# **FACULTY OF COMPUTER SCIENCE & IT**

# **SYLLABUS**

of

**Bachelor of Computer Applications (Honours)** (offered under 4-Year UG Degree Programme)

(Semester I-II)

(Under Credit Based Continuous Evaluation Grading System) Under NEP 2020

> Session: 2024-25 Batch: 2024-28



# **The Heritage Institution**

KANYA MAHA VIDYALAYA JALANDHAR (Autonomous)

### **PROGRAMME SPECIFIC OUTCOMES**

### Bachelor of Computer Applications (Honours) (Session 2024-25)

#### **Program Specific Outcomes**

PSO1: Apply skills for development of software and websites for providing efficient solution to IT based problems

PSO2: Comprehend development process in IT industry through ethical, defined and innovative techniques.

PS03: Achieve leadership role and team player role to be able to work in multidisciplinary areas at various job roles.

PSO4: Identify and demonstrate the implementation of various tools and technologies involved in the field of Information Technology.

PSO5: Demonstrate proficiency in the field of Programming, Web development and IT enabled services.

# Kanya Maha Vidyalaya, Jalandhar (Autonomous)

### SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE/FOUR YEAR DEGREE PROGRAMME

### **Bachelor of Computer Applications ((Three Year Degree Programme)**

### **Bachelor of Computer Applications (Honours) (Four Year Degree Programme)**

### Credit Based Continuous Evaluation Grading System (CBCEGS) (Session 2024-25)

Bachelor of Computer Applications /Bachelor of Computer Applications (Honours) Semester - I										
Course Code	Course Title	Course Type	Hours per week L-T-P	Credit		Marks				Examinat ion Time
				L-T-P	Total	Total	Ext.		CA	(in
							L	Р		Hours)
BCAL- 1421 / BCAL- 1031/ BCAL- 1431	Punjabi (Compulsory) / <sup>1</sup> Basic Punjabi/ <sup>2</sup> Punjab History and Culture	С	4-0-0	4-0-0	4	100	70	-	30	3
BCAM- 1102	Communication Skills in English - I	AEC	3-0-2	3-0-1	4	100	50	20	30	3+3
BCAL- 1113	Digital Electronics	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAL- 1114	Introduction to Programming – C	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAL- 1115	Introduction to Computers and Information Technology	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAP- 1116	Lab on Programming – C	DSC	0-0-4	0-0-2	2	50	-	35	15	3
BCAP- 1117	Lab on Office Package	DSC	0-0-4	0-0-2	2	50	-	35	15	3
BCAM- 1110	Introduction to the Internet	SEC	2-0-2	2-0-1	3	100	40	30	30	3+3
VACF- 1491	*Foundation Course	VAC	2-0-0	2-0-0	2	50	35	-	15	1
	Total				29	750				

Note:

C – Compulsory, DSC – Discipline Specific Course, SEC – Skill Enhancement Course AEC – Ability Enhancement Course, VAC – Value Added Course

<sup>1</sup> Special course in lieu of Punjabi (Compulsory)

<sup>2</sup> Special course in lieu of Punjabi (Compulsory) for those students who are not domicile of Punjab.

\*Credits/Grades Points of these courses will not be added in total, only grades will be provided.

## Kanya Maha Vidyalaya, Jalandhar (Autonomous)

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE/FOUR YEAR DEGREE PROGRAMME

**Bachelor of Computer Applications ((Three Year Degree Programme)** 

### **Bachelor of Computer Applications (Honours) (Four Year Degree Programme)**

### Credit Based Continuous Evaluation Grading System (CBCEGS) (Session 2024-25)

<b>Bachelor of Computer Applications (Honours) Semester - II</b>										
Course Code	Course Title	Cour se Type	Hours per week L-T-P	Credit		Marks				Examination Time (in Hours)
				L-T-P	Total	Total	Ext. CA		CA	
							L	Р		
BCAL-2421/ BCAL-2031/ BCAL-2431	Punjabi (Compulsory) <sup>1</sup> Basic Punjabi <sup>2</sup> Punjab History and Culture	С	4-0-0	4-0-0	4	100	70	-	30	3
BCAM-2102	Communication Skills in English - II	MDC	3-0-2	3-0-1	4	100	50	20	30	3+3
BCAL-2113	Computer Architecture	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAL-2114	Database Management System	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAL-2115	Introduction to Object Oriented Programming-I	DSC	4-0-0	4-0-0	4	100	70	-	30	3
BCAP-2116	Lab on Database Management System	DSC	0-0-4	0-0-2	2	50	-	35	15	3
BCAP-2117	Lab on Object Oriented Programming - I	DSC	0-0-4	0-0-2	2	50	-	35	15	3
VACD-2161	*Drug Abuse: Problem, Management and Prevention (Compulsory)	VAC	2-0-0	2-0-0	2	50	35	-	15	3
	Total				26	650				

Note:

C – Compulsory, DSC – Discipline Specific Course, SEC – Skill Enhancement Course MDC – Multi Disciplinary Course, VAC – Value Added Course

<sup>1</sup> Special course in lieu of Punjabi (Compulsory)

<sup>2</sup> Special course in lieu of Punjabi (Compulsory) for those students who are not domicile of Punjab.

\* Credits/Grades Points of these courses will not be added in total, only grades will be provided.

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1421 PUNJABI (COMPULSORY)

#### **COURSE OUTCOMES**

CO1: ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਕਵਿਤਾ ਤੇ ਕਹਾਣੀ ਪੁਸਤਕ ਦੇ ਕਵਿਤਾ ਭਾਗ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਵਿਤਾ ਪ੍ਰਤੀ ਦਿਲਚਸਪੀ, ਸੂਝ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਤਾਂ ਕਿ ਉਹ ਆਧੁਨਿਕ ਦੌਰ ਵਿਚ ਚੱਲ ਰਹੀਆਂ ਕਾਵਿ ਧਾਰਾਵਾਂ ਅਤੇ ਕਵੀਆਂ ਬਾਰੇ ਗਿਆਨ ਹਾਸਿਲ ਕਰ ਸਕਣ।ਇਸ ਦਾ ਹੋਰ ਮਨੋਰਥ ਕਵਿਤਾ ਦੀ ਵਿਆਖਿਆ, ਵਿਸ਼ਲੇਸ਼ਣ ਤੇ ਮੁਲੰਕਣ ਦੀ ਪ੍ਰਕਿਰਿਆ ਤੋਂ ਜਾਣੂ ਕਰਾਉਣਾ ਵੀ ਹੈ ਤਾਂ ਕਿ ਉਹ ਸਮਕਾਲੀ ਸਮਾਜ ਦੀਆਂ ਸਮੱਸਿਆਵਾਂ ਨੂੰ ਸਮਝ ਸਕਣ ਅਤੇ ਆਲੋਚਨਾਤਮਕ ਦ੍ਰਿਸ਼ਟੀ ਬਣਾ ਸਕਣ।

CO2: ਮੰਚ ਘਰ ਪੁਸਤਕ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਮੁੱਲਵਾਨ ਗਿਆਨ ਦੇਣਾ ਹੈ।

CO3: ਪੈਰ੍ਹਾ ਰਚਨਾ ਅਤੇ ਪੈਰ੍ਹਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉਤਰ ਦੇਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।

CO4: ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ:ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪਭਾਸ਼ਾ ਵਿਚਲਾ ਅੰਤਰ, ਪੰਜਾਬੀ ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ੍ਹ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ ਪੜ੍ਹਣ ਨਾਲ ਵਿਦਿਆਰਥੀ ਧੁਨੀਆਂ ਦੀ ਉਚਾਰਨ ਪ੍ਰਣਾਲੀ ਤੋਂ ਵਾਕਫ਼ ਹੋਣਗੇ।

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1421 PUNJABI (COMPULSORY)

ਸਮਾਂ ਤਿੰਨ ਘੰਟੇ L-T-P 4-0-0

Maximum Marks: 100 Theory : 70 CA : 30

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹੋਣਗੇ।ਸੈਕਸ਼ਨ A-D ਤੱਕ ਦੇ ਪ੍ਰਸ਼ਨ ਯੂਨਿਟ I-IV ਵਿਚੋਂ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- 3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 14 ਅੰਕ ਹਨ।

4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

#### ਪਾਠਕ੍ਰਮ ਅਤੇ ਪਾਠ ਪੁਸਤਕਾਂ

### ਯੂਨਿਟ-I

ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਕਵਿਤਾ ਤੇ ਕਹਾਣੀ (ਸੰਪਾ. ਡਾ. ਰਮਿੰਦਰ ਕੌਰ, ਡਾ. ਮੇਘਾ ਸਲਵਾਨ) ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ। (ਕਵਿਤਾ ਭਾਗ)

(ਕਵਿਤਾ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ/ਵਿਸ਼ਾਵਸਤੁ/ਸਾਰ)

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#### ਯੂਨਿਟ-II

ਮੰਚ ਘਰ

ਡਾ. ਕੁਲਦੀਪ ਸਿੰਘ ਧੀਰ, ਡਾ. ਹਿਰਦੇਜੀਤ ਸਿੰਘ ਭੋਗਲ (ਸੰਪਾ.), ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ,ਅੰਮ੍ਰਿਤਸਰ।

