

Sr. No. 008

Course Title : Moral Education
Course Code : SECM- 2502 ✓
May 2023

Programme		Semester	2nd	Session : 2022-23
Signature of Candidate		Examination Roll No.		
Controller's Stamp		Signature of Invigilator		
		Date Stamp		

Time : 1 hour

Maximum Marks : 20

Note: Attempt any 20 questions out of given 25. Each question carries equal marks. (1×20=20)

1. What is the other name for inner voice?

- (a) Instinct
- (b) Sympathy
- (c) Understanding
- (d) None of the all

2. To be Happy one needs to be

- (a) Energetic
- (b) Stress free
- (c) Positive
- (d) All of the above

3. Cybercrime is a type of crime that involves :

- (a) Computing device
- (b) Network
- (c) Target
- (d) All of these

4. Defamation means:

- (a) Stalking a person
- (b) Editing her picture
- (c) Harming reputation of a person
- (d) Using his/her financial information

5. What qualities should a person have to fulfil his/her ambition?
- (a) Focus
 - (b) Concentration
 - (c) Dedication
 - (d) All of the above
6. Self defence means :
- (a) Training for physically, psychologically and intellectually strong personalities
 - (b) Training to protect in time of danger
 - (c) Training only for girls
 - (d) None of the above
7. How can you secure your devices?
- (a) By using Passwords
 - (b) By using Antivirus/Antimalware software
 - (c) Not using open Wifi
 - (d) All of these
8. What is the Significance of Family:-
- (a) Family set the stage for future relations
 - (b) Families are source of affection and encouragement
 - (c) People raised in good families develop healthier relationship with others
 - (d) All of above
9. The Act that deals with Cyber crimes in India is:
- (a) I.T. Act 2000
 - (b) The Criminal Law Act
 - (c) National Security Act
 - (d) The Evidence Act
10. The harder you work towards a goal, the easier it is to achieve it.
- (a) True
 - (b) False
11. What are the basic requirements of Youth today?
- (a) Patience
 - (b) Tolerance
 - (c) Respect
 - (d) All of the above

12. Computing devices have become:
- (a) Highly Powered
 - (b) Accurate
 - (c) Portable
 - (d) All of these
13. Technology is a double-edged sword that has many positives, but negative aspects as well.
- (a) True
 - (b) False
14. What value do we show when we solve problems without losing our temper?
- (a) Compassion
 - (b) Honesty
 - (c) Courtesy
 - (d) Patience
15. What should be done when someone has a disagreement with other?
- (a) Quarrel
 - (b) Communicate
 - (c) Stop conversation
 - (d) Ignore
16. Which portal has been set up to facilitate online complaints of cyber crime?
- (a) <https://india.gov.in>
 - (b) <https://punjab.gov.in>
 - (c) <https://delhi.in>
 - (d) <https://cybercrime.gov.in>
17. Gratitude means
- (a) Thanking for what you have
 - (b) Asking for more
 - (c) Taking everything, you have for granted
 - (d) None of the above
18. We take responsibility of our Life by
- (a) Stopping to complain
 - (b) Making oneself happy
 - (c) Living in the present moment.
 - (d) All of the above

19. What is the proper way to behave when the teacher is teaching in class?
- (a) Making noise and disturbing others
 - (b) Listening attentively and raising up your hand to ask questions
 - (c) Escaping from the class
 - (d) Sleeping and eating in class
20. Having a positive attitude about the future means that you are _____.
- (a) Confident
 - (b) Resilient
 - (c) Optimistic
 - (d) Ignorant
21. How many Fundamental duties are there in India?
- (a) Six
 - (b) Four
 - (c) Seven
 - (d) Eleven
22. Which one is not a Fundamental Right?
- (a) Right to equality
 - (b) Right to freedom
 - (c) Right to freedom of religion
 - (d) Right to damage public property
23. What is the holistic and encompassing state of mind that creates inner harmony?
- (a) Prosperity
 - (b) Happiness
 - (c) Self-organisation
 - (d) All of the above
24. Which of these are multi-function devices?
- (a) Smart watch
 - (b) Smart phone
 - (c) Tablet
 - (d) All of these
25. What is the value of Sanskara?
- (a) Assistant in character creation
 - (b) Necessary for the family
 - (c) Necessary for the country
 - (d) All of the above

(Only for Reappear Candidates)

Paper Code: 9201

<u>Programme</u>	<u>Exam Code</u>
Bachelor of Business Administration	105402
Bachelor of Computer Application	107202
Bachelor of Vocation (Textile Designing & Apparel Technology)	111202
Bachelor of Vocation (Hospitality and Tourism)	113902

(Semester: II)

Course Title: Drug Abuse: Problem, Management and Prevention (Compulsory)

Course Code: AECD-2161 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt Five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

SECTION-A

1. How can a family control the drug abuser?
ਇੱਕ ਪਰਿਵਾਰ ਨਸ਼ਾ ਕਰਨ ਵਾਲੇ ਨੂੰ ਕਿਵੇਂ ਕਾਬੂ ਕਰ ਸਕਦਾ ਹੈ?
एक परिवार ड्रग एब्जूस करने वाले को कैसे नियंत्रित कर सकता है?
2. How far is it important to keep a scrutiny on the children?
ਬੱਚਿਆਂ 'ਤੇ ਛਾਣਬੀਣ ਕਰਨੀ ਕਿੰਨੀ ਕੁ ਜ਼ਰੂਰੀ ਹੈ?
बच्चों पर निगरानी रखना कहीं तक जरूरी है?

SECTION-B

3. What role do parents play in preventing drug abuse?
मापे नसे दी दुरदरते नूँ रेकट दिँच बी भूमिका निडाउंसे उन?
नशीली दवाओं के दुरुपयोग को रोकने में माता-पिता की क्या भूमिका है?
4. Discuss in detail the role of School in preventing Drug-Abuse.
नसापेठी नूँ रेकट दिँच सकूल दी भूमिका घाटे दिसघात दिँच दिचात करे?
नशीली दवाओं के दुरुपयोग को रोकने में विद्यालय की भूमिका की विस्तार से
बर्चा कीजिए?

SECTION-C

5. What is the role of media in preventing Drug Abuse?
नसिआ दी दुरदरते नूँ रेकट दिँच मीडिया दी बी भूमिका है?
नशीली दवाओं के दुरुपयोग को रोकने में मीडिया की क्या भूमिका है?
6. What will be the minimum standards of services in India for Drug prevention?
डरंग दी रेकषाम लही भारत दिँच सेवादा दे षंटे-षंटे मापसंड बी सेटले?
नशीली दवाओं की रोकथाम के लिए भारत में सेवाओं के न्यूनतम मानक क्या होंगे?

SECTION-D

7. Write an essay on NDPS (Narcotic Drugs and Psychotropic Substances) act related with drug abuse.
नसिले पदार्था दी दुरदरते नाल मसंपत ऐनडीपीएस (नारकोटिक डरंगस अंड
साइकोट्रोपिक सबस्टेंस) ऐक्ट से ऐक लेख लिखे?
नशीली दवाओं के दुरुपयोग से संबंधित एनडीपीएस (नारकोटिक ड्रग्स एंड
साइकोट्रोपिक सबस्टेंस) अधिनियम पर एक निबंध लिखें
8. What are the types of legal interventions for drug abuse?
नसिले पदार्था दी दुरदरते लही कानूनी दखल दीआ बिमामा बी उन?
नशीली दवाओं के दुरुपयोग के लिए कानूनी हस्तक्षेप के प्रकार क्या हैं?

