonstrate an understanding of the foundations and importance of E-commerce
- CO 2- Demonstrate an understanding of retailing in E-commerce by: analyzing branding and pricing strategies, using and determining the effectiveness of market research assessing the effects of disintermediation.
- CO 3- Analyze the impact of E-commerce on business models and strategy.
- CO 4- Describe Internet trading relationships including Business to Consumer, Business-to-Business, Intra-organizational.
- CO 5- Describe the infrastructure for E-commerce.
- CO 6- Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- CO 7- Discuss legal issues and privacy in E-Commerce. CO 8- Assess electronic payment systems.
- CO 9- Recognize and discuss global E-commerce issues.

#### **SEMESTER VI**

#### **Core Course- Paper-I- Computer Graphics**

- CO 1- Knowledge to list the basic concepts used in computer graphics.
- CO 2- Will understand to implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping.
- CO 3- Knowledge to describe the importance of viewing and projections.
- CO 4- Knowledge to define the fundamentals of animation, virtual reality and its related technologies.
- CO 5- Will understand a typical graphics pipeline
- CO 6- Can design an application with the principles of virtual reality.

# Name of Program: M.Sc (Information Technology)

#### **Program Outcomes**

PO1: Will have the ability to communicate computer science concepts, designs, and solutions effectively and professionally. Apply knowledge of computing to produce effective designs and solutions for specific problems. Identify, analyze, and synthesize scholarly literature relating to the field of computer science; and use software development tools, software systems, and modern computing platforms.

PO2: Work in a collaborative manner with others on a team, contributing to the management, planning and implementation of a computer system.

PO3: Independently propose a small scale research project, plan its execution, undertake its development, evaluate its outcome and report on its results in a professional manner.

PO4: Advance knowledge through innovation and knowledge creation. Pursue life-long learning in practice. Interpret and present theoretical issues and empirical findings.

# **Program Specific Outcomes**

PSO1: Gains understanding about techniques, technologies and methods used in managing and implementing information technology systems.

PSO2: Widens and deepens understanding of computing technologies and covers high level concept that enable the effective management and planning of IT project and services.

PSO3: High level strategy and design in-depth technical specializations, management and planning of IT project and services.

#### **Course Outcomes**

After completing each course under three-year MSc (IT) Program, the students will be able: -

#### Semester I

#### Core Course- MIT-101- Analysis & Design of Embedded Systems

- CO 1- Foster ability to understand the internal architecture and interfacing of different peripheral devices with Microcontrollers.
- CO 2- Foster ability to write the Programs for microcontroller.
- CO 3- Foster ability to understand the role of embedded systems in industry.
- CO 4- Foster ability to understand the design concept of embedded systems.

# **Core Course- MIT-102- Distributed Computing**

- CO 1- Outline the potential benefits of distributed systems.
- CO 2- Summarize the major security issues associated with distributed systems along with the range of techniques available for increasing system security.
- CO 3- Understand the concepts of distributed database systems and synchronization algorithms.
- CO 4- Learn distributed operating systems and token-based algorithms.
- CO 5- Understand the concepts of process and resource management in distributed computing environment.
- CO 6- Apply Security techniques in Distributed System. CO 7- Manage Distributed Shared Memory.
- CO 8- Analyze and understand the concepts of synchronization of clocks and deadlocks.

# Core Course- MIT-103- Advanced Computer Organization and Architecture

- CO 1- Conceptualize the basics of organizational and architectural issues of a digital computer.
- CO 2- Analyze processor performance improvement using instruction level parallelism.
- CO 3- Learn the function each element of a memory hierarchy. CO 4- Study various data transfer techniques in digital computer.

- CO 5- Acquainting the students with principles and concepts of parallel processing including parallel computer architectures, performance metrics, the scheduling problem and parallel algorithms.
- CO 6- Choose the appropriate Operating system.
- CO 7- Develop computer-based systems.
- CO 8- Evaluate systems in terms of quality attributes

# **Core Course- MIT-104- Network Operating Systems**

- CO 1- Demonstrate an understanding of the principles, practices and goals of system administration.
- CO 2- Demonstrate an understanding of system components, the advantages of Unix-like and Windows-like OS, major networking models, network addressing and naming systems, network services
- CO 3- Demonstrate an understanding of the major approaches to computer management in the network environment.
- CO 4- Demonstrate an understanding of the features of the Windows 2003 Server Operating System.
- CO 5- Perform the installation of Windows 2003 OS and configure the server environment.
- CO 6- Demonstrate an understanding of Active Directory and its key features.
- CO 7- Perform user accounts management and implement security groups.
- CO 8- Perform configuration, management, and troubleshooting of folders, files, and printing resources.
- CO 9- Demonstrate an understanding of the configuration and management of data storage.
- CO 10- Demonstrate an understanding of Group Policies to secure Windows 2003 Server.
- CO 11- Perform network services installation and management. CO 12- Use server and network monitoring software tools.

#### Core Course- MIT-105- Computational Problem Solving Using Python

- CO 1- Knowledge & Understanding: Python Programming.
- CO 2- Intellectual Cognitive/ analytical skills: Application development.
- CO 3- Practical Skills: Programming for application development and data science.
- CO 4- Transferable skills: Ability to define a practical problem, Data structure and Modular approach

#### SEMESTER II

#### **Core Course- MIT-201- Mobile Computing**

- CO 1- Understand fundamentals of wireless communications.
- CO 2- Analyze security, energy efficiency, mobility, scalability, and their unique characteristics in wireless networks.
- CO 3- Demonstrate basic skills for cellular networks design, frequency reuse, capacity, Antenna for cellular communications.
- CO 4- Apply knowledge of TCP/IP extensions for mobile and wireless networking
- CO 5- Understand the concept of 2G/2.5G/3G/4G/5G and latest architecture of wireless communications.
- CO 6- Understand the concept of LMDS, UMTS, IMT-200, GSM, GPRS.

#### Core Course- MIT-202- Distributed Database

- CO 1- Knowledge & Understanding: Distributed Databases and their design & development.
- CO 2- Intellectual Cognitive/ analytical skills: Data Distribution and Allocation strategies.
- CO 3 -Practical Skills : Algorithmic knowledge about distributed database design and allocation.
- CO 4- Transferable skills: Usage of DDBMS design and allocation models

# **Core Course- MIT-203- Image Processing**

- CO 1- An ability to apply knowledge of computing and mathematics appropriate to the discipline.
- CO 2- An ability to analyze a problem and identify the computing requirements appropriate for its solution; an ability to design, implement and evaluate a computer-based system, process, component or Program to meet desired needs.
- CO 3- An ability to apply mathematical foundations, algorithmic principles and computer science theory to the modelling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.

# Core Course- MIT-204- Fuzzy Systems

- CO 1- Understand the concepts of Fuzzy Systems, ANN, Genetic Algorithms and its applications.
- CO 2- Understand the concepts of feed forward neural networks and learning and understanding of NETWORKS AND FUZZY feedback neural networks.
- CO 3- Understand the concept of fuzziness involved in various systems and fuzzy set theory.
- CO 4- Comprehensive knowledge of fuzzy logic control and adaptive fuzzy logic.
- CO 5- Gain adequate knowledge of application of fuzzy logic control to real time systems.
- CO 6- Back Propagation Networks for real world problems.
- CO 7- Fuzzy logic in Industrial application.
- CO 8- Implementation of Genetic Algorithms for optimization problems.
- CO 9- Designing of fuzzy membership functions and construct fuzzy logic control systems for simple applications.

#### **Core Course- MIT-205- Network Design and Performance Analysis**

- CO 1- Describe and develop a network model using analysis and simulation
- CO 2- Design a new network model to meet requirements for new and existing networks.
- CO 3- Use quantitative and qualitative techniques to design or upgrade a network
- CO 4- Make decisions on the proper network technologies, routing protocols, network topologies, node placement, etc.
- CO 5- Troubleshoot and diagnose network problems. CO 6- Identify network issues, risks, bottlenecks, etc

#### SEMESTER III

# **Core Course- MIT-301- Network Protocols**

- CO 1- Explain how protocols and standards benefit a global internetwork.
- CO 2- Describe how the Ethernet Protocol transmits data within a LAN. CO 3- Explain IPv4 addressing and the role subnet masks.
- CO 4- Use Cisco Packet Tracer to connect hosts to a wireless router in a LAN.
- CO 5- Use a protocol analyzer or "packet sniffer" to open and examine a data packet that has been transmitted across a network.
- CO 6- Examine a Windows computer to locate the physical or MAC address used send and receive data

#### Core Course- MIT-302- Advanced Web Technologies

- CO 1-Learn web development model view controller principles, data structures, and libraries. The subject matter of the course is object- oriented development in the ASP.NET MVC using the C# language.
- CO 2-Develop critical thinking skills through solving Programming problems in practical assignments, on projects, and on tests.
- CO 3-Successful students will able to design web applications using ASP.NET. They will be able to use ASP.NET controls in web applications and will be able to debug and deploy ASP.NET web applications. They will be able to create database driven ASP.NET web applications and web services
- CO 4- Transferable Skills: In many multinational companies they can work effectively in a group or team to achieve goals and can show initiative and leadership abilities.

#### **Core Course- MIT-303- Linux Administration**

- CO 1- Learn the fundamentals of Operating Systems.
- CO 2- Learn the mechanisms of OS to handle processes and threads and their communication.
- CO 3- Learn the mechanisms involved in memory management in contemporary OS.
- CO 4- Gain knowledge on distributed operating system concepts that includes architecture, Mutual exclusion algorithms, deadlock detection algorithms and agreement protocols.
- CO 5- Know the components and management aspects of concurrency management.
- CO 6- Learn Programmatically to implement simple OS mechanisms.

# **Core Course- MIT-304-System Simulation**

- CO 1- Understand different methods for random number generation
- CO 2- Have a clear understanding of the need for the development process to initiate the real problem.
- CO 3- Have a clear understanding of principle and techniques of simulation methods informed by research direction.
- CO 4- Be able to describe the components of continuous and discrete systems and simulate them.
- CO 5- Be able to model any system from different fields.
- CO 6- Be able to implement numerical algorithm to meet simple requirements, expressed in English.
- CO 7- Be able to discuss the simulation methods and select the suitable technique on the problems.

#### **Core Course- MIT-305- Microprocessor and Its Applications**

- CO 1- Evaluate and solve basic binary math operations using the microprocessor and describe the microprocessor's and Microcontroller's internal architecture and its operation within the area of manufacturing and performance.
- CO 2- Apply knowledge and demonstrate Programming proficiency using the various addressing modes and data transfer instructions of the target microprocessor and microcontroller.
- CO 3- Compare accepted standards and guidelines to select appropriate Microprocessor (8085 & 8086) and Microcontroller to meet specified performance requirements.
- CO 4- Analyze assembly language Programs; select appropriate assemble into machine a cross assembler utility of a microprocessor and microcontroller.
- CO 5- Design electrical circuitry to the Microprocessor I/O ports in order to interface the processor to external devices.
- CO 6- Evaluate assembly language Programs and download the machine code that will provide solutions real- world control problems.

#### SEMESTER IV

# Core Course- MIT-401- Advance Java Technology

- CO 1- knowledge of the structure and model of the Java Programming language.
- CO 2- use the Java PROGRAMming language for various Programming technologies .
- CO 3- evaluate user requirements for software functionality required to decide whether the Java PROGRAMming language can meet user requirements.
- CO 4- propose the use of certain technologies by implementing them in the Java
- PROGRAMming language to solve the given problem.
- CO 5- choose an approach to solving problems, starting from the acquired knowledge of PROGRAMming and knowledge of operating systems.

# **Core Course- MIT-402- Network Security**

- CO 1- Recognize the basic working principles of computer networks. CO 2- Identify threats to network security.
- CO 3- Distinguish between various protocols employed to secure networks.
- CO 4- Utilize network security tools like firewalls, IDS, IPS, VPN. CO 5- Specify procedures for defending network systems.
- CO 6- Develop network security policies.
- CO 7- Specify procedures for recovery from attacks on networks.

#### Core Course- MIT-403- Artificial Neural Networks

- CO 1- Understand generic machine learning terminology.
- CO 2- Understand motivation and functioning of the most common types of deep neural networks.
- CO 3- Understand the choices and limitations of a model for a given setting.
- CO 4- Apply deep learning techniques to practical problems.
- CO 5- Critically evaluate model performance and interpret results.
- CO 6- Write reports in which results are assessed and summarized in relation to aims, methods and available data.

# Name of Program: M.Sc (Computer Science)

# **Program Outcomes (PO)**

- PO 1: Provides technology-oriented students with the knowledge and ability to develop creative solutions.
- PO 2: Develop skills to learn new technology.
- PO 3: Apply computer science theory and software development concepts to construct computing-based solutions.
- PO 4: Design and develop computer PROGRAMs/computer-based systems in the areas related to algorithms, networking, web design, cloud computing, Artificial Intelligence, Mobile applications.
- PO5: Work in a collaborative manner with others on a team, contributing to the management, planning and implementation of a computer system.

PO6: Independently propose a small scale research project, plan its execution, undertake its development, evaluate its outcome and report on its results in a professional manner.

PO7: Advance knowledge through innovation and knowledge creation. Pursue life-long learning in practice. Interpret and present theoretical issues and empirical findings.

# **Program Specific Outcomes (PSO)**

PSO1: Gains understanding about techniques, technologies and methods used in managing and implementing information technology systems.

PSO2: Widens and deepens understanding of computing technologies and covers high level concept that enable the effective management and planning of IT project and services.

PSO3: High level strategy and design in-depth technical specializations, management and planning of IT project and services.

#### **Course Outcomes**

After completing each course under three-year MSc (IT) Program, the students will be able: -

#### SEMESTER I

# Core Course- MCS-101- Advanced Data Structure

- CO 1- Design and analyze Programming problem statements.
- CO 2- Choose appropriate data structures and algorithms, understand the ADT/libraries, and use it to design algorithms for a specific problem.
- CO 3- Understand the necessary mathematical abstraction to solve problems.
- CO 4- Come up with analysis of efficiency and proofs of correctness
- CO 5- Comprehend and select algorithm design approaches in a problem specific manner.

# Core Course- MCS-102- Advanced Computer Architecture

- CO 1- Define the basics of Computer Systems.
- CO 2-Demonstrate the basics of Computer Components.
- CO 3- Articulate design issues in the development of processor or other components that satisfy design requirements and objectives.
- CO 4- Conceptualize the basics of organizational and architectural issues of a digital computer.
- CO 5- Analyze processor performance improvement using instruction level parallelism.
- CO 6- Learn the function each element of a memory hierarchy. CO 7- Study various data transfer techniques in digital computer.
- CO 8- Acquainting the students with principles and concepts of parallel processing including parallel computer architectures, performance metrics, the scheduling problem and parallel algorithms.

# Core Course- MCS-103- Network Design & Performance Analysis

- CO 1- Describe and develop a network model using analysis and simulation
- CO 2- Design a new network model to meet requirements for new and existing networks.

- CO 3- Use quantitative and qualitative techniques to design or upgrade a network
- CO 4- Make decisions on the proper network technologies, routing protocols, network topologies, node placement, etc.
- CO 5- Troubleshoot and diagnose network problems CO 6- Identify network issues, risks, bottlenecks, etc

#### **Core Course- MCS-104- Discrete Structures**

- CO 1- Understand the basic principles of sets and operations in sets.
- CO 2- Prove basic set equalities.
- CO 3- Apply counting principles to determine probabilities.
- CO 4- Demonstrate an understanding of relations and functions and be able to determine their properties.
- CO 5- Solve problem regarding Recurrence relations and Generating Function.
- CO 6- Determine when a function is 1-1 and "onto".
- CO 7- Demonstrate different traversal methods for trees and graphs. CO 8- Solve problem regarding Rings, Subrings and quotient rings

#### **Core Course- MCS-105- Soft Computing**

- CO 1- Understand the Neural Network and its various architectures and models and its applications.
- CO 2- Comprehend the fuzzy logic and the concept of fuzziness involved in various systems and fuzzy set theory.
- CO 3- Understand the concepts of fuzzy sets, knowledge representation using fuzzy rules, approximate reasoning, fuzzy inference systems, and fuzzy logic.
- CO 4- To understand the fundamental theory and concepts of neural networks, Identify different neural network architectures, algorithms, applications and their limitations.
- CO 5- Reveal different applications of these models to solve engineering and other problems.
- CO 6- Relate the probabilistic concepts with fuzzy logic

#### **SEMESTER II**

#### **Core Course- MCS-201- Theory of Computation**

- CO 1- Analyze and design finite automata, pushdown automata, Turing machines, formal languages, and grammars.
- CO 2- Demonstrate the understanding of key notions, such as algorithm, computability, decidability, and complexity through problem solving.
- CO 3- Prove the basic results of the Theory of Computation.

#### **Core Course- MCS-202- Image Processing**

- CO 1- An ability to apply knowledge of computing and mathematics appropriate to the discipline.
- CO 2- An ability to analyze a problem and identify the computing requirements appropriate for its solution; an ability to design, implement and evaluate a computer-based system, process, component or PROGRAM to meet desired needs.
- CO 3- An ability to apply mathematical foundations, algorithmic principles and computer science theory to the modelling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.

# Core Course- MCS-203- Design & Analysis of Algorithms

- CO 1- Analyze the asymptotic performance of algorithms. CO 2- Write rigorous correctness proofs for algorithms.
- CO 3- Demonstrate a familiarity with major algorithms and data structures.
- CO 4- Apply important algorithmic design paradigms and methods of analysis.
- CO 5- Synthesize efficient algorithms in common engineering design situations.

#### **Core Course- MCS-204- Cloud Computing**

CO 1- Analyze the Cloud computing setup with it's vulnerabilities and applications using different architectures.

- CO 2- Design different workflows according to requirements and apply map reduce Programming model.
- CO 3- Apply and design suitable Virtualization concept, Cloud Resource Management and design scheduling algorithms.
- CO 4- Create combinatorial auctions for cloud resources and design scheduling algorithms for computing clouds.
- CO 5- Assess cloud Storage systems and Cloud security, the risks involved, its impact and develop cloud application.
- CO 6- Broadly educate to know the impact of engineering on legal and societal issues involved in addressing the security issues of cloud computing

# Core Course- MCS-205- Distributed Database Systems

- CO 1- Develop system architecture based on distributed databases.
- CO 2- Develop a system to support distributed transactions in such databases.
- CO 3- Create queries to retrieve data from a distributed database which will have optimum performance.
- CO 4- Provide for competitive access to data in systems using distributed databases.
- CO 5- Propose solutions for increasing reliability and security of distributed database system
- CO 6- Recommend mechanisms to control data fragmentation in distributed databases
- CO 7 Compare different systems for managing distributed databases (DDBMS).
- CO 8- Apply technical knowledge and skills to solve problems of database distribution to several fragments

#### SEMESTER III

# Core Course- MCS-301- Advanced Software Engineering

- CO 1- Knowledge of basic Software Engineering methods and practices, and their appropriate application.
- CO 2- A general understanding of software process models such as the waterfall and evolutionary models.
- CO 3- Acquire the knowledge of software re-engineering.
- CO 4- Understanding of the role of project management including planning, scheduling, risk management, etc.
- CO 5- Understanding of different measurements of object oriented and Knowledge of UML for object-oriented design.
- CO 6-Specify, design and construct CASE tools and application software.
- CO 7- Develop and apply various strategies for software applications.
- CO 8- Identify some of the main risks of software development and use.
- CO 9- Analyze the system requirements and the production of system specifications.
- CO 10- Use appropriate computer-based design support tools.

#### Core Course- MCS-302- System Software

- CO 1- Explain the working of OS in detail
- CO 2- identify and understand different phases and passes of compiler and their functioning.
- CO 3- understand the concept of syntax analysis and solve the problems of predictive parsing.
- CO 4- differentiate between top down and bottom up parsing and understand syntax directed translation techniques.
- CO 5- Apply code optimization and code generation techniques. CO 6- Generate flowchart and algorithms for passes of Assembler. CO 7- Differentiate between different types of loader.

# Core Course- MCS-303- Data Mining and Warehousing

- CO 1- Identify the scope and necessity of Data Mining & Warehousing for the society.
- CO 2- Describe the designing of Data Warehousing so that it can be able to solve the root problems.
- CO 3- Understand various tools of Data Mining and their techniques to solve the real time problems.
- CO 4- Develop ability to design various algorithms based on data mining tools.
- CO 5- Develop further interest in research and design of new Data Mining techniques.

# Core Course- MCS-304- Concept of Core and Advanced Java

- CO 1- Able to understand concept of Object Oriented Programming & Java Programming.
- CO 2- And basic concepts of Java such as operators, classes, objects, inheritance, packages, Enumeration and various keywords.
- CO 3- Able to understand the concept of exception handling and Input/Output operations.
- CO 4- Able to design the applications of Java & Java applet.
- CO 5- Able to Analyze & Design the concept of Event Handling and Abstract Window Toolkit.
- CO 6- Able to implement multithreading in java and how to set the priorities level of threads

# **Core Course- MCS-305- Network Programming**

- CO 1- create applications using techniques such as multiplexing, forking, multithreading
- CO 2- Make use of different types of I/O such as non-blocking I/O and event driven I/O.
- CO 3- Make use of various solutions to perform inter-process communications.
- CO 4- Apply knowledge of Unix/Linux operating systems to build robust client and server software for this environment.
- CO 5- learn advanced Programming techniques such as IPv6 Socket Programming, Broadcasting, Multicasting
- CO 6- Able to describe major technologies and protocols used in network communications

#### SEMESTER IV

# Core Course- MCS-401- Advanced Web Technologies

- CO 1- Successful students will able to design web applications using ASP.NET
- CO 2- Successful students will be able to use ASP.NET controls in web applications.
- CO 3- Successful students will be able to debug and deploy ASP.NET web applications.
- CO 4- Successful students will be able to create database driven ASP.NET web applications and web service

#### Core Course- MCS-402- Microprocessor and Its Applications

- CO 1- Evaluate and solve basic binary math operations using the microprocessor and describe the microprocessor's and Microcontroller's internal architecture and its operation within the area of manufacturing and performance.
- CO 2- Apply knowledge and demonstrate Programming proficiency using the various addressing modes and data transfer instructions of the target microprocessor and microcontroller.
- CO 3- Compare accepted standards and guidelines to select appropriate Microprocessor (8085 & 8086) and Microcontroller to meet specified performance requirements.
- CO 4- Analyze assembly language PROGRAMs; select appropriate assemble into machine a cross assembler utility of a microprocessor and microcontroller.
- CO 5- Design electrical circuitry to the Microprocessor I/O ports in order to interface the processor to external devices.
- CO 6- Evaluate assembly language PROGRAMs and download the machine code that will provide solutions real-world control problems.

# Core Course- MCS-403- Object Oriented Modeling, Analysis and Design

- CO 1- Analyze a problem statement.
- CO 2-Can construct models for the problem in hand.
- CO 3- Can prepare a System Design
- CO 5- Can prepare Object Design
- CO 4- Can write clean code in Programming Language
- CO 5-Effectively develop a high-quality Software

# Name of Program: PGDCA (PG Diploma in Computer Application)

#### **Program Outcomes**

PO1: It will equip the students with skills required for designing, developing applications in Information Technology.