(ਵਿਸ਼ਾ ਵਸਤੂ,ਸਾਰ, ਪਾਤਰ ਚਿਤਰਨ)

ਯੂਨਿਟ-III

(ੳ) ਪੈਰ੍ਹਾ ਰਚਨਾ

(ਅ) ਪੈਰ੍ਹਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉਤਰ।

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ਯੂਨਿਟ-IV

ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ:

ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪਭਾਸ਼ਾ ਵਿਚਲਾ ਅੰਤਰ, ਪੰਜਾਬੀ ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ੍ਹ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ

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### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1031 BASIC PUNJABI (in lieu of Punjabi (Compulsory))

**Course outcomes** 

CO1:ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਨੂੰ ਸਿਖਾਉਣ ਦੀ ਪ੍ਰਕਿਰਿਆ ਵਿਚ ਪਾ ਕੇ ਇਕ ਹੋਰ ਭਾਸ਼ਾ ਸਿੱਖਣ ਦਾ ਮੌਕਾ ਪ੍ਰਦਾਨ ਕਰਨਾ ਹੈ। ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੈਂਤੀ ਅੱਖਰੀ, ਅੱਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤਰਾਵਾਂ (ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ) ਲਗਾਖ਼ਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ) ਦੀ ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।

CO2: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ ਦੀ ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ (ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਸਿਸ਼ਰਤ ਸ਼ਬਦ,ਮੁਲ ਸ਼ਬਦ,ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ) ਤੋਂ ਜਾਣੂ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।

CO3: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਤੋਂ ਜਾਣੂ ਕਰਵਾਇਆ ਜਾਵੇਗਾ।

CO4: ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਪੰਜਾਬੀ ਵਿਚ ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰ੍ਹਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤੱਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ ਸਿਖਾਉਣਾ ਹੈ।

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1031 BASIC PUNJABI (in lieu of Punjabi (Compulsory))

ਸਮਾਂ : 3 ਘੰਟੇ L-T-P 4-0-0

Maximum Marks: 100 Theory : 70 CA: 30

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹੋਣਗੇ।ਸੈਕਸ਼ਨ A-D ਤੱਕ ਦੇ ਪ੍ਰਸ਼ਨ ਯੂਨਿਟ I-IV ਵਿਚੋਂ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- 3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 14 ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ ਪ੍ਰਸ਼ਨਾਂ

ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

#### ਪਾਠਕ੍ਰਮ

### ਯੂਨਿਟ-I

ਪੈਂਤੀ ਅੱਖਰੀ, ਅੱਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤ੍ਰਵਾਂ (ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ) ਲਗਾਖ਼ਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ) : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ ।

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### ਯੂਨਿਟ-II

ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ (ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਮਿਸ਼ਰਤ ਸ਼ਬਦ, ਮੂਲ ਸ਼ਬਦ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ) 14 ਅੰਕ

### ਯੂਨਿਟ-III

ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇ ਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਤ। 14 ਅੰਕ

### ਯੂਨਿਟ-IV

ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰ੍ਹਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ ।

14 ਅੰਕ

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL-1431 PUNJAB HISTORY AND CULTURE (FROM EARLIEST TIMES TO C 320) (Special paper in lieu of Punjabi Compulsory) (For those students who are not domicile of Punjab)

### **COURSE OUTCOMES**

After completing Semester I and course on Punjab History and Culture students of History will be able to identify and have a complete grasp on the sources and writings of Ancient Indian History of Punjab

CO1: Identify and understand the sources and physical features of Punjab

CO 2: To study the earliest civilisation (Indus Valley Civilization) and original home of Aryans

CO 3: To examine the Social, Religious and Economic life during Early and Later Vedic Age

CO 4: To comprehend the Buddhist, Jain and Hindu faith and their relevance in the modern time

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL-1431 PUNJAB HISTORY AND CULTURE (FROM EARLIEST TIMES TO C 320) (Special paper in lieu of Punjabi Compulsory) (For those students who are not domicile of Punjab)

Examination Time: 3 Hours Credits L-T-P: 4-0-0 Contact Hours: 4 Hrs/Week Max. Marks: 100 Theory: 70 CA: 30

Instructions for the Paper Setter:

- 1. Question paper shall consist of four Units
- 2. Examiner shall set 8 questions in all by selecting Two Questions of equal marks from each Unit.
- 3. Candidates shall attempt 5 questions in 1000 words, by at least selecting One Question from each Unit and the 5<sup>th</sup> question may be attempted from any of the four Units.
- 4. Each question will carry 14 marks

### Unit-I

- 1. Physical features of the Punjab
- 2. Sources of the ancient history of Punjab

### Unit-II

- 3. Harappan Civilization: social, economic and religious life of the Indus Valley People.
- 4. The Indo-Aryans: Original home

### Unit-III

- 5. Social, Religious and Economic life during Early Vedic Age.
- 6. Social, Religious and Economic life during Later Vedic Age.

### UNIT-IV

- 7. Teachings of Buddhism
- 8. Teachings of Jainism

### Suggested Readings

- B.N. Sharma, Life in Northern India, Delhi. 1966.
- Budha Parkash, Glimpses of Ancient Punjab, Patiala, 1983.
- Chopra, P.N., Puri, B.N., and Das, M.N.(1974). A Social, Cultural and Economic History of India, Vol. I, New Delhi: Macmillan India.
- L. M Joshi (ed.), History and Culture of the Punjab, Art-I, Patiala, 1989 (3<sup>rd</sup> edition)
- L.M. Joshi and Fauja Singh (ed.), History of Punjab, Vol.I, Patiala 1977.

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAM–1102 COMMUNICATION SKILLS IN ENGLISH – I

#### **Course Outcomes:**

At the end of this course, the students will develop the following Skills:

**CO 1**: Reading skills that will facilitate them to become an efficient reader

**CO 2**: Through reading skills, the students will have an ability to have a comprehensive understanding of the ideas in the text and enhance their critical thinking

**CO 3**: Writing skills of students which will make them proficient enough to express ideas in clear and grammatically correct English

**CO 4**: The skill to use an appropriate style and format in writing letters (formal and informal) and resume, memo, notices, agenda, minutes

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAM–1102 COMMUNICATION SKILLS IN ENGLISH – I

L-T-P: 3-0-1 Credits: 4 Examination Time: 3 Hours. Max. Marks: 100 Theory: 50 Practical: 20 CA: 30

Instructions for the paper setter and distribution of marks:

The question paper will consist of four sections. The candidate will have to attempt five questions in all selecting one from each section and the fifth question from any of the four sections. Each question will carry 10 marks. Each question can be sub divided into two parts.

 $(10 \times 5 = 50)$ 

Section-A: Two questions of theoretical nature will be set from Unit I.

Section-B: Two comprehension passages will be given to the students from Unit II.

Section-C: Two questions will be given from Unit III.

Section-D: Two questions will be set from Unit IV.

#### Unit I

**Reading Skills:** Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings.

#### Unit II

Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

#### Activities:

- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

#### Unit III

**Writing Skills:** Guidelines for effective writing; writing styles for application, personal letter, official/ business letter.

#### **Activities:**

- Formatting personal and business letters.
- Organizing the details in a sequential order

### Unit IV

Resume, memo, notices, agenda, minutes, Tips for effective blog writing **Activities:** 

- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/boards
- Writing blogs

#### **Recommended Books:**

- 1) Oxford Guide to Effective Writing and Speaking by John Seely.
- 2) Business Communication, by Sinha, K.K. Galgotia Publishers, 2003.
- 3) Business Communication by Sethi, A and Adhikari, B., McGraw Hill Education2009.
- 4) Communication Skills by Raman, M. & S. Sharma, OUP, New Delhi, India (2011).

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAM–1102 COMMUNICATION SKILLS IN ENGLISH – I

L-T-P: 3-0-1 Credits: 4 Examination Time: 3 Hours. Max. Marks: 100 Theory: 50 Practical: 20 CA: 20

#### **PRACTICAL / ORAL TESTING**

Course Contents:	
1. Oral Presentation with/without audio visual aids	(10 Marks)
2. Group Discussion	(05 Marks)
3. Practical File form Syllabi	(05 Marks)

#### **Questions:**

1. Oral Presentation will be of 5 to 7 minutes duration. (Topic can be given in advance or it can be of student's own choice). Use of audio-visual aids is desirable.

2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1113 DIGITAL ELECTRONICS

#### **Course Outcomes:**

After the completion of this course, the student will be able to:

- CO1: Comprehend and apply the number systems.
- CO2: Apply K-map for simplification of Boolean expressions and implement them with Logic Gates.
- CO3: Design advanced and complex combinational and sequential circuits.
- CO4: Demonstrate the internal structure of semiconductor memory.

### Bachelor of Computer Applications (Honours) Semester – I Session 2024-25 COURSE CODE: BCAL–1113 DIGITAL ELECTRONICS

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours. Max. Marks: 100 Theory: 70 CA: 30

#### **Instructions for Paper Setter -**

Eight questions of equal marks (14 marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

#### UNIT-I

**Number System:** Introduction to number system (Binary, Octal, Decimal, Hexadecimal and Arbitrary), number conversion system, binary arithmetic. 1's and 2's complement.

**Representation of signed binary numbers, Non-weighted Codes:** BCD Code, Excess-3 Code, Grey Code, ASCII, Integer and floating point representation.