Paper Code: 2106

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARL-2031
Bachelor of Science (Non-Medical)	103302	BSNL-2031
Bachelor of Science (Medical)		BSML-2031
Bachelor of Science (Economics)		BECL-2031 ✓
Bachelor of Science (Computer Science)		BCSL-2031
Bachelor of Commerce	108502	BCRL-2031 ✓
Bachelor of Business Administration	105402	BBRL-2031 ✓
Bachelor of Commerce (Honours)	109102	BCOL-2031 ✓
Bachelor of Arts (Journalism & Mass Communications)	108702	BJML-2031
Bachelor of Science (Fashion Designing)	108602	BFDL-2031 ✓
Bachelor of Science (Home Science)	108202	BHSL-2031
Bachelor of Computer Applications	107202	BCAL-2031 ✓
Bachelor of Science (Information Technology)	105702	BITL-2031 ✓
Bachelor of Science (Bio-Technology)	107402	BBTL-2031
Bachelor of Arts (Honours) English	107502	BOEL-2031
Bachelor of Science (Honours) Mathematics	112412	BOML-2031

Course Title: Basic Punjabi
Semester-II
(70)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: 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 ਅੱਠ ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ-ਏ

1. ਨਾਂਵ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦੱਸੋ, ਕੋਈ ਦਸ ਨਾਂਵ ਸ਼ਬਦ ਵਾਕਾਂ ਵਿਚ ਵਰਤੋਂ?
2. ਕਿਰਿਆ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿਓ। ਕਿਰਿਆ ਲਗਾ ਕੇ ਕੋਈ ਦਸ ਵਾਕ ਬਣਾਓ?

ਸੈਕਸ਼ਨ-ਬੀ

3. ਸੰਯੁਕਤ ਵਾਕ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ, ਕੋਈ ਪੰਜ ਸੰਯੁਕਤ ਵਾਕ ਬਣਾਓ?
4. ਹੁਕਮੀ ਵਾਕ ਕੀ ਹੁੰਦੇ ਹਨ, ਕੋਈ ਪੰਜ ਉਦਾਹਰਨਾਂ ਦਿਓ?

ਸੈਕਸ਼ਨ-ਸੀ

5. ਹੇਠ ਲਿਖਿਆਂ ਵਿਚੋਂ ਕਿਸੇ ਇਕ ਵਿਸ਼ੇ ਤੇ ਪੈਰਾ ਰਚਨਾ ਲਿਖੋ।
 - 1) ਫੈਸ਼ਨ
 - 2) ਖੂਨ ਦਾਨ
 - 3) ਮੋਬਾਇਲ ਦੇ ਲਾਭ ਹਾਨੀਆਂ

6. ਹੇਠ ਲਿਖੇ ਅਖਾਣਾਂ ਵਿਚੋਂ ਕੋਈ ਚਾਰ ਵਾਕਾਂ ਵਿਚ ਵਰਤੋ
 1. ਉੱਚੀ ਦੁਕਾਨ ਫਿੱਕਾ ਪਕਵਾਨ
 2. ਸਹਿਜ ਪੱਕੇ ਹੋ ਮੀਠਾ ਹੋਏ
 3. ਇਕ ਅਨਾਰ ਸੌ ਬਿਮਾਰ
 4. ਹੰਕਾਰਿਆ ਸੌ ਮਾਰਿਆ
 5. ਚਿੰਤਾ ਚਿਖਾ ਬਰਾਬਰ
 6. ਦਾਲ ਵਿਚ ਕਾਲਾ ਹੋਣਾ

ਸੈਕਸ਼ਨ-ਡੀ

7. ਲਾਊਡ ਸਪੀਕਰਾਂ ਨੂੰ ਬੰਦ ਕਰਵਾਉਣ ਲਈ ਕਿਸੇ ਅਖਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ ਲਿਖੋ।
8. ਹੇਠ ਲਿਖੇ ਮੁਹਾਵਰਿਆਂ ਵਿਚੋਂ ਕੋਈ ਚਾਰ ਦੇ ਅਰਥ ਦੱਸ ਕੇ ਵਾਕਾਂ ਵਿਚ ਵਰਤੋ
 1. ਉੱਗਲ ਕਰਨੀ
 2. ਅੱਖਾਂ ਵਿੱਚ ਰੜਕਣਾ
 3. ਸਿਰ ਤੇ ਚੜ੍ਹਨਾ

4. ਲਾਲ ਪੀਲਾ ਹੋਣਾ
5. ਪੱਕਾ ਲੱਗਣਾ
6. ਈਚ ਦਾ ਸੰਦ ਹੋਣਾ

Paper Code: 2118

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARL-2175 ✓
Bachelor of Science (Economics)	103302	BECL-2175 ✓

Course Title: Economics (Macroeconomics)
Semester-II
(40)

Time Allowed: 3 Hours

Max Marks: 80

Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section A

1. What is Psychological Law of consumption? Explain it with suitable diagram. 16
2. Explain Keynesian Theory of Income and employment. 16

Section B

3. Explain Samuleson Theory of Trade cycles.
4. What is meant by MEC? Discuss the various short-run and Long-run factors affecting MEC. 16

Section C

5. Critically examine the liquidity Preference Theory of investment. 16
6. Discuss the composition and functions of a money market? 16

Section D

7. What is inflation. Discuss its causes and cures. 16
8. Define monetary Policy. Discuss its main instruments. 16

21/1/23 (EVE)

Lib

Exam Code: 103202
(50)

Paper Code: 2138

Programme: Bachelor of Arts
Semester-II

Course Title: English (Elective)

Course Code: BARL-2198 ✓

Time Allowed: 3 Hours

Max Marks: 80

Section-A

1. Attempt any three of given literary terms in about 100 words approximately. $3 \times 4 = 12$
Burlesque, Elogy, Hyperbole, Dramatic monologue, point of view, tragicomedy.

Section-B

2. Attempt any 12 words for transcription out of the given. 16 $12 \times 1 = 12$
- | | | | |
|---------------|------------------|----------------|-------------|
| 1. Garage | 2. Perfect [adj] | 3. Perfect [v] | 4. Hello |
| 5. Cadet | 6. exit | 7. Rebel (n) | 8. Rebel(v) |
| 9. Conduct(n) | 10. Conduct(v) | 11. Consume | 12. Idiot |
| 13. Police | 14. Sandwich | 15. Talent | 16. Career |

Section-C

3. Attempt anyone of the following reference to the context in about 300 words. $1 \times 8 = 8$
"Tale bearers are as bad as the tale makers"
OR

"To pity, without the power to relieve, is still more painful than to ask and be denied."

4. Attempt any two of the following in about 500 words.

2x10=20

- a. Bring out the humour in *The School for Scandal* by R.B. Sheridan.
- b. Discuss '*The School for Scandal*' as Comedy of Manners.
- c. Compare and contrast the characters of Joseph Surface and his brother Charles Surface.

Section-D

5. Attempt any one of the reference to the contexts (in 300 words approximately)

1x8=8

- a. Conquer taste, and you will have conquered the self.

OR

- b. I've taken to eating beef; and I don't think I'm any worse for it... Now I want to suggest why not you people starting eating beef?

6. Attempt any two of the following in about 500 words.

2x10=20

- a. Comment on the title of the novel '*Vendor of Sweets*' by R.K. Narayan.
- b. Bring out the East Vs West conflict in R.K. Narayan's '*Vendor of Sweets*'.
- c. Sketch the character of Mali in '*Vendor of Sweets*' by R.K. Narayan.

(Old Syllabus (2021-22))

Exam Code: 103202

Paper Code: 9210

BACHELOR OF ARTS [Semester II]
Course Title: ENGLISH (ELECTIVE)

Course Code: BARL -2198

Examination time: 3 Hours

Theory: 80 marks

Section A

Question 1.

a.) Answer any three out of the given five literary terms in about 100 words:

I Elegy II hyperbole III Dramatic monologue
IV Metaphor V Point of view **3x4=12**

b.) Attempt any 12 out of given 16 words for phonetic transcription:

I talent II perfect (v) III consume IV idiot
V hello VI exit VII data VIII garage
IX wolf X wool XI arch XII crèche
XIII dose XIV gauge XV ghost XVI sing.