PO2: Students will able to learn the latest trends in various subjects of computers & information technology.

PO3:The PG Diploma is aimed at graduates with a computing background and provides a detailed coverage of the key concepts and challenges in data and resource protection and computer software security.

PO4: To give hands on to students while developing real life IT application as part of the study.

PO5: To train graduate students in basic computer technology concepts and information technology applications.

PO6: Design and develop applications to analyze and solve all computer science related problems.

# **Program Specific Outcomes**

PSO1: To expose the students to open Source technologies so that they become familiar with it and can seek appropriate opportunity in trade and industry.

PSO2:Able to provide socially acceptable technical solutions to real world problems with the application of modern and appropriate Programming techniques.

PSO3: Design applications for any desired needs with appropriate considerations for any specific need on societal and industrial aspects.

#### **Course Outcomes**

After completing each course under three-year MSc (IT) Program, the students will be able: -

#### **SEMESTER I**

# Core Course- Paper-I- PC Computing-I

- CO 1- Will understand the basic terminology of computers
- CO 2- Will understand the practical concepts of MS Word, MS Excel, MS PowerPoint, and MS Access.

#### **Core Course- Paper-II- PC-Computing-II (Professional DTP)**

- CO 1- Students will be familiar with the CorelDraw workspace, tools, panels, basic techniques and gain an insight into the techniques of creating and manipulating vector (design) objects, shapes and color fills.
- CO 2- Able to work with artistic text for the creation of logos, labels and any other one page print design material.
- CO 3- Can add a great degree of dimensional effect and richness to their drawings.

# Core Course- Paper-III- Fundamentals of Computer & Operating Systems

- CO 1- Appreciate the role of operating system as System software.
- CO 2- Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components
- CO 3- understand the difference between an operating system and an application PROGRAM, and what each is used for in a computer
- CO 4- describe some examples of computers and state the effect that the use of computer technology has had on some common products
- CO 5- Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems.

# Core Course- Paper-IV- Database Management System through Oracle-10g & System Analysis & Design

- CO 1- Knowledge & Understanding: Databases and their design & development
- CO 2- Intellectual Cognitive/analytical skills: Normalization of Databases.
- CO 3- Practical Skills: Using SQL and PL/SQL.
- CO 4- Transferable skills: Usage of DBMS design and administration. CO 5- gather data to analyse and specify the requirements of a system.

#### **SEMESTER II**

# Core Course- Paper-I- and Network Concepts Management (Hardware, Software, setting in LINUX/UNIX/NT environment

# **Core Course- Paper-II- Programing in C**

- CO 1- Understand the fundamentals of C Programing.
- CO 2- Will acquire knowledge and skills of Programing.
- CO 3- Will be able to develop logics which will help them to create Programs, applications in C.
- CO 4- Also by learning the basic Programing constructs they can easily switch over to any other language in future.

# Core Course- Paper-III- Introduction to Scripting Languages, Web Designing & Uses of Internet

- CO 1- Understand the principles of creating an effective web page.
- CO 2- Become familiar with graphic design principles that relate to web design and learn how to implement these theories into practice.
- CO 3- Develop skills in analyzing the Social sites.
- CO 4- Understand how to plan and conduct user research related to web usability.
- CO 5- Learn the language of the web: HTML.
- CO 4- Learn techniques of web design, Form Design, Table Design, Front page 2003.
- CO 5- Be able to embed social media content into web pages.

# Core Course- Paper-IV- Optional (Option (ii): e-Commerce / Business)

- CO 1- Demonstrate an understanding of the foundations and importance of E-commerce
- CO 2- Demonstrate an understanding of retailing in E-commerce by: analyzing branding and pricing strategies, using and determining the effectiveness of market research assessing the effects of disintermediation.
- CO 3- Analyze the impact of E-commerce on business models and strategy.
- CO 4- Describe Internet trading relationships including Business to Consumer, Business-to Business, Intraorganizational.
- CO 5- Describe the infrastructure for E-commerce
- CO 6- Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- CO 7- Discuss legal issues and privacy in E-Commerce
- CO 8- Assess electronic payment systems
- CO 9- Recognize and discuss global E-commerce issue.

# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# FACULTY OF SCIENCES

# Program Outcomes (POs) and

# **Course Outcomes (COs)**

Gt Road, near Putli Ghar, Amritsar, Punjab 143002

Phone:0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

### Name of Program: B.Sc (Non-Medical)

#### **Program Outcomes**

- PO 1: Demonstrate, solve and understanding of major concepts indifferent disciplines of Non-medical i.e. Physics, Chemistry and Mathematics.
- PO 2: Think scientifically and draw a logical conclusion and solveproblems independently.
- PO 3: Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of the experiments.
- PO 4: Use modern techniques, lab equipment to have experimentknowledge about subject.

# **Program Specific Outcomes**

- Develop scientific attitude and temperament and give emphasison the development of experimental skills, data analysis, calculation, measurements and also on the limitations and precautions about the experimental method data and results obtained.
- Understand the conceptual development of the subject and its application in emerging areas of Physics, Chemistry and Mathematics
- Understand the scientific theories and its relevance in present context.
- Study mathematical tools to solve the problems in various branches in Physics
- To enhance experimental skill through experiments in diverse fields.

#### **Course Outcomes**

#### **SEMESTER I**

#### **Core Course: Electricity and Magnetism**

- CO 1- Know how to define a various branch of Electricity and Magnetism.
- CO 2- Understand and explain the basic concepts associated with the electric and magnetic field (e.g. Boit Savort Law, Implications of Maxwell equations, Gauss Law and other important laws of Electricity and Magnetism).
- CO 3- Students will be able to understand basis of electricity and how does the things change in different situations.
- CO 4- Can practically demonstrate about applications of Faraday's law.
- CO 5-Able to learn about Electricity and Magnetism and their applications.

#### **Core Course: Mechanics**

- CO 1- Understand basics formalism of Mechanics and its implications.
- CO 2- Understand Fouacult's Pendulum and motion of rigid bodies.
- CO 3- Students will be able to understand motion of centre of mass.
- CO 4- Will think critically about the theories of physics.
- CO 5- Will think critically about the contribution of various scientists in the particle world.
- CO 6-Can identify the different relations of momentum, energy velocities etc.
- CO 7- Think critically about the use of physics in our daily life.
- CO 8- Can characterize various applications of Ampere's Law
- CO 9-Able to study the rigid body motions.
- CO 10- Can understand behaviour of Coupled Oscillator.

#### **Core Course: CHEMISTRY (INORGANIC CHEMISTRY-I)**

CO 1- Acquire knowledge and understanding of essential facts, concepts, principles and theories relating to the Inorganic Chemistry.

- CO 2- To develop skills to evaluate, analyze and solve problems competently.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

#### **Core Course: CHEMISTRY (ORGANIC CHEMISTRY-I)**

- CO 1- This course will equip the students with the necessary chemicalknowledge concerning the fundamentals in the basic areas of Organic chemistry.
- CO 2- To develop skills to evaluate, analyze and solve problemscompetently.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

#### **Core Course: Algebra**

- CO 1- Develop an understanding of algebra in mathematics, natural and social sciences.
- CO 2- Use matrix algebra to analyze and solve equations arising inmany applications that require a background in linear algebra.
- CO 3- Utilize vector space terminology and describe how closely othervector spaces resemble R<sup>n</sup>.
- CO 4- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.
- CO 5- Represent mathematical information and communicatemathematical reasoning symbolically and verbally.
- CO 6- Interpret and analyze numerical data, mathematical concepts andidentify patterns to formulate and validate reasoning.

#### **SEMESTER II**

#### **Core Course: Vibrations and Waves**

- CO 1- Know how to define various branches of Vibration and Waves.
- CO 2- Understand and explain the basic concepts associated with Oscillation, simple harmonic oscillation, damped oscillations energy of oscillor (Mechanical and electrical), Waves.
- CO 3- Students will understand and able to describe Oscillations and simple harmonic motion, and waves and standing waves.

# Core Course: Relativity and Electromagnetism

- CO 1- Know how to define a various branch of Relativity and Electromagnetism.
- CO 2- Understand and explain the basic concepts associated with the electric and magnetic field (eg. Boit Savart Law and Ampere's Law and their applications)
- CO 3- Students will understand and able to describe the difference between the particles travelling with speed of light and with velocity very smaller than the speed of light.
- CO 4- Can characterize various applications of Ampere's Law.
- CO 5- Able to study the variation of self and mutual inductance.

#### Core Course: CHEMISTRY (INORGANIC CHEMISTRY-II)

- CO 1- Acquire knowledge and understanding of essential facts, concepts, principles and theories relating to the Inorganic Chemistry.
- CO 2- Will develop skills to evaluate, analyze and solve problemscompetently.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

# **Core Course: CHEMISTRY (Physical CHEMISTRY-I)**

- CO 1- Will equip the students with the necessary chemical knowledgeconcerning the fundamentals in the basic areas of Physical chemistry.
- CO 2- To develop skills to evaluate, analyze and solve problemscompetently.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and

teaching.

#### **Core Course: Calculus II**

- CO 1- Extend the concept of integrals to a variety of applications, establishing several integrations.
- CO 2- Use a variety of mathematical techniques to evaluate integrals
- CO 3- Develop problem solving skills through diverse applications of the integral.
- CO 4- Analyze the parameterization of curves and the polar coordinatesystem.
- CO 5- Examine various techniques of integration and apply them to definite and improper integrals.
- CO 6- Approximate definite integrals using numerical integration techniques and solve related problems.
- CO 7- Model physical phenomena using partial differential equations.
- CO 8- Compute limits of, differentiate, integrate and solve related problems involving functions represented parametrically or in polar coordinates.
- CO 9- Differentiate, and integrate functions represented using power series expansions, including Taylor series, and solve related problems.

#### **Core Course: Calculus and Differential equations II**

- CO 1- Write the definition of indefinite and definite integrals.
- CO 2- Define the integral of the inverse trigonometric and hyperbolic functions.
- CO 3- State the Fundamental theorem of calculus
- CO 4- Find general solutions to first order, second order and higher order homogeneous and non-homogeneous differential equations with constant and variable coefficients.
- CO 5- Can find the series solution of differential equation
- CO 6- Evaluate Indefinite integral involving hyperbolic functions and Definite integral of all the functions.
- CO 7- Sketch the graph of curves (Cartesian and parametric co- ordinates)
- CO 8- Calculate areas of plane regions and arc length.
- CO 9- Select and apply appropriate methods to solve differential equations.
- CO 10- Apply power series method to find solution of Differential equations involving Bessel and Legendre equations.
- CO 11- Use fundamental theorem of calculus to evaluate integralinvolving algebraic and transcendental functions.

#### **SEMESTER III**

#### **Core Course: Statistical Physics and Thermodynamics**

- CO 1- Will achieve the ability to explain the various statistical physics and their properties.
- CO 2- Explain the various laws of thermodynamics and all the thermodynamical processes along with their essential variables.
- CO 3- Acquires knowledge of properties of Carnot heat engine.
- CO 4- Acquires knowledge of all quantum states and phase space..
- CO 5- Describe the role of Bose Einstein Condensation and their all concepts in brief.
- CO 6- Can read, understand and explain scholarly journal articles in statistical physics
- CO 7- Describe and analyses quantitatively processes, relationships and techniques related to the areas covered in the statistical physics course.
- CO 8- Develop a clear understanding of the basic concepts in statistical mechanics physics.
- CO 9-Able to use the physical knowledge to analyze a suitable technique to solve problems.
- CO 10- Be able to outline the importance of statistical physics and its various applications in the modern society.

#### **Core Course: Optics**

- CO 1- Able to achieve the ability to explain the various opticalphenomenon's.
- CO 2- Can explain the various laws of Optics and all processes alongwith their essential variables.
- CO 3-Can read, understand and explain scholarly journal articles in Optics

- CO 4- Describe and analyses quantitatively processes, relationshipsand techniques related to the areas covered in the course
- CO 5- Develop a clear understanding of the basic concepts in OpticalPhysics.
- CO 6- Use the physical knowledge to analyze a suitable technique to solve problems.
- CO 7- Be able to outline the importance of statistical physics and its various applications in the modern society.

#### Core Course: CHEMISTRY (ORGANIC CHEMISTRY-II)

- CO 1- This course will equip the students with the necessary chemicalknowledge concerning the organic chemistry of functional groups.
- CO 2- To develop skills to interpret and explain the mechanism of organic reactions involving different functional groups.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

#### **Core Course: CHEMISTRY (PHYSICAL CHEMISTRY-II)**

- CO 1- This course will help the students to acquire knowledge and understanding of basic concepts of thermodynamics as well as equilibrium in a detailed manner.
- CO 2- The students will be able to pursue their career objectives in higher education, scientific research and teaching.

#### **Core Course: Analysis**

- CO 1- Can work within an axiomatic framework.
- CO 2- Knowledge of some simple technique for testing the convergence of sequences and series and confidence in applying them.
- CO 3- An understanding of how the elementary functions can be defined by power series with an ability to deduce some of their easier properties.
- CO 4- Express correctly the definitions of basic concepts from the course unit, for example the definition of the limit of a sequence.
- CO 5- Decide on the correctness or otherwise of statements involving the basic concepts from the course unit, providing justifications or counter examples as appropriate.

#### **Core Course: Analytical Geometry**

- CO 1- Establish rectangular coordinate system in the plane and in the space, express concept of vector both geometrically and analytically, understand operations on vectors and the properties of these operations.
- CO 2- Estimate polar equations of conics and their graphs.
- CO 3- Study of conics like ellipse, parabola and hyperbola.
- CO 4- Express condition of parallel or perpendicular of the two lines
- CO 5- Use the polar coordinate system, relate it to the rectangular coordinate system and graph equations using polar coordinates.
- CO 6- Model real world situations with equations of conics.
- CO 7- Determine equation of curves when given information that determines the curve.

#### **SEMESTER IV**

#### **Core Course: Quantum Mechanics**

- CO 1- Able to define a various branches of Quantum Physics (eg. high energy physics, high particle physics, Molecular Physics).
- ${
  m CO}$  2- Understand and explain the basic concepts associated with the quantum physics ( e.g. Uncertainty principle, Normalization, Operators)

- CO 3- Students will understand and able to describe the differencebetween classical (old) and quantum (new) physics.
- CO 4- Identify the different process of how individual atoms interactwith one another.
- CO 5- Think critically about the wave particle duality nature.
- CO 6- Learn about degenerate states of same energy level.
- CO 7- Think critically about the use of physics in our daily life.

# **Core Course: Atomic Spectra & Lasers**

- CO 1- Will achieve the ability to explain the various atomic spectraphenomenons.
- CO 2- Explain the various laws of Lasers and all processes along with their essential variables.
- CO 3- Read, understand and explain scholarly journal articles in Laser Spectra
- CO 4- Describe and analyses quantitatively processes, relationships and techniques related to the areas covered in the course
- CO 5- Develop a clear understanding of the basic concepts in Atomic Spectra and Lasers.
- CO 6- Use the physical knowledge to analyze a suitable technique to solve problems.
- CO 7- Be able to outline the importance of statistical physics and its various applications in the modern society.

#### **Core Course: CHEMISTRY (ORGANIC CHEMISTRY-III)**

- CO 1- This course will equip the students with the necessary chemicalknowledge concerning the organic chemistry of functional groups.
- CO 2- To develop skills to interpret and explain the mechanism of organic reactions involving different functional groups.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

# **Core Course: CHEMISTRY (INORGANIC CHEMISTRY-III)**

- CO 1- This course will equip the students with the necessary chemicalknowledge concerning the biological properties of inorganic compounds.
- CO 2- To develop skills to devise uses of inorganic compounds in medicine and industry.
- CO 3- The students will be able to pursue their career objectives in higher education, scientific research and teaching.

#### **Core Course: Solid Geometry**

- CO 1- Will learn the method of using virtual reality in desktopapplication that is intended to be used for solid geometry.
- CO 2-Will learn the topics of Geometry that covers a whole range of concepts which will be encountered in everyday life.
- CO 3- Will learn the examples of 2-D and 3-D shapes, such as a circleand a sphere.
- CO 4- Will learn the systematic use of linear equations and matrixalgebra, which are important for higher dimension

#### **Core Course: Statics and Vector Calculus**

- CO 1- Will identify conservative vector fields.
- CO 2- Find the divergence and curl of a vector field.
- CO 3- Evaluate line integrals of curves and vector fields.
- CO 4- Use Green's theorem to evaluate line integrals, Gradient vectorfields and constructing potentials.
- CO 5- Can calculate vector and scalar derivatives of vector and scalar fields using the grad, div and curl operators in Cartesian and in cylindrical and spherical polar coordinates.
- CO 6- Use suffix notation to manipulate Cartesian vectors and their derivatives.

- CO 7- Can calculate multiple integrals in two and three dimensions including changing variables using Jacobians.
- CO 8- Can calculate line and surface integrals and use the various integral theorems.

#### **SEMESTER V**

#### **Core Course: Condensed Matter Physics**

- CO 1- Have a basic knowledge of crystal structure and symmetry operations.
- CO 2- Understand the concept of reciprocal lattice and be able to use itas a tool.
- CO 3- Know the significance of grain boundaries.
- CO 4- Know the fundamental principles of Fermi levels and band gapin semiconductors.
- CO 5- Will be able to outline the importance of Brillouin zones.
- CO 6-Will be able to perform structure determination of simplestructures.

# **Core Course: Electronics**

- CO 1-Will have a basic knowledge of how semiconductor electronicsworks.
- CO 2-Will know the significance of Amplitude gain.
- CO 3- Will know the fundamental principles of oscillators.
- CO 4- Apply appropriate mathematical techniques to solve diodeequation and its implications.
- CO 5- Think in graphical terms and approximate terms when appropriate.
- CO 6- Apply appropriate laboratory techniques to measure semiconductor properties.
- CO 7- Understand the operation and characteristics of various typesof transistors.

#### Core Course: CHEMISTRY (INORGANIC CHEMISTRY-IV)

- CO 1- This course will equip the students with the necessary chemicalknowledge concerning the inorganic chemistry of transition metalcomplexes.
- CO 2- Will develop skills to interpret and explain the bonding, magnetic as well as spectral properties of transition metal complexes.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

#### Core Course: CHEMISTRY (PHYSICAL CHEMISTRY-III)

- CO 1- Will understand the inter conversion of chemical and electrical energy and to link thermodynamics with electrochemistry.
- CO 2- Can apply the concepts of electrochemistry, spectroscopy to different chemical processes as well as in practicals.
- CO 3- The students will be able to pursue their career objectives inhigher education, scientific research and teaching.

#### **Core Course: Dynamics**

- CO 1- Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- CO 2- Understand and use basic terms for the description of the motion of particles, vector functions and the fundamental laws of Newtonian mechanics.
- CO 3- Solve mechanics problems in one dimension that involve one ormore of the forces of gravity, friction and air resistance.
- CO 4- understand the concept of terminal speed, and use it in solving mechanics problems in one dimension

#### **Core Course: Number theory**

- CO 1- Explore the use of arithmetical functions, the Mobius functionand the Euler totient function.
- CO 2- Solve systems of linear congruences with different moduli using the Chinese Remainder Theorem.
- CO 3- Prove results involving divisibility and greatest commondivisors.
- CO 4- Can apply Euler-Fermat's Theorem to prove relations involving prime numbers.
- CO 5- Analyze the structure of real-world problems and plan solutionstrategies.
- CO 6- Communicate quantitative data verbally, graphically, symbolically and numerically.
- CO 7- Use mathematical concepts in problem-solving throughintegration of new material and modelling.

#### **SEMESTER VI**

## **Core Course: Nuclear Physics**

- CO 1- Will gain a basic knowledge of how nuclear forces work.
- CO 2- Will know the significance of radioactive decay.
- CO 3- Will know the fundamental principles of Nuclear Reactions.
- CO 4- Apply appropriate mathematical techniques to solve nuclear equation and its implications.
- CO 5- Can think in graphical terms and approximate terms when appropriate.
- CO 6- Can apply appropriate laboratory techniques to measure nuclearproperties.
- CO 7- Able to understand the operation and characteristics of radioactive decays.

# **Core Course: Radiation and Particle Physics**

- CO 1-Will have a basic knowledge of nuclear radiation and itsproperties.
- CO 2-Will know the significance of accelerators.
- CO 3- Will know the fundamental properties of elementary particles.
- CO 4- Can apply appropriate mathematical techniques to solve radiation equations.
- CO 5- Think in graphical terms and approximate terms when appropriate.
- CO 6- Apply appropriate laboratory techniques to measure elementary particle properties.
- CO 7- Understand the operation and characteristics of radiation detectors.

# Core Course: CHEMISTRY (PHYSICAL CHEMISTRY-IV)

- CO 1- Will help the students to acquire knowledge and understanding of basic concepts of quantum chemistry in a detailed manner.
- CO 2-Will be able to pursue their career objectives in higher education, scientific research and teaching.

# **Core Course: CHEMISTRY (ORGANIC CHEMISTRY-IV)**

- CO 1- Will equip the students with the necessary knowledgeconcerning uses of spectroscopic techniques.
- CO 2- Will develop skills to interpret and explain the spectras.
- CO 3-Will be able to pursue their career objectives in higher education, scientific research and teaching.

# **Core Course: Numerical Analysis**

- CO 1- Can solve an algebraic or transcendental equation using anappropriate numerical method.
- CO 2- Approximate a function using an appropriate numerical method.
- CO 3-Can solve a differential equation using an appropriate numerical method.
- CO 4-Can evaluate a derivative at a value using an appropriatenumerical method.
- CO 5-Can code a numerical method in a modern computer language.
- CO 6- Analyze the error incumbent in any such numerical approximation.
- CO 7- Implement a variety of numerical algorithms using appropriate technology.
- CO 8- Compare the viability of different approaches to the numerical solution of problems arising in roots of solution of non-linear equations, interpolation and approximation, numerical differentiation and integration, solution of linear systems.

#### **Core Course: Linear Algebra**

- CO 1- Develop an understanding of linear algebra in mathematics, natural and social sciences.
- CO 2- Use matrix algebra to analyze and solve equations arising inmany applications that require a background in linear algebra.
- CO 3- Utilize vector space terminology and describe how closely other vector spaces resemble R<sup>n</sup>.
- CO 4- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.
- CO 5- Represent mathematical information and communicatemathematical reasoning symbolically and verbally.
- CO 6- Interpret and analyze numerical data, mathematical concepts andidentify patterns to formulate and validate reasoning.

# Name of Program: B.Sc (Medical)

# **Program Outcomes**

- PO 1: The Programme aims to give knowledge with facts and figures related to various subjects in medical.
- PO 2: Enable the students to understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevance in the day-to-day life.
- PO 3: The learners acquire the abilities in handling scientific instruments, scheduling and executing the experiments in laboratories and to draw logical inferences from the scientific experiments.
- PO 4: They become capable of thinking creatively, to propose innovative ideas in clarifying facts and figures and providing newsolution to the problems.
- PO 5: To give them knowledge about developments in any science subject and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
- PO 6: The Programme targets to develop scientific aptitude among the students to make them open-minded and curious in order to deal with all aspects related to life.
- PO 7: To make them capable of applying their acquired knowledge andable to work on their own hence make themselves self-reliant and self- sufficient.