#### UNIT- II

**Logic Gates and Boolean algebra:** Logic gates, Universal Gates, Boolean Algebra Laws of Boolean Algebra, canonical forms of Boolean expressions, K-Map.

#### UNIT-III

**Combinational Circuits**: Half, Full, BCD and Parallel Adder, Half and full Subtractor, Multiplexers, Demultiplexers, Multiplexer Tree, Demultiplexer Tree, Decoder, Encoder: Priority and 7-segment Display, Parity Generator and Checker.

RAM and ROM Chips, Read and Write timing diagrams, Address Selection Logic, Design of Large memory using smaller chips.

### **UNIT-IV**

**Sequential Circuits:** Introduction, RS-latch, Flip-flops (Truth Table, Internal Circuit, Excitation Table), clock and Triggering, Registers: SISO, SIPO, PISO, PIPO, Counters: Up, Down, Up/Down, Ring, Twisted Ring.

#### **References / Textbooks:**

1. M. Morris Mao, Digital Design, Pearson Publication (2018), 6<sup>th</sup> Edition.

- 2. Ronald J. Tocci, Digital Systems, Pearson (2009), 10<sup>th</sup> Edition.
- 3. Morris Mano, Digital Logic and Computer Design, Pearson Education (2004), 1<sup>st</sup> Edition.
- 4. V.K. Jain, Arti Agarwal, Digital Electronics, Genius Publications Pvt. Ltd. (2018), 1st Edition
- 5. K. Meena, Principles of Digital Electronics, Prentice Hall India Learning Private Limited (2009), 1<sup>st</sup> Edition
- 6. William H. Gothmann, Digital Electronics: An introduction to Theory and Practice, Prentice Hall India Learning Private Limited (1982), 2<sup>nd</sup> Edition

Note: The latest editions of the books should be followed.

### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAL–1114 INTRODUCTION TO PROGRAMMING – C

### **Course Outcome:**

After passing course the student will be able to:

CO1: Comprehend the working of various programming constructs involved in C Programming.

CO2: Design C program and control its sequence using various control statements.

CO3: Apply programming concepts such as arrays, functions and strings to provide solution in different problem domains.

CO4: Work with pointers, structures and union.

### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAL–1114 INTRODUCTION TO PROGRAMMING – C

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours Max. Marks: 100 Theory: 70 CA: 30

#### **Instructions for Paper Setter -**

Eight questions of equal marks (14 Marks each) are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section

#### **UNIT-I**

**Fundamentals:** Character set, Identifiers and Key Words, Data types, Constants, Variables, Expressions, Statements, Symbolic Constants.

**Operations and Expressions:** Arithmetic operators, Unary operators, Relational Operators, Logical Operators, Assignment and Conditional Operators, Library functions. Data Input and Output statements

### UNIT-II

**Control Statements:** Preliminaries, While, Do-while and for statements, Nested loops, If-else, Switch, Break – Continue statements.

**Program Structure Storage Class:** Storage Classes- Auto, extern, register and static about library functions.

#### UNIT-III

**Functions:** Brief overview, defining, accessing functions, passing arguments to function, specifying argument data types, function prototypes, recursion.

**Arrays:** Defining, processing an array, passing arrays to a function, multi–dimensional arrays. **Strings:** String declaration, string functions and string manipulation

### **UNIT-IV**

**Structures & Unions:** Defining and processing a structure, user defined data types, structures and pointers, passing structures to functions, Unions.

**Pointers:** Fundamentals, pointer declaration, passing pointer to a function, pointer and one dimensional arrays, operation on pointers, pointers & multi–dimensional arrays of pointers, passing functions, other functions, more about pointer declarations.

#### **References/Textbooks:**

1. E Balagurusamy, Programming in ANSI C, Tata McGraw-Hill, 2002.

- 2. Byron Gottfried, Schaum's Outline Programming with C, McGraw Hill, 1996.
- 3. Brian W. Kernighan, Dennis M. Ritchie, The C Programming language, Prentice Hall, 1988.
- 4. Stephen G. Kochan, Programming in C, Pearson Education, 2015.

Note: The latest editions of the books should be followed.

#### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAL–1115 INTRODUCTION TO COMPUTERS AND INFORMATION TECHNOLOGY

### **Course Outcome:**

After passing course the student will be able to:

CO1: comprehend about computer hardware, operating system concepts and various system software.

CO2: Identify various input, output and memory devices.

CO3: Apply word processing software to create professional and academic documents.

CO4: Create effective and well-formatted presentation.

#### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAL–1115 INTRODUCTION TO COMPUTERS AND INFORMATION TECHNOLOGY

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours Max. Marks: 100 Theory: 70 CA: 30

#### **Instructions for Paper Setter -**

Eight questions of equal marks (14 Marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section

#### UNIT-I

**Fundamentals of Computer:** Introduction to computer, Applications of computer, Components of computers (Input unit, Output Unit, Memory Unit & CPU).

Software: Application Software, Service software, System software, booting a System.

**Memories:** Primary Memory -RAM (Working and Its types), ROM (Types of ROM). Secondary Memory - Hard Disk (Structure of a hard disk, working, concept of tracks, sectors, clusters, cylinders).

### UNIT-II

**Input Devices:** Keyboards, Mouse, Joystick, Light Pen and Data Scanning devices (scanner, OCR, OMR, MICR, Bar Code Reader, Card Reader)

Output Devices: Monitor, Printers (laser printer, dot matrix printer, ink jet printer)

**Word Processing:** Introduction to Office, word processing & its features, Parts of window of word (Title bar, menu bar, status bar, and ruler), understanding the Ribbon, Use of Office Button and Quick Access Toolbar, Creation of new documents, opening document, insert a document into another document.

### UNIT-III

**Word Processing:** Page setup, margins, gutters, font properties, Alignment, page breaks, header & footer, deleting, moving, replace, editing text in document, saving a document, spell checker, printing a document. Creating a table, entering and editing, Text in tables. Changing format of table, height, width of row/column. Editing, deleting Rows, columns in table. Adding picture, page colors and Watermarks, Borders, shading, Templates, wizards, drawing objects.

**Presentation:** Introduction to PowerPoint, Exploring menus, starting a new slide, saving presentation, moving/rearranging slides, printing slides. Applying theme to presentation, Views

(slide View, slide sorter, notes view, outline view), Formatting & enhancing text formatting. Displaying slide show, adding multimedia. Slide transitions, applying Animation, Timing slide display, adding movies & sounds.

#### **UNIT-IV**

**Spreadsheet:** Introduction to Worksheet/Spreadsheets, creating a simple Worksheet, Computations in a Worksheet, Printing the Worksheet, Graphs, Data Sorting, Filling, Filtering data. **Functions and Formulas:** Applying Formulas. Inserting and Editing a Function, Auto Calculate and Manual Calculation, Defining Names, Using and Managing Defined Names, Displaying and Tracing Formulas, Understanding Formula Errors, Using Logical Functions (IF), Using Financial Functions (PMT), Using Database Functions (DSUM), Using Lookup Functions (VLOOKUP), User Defined and Compatibility Functions, Date & Time Functions, Math & Trig Functions, Statistical Functions, Text Functions, Logical Functions. **Working with Pivot Tables:** Creating a PivotTable, Specifying PivotTable Data, changing a PivotTable's Calculation, Filtering and Sorting a PivotTable, working with PivotTable Layout, Grouping PivotTable Items, updating a PivotTable, formatting a PivotTable, creating a PivotChart.

#### **References/Textbooks:**

- 1. Joyce Cox, Joan Lambert and Curtis Frye, Microsoft office Professional 2010 Step by Step, Microsoft Press, 2010.
- 2. V. Rajaraman, Neeharika Adabala, Fundamentals of Computers, PHI Learning, 2015.
- 3. P.K. Sinha, Computer Fundamentals, BPB Publications, 2004.
- 4. Anshuman Sharma, A book of Fundamentals of Information Technology, Lakhanpal Publishers, 5<sup>th</sup> Edition.
- 5. Peter Norton, Peter Norton's Computing Fundamentals, McGraw-Hill Technology Education, 2006.

Note: The latest editions of the books should be followed.

Bachelor of Computer Applications (Honours) Semester – I

### (Session 2024-25) COURSE CODE: BCAP-1116 LAB ON PROGRAMMING - C

L-T-P: 0-0-2 Credits: 2 Examination Time: 3 Hours Max. Marks: 50 Practical:35 CA: 15

Lab based on course code BCAL-1114

### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAP–1117 LAB ON OFFICE PACKAGE

L-T-P: 0-0-2 Credits: 2 Examination Time: 3 Hours

Max. Marks: 50 Practical:35 CA: 15

Lab based on course code BCAL-1115

### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAM–1110 INTRODUCTION TO THE INTERNET

### **Course Outcome:**

After passing course the student will be able to:

- CO1: Understand Internet basics and its working.
- CO2: Gain knowledge of email service on different mail servers.
- CO3: Understand different Internet protocols and search engines.

CO4: To give hands-on experience and provide a comprehensive, non-technical, hands-on overview of the Internet based services.

#### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAM–1110 INTRODUCTION TO THE INTERNET (Theory)

L-T-P: 2-0-1 Credits: 3 Examination Time: 3+3 Hours Max. Marks: 100 Theory: 40 Practical: 30 CA: 30

#### **Instructions for Paper Setter -**

Eight questions of equal marks (8 Marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section

### UNIT I

Origin, growth and evolution of the Internet; the impact of the Internet; terminology: web pages, website, web browser, web server, bandwidth; Connect to the Internet: hardware and software, types of Internet connections, Internet Service Providers; Navigating different types of websites and online resources.

Student should explore the local market to understand the internet service providers, rates, bandwidth etc.

#### UNIT II

Email Communication: Email Etiquette and Best Practices, Managing and Organizing Emails Email Tools and Features, identifying spam and phishing emails

Searching on the Internet: Overview of internet resources and search engines, Basics of Using Search Engines -How search engines work, Basic search techniques and tips, Understanding search engine results pages (SERPs), Using search operators (e.g., AND, OR, NOT), Utilizing advanced search features (e.g., Google Advanced Search)

#### UNIT III

Online Tools for Productivity: Introduction to productivity tools (e.g., Google Workspace, Microsoft Office 365), Cloud storage and file management (e.g., Google Drive, Dropbox), Collaboration and Communication Tools: Online communication etiquette and best practices, using collaboration tools (e.g., Google Docs, Slack, Microsoft Teams), Effective virtual meeting strategies (e.g., Zoom, Google Meet)

### UNIT IV

Building Online Presence: Creating and maintaining a professional online profile (e.g., LinkedIn), Personal branding and digital portfolios, Networking strategies for academic and career growth, Understanding digital footprints and online reputation.

Digital citizenship and respectful online behaviour, balancing screen time and managing digital distractions

#### **References / Textbooks:**

- 1. Douglas E Comer, The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works, CRC Press
- 2. Faithe Wempen, Digital Literacy For Dummies 1st Edition

#### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: BCAM–1110 INTRODUCTION TO THE INTERNET (Theory)

L-T-P: 2-0-1 Credits: 3 Examination Time: 3+3 Hours Max. Marks: 100 Theory: 40 Practical: 30 CA: 30

#### Instructions for the examiners: -

Two questions of equal marks strictly as per the syllabus and based on the practical exercises covered in the semester. Questions may be subdivided into parts (not exceeding four). Candidates will attempt ONE question, explain their answer by writing on the answer sheet, and then implement the same on the computer. Examiner will evaluate both the answers (theory as well as practical). The viva should also be conducted alongside, and the student is asked viva questions related to the question and the solution he/she is working on during the exam.

#### Lab exercises based on:

- Identifying internet connections and Configuring internet connection on PC/Laptop
- Email Tools and features
- Using the Google search engine and explore Bing
- Using Google Docs, Google Drive for document preparation and storage
- Collaboration using Slack
- Analyzing LinkedIn profiles
- Creating your own LinkedIn profile
- Virtual meeting platforms: Microsoft Teams, Zoom, Google Meet

### Bachelor of Computer Applications (Honours) Semester – I (Session 2024-25) COURSE CODE: VACF- 1491 FOUNDATION COURSE

#### Nature of Course: Audit Course (Value Added)Course

#### **Duration: 30 hours**

Course intended for: Semester I students of undergraduate degree programs of all25 streams.

Course Credits: 2 Course

### PURPOSE & AIM

This course has been designed to strengthen the intellectual foundation of all the new entrants in the college. One of the most common factors found in the students seeking admission in college after high school is the lack of an overall view of human history, knowledge of global issues, peaks of human intellect, social/political thinkers and inventors & discoverers who have impacted human life. For a student, the process of transition from school to college is full of apprehension and skepticism regarding adapting themselves to new system. The Foundation Programme intends to bridge the gap between high school and college education and develop an intellectual readiness and base for acquiring higher education.

### **INSTRUCTIONAL OBJECTIVES**

- to enable the students to realise their position in the whole saga of time and space
- to inculcate in them an appreciation of life, cultures and people across the globe
- to promote, in the students, an awareness of human intellectual history
- to make them responsible and humane world citizens so that they can carry forward the rich legacy of humanity

### **LEARNING OUTCOMES**

After the completion of this Audit course, students will be able to

- learn how past societies, systems, ideologies, governments, cultures and technologies were built, how they operated, and how they have changed
- understand how the rich history of the world helps us to paint a detailed picture of where we stand today

- understand the Vedic theism, Upanishads Philosophy and doctrines of Jainism, Buddhism andSikhism
- > acquire knowledge of women rights and courage to face day to day challenges
- acknowledge the changes in society, religion and literature in the renaissance period and the importance of empathy and compassion for humanity
- learn about the prominent Indians (Men and Women) who contributed significantly in freedom struggle, education, economic development and in the formation and evolution of our nation
- understand meaning of race and how that concept has been used to justify exclusion, inequality, and violence throughout history and the origin of civil right movements to fight for equality, liberty and fraternity
- critically evaluate the socio-political and economic issues at global level and its implications in the present
- > upgrade and enhance learning technological skills and striking a balance between technology and their well being
- > take pride in learning the saga of Indian Past Culture and Heritage
- > understand the rich legacy of KMV and its progressive endeavours

MODULE	TITLE	CONTACT HOURS
Ι	Introduction and Initial Assessment	2
II	The Human Story	3
III	The Vedas and the Indian Philosophy	2.5
IV	The Journey of Woman The Story and the Dream	2.5
V	Changing Paradigms in Society, Religion & Literature	2.5
VI	Makers of Modern India	2.5
VII	Racism: Story of the West	2.5
VIII	Modern World at a Glance: Political & Economic Perspective	2.5
IX	Technology Vis a Vis Human Life	2.5
X	My Nation My Pride	2.5
XI	The KMV Experience	2.5
XII	Final Assessment, Feedback and Closure	2.5

### **EXAMINATION**

- Total Marks: 50 (Final Exam: 35; Internal Assessment: 15)
- Final Exam: multiple choice quiz. Marks 35; Time: 1 hour
- Internal Assessment: 15 (Assessment: 5; Attendance: 10)
   Comparative assessment questions (medium length) in the beginning and close of the program. Marks: 5; Time: 0.5 hour each at the beginning and end.
- Total marks: 50 converted to grade for final result
- Grading system: 90% marks & above: A grade
  - 80% 89% marks: B grade
    70% 79% marks: C grade
    60% 69% marks: D grade
    50% 59% marks: E grade
    Below 50% marks: F grade (Fail must give the exam again)

### SYLLABUS

#### Module I Being a Human: Introduction & Initial Assessment

- Introduction to the programme
- Initial Assessment of the students through written answers to a couple of questions

#### **Module 2 The Human Story**

- Comprehensive overview of human intellectual growth right from the birth of human history
- The wisdom of the Ancients
- Dark Middle Ages
- Revolutionary Renaissance
- Progressive modern times
- Most momentous turning points, inventions and discoveries

### Module 3 The Vedas and the Indian Philosophy

- Origin, teachings and significance of The Vedas
- Upnishads and Puranas
- Karma Theory of *The Bhagwad Gita*
- Main tenets of Buddhism & Jainism
- Teachings of Guru Granth Sahib

### Module 4 Changing Paradigms in Society, Religion & Literature

- Renaissance: The Age of Rebirth
- Transformation in human thought
- Importance of humanism
- Geocentricism to heliocentricism
- Copernicus, Galileo, Columbus, Darwin and Saint Joan
- Empathy and Compassion

#### Module 5 Woman: A Journey through the Ages

- Status of women in pre-vedic times
- Women in ancient Greek and Roman civilizations
- Women in vedic and ancient India
- Status of women in the Muslim world
- Women in the modern world
- Crimes against women
- Women labour workforce participation
- Women in politics
- Status of women- our dream

#### Module 6 Makers of Modern India

- Early engagement of foreigners with India
- Education: The first step to modernization
- Railways: The lifeline of India
- Raja Ram Mohan Roy, Gandhi, Nehru, Vivekanand, Sardar Patel etc.
- Indira Gandhi, Mother Teresa, Homai Vyarawala etc.
- The Way Ahead

### Module 7 Racism: Story of the West

- European beginnings of racism
- Racism in the USA Jim Crow Laws
- Martin Luther King Jr. and the battle against racism
- Apartheid and Nelson Mandela
- Changing face of racism in the modern world

### Module 8 Modern World at a Glance: Political & Economic Perspective

- Changing world order
- World War I & II
- UNO and The Commonwealth
- Nuclear Powers; Terrorism
- Economic Scenario: IMF, World Bank

• International Regional Economic Integration

### Module 9 Technology Vis a Vis Human Life

- Impact of technology on modern life
- Technological gadgets and their role in our lives
- Technology and environment
- Consumerism and materialism
- Psychological and emotional consequences of technology
- Harmonizing technology with ethics and humaneness

### Module 10 My Nation My Pride

- Indian Past Culture and Heritage
- Major Discoveries (Medicinal and Scientific)
- Vedic Age
- Prominent Achievements
- Art, Architecture and Literature

### Module 11 The KMV Experience

- Rich Legacy of KMV
- Pioneering role in women emancipation and empowerment
- KMV Contribution in the Indian Freedom Struggle
- Moral, cultural and intellectual heritage of KMV
- Landmark achievements
- Innovative initiatives; international endeavours
- Vision, mission and focus
- Conduct guidelines for students

### Module 12 Final Assessment, Feedback & Closure

- Final multiple choice quiz
- Assessment through the same questions asked in the beginning
- Feedback about the programme from the students
- Closure of the programme