12x1 =12

Section B

Question 2. Explain anyone of the following with reference to the context:

a.) 'No doctor could do more; a very rare type of brain tumour ; if one knew why it came, one would also know how to get rid of it.'

b.) 'Conquer taste ,and you will have conquered the self.' **1x8=8**

Question 3. Answer any two of the following questions in about 500 words.

a.) What is the effect of Hinduism and Gandhian philosophy on Jagan in the Vendor of Sweets by R.K. Narayan.

b.) Discuss the multiple themes of The Vendor of Sweets by RK Narayan.

c.) Comment on the Western influence in the novel A Vendor of Sweets by RK Narayan. **10x2=20**

Section C

Question 4. Explain anyone of the following passages in about 300 words with reference to the context

a.) 'Tale bearers are as bad as the tale makers.'

b.) 'To pity, without the power to relieve , is still more painful than to ask and be denied.' **1x8=8**

Question 5. Answer any two of the following questions in about 500 words

a) Bring out the contrast in the characters of Charles Surface and Joseph Surface.

b) Bring out the humour in the play 'The School For Scandal' by RB Sheridan.

c) Discuss The School for Scandal as a social satire. **10x2=20**

pExam Code: 103202
(30)

Paper Code: 2139

Programme: Bachelor of Arts
Semester-II

Course Title: Punjabi (Elective)

Course Code: BARL-2208 ✓

Time Allowed: 3 Hours

Max Marks: 80

ਨੋਟ:-ਕੋਈ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰੋ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਜ਼ਰੂਰੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ 16 ਅੰਕਾਂ ਦਾ ਹੈ।

ਸੈਕਸ਼ਨ-1

1. ਪ੍ਰਗਤੀਵਾਦੀ ਪੰਜਾਬੀ ਕਾਵਿ ਧਾਰਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਉ।
2. ਪੰਜਾਬੀ ਨਾਟਕ ਦੇ ਆਰੰਭ ਬਾਰੇ ਚਰਚਾ ਕਰਦੇ ਹੋਏ ਪਹਿਲੇ ਦੋਰ ਦੇ ਪੰਜਾਬੀ ਨਾਟਕ ਜਾਣ ਪਛਾਣ ਕਰਾਓ।

ਸੈਕਸ਼ਨ-2

3. 'ਬੇਬੇ ਰਾਮ ਭਜਨੀ' ਇਕਾਂਗੀ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਬਿਆਨ ਕਰੋ।
4. 'ਕੁੱਤਾ ਤੇ ਮਨੁੱਖ' ਇਕਾਂਗੀ ਦਾ ਸਾਰ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-3

5. ਬੈਂਕ ਨੂੰ ਖਾਤਾ ਬੰਦ ਕਰਨ ਲਈ ਪੱਤਰ ਲਿਖੋ।

6. ਵਿਸ਼ਰਾਮ ਚਿੰਨ੍ਹ ਕੀ ਹੁੰਦੇ ਹਨ? ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਇਨ੍ਹਾਂ ਦੀ ਵਰਤੋਂ ਅਤੇ ਨਿਯਮਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ

ਸੈਕਸ਼ਨ-4

7. ਕੋਸ਼ਕਾਰੀ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿੰਦੇ ਹੋਏ ਇਸ ਦੇ ਮਹੱਤਵ ਤੇ ਚਰਚਾ ਕਰੋ।
8. ਕੋਸ਼ਕਾਰੀ ਦਾ ਵਰਗੀਕਰਨ ਕਰੋ।

24/5/23 (eve)
KMV-II

Paper Code: 2111

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARL-2212 ✓
Bachelor of Science (Non-Medical)	103302	BSNL-2212 ✓
Bachelor of Science (Medical)		BSML-2212 ✓
Bachelor of Science (Economics)		BECL-2212
Bachelor of Science (Computer Science)		BCSL-2212 ✓
Bachelor of Commerce	108502	BCRL-2212
Bachelor of Business Administration	105402	BBRL-2212

Course Title: English (Compulsory)
Semester-II
(250)

Time Allowed: 3 Hours

Max Marks: 40

Note- All questions are compulsory.

Section-A

1. Do as directed - any 10 of the following sentences:
1. The police caught the robbers. (Change the Voice)
 2. We were woken up by the noise in the street.(Change the Voice)

3. How do people learn languages? (Change the Voice)
 4. The concert has been cancelled. (Change the Voice)
 5. My uncle sent me a birthday gift. (Change the Voice)
 6. Quinine tastes bitter. (Change the Voice)
 7. My friend said to me, "Are you coming to the party tonight?" (Change the Narration)
 8. The doctor said to the patient, "Do not neglect your health." (Change the Narration)
 9. The customer asked the shopkeeper, "What time does your shop close?" (Change the Narration)
 10. The mother said to her daughter, "Have you eaten?" (Change the Narration)
 11. I said to my friend, "How are you?"
 12. You can speak Spanish (Complete the sentence)
 13. The Police officer said, "Show me your license." (Change the Narration)
 14. Let's go for a movie, (Complete with a question tag)
 15. I like cold weather but my sister (Complete with an auxiliary verb)
- 10

Section - B

- II. Write a letter to your father telling him about the new course you have joined. (150 words)
- Or**
- Write a letter to your friend advising her to focus on her career. (150 words)
- 5

- III. Give the Synonyms of **any five** of the following words:
Consent, right, joy, surprise, attractive, generous, wise,
dedicated 5

Section C

- IV. Comment on the significance and appropriateness of the title 'A Strand of Cotton' (300 words)

Or

Write a character sketch of Bishen Singh as portrayed in the story 'Tobha Tek Singh'. (300 words) 6

- V. Answer **any two** of the following questions in 50 words
1. What did the doll's house look like? (The Doll's House)
 2. How does Eveline feel while leaving her family members? ('Eveline')
 3. In what way are children and birds alike? ('The Taboo')
- 4

Section D

- VI. What was the chief objective of Miss Beams' school? (The School for Sympathy') (300 words) 6

Or

What do you know about the lifestyle of the Bhopas on the basis of your reading of 'With A Song On Their Lips'? (300 words)

VII. Attempt any two of the following questions in 50 Words.

1. How is the camera an imperfect judge of beauty? ('Beauty and the Beast')

2. How can the problem of AIDS be dealt with effectively? ('AIDS')

3. Why did Leacock feel the need to open an account in the bank? ('My Financial Career')

4

(Only for Reappear Candidates (Session 2021-22))

103202

Paper Code: 9208

Programme: Bachelor of Arts (Semester- II)

Course Title: History (History of India (C. 1000 – A.D. 1707))

Course Code: BARI-2273 ✓

3 Hours

Theory: 80

Three questions, selecting one question each from first three Units in about 1200
at both questions from Unit IV. Each question carries 16 marks.

Unit-I

motives and effects of Mahmud Ghazni's invasions of India?
difficulties of Iltutmish. How did he overcome them?

Unit-II

economic and land reforms of Alauddin Khilji?
of administration, art and economy under Vijaynagar kings.

Unit-III

causes, events and results of First Battle of Panipat?
note on Akbar's religious policy.

Unit-IV

DRY UNIT / ATTEMPT BOTH QUESTIONS)

Eight questions. Each question will carry 2 marks

- 2 major central Ministers of Shivaji?
- chief officers in the cavalry of Shivaji?
- yardstick used to measure land under Shivaji rule?
- Shivaji die? Who succeeded Shivaji?
- meaning of Chhatrapati?
- mode of warfare of Shivaji?
- Shivaji's strength of army.
- do you know about baris?
- qualities of Shivaji as a man.
- the name given to the central cabinet of Shivaji ?
- note on Chauth
- land classified under Shivaji's rule?

any four places on the political map of India and explain their importance

Jaunpur ; Raigarh; Kurkanotea; Delhi; Pasipat; Lahore and Agra

Hindi Version

1200 शब्दों में पहली तीन इकाइयों में से एक प्रश्न का चयन करते हुए तीन प्रश्नों का उत्तर लिखो।
दोनों प्रश्नों को हल करें। प्रत्येक प्रश्न 16 अंक का होगा।

यूनिट-I

हमूद गजनवी के आक्रमणों के उद्देश्य और प्रभाव क्या थे?
की कठिनाइयों की चर्चा कीजिए। उसने उन्हें कैसे दूर किया?