#### **Program Specific Outcomes**

- Acquaintance with microbiological world: Students are familiarized with different classifications of microorganisms (algae, fungi, bacteria, and viruses) present across the globe to make them understand and appreciate history, morphology and distinguishing features of different types of microorganisms present on our planet thus opening the field of various career options in Microbiology.
- Familiarization with lower plants: Students understand about the morphology, biology and importance of bryophytes and pteridophytes and comprehend the role of lower plants in evolution and succession of life.
- Identification of relationship between structure and function:
- Detailed structural and functional study of nucleus, cell membrane, cellwall and various other organelles which includes mitochondria, golgi body, endoplasmic reticulum, peroxisomes and vacuoles helps studentsrealize the relationship between structure and function.
- Comprehension of patterns of inheritance: To explain the students about the genetic inheritance and genetic variations, detailed study on DNA and understand the concept of cell division including mitosis and meiosis.
- Grasping the concept of plant systems and organs: The main objective of this Program is to familiarize students regarding the basic plan of plant, branching pattern, diversity of life forms of flowering plants.
- Analyzing the components of different plant parts: The main objective of this Program is to familiarize students regarding detailed study of root system, various means of vegetative reproduction and sexual reproduction in flowering plants.
- Conception of history and trends of plant classification: The main objective of this Program is to familiarize students regarding history, morphological and taxonomical distinguishing features of different classes of angiosperms and gymnosperms.
- Learning the trends in biologically important families: The main objective of this Program is to familiarize

- students regarding angiosperm taxonomy, botanical nomenclature, diversity of flowering plants in families.
- Expanding perceptive how plants function at various at various physiological processes: To explain the students about the various life supporting processes in plants and enlighten students towards the basics of biochemistry and biotechnological studies.
- Interpret various physiological processes in relation to plants: To explain the students about the detailed study of various physiological processes in plants life supporting processes in plants.
- Understand and analyse plants in relation to environment and its various components: detailed study of interactions between plants and environment which includes anatomical and physiological responses of plants to various environmental factors.
- Gain knowledge about various plants of economic use: Understand the concept of sources and importance of different plants in our life.

#### **Course Outcomes**

#### Semester I

### Paper I A: Diversity of Microbes

- CO 1: This course will facilitate students to classify various genera of Algae according to general characters and economic importance.
- CO 2: To facilitate students to demonstrate different characteristics features of various classes of microorganisms under Bacteria and viruses and also illustrate their life cycle and economic importance.
- CO 3: Students will be able to summarize different characteristics features of various classes of Mastigomycotina, Zygomycotina and Ascomycotina.
- CO 4: Students will be able to perform practicals to demonstrate characteristic features of Basidiomycotina and Deuteromycotina
- CO 5: Students will be able to identify various characteristic features of Lichens.

#### Paper I B: Diversity of Cryptogams

- CO 1: Student can make micropreparation of the material of Pteridophyta and bryophytes and identified anatomically.
- CO 2: Student can collect few species from locality and identify morphologically during collection of material in the local visit.
- CO 3: Students can summarize characters, distribution, classification and regeneration in Bryophytes
- CO4: Students can outline how the stele evolution occurs in Pteridophytes and also familiar with the work done by Indian pteriodologist.
- CO 5: Students can catalog Pteridophytic classes and the morphological and anatomical characters of genus included in the different Pteriodophytic orders.

#### Semester II

#### Paper I A: Cell biology

- CO 1: The students will be able to categorize level of structuralorganization and function of Nucleus.
- CO 2: The students will be able to explain extra nuclear Genome.
- CO 3: The students will be able to enlist various levels of Chromosome Organization.
- CO 4: The students will be able to summarize various chromosome alterations.
- CO 5: This course will help students in distinguishing between cell wall and cell membrane.

#### Paper I B : Genetics

CO 1: The students will be able to identify fine structure of DNA, the Genetic Material

- CO 2: The students will be able to summarize Genetic regulation of Cell division
- CO 3: The students will be able to outline the Regulation of Genetic expression
- CO 4: The students will be able to illustrate the genetic variation.
- CO 5: This course will be able to compare DNA damage and repair structure.

#### Semester-III

#### Paper: A Structure, Development and Reproduction in Flowering Plants-I

- CO 1: The students will be able to compare diversity and branching in Flowering Plants.
- CO 2: The students will be able to interpret the shoot system andvarious tissues present in it.
- CO 3: The students will be able to students to illustrate structure of wood and their variation in various environment conditions
- CO4: The students will be able to identify the various adaptations of leaves in relation to photosynthesis.

# Paper B: Structure, Development and Reproduction in Flowering Plants-II

- CO 1: The students will be able to relate function and mechanism of root system in plants
- CO 2: The students will be able to experiment with vegetative reproduction and structure of flower.
- CO 3: The students will be able to compare the role and structure of male and female gametophyte.
- CO 4: The students will be able to analyze the mechanism of double fertilization and seed.

#### **Semester-IV**

# Paper: IV A Diversity of Seed Plants and their Systematics- I

- CO 1: Students will be able to identify the seed plants
- CO 2: Students will be able to classify gymnosperms according to their features.
- CO 3: Students will be able to examine geological time scale andfossilization
- CO 4: The students will be able students to classify the gymnospermson the basis of morphology of vegetative and reproductive parts.

#### Paper: IV B Diversity of Seed Plants and their Systematics-II

- CO 1: Students will be able to classify some angiosperms.
- CO 2: They will be able to interpret different components of various classification systems.
- CO 3: They will be able to dissect flowers.
- CO4: The students will be able to extrapolate the information about Diversity of flowering plants as illustrated by members of the different families.

#### Semester-V

# **Paper: V A Plant Physiology**

- CO 1: The student will be able to compare plant-water relations.
- CO 2: The students will be able to compile deficiency diseases inplants.
- CO 3: The students will be able to apply concepts of transport of organic substances in plants.
- CO 4: The students will be able to draw relationships between Photosynthesis, Photorespiration and CAM

#### Paper: V B Biochemistry and Biotechnology

- CO 1: The students will be able to simplify the concepts of enzymology.
- CO 2: The students will be able to prepare model of Respiration process in plants.
- CO 3: The students will be able to contrast different steps in Nitrogen and Lipid Metabolism.
- CO 4: This course will help students to recognize basic aspects of biotechnology.

#### Semester-VI

# Paper: VI A Ecology

- CO 1: The students will be able to develop correlation between Plantsand different Components of environment.
- CO 2: The students will be able to draw relationship between Community and Population ecology.
- CO 3: This course will help students to analyze different biotic andabiotic components of ecosystem.
- CO 4: This course will appraise students about Bio geographical Regions and Vegetation types of India.

# Paper: VI B Economic Botany

- CO 1: The students will be able to compile different food plants.
- CO 2: The students will be able to examine various source of fibres and vegetable oils.
- CO 3: The students will be able to classify different source of spices.
- CO 4: The students will be able to elaborate upon the importance of different medicinal plants.
- CO 5: This course will help the students to evaluate the importance of different sources of beverages and rubber in our life.

# Zoology

- Students will acquire knowledge on basic, important concepts in the field of Zoology such as Physiology, Taxonomy, Evolution, Genetics, Wildlife Biology, Developmental Biology and Comparative Anatomy and can be applied to fields suchas Animal Biotechnology.
- Students will learn how to identify organisms, understand animal body systems, understand population dynamics in the environment as well as apply these concepts when conducting field surveys.
- Students will also gain a sense of responsibility, appreciation and conservation with regards to nature and environment.

#### Course ZOO-IA: CELL BIOLOGY

#### **Course outcome:**

- CO 1: Gain knowledge on the different Methods in Cell Biology and their characteristics.
- CO 2: Understand the organization of cells.
- CO 3: Understand the concepts in Golgi complex, Ribosomes: Lysosomes, Polymorphism, Centrosome.
- CO 4: Understanding Structure and functions of nuclear membrane, nucleolus and chromosomes, An elementary idea of cell transformationin cancer, An elementary idea of cellular basis of immunity.

#### Course: ZOO-IB: BIODIVERSITY-I

#### **Course outcome**

- CO 1 : Knowledge of Amoeba proteus, Paramecium caudatum (with special reference to Kappa particles in P. aurelia), Plasmodium vivax. Introduction to Parasitic Protozoans.
- CO 2: Understanding of Fasciola hepatica, Taenia solium, Larvae of Fasciola hepatica and Taenia solium
- CO 3: Understanding Aschelminthes: Ascaris, Parasitic adaptations in Helminthes Annelida.

#### **ZOOLOGY PRACTICAL-I (RELATED TO ZOO-IA and ZOO-IB)**

Understanding of the following animals (Through Specimens or slides):

- A. Protozoa. Amoeba, Euglena, Trypanosoma, Noctiluca, Eimeria, Monocystis, Paramecium Opalina, Vorticella, Balantidium, Nyctotherus and Polystomella.
- B. Parazoa. Sycon, Grantia, Euplectella, Hyalonema, Spongilla, Euspongia.

- C. Cnidaria.Porpita, Velella, Physalia, Aurelia, Rhizostoma, Metridium, Millipora, Alcyonium, Tubipora, Zoanthus, Madrepora, Favia, Fungia and Astrangia. Hydra (W.M.), Hydra with buds, Obelia (colony and medusa), Sertularia, Plumularia, Tubularia, Bougainvillea and Aurelia
- D. Platyhelminthes. Dugesia, Fasciola, Taenia, Echinococcus. Miracidium, Sporocyst, Redia, Cercaria of Fasciola, scolex and proglottids of Taenia (mature and gravid).
- E. Aschelminthes. Ascaris (male and female), Trichinella, Ancylostoma.
- F. Annelida. Pheretima, Nereis, Heteronereis, Polynoe, Eunice, Aphrodite, Chaetopterus, Arenicola, Tubifex and Pontobdela

#### Semester-II

# Paper: II A Ecology

- CO1: Students will be able to understand the scope of ecology in biology and functional basis of animal ecology.
- CO2: Students will be able to summarize the structure and functioning of ecosystems, ecological succession, biogeochemical cycles, and concepts of limiting factors.
- CO3: The students can categorize various adaptations acquired by the organisms to survive in the particular habitats.
- CO4: The students will know about inter and intra specific interactions& learn to solve environment problems like environmental pollution and Conservation of resource

#### **Paper: ZOO-IIB Biodiversity**

- CO 1: Students will be able to describe general rules of classification of invertebrates.
- CO 2: Students will understand about the scientific classification of invertebrate fauna (Arthropoda to Echinodermata) and can list different morphological features and economic importance of specimens of each phylum.
- CO3:Students will be able to explain & know about detail study of oneorganism each from phylum Arthropoda to Echinodermata.
- CO 4: Students will able to understand the phenomenon of social behaviour in insects, Pearl formation in Mollusca and Echinoderm larvae.

#### **Semester-III**

#### Paper: IIIA (Evolution)

- CO 1: Students will be able to understand the concept of evolution , theories of organic evolution and highlighted the role of evidences in support of evolution.
- CO 2: Students will know about origin of life, concept of micro, macro, mega evolution & evolution of species.
- CO 3: The students will learn about the fossils & extinction of reptiles & evolution of man.
- CO4: Students will be able to understand poison apparatus in snakes & dentition in mammals, migration and parental care.

#### Paper: ZOO- IIIB Biodiversity

- CO 1. Students will understand about the hierarchy and diversity of chordates, basic characteristic features of chordates and the organisms showing affinities with both Chordates and Non chordates.
- CO 2: Students will learn about of structural organization and functioning of various systems in organisms belonging to different vertebrate classes, the detailed study of a representative specimen of each class.
- CO 3: Classification of different vertebrate groups up to order, their generalfeatures and economic importance.
- CO 4: Knowledge of Classification of Urochotdata, Cephalochordata along withdetail study of Amphioxus

#### Semester-IV

#### Paper: IVA Biochemistry

- CO 1: Students will be able to understand importance & scope of biochemistry
- CO 2: The students can classify & summarize the structure, functions and metabolism of proteins, carbohydrates, lipids & nucleic acids.
- CO 3: The students will be able to understand the concept of enzymes & role ofcoenzymes.
- CO 4: The students will learn & perform different biochemical test.

# Paper: ZOO- IVB Animal Physiology

- CO 1: Students will learn about the basic principles and fundamentals of animalphysiology.
- CO2: The students be able to understand the physiology of digestion, types of digestion and physiology of respiration .
- CO 3:Students will understand the detailed physiology of excretion, circulation, etc.
- CO 4:Students will know about nervous coordination and integration of nervoussystem and can understand different endocrine glands and their disorders.
- CO5:Students will learn theoretical and practical techniques to study animalbehavior.

#### **Semester-V**

# Paper: ZOO-VA Developmental Biology

- CO 1: Students will develop critical understanding of fundamentals of developmental biology, various stages in the development of embryo andgametogenesis.
- CO 2: The students can understand the role of organisers and inducers in the development of embryo, the basic concepts of determination, differentiation and gastrulation.
- CO 3: Students are able to know about the formation of foetal membranes, theirrole, and development of frog, chick and rabbit upto three germinal layers, their fate maps and the nature and physiology of placenta.
- CO 4: The students are able to understand the phenomenon of Metamorphosis, Regeneration, Ageing and Death.

#### Paper: ZOOV-B Genetics

- CO 1: Students will learn about the central role of genetics in the study ofbiology.
- CO 2: The students will come to know about genetic variation through crossingover, recombination and linkage, analyze non-allelic gene interaction and modifications of Mendelian ratios.
- CO 3: The students will be able to understand the molecular structure of geneticmaterial; can enlist different steps of replication and transcription of DNA and expression of genes.
- CO 4: The students will learn with the phenomenon of extranuclear inheritance, Understand concept of Mutations.Get well versed with Recombinant DNA technology & Apply principles of Mendelian inheritance and Population genetics.

# **Semester-VI**

#### Paper: ZOO-VI A Medical Zoology

- CO 1: The students are able to define different terms in parasitology, Understandthe disease causing potential of pathogenic microorganisms..
- CO2: Students will be able to describe the life cycle, mode of transmission and pathogenicity of parasitic protozoans and helminthes.
- CO 3:Students will know about different Arthropod vectors, their life cycles and control measures.
- CO 4: Students will be able to define terms in Immnology, Learn abour innate and adaptive immunity & understand structure and types of Immunoglobulins.
- CO5.Demonstration and application of serodiagnostic assays and know about Vaccines.

# Paper: ZOO-VI B Medical Labora

CO 1: The students will have the knowledge of laboratory safety rules, hazardsand precautions . Learn the maintenance of laboratory equipments and application.

CO2: The students will learn techniques of collection, transportation and preservation of different clinical samples.

CO3:Students will be able to estimate and analyse different hematological tests.

CO 4: Students will learn about Bacteriology, different culture media and reparation of culture media.

CO5:Students will be able to know about about Histopathology, staining of tissueslides .

# Name of Program: B.Sc (Computer Science)

# **Program Outcomes (PO)**

PO1: Learn how to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software. Develop the skills to present ideas effectively and efficiently.

PO2: Do Academic and Professional Presentations - Designing and delivering an effective presentation and developing the various IT skillsto the electronic databases.

PO3: Use the Systems Analysis Design paradigm to critically analyse a problem. Solve the problems (Programming networking database and Web design) in the Information Technology environment. Function effectively on teams to accomplish a common goal and demonstrate professional behaviour.

PO4: Develop IT-oriented security issues and protocols. Design and implement a web page. Improve communication and businessmanagement skills, especially in providing technical support. Serve as the System Administrators with thorough knowledge of DBMS.

#### **Program Specific Outcomes (PSO)**

- Apply standard software engineering process and strategies in software project development using open-source Programming environment to deliver a quality product for business success.
- Acquaintance with latest trends in technological development and thereby innovate new ideas and solutions to existing problems.
- Conceptual grounding in computer usage as well as its practical business applications.
- To demonstrate advanced skills in the effective analysis design and realization of business system utilizing contemporary information technology.

#### **Course Outcomes**

#### **SEMESTER I**

#### **Core Course: Calculus and Trigonometry**

- CO 1- Learn the general concept of function and its applications to real-world situations.
- CO 2-Define the integral of the inverse trigonometric and hyperbolic functions.
- CO 3-State the Fundamental theorem of calculus
- CO 4-Find general solutions to first order, second order and higher order homogeneous and non-homogeneous differential equations with constant and variable coefficients.
- CO 5-Find the series solution of differential equation.
- CO 6-Learn to use concept of integration to evaluate geometric area and solve other applied problems.

#### **Core Course: Algebra**

- CO 1- Develop an understanding of algebra in mathematics, naturaland social sciences.
- CO 2- Use matrix algebra to analyze and solve equations arising inmany applications that require a background in linear algebra.
- CO 3- Utilize vector space terminology and describe how closely other vector spaces resemble R<sup>n</sup>.
- CO 4- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.
- CO 5- Represent mathematical information and communicate mathematical reasoning symbolically and verbally.
- CO 6- Interpret and analyze numerical data, mathematical concepts andidentify patterns to formulate and validate reasoning.

#### Core Course: Computer Fundamental & PC Software

- CO 1- Understand the basic terminology of computers
- CO 2- Understand the fundamental hardware components that make upa computer's hardware and the role of each of these components.

- CO 3- Understand the difference between an operating system and anapplication Program, and what each is used for in a computer
- CO 4- Describe some examples of computers and state the effect that the use of computer technology has had on some common products.
- CO 5- Identify the applications of computer in daily life.

#### **SEMESTER II**

#### **Core Course: Calculus II**

- CO 1- Examine various techniques of integration and apply them to definite and improper integrals
- CO 2- Approximate definite integrals using numerical integration techniques and solve related problems,
- CO 3- Model physical phenomena using partial differential equations.
- CO 4- Compute limits of, differentiate, integrate and solve related problems involving functions represented parametrically or in polar coordinates.
- CO 5- Differentiate, and integrate functions represented using power series expansions, including Taylor series, and solve related problems.

#### Core Course: Calculus and Differential equations II

- CO 1- Can write the definition of indefinite and definite integrals.
- CO 2-Can define the integral of the inverse trigonometric and hyperbolic functions.
- CO 3-Can state the Fundamental theorem of calculus
- CO 4-Can find general solutions to first order, second order and higher order homogeneous and non-homogeneous differential equations with constant and variable coefficients.
- CO 5-Can find the series solution of differential equation.
- CO 6- Select and apply appropriate methods to solve differential equations.
- CO 7-Apply power series method to find solution of Differential equations involving Bessel and Legendre equations.
- CO 8- Use fundamental theorem of calculus to evaluate integralinvolving algebraic and transcendental functions.

#### **Core Course: Programming Using C**

- CO 1- On successful completion of this subject the students have the Programming ability in C Language.
- CO 2- Will Enhance Logical Thinking and Reasoning
- CO 3- Students would be capable of developing various applications to solve deluge of real-world problems.
- CO 4- They can also learn to make system software as well as application software.
- CO 5- In many multinational companies they can work effectively in group or team to achieve goals and can show initiative and leadership abilities.

#### **SEMESTER III**

#### **Core Course: Analysis**

- CO 1- Can work within an axiomatic framework.
- CO 2- Knowledge of some simple technique for testing the convergence of sequences and series and confidence in applying them.
- CO 3- An understanding of how the elementary functions can be defined by power series with an ability to deduce some of their easier properties.
- CO 4- Express correctly the definitions of basic concepts from the course unit, for example the definition of the limit of a sequence.
- CO 5- Decide on the correctness or otherwise of statements involving the basic concepts from the course unit, providing justifications or counter examples as appropriate.

## **Core Course: Analytical Geometry**

- CO 1- Establish rectangular coordinate system in the plane and in the space, express concept of vector both geometrically and analytically, understand operations on vectors and the properties of these operations.
- CO 2- Estimate polar equations of conics and their graphs.
- CO 3- Study of conics like ellipse, parabola and hyperbola.
- CO 4- Express condition of parallel or perpendicular of the two lines
- CO 5- Use the polar coordinate system, relate it to the rectangular coordinate system and graph equations using polar coordinates.
- CO 6- Model real world situations with equations of conics.
- CO 7- Determine equation of curves when given information that determines the curve.

# **Core Course: Computer Oriented Numerical and Statistical Methods**

- CO 1- Develop appropriate numerical methods to approximate afunction
- CO 2- Perform an error analysis for various numerical methods
- CO 3- Develop appropriate numerical methods to solve a differential equation
- CO 4- Derive appropriate numerical methods to solve a linear systemof equations
- CO 5- Derive appropriate numerical methods to evaluate a derivative at a value.
- CO 6- Prove results for various numerical root finding methods.
- CO 7- Derive appropriate numerical methods to calculate a definite integral.
- CO 8- Code various numerical methods in a modern computer language.

#### **SEMESTER IV**

### **Core Course: Solid Geometry**

- CO 1- Will learn the method of using virtual reality in desktopapplication that is intended to be used for solid geometry.
- CO 2-Will learn the topics of Geometry that covers a whole range of concepts which will be encountered in everyday life.
- CO 3- Will learn the examples of 2-D and 3-D shapes, such as a circleand a sphere.
- CO 4- Will learn the systematic use of linear equations and matrixalgebra, which are important for higher dimension.

#### **Core Course: Statics and Vector Calculus**

- CO 1-Will able to identify conservative vector fields.
- CO 2- Can find the divergence and curl of a vector field.
- CO 3- Able to evaluate line integrals of curves and vector fields.
- CO 4- Use Green's theorem to evaluate line integrals.
- CO 5- Can calculate gradient vector fields and constructing potentials

#### Core Course: Data Structures & Programming Language Using C++

- CO 1- Define basic static and dynamic data structures and relevant standard algorithms for them: stack, queue, dynamically linked lists, trees, graphs, heap, priority queue, hash tables, sorting algorithms.
- CO 2- Demonstrate advantages and disadvantages of specific algorithms and data structures.
- CO 3- Select basic data structures and algorithms for autonomous realization of simple Programs or Program parts.
- CO 4- Determine and demonstrate bugs in Program, recognize neededbasic operations with data structures
- CO 5- Formulate new solutions for Programming problems or improve existing code using learned algorithms and data structures.
- CO 6- Evaluate algorithms and data structures in terms of time and memory complexity of basic operations.
- CO 7- Able to know how to do Programming in C++ environment.
- CO 8- Able to understand and implement the concepts of object- oriented approach using C++.

- CO 9- Able to acquire in depth knowledge and develop software in C++
- CO 10- Identify different class attributes, member functions, base classand derived class and their relationships among them
- CO 11- Learn how to reuse the code using polymorphism.