### PRESCRIBED READING

• The Human Story published by Dawn Publications

### Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2421 PUNJABI (COMPULSORY)

#### **COURSE OUTCOMES**

CO1:ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਕਵਿਤਾ ਤੇ ਕਹਾਣੀ ਪੁਸਤਕ ਦੇ ਕਹਾਣੀ ਭਾਗ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਕਹਾਣੀ ਨੂੰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਕਹਾਣੀ ਜਗਤ ਨਾਲ ਜੋੜਣਾ ਹੈ।

CO2: ਗੱਦ ਪ੍ਰਵਾਹ ਪੁਸਤਕ ਨੂੰ ਸਿਲੇਬਸ ਵਿਚ ਸ਼ਾਮਿਲ ਕਰ ਕੇ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੜ੍ਹਣ ਦੀ ਰੁਚੀ ਨੂੰ ਪੈਦਾ ਕਰਨਾ ਹੈ ਅਤੇ ਮੁੱਲਵਾਨ ਗਿਆਨ ਦੇਣਾ ਹੈ।

CO3: ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ, ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ, ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਦਾ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ -ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

CO4: ਦਫ਼ਤਰੀ ਚਿੱਠੀ ਪੱਤਰ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਮੇਂ ਅਤੇ ਮਿਹਨਤ ਦੀ ਬੱਚਤ ਕਰਨ ਬਾਰੇ ਦੱਸਣਾ ਹੈ। ਮੁਹਾਵਰੇ / ਅਖਾਣ ਦੀ ਵਰਤੋਂ ਨਾਲ ਗੱਲਬਾਤ ਵਿਚ ਪਰਪੱਕਤਾ ਆਉਂਦੀ ਹੈ।ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਗੱਲਬਾਤ ਵਿਚ ਨਿਖਾਰ ਲਿਆਉਣ ਦਾ ਕੰਮ ਕਰਨਗੇ।

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2421 PUNJABI (COMPULSORY)

ਸਮਾਂ : 3 ਘੰਟੇ L-T-P 4-0-0 Maximum Marks: 100 Theory: 70 CA: 30

14 ਅੰਕ

14 ਅੰਕ

14 ਅੰਕ

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹੋਣਗੇ।ਸੈਕਸ਼ਨ A-D ਤੱਕ ਦੇ ਪ੍ਰਸ਼ਨ ਯੂਨਿਟ I-IV ਵਿਚੋਂ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- 3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 14 ਅੰਕ ਹਨ।

4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

ਪਾਠਕ੍ਰਮ ਅਤੇ ਪਾਠ ਪੁਸਤਕਾਂ

ਯੂਨਿਟ-I

ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਕਵਿਤਾ ਤੇ ਕਹਾਣੀ (ਸੰਪਾ. ਡਾ. ਰਮਿੰਦਰ ਕੌਰ, ਡਾ. ਮੇਘਾ ਸਲਵਾਨ) ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ। (ਕਹਾਣੀ ਭਾਗ)

<b>^</b>		<i>.</i> <b>^</b>
ਕਹਾਣੀ	ਦਾ	ਸਾਰ/ਵਿਸ਼ਾਵਸਤੂ
	-	

ਯੂਨਿਟ-II

ਗੱਦ ਪ੍ਰਵਾਹ (ਰੇਖਾ ਚਿਤਰ ਤੇ ਹਲਕੇ ਲੇਖ)

(ਸੰਪਾ. ਡਾ. ਬਿਕਰਮ ਸਿੰਘ ਘੁੰਮਣ ਅਤੇ ਜਸਪਾਲ ਸਿੰਘ),

ਗਰੁ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।

(ਵਿਸ਼ਾ ਵਸਤੁ/ਸਾਰ)

#### ਯੂਨਿਟ-III

(ੳ) ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ, ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ (ਅ) ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ

# ਯੁਨਿਟ-IV

ਦਫ਼ਤਰੀ ਚਿੱਠੀ ਪੱਤਰ	
ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ	14 ਅੰਕ

Bachelor of Computer Applications (Honours) Semester - II

(Session 2024-25) COURSE CODE: BCAL–2031 BASIC PUNJABI (in lieu of Punjabi (Compulsory))

**Course outcomes** 

CO1: ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ (ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ) ਨੂੰ ਪੜ੍ਹਾਉਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਅੰਦਰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਅਮੀਰੀ ਦਾ ਅਤੇ ਬਾਰੀਕੀਆਂ ਨੂੰ ਸਮਝਣ ਲਈ ਵੱਖਰੇ -ਵੱਖਰੇ ਸਿਧਾਂਤਾਂ ਦਾ ਵਿਕਾਸ ਕਰਨਾ ਹੈ।

CO2: ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ (ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ, ਮਿਸ਼ਰਤ ਵਾਕ, ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨ ਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ) ਦੀ ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਇਸ ਦੀ ਬਣਤਰ ਤੋਂ ਜਾਣੂ ਹੋਣਗੇ ਅਤੇ ਉਨ੍ਹਾਂ ਦੀ ਭਾਸ਼ਾ ਤੇ ਪਕੜ ਮਜਬੂਤ ਹੋਵੇਗੀ।

CO3: ਪੈਰ੍ਹਾ ਰਚਨਾ ਅਤੇ ਸੰਖੇਪ ਰਚਨਾ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਬੁੱਧੀ ਨੂੰ ਤੀਖਣ ਕਰਦਿਆਂ ਉਨਾਂ ਦੀ ਲਿਖਣ ਪ੍ਰਤਿਭਾ ਨੂੰ ਉਜਾਗਰ ਕਰਨਾ ਹੈ।

CO4: ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ ਚਿੱਠੀ ਪੱਤਰ ਲਿਖਣ ਦਾ ਮਨੋਰਥ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਇਸ ਕਲਾ ਵਿਚ ਨਿਪੁੰਨ ਕਰਨਾ ਹੈ। ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ ਦੀ ਵਰਤੋਂ ਨਾਲ ਗੱਲਬਾਤ ਵਿਚ ਪਰਪੱਕਤਾ ਆਉਂਦੀ ਹੈ।ਇਹ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਗੱਲਬਾਤ ਵਿਚ ਨਿਖਾਰ ਲਿਆਉਣ ਦਾ ਕੰਮ ਕਰਨਗੇ। Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2031 BASIC PUNJABI (in lieu of Punjabi (Compulsory))

ਸਮਾਂ : 3 ਘੰਟੇ L-T-P 4-0-0

Maximum Marks: 100 Theory: 70 CA: 30

ਅੰਕ ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹੋਣਗੇ। ਸੈਕਸ਼ਨ A-D ਤੱਕ ਦੇ ਪ੍ਰਸ਼ਨ ਯੂਨਿਟ I-IV ਵਿਚੋਂ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 14 ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ ਪ੍ਰਸ਼ਨਾਂ

ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

#### ਪਾਠਕ੍ਰਮ

# ਯੂਨਿਟ-I

ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ (ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ) 14 ਅੰਕ

# ਯੂਨਿਟ-II

ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ

- (ੳ) ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)
- (ਅ) ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨ ਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)
- 14 ਅੰਕ

# ਯੂਨਿਟ-III

ਪੈਰ੍ਹਾ ਰਚਨਾ

ਸੰਖੇਪ ਰਚਨਾ

14 ਅੰਕ

ਯੂਨਿਟ-IV

ਚਿੱਠੀ ਪੱਤਰ (ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ)