यूनिट -II

खिलजी के आर्थिक एवं भूमि सुधारों की चर्चा कीजिए।
के राजाओं के प्रशासन, कला और अर्थव्यवस्था का विवरण दीजिए।

यूनिट-III

प्रथम युद्ध के कारणों, घटनाओं और परिणामों की चर्चा कीजिए।
धार्मिक नीति पर विस्तृत टिप्पणी लिखिए।

यूनिट IV

काई / दोनों प्रश्नों के उत्तर दें। किन्हीं आठ प्रश्नों के उत्तर दीजिए:- प्रत्येक प्रश्न 2 अंक का होगा

की के 2 प्रमुख केंद्रीय मंत्रियों के नाम बताएं?

की की घुड़सवार सेना के प्रमुख अधिकारियों के नाम बताएं?

की के शासन काल में जमीन नापने के लिए किस मापदंड का प्रयोग किया जाता था?

की की मृत्यु कब हुई थी? शिवाजी का उत्तराधिकारी कौन था?

ति का क्या अर्थ है?

की के युद्ध करने का तरीका क्या था?

की की सेना का बल लिखिए।

गियों के बारे में आप क्या जानते हैं?

की के एक पुरुष के रूप में दो गुण लिखिए।

की के केंद्रीय मंत्रिमंडल को क्या नाम दिया गया था?

पर एक टिप्पणी लिखिए

की के शासन में भूमि का वर्गीकरण किस प्रकार किया गया था?

जनीतिक मानचित्र पर किन्हीं चार स्थानों पर निशान लगाओ और उनके महत्व को समझाइए।

री; जौनपुर; रायगढ़; कुरक्षेत्र; दिल्ली; पानीपत; लाहौर; आगरा

Punjabi Version

ਯੂਨਿਟ-1

ਨਜ਼ਦੀ ਦੇ ਭਾਰਤ ਉੱਤੇ ਹਮਲਿਆਂ ਦੇ ਮਨੋਰਥ ਅਤੇ ਪ੍ਰਭਾਵ ਕੀ ਸਨ?

ਦੀਆਂ ਮੁਸ਼ਕਿਲਾਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ। ਉਸ ਨੇ ਉਨ੍ਹਾਂ ਉੱਤੇ ਕਿਵੇਂ ਕਾਬੂ ਪਾਇਆ?

ਯੂਨਿਟ-II

ਲਜੀ ਦੇ ਆਰਥਿਕ ਅਤੇ ਭੂਮੀ ਸੁਧਾਰਾਂ ਦੀ ਚਰਚਾ ਕਰੋ?

ਜਿਆਂ ਦੇ ਅਧੀਨ ਪ੍ਰਸ਼ਾਸਨ, ਕਲਾ ਅਤੇ ਆਰਥਿਕਤਾ ਦਾ ਲੇਖਾ ਦਿਓ।

ਯੂਨਿਟ-III

ਹਿਲੀ ਲੜਾਈ ਦੇ ਕਾਰਨਾਂ, ਘਟਨਾਵਾਂ ਅਤੇ ਨਤੀਜਿਆਂ ਦੀ ਚਰਚਾ ਕਰੋ?

ਆਰਥਿਕ ਨੀਤੀ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।

ਯੂਨਿਟ-IV

ਟ / ਦੇਵੋਂ ਸਵਾਲਾਂ ਦੇ ਜਵਾਬ ਦਿਓ)

ਸਵਾਲਾਂ ਦੇ ਜਵਾਬ ਦਿਓ:- ਹਰੇਕ ਸਵਾਲ ਵਿੱਚ 2 ਅੰਕ ਹੋਣਗੇ

ਦੇ 2 ਪ੍ਰਮੁੱਖ ਕੇਂਦਰੀ ਮੰਤਰੀਆਂ ਦੇ ਨਾਮ ਦੱਸੋ?

ਦੇ ਖੇਤਰਸਵਾਰ ਦੇ ਮੁੱਖ ਅਫਸਰਾਂ ਦੇ ਨਾਮ ਦੱਸੋ?

ਦੀ ਰਾਜ ਦੇ ਅਧੀਨ ਜ਼ਮੀਨ ਨੂੰ ਮਾਪਣ ਲਈ ਵਰਤੇ ਜਾਣ ਵਾਲੇ ਗਜ਼ ਦਾ ਨਾਮ ਦੱਸੋ?

ਦੀ ਦੀ ਮੌਤ ਕਦੋਂ ਹੋਈ? ਸਿਵਾਜੀ ਤੋਂ ਬਾਅਦ ਕੌਣ ਬਣਿਆ?

ਦੀ ਤੀ ਦਾ ਕੀ ਅਰਥ ਹੈ?

ਦੀ ਦੀ ਯੁੱਧ ਵਿਧੀ ਕੀ ਸੀ?

ਦੀ ਦੀ ਫੌਜ ਦੀ ਤਾਕਤ ਲਿਖੋ।

ਦੀ ਬਰਗੀਆਂ ਬਾਰੇ ਕੀ ਜਾਣਦੇ ਹੋ?

ਦੀ ਦੀ ਇੱਕ ਆਦਮੀ ਦੇ ਰੂਪ ਵਿੱਚ ਦੇ ਗੁਣ ਲਿਖੋ।

ਦੀ ਦੇ ਕੇਂਦਰੀ ਮੰਤਰੀ ਮੰਡਲ ਨੂੰ ਕੀ ਨਾਮ ਦਿੱਤਾ ਗਿਆ ਸੀ?

ਦੀ ਨੋਟ ਲਿਖੋ।

ਦੀ ਦੀ ਰਾਜ ਅਧੀਨ ਜ਼ਮੀਨ ਦਾ ਵਰਗੀਕਰਨ ਕਿਵੇਂ ਕੀਤਾ ਗਿਆ ਸੀ?

ਦੀ ਨੀਤਿਕ ਨਕਸ਼ੇ 'ਤੇ ਕੋਈ ਵੀ ਚਾਰ ਸਥਾਨ 'ਤੇ ਨਿਸ਼ਾਨ ਲਗਾਓ ਅਤੇ ਉਹਨਾਂ ਦੀ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਾਓ

ਦੀ; ਜੈਨਪੁਰ; ਰਾਏਗੜ੍ਹ; ਕੁਰਕਸ਼ੇਤਰ; ਦਿੱਲੀ; ਪਾਣੀਪਤ; ਲਾਹੌਰ; ਆਗਰਾ

Exam Code: 103202
(70)

Paper Code: 2121

Programme: Bachelor of Arts
Semester-II

Course Title: History (History of India (C 1000-A.D. 1707))

Course Code: BARL-2273 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note:- Attempt three questions from first three units selecting one from each unit. Unit IV is compulsory. Each question carries 16 marks.

Unit-I

1. Describe the invasions of Mahmud Ghajnavi and their effects also.
2. Describe the blood and Iron Policy of Balban.

Unit-II

3. Discuss the conquests of Alauddin Khalji.
4. Describe the administrative set up and development of Art under Vijay Nagar Kingdom.

Unit-III

5. Discuss the First battle of Panipat (1526) and its significance.

6. Discuss the Religious Policy of Akbar.

Unit-IV

(Compulsory Unit)

7. Attempt any 8 short questions. Each question carries 2 marks.

1. Who was the First Peshwa?
2. Which great Indian leader inaugurated the Shivaji festival in 1895.
3. Who designed Chhatrapati Shivaji Terminus station?
4. Name the 4 major central Ministers of Shivaji?
5. Which were the two classes in the cavalry of Shivaji?
6. Who took care of Maratha artillery?
7. What is the agreement between Shivaji and Jai Singh called?
8. Who was military guru of Shivaji?
9. Who led the Marathas in the third battle of Panipat?
10. Who delivered justice in the villagers?