#### **SEMESTER V**

#### **Core Course: Dynamics**

- CO 1- Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- CO 2- Understand and use basic terms for the description of the motion of particles, vector functions and the fundamental laws of Newtonian mechanics.
- CO 3- Solve mechanics problems in one dimension that involve one ormore of the forces of gravity, friction and air resistance.
- CO 4- understands the concept of terminal speed, and use it in solving mechanics problems in one dimension

# **Core Course: Number theory**

- CO 1- Explore the use of arithmetical functions, the Mobius functionand the Euler totient function.
- CO 2- Solve systems of linear congruences with different moduli using the Chinese Remainder Theorem.
- CO 3- Prove results involving divisibility and greatest commondivisors.
- CO 4- Can apply Euler-Fermat's Theorem to prove relations involving prime numbers.
- CO 5- Analyse the structure of real-world problems and plan solutionstrategies.
- CO 6- Communicate quantitative data verbally, graphically, symbolically and numerically.
- CO 7- Use mathematical concepts in problem-solving through integration of new material and modelling.

#### Core Course: Data Base Management System & Oracle

- CO 1- Will understand Databases and their design & development
- CO 2- Learn Normalization of Databases.
- CO 3- Will learn using SQL and PL/SQL.
- CO 4- Learn usage of DBMS design and administration.

#### **SEMESTER VI**

#### **Core Course: Numerical Analysis**

- CO 1- Solve an algebraic or transcendental equation using an appropriate numerical method.
- CO 2- Approximate a function using an appropriate numerical method.
- CO 3- Can solve a differential equation using an appropriate numerical method
- CO 4-Can evaluate a derivative at a value using an appropriate numerical method.
- CO 5- Analyse the error incumbent in any such numerical approximation.
- CO 6- Implement a variety of numerical algorithms using appropriate technology.
- CO 7- Compare the viability of different approaches to the numerical solution of problems arising in roots of solution of non-linear equations, interpolation ad approximation, numerical differentiation and integration, solution of linear systems.
- CO 8- Can code a numerical method in a modern computer language.

# Core Course: Linear Algebra

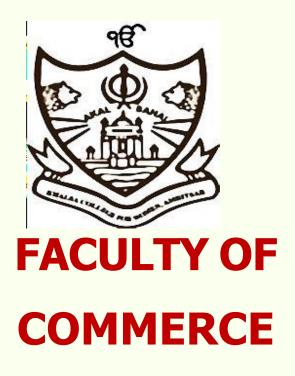
- CO 1- Develop an understanding of linear algebra in mathematics, natural and social sciences.
- CO 2- Use matrix algebra to analyze and solve equations arising inmany applications that require a background in linear algebra.

- CO 3- Utilize vector space terminology and describe how closely othervector spaces resemble R<sup>n</sup>.
- CO 4- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.
- CO 5- Represent mathematical information and communicate mathematical reasoning symbolically and verbally.
- CO 6- Interpret and analyse numerical data, mathematical concepts andidentify patterns to formulate and validate reasoning.

# **Core Course: Information Technology**

- CO 1- Understand professional, ethical, legal, security and social issuesand responsibilities
- CO 2- Be able to communicate effectively with a range of audiences
- CO 3- Be able to analyse the local and global impact of computing on individuals, organizations, and society.

# KHALSA COLLEGE FOR WOMEN, AMRITSAR, G.T. ROAD AMRITSAR



# Program Outcomes (POs) and

# **Course Outcomes (COs)**

G T Road, near Putli Ghar, Amritsar, Punjab 143002

Phone:0183-5050431

Website: www.kcwasr.org

E-mail: kcw\_asr@yahoo.co.in

### Name of Program: B.COM (REGULAR)

### **Program Outcomes**

- PO 1: Understand the role of business and its implications on society
- PO 2: Understand the conceptual knowledge of accounting and acquire skills of maintaining accounts
- PO 3 : Acquire entrepreneurial, legal and managerial skills.
- PO 4 : Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- PO 5: Students can independently start up their own business.
- PO 6: Students can get thorough knowledge of finance and commerce.
- PO 7: This Program could provide industries, banking sectors, insurance companies, financing companies, transport agencies, warehousing etc., well trained professionals to meet the requirements
- PO 8 : After completing graduation, students can get skills regarding various aspects like marketing manager, selling manager, over all administration abilities of the company
- PO 9: The knowledge of different specializations in accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.

# **Program Specific Outcomes**

- The students can get the knowledge, skills and attitudes during theend of the b.com degree course
- By goodness of the preparation they can turn into a manager, accountant, management accountant, cost accountant, bank manager, auditor, company secretary, teacher, professor, stock agents, government employments and so on.,
- Students will prove themselves in different professional exams like C.A , CS,UPSC.
- The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving inday to day business activities.
- Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.
- Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator as well as other financial supporting services.

### SEMESTER -1 BCG -103 FINANCIAL ACCOUNTING

**Course objective**: to give an insight into the basics of accounting concepts and principles to prepare to students to have the foot hold in accounts.

- CO 1: Understanding of accounting principles, concepts and conventionand to identify various subsidiary books in accountancy.
- ${
  m CO}~2$ : Analyze what bank reconciliation statement is and understandabout rectification of errors and suspense account
- CO 3: Analyze the essentials of bill of exchange and its accountingtreatment
- CO4: Understanding of various methods of calculating depreciation.
- CO 5: Understand the methods of calculating profits under single entrysystem.
- CO6: Enable the students to learn the basic concepts of partnershipaccounting, and allied aspects of accounting.

### **BCG-104 BUSINESS ORGANISATION:**

**Course objective**: The objective of the course is to understand the various forms of business organization, industries trade association and stock exchange.

#### **Course outcomes:**

- CO 1 : Provide understanding about business organisation
- CO 2 : Create understanding about different business organisation forms
- CO 3 Familiarise with partnership form of organisation and its comparison with sole proprietorship
- CO 4 : Provide understanding about kinds of companies andcreate awareness about multinational companies
- CO 5 : Get an idea about cooperative societies and cooperative societymovement in India
- CO 6: Understanding of the main working aspects of organizations, notonly from an economic point of view but also considering organizations as part of society.
- CO 7: To provide knowledge about stock exchange
- CO 8: To provide the knowledge about trade associations.

### **BCG-105 BUSINESS COMMUNICATION:**

**Course objective:** the objective of this course is to help students to acquire basic knowledge of the business communication and professional skills to impart skills for dealing with various kinds of business communications.

### **Course outcomes:**

- CO 1 : Understanding of relevance and importance of propercommunication.
- CO 2: Enhancement in the reading skills.
- CO 3: Gain insights into the various aspects of communication.
- CO 4: Improvisation of the writing skills of the students.
- CO 5 : Ability to frame official letters, applications, office memorandum, notices etc.
- CO 6: To distinguish among various levels of organizational communication and communication barriers while developing an understanding of communication as a process in an organization.

#### **BCG-106 BUSINESS STATISTICS**

**Course objective**: the main objective of the course is to help students acquire new skills on the application of statistical tools and techniques inbusiness decision-making.

- a) To familiarizes the concept of statistics
- b) To provide practical exposure on calculation of measures of average
- c) To provide practical exposure on calculation of measures of correlation and irrigation
- d) To introduce the students about the concept of provability
- e) To provide practical exposure on calculation of trend analysis.
- f) Use of simple/multiple regression models to analyse the underlying relationships between the variables through hypothesistesting.

### **BCG 107 COMPUTER FUNDAMENTALS:**

**Course objectives:** The course aims at providing basic computer skills tostudents. This course also help student to understand input output system,types of software and hardware.

### **Course outcomes:**

- a) Understanding of the concepts of input/output devices of computers and how it works.
- b) Ability to bridge the fundamental concept of computers with their present level of knowledge about computers.
- c) Understanding software and hardware.
- d) Understanding different computer languages.

### SEMESTER 2 BCG 202 ADVANCED FINANCIAL ACCOUNTING

**Course objective:** The course aims at providing knowledge of various accounting concepts and methods.

#### **Course outcomes**

- a) To provide the knowledge of various accounting concepts
- b) To impart the knowledge about accounting methods, procedures and techniques.
- c) To gain knowledge on preparation of accounts in hire purchase and installment system.
- d) To acquire the skill to prepare depreciation account.
- e) To familiar with the procedure involved in the dissolution of partnership firms.
- f) To familiarize students with the application of important accountingstandards.
- g) To understand the procedure to prepare accounts for non-profit organizations.

### **BCG204-COMMERCIAL LAWS**

Course objectives: course objective: to help the students to understand the commercial laws .the course also aims to help students to have knowledge about contract act, sales of goods act, consumer protection act and limited liability partnership act.

### **Course outcomes:**

- a) To understand the rules governing Indian contract act
- b) To familiarize the rights and discharges of duties by parties inindemnity, guaranty, Bailment and pledge
- c) To acquire knowledge of rules governs setting up of agency and termination of agency.
- d) To understand the legal provisions of sale of goods act.
- e) Understand the provisions of consumer protection act..

### **BCG-205 BUSINESS ECONOMICS:**

Course objective: to understand and appreciate the business economics. The course also aims to familiarize students to law of demand, theory of cost, determination of price under different market forms, national income and law of consumption.

- a) Understand the role of business economics in decision making
- b) Analyse the demand determinants and measuring price elasticity ofdemand
- c) Analyse the peculiarities of factors of production
- d) Evaluate the supply and cost analysis of total, average and marginalcurves
- e) Identify equilibrium, price and output decisions in various marketforms.
- f) Understand the concept of national income and law of consumption.

### **BCG-206 FUNCTIONAL MANAGEMENT**

**Course objectives:** The course aims at providing knowledge about management, its functions its various branches.

### **Course outcomes:**

- a) To understand the basic concepts of management, its functions.
- b) Able to explain manpower planning, recruitment, selection, training, placement, compensation, promotion, appraisal.
- c) Understanding of marketing management.
- d) Able to understand production and strategic marketing.

### **SEMESTER-III**

### **BCG 303- CORPORATE ACCOUNTING:**

**Course Objectives:** To impact company accounts to understand and appreciate the provisions of the companies act 1956. To give them anexposure to calculate the value of goodwill and shares.

### **Course outcomes**

- a) This course aims to enlighten the students on the accounting procedures followed by the companies.
- b) Student's skills about accounting standards will be developed.
- c) To make aware the students about the valuation of shares.
- d) To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.
- e) To understand the preparation of accounts of banking and insurance company.
- f) To understand the accounting standards.

### **BCG 304 COMPANY LAW**

Course objectives: The course aims at providing knowledge aboutvarious legal aspects of company, its formation and its working.

- a) To know the emerging issues in company law, understand the types of companies, illegal association, familiarize oneself with the cases referred in company laws.
- b) To develop an understanding of the main rules and principles relevant to the nature of company ,formation and its incorporation
- c) To focus on MOA, AOA and issue of prospectus and how companymeetings arranged n winding up of company.
- d) To understand the management and meetings of companies.
- e) To understand the provisions related to share capital and board of directors

### **BCG 305 FINANCIAL MANAGEMENT**

**Course objectives**: To introduce the students the concept of financial management and to understand the role of financial manager to give them an input into various concepts like capital structure planning cost of capital, dividend policies and working capital which will be foundation if they go for management studies.

### **Course outcome:**

- a) To provide introduction to financial management
- b) To create an awareness about capital structure and theories of capital structure
- c) To make them understand the cost of capital in wide aspects
- d) To provide knowledge about dividend policies and various dividendmodels.
- e) To enable them to understand working capital management

### **BCG 306: INTERNATIONAL BUSINESS**

**Course objectives**: The course aims at providing knowledge about issues related with business at international level.

#### Course outcomes

- a) To analyse the principle of international business
- b) To able to understand and describe the concepts and processes of international marketing.
- c) Having the abilities to analyze the international marketing environment and choose the suitable international markets for their organization.
- d) To understand the concept of regional economic growth.
- e) To understand the concept of foreign investment.
- f) To provide knowledge about international environment.

### **BCG 307 BUSINESS ENVIRONMENTS:**

Course objective: To make aware about the importance of businessenvironment and marketing strategies.

- a) To know and analysis different business environment.
- b) To evaluate the major factors which affect the business.
- c) To understand and analyze various political, technological andeconomic environment in the business
- d) To understand the concept of deficit financing

- e) To understand economic planning
- f) To know and analyze consumer protection act.

### **SEMESTER IV**

### **BCG 403 GOODS AND SERVICES TAX**

**Course objectives:** The course aims to provide the knowledge about the concept of indirect taxation and GST from the pre- GST period to post- GST period and to introduce the students about the implementation and impact of GST in the taxation system.

### **Course outcomes**

- a) Development of critical thinking and problem solving skills to esolve the GST related issues.
- b) Learn about the role and functioning of GST council.
- c) Discuss the working of IGST model for inter-state supplies under GST regime.
- d) Evaluate the administrative structure and the process of registration under GST.

### **BCG 404 INDUSTRIAL LAWS**

**Course objectives:** The course aims to provide knowledge about industrial law, workmen compensation act, factories act and other related acts and laws.

### **Course outcomes**

- a) Clarify the use & importance of various acts & their uses inindustrial relations.
- b) To understand the concept and importance of trade union act
- c) To understand the concept and importance of employee state insurance act
- d) To understand the concept and importance of workmencompensation act

### BCG 405 PRINCIPLES AND PRACTICES OF BANKING AND INSURANCE

**Course objectives:** The course objective is to familiarize students withthe basic banking system, e- banking and internet banking.

### **Course outcomes**

- a) To aim to familiarize banking system in India
- b) To create awareness about modern banking services like e-bankingand internet banking
- c) To provide basic awareness to students about the concept and various types of insurance.
- d) To gain knowledge on various kinds of life insurance plans.
- e) To familiarize the types of the general insurance in India.

### **BCG 406 COST ACCOUNTING**

**Course objectives**: course objective: to familiarize students with the basic concepts of cost and various methods and techniques of costing.

- a) Aimed to familiarize the concept of cost accounting
- b) Helps to gather knowledge on preparation of cost sheet in its practical point of view
- c) To facilitate the idea and meaning of material control with pricingmethods
- d) Develop the knowledge about remuneration and incentives
- e) To introduce the concept of overhead cost.
- f) To know the significance of different types of costs, understand themeaning of total cost and per unit cost, know about cost sheet.
- g) Describe the budgetary control process.
- h) Spell out the factors influencing different costs.
- i) To describe the kinds of cost control.
- j) To analyze the combined effects of job and batch control.
- k) To understand marginal costing and break even analysis.

### **SEMESTER V**

### **BCG 503 MANAGEMENT ACCOUNTING**

**Course objectives:** The course objective is to introduce students to the various tools and techniques of management accounting. To enlighten students on financial statement analysis with the emphasison the preparation of fund flow and cash flow statement

#### Course outcomes

- a) To introduce the concept of fund flow and cash flow statements
- b) Imparted knowledge on capital budgeting and decision makingtechniques.
- c) Able to explain accounting statements and can analyze the financial statement with ratio and cash flow analysis.
- d) Apply various cost control techniques for profit maximization.
- e) To provide knowledge about budget control keeping in mind thescope of the concept co
- f) to develop the know-how and concept of marginal costing with practical problems

### **BCG 504 DIRECT TAX LAWS**

### **Course objectives:**

The course aims to provide an overview about the fundamental conceptsof income tax law and to make students aware about the provisions of income tax act, 1961 and income tax rules, 1962. The course also helps to understand the provisions and procedure involved in computing total income and liability of various individual assesse and to familiarize the students with various deduction and rebates available to assessee.

- a) Development of critical thinking and problem solving skills to esolve income tax issues.
- b) Understanding the amendments made from time to time in financeact.
- c) Ability to compute the total income and tax liability of anindividual
- d) Knowledge about various deductions and eligibility to avail it.

- e) Ability to file ITR for an individual assesse
- f) Creates an understanding of the basic concept of direct tax and basic definition related to direct tax and assessee.
- g) Provides learners an idea of the process and techniques of calculation of taxability and tax liability

### **BCG 505 AUDITING**

**Course objectives:** the course aims to gain knowledge about the importance of auditing in the presentation of financial statements of business entities.

#### **Course outcomes**

- a) Understanding of audit process, planning and Program.
- b) Familiarization with the recent trends in auditing.
- c) Ability to apply different techniques of auditing and to study theaudit report.
- d) To understand the duties and liabilities of a company auditor
- e) To get knowledge about preparation of audit report
- f) To understand tax audit and management audit.

### **BCG 511 CONTEMPORARY ACCOUNTING**

**Course objectives:** This course aims at introducing the students with emergence of contemporary issues in accounting. The course enables the students to gain insights about the accounting standards and understand the role of human resources and price level changes in the books of accounts.

#### Course outcomes

- a) Ability to identify and evaluate concepts and principles of accounting standards, including the historical development of accounting theories and their application to contemporary business.
- b) Practical knowledge about the application of HRA and price level accounting in Indian context.
- c) Ability to write report with respect to recent trends in published accounts.
- d) Ability to present published accounts using recent trends
- e) Knowledge regarding the practical use of accounting standards in preparation of financial statements.
- f) Ability to prepare value added statement and calculate economic value added

### **BCG 512 FINANCIAL MARKET OPERATIONS**

### **Course objectives:**

The course aims to deliver an overview of financial markets, to explain the concepts of capital market and money market and their respective sub-markets and to impart knowledge about sebi and its role in investor protection.

- a) Creates understanding of the concept of banking and its benefits in the modern world of business.
- b) Enables understanding about the need of insurance sector and itsbenefits.
- c) Complete knowledge of financial markets of India.
- d) Clarity about the role of SEBI, IDBI, NABARD, EXIM and otherdevelopment banks.

### **SEMESTER VI**

### **BCG 603 OPERATIONS RESEARCH**

**Course objectives**: The main objective of the course is to introduce the students about the concept and tools of operations research, to impart in-depth knowledge of various techniques of operations research such as assignment problems, transportation problems, inventory control, pert and CPM, etc and to develop the understanding about the concept of linear Programing problems and it's applications in various spheres of routine life.

### **Course outcomes**

- a) Practical knowledge about the use of various operations researchtechniques in daily life.
- b) Ability to understand the implications of PERT and CPM inconstruction projects.
- c) Understanding of the practical aspects and scope of linear Programing problems in mixing, diet balancing, inventorymanagement etc.
- d) Development of skill to apply techniques constructively to makeeffective business decisions.

### **BCG 604 CORPORATE GOVERNANCE**

**Course objectives:** The course objective is to familiarize students withthe basic concepts of corporate governance and its related aspects.

### **Course outcomes**

- a) Understand the role and importance of corporate governance.
- b) Examine the need for business ethics and role of business in the society.
- c) Identify the role and responsibilities of board members as well as thefuture of corporate governance in India.
- d) Understand the codes and standards of corporate governance.

#### **BCG 611 PORTFOLIO MANAGEMENT**

**Course objectives:** course objective: to make the students aware of portfolio management and to explain about the significance of various tools, techniques, models and investment theories necessary for analyzing different types of securities, making sound investment decisions and optimal portfolio choice.

- a) To understand the investment decisions and portfolio performance.
- b) Familiarization with the designing and construction of portfolios.
- c) Understanding of the basics of fundamental and Technical analysis.
- d) Ability to apply investment management principles and concepts inpractical life. Knowledge about the portfolio revision and selection.
- e) Ability to study the trends of stock markets and analyze the different securities in equity markets with a deep understanding of capital markettheory and associated models.

### **BCG 612 FINANCIAL SERVICES**

**Course objective:** To help students to understand the working of financial system in India. To introduce them to the view areas of merchant banking, leasing, factoring and insurances.

- a) To give an idea about fundamentals of financial services and players in financial sectors
- b) To create awareness about merchant banking, issue management, capital markets and role of SEBI.
- c) To provide knowledge about leasing and hire purchase concepts
- d) To make them understand about different types of insurance and IRDA Act

# Name of Program: B.Com (FS)

### **Program Outcomes**

PO1: Ability to understand practical applications of investment and portfolio theories.

PO 2 : Development of skills required to act as financial analyst or consultant having thorough knowledge of financial analysis, risk management, portfolio theory and insurance etc.

PO 3: Equip the students with required proficiency to enable them to work in banks and insurance companies.

### **Program Specific Outcomes**

PSO 1: To impart knowledge regarding the components of Indian Financial System.

PSO 2: To provide in depth understanding of different avenues of financial system viz. capital markets, banking, insurance, mutual funds & other related services.

PSO 3: To enable the students to understand the role & functioning of regulatory bodies in financial sector

PSO 4: To equip the students with skills required to operate in competitive environment in the service sector

#### Semester- I

### Paper-I: Communication Skills in English-I

### **Course Objectives**

- 1. Development of an understanding of the process of interpersonal Communication.
- 2. Development of students' critical reading and writing skills.
- 3. Apply appropriate communication skills across settings purposes and audiences.
- 4. Improve listening and observational skills.

### **Course Outcomes**

- 1. To have competence in Oral, Written and visual Communication.
- 2. Demonstrating critical and innovative thinking.
- 3. Communicate ethically.
- 4. Understanding the process of communication and its effect on giving and receiving information.
- 5. Apply effective communication skills in a variety of public and interpersonal settings.

# **Paper-III: Financial Accounting with Tally**

- To introduce the art and science of Financial Accounting.
- To enable the students to understand the accounting principles and accounting cycle.
- To equip the students with the knowledge of accounting process and preparation of final accounts of both sole trader and partnership firm.
- To familiarize the students with computerized accounting and related software viz. Tally ERP 9.

- Familiarization with the relevance of accounting and its procedures.
- Development of the skill of recording financial transactions and preparation of financial statements in accordance with GAAP.
- Ability to record the adjustments arising out of admission, retirement, death and dissolution offirm.
- Enable the students to prepare the financial statements of a sole trader using Tally ERP 9.

### Paper-IV: Quantitative Techniques for Business-I

### **Course Objectives**

- To introduce an important and highly useful branch of knowledge i.e. Statistics.
- To enable the students understand the concept of various statistical techniques for analyzing, forecasting and interpreting data.
- To familiarize with the concept of index number and its applicability in business.
- To make the students understand various techniques of discounting and factoring.
- To enable the students to calculate simple and compound Interest

### **Course Outcomes**

- CO 1: Enable the students to understand the practical applications of statistical techniques.
- CO 2: Develop the skills to understand the relationship among different variables.
- CO 3: Develop the skills to calculate simple and Compound Interest.
- CO 4: Understanding the relevance of the concept of inflation and cost of living.

### Paper-V: Business Organization and Management

### **Course Objectives**

- To impart the knowledge of the discipline integral to the business world.
- To enable the students to understand the concept of corporate social responsibility, business ethics and its relevance in the business world.
- To develop an understanding of the various functions of the management.
- To gain basic knowledge of branches of Functional Management: personnel, marketing, strategic managementand production management.

### **Course Outcomes**

- Clarity about the different forms of business organizations.
- Familiarizing with the concept of management, its functions and principles.
- Understanding of the concept of social responsiveness and its benefits.
- Awareness regarding the importance of the role of CEO in modern business.

# **Computer Applications:**

- To impart knowledge about the structure, components and functions of a computer system.
- To develop understanding and working of basic input and output devices.
- To explain the binary number representation along with its operations.
- To enable the students to effectively utilize hardware and software technologies.
- To develop an intuitive sense of how computers work and how they can be used to make their academic workmore efficient.