#### ਅਖਾਣ

ਉਠੇ ਤਾ ਉੱਠ ਨਹੀਂ ਰੇਤੇ ਦੀ ਮੁੱਠ ,ਉੱਦਮ ਅੱਗੇ ਲੱਛਮੀ ਪੱਖੇ ਅੱਗੇ ਪੈਣ ,ਉਹ ਦਿਨ ਡੁੱਬਾ ਜਦੋਂ ਘੋੜੀ ਚੜ੍ਹਿਆ ਕੁੱਬਾ ,ਉੱਚੀ ਦੁਕਾਨ ਫਿੱਕਾ ਪਕਵਾਨ ,ਉਲਟੀ ਵਾੜ ਖੇਤ ਨੂੰ ਖਾਏ ,ਉੱਚਾ ਲੰਮਾ ਗੱਭਰੁ ਪੱਲੇ ਠੀਕਰੀਆਂ , ਅਸ਼ਰਫ਼ੀਆਂ ਦੀ ਲੁੱਟ ਤੇ ਕੋਲਿਆਂ ਤੇ ਮੁਹਰਾਂ, ਅੱਗੇ ਸੱਪ ਪਿੱਛੇ ਸ਼ੀਂਹ, ਆਦਰ ਤੇਰੀ ਚਾਦਰ ਨੂੰ ਬਹਿਣਾ ਤੇਰੇ ਗਹਿਣੇ ਨੂੰ, ਆਪੇ ਫਾਥੜੀਏ ਤੈਨੂੰ ਕੌਣ ਛੁਡਾਏ, ਆਪਣੇ ਹੱਥੀਂ ਆਪਣਾ ਆਪੇ ਹੀ ਕਾਜ ਸਵਾਰੀਐ, ਆਰੀ ਨੂੰ **ਇੱਕ ਪਾਸੇ ਦੰਦੇ ਜਹਾਨ ਨੂੰ ਦੋਹੀਂ ਪਾਸੀਂ,**ਅੱਖੀਂ ਵੇਖ ਕੇ ਮੱਖੀ ਨਹੀਂ ਨਿਗਲੀ ਜਾਂਦੀ ,ਅੰਦਰ ਹੋਵੇ ਸੱਚ ਤਾਂ ਕੋਠੇ ਚੜ੍ਹ ਕੇ ਨੱਚ ,ਆਪੇ ਮੈਂ ਰੱਜੀ ਪੁੱਜੀ ਆਪੇ ਮੇਰੇ ਬੱਚੇ ਜਿਉਣ ,ਆਪ ਕੁਚੱਜੀ ਵਿਹੜੇ ਨੂੰ ਦੋਸ਼ ,ਅੰਨ੍ਹਾ ਵੰਡੇ ਰਿਊੜੀਆਂ ਮੁੜ ਮੁੜ ਆਪਣਿਆਂ ਨੂੰ ,ਅਕਲ ਵੱਡੀ ਕੇ ਮੱਝ ,ਅੰਨ੍ਹਿਆਂ ਵਿੱਚ ਕਾਣਾ ਰਾਜਾ ,ਆਪਣੀ ਪੀੜ੍ਹੀ ਹੇਠ ਸੋਟਾ ਫੇਰਨਾ ,ਇਕ ਅਨਾਰ ਸੇ ਬਿਮਾਰ ,ਇਕ ਹੱਥ ਨਾਲ ਤਾੜੀ ਨਹੀਂ ਵੱਜਦੀ ,ਇੱਕ ਚੁੱਪ ਸੇ ਸੁੱਖ ਝੱਟ ਮੰਗਣੀ ਪੱਟ ਵਿਆਹ ,ਸਹਿਜ ਪੱਕੇ ਸੋ ਮੀਠਾ ਹੋਵੇ ,ਦਾਲ ਵਿੱਚ ਕਾਲਾ ਹੋਣਾ , ਸੰਗ ਤਾਰੇ ਕੁਸੰਗ ਡੋਬ, ਸੱਦੀ ਨਾ ਬੁਲਾਈ ਮੈਂ ਲਾੜੇ ਦੀ ਤਾਈਂ ,ਸਵੈ ਭਰੋਸਾ ਵੱਡਾ ਤੋਸਾ,ਸੇ ਦਿਨ ਚੋਰ ਦੇ ਇਕ ਦਿਨ ਸਾਧ ਦਾ ,ਸੱਪ ਦਾ ਬੱਚਾ ਸਪੋਲੀਆ ,ਸੱਪ ਮਰ ਜਾਵੇ ਲਾਠੀ ਵੀ ਨਾ ਟੁੱਟੇ ,ਸਾਈਆਂ ਕਿਤੇ ਵਧਾਈਆਂ ਕਿਤੇ ,ਹੰਕਾਰਿਆ ਸੋ ਮਾਰਿਆ , **ਹੱਥ ਨੂੰ ਹੱਥ ਧੋਂਦਾ ਹੈ**, ਹਾਥੀ ਲੰਘ ਗਿਆ ਪੁਛ ਰਹਿ ਗਈ, ਕੋਹ ਨਾ ਚੱਲੀ ਬਾਬਾ ਤਿਹਾਈ,ਕੁੱਛੜ ਕੁੜੀ ਸ਼ਹਿਰ ਢੰਡੋਰਾ ,ਕੋਲਿਆਂ ਦੀ ਦਲਾਲੀ ਵਿੱਚ ਮੁੰਹ ਕਾਲਾ ,ਕਰੇ ਕੋਈ ਭਰੇ ਕੋਈ , ਖਿੱਦੋ ਫ਼ਰੋਲਿਆਂ ਲੀਰਾਂ ਹੀ ਨਿਕਲਦੀਆਂ ਹਨ, ਖ਼ਵਾਜੇ ਦਾ ਗਵਾਹ ਡੱਡੂ ,ਖੇਤੀ ਖਸਮਾਂ ਸੇਤੀ, ਖਰਬੁਜ਼ੇ ਨੂੰ ਦੇਖ ਕੇ ਖਰਬੁਜ਼ਾ ਰੰਗ ਬਦਲਦਾ ਹੈ, ਖੁਹ ਪੁੱਟਦੇ ਨੂੰ ਖਾਤਾ ਤਿਆਰ, ਘੜੇ ਨੂੰ ਹੱਥ ਲਾਇਆ ਸਾਰਾ ਟੱਬਰ ਤਿਹਾਇਆ,ਘਰ ਦਾ ਭੇਤੀ ਲੰਕਾ ਢਾਹੇ ,ਘਰ ਦੀ ਕੁੱਕੜੀ ਦਾਲ ਬਰਾਬਰ ,ਚਿੰਤਾ ਚਿਖਾ ਬਰਾਬਰ , ਛੱਜ ਤਾਂ ਬੋਲੇ ਛਾਣਨੀ ਵੀ ਬੋਲੇ,ਛੋਟੀ ਮੂੰਹ ਵੱਡੀ ਗੱਲ, ਜੋ ਰਾਤੀਂ ਜਾਗਣ ਕਾਲੀਆਂ ਸੋ ਹੀ ਖਾਣ ਸੁਖਾਲੀਆਂ ,ਜਾਂਦੇ ਚੋਰ ਦੀ ਲੰਗੋਟੀ ਹੀ ਸਹੀ ,ਜਿਸ ਦੀ ਕੋਠੀ ਦਾਣੇ ਉਹਦੇ ਕਮਲੇ ਵੀ ਸਿਆਣੇ ,ਜਿਹੜੇ ਗੱਜਦੇ ਨੇ ਉਹ ਵਰ੍ਹਦੇ ਨਹੀਂ, ਝੱਟ ਮੰਗਣੀ ਪੱਟ ਵਿਆਹ, ਨਵਾਂ ਨੌ ਦਿਨ ਪੁਰਾਣਾ ਸੌ ਦਿਨ, ਪਾਣੀ ਵਿੱਚ ਸੋਟਾ ਮਾਰਿਆਂ ਪਾਣੀ ਦੋ ਨਹੀਂ ਹੋ ਜਾਂਦੇ, ਵਿੱਦਿਆ ਵਿਚਾਰੀ ਤਾਂ ਪਰਉੱਪਕਾਰੀ, ਵੇਲੇ ਦੀ ਨਮਾਜ਼ ਕੁਵੇਲੇ ਦੀਆਂ ਟੱਕਰਾਂ, ਇਕ ਦਰ ਬੰਦ ਸੌ ਦਰ ਖੁੱਲ੍ਹਾ, ਬਿੱਲੀ ਦੇ ਸਿਰ੍ਹਾਣੇ ਦੁੱਧ ਨਹੀਂ ਜੰਮਦਾ,ਰੱਸੀ ਸੜ ਗਈ ਵੱਟ ਨ੍ਹੀਂ ਗਿਆ