8. On the map of India mark any four places (Panipat, Fatehpur Sikri, Delhi, Kurukshetra, Bijapur, Lahore, Daultabad, Kalanaur, Ahmednagar, Golkunda) and add explanatory note of the same. This question carries 16 marks.

Instructions to the Candidates

नोट: पहले तीन यूनिट में से एक-एक प्रश्न का चयन करते हुए तीन प्रश्न करें। चौथा यूनिट अनिवार्य है। प्रत्येक प्रश्न के 16 अंक हैं।

यूनिट-1

1. महमूद गजनवी के हमलों का वर्णन करो और हमलों के प्रभाव भी बताओं।
2. बलबन की लहू और लौहे की नीति का वर्णन करो।

यूनिट 2

3. अलाउद्दीन खलजी की विजयों का वर्णन करो।
4. विजयनगर शासकों के अधीन शासन व्यवस्था तथा कलाओं के विकास का वर्णन करें।

यूनिट 3

5. पानीपत का प्रथम युद्ध 1526 तथा उसके महत्व का वर्णन करें।
6. अकबर की धार्मिक नीति का वर्णन करो।

यूनिट 4

7. 1. पहला पेशवा कौन था?
2. 1895 में शिवाजी उत्सव का उद्घाटन किस महान भारतीय नेता ने किया था?

3. छत्रपति शिवाजी टर्मिनस स्टेशन को किसने डिजाइन किया था?
 4. शिवाजी के 4 प्रमुख केंद्रीय मंत्रियों के नाम बताएं?
 5. शिवाजी की घुड़सवार सेना में कौन से दो वर्ग थे?
 6. मराठा तोपखाने की देखभाल किसने की?
 7. शिवाजी और जय सिंह के बीच हुए समझौते को क्या कहते हैं?
 8. शिवाजी के सैन्य गुरु कौन थे।
 9. पानीपत की तीसरी लड़ाई में मराठों का नेतृत्व किसने किया?
 10. ग्रामीणों को न्याय किसने दिया?
8. भारत के मानचित्र पर किन्हीं चार स्थानों (पानीपत, फतेहपुर सीकरी, दिल्ली, कुरुक्षेत्र, बीजपुर, लाहौर, दौलताबाद, कलानौर, अहमदनगर, गोलकुण्डा) करें और इसके बारे में वर्णनात्मक नोट्स जोड़ें। इस प्रश्न का 16 अंक हैं।

Exam Code: 103202
(20)

Paper Code: 2134

Programme: Bachelor of Arts
Semester-II

Course Title: Philosophy (Ethics: Western and Indian)

Course Code: BARL-2377 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note:- Candidates are required to attempt five question, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 16 marks.

Section-A

1. Describe Nature, Scope and Utility of Ethics.
2. Explain Relation of Ethics with Religion.

Section-B

3. Give brief introduction of Virtue and explain Plato's theory of Virtue.
4. What do you understand by Utilitarianism? Explain Bentham views on Utilitarianism.

Section- C

5. What is Nishkama Karma according to Gita? Explain its Characteristics
6. Illustrate Virtues and their characteristics according to Sikh Ethics.

Section-D

7. What is Four Noble Truths in Buddhism? How Eight-Fold Path is related to it?
8. What is Astanaga- Yoga according to Patanjali? Explain its Various Parts.

Exam Code: 103202

Paper Code: 2130

Bachelor of Arts (Semester-II)
Course Title: Political Science (Political Theory-II)
Course Code: BARI-2406

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any Section. Each question carries equal (16) marks.

Section A

1. Discuss Input- Output Functions of Political System?
राजनीतिक प्रणाली के इनपुट-आउटपुट कार्यों पर चर्चा करें?
2. Define Political Socialization and Discuss about Processes of Political Socialization?

राजनीतिक समाजीकरण को परिभाषित कीजिए तथा राजनीतिक समाजीकरण की प्रक्रियाओं की चर्चा कीजिए।

Section B

3. Define Power and Discuss its Characteristics?
शक्ति को परिभाषित कीजिए तथा इसकी विशेषताओं की विवेचना कीजिए।
4. Define Authority and Mention its Main Features?
प्राधिकरण की परिभाषा दीजिए तथा इसकी प्रमुख विशेषताओं का उल्लेख करें।

Section C

5. What is Liberty? Discuss both Negative and Positive Theory of Liberty?
स्वतंत्रता क्या है? स्वतंत्रता के नकारात्मक और सकारात्मक सिद्धांत दोनों पर चर्चा करें?
6. Define Equality and what are Necessary Conditions to Ensure Social and Economic Equality?
समानता को परिभाषित करें और सामाजिक और आर्थिक समानता सुनिश्चित करने के लिए आवश्यक शर्तें क्या हैं?

Section D

7. Define Justice and Discuss its Features?
न्याय को परिभाषित कीजिए तथा इसकी विशेषताओं की चर्चा कीजिए।
8. Critically analyze the Elitist Theory of Democracy?
लोकतंत्र के संभ्रंतवादी सिद्धांत का समालोचनात्मक विश्लेषण कीजिए।

Exam Code: 103202
(20)

Paper Code: 2124

Programme: Bachelor of Arts
Semester-II

Course Title: Public Administration (Indian
Administration)

Course Code: BARL-2414 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note:- Candidates are required to attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question will carries sixteen marks

Section A

1. Write a detailed note of Indian Federalism.
2. Discuss the administrative relations between Centre and the states.

Section B

3. Write the appointment, powers and functions of Prime Minister of India.
4. Discuss the composition, functions and powers and role of the Supreme Court of India.

Section C

5. How is the Chief Minister of the State appointed? Discuss his powers and position.
6. Discuss the structure, appointment, functions and role of the Deputy Commissioner in the District Administration.

Section D

7. Examine the relationship between Permanent Executive and Political Executive in India.
8. Examine the issues of Generalists vs. Specialists in India.

Hindi version

नोट: प्रत्येक खंड से कम से कम एक प्रश्न का चयन करते हुए, पांच प्रश्नों का उत्तर दें। पांचवां प्रश्न किसी भी खंड से हल किया जा सकता है। प्रत्येक प्रश्न सोलह अंक का है।

खंड ए

1. भारतीय संघवाद का विस्तृत विवरण लिखिए।
2. केंद्र और राज्यों के बीच प्रशासनिक संबंधों पर चर्चा करें।

खंड बी

3. भारत के प्रधान मंत्री की नियुक्ति, शक्तियां और कार्य लिखिए।
4. भारत के सर्वोच्च न्यायालय की संरचना, कार्य और शक्तियों और भूमिका की चर्चा करें।

खंड सी

5. राज्य के मुख्यमंत्री की नियुक्ति कैसे की जाती है? उसकी शक्तियों और स्थिति पर चर्चा करें।
6. जिला प्रशासन में उपायुक्त की संरचना, नियुक्ति, कार्य और भूमिका की चर्चा करें।

खंड डी

7. भारत में स्थायी कार्यपालिका और राजनीतिक कार्यपालिका के बीच संबंधों का परीक्षण कीजिए।
8. भारत में सामान्यवादियों बनाम विशेषज्ञों के मुद्दों का परीक्षण करें।

Paper Code: 2102

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARL-2421
Bachelor of Science (Non-Medical)	103302	BSNL-2421
Bachelor of Science (Medical)		BSML-2421
Bachelor of Science (Economics)		BECL-2421 ✓
Bachelor of Science (Computer Science)		BCSL-2421
Bachelor of Commerce	108502	BCRL-2421 ✓
Bachelor of Business Administration	105402	BBRL-2421 ✓