- Familiarizing with the terms like operating system, peripheral devices etc.
- Development of the ability to use internet for searching information on web, sending emails and many othertasks.
- Development of skill to work with Command Line Interface (DOS).

#### Semester II

### Paper-III: Quantitative Techniques for Business-II

### **Course Objectives**

- To enable the students understand the concept of various statistical techniques for analyzing, forecasting and interpreting data.
- To familiarize them with the concept of correlation and regression and its applicability in business.
- To make students understand the calculation and relevance of probability and its distributions.
- To enable the students to understand the meaning of sampling and various sampling techniques.

### **Course Outcomes**

- CO 1: Develop decision making ability.
- CO 2: Ability to establish cause and effect relationships between variables.
- CO 3: Prediction and forecasting on the basis of data.
- CO 4: Familiarization with the characteristics of various probability distributions.

### Paper-IV: Mercantile Law

### **Course objectives**

- To introduce the legal environment and to develop the understanding of legal principles prevalent in business.
- To deliver a comprehensive view of Indian Contract Act 1872 and its essential provisions.
- To familiarize the students with the relevance and provisions of Consumer Protection Act, 1986.
- To impart the knowledge about the regulatory framework of various Industrial Laws viz. Factory Act,1948, Workmen Compensation Act, 1923, Payment of Wages Act, 1936 and Trade Union Act, 1926.

#### Course Outcomes

- CO 1: Ability to understand the development and the judicial setup of business Laws.
- CO2: Detailed understanding of legal procedures to form a business contract.
- CO 3: Learn how to pursue the consumer rights under Consumer Protection Act 1986.
- CO 4: Ability to understand the complexities of resolution of industrial disputes.
- CO 5: Develops an insight into the legal framework governing the formation of trade unions, rights and duties of itsmembers and functioning of trade unions.

# Paper V: Banking Operations and Regulations

- To provide fundamental understanding of the structure of commercial banking in India.
- To enable students to understand the various aspects of banker customer relationship.
- To familiarize the students regarding the process of opening and closing of bank accounts.
- To impart knowledge of KYC norms in different types of customers.
- To apprise the students regarding the various types of non-performing assets and their provisioning norms

- Understanding different types of bank accounts and the process of opening a bank account.
- Ability to assess the significance of KYC norms.
- Knowledge regarding different types of banks in India.
- Ability to understand the provisions required to be created for different types of nonperforming assets.
- Familiarization with the different types of banker-customer relationship.

### Paper-VI: Indian Financial System

### **Course Objectives**

- To deliver an overview of Financial System in India.
- To explain the concepts of Money, Money Supply and Money Creation in an economy.
- To impart knowledge of Financial Markets, Financial Institutions, Financial Services and Financial Instrumentsthat formulates a financial system.
- To give an overview of Life and Non-life Insurance and different types of policies under both the insurances.

### **Course Outcomes**

- CO1: Complete knowledge of Financial System of India.
- CO 2: Clarity about the basic concepts of money, money supply and money creation.
- CO 3: Understanding of technical terms relating to Financial System like Derivatives, Stock etc.
- CO 4: Development of basic understanding relating to Life Insurance and General Insurance.

# Paper-VII: Corporate and Bank Accounting

### **Course Objectives**

- To equip the students with the knowledge of the provisions of preparation of final accounts of joint stockcompanies and banks as per Companies Act, 2013.
- To enable the students to know the accounting treatment of issue and redemption of shares and debentures in thebooks of company.
- To familiarize the students with the provisions and accounting treatment of internal and external reconstruction of a company.
- To learn how to calculate the rate of interest and EMI on a bank loan.
- To introduce the concept of Non Performing Assets (NPAs) and its provisioning norms.

- CO 1: Understanding of preparation of the Final Accounts of joint stock companies and banking companies.
- CO 2: Ability to record accounting transactions related to issue of shares and debentures.
- CO 3: Development of skills to record the transactions related to internal and external reconstruction of companies.
- CO 4: Knowledge about the calculation of EMI and interest in case of bank loans and annuities.
- CO 5: Ability to calculate provisions on Non Performing Assets (NPAs) as per the norms given by Reserve Bank of India.

### Semester III

### **Paper I: Cost Accounting**

### **Course Objectives**

- To impart the knowledge about the concept and significance of Cost Accounting.
- To help them understand the process of introducing the cost accounting system in an organization.
- To enable students to comprehend the process of ascertaining the cost of a product/service.
- To familiarize the students with the various cost accounting methods applicable in different industries.
- To acquaint them with the various techniques that can be applied to control and reduce the cost with in a limit.

### **Course Outcomes**

- Understanding the intricacies involved in ascertaining cost of production of a product/service.
- Knowledge about the adoption of divergent Cost accounting methods by different industries.
- Ability to apply various techniques to control/reduce costs.
- Learning the procedures to fix selling prices and tender prices of their products.
- Familiarization with the managerial applications of Cost accounting techniques in their strategic decision makingprocess.

### **Paper-II: Financial Market Operations**

# **Course Objectives**

- To deliver an overview of Financial Markets.
- To explain the concepts of Capital Market and Money Market and their respective sub-markets.
- To impart knowledge about SEBI and its role in investor protection.
- To give an overview of services provided by Indian Development Banks in Indian Financial Market.
- To provide an overview about the role of mutual funds and depositories in India.

### **Course Outcomes**

- CO 1: Complete knowledge of Financial Markets of India.
- CO 2: Clarity about the role of SEBI, IDBI, NABARD, EXIM and other development banks.
- CO 3: Understanding of technical terminology and policies related to Mutual Funds.
- CO 4: Development of basic understanding related to services offered by the depositories in India.

### **Paper-III: Contemporary Accounting and Reporting Practices**

### **Course Objectives**

- To introduce the students to contemporary issues in Accounting.
- To enable the students to understand the concept of Human Resource Accounting and Price Level Accounting.
- To provide an overview of various models of Corporate social reporting and corporate reporting.
- To impart the knowledge about the concept of Value added reporting and Economic value added.
- To acquaint with the concept of Forensic Accounting and Environmental Accounting.

- CO 1: Complete practical knowledge about the application of HRA and Price Level Accounting in Indian context.
- CO 2: Ability to prepare the reports with respect to recent trends in published accounts.
- CO 3: Learn to prepare the value added statement and calculation of economic value added.

CO 4: Understanding the applicability of forensic accounting and environmental accounting in Indian companies.

### Paper-IV: Banking Laws and Practice

### **Course Objectives**

- To develop understanding regarding the role of Central Bank of a country.
- To introduce the mechanism of credit creation.
- To acquaint the students with the concept of financial inclusion and asset liability management.
- To introduce the legal aspects relating to Negotiable Instruments.
- To appraise the students regarding the types of Non- Performing Assets and their provisioning norms.
- To make them familiar with demonetization and its impact on Indian Economy.

### **Course Outcomes**

- CO 1: Understanding the role of Central Bank.
- CO 2: Learn the process of credit creation.
- CO3: Familiarization with the legal aspects of various negotiable instruments.
- CO 4: Ability to understand the effects of demonetization.
- CO 5: Understand the various provisions required to be created for different types of Non Performing Assets.

### Paper-V: Business Economics-I

# **Course Objectives:**

- To make the students understand the concept of demand, revenue and cost.
- To familiarize the students with different laws of production.
- To enable the students to determine the price under different market forms
- To enable the students to understand the situation of consumer and producer equilibrium.
- To make the students understand the determination of factor payments: Rent, Interest and Profits.

### **Course Outcomes**

- Helpful in demand forecasting.
- Students will be able to chalk out Business Policies.
- It will be helpful in Business Planning.
- Students will gain the knowledge of Profit Planning and control.

### **Paper-VI: Goods and Services Tax (GST)**

- To provide the knowledge about the concept of Indirect taxation and GST from the pre-GST period to post-GST period.
- To introduce the students about the implementation and impact of GST in the taxation system.
- To familiarize the students regarding the procedure for registration, payment and refund of GST.
- To learn how to compute the amount of CGST, SGST and IGST payable after considering the eligible input taxcredit.

- CO1: Development of Critical thinking and problem solving skills to resolve the GST related issues.
- CO 2: Learn about the role and functioning of GST Council.
- CO 3: Ability to prepare and file GST returns.
- CO 4: Familiarization with the processing and recording of GST transactions.
- CO 5: Understanding the practical aspects of GST and equip them to become tax practitioners.

### Semester IV

### Paper-I: Management Accounting & Auditing

### **Course Objectives**

- To familiarize the students with the specialized branch of accounting i.e. Management Accounting.
- To enable the students to understand, develop and apply the techniques of management accounting in the financial decision making in various business organizations.
- To gain knowledge about the importance of Auditing in the presentation of financial statements of businessentities.
- To enable the students to understand the relationship between Auditing and Internal Control.
- To introduce the students with Code of Conduct for Auditors issued by ICAI.

### **Course Outcomes**

- CO 1: Comprehensive view of relevance of Management Accounting.
- CO 2:Ability to critically analyses and provide recommendations to improve the operations of organizations throughthe application of management accounting techniques.
- CO 3: Understanding of audit process, planning and Program. Familiarization with the recent trends in Auditing.
- CO 4: Ability to apply different techniques of Auditing and to study the Audit report.

### Paper-II: Leadership and Personality Development

### **Course Objectives**

- To enable the students to understand the concept of leadership and its relevance in the current challenging world.
- To elaborate the role of a leader as a motivator, conflict manager and decision maker.
- To introduce the concept of personality development and impart knowledge about the relevance of goodcommunication and inter-personal skills in the overall development of one's personality.
- To give a detailed view on group dynamics and to discuss the function of stress management.

- CO 1: Familiarization with the concept of Leadership and its auxiliary functions.
- CO 2: Enabling the students to develop their personality through the study and practice of Personality DevelopmentTechniques.
- CO 3: Awareness regarding the ways to manage stress.
- CO 4: Development of an understanding about the group dynamics.

### Paper III: Corporate Law and Secretarial Practice

### **Course Objectives**

- To impart the knowledge regarding the important role of corporations and corporate law in modern society.
- To familiarize with the important documents of company like Memorandum of Association, Articles of Association and Prospectus.
- To provide an outline of the various Statutory Provisions to be complied with in conducting various types of Company Meetings.
- To familiarize with the responsibilities and duties of company secretary in the smooth functioning of company.

#### Course Outcomes

- CO 1: Understanding of the numerous types of corporate entities that can be formed under the law.
- CO 2: Knowledge of legal requirements for the formation, working and dissolution of a company.
- CO 3: Capability to evaluate corporate problems and identify legal obligations.
- CO 4: Ability to evaluate role and importance of Company Secretary and other key managerial personnel.

### Paper IV: Business Economics-II

# **Course Objectives**

- To introduce the nature and scope of macroeconomics.
- To study Classical school of thought on output, employment and output.
- To familiarize students with the importance of Keynesian concept of multiplier.
- To impart knowledge regarding the concept of inflation and its adverse effects on the economic development.
- To study the effects of trade cycles on business.

### **Course Outcomes**

- CO 1: Understanding the role of various factors in the overall functioning of an economy.
- CO 2: Skill to formulate economic policies using data regarding various economic factors i.e. national income,employment, price level etc.
- CO 3: Ability to understand the mutual dependence and interdependence of different sectors.

### Paper V: Fundamentals of Insurance and its Accounting

### **Course Objectives:**

- To provide fundamental understanding of insurance and its types.
- To familiarize the students regarding the preparation of final accounts of life and general insurance companies.
- To impart knowledge of insurance business environment in India.
- To enable students to understand the regulatory framework for insurance companies inIndia.

- CO 1: Understanding of the different types of insurance policies in life and general insurance sector.
- CO 2: Ability to assess the significance of buying insurance for individuals as well as for business houses.
- CO 3: Knowledge regarding different Acts for regulating insurance companies.
- CO 4: Ability to understand and prepare financial statements of life and general insurance companies.

### Paper –VI: Fundamentals of Human Resource Management

### **Course Objectives:**

- To enable the students to understand the nature and scope of Human Resource Management.
- To impart the knowledge about the challenges involved in Human Resource Management To apprise the students about the various methods of performance appraisal and job evaluation applicable todifferent industries.
- To develop an insight regarding the concept of Compensation Management and its components. Course outcomes:
- Practical knowledge about the implications of various issues involved in Human Resource Management.
- Ability to evaluate the various types of incentives plans.
- Understanding the impact of various challenges to human resource management regarding human resource policies.

#### Semester - V

### **Paper I: Financial Management**

### **Course Objectives**

- To introduce the students with the meaning and the need of Financial Management in current competitive environment.
- To discuss the usage of financial management by the finance manager of the company in taking importantfinancial decisions (i.e. Investment decisions, Financing decisions and Dividend decisions).
- To provide an insight into various modes and techniques of managing the financial resources of an organization.
- To impart knowledge about the significant factors to be considered while planning the financial policies.

### **Course Outcomes**

- CO 1: Development of skills that are required by the finance manager of a company.
- CO 2: Ability to comprehend the relevance of Financial Management in a company.
- CO 3: Ability to apply various methods and techniques to estimate, raise and invest the finances.
- CO 4: Knowledge of various sources of finance available to corporate houses.

### **Paper II: Operations Research**

### **Course Objectives**

- To introduce the students about the concept and tools of Operations Research.
- To impart in-depth knowledge of various techniques of operations research such as assignment problems, transportation problems, inventory control, PERT and CPM, etc.

To develop the understanding about the concept of Linear Programming Problems and it's applications in various spheres of routine life.

- CO 1: Practical knowledge about the use of various operations research techniques in daily life.
- CO 2: Ability to understand the implications of PERT and CPM in construction projects.
- CO 3: Understanding of the practical aspects and scope of Linear Programming Problems in mixing, diet balancing, inventory management etc.
- CO 4: Development of skill to apply techniques constructively to make effective business decisions.

### Paper-III: Income Tax Law-I

### **Course Objectives**

- To provide an overview about the fundamental concepts of Income Tax Law.
- To make students aware about the provisions of Income Tax Act, 1961 and Income Tax Rules, 1962.
- To understand the provisions and procedure involved in computing total income and liability of various individual assessee.
- To familiarize the students with various deduction and rebates available to assessee.
- To provide an insight into practical aspects of Income Tax Law and apply the provisions of laws to varioussituations.

### **Course Outcomes**

- CO 1: Development of critical thinking and problem solving skills to resolve income tax issues.
- CO 2: Understanding the amendments made from time to time in Finance Act.
- CO 3: Ability to compute the total income and tax liability of an individual.
- CO 4: Knowledge about various deductions and eligibility to avail it.
- CO 5: Ability to file ITR for an individual assessee.

### Paper IV: E-Commerce and E-Reporting

### **Course Objectives**

- To provide basic knowledge about the concept of E-Commerce and various E-Business strategies.
- To impart understanding of the common legal, ethical and taxation issues involved in E-Commerce.
- To impart knowledge of the various tools required to build a dynamic website.
- To familiarize with the various types of plastic cards, used for e-payment.
- To elaborate the concept of corporate reporting system through web.

### **Course Outcomes**

- CO 1: Knowledge of pre-requisites for starting and operating an e-commerce website.
- CO 2: Familiarization with the scope of cyber laws in e-commerce.
- CO 3: Development of skills to use online payment services.
- CO 4: Ability to buy products online.
- CO 5: Understanding of corporate reporting environment in India

### Paper V: Marketing of Financial Services

### **Course Objectives**

- To explain the meaning and concepts of marketing and financial services.
- To impart knowledge about the concept of Product research and development, Product life cycle and Productmodification, diversification, packaging and branding of financial products.
- To familiarize with the concepts of pricing, distribution and promotion of financial services.
- To equip the students with the knowledge of Management Information System andMarketing of allied activities i.e. mutual funds, credit cards, personal loans etc.

- CO 1: Capability to identify key issues in marketing of financial services.
- CO 2: In depth knowledge of key external influences in marketing of financial services.
- CO 3: Skill to understand and articulate the process of product development, product pricing and its distribution.
- CO 4: Ability to comprehend the concepts and marketing of Mutual funds, credit cards, housing finance, personal loansand factoring services.

# Paper VI: Foreign Trade

- CO 1: To introduce the students to the concept of foreign trade and various modes to enter the international market.
- CO 2: To create awareness about the various commercial policy instruments.
- CO 3: To impart the knowledge regarding functioning of the international organizations.
- CO 4: To develop an understanding about the foreign exchange market and foreign exchange rate determination. Course outcomes
- CO 5: Understanding of aspects of globalization and its impact on the domestic market.
- CO 6: Knowledge of various tariff and non-tariff measures used by government to stabilize its balance of payment account.
- CO 7: Ability to deal in the foreign exchange market and managing foreign exchange risks.

# Name of Program: Bachelor of Business Administration

# **Program Outcomes**

PO 1: Professional Excellence

PO 2:Development of analytical and critical thinking abilities

PO 3: Interpersonal skill development

PO 4: Effective Communication

PO 5: Social Interaction

PO 6: Developing Entrepreneurship Acumen

PO 7: Providing global perspectives

PO 8: Ability to recognize and resolve ethical issues

PO 9: Holistic Development

### **Program Specific Outcomes**

- a) To demonstrate proficiency in the fundamental business principles and practices that enable successful firms to operate in domestic and global environments.
- b) To demonstrate effective Communication through the delivery of writtenand oral presentations.
  - c) To apply ethical principles and commitment towards professional ethics and responsibility
- d) To develop competencies required for effective problem solving and right decision making in routine and special activities using logical reasoning pattern.
  - e) To enable a student well versed in national as well as international trends.
  - f) To specify the role of technology as a strategy for competitive advantagein business.

### **BBA 103 BASIC ACCOUNTING**

**Course Objective:** The objective of the course is to familiarize the studentswith the concept of accounting and Tally.

### **Course Outcomes**

- CO 1: To familiarize the students with the basic accounting principles and practices in business
- CO 2: To enable students to record transactions in the books of original entry.
- CO 3: To enable students to post the transactions to the ledger
- CO 4: To enable students to prepare the final accounts.
- CO 5: To enable students to understand and practice computerized accounting and tally.

### **BBA 104 BUSINESS ORGANISATION AND SYSTEMS**

**Course Objectives:** The course aims at helping students to understandvarious forms of business organization and its management.

- CO 1: Create understanding about different business organisation forms
- CO 2: Familiarise with partnership form of organisation and its comparison with sole proprietorship
- CO 3: Provide understanding about kinds of companies andcreate awareness about multinational companies
- CO 4: Get an idea about cooperative societies and cooperative societymovement in India.
- CO 5: Provides with the logic and working of organizations and outlinesthe major function of business organisation.
- CO 6: Enables students to acquire and exhibit knowledge skill and abilities needed to successfully manage the organization with different environmental situations.
- CO 7: Enables students to understand domestic and foreign trade
- CO 8: To understand the working of stock exchange and produceexchange.

### Semester -1

#### **BBA 105 MANAGERIAL ECONOMICS**

**Course Objectives:** The objective of the course is to providing knowledgeabout demand and supply concepts and various forms of market.

### **Course Outcomes**

- CO 1: Understand the roles of managers in firms
- CO 2:Understand the internal and external decisions to be made bymanagers
- CO 3: Analyze the demand and supply conditions and assess the position of a company
- CO 4: Evaluate the supply and cost analysis of total, average and marginalcurves
- CO 5: Identify equilibrium, price and output decisions in various marketforms.

### **BBA 106 COMPUTER APPLICATIONS FOR BUSINESS**

**Course Objectives:** The course aims at providing basic computer skills to students. This course also help student to Understand Input Output System, Types of Software and Hardware.

### **Course Outcomes**

- CO 1: Understanding of the concepts of input/output devices of computers and how it works.
- CO 2: Ability to bridge the fundamental concept of computers with their present level of knowledge about computers.
- CO 3: Understanding software and hardware and operating system.
- CO 4:Understanding the working and usage of MS Office.

### **BBA 107 BUSINESS COMMUNICATIONS**

**Course Objective:** The objective of this course is to help students to acquire basic knowledge of the business communication and professional skills to impart skills for dealing with various kinds of business communications.

- CO 1: Understanding of relevance and importance of propercommunication.
- CO 2: Enhancement in the reading skills.
- CO 3: Gain insights into the various aspects of communication.
- CO 4: Improvisation of the writing skills of the students.
- CO 5: Ability to frame official letters, applications, office memorandum, notices etc.
- CO 6: To distinguish among various levels of organizational communication and communication barriers while developing an understanding of communication as a process in an organization.

### **SEMESTER II**

### **BBA 203 BUSINESS LAWS**

**Course Objectives:** to help the students to understand the commerciallaws. The course also aims to help students to have knowledge about contract act, sales of goods act, consumer protection act and negotiable instruments.

### **Course Outcomes**

- CO 1: To understand the rules governing Indian contract act
- CO 2: To familiarize the rights and discharges of duties by parties inindemnity, guaranty, Bailment and pledge
- CO 3: To acquire knowledge of rules governs setting up of agency andtermination of agency
- CO 4: To understand the legal provisions of sale of goods act.
- CO 5: Understand the provisions of consumer protection act.
- CO 6: Understand the provisions related to negotiable instruments.

### **BBA 204 PRINCIPLES OF MANAGEMENT**

**Course Objective:** To throw light on the basic principles of Management andto grasp the knowledge about functions of Management.

### **Course outcomes**

- CO 1: To develop knowledge about evolution of management thoughts
- CO 2: To better understanding of planning and decision making
- CO 3: To give an idea about organisation structure and different types of organization
- CO 4: To make them familiarize with recruitment process and stages in selection
- CO 5: To provide idea about motivation, importance of communication and Principles of coordination.

### **BBA 205 MANAGERIAL ECONOMICS 2**

**Course Objectives:** The course objective is to introduce students to MarginalAnalysis, investment, multiplier, Psychological Law of Consumption and Calculation of national income.

- CO 1: Understanding of the theories of Managerial Economics.
- CO 2: Apply the knowledge of national income accounting and cost of living measurement in real-world situations.
- CO 3: Determine the relevance of Consumption Function and itsPropensity to Consume.
- CO 4: Understanding the concept of Investment.

- CO 5: Understanding the concept of Multiplier.
- CO 6: To understand Inflation.

### **BBA-206 COMPUTERISED ACCOUNTING**

**Course Objectives**: The basic objective of this course is to give understanding of accounting with the help of computers and understanding of Tally.

### **Course Outcomes:**

- CO 1: Understand the processing of variety of accounting transactions;
- CO 2: Able to convert manual accounting system to a computer-based system;
- CO 3: Able to prepare Financial Statements on the completion of theaccounting cycle in a timely fashion.
- CO 4: Knowledge of TALLY.

### **BBA -207 FUNDAMENTALS OF BANKING**

**Course Objectives:** To provide an understanding of the Indian Banking Sector. To make the students comprehend, the latest offerings and the day to day operations in Banking.