# ਮੁਹਾਵਰੇ

ਉਸਤਾਦੀ ਕਰਨੀ, ਉਂਗਲ ਕਰਨੀ, ਉੱਲੂ ਬਣਾਉਣਾ ,ਉੱਚਾ ਸਾਹ ਨਾ ਕੱਢਣਾ, ਉੱਡਦੇ ਫਿਰਨਾ ,ਉੱਘ ਸੁੱਘ ਮਿਲਣੀ,ਅੱਖਾਂ ਵਿਚ ਰੜਕਣਾ , ਉਂਗਲਾਂ ਤੇ ਨਚਾਉਣਾ, ਉਧੜ–ਧੁੰਮੀ ਮਚਾਉਣਾ, ਊਠ ਦੇ ਮੂੰਹ ਵਿੱਚ ਜ਼ੀਰਾ ਦੇਣਾ, ਅੱਗ ਲਾਉਣਾ ,ਆਵਾ ਉਤ ਜਾਣਾ ,ਅਸਮਾਨ ਨੂੰ ਟਾਕੀਆਂ ਲਾਉਣਾ, ਅੱਖਾਂ ਵਿੱਚ ਲਾਲੀ ਉਤਰਨੀ ,ਅਕਲ ਤੇ ਪਰਦਾ ਪੈਣਾ, ਅੱਖਾਂ ਅੱਗੇ ਖੋਪੇ ਚਾੜ ਦੇਣੇ, ਅੱਖਾਂ ਉੱਤੇ ਬਿਠਾਉਣਾ, ਅੱਲੇ ਫੱਟਾਂ ਤੇ ਲੂਣ ਛਿੜਕਣਾ, ਆਪਣੇ ਅੱਗੇ ਕੰਡੇ ਬੀਜਣਾ, ਆਪਣੇ ਤਰਕਸ਼ ਵਿੱਚ ਤੀਰ ਹੋਣਾ, ਸਿਰ ਚੜ੍ਹਨਾ, ਈਨ ਮੰਨਣੀ, ਈਦ ਦਾ ਚੰਨ ਹੋਣਾ, ਇੱਟ ਨਾਲ ਇੱਟ ਖੜਕਾਉਣਾ,ਸਿਰ ਫਿਰਨਾ, ਸਿਰ ਤੇ ਚੜ੍ਹਨਾ ,ਸਬਰ ਦਾ ਘੁੱਟ ਭਰਨਾ, ਸਿਰ ਪੈਰ ਨਾ ਹੋਣਾ, ਸਿਰ ਖੁਰਕਣ ਦੀ ਵੇਹਲ ਨਾ ਹੋਣਾ, ਸੱਠੀ ਦੇ ਚੌਲ ਖੁਆਣੇ, ਹੱਥ ਧੇ ਕੇ ਪਿੱਛੇ ਪੈਣਾ, ਹੱਥੀਂ ਛਾਂਵਾਂ ਕਰਨੀਆਂ, ਹੱਡ ਭੰਨਣੇ, ਹੱਥ ਤੰਗ ਹੋਣਾ ,ਹੱਥ ਮਲਣਾ,ਹੱਥ ਪੈਰ ਮਾਰਨਾ, ਹੱਥ ਉੱਤੇ ਹੱਥ ਧਰ ਕੇ ਬੈਠਣਾ, ਹੱਥ ਵਟਾਉਣਾ, ਹਵਾ ਦੇ ਘੋੜੇ ਸਵਾਰ ਹੋਣਾ, ਕੰਨੀਂ ਕਤਰਾਉਣਾ, ਕੰਨ ਤੇ ਜੂੰ ਨਾ ਸਰਕਣਾ, ਕੰਨ ਘੇਸਲ ਮਾਰਨੀ, ਕਣਕ ਨਾਲ ਘੁਣ ਵੀ ਪਿਸਣਾ, ਕੱਖ ਭੰਨ ਕੇ ਦੂਹਰਾਂ ਨਾ ਕਰਨਾ, ਕਲਮ ਦੇ ਧਨੀ ਹੋਣਾ, ਕਿਤਾਬੀ ਕੀੜਾ ਹੋਣਾ, ਖ਼ਾਨਾ ਖ਼ਰਾਬ ਹੋਣਾ, ਖਾਨਿਓ ਜਾਣਾ, ਖੂਹ ਨਿਖੁੱਟ ਜਾਣਾ, ਗੁੱਡੀ ਚੜ੍ਹਨੀ, ਗਲ ਪੈਣਾ ,ਗੰਗਾ ਨਹਾਉਣਾ ,ਚੜ੍ਹ ਮੱਚਣੀ, ਚੰਦ ਚਾੜ੍ਹਨਾ, ਚਾਦਰ ਵੇਖ ਕੇ ਪੈਰ ਪਸਾਰਨਾ ,ਦਕਮਾ ਦੇਣਾ ,ਛੱਕੇ ਛੜਾਉਣਾ ,ਛਾਪਾ ਮਾਰਨਾ, ਛਿੱਲ ਲਾਉਣੀ ,ਛਿਂਕੇ ਟੰਗਣਾ

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2431 PUNJAB HISTORY AND CULTURE (C 320 TO 1000 A.D.) (Special paper in lieu of Punjabi Compulsory) (For those students who are not domicile of Punjab)

# **COURSE OUTCOMES**

After completing Semester II and course on Ancient History of Punjab students will be able to understand:

CO 1: The reasons and impact of Alexander's invasions and to comprehend various factors leading to rise and fall of empires and emergence of new dynasties and their administration specifically of Maurya rule in general and Ashok in particular

CO 2: art and architecture of Gupta period and the Indo-Greek style of architecture under Gandhara School

CO 3: To have an insight into the socio-cultural history under Harshvardhan and Punjab under the stated period

CO 4: To enable students to have thorough insight into the various forms/styles of Architecture and synthesis of Indo - Greek Art and Architecture in Punjab

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2431 PUNJAB HISTORY AND CULTURE (C 320 TO 1000 A.D.) (Special paper in lieu of Punjabi Compulsory) (For those students who are not domicile of Punjab)

Examination Time: 3 Hours Credits L-T-P: 4-0-0 Max. Marks: 100 Theory: 70 CA: 30

Instructions for the Paper Setter:

- 1. Question paper shall consist of four Units
- 2. Examiner shall set 8 questions in all by selecting Two Questions of equal marks from each Unit.
- Candidates shall attempt 5 questions in 1000 words, by at least selecting One Question from each Unit and the 5<sup>th</sup> question may be attempted from any of the four Units.
- 4. Each question will carry 14 marks

### UNIT-I

- 1. Alexander's Invasion's and Impact
- 2. Administration of Chandragupta Maurya with special reference to reforms introduced by Ashok

### **UNIT-II**

- 3. The Kushans: Gandhar School of Art
- 4. Gupta Empire: Golden Period-Social and cultural life, Art and Architecture)

# UNIT-III

- 5. The Punjab under Harshvardhana-Society and Religion During the time of Harshvardhana
- 6. Socio-cultural History of Punjab from 7<sup>th</sup> to 1000 A.D.

# UNIT IV

- 7. Development of Languages and Education with Special reference to Taxila
- 8. Development to Art and Architecture

# Suggested Readings

- B.N. Sharma: Life in Northern India, Delhi. 1966
- Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
- L. M Joshi (ed), *History and Culture of the Punjab*, Art-I, Punjabi University, Patiala, 1989 (3<sup>rd</sup> edition)
- L.M. Joshi and Fauja Singh (ed.), *History of Punjab*, Vol.I, Punjabi University, Patiala, 1977.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAM–2102 COMMUNICATION SKILLS IN ENGLISH – II

# **COURSE OUTCOMES:**

At the end of this course, the students will develop the following skills:

**CO 1**: Enhancement of listening skills with the help of listening exercises based on conversation, news and TV reports

**CO 2:** The ability of Note-Taking to be able to distinguish the main points from the supporting details and the irrelevant information from the relevant one

**CO 3**: Improvement of speaking skills enabling them to converse in a specific situation

**CO 4:** Acquisition of knowledge of phonetics which will help them in learning about correct pronunciation as well as effective speaking

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAM–2102 COMMUNICATION SKILLS IN ENGLISH – II

L-T-P: 3-0-1 Credits: 4 Examination Time: (3+3) Hours Max. Marks: 100 Theory: 50 Practical: 20 CA: 30

Instructions for the paper setter and distribution of marks:

The question paper will consist of four sections. The candidate will have to attempt five questions in all selecting one from each section and the fifth question from any of the four sections. Each question will carry 10 marks. Each question can be sub divided into two parts. (10 x 5 = 50)

Section-A: Two questions of theoretical nature will be set from Unit I.

Section-B: Two questions will be given to the students from Unit II.

Section-C: Two questions will be given from Unit III.

Section-D: Two questions will be set from Unit IV

### Unit I

Listening Skills: Barriers to listening; effective listening skills; feedback skills.

Activities: Listening exercises - Listening to conversation, News and TV reports

### Unit II

Attending telephone calls; note taking and note making **Activities:** Taking notes on a speech/lecture

### Unit III

**Speaking and Conversational Skills**: Components of a meaningful and easy conversation, understanding the cue and making appropriate responses, forms of polite speech, asking and providing information on general topics

Activities: 1) Making conversation and taking turns

2) Oral description or explanation of a common object, situation or concept

# Unit IV

The study of sounds of English, Stress

Situation based Conversation in English Essentials of Spoken English

Activities: Giving Interviews

### **Recommended Books:**

- 1. Oxford Guide to Effective Writing and Speaking by John Seely.
- 2. Business Communication by Sethi, A and Adhikari, B., McGraw Hill Education 2009.
- 3. Communication Skills by Raman, M. & S. Sharma, OUP, New Delhi, India (2011).
- 4. A Course in Phonetics and Spoken English by J. Sethi and P.V. Dhamija, Phi Learning.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAM–2102 COMMUNICATION SKILLS IN ENGLISH – II

L-T-P: 3-0-1 Credits: 4 Examination Time: (3+3) Hours Max. Marks: 100 Theory: 50 Practical: 20 CA: 30

### PRACTICAL / ORAL TESTING

#### **Course Contents:**

1. Oral Presentation with/without audio visual aids(10 Marks)2. Mock Interview(05 Marks)3. Listening to any recorded or live material and asking oral questions for listening<br/>comprehension(05 Marks)

# **Questions:**

1. Oral Presentation will be of 5 to 7 minutes duration. (Topic can be given in advance or it can be of student's own choice). Use of audio-visual aids is desirable.

2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2113 COMPUTER ARCHITECTURE

# **Course Outcomes:**

After passing course the student will be able to:

CO1: Comprehend various registers and its micro-operations, computer instructions and basic design of computer.

CO2: Comprehend various instruction formats and addressing modes.

CO3: Identify the hierarchy of computer memory and their organization.

CO4: Comprehend I/O organization, Pipeline and vector processing.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2113 COMPUTER ARCHITECTURE

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours Max. Marks: 100 Theory: 70 CA: 30

# **Instructions for Paper Setter -**

Eight questions of equal marks (14 Marks each) are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

#### UNIT-I

**Information Representation:** Register Transfer, Various Registers, Implementing Common Bus Using Multiplexers: Logical; Arithmetic & Shift Micro-operations.

**Basic Computer Design** Instruction Codes, Interfacing various Registers, Computer Instructions, Timing Signals, Instruction Cycle, Design of a Basic Computer.

### **UNIT-II**

**CPU Design** Stack Organized CPU, Instruction Formats, Addressing Modes, Program Control, Hardwired & Micro programmed (Wile's Design) Control Unit.