Course Title: Punjabi (Compulsory)

Semester- II

(200)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹਨ। ਹਰੇਕ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 8 ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ-1

1. ਪ੍ਰਿੰਸੀਪਲ ਸੁਜਾਨ ਸਿੰਘ ਦੀ ਬਾਗਾਂ ਦਾ ਰਾਖਾ ਕਹਾਣੀ ਦਾ ਸਾਰ ਲਿਖੋ।

2. ਬੱਸ ਕੰਡਕਟਰ ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ ਸਪੱਸ਼ਟ ਕਰੋ।

ਸੈਕਸ਼ਨ-2

3. ਜੀਵਨੀ ਲੇਖ ਰੂਸ ਦਾ ਗੌਰਵ ਲੈਨਿਨ ਦਾ ਸਾਰ ਲਿਖੋ।
4. ਜਗਤ ਮਾਤਾ ਮਦਰ ਟਰੇਸਾ ਦਾ ਜੀਵਨੀ ਲੇਖ ਦਾ ਸਾਰ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-3

5. ਸ਼ਬਦ ਦੀ ਪਰਿਭਾਸ਼ਾ ਤੇ ਸ਼ਬਦ ਬਣਤਰ ਤੇ ਨੋਟ ਲਿਖੋ।
6. ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ ਪੜਨਾਵ ਜਾਂ ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ ਤੇ ਨੋਟ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-4

7. ਆਪਣੇ ਜ਼ਿਲ੍ਹੇ ਦੇ ਡਿਪਟੀ ਕਮਿਸ਼ਨਰ ਨੂੰ ਇਕ ਚਿੱਠੀ ਲਿਖੋ। ਜਿਸ ਵਿੱਚ ਆਪਣੇ ਇਲਾਕੇ ਵਿੱਚ ਦਿਨ-ਬ-ਦਿਨ ਵਧ ਰਹੀ ਗੁੰਡਾਗਰਦੀ ਦੀ ਸ਼ਿਕਾਇਤ ਕਰਦਿਆਂ ਇਸ ਉੱਤੇ ਕਾਬੂ ਪਾਉਣ ਦੀ ਪ੍ਰਾਰਥਨਾ ਕਰੋ।
8. ਕੋਈ ਚਾਰ ਮੁਹਾਵਰਿਆਂ ਦਾ ਅਰਥ ਸਪੱਸ਼ਟ ਕਰਦੇ ਹੋਏ ਇਨ੍ਹਾਂ ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤੋਂ :-
ਲੋਹਾ ਲਾਖਾ ਹੋਣਾ, ਮੂੰਹ ਕਾਲਾ ਹੋਣਾ, ਮੂੰਹ ਤੋੜ ਜਵਾਬ ਦੇਣਾ, ਭਾਜੜ ਪਾ ਦੇਣੀ, ਬਾਤ ਦਾ ਬਤੰਗੜ ਬਣਾਉਣਾ, ਪੁੱਠੀਆਂ ਛਾਲਾਂ ਮਾਰਨੀਆਂ, ਪੈਰਾਂ ਹੇਠੋਂ ਜ਼ਮੀਨ ਖਿਸਕਣਾ, ਪੱਗ ਨੂੰ ਹੱਥ ਪਾਉਣਾ।

Paper Code: 2108

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARL-2431 ✓
Bachelor of Science (Non-)	103302	BSNL-2431 ✓
Bachelor of Science (Medical)		BSML-2431 ✓
Bachelor of Science (Electronics)		BECL-2431
Bachelor of Science (Computer)		BCSL-2431
Bachelor of Commerce	108502	BCRL-2431
Bachelor of Business Administration	105402	BBRL-2431
Bachelor of Arts (Journalism & Mass Communications)	108702	BJML-2431 ✓
Bachelor of Science (Fashion Designing)	108602	BFDL-2431
Bachelor of Science (Home Science)	108202	BHSL-2431 ✓
Bachelor of Computer Applications	107202	BCAL-2431
Bachelor of Information Technology	105702	BITL-2431
Bachelor of Science (Bio- technology)	107402	BBTL-2431 ✓
Bachelor of Arts (Honours)	107502	BOEL-2431 ✓
Bachelor of Science (Honours) Mathematics	112412	BOML-2431 ✓

Course Title: Punjab History and Culture
Semester-II
(50)

Duration: 3 Hours

Max Marks: 40

Attempt all questions in all, selecting at least one question from each section. The fifth question to be attempted from any section in 600 words. Each question carries 8 marks

Section-A

Write the condition of Punjab on the Eve of Alexander's Invasion.

Write the main features of central and provincial administration of Chandra Gupta

Section -B

Describe the salient features of the Gandhara School of art developed the reign of

Essay on Art of Gupta period

Section -C

Describe the achievements of Harashvardhana.

Write the Socio Cultural history of Punjab from 7th century to 1000 A.D

Section-D

Write the features of Art and Architecture of ancient period.

Write the history of education in Punjab upto 1000 A D.

on

खंड-1

आक्रमण की पूर्व संध्या पर पंजाब की स्थिति की विवेचना कीजिए।

के केंद्रीय और प्रांतीय प्रशासन की मुख्य विशेषताओं की चर्चा कीजिए।

खंड-2

शासन काल में विकसित गांधार कला शैली की प्रमुख विशेषताओं का संक्षेप में वर्णन

की कला पर एक निबंध लिखिए।

खंड-3

उपलब्धियों का संक्षेप में वर्णन कीजिए।

वीं शताब्दी से 1000 ई. तक के सामाजिक सांस्कृतिक इतिहास का वर्णन कीजिए।

खंड-4

की कला और स्थापत्य कला की विशेषताओं की चर्चा कीजिए।

00 ई. तक शिक्षा के इतिहास की विवेचना कीजिए।

Exam Code: 103202
(30)

Paper Code: 2127

Programme: Bachelor of Arts
Semester-II

Course Title: Sociology (Fundamentals of Sociology -II)

Course Code: BARL-2475 ✓

Time Allowed: 3 Hours

Max Marks: 80

Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section-A

1. Define Socialization. Discuss its agencies?
2. What are the states of Socialization? Also discuss Freud's theory of Socialization?

Section-B

3. Define Class. What are its features? Discuss difference between Caste and class?
4. Define Social mobility? What are its types?

Section-C

5. Which agencies play an important role in Social Control?
6. Discuss Propaganda as an agency of Social Control?

Section-D

7. Write a note on Crime?
8. What are the functions of Culture?

Punjabi

Section-A

1. ਸਮਾਜੀਕਰਨ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿਓ। ਇਸ ਦੀਆਂ ਏਜੰਸੀਆਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ?
2. ਸਮਾਜੀਕਰਨ ਦੇ ਪੜਾਅ ਕੀ ਹਨ? ਫਰਾਇਡ ਦੇ ਸਮਾਜੀਕਰਨ ਦੇ ਸਿਧਾਂਤ ਦੀ ਵੀ ਚਰਚਾ ਕਰੋ?

Section-B

3. ਕਲਾਸ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ। ਇਸ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਕੀ ਹਨ? ਜਾਤ ਅਤੇ ਜਮਾਤ ਦੇ ਅੰਤਰ ਬਾਰੇ ਚਰਚਾ ਕਰੋ?
4. ਸਮਾਜਿਕ ਗਤੀਸ਼ੀਲਤਾ ਨੂੰ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ? ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਕੀ ਹਨ?

Section-C

5. ਸਮਾਜਿਕ ਨਿਯੰਤਰਣ ਵਿੱਚ ਕਿਹੜੀਆਂ ਏਜੰਸੀਆਂ ਮਹੱਤਵਪੂਰਨ ਭੂਮਿਕਾ ਨਿਭਾਉਂਦੀਆਂ ਹਨ?
6. ਸਮਾਜਿਕ ਨਿਯੰਤਰਣ ਦੀ ਇੱਕ ਏਜੰਸੀ ਵਜੋਂ ਪ੍ਰਚਾਰ ਬਾਰੇ ਚਰਚਾ ਕਰੋ?