### **Course Outcomes**

- CO 1: Demonstrate a good understanding of the Banking system, their challenges and functions
- CO 2: Analyze critically the role of RBI, its function s and schemes inIndia
- CO 3: Examine relationship between banker and customer and theirobligations
- CO 4: Evaluate the various types of accounts and problems faced by the customer
- CO 5: After completion of the course the students will have thorough knowledge on Banking Practices
- CO 6: Provides students with the latest and modern functions and Banking in India.

### **SEMESTER III**

### **BBA 303 STATISTICS FOR BUSINESS**

**Course Objectives**: The course aims at providing understanding of matrices, central tendency, dispersion and other statistical techniques.

- CO 1: Study the concept of Regression and Properties of correlation andregression coefficients
- CO 2:Understand the concept of Matrices and Determinants
- CO 3: Calculate Measures of Central Tendency for the given data.
- CO 4: Obtain the solutions of Measures of Dispersion
- CO 5: Understand the meaning of statistical terms used in business statistics.
- CO 6: Construct Index numbers and its use
- CO 7: Test the adequacy of Index number formulae.
- CO 8: Understanding the concept of probability and probability distribution.

### BBA 304 FUNDAMENTALS OF HUMAN RESOURCES MANAGEMENT

**Course Objectives:** The course aims at providing understanding of basic concepts of human resources, job evaluation, staffing recruitment process and other related concepts

### **Course Outcomes**

- CO 1: Develop an understanding of the concepts of HRM andits importance in the organization
- CO 2: Updates learners with recent trends in HRM and make studentsaware about challenges faced by HR managers.
- CO 3: Refurbishes students with fundamental aspects of HRM, the role, functions and process of HRM
- CO 4: To familiarise the Students about the concepts of Staffing, Training, Transfer, Promotion, Human factors consideration and Appraisal methods.
- CO 5: Students would become acquainted with the Human ResourceDevelopment, Career Planning and Job Evaluation methods.
- CO 6: To gain insight into the enormous Wage and Salary Administration, Fringe benefits, Motivation and Morale.

### BBA 305 FUNDAMENTALS OF MARKETING MANAGEMENT

**Course Objectives:** The course aims at providing understanding of concepts of marketing and related aspects.

### Course Outcomes

- CO 1: know the marketing concepts, understand the marketing environment, familiarize oneself with use of internet in collecting information
- CO 2: Analyzing the Microenvironment; Needs and Trends, The Demographic Environment,

Economic, Social-Cultural and Natural, Technological, Political-Legal Environment.

- CO 3: The Buying Decision Process: The Five Stage Model. Levels of Marketing Segmentation,
- CO 4: Bases for segmenting consumer markets: Market Targeting, Basesfor segmenting business markets, Meaning of Features of advertising and Importance of advertising
- CO 5: Advertising and Publicity, Functions of advertising. Advertisingmedia, advertising copy, Objections against advertising. Sales.
- CO 6: Promotions. Direct Marketing, Personnel Selling, Interactive Marketing and Word of Mouth marketing, Channels of distributions.

### **BBA 306 INDIAN FINANCIAL SYSYTEM**

**Course Objectives:** The course aims at providing understanding of Indian financial system,

financial markets, and financial instruments.

- CO 1: Demonstrating an awareness of the regulation of the Indian Financial Markets, Institutions and services sector.
- CO 2: Analyzing the different types of financial markets and financialinstruments.
- CO 3: Illustrating an awareness of the current structure and functioning of the financial Markets, Institutions and Services

- CO 4: Identifying the Regulators in Financial System and understanding the role of various intermediaries in the system
- CO 5: To find out role of SEBI, Understand role and functions of RBI
- CO 6: Conceptual knowledge of capital market Instruments, Theoreticalknowledge of capital Markets.

### **BBA 307 MANAGEMENT ACCOUNTING**

**Course Objectives:** The course aims to make the students aware aboutvarious elements of cost and provide knowledge about management accounting and its objectives.

### **Course Outcomes**

- CO 1: Acquaint with the fundamentals principles of managementaccounting.
- CO2: Prepare; analyze and interpret financial statements.
- CO 3: Use of reporting system to inform the various levels ofmanagement.
- CO 4: Ability to make distinction between management accounting, financial accounting and cost accounting.
- CO 5: Learning the procedures to fix selling prices and tender prices of their products.
- CO 6: Understanding of responsibility accounting.
- CO 7: To enable students to understand accounting statements so that they can analyze the financial statement with ratio and cash flowanalysis.

# **SEMESTER IV**

### **BBA 403 FINANCIAL MANAGEMENT**

Course objectives: To introduce the students to financial management to understand the role of financial manager to give them an input into various concepts like capital structure planning cost of capital, dividend policies and working capital which will be foundation if they go for management studies.

### **Course outcomes**

- CO 1: To provide introduction to financial management
- CO 2: To create an awareness about capital structure and theories of capital structure
- CO 3: To make them understand the cost of capital in wide aspects
- CO 4: To provide knowledge about dividend policies and various dividend models.
- CO 5: To enable them to understand working capital management

### **BBA 404 PRODUCTION AND OPERATIONS MANAGEMENT**

**Course Objectives:** The course aims at providing understanding of concept of production, work study supply chain management and related aspects.

- CO 1: Familiarizes students with the process of production to be carriedout in a business
- CO 2: Assists in analysis with the selection of the plant location, layout, and selection of process, controlling production process and producing quality products.
- CO 3: Basic understanding of supply chain management and the diversesupply chain networks.
- CO 4: Gain insights into the latest innovations in Supply chainmanagement.

- CO 5: Development of Practical skills for the determination of stock levels and inventory management
- CO 6: Understanding the concept of TQM.

### **BBA 405 BUSINESS ENVIRONMENT**

**Course objective:** To make students aware about the importance of businessenvironment and its related marketing strategies.

### **Course outcomes**

- CO 1: To know and analysis different business environment.
- CO 2: To understand and analyze various political, technological andeconomic environment in the business
- CO 3: To understand the concept of deficit financing
- CO 4: To understand economic planning.
- CO 5: Evaluate the major factors which affect the business

### **BBA 406 OPERATIONS RESEARCH**

Course Objectives: The main objective of the course is to introduce the students about the concept and tools of Operations Research, to impart in- depth knowledge of various techniques of operations research such as assignment problems, transportation problems, inventory control, PERT and CPM, etc and to develop the understanding about the concept of Linear Programing Problems and it's applications in various spheres of routine life.

### **Course Outcomes**

- CO 1: Practical knowledge about the use of various operations researchtechniques in daily life.
- CO 2: Ability to understand the implications of PERT and CPM inconstruction projects.
- CO 3: Understanding of the practical aspects and scope of Linear Programing Problems in mixing, diet balancing, inventory management etc.
- CO 4: Development of skill to apply techniques in inventory and gametheory.

### **BBA 407 FUNDAMENTALS OF INSURANCE**

**Course objectives:** The fundamental objective of this course is to make students aware about the core issues involved in insurance sector and related fields.

- CO 1: Understanding of the different types of insurance policies in lifeand general insurance sector.
- CO 2: Ability to assess the significance of buying insurance for individuals as well as for business houses.
- CO 3: Knowledge regarding different Acts for regulating insurance companies.
- CO 4: Ability to understand and prepare financial statements of life andgeneral insurance companies.

### **BBA 503 COMPANY LAW**

### **SEMESTER V**

**Course objectives:** The course aims at providing understanding of various legal aspects related to company, its formation and working .

### **Course outcomes**

- a) To know the emerging issues in company law, understand the types of companies, illegal association, familiarize oneself withthe cases referred in company laws.
- b) To develop an understanding of the main rules and principles relevant to the nature of company, formation and its incorporation
- c) To have understanding of MOA,AOA and issue of prospectus and how company meetings are arranged and winding up of company.
- d) To understand the management and meetings of companies.
- e) To understand the provisions related to share capital and board of directors

### BBA504 ENTREPRENEURSHIP AND SMALL BUSINESS

**Course Objective:** This course is intended to enable students to distinguish between entrepreneurship and small business management. Emphasis will be placed on the integration of key management principles to make the students reflective of and relevant to the current business environment.

### **Course outcomes**

- CO 1 : Understanding of the concepts of entrepreneurship, innovation, entrepreneurship and small business management.
- CO2 : Ability to use systems thinking and design thinking to develop newventure ideas.
- CO 3 : Critical Evaluation of Role of government in organizingEntrepreneurial Development Programs
- CO 4 : Ability to utilize the business model canvas to operationalize newventure ideas
- CO 5: Understanding of the National Policies for small business development.
- CO 6: Equipment of the students with professional, inter personal, presentation and entrepreneurial skills in their reallife.
- CO7 : Familiarization with the art of strategic planning in respect of finance, production, marketing, and risk management.

### **BBA505 COST ACCOUNTING**

**Course Objectives**: to familiarize students with the basic concepts of cost and various methods and techniques of costing.

- a) Aimed to familiarize the concept of cost accounting
- b) Helps to gather knowledge on preparation of cost sheet in its practical point of view
- c) To facilitate the idea and meaning of material control with pricingmethods

- d) Develop the knowledge about remuneration and incentives
- e) To introduce the concept of overhead cost.
- f) To know the significance of different types of costs, understand themeaning of total cost and per unit cost, know about cost sheet
- g) To describe the budgetary control process.
- h) To spell out the factors influencing different costs.
- i) To describe the kinds of cost control.
- i) To analyze the combined effects of job and batch control.
- k) To understand marginal costing and break even analysis.

### **BBA 511 CONSUMER BEHAVIOUR**

**Course Objective:** The course has been designed to provide students anin-depth understanding of the consumer behavior and their determinants as relevant for marketing decision making.

### **Course Outcomes**

- CO 1: Understanding of the consumer behavior and its relationship withmarketing concepts.
- CO 2: Familiarization with the process of consumer decision making andits application.
- CO 3 : Ability to draw a relationship between the culture, sub-culture, peer group, family influence and consumer behavior.
- CO 4 : Clarity about the models of consumer behavior and their practical application.
- CO 5 : Recognition of the social and ethical implications of marketing actions on consumer behavior.
- CO 6: Have practical insight at the various stages of purchasing and various underlying variables resulting into differences in consumer decision making.
- CO 7: Determination of the socio-cultural factors affecting consumerdecision making.
- CO 8: Ability to observe, interpret and demonstrate consumer behavior in action.
- CO 9: Understanding of the importance of consumer related referencegroups

### BBA 512 ADVERTISING AND SALES MANAGEMENT

**Course Objective:** The fundamental objective of this course is to make students aware about the core issues involved in advertising, personal selling and sales force management which is an integral area of marketing.

- CO 1 : Understanding of basics basic concepts like nature, scope, functions and classification of advertising.
- CO 2: Knowledge about the economic and legal aspects of advertising.
- CO 3: Ability to build advertising Program: message, theme, copy, appeals, layout etc.
- CO 4 : Knowledge about the different types of advertising medias and budget advertising agencies.
- CO 5: Understanding of the nature and scope of sales management.
- CO 6: Developing a thought for the recruitment, selection, training anddevelopment of sales personnel.
- CO 7: Understanding of the factors influencing the motivation of salesforce.

- CO 8: Knowledge about different types of compensation plans available for sales force.
- CO 9: Ability to evaluate sales force control and budget.

### SEMESTER VI

### **BBA603 INCOME TAX**

Course Objectives: The course aims to provide an overview about the fundamental concepts of Income Tax Law and to make students aware about the provisions of Income Tax Act, 1961. The course also helps to understand the provisions and procedure involved in computing total income and liability of various individual assesse and to familiarize the students with various deduction and rebates available to assess.

### **Course Outcomes**

- CO 1 : Development of critical thinking and problem solving skills to esolve income tax issues.
- CO 2: Understanding the amendments made from time to time in FinanceAct.
- CO 3 : Ability to compute the total income and tax liability of an individual under different heads.
- CO 4: Ability to file ITR for an individual assesse.
- CO 5: Ability to understand capital gains taxability.
- CO 6: To understand the concept of income from other sources.
- CO 7: Knowledge about various deductions and eligibility to avail it
- CO 8: Knowledge about tax liability of individual and firms.

### **BBA 604 FUNDAMENTALS OF CAPITAL MARKET**

**Course Objective:** The fundamental objective of this course is to make students aware about the core issues related with capital market.

- CO 1 : Understanding the role of capital market in Indian FinancialSystem and its regulatory environment.
- CO 2: To study the different components of capital market.
- CO 3: To study and understand different instruments of capital marketlike ADR ,GDR ,Mutual funds.
- CO 4: To understand working of stock exchange
- CO 5: To understand the listing procedure.
- CO 6: Understanding security market indices.

### **BBA 611 SERVICES MARKETING**

**Course Objectives:** The course objective is to impart knowledge regarding customer expectations from services and their perceptionsabout it so that students can understand the deeper aspects of successful services marketing.

### **Course Outcomes**

- CO 1 : To explain the differences between goods and services and theresulting challenges and opportunities for service businesses .
- CO 2 : To introduce the expanded marketing mix for Services and thephilosophy of customer focus for services.
- CO 3: Familiarity with the service models and organizing changemanagement.
- CO 4 : Capability to evaluate the suitability of different pricing methods for services.
- CO 5: Understanding of the roles of employees and customers in serviced elivery.
- CO 6: Provide insights to the challenges and opportunities in servicesmarketing.
- CO 7: Knowledge regarding an effective services marketing
- CO 8: Knowing the strategies for influencing Customer expectations
- CO 9: Understanding of the challenges of service design and service redesign.
- CO 10: In-depth understanding of impact of service failure and recovery.
- CO 11: Ability to analyze and interpret marketing research Program.

### **BBA 612 E-MARKETING**

**Course Objectives:** The fundamental objective of this course is tomake students aware about the core concepts related with e- marketing and internet marketing.

- CO 1: To introduce the concept of e marketing
- CO 2: To understand the difference between traditional and e-marketing.
- CO 3: Ability to that e marketing mix and e marketing management
- CO 4: Introducing the concept of internet marketing and internetadvertising
- CO 5: Introducing social media marketing
- CO 6: Understanding e payment system

# Name of Program : BACHELOR OF VOCATION (B.Voc.) (RETAIL MANAGEMENT & IT)

### **Program Outcomes**

- PO 1 : Comprehensive understanding of the theoretical and applied aspects of retail management and IT.
- PO 2: Inculcation of the desired skills required to bring the customers into the store and respondto their buying needs.
- PO 3: Have the flexibility of opting out of a 3 year degree Program after 1st or 2nd year with a diploma and at the same time gain the benefit of employability.
- PO 4 : Get employment at the entry level in any medium or large scale retail or IT sector.
- PO 5: Ability to apply techniques, frameworks and tools to arrive at informed decisions inprofession and practice.
- PO 6: Sound theoretical foundation to pursue professional careers and take up higher learning Courses such as M. Voc., MBA, MCA, MCM, MMM, M. Phil, Ph.D as well as research
- PO 7 : Ability to initiate and build upon entrepreneurial ventures or demonstrate entrepreneurship for their employer organizations.
- PO 8 : Engagement in independent and life long learning in the broadest context of socio-economic, technological and global change.

### **Program Specific Outcomes**

- To make students capable of the applicable National Occupational Standards (NOS) in the Retail Management industry in the national and global context.
- To gain a thorough knowledge in the subject so that the students are work-ready after the completion of the course.
- To develop competencies required for effective problem solving and right decision making in retail sector.
- To develop the competency in students to broaden their management and leadership skills and to generate and initiate innovative business solutions for today's business and societal challenges.
- In-depth knowledge and understanding of the techniques, principles, concepts, values, substantive rules and development of the core areas of Retail Management.
- To function effectively as an individual, and as a member or leader in teams, and in multidisciplinary settings by demonstrating life skills, coping skills and human values.
- Ability to use variety of modes such as reports and documentation, effective presentations, give and receive clear instructions for effective communication.

#### **SEMESTER-1**

### **Course name: Communication Skills in English- I (BVC- 102)**

**Objective of the Course:** The objective of this paper is to help students to acquire basic knowledge of the business communication and professional skills to impart skills for dealing with various kinds of business communications.

### **Course Outcomes**

- CO 1 : Understanding the relevance and importance of proper communication.
- CO 2: Enhancement in the reading skills.
- CO 3 : Gain insights into the various aspects of communication.
- CO 4: Improvisation of the writing skills of the students.
- CO 5: Ability to frame official letters, applications, office memorandum, notices etc.

### Course name: Inventory and Event Management BVC-103

**Objective of the Course:** The objective of this course is to make students familiar with the concept of merchandising for successful negotiation with the vendor. This subject also provides detailed knowledge about an event Management.

### **Course outcomes**

- CO 1: Knowledge about the Sources and functions of Merchandising in Retailing.
- CO 2: Awareness about an ethical and legal issue in buying merchandise.
- CO 3: Identification of the importance of counterfeit and grey market operations.
- CO 4: Determination of principles and techniques of visual merchandising.
- CO 5: Ability to evaluate the impact of display of merchandise.
- CO 6: Development of Practical skills for the determination of stock levels and inventory management in retail store.
- CO 7: Ability to plan and design events keeping in mind the Legal and Statutory aspects and risks and contingencies likely to arise during the event.

### **Course name: Fundamentals of Management (BVC-104)**

**Objective of the Course:** The course objective is to enhance the managerial efficiency of the students by teaching objectives, needs, principles and practices of management.

- CO 1: Understanding of the meaning, definition, nature, scope and importance of management.
- CO 2: Ability to explain management technique: management by objective.
- CO 3: Detailed knowledge about the functions of management.
- CO 4: Ability to execute managerial tasks of planning, organizing, controlling and staffing.
- CO 5: In-depth understanding of the concept of departmentation and its types.
- CO 6: Understanding of various theories of motivation and leadership and its impact on decision making process.
- CO 7: Interpret the relevance of management theories in real life situations and adopt them in workplace situations.

### **Course name: Retailing Principles and Practices (BVC-105)**

**Objective of the Course:** The course is designed to provide students an idea about Retail practices in India by integrating dynamics of Retail environment with the theoretical framework.

### **Course outcomes:**

- CO 1: Identification of the trends and features of retailing.
- CO 2: Understanding of the economic significance of retailing.
- CO 3: Knowledge about the different types of retailers and retail formats.
- CO 4: Knowledge about diverse retail channels available for interacting with customers.
- CO 5: Ability to select and evaluate retail location and trade areas.
- CO 6: Gain insights into the different Pricing strategies and approaches used by the retailers.

### **Course name: Retailing Strategy (BV 106)**

**Objective of the Course:** This course tends to make students familiar with how *retailing* works and the factors that helps to build strong customer relationships and thereby brings success to the retail industry.

### **Course Outcomes:**

- CO 1: Understanding of the Framework of Retailing.
- CO 2: Ability to formulate and implement retail strategies using different techniques.
- CO 3: Ability to conduct SWOT appraisal of Retail strategy.
- CO 4: Gain insights into the development and assessment of Retail Price and Retail LocationStrategy.
- CO 4: Examination of possible opportunities that can arise from strategic planning
- CO 5: Development of Skills required to gain customer commitment to loyalty schemes.
- CO 6: Knowledge about the customer sales support services, direct marketing and direct selling.

### Course name: Lab on Retail Selling Skills (BVC-107)

**Objective of the Course:** In this course, the students will be trained in practical aspects of Retail Selling Skills. It would help the students to develop confidence, energy and focus so that they can identify essential ingredients to meet successful sales and handle different retail sales situations.

- CO 1: In-depth understanding of the Personal Selling Skills.
- CO 2 : Ability to handle objections, take Customer Follow up and implement NegotiationStrategies.
- CO 3: Knowledge about the importance of basic hygiene, grooming, manners and etiquettes inretail sector.
- CO 4 : Able to create a shopping experience that builds customer loyalty.
- CO 5 : Development of effective communication skills that would help in interacting with thestakeholders in a positive manner.
- CO 6: Able to manage stress and do self-introspection.

### **SEMESTER-II**

# **Course name: Communication Skills in English-II (BVC-202)**

**Objective of the Course:** The objective of this paper is to sharpen their communication proficiency of the students as they gain practical knowledge about how to deal and interact with others.

### **Course Outcomes**

- CO 1: Improvement in the listening and speaking skills of the young learners.
- CO 2: Ability to make conversation and taking turns.
- CO 3: Familiarity with the correct and accurate pronunciation of English word as they work on fluency in English as well as proper intonation and accent of speaking.
- CO 4: Ability to take notes on a speech/lecture
- CO 5: Development of skills for dealing with various kinds of business communications.

# Course name: Visual Merchandising and Product Display (BVC-203)

**Objective of the Course:** The objective of this course is to demonstrate an understanding of the principles and elements of design through the creation of visual displays and exhibits.

### **Course Outcomes**

- CO 1: In-depth understanding of the importance of Visual Merchandising and Window displays.
- CO 2: Knowledge about the concept of Store layout, design and displays.
- CO 3: Ability to Create props, signage for use in displays and exhibits.
- CO 4: Identification of the types of Store Exteriors and Interior Display Components.
- CO 5: Gain insights into safety requirements while changing displays.
- CO 6: Awareness about the various types of merchandising planning and assessing their merchandise presentation techniques.

# Course name: Retail Shopper Behaviour (BVC- 204)

**Objective of the Course:** This course would help the students to develop an understanding of shopper behaviour so that they could adopt modified measures in shopper marketing principles to build long term relationships with the retailers.

- CO 1: Understanding the retail dynamics of customer buying behaviour process.
- CO 2: Understanding of the role that shopper segmentation plays in the formation of channelstrategies.
- CO 3: Complete understanding of the stages involved in retail buying decision process.
- CO 4 : Development of the ways retail and consumer marketing systems are evolving in currentcompetitive environment.
- CO 5: Knowledge about the different theories of personality, perception and motivation.

- CO 6: Ability to conduct market research prior and after setting up a Retail Store.
- CO 7: Ability to observe how to grasp the customer attention for sale of goods.

## Course name: Team Management in Retailing (BVC-205)

**Objective of the Course:** The objective of this course is to enable the students to lead individuals and teams in retail organizations by developing effective leadership and motivational Programs and setting common team goals and vision to connect the team to organizational purpose.

#### **Course Outcomes**

- CO 1 : Ability to function as successful retail store manager in building retail team.
- CO 2: Formulation of an effective team management Program while supporting the work team.
- CO 3: Ability to develop effective leadership and motivational Programs for team members.
- CO 4: Understanding of the role of technology and ethical relationships in retailing.
- CO 5 : Able to do performance evaluation and appraisal of team members.

# **Course name: Customer Services and Strategy (BVC-206)**

**Objective of the Course:** The course is designed to enable students to establish customer service work objectives strategies to enhance the quality of <u>customer support</u> in retail industry.

#### **Course Outcomes**

- CO 1 : Understanding of value of customer profiles in retail customer service.
- CO 2 : Ability to create unique customer experience at the retail store.
- CO 3: Knowledge about the Services based components of quality
- CO 4: Formulation of Strategies for improvement of service quality and service guarantee.
- CO 5: Ability to formulate and implement service strategy.
- CO 6: Proficiency in building relationships through valuing the customer.
- CO 7: Understanding of CRM strategy development and CRM value creation process.