### UNIT-III

**Memory Organization** Memory Hierarchy, Designs & Concepts of Main Memory, Auxiliary Memory, Associative Memory, Cache and Virtual Memory.

### UNIT-IV

I/O Organization I/O Interface, Modes of Transfer, Program Interrupt, DMA & I/O Processor.

**Pipeline & Vector Processing** Parallel Processing Pipelining, Parallel & Distributed Computers, SISD, SIMD& MISD, MIMD Machines, Vector Processing.

#### **References/Textbooks:**

- 1. Morris M. Mano, Computer System Architecture, Prentice Hall, 1992.
- 2. J.P. Hayes, Computer Architecture and Organization, McGraw Hill, 1998.
- 3. J.L. Hennessy D.A Patterson, and D. Goldberg, Computer Architecture A Quantitative Approach, Pearson Education Asia, 2006.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2114 DATABASE MANAGEMENT SYSTEM

# **Course Outcomes:**

After passing course the student will be able to:

CO1: Understand data, database and database models.

CO2: Apply relational algebra and relational calculus for performing queries of different types.

CO3: Gain knowledge of normalization and transaction control.

CO4: Create, manage and access database using SQL and PL/SQL.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2114 DATABASE MANAGEMENT SYSTEM

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours Max. Marks: 100 Theory: 70 CA: 30

# **Instructions for Paper Setter -**

Eight questions of equal marks (14 Marks each) are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

#### UNIT-I

Introduction: Introduction to Database, Database management system. Structure of database system, Advantages and Disadvantages, Schema, levels of database system, Relational model, Hierarchical model, Network model.

E-R diagram: Entity set, Relationship set, Attributes, Generalization, Participation, different keys used in a relational system.

### UNIT-II

DBA, responsibilities of DBA, Codd's Rules, Relational Algebra: Selection, Projection, Rename, Union, Intersection, Set Difference, Cartesian Product.

Introduction to SQL, Data types, Constraints, DDL: Creating Table, Deleting Table, Alter Table (Renaming table, changing name of column, adding/dropping column, adding dropping constraint, changing type of column).

#### **UNIT-III**

DML: Insertion, Deletion and Update. Inserting multiple records, Deleting and update records having reference to another table (Cascade/Restrict/Set Null).

Querying Data: Operators, Where, Order By, Group By and having clause. Aliases, Handling NULL values, displaying distinct records, built in Functions, Aggregate Functions and Wildcards.

### **UNIT-IV**

DCL: Creating and managing users/roles, Grant and Revoke commands.

Introduction to Normalization – need and advantages of normalization, Role of Candidate Key, INF, 2NF, 3NF, BCNF, 4NF.

Query Processing and Optimization: Steps and Components. Views in SQL.

# **References/Textbooks:**

- 1. C.J. Date, An Introduction to Database Systems, Pearson Education 2000.
- 2. H. F. Korth&Silverschatz, A., Database System Concepts, Tata McGraw Hill, 2010.
- 3. Elmasri & Navathe, Fundamentals of Database Systems, Addison-Wesley, 2011.
- Hoffer, Prescott, Mcfadden, Modern Database Management, Paperback International, 2012.
- 5. Martin Gruber, Understanding SQL, BPB Publication, 1994.

Note: The latest editions of the books should be followed.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2115 INTRODUCTION TO OBJECT ORIENTED PROGRAMMING-I

# **Course Outcomes:**

After the completion of this course, the student will be able to:

- CO1: Comprehend the concepts of Object-Oriented Programming Paradigm.
- CO2: Identify the use of access specifiers and different types of constructors in class.
- CO3: Apply function and operator overloading.
- CO4: Comprehend different types of inheritance and polymorphism.

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAL–2115 INTRODUCTION TO OBJECT ORIENTED PROGRAMMING- I

L-T-P: 4-0-0 Credits: 4 Examination Time: 3 Hours Max. Marks: 100 Theory: 70 CA: 30

### **Instructions for Paper Setter -**

Eight questions of equal marks (14 Marks each) are to set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section

#### UNIT -I

**Programming Paradigms**: Introduction to the object oriented approach towards programming by discussing Traditional, Structured Programming methodology.

**Objects & Classes:** Object Definition, Instance, Encapsulation, Data Hiding, Abstraction, Inheritance, Messages, Method, Polymorphism, Classes.

### UNIT -II

**Object Oriented Programming using C++:** Characteristics of OOP, Overview of C++, I/O using cout and cin, Objects and Classes, Member functions and data, private & public, constructor & destructor, Constructor Overloading, Types of Constructors.

### UNIT -III

**Function Overloading:** Function Overloading, Default Arguments, Ambiguity in Function Overloading.

**Operator Overloading:** Overloading unary and binary operators, Type Conversion using Operator Overloading

### **UNIT-IV**

**Inheritance:** Concept of inheritance, Base & derived classes, Access Specifiers, Class Hierarchies, Types of Inheritance with examples.

**Virtual Functions and Polymorphism:** Virtual functions, friend functions, static function, this pointer, polymorphism, Types of Polymorphism with examples, templates, class templates.

# **References / Textbooks:**

- 1. HerberttSchildt, C++: The Complete Reference, Tata McGraw-Hill Education India, 4th Edition.
- Bjarne Stroustrup, The C++ Programming Language, Addison Wesley Professional (2013), 4th Edition

- 3. Bjarne Stroustrup, A Tour of C++ (C++ In-Depth Series), Addison Wesley Professional (2018), 2nd Edition
- 4. G.S. Baluja, C++ Program Design (w/CD), Khanna Book Publishing Company (2015), 2nd edition.
- 5. Stanley Lippman, Josee Lajoie, Barbara Moo, C++ Primer, Addison-Wesley Professional (2012), 5th edition.
- 6. Richard Johnsonbaugh and Martin Kalin, Object Oriented Programming in C++, Pearson Education (1999), 2<sup>nd</sup> Edition

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAP–2116 LAB ON DATABASE MANAGEMENT SYSTEM

L-T-P: 0-0-2 Credits: 2 Examination Time: 3 Hours Max. Marks: 50 Practical:35 CA: 15

Lab based on course code BCAL-2114

# Bachelor of Computer Applications (Honours) Semester – II (Session 2024-25) COURSE CODE: BCAP–2117 LAB ON OBJECT ORIENTED PROGRAMMING - I

L-T-P: 0-0-2 Credits: 2 Examination Time: 3 Hours Max. Marks: 50 Practical:35 CA: 15

Lab based on course code BCAL-2115

# Bachelor of Computer Applications (Honours) Semester - II

# (Session 2024-25) COURSE CODE: AECD-2161 DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION

#### **Course Outcomes**

After completing the course the students will be able to:

CO1. Learn how to include factual data about what substance abuse is; warning signs of addiction; information about how alcohol and specific drugs affect the mind and body;

CO 2. Focus on substance abuse education- is teaching individuals about drug and alcohol abuse and how to avoid, stop, or get help for substance use disorders.

CO3. Learn how to be supportive during the detoxification and rehabilitation process

CO 4. Understand that substance abuse education is important for students alike; there are many misconceptions about commonly used legal and illegal substances, such as alcohol and marijuana

# Bachelor of Computer Applications (Honours) Semester - II

### (Session 2024-25) COURSE CODE: AECD-2161 DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION

Examination Time: 3 Hours Credits L-T-P: 2-0-0 Contact Hours: 2 Hrs/Week Max. Marks: 50 Theory: 35 CA: 15

### **Instructions for the Paper Setter:**

- 1. Question paper shall consist of four Units
- 2. Examiner shall set 8 questions in all by selecting Two Questions of equal marks from each Unit.
- 3. Candidates shall attempt 5 questions in 500 words by at least selecting One Question from each Unit and the 5<sup>th</sup> question may be attempted from any of the four Units.
- 4. Each question will carry 7 marks

### UNIT-I

# Meaning of Drug Abuse:

- 1. Meaning, Nature, Types and Extent of Drug Abuse in India and Punjab.
- Consequences of Drug Abuse for: Individual: Education, Employment, Income. Family: Violence. Society: Crime, Social Disorganization

### **UNIT-II**

### Management of Drug Abuse:

- 1. Medical management: medication for treatment and to withdrawal effects.
- 2. Psychiatric Management: Counseling, Behavioral and Cognitive therapy.

### UNIT-III

#### **Prevention of Drug abuse:**

(i) Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

(ii) School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students

# **UNIT-IV**

# **Controlling Drug Abuse:**

1. Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials

# **Suggested Readings:**

1. Ahuja, Ram (2003), Social Problems in India, Rawat Publication, Jaipur.

2.Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.

3. Inciardi, J.A. 1981. The Drug Crime Connection. Beverly Hills: SagePublications.

4. Kapoor. T. (1985) Drug epidemic among Indian Youth, New Delhi: MittalPub.

5.Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.

6.National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical

Epidemiological Unit, All India Institute of Medical Sciences, 2004.

7.Sain, Bhim 1991, *Drug Addiction Alcoholism*, Smoking obscenity New Delhi: Mittal Publications.

8.Sandhu, Ranvinder Singh, 2009, Drug Addiction in Punjab: A Sociological Study.

Amritsar: Guru Nanak Dev University.

9. Singh, Chandra Paul 2000. Alcohol and Dependence among Industrial Workers: Delhi: Shipra.

10.Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation,* Cambridge University Press.