Section-D

7. ਅਪਰਾਧ ਤੇ ਇੱਕ ਨੋਟ ਲਿਖੋ?
8. ਸੱਭਿਆਚਾਰ ਦੇ ਕੰਮ ਕੀ ਹਨ?

(Old Syllabus (2021-22)) ✓

Exam Code: 103202

Paper Code: 9207

Programme: Bachelor of Arts (Semester - II)

Course Title: Computer Applications (Vocational) (Programming in C)

Course Code: BARM-2124

Time- 3 Hrs.

Max. Marks- 50

Attempt five questions in all, selecting at least one from each section, fifth question may be attempted from any section. Each question carries 10 marks.

SECTION-A

Q.1. Explain the following: (5,5)

(a) Declaring and Initializing Variables

(b) User Defined Data types

Q.2. (a) Discuss various errors that occur in a C program? (5)

(b) What are the various characteristics of C Language? (5)

SECTION-B

Q.3. What are various Formatted I/O functions available in C. Explain with examples. (10)

Q.4. (a) What are the various Control Statements available in C language? (5)

(b) Explain the difference between Break and Continue statement? (5)

SECTION-C

Q.5. What is String? Explain various string handling functions available in C? (10)

Q.6. (a) What is Two-dimensional Array? How are two-dimensional arrays stored in memory? (5)

(b) Explain the concept of "Call by Value" and "Call by Reference" with example. (5)

SECTION-D

Q.7. (a) How can you define and process the union? Explain with suitable example. (5)

(b) Define a Structure named employee having the following members:

Member Name	Data Type
1. Employee Name	Character
2. Employee ID	Integer
3. Employee Department	Character
4. Salary	Float (5)

Q.8. (a) Define Pointers? How Pointers are declared in C language? (5)

(b) What do you mean by Storage class? Explain register and static storage classes with the help of examples. (5)

Paper Code: 2117

<u>Programme</u>	<u>Exam Code</u>	<u>Course Code</u>
Bachelor of Arts	103202	BARM-2124
Bachelor of Science (Economics)	103302	BECEM-2124

(Semester: II)

Course Title: Computer Applications (Vocational)
(Programming in C)

Time Allowed: 3 Hours

Max Marks: 50

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 8 marks.

SECTION - A

Q1) (a) Explain types of error in C.

(b) How binary numbers are converted into hexadecimal numbers? Explain with an example. (5 X 2 = 10)

Q2) What is algorithm? Write its advantages and limitations. How is it different from pseudocode? (10)

SECTION - B

Q3) (a) Explain formatted I/O functions.

(b) Explain various logical operators. (5 X 2 = 10)

Q4) What is loop? Explain all its types with syntax and example. (10)

SECTION - C

Q5) What is string? Explain various string functions with example. (10)

Q6) What is recursion? Write a program to illustrate the concept of recursion. (10)

SECTION - D

Q7) a) What is pointer? Discuss variable advantages and limitations of pointer?

(b) What are static variables? Write a program to illustrate concept of static variable. (5 X 2 = 10)

Q8) What is union in C? Explain with an example. How it is different from structure? (10)

Paper Code: 2116

	<u>Exam Code</u>	<u>Course Code</u>
...s (Semester: II)	103202	BARM-2134 ✓
...ence (Computer Science) (Semester: II)	103302	BCSM-2134 ✓
...ence (Economics) (Semester: II)	103302	BECM-2134 ✓

Course Title: Computer Science (Programming in C)

...: 3 Hours

Max Marks: 50

... questions in all, selecting at least one question from each section. The fifth
... attempted from any Section. Each question carries 8 marks.

Section-A	
...e Pseudo Code. Explain it with examples.	(10)
... the algorithms. Write an algorithm for finding the smallest and the ... numbers from a list of numbers.	(10)
Section-B	
...n all the data types in C-Language.	(10)
...o you mean by operator precedence? Draw the operator ... precedence tree.	(10)
Section-C	
... is different conditional control statement in 'C'? Explain giving ... ples.	(10)
...e arrays? How arrays are passed as function arguments? Explain it.	(10)
Section-D	
... Pointer? How pointers to functions are used? Explain giving ... les.	(10)
... Functions. What are formal and actual parameters? Explain it.	(10)

Exam Code: 103202
(20)

Paper Code: 2137

Programme: Bachelor of Arts
Semester-II

Course Title: Cosmetology (Vocational)

Course Code: BARM-2147 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions in all, selecting at least one question from each section (A-D). The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Discuss the structure of nail. Explain the process of care of nails. (8)
2. Elaborate on any two of the following:-
 - a) Athlete's foot
 - b) Ingrown nail
 - c) Egg shell nails (4,4)

Section-B

3. Explain about primary and secondary colours. (8)
4. How you will design your wardrobe according to complexion, figure and occupation? (8)

Section-C

5. What are the visual poises for corrective stance? (8)
6. Explain the visual poises for following:-
 - a) Standing
 - b) Sitting (4,4)

Section-D

7. What is yoga? What are the main benefits of yoga? (4,4)
8. Which yoga is best for health? What is the importance of yoga in our daily life? (4,4)

Exam Code: 103202

Paper Code: 2131

Programme: Bachelor of Arts (Semester – II)

Course Title: Indian Classical Dance (Kathak)

Course Code: BARM-2156 ✓

Time Allowed: 3 Hours

Maximum Marks: 40

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 8 marks.

SECTION –A

1. Explain the nine head movements and eight eye glances.
2. What do you mean by Chakradar Paran. Gat, Laya and bhaav.

SECTION –B

3. Write a brief note on Bharatnatyam Dance.
4. What are Smyukta Hasta mudras. Explain any 15 Mudras.

SECTION –C

5. (a) Why Taal and lehra important in dance.
(b) Explain how vocal and instrument importance in dance.
6. Explain Rajsthani folk dance with its music, costume and style.

SECTION –D

7. Comparative study of Dadra taal and Ektaal.
8. What is Jhaptaal and write the notation of this taal with ekgun, dugun and chaugun.

Exam Code: 103202
(20)

Paper Code: 2136

Programme: Bachelor of Arts
Semester-II

Course Title: Fashion Designing and Garment Construction
(Vocational) (Fashion Designing-II)

Course Code: BARM-2237 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note:- Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 6 marks.

Section I

1. Define Fashion Forecasting. Explain the components of fashion forecasting. (6)
2. Explain the sources of inspiration for fashion designing. (6)

Section II

3. Give the importance and methods of visual merchandising. (6)
4. Explain the size and structure of fashion market. (6)

Section III

5. Explain the various methods of publicity for fashion promotion. (6)
6. How the fashion shows help in publicity of fashion products. (6)

Section IV

7. Give the detailed account of designer retail stores. (6)
8. Explain:
 - i) Designer Retail store
 - ii) chain store (6)

Exam Code: 103202
(20)

Paper Code: 2128

Programme: Bachelor of Arts
Semester-II

Course Title: Fine Arts (Drawing and Painting)

Course Code: BARM-2245 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section A

1. What do you mean by Mauryan Pillars? 8
2. Write a detailed note on Lion Capital of Sarnath.

Section-B

3. Write a detailed note on Chhatiyas and Viharas. 8
4. Explain Bharhut sculptures in details.

Section-C

5. Discuss in detail about Sanchi Stupa.
6. What do you know about Amaravati sculpture explain in detail. 8

Section-D

7. Explain Mathura Art Portraits in detail.
8. Give a detailed on Gandhara Art and Standing Bodhisattava in detail.

8

Punjabi version

Section-A

1. ਮੌਰੀਆਂ ਬੰਮਾਂ ਤੋਂ ਤੁਹਾਡਾ ਕੀ ਭਾਵ ਹੈ?
2. ਸਾਰਨਾਥ ਦੀ ਸ਼ੇਰ ਦੀ ਰਾਜਧਾਨੀ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।