#### **SEMESTER-III**

# **Communication among Stake Holders (BVC-301)**

**Objective of the Course:** The course aims to transform effective communication skills in students so that they can easily understand what drives the stakeholder, their underlying motivations and needs from the project. It would also assist them in securing a good job coupled with carrier advancement in future.

#### **Course outcomes:**

CO 1: Overview of stake holder analysis process along with the analysis of its strength and limitation.

- CO 2: Emphasis on eloquence of speech, erudition of writing, emphatic listening and expressiveness of body language.
- CO 3: Improvement in the listening and speaking skills.
- CO 4: Able to introduce a model for communication and techniques for effective communication.
- CO 5 : Ability to communicate effectively inside an organization through memos, office orders, circulars and notices.
- CO 6: Ability to communicate effectively with external stakeholders via business letter, sales letters, employment letters, complaint and adjustment letters.
- CO 7 : Overcoming barriers to establish stronger relationships, setting healthy boundaries for achieving respect and negotiating to resolve conflicts with stakeholders.

# **Basic Accounting Applications in Retail (BVC-302)**

**Objective of the Course:** This course is designed to make students aware about the fundamental concepts underlying accounting so as to support business processes and practices, such as problem analysis and decision making.

#### Course outcomes:

- CO 1: Understanding of the characteristics and types of accounting.
- CO 2: Knowledge about the different concepts and conventions of accounting.
- CO 3 : Gain insights into the main elements of financial accounting information assets, liabilities, revenue, expenses, financial statements and their purposes.
- CO 4: Understanding of the rules and principles of accounting for recording various businesstransactions.
- CO 5 : Ability to prepare final accounts With adjustments related to retail.
- CO 6: Knowledge about various Modes of Payment and also various equipments being used inpayment process.

## Organizational Behaviour (BVC-303)Program:

**Objective of the Course:** This course is designed to enable students to describe how people behave under different conditions and understand why people behave as they do.

- CO 1: Demonstration of the applicability of the concept of organizational behavior to understand the behavior of people in the organization.
- CO 2 : Ability to analyze the complexities associated with management of individual behavior in he organization.
- CO 3 : Ability to analyze and compare different models used to explain individual behaviourrelated to motivation and rewards.
- CO 4 : Ability to analyze the complexities associated with management of the group behavior in he organization.
- CO 5: Gain insights into how the organizational behavior can integrate in understanding themotivation (why) behind behavior of people in the organization

- CO 6: Knowledge about group dynamics and demonstration of skills required for working ingroups.
- CO 7: Identification of the various leadership styles and the role of leaders in a decision makingprocess.
- CO 8: Understanding of the ways to cope up with stress.

# Computer Applications in Retail - I (BVC- 304)

**Objective of the Course:** This course is provides the basic insights of computer and various application software which are being used in various fields, offices and companies.

#### **Course Outcomes**

- CO 1: Understanding of the concepts of input/output devices of computers and how it works.
- CO 2 : Ability to bridge the fundamental concept of computers with their present level of knowledge about computers.
- CO 3 : Knowledge about Microsoft Office Programs which enable the students to create professional and academic documents.
- CO 4: In-depth understanding of MS office- MS excel, MS word and power point presentation that would enable the students to work in field of office automation and desktop publishing as well.

# Retail Services and Opportunities (BVC-305)

**Objective of the Course: This** course aims to make the students well versed with the promising opportunities in interactive retail services; namely, the increasing power of consumers, channel synergies, pre and post-transaction service, optimal use of resources, and consumer heterogeneity..

#### **Course Outcomes**

- CO 1: Understanding of the factors affecting retail services.
- CO 2 : Ability to hone retail customer service skills by meeting their needs in a timely, efficient, and pleasant way.
- CO 3 : Proficiency in retail selling having mastered with Qualities of good sales person for handling queries.
- CO 4 : In-depth understanding of the Customer retention strategies.
- CO 5: Knowledge about Retail Information system and it applications.
- CO 6: Ability to build a strong Brand while focusing on the importance of Brand services, Brand performance, Brand Performance.
- CO 7: Evaluation of the Emerging Opportunities in Retail sector with special reference to India.

# Health & Safety Management Issues in Retail (BVC-306)

**Objective of the Course:** This course is designed to acquaint students with the hazards associated with retail environment that are often thought to be low risk but can inflict significant extra costs on a business. Along with this, knowledge is also provided to help them to identify

and follow health and safety needs laid down by the retailer and the law to act as a monitor to avoid all kinds of health or safety hazards.

## **Course Outcomes**

- CO 1 : Knowledge about the health and safety management systems available that need to be present in the retail stores.
- CO 2: Understanding of the company policies and legal requirements for health managementissues.
- CO 3: Knowledge about the different types of hazards and risks present in various retail sectors.
- CO 4: Ability to form a health and safety committee for conducting regular risk assessments.
- CO 5: Ability to deal with emergencies and accidents at the workplace.
- CO 6: Incorporation of necessary measures for managing the prevention of work-related injuries and diseases at the workplace.
- CO 7: Knowledge about the procedure to be adopted for evacuation including alarm raise, exits and assembly points.
- CO 8 : Ability to develop an emergency action plan and report accidents and emergencies to right persons.

# **Summer Training Project (BVC-307)**

**Objective of the Course:** The course is designed to enable the students to practically understand and apply the knowledge related to the requirements of retail industry.

#### **Course outcomes**

- CO 1: Development of a judicious mix of professional skills and suitable general educationcomponent.
- CO 2 : Opportunity to work on different types of field project which would enhance their professional skills.
- CO 3: Assistance in the development of employer-valued skills such as teamwork, communications and attention to detail.
- CO 4: Knowledge of the behaviors expected in the intern's workplace.
- CO 5: Ability to apply learned skills, business concepts and theories in world decision-making.
- CO 6: Meet professional role models and potential mentors who can provide guidance, feedback, and support.
- CO 7: Expand network of professional relationships and contacts.
- CO 8: Develop a solid work ethic and professional demeanor, as well as a commitment toethical conduct and social responsibility.

## **SEMESTER-IV**

# **Computer Applications in Retail - II (BVC- 401)**

**Objective of the Course:** The objective of the course is to familiarize the students with the role of information technology in the management of complex retail operations.

#### **Course Outcomes**

- CO 1: In-depth understanding of the role of IT.
- CO 2: Understanding of diverse IT options available in retail industry.
- CO 3 : Knowledge of the issues concerning the use of internet and related technology to improveretail business.
- CO 4: Introduction with the latest technologies that influence online retailing.
- CO 5: Comprehensive knowledge of database management and data warehousing.
- CO 6: Critical analysis of E-retailing strategies.

## **Business Ethics (BVC-402)**

**Objective of the Course:** The objective of the course is to provide students an of business ethics and ethical management practices, with emphasis on the process of ethical decision-making and working through contemporary ethical dilemmas faced by business organizations, managers and employees.

## **Course Outcomes**

- CO 1 : Ability to recognize organizational challenges to ethical behavior.
- CO 2: Evaluation of common beliefs about the role of ethics in business.
- CO 3 : Familiarity with the diverse theories underlying Corporate Governance.
- CO 4 : Ability to manage ethical problems in workplace..
- CO 5 : Ability to apply moral reasoning to specific situations and defend the conclusions of that reasoning.
- CO 6: Development of strategies for identifying and dealing with typical ethical issues, bothpersonal and organizational.
- CO 7: An overview of ethics in different functional areas

Understanding of the relationship between corporate social responsibility and businessethics

# **Store Team Management (BVC-403)**

**Objective of the Course:** This course focusing on the importance of teams in retail store, enable students to develop and implement common values, goals, and vision as well as demonstrate an ability to transform groups into teams.

- CO 1: Ability to encourage and recognize innovation and creativity within the team.
- CO 2 : Able to provide opportunities for team members to get to know each other's strengths weaknesses and build mutual respect and trust.
- CO 3: Understanding of team dynamics.
- CO 4: Able to monitoring team efforts and improving their performance.
- CO 5: Understanding the importance of fair allocation of work among team members.
- CO 6: Ability to interact effectively with team members.
- CO 7: Recognition of the perceptions and expectations of team members which would help to identify different behavioral styles and coach each team member in a better way.

## **Business Laws (BVC-404)**

**Objective of the Course:** This subject widens the knowledge of the students regarding Contract Act, 1872 of India.

#### **Course Outcomes**

- CO 1: Knowledge about the formation of a valid contract and various legal formalities to form abusiness contract.
- CO 2: Familiarity with the formation of contracts of sale, Transfer of property in goods and Performance of the contact of Sales from Sales of Goods Act,1930.
- CO 3: Understanding about various negotiable instruments, and their features in detail.
- CO 4: Understanding about the rights of being a consumer of goods through Consumer Protection Act, 1986.

# Marketing Planning (BVC-405)

**Objective of the Course:** This course help students understand the development of marketing-mix strategies structured to deliver superior customer value proposition and organizational performance.

#### **Course Outcomes**

- CO 1: Understanding of the philosophies and importance and marketing in business andorganizational settings and the importance of market-based management.
- CO 2: In-depth understanding of the relationship between marketing and the external environment and how firms can create and deliver value.
- CO 3: Knowledge about the diverse packing and branding strategies opted by the firms topromote the product.
- CO 4: Determination of the significance of price mix and pricing methods in retailing.
- CO 5: Understand the value created by cutting edge product innovation and design, and productlife cycle.
- CO 6: Understand segmentation variables and the manner in which firms effectively target and position their offerings to better meet the needs of the market.
- CO 7: Evaluation of the emerging applications in retail marketing.

# **Customer Relationship Management (BVC-406)**

**Objective of the Course:** The course is designed to help students to identify customer needs, track feedback and manage customer service improvements so as to develop long-term loyalty and repeat business.

- CO 1: Fundamental understanding of customer and customer relationship management
- CO 2: Ability to develop customer loyalty Program.
- CO 3: Understanding of the customer life cycle
- CO 4 : Gain insights into the importance of customer divisibility in customer relationshipmanagement

- CO 5 : Ability to develop long-term customer relations with a special focus on rural customerrelations.
- CO 6: Understanding of the basic concepts of contact management and Value chain.
- CO 7: Ability to manage relationship in services and industrial market and exchange ininternational market.
- CO 8: Learn basics of analytical Customer relationship management in fast moving consumer goods

#### **SEMESTER-V**

## **Human Resource management in Retail (BVC-501)**

**Objective of the Course:** The fundamental aim of this course is to impart knowledge about diverse HR practices so that students can develop theoretical understanding regarding the importance of optimization of human resource potential.

## **Course Outcomes**

- CO 1: Understanding about management of human resources and role of HR manager and HR department in an organization.
- CO 2: Familiarity with the various techniques of recruitment and selection.
- CO 3: Understanding about how an organization acquires, motivates, compensates and retainsits human resources.
- CO 4 : Ability to use HR strategies in an organization.
- CO 5: Ability to analyze the need and importance of HRM in real life situations.
- CO 6: Ability to link human resources with firm performance and evaluate HR effort.
- CO 7: Understanding of different types of remuneration plans and their significance.
- CO 8: Capability to evaluate different training Programs and understanding of their limitations.
- CO 9: Understanding of the ethics and Concept of Performance management.
- CO 10: Gain insights into how to improve managerial effectiveness.
- CO 11: Knowledge about the role of Worker's Participation in Management.

# **Economics for Executives (BVC-502)**

**Objective of the Course:** This course aims to familiarize students to law of demand, theory of Cost, determination of price under different market forms and theories of wages.

- CO 1: Determination of the objectives of business firms and their relevance in current scenario
- CO 2: Understanding of the concept of demand, law of demand along with its exceptions.
- CO 3 : Ability to calculate elasticity of demand under different market conditions.
- CO 4: Gain insights into how markets work to allocate resources and the optimal individual decision-making that underlies market outcomes.
- CO 5: Identification of various market structure and prices and discuss their implications for resource allocation.
- CO 6: Analyze the various theories of wages.

# **Cost Accounting and Management Accounting (BVC-503)**

**Objective of the Course:** The course aims to make the students aware about various elements of cost and provide knowledge about management accounting and its objectives.

#### Course outcomes

- CO 1: Understanding of the concept of cost, costing and cost Accounting.
- CO 2: Understanding relating to designing and installing a cost accounting system.
- CO 3: Knowledge about the reconciliation of cost and financial accounts and its need.
- CO 4: Gain insights into material costing and different techniques of Inventory control.
- CO 5: Understanding about the importance and limitations of financial statements.
- CO 6: Ability to make use of ratios for analysing the profits and position of the business.
- CO 7: Use of reporting system to inform the various levels of management.
- CO 8: Ability to make distinction between management accounting, financial accounting and cost accounting.

# **Entrepreneurship and Small Scale Business (BVC-504)**

**Objective of the Course:** This course is intended to enable students to distinguish between entrepreneurship and small business management. Emphasis will be placed on the integration of key management principles to make the students reflective of and relevant to the current business environment.

## **Course outcomes**

- CO 1: Understanding of the concepts of entrepreneurship, innovation, intrapreneurship and small business management.
- CO 2: Ability to use systems thinking and design thinking to develop new venture ideas.
- $CO\ 3: Critical\ Evaluation\ of\ Role\ of\ government\ in\ organizing\ Entrepreneurial\ Development\ Programs.$
- CO 4 : Ability to utilize the business model canvas to operationalise new venture ideas
- CO 5: Understanding of the National Policies for small business development.
- CO 6: Equipment of the students with professional, inter personal, presentation and entrepreneurial skills in their real life.
- CO 7 : Familiarization with the art of strategic planning in respect of finance, production, marketing, and risk management.

# **BVC-505** Advertising and Sales Management

#### Semester V

**Objective of the Course:** The fundamental objective of this course is to make students aware about the core issues involved in advertising, personal selling and sales force management which is an integral area of marketing.

- CO 1: Understanding of basics basic concepts like nature, scope, functions and classification of advertising.
- CO 2: Knowledge about the economic and legal aspects of advertising.

- CO 3: Ability to build advertising Program: message, theme, copy, appeals, layout etc.
- CO 4: Knowledge about the different types of advertising medias and budget advertising agencies.
- CO 5: Understanding of the nature and scope of sales management.
- CO 6: Developing a thought for the recruitment, selection, training and development of sales personnel.
- CO 7: Understanding of the factors influencing the motivation of sales force.
- CO 8: Knowledge about different types of compensation plans available for sales force.
- CO 9: Ability to evaluate sales force control and budget.

## **Management Information System (BVC-506)**

**Objective of the Course:** The overall aim of this course is to provide students with an understanding at how to use and manage information system in order to revitalize business processes, improve business decision making, and gain competitive advantage.

## **Course Outcomes**

- a) Understanding of the need for information system for decision making and steps used in implementation of MIS.
- b) Ability to plan, organize and control MIS for specific functions related to personnel, finance, marketing, inventory and production.
- c) Knowledge about the various input/output devices being used while managing the retail information.
- *d*) Understand the role of internet, intranet and teleconferencing in management information system.
- e) Ability to redesign the organization with information systems.

#### **SEMESTER-VI**

# **Supply Chain Management (BVC-601)**

**Objective of the Course:** The course aims to familiarize the students with organized retail and relate the supply chain activities which create the value in the organized retail industry.

- a) Basic understanding of supply chain management and the diverse supply chain networks.
- b) Understanding of key drivers of retail supply chain and how to select a vendor.
- c) Knowledge about the different techniques to manage inventory.
- d) Ability to forecast and estimate demand by using diverse techniques.
- e) Gain insights into the latest innovations in Supply chain management.
- f) Understanding of the concept of Cross Docking, Collaborative Planning and Bull Whip Effect.

# **International Retailing (BVC-602)**

**Objective of the Course:** The course will acquaint the students with the concept of international retailing so that they can analyze the risks and opportunities dispensed for global businesses and develop practical approach to frame effective strategies and take good business decisions.

## **Course Outcomes**

- a) Understanding of the basic concepts and importance of International Marketing Research and Information System.
- b) Recognition of the future of International Retailing and the India's Presence in International Marketing.
- c) Knowledge about the various environments in which international businesses operate.
- d) Ability to gauge the strategies for successful entry into foreign market.
- e) Knowledge about the selection of retail market in global setting.
- f) Determination of the methods of competing in foreign market.
- g) Overview of the unique issues and challenges faced by firms involved in international activities.

# **Brand Management (BVC-603)**

**Objective of the Course:** The course is designed to provide the students an overview about the objectives, functions, scope of brand management including brand equity, brand positioning, brand personality and strategies to be applied while managing a brand.

## **Course Outcomes**

- a) Preliminary understanding of the meaning of brand.
- b) Understanding the intricacies of building a strong brand including brand loyalty, brand equity and brand positioning.
- c) Understanding of the concept of brand associations.
- d) Familiarization with the qualitative and quantitative research techniques for measuring brand performance.
- e) Ability to formulate various branding strategies
- f) Ability to critically evaluate and interpret performance in the brand /distribution areas in marketing.

## Mall Management (BVC-604)

**Objective of the Course:** The contents of the course impart skills necessary for taking up positions in Mall administration.

- a) Understanding of the concept of shopping malls in India.
- b) Ability to conduct strategic planning for malls.
- c) Ability to comprehend the mall architecture and mall project handling.
- d) Understanding of the legal compliances and issues.

- e) Gain insights into the effective development of owner-tenant relationship.
- f) Knowledge regarding the selection of the mall locations and identify the catchment areas.

# **Statistical Analysis for Business (BVC-605)**

**Objective of the Course:** The objective of this course is develop clear understanding of statistics in solving different research problems related to statistical techniques.

## **Course Outcomes**

- a) Understanding of the meaning of statistics, basic statistical concepts and relevance of statistics in business.
- b) Ability to calculate and interpret descriptive statistics such as measures of central tendency and dispersion.
- c) Ability to use regression analysis to analyse the underlying relationships between the variables and estimate regression coefficients.
- d) Ability to describe the components of time series and apply time series analysis in business scenarios.
- e) Knowledge about the different types of index numbers and their calculation.
- f) Grasping of the concept of correlation, analyze and interpret covariance and correlation coefficient.

## E-Commerce (BVC-606)

**Objective of the Course:** The objective of the course is to impart knowledge about the relevance of E-Commerce in current competitive environment.

## **Course Outcomes**

- a) Familiarization with the concept of electronic commerce and an understanding of contemporary trends and technologies in e-business.
- b) Ability to start up and operate e-commerce website while realizing the problems involved in designing and building e-commerce systems.
- c) Real-world application of digital marketing and e-commerce methods.
- d) Identification of the different methods of E-commerce payment systems.
- e) Understanding of challenges involved in online retailing.
- f) Insights on how to implement e-commerce strategies in the new economy.

# Lab on E-Marketing (BVC- 607)

**Objective of the Course:** The students will be trained in practical aspects of E-Marketing by providing them a thorough understanding of the principles and practices associated with using the internet to market goods and services.

- a) Introduction to Internet Marketing.
- b) Mapping fundamental concepts of Marketing
- c) Knowledge regarding strategy and planning for internet marketing
- d) Ability to analyze websites and understand the complexities of marketing on the Internet.
- e) Understanding of contemporary trends and technologies in e-business.
- f) Ability to prepare an effective e-Marketing Plan and deliver a quality presentation using leading edge web-based tools.
- g) Understanding of challenges involved in online advertising.

# Name of Program: Masters of Commerce (M. Com)

## **Program Outcomes**

PO 1: Professional Excellence

PO 2: Development of entrepreneurial skills

PO 3: Sound theoretical foundation

PO 4: Effective Communication

PO 5: Social Interaction

PO 6: Critical Thinking

PO 7: Research Aptitude

PO 8: Holistic Development

# **Program Specific Outcomes**

- > To impart the knowledge basic accounting principles and the latest- application oriented corporate accounting methods.
- ➤ To instill the knowledge of business and the techniques of managing the business with special focus on finance management skills, marketing, insurance, auditing, banking law and security market.
- > To gain a thorough knowledge in the subject to be able to work in projects at different research as well as academic institutions and in business field.
- ➤ To develop competencies required for effective problem solving and right decision making in routine and special activities through costing methods and practical application of management accounting principles.
- > To enable a student well versed in national as well as international trends.
- > To facilitate the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
- > To develop the competency in students to broaden their management and leadership skills and to generate and initiate innovative business solutions for today's business and societal challenges.

#### **SEMESTER-1**

# **MANAGERIAL ECONOMICS (MC-101)**

**Objective of the Course:** The course objective is to introduce students to Marginal Analysis, Law of Demand, theory of Cost, determination of price under different market forms, Market Structure, Psychological Law of Consumption and Calculation of national income.

#### **Course outcomes**

- a) Understanding of the theories of Managerial Economics.
- b) Understand the law of demand and elasticity of demand
- c) Know about the Production Function
- d) Comprehend the market forms and apply the pricing techniques to determine the price of factors of production
- e) Analyze the various theories of marginal economics and theory of Costs
- f) Apply the knowledge of national income accounting and cost of living measurement in real- world situations.
- g) Determine the relevance of Consumption Function and its Propensity to Consume.
- h) Forecast demand in light of changing circumstances and to formulate business plans
- i) Able to understand the role of various microeconomic and macroeconomic forces in the current scenario

## STATISTICAL ANALYSIS FOR BUSINESS (MC-102)

# **Objective of the Course:**

The objective of this course is develop clear understanding of statistics in solving different research problems related to statistical techniques, Probability theorems and hypothesis testing. The course also helps the students to gain a comprehensive view of the usage and importance of SPSS in solving different statistical problems.

- a) Development of logical reasoning ability regarding the use of various statistical methods in forecasting, controlling and exploring data.
- b) Ability to apply various parametric and nonparametric tests in the real life case situation.
- c) Understanding the use of SPSS to solve statistical problems.
- d) To comprehend the decision making process under uncertain business situations using statistical tools.
- e) To analyse the various methods of theoretical probability distribution.
- f) To become aware of the concepts in sampling, sampling distributions and estimation.
- g) To develop an understanding of the theory of probability, rules of probability and probability distributions
- h) To understand the meaning and process of hypothesis testing including one-sample and

- two-sample tests.
- i) To understand the meaning and importance of correlation and regression analysis including both simple and multiple correlation and regression.

# MANAGEMENT PRINCIPLES AND ORGANIZATION BEHAVIOUR (MC-103)

**Objective of the Course:** The course objective is to enable the students understand the principles of management and gain insight into the behavior of individuals and groups in an organization. The course would also help to determine the challenges /opportunities in organizational behaviour.

#### **Course outcomes**

- a) Ability to execute managerial tasks of planning, organizing and controlling.
- b) Understanding of various theories of motivation and leadership and its impact on decision making process.
- c) Understanding of different factors influencing individual behavior, personality and perception and find ways to mold them for optimal results.
- d) Ability to analyze challenges and opportunities in the field of organization behavior.
- e) In-depth understanding of emotional labour and different types of emotions.
- f) Interpret the relevance of management theories in real life situations and adopt them in workplace situations.

# **BUSINESS ENVIRONMENT (MC-104)**

**Objective of the Course:** The objective of this course is to provide an insight into meaning of business environment and its components. This subject will enhance the students' knowledgeregarding various financial policies such as Economic Planning, LPG, Deficit Financing, Monetary Policy, Disinvestment of Public enterprises, Foreign Trade etc. This in turn would also enable them to analyze positive and negative impact of different legislations on Indian economy.

- a) Understand the various Micro and Macro factors affecting the business.
- b) Ability to analyze Indian Economy in light of changing government regulatory policies.
- c) Familiarization with the objectives and strategies in Economic planning with special reference to Planning Commission and NITI Aayog
- d) Ability to file complaint against unfair trade practices under Consumer Protection Act.
- e) Ability to analyze the changing dimensions of environment surrounding the business
- f) Critically examine various financial policies and legislations affecting business.
- g) Ability to handle the changes in business environment while carrying out their own business operations.

## MANAGEMENT ACCOUNTING AND CONTROL SYSTEMS (MC- 105)

**Objective of the Course:** The objective of the course is to enable the students to understand the conceptual and practical aspects Management Accounting and its relevance in a business organization. To develop clear understanding of Managerial behavior, Control structure and Control Process under different circumstances. The students will learn about the application of contemporary management technique and familiarize themselves with the various measures of segment performance evaluation like Balance Scorecard, Economic Value Added etc. they will also learn about the managerial reporting.

## **Course outcomes**

- a) Familiarization with the concept of Management Accounting.
- b) Ability to evaluate the Segment Business Units by using diverse tools and techniques of management accounting.
- c) Understanding of the factors influencing investment decisions and the different types of investment proposals.
- d) In-depth understanding regarding the scrutinization of the financial reports and financial information to improve business practices
- e) Utilization of the corporate resources in an effective way
- f) Clarity about the reporting requirements of management

## **SEMESTER-II**

# **CORPOATE FINANCIAL ACCOUNTING AND AUDITING (MC-201)**

**Objective of the Course:** The main objective of this course is to impart the understanding of the theoretical and practical know how in Corporate financial accounting and auditing so that the students can decisions towards the maximization of value of the firm. This subject provides a comprehensive view of legal provisions governing audit of Companies and its various kinds.

- a) Understanding of the various methods to calculate goodwill, valuation of shares and preparation of final accounts of Indian Companies.
- b) Understanding of the provisions regarding the appointment, qualifications, duties and liabilities of auditor.
- c) Understanding of the concept of managerial remuneration
- d) Clarity about the applicability of different types of audits.
- e) Ability to analyze the financial statements and determine the economic health of a company.

## FINANCIAL MANAGEMENT (MC-202)

**Objective of the Course:** The course objective is to acquaint students with the diverse modes and techniques of Financial Management so that they can effectively analyze the business proposals. Moreover, the concepts on capital budgeting techniques, risk analysis and sensitivity analysis are explained so that they would be able to select the best investment project out of alternative investment proposals.

#### Course outcomes

- a) Ability to describe this relationship between finance with other allied disciplines.
- b) Able to evaluate the significance of cost of capital in financial decisions.
- c) Ability to evaluate capital budgeting decision using advanced techniques.
- d) Understanding of the various theories and practices of capital structure.
- e) Able to analyze the combined effects of financial and operating leverages.
- f) Critically examine various theories and determinants of capital structure, analyze financial plans and determine optimal capital structure.
- g) Decide the form and amount of short term financing that best suits a given corporate need based on historical and projected analysis.
- h) Understanding of various theories and policies of dividend and determine optimal payout policy
- i) Understand the intricacies of working capital management and effectively manage cash, receivables and inventories.

# **RESEARCH METHODOLOGY (MC-203)**

**Objective of the Course:** The objective of this course is to make students familiarize with the core concepts of research and its methodologies so that they can identify appropriate problem and parameters. Moreover, knowledge about different statistical methods is also provided for forecasting, controlling and exploring data.

- a) Familiarization with Research and research problems.
- b) To Create Hypothesis and testing.
- c) Understanding of the Quantitative and Qualitative Methods of research.
- d) Understanding of the research design.
- e) To determine data sources and learn the art of designing a questionnaire.
- f) To understand various sampling techniques used for data collection.
- g) Knowledge about advanced statistical techniques like Discriminant Analysis, Logistic Analysis and Factor Analysis.
- h) Ability to write the research report using hypothetical data
- i) Skill to write Research paper.
- j) Ability to draw conclusions about the population on the basis of sample.

## **MARKETING MANAGEMENT (MC-204)**

**Objective of the Course:** This course is designed to impart students understanding about holistic nature of Marketing. There will be a focus on the development of conceptual and analytical skills of students so that they can effectively manage marketing operations of a business firm.

## **Course Outcomes**

- a) Familiarization with the conceptual framework of marketing and its applications indecision making under various environmental constraints.
- b) Understanding of the concepts of product design, new product development, product life cycle for various products & services and simultaneously stimulating them to observe the nuances and complexities involved in pricing decisions.
- c) Gain knowledge about the importance of buyer behavior and consumer decision making process.
- d) Understanding of the importance and implications of distribution & channel decisions in marketing.
- e) Familiarization with the diverse retail formats and theories.
- f) Critical evaluation of the Promotion-Mix in the light of competitive market environment
- g) Identification of the components of web marketing
- h) Ability to carry out a research project that explores marketing planning and strategies for specific marketing situation
- i) Ability to conduct marketing research in order to check needs, preferences and habits of customers.

# **COURSE NAME: HUMAN RESOURCE MANAGEMENT (MC-205)**

**Objective of the Course:** The fundamental aim of this course is to impart knowledge about diverse HR practices so that students can develop theoretical understanding regarding the importance of optimization of human resource potential and appreciate the relationship between management of people with organization's strategic goals and objectives.

- a) Understanding about how an organization acquires, motivates , compensates and retainsits human resources .
- b) Effectively use HR strategies in an organization
- c) Learn analytical skills to enhance effectiveness of HR functions.
- d) Able to analyze the need and importance of HRM in real life situations.
- e) Ability to link human resources with firm performance and evaluate HR effort.
- f) Understanding of different types of remuneration plans and their significance.
- g) Capability to evaluate different training Programs and understanding of their limitations.
- h) Critically evaluate and analyze opportunities in the HR sector.

## **SEMESTER-III**

# **COURSE NAME: BANKING AND INSURANCE SERVICES (MC-301)**

**Objective of the Course:** The course is designed to provide fundamental understanding of the structure of commercial banking in India and its management. This subject also acquaints the students regarding the new innovations in the banking sector and detailed role of insurance sector in India.

## **Course outcomes**

- a) Understanding of the evolution and current state of the Indian banking industry.
- b) Knowledge about the different services and products offered by banks and the challenges associated with them.
- c) Understanding of the various factors influencing risk management in banks and the risk management mechanism.
- d) Knowledge about the models of profitability and liquidity in banking.
- e) Understanding of BASAL norms and ALM in detail.
- f) Understanding the operations and working of insurance companies in India.
- g) Ability to observe, interpret and demonstrate Bancassurance.

## SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT (MC-311)

**Objective of the Course:** The course is designed to explain students the intricacies of analyzing securities while designing a portfolio. Moreover, to explain about the significance of various tools, techniques, models and investment theories necessary for analyzing different types of securities, making sound investment decisions and optimal portfolio choice.

#### **Course outcomes**

- a) Familiarization with the designing and construction of portfolios.
- b) Understanding of the basics of Fundamental and Technical Analysis.
- c) Ability to apply Investment Management principles and concepts in practical life.
- d) Knowledge about the diverse investment avenues available.
- e) Ability to study the trends of stock markets and analyze the different securities in equity markets with a deep understanding of Capital market theory and associated models.

# **CONTEMPORARY ACCOUNTING (MC-312)**

Objective of the Course: This Course aims at introducing the students with emergence of contemporary issues in accounting. The course enables the students to gain insights about the

accounting standards and understand the role of human resources and price level changes in the books of accounts.

## **Course Outcomes**

- a) Ability to identify and evaluate concepts and principles of accounting standards, including the historical development of accounting theories and their application to contemporary business.
- b) Practical knowledge about the application of HRA and Price level accounting in Indian context.
- c) Ability to write report with respect to recent trends in published accounts.
- d) Ability to present published accounts using recent trends
- e) Knowledge regarding the practical use of Accounting Standards in preparation of financial statements.
- f) Ability to prepare value added statement and calculate economic value added.

# **COURSE NAME: CONSUMER BEHAVIOUR (MC-351)**

**Objective of the Course:** The course has been designed to provide students an in-depth understanding of the consumer behavior and their determinants as relevant for marketing decision making.

#### **Course Outcomes**

- a) Understanding of the consumer behaviour and its relationship with marketing concepts.
- b) Familiarization with the process of consumer decision making and its application.
- c) Ability to draw a relationship between the culture, sub-culture, peer group, family influence and consumer behaviour.
- d) Clarity about the models of consumer behavior and their practical application.
- e) Recognition of the social and ethical implications of marketing actions on consumer behaviour.
- f) Have practical insight at the various stages of purchasing and various underlying variables resulting into differences in consumer decision making.
- g) Determination of the socio-cultural factors affecting consumer decision making.
- h) Ability to observe, interpret and demonstrate consumer behaviour in action.
- i) Understanding of the importance of consumer related reference groups.

# **COURSE NAME: RETAIL MANAGEMENT (MC-352)**

**Objective of the Course:** The basic objective of this subject is to make the students aware about the importance of retailing in increasing market share. Moreover, this subject familiarize them with different types of retail locations, retailers, visual merchandising, store design, category management etc.

#### **Course Outcomes**

- a) Knowledge about retailing practices followed in India.
- b) Understanding of the Retail shopper behavior.
- c) Familiarity with Retail Merchandising, Merchandising Planning and Merchandise Procurement process.
- d) Awareness of the key issues relating to Retail Management and category management.
- e) Understanding of the benefits and applications of Franchising.

#### **SEMESTER-IV**

# **INTERNATIONAL ACCOUNTING (MC-401)**

**Objective of the Course:** Keeping in mind the constant increase in the volume of international financial operations and cross-border investments, this course has been designed to equip the students with the necessary theoretical and practical know how in International Accounting and its relevance in the contemporary business environment.

#### **Course Outcomes**

- a) Understanding of the need and relevance of harmonizing varying patterns and practices of financial reporting practices globally.
- b) Development of an insight to read between the lines while studying a financial statement of MNC's.
- c) Understanding of the procedures related to foreign currency translation, International taxation and Consolidation of Financial Statements in the context of MNCs.
- d) Ability to spell out the factors that influence investment decisions at the international level.
- e) Have strong financial awareness that serves as the essential skill to function as effective managers, both within the financial sector and across a range of multinational organizations.
- f) In- depth understanding of concepts related to international business strategies, crossculture management, corporate finance and investment management that help in problemsolving and incorporating right decision making skills to support business management.

# **E-C OMMERCE (MC- 402)**

**Objective of the Course:** The objective of the course is to impart knowledge about the relevance of E-Commerce in current competitive environment. It would make the students aware about the common legal, ethical and tax issues involved in e-commerce.

#### **Course Outcomes**

- a) Familiarization with the concept of electronic commerce and an understanding about how electronic commerce is affecting business enterprises, governments, consumers and people in general.
- b) Ability to start up and operate e-commerce website while realizing the problems involved in designing and building e-commerce systems.
- c) Understanding of the scope of cyber laws in E-commerce.
- d) Identification of the different methods of E-commerce payment systems.
- e) Understanding of Web marketing approaches and elements of branding
- f) Knowledge about the legal and ethical issues related to E-Commerce
- g) Insights on how to implement e-commerce strategies in the New Economy.

# **COURSE NAME: INTERNATIONAL FINANCIAL MANAGEMENT (MC-411)**

**Objective of the Course:** The course aims to provide a deep understanding of to international finance theory (e.g., exchange rate determinants, foreign exchange exposure, foreign exchange markets, interest rate parity) to equip the students with analytical tools and techniques for sound financial decision making in a global setting.

#### **Course Outcomes**

- a) Knowledge about IMF, World Bank, European Monetary System and their role in international financial management.
- b) Clarity about the role of central bank in international financial management.
- c) Gain insights into the financial viability of capital expenditure plans undertaken by Multinational companies and their implications on parent and subsidiary companies in financial decision making.
- d) Ability to calculate arbitrage in spot as well as forward market.
- e) Ability to analyze the issues related to various finance functions of MNCs.
- f) Knowledge about various exposures involves in international transactions and its management.
- g) Understanding of translation, transaction and economic exposure to exchange rate changes.
- h) Development of a frame of reference to identify, evaluate and solve problems pertaining to international financial with or without complete information.
- i) Understanding of various kind of foreign exchange associated with the functioning of Multinational companies along with techniques of hedging these risks.
- j) Evaluation of portfolio management techniques and its risk management in involving investment in International markets.

# FINANCIAL MARKETS AND FINANCIAL SERVICES (MC-412)

**Objective of the Course:** The objective of this course is to introduce the students about financial System prevalent in India along with their operations, mechanics and structure. Moreover, the

functioning of NBFCs, RBI, stock exchanges etc. have also been discussed to make students aware about its impact on the economy.

## **Course Outcomes**

- a) Knowledge about the progress of Indian financial system and the various market instruments.
- b) Understanding of stock market operations and the clearing and settlement procedures of stock exchanges.
- c) Detailed understanding about the Banking Structure of the country and its recent developments.
- d) Gain insights into significance of monetary policy.
- e) Ability to make distinction between money market and capital market.
- f) Familiarization with the concept of CCIL, Repos and Securitization.

## **CORPORATE TAX LAW AND PLANNING (MC-413)**

**Objective of the Course:** This Course aims at making the students aware with the planning and management of corporate tax. Since there is always a friction between the collector and the payer of tax, so it is very important for the students to familiarize themselves with the relevant provisions and procedure to compute total income of a company as per the required laws.

#### **Course Outcomes**

- a) Ability to analyze the difference between Tax Evasion, Tax Planning and Tax Avoidance.
- b) Understanding of corporate tax planning pertaining to various deductions, rebates and reliefs to reduce the taxable income and tax liability.
- c) Skill to take managerial decisions keeping in view the Income Tax Rules.
- d) Knowledge about how to avoid double taxation.
- e) Awareness about the taxability of dividend from company and investor point of view.
- f) Development of a framework of reference through which students can identify, evaluate and solve problems relating to corporate tax and its planning.
- g) Strong tax planning awareness to function as an effective tax planner.

## **ADVERTISING AND SALES MANAGEMENT (MC-451)**

**Objective of the Course:** The fundamental objective of this course is to make students aware about the core issues involved in advertising, personal selling and sales force management which is an integral area of marketing.

- a) Understanding of basics of marketing communication and the processes.
- b) Understanding of strategic and tactical level decisions involved in development of an advertisement and their application
- c) Knowledge about possible arrangements for organizing and evaluating advertising efforts

- d) Ability to connecting advertising strategies and organizational goals with the moral codeof conduct in advertising.
- e) Developing an understanding of creativity in advertising and media decisions.
- f) Developing a thought for the recruitment, selection, training, development, Evaluation, compensation, motivation and supervising of sales personnel, sales and cost analysis.
- g) Understanding of the process involved in personnel selling, its management and its implications for relationship development.
- h) Ability to examine the decisions involved in planning and organizing the sales efforts.
- i) Development of creative and persuasive skills.

# **BRAND AND DISTRIBUTION MANAGEMENT (MC-452)**

**Objective of the Course:** The course is designed to provide the students an overview about the objectives, functions, scope of brand and retail management including brand equity ,brand positioning ,brand personality and strategies to be applied in managing a brand ,various aspects of retail management in context to its role as a marketing tool.

#### **Course outcomes**

- a) Ability to formulate various branding strategies and measure Brand Performance using Research techniques.
- b) Familiarization with the Qualitative and Quantitative Research techniques for measuring Brand Performance.
- c) Understanding of various Retail formats and Retail locations.
- d) Understanding the intricacies of Retail store design, Visual Merchandising and Retail Supply Chain Integration.
- e) Ability to critically evaluate and interpret performance in the brand /distribution areas in marketing.
- f) Gain insights into the art of handling customer service as a part of retailing strategy.
- g) Development of analytical skills that would help in enhancing effectiveness of branding and retailing.

## **SERVICES MARKETING (MC-453)**

**Objective of the Course:** The course objective is to impart knowledge regarding customer expectations from services and their perceptions about it so that students can understand the deeper aspects of successful services marketing.

- a) Familiarity with the service models and organizing change management.
- b) Capability to evaluate the suitability of different pricing methods for services.
- c) Understanding of the roles of employees and customers in service delivery.
- d) Provide insights to the challenges and opportunities in services marketing.

- e) Knowledge regarding an effective services marketing
- f) Knowing the strategies for influencing Customer expectations.
- g) Understanding of the challenges of service design and service redesign.
- h) In-depth understanding of impact of service failure and recovery.
- i) Ability to analyze and interpret marketing research Program.

# Name of Program: P.G. Diploma in Financial Services

## **Program Outcomes**

- a) Professional Excellence
- b) Sound theoretical foundation
- c) Social Interaction
- d) Critical Thinking
- e) Holistic Development

# **Program Specific Outcomes**

- 1. The course helps aspirants to acquire knowledge in the field of accounting, taxation, auditing.
- 2. The Program aims to develop professional skills among students and build a strong foundation inaccounts and Finance.
- 3. To facilitate the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
- 4. To develop the competency in students to broaden their management and leadership skills
- 5. Students will gain thorough systematic and subject skills within various disciplines of finance, accounting, management and other related fields.

## **SEMESTER I**

## FINANCIAL SERVICES (PGDFS 101)

**Objectives of the course:** The objective of the course is to provides knowledge aboutvarious financial services such as hire purchase, leasing, merchant banking.

#### **Course outcomes**

- a) Knowledge about the progress of Indian financial system.
- b) Detailed understanding about the Banking Structure of the country and its recent developments.
- c) To understand various legal aspects related to Leasing business.
- d) To get knowledge about merchant banking.
- e) To understand concept of depositories Act and mutual funds.

## FINANCIAL INSTITUTIONS (PGDFS 102)

**Objectives of the course:** The objective of the course is to provides knowledge about various financial and banking institutions, development banks and various banking committees.

- a) Understand the role and functioning of financial institutions and markets.
- b) Articulate the structure and impact of regulatory considerations on Indian financial institutions.
- c) Complete knowledge of Financial System of India.

- d) Detailed understanding about the Banking Structure of the country and its recentdevelopments.
- e) To get knowledge of development banks in India.
- f) To find out role of financial institutions in development of Indian economy
- g) To understand the concept of credit planning and credit monitoring.

# **CORPORATE LEGAL FRAMEWORK (PGDFS 103):**

**Objectives of the course**: The objective of the course is to provides knowledge about company, its management administration and SEBI.

#### **Course outcomes**

- a) To understand the provisions related to share capital and board of directors
- b) To understand the incorporation of company.
- c) To understand the management and administration of company.
- d) To understand the objectives, status and powers of SEBI.
- e) To understand other legal aspects related to company.

## FINANCIAL MANAGEMENT (PGDFS 104)

**Objectives of the course:** The course aims to introduce the students with the meaning and the need of Financial Management in current competitive environment and to discuss the usage of financial management by the finance manager of the company in taking important financial decisions (i.e. Investment decisions, Financing decisions and Dividend decisions).

#### Course outcomes

- a) To provide introduction to financial management
- b) To create an awareness about capital structure and theories of capital structure
- c) To make them understand the cost of capital in wide aspects
- d) To provide knowledge about dividend policies and various dividend models.
- e) To enable them to understand working capital management

## FINANCIAL MARKETS (PGDFS 105)

**Objectives of the course**: The objective of this course is to introduce the students about financial System, development banks ,commercial banks and consumer financing.

- a) Understand the role and functioning of financial markets.
- b) Articulate the structure and impact of regulatory considerations on development institutions. Understanding the functioning of Reserve Bank of India and commercial banks in Indian bankingsystem.
- c) Understanding the working of securities market.
- d) To understand the concepts like housing finance, credit cards and consumer finance.

## **SEMESTER II**

# **CORPORATE LEGAL ENVIRONMENT (PGDFS 201)**

**Objective of the Course:** The objective of this course is to enable the students to acquire application oriented knowledge and to develop understanding about regulatory framework of legalenvironment of corporate houses.

#### **Course Outcomes**

- a) To understand the rules governing Indian Contract Act
- b) To familiarize the rights and discharges of duties by parties in Indemnity, Guaranty and bailment. To understand the legal provisions of sale of goods act.
- c) Understanding the process of winding up of companies.
- d) To get knowledge about indirect taxes and company meetings.

# FINANCIAL SERVICES –II (PGDFS- 202)

**Objective of the Course**: The objective of this course is to introduce the students about financial system prevalent in India along with their operations, mechanics and structure. The students are explained about the intricacies of analyzing securities while designing a portfolio.

## **Course Outcomes**

- a) Understanding of various tools, techniques, models and investment theories necessary foranalyzing different types of securities.
- b) Familiarization with the designing and construction of portfolios.
- c) Ability to apply Investment Management principles and concepts in practical life.
- d) Knowledge about the measures for promoting healthy sustained development of the investment market.
- e) Ability to study the trends of stock markets and analyze the different securities in equity markets with a deep understanding of Capital market theory and associated models.

# FINANCIAL AND COST ACCOUNTING(PGDFS- 203)

**Objective of the Course:** The course outline the theoretical and practical knowledge of financial accounting while providing introduction of the accounting standards. They are also made aware about various elements of cost accounting and its objectives.

- a) Understanding of the form any layout of final accounts of banking and insurance companies.
- b) To get acquainted with adjusting and changing entries.
- c) Understanding of the concept of cost, costing and cost Accounting.
- d) Understanding relating to designing and installing a cost accounting system.
- e) Gain insights into cost accounting techniques like budgetary control, standard costing, marginal costing and break even analysis.

## INFORMATION TECHNOLOGY IN FINANCIAL SERVICES(PGDFS-204)

**Objective of the Course:** This course provides the basic insights of computer and various application software which are being used in various fields, offices and companies.

# **Course Outcomes**

- a) Understanding of the fundamental concepts of computers with their present level of knowledge about computers.
- b) Knowledge about Microsoft Office Programs which enable the students to create professionaland academic documents.
- c) In-depth understanding of MS office- MS excel and MS word to enable the students to work in field of office automation and desktop publishing as well.
- d) To enable the understanding of Tally package for financial accounting.

# MANAGEMENT OF BANKING AND INSURANCE SERVICES(PGDFS- 205)

**Objective of the Course**: The course is designed to provide fundamental understanding of the structure of banking system in India and its management. This subject also acquaints the students regarding the funding to priority sector and detailed role of insurance sector in India.

- a) Understanding of the evolution and current state of the Indian banking industry.
- b) Knowledge about the different services and products offered by banks and the challenges associated with them.
- c) Understanding of the guidelines for financing priority sectors.
- d) Understanding about the various schemes available for financing agriculture sector.
- e) Gain insights about International banking trends.
- f) Understanding the operations and working of insurance companies in India.
- g) Ability to apply management concepts in Insurance.