Section-B

3. ਚੈਤਿਆਂ ਅਤੇ ਵਿਹਾਰਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।
4. ਭਾਰਤ ਦੀਆਂ ਮੂਰਤੀਆਂ ਨੂੰ ਵੇਰਵੇ ਵਿੱਚ ਸਮਝਾਓ।

Section-C

5. ਸਾਂਚੀ ਸਤੂਪ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿੱਚ ਚਰਚਾ ਕਰੋ।
6. ਤੁਸੀਂ ਅਮਰਾਵਤੀ ਦੀ ਮੂਰਤੀ ਬਾਰੇ ਕੀ ਜਾਣਦੇ ਹੋ, ਵਿਸਥਾਰ ਵਿੱਚ ਦੱਸੋ।

Section-D

7. ਮਥੁਰਾ ਆਰਟ ਪੋਰਟਰੇਟਸ ਨੂੰ ਵਿਸਥਾਰ ਵਿੱਚ ਸਮਝਾਓ।
8. ਗੰਧਾਰ ਕਲਾ ਅਤੇ ਸਟੈਟਿਊਗ ਬੋਧੀਸਤਵ ਬਾਰੇ ਵਿਸਤਾਰ ਵਿੱਚ ਵੇਰਵੇ ਦਿਓ।

(8×5=40)

Exam Code: 103202
(20)

Paper Code: 2140

Programme: Bachelor of Arts
Semester-II

Course Title: Hindi (Elective) (Pracheen Evam
Madhyakaleen Hindi Kavya)

Course Code: BARM-2268

Time Allowed: 3 Hours

Max Marks: 60

यह प्रश्नपत्र चार भागों में विभाजित है। विद्यार्थी को कुल पांच प्रश्नों के उत्तर देने होंगे। प्रथम भाग अनिवार्य है। प्रथम भाग में कुल छः में से तीन पद्यांशों की सप्रसंग व्याख्याएं करनी जरूरी हैं। प्रत्येक प्रश्न के चार अंक हैं। भाग दो, तीन और चार में से एक-एक प्रश्न का उत्तर दें। पांचवां प्रश्न विद्यार्थी व्याख्या भाग को छोड़कर अन्य किसी भी भाग से कर सकता है। प्रत्येक प्रश्न के लिए निर्धारित अंक 12 हैं।

भाग-एक

1. व्याख्या के लिए पद्यांश—
 - क. गुरु गोविंद तो एक है, दूजा यह आकार।
आपा मेटत जीवत मरै, ती पावे करतार
 - ख. सतगुरु की महिमा अनंत, अनंत किया उपगार।
लोचन अनंत उघाडिया, अनंत दिखावणहार।।
 - ग. हमारे, प्रभु, औंगुन चित्त न धरौ।
समदर्शी है नाम तिहारौ, सोई पर करो

एक लोहा पूजा में राखत, इक घर बधिक परी।
सो दुविधा परास नहीं जानत, कंचन करत खरी....

घ. चरण—कमल बंदी हरि—राइ

जाकी कृपा पंगु गिरि लंघै, अंधे को सब कुछ दरसाइ।
बहिरौ सुनै, गूंग पुनि बोलै, रैंक चले सिर छत्र धराइ।
सूरदास स्वामी करुनामय, बार—बार बंदी तिहि पाइ।

छ. तनकी दुति स्याम सरोरुह लोचन कंजकी मंजुलताई हरै।

अति सुंदर सोहत धूरि भरे छबी भूरि अनगकी दुरि धरै।
दमकै दँतियाँ दुति दामिनी—ज्यों किलकै कल बाल—बिनोद करै।
अवधेस के बालक चारि सदा तुलसी—मन—मंदिर में बिहारै।३।

च. कीनै हूँ कोटिक जतन अब कहि काढ़ै कौन।

मो मन मोहन—रूपु मिली पानी में की लौनु।।

भाग—दो

2. आदिकाल में रचित काव्य की प्रमुख प्रवृत्तियों पर प्रकाश डालें।
3. अमीर खुसरो के व्यक्तित्व और कृतित्व का परिचय दें।

भाग—तीन

4. संत कबीर का साहित्यिक परिचय दें।
5. निर्गुण काव्यधारा की सामान्य विशेषताओं का उल्लेख करें।

भाग—चार

6. भक्तिकाल की सगुण काव्य धारा की प्रवृत्तियों का विस्तारपूर्वक वर्णन करें।
7. तुलसीदास का साहित्यिक परिचय दें।

Exam Code: 103202
(20)

Paper Code: 2128

Programme: Bachelor of Arts
Semester-II

Course Title: Fine Arts (Drawing and Painting)

Course Code: BARM-2245 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section A

1. What do you mean by Mauryan Pillars? 8
2. Write a detailed note on Lion Capital of Sarnath.

Section-B

3. Write a detailed note on Chhatris and Viharas. 8
4. Explain Bharhut sculptures in details.

Section-C

5. Discuss in detail about Sanchi Stupa.
6. What do you know about Amaravati sculpture explain in detail. 8

Section-D

7. Explain Mathura Art Portraits in detail.
8. Give a detailed on Gandhara Art and Standing Bodhisattava in detail.

8

Punjabi version

Section-A

1. ਮੋਰੀਆਂ ਬੰਮਾਂ ਤੋਂ ਤੁਹਾਡਾ ਕੀ ਭਾਵ ਹੈ?
2. ਸਾਰਨਾਥ ਦੀ ਸ਼ੇਰ ਦੀ ਰਾਜਧਾਨੀ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।

Section-B

3. ਚੈਤਿਆਂ ਅਤੇ ਵਿਹਾਰਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।
4. ਭਾਰਤ ਦੀਆਂ ਮੂਰਤੀਆਂ ਨੂੰ ਵੇਰਵੇ ਵਿੱਚ ਸਮਝਾਓ।

Section-C

5. ਸਾਂਚੀ ਸਤੂਪ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿੱਚ ਚਰਚਾ ਕਰੋ।
6. ਤੁਸੀਂ ਅਮਰਾਵਤੀ ਦੀ ਮੂਰਤੀ ਬਾਰੇ ਕੀ ਜਾਣਦੇ ਹੋ, ਵਿਸਥਾਰ ਵਿੱਚ ਦੱਸੋ।

Section-D

7. ਮਥੁਰਾ ਆਰਟ ਪੋਰਟਰੇਟਸ ਨੂੰ ਵਿਸਥਾਰ ਵਿੱਚ ਸਮਝਾਓ।
8. ਗੰਧਾਰ ਕਲਾ ਅਤੇ ਸਟੈਟਿਊਂਗ ਬੋਧੀਸਤਵ ਬਾਰੇ ਵਿਸਤਾਰ ਵਿੱਚ ਵੇਰਵੇ ਦਿਓ।

(8×5=40)

Exam Code: 103202
(20)

Paper Code: 2125

Programme: Bachelor of Arts
Semester-II

Course Title: Home Science (Family Resource Management
and Physiology)

Course Code: BARM-2284 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section A

1. Explain the factors affecting selection of furniture.
2. Explain different types of flower arrangement?

Section B

3. What are the types of and symptoms of fatigue? How can it be eliminated?
4. What are the principles of Work Simplification?

Section C

5. (a) Explain clotting of blood
(b) Explain the structure of heart
6. Explain the structure of alimentary canal in detail.

Section D

7. Explain the structure and functions of skin.
8. Describe the process of menstruation.

Hindi Version

नोट: प्रश्न पत्र में चार खंड हैं। उम्मीदवारों को प्रत्येक खंड से कम से कम एक प्रश्न पत्र का चयन करते हुए, किन्हीं पांच प्रश्नों का प्रयास करना आवश्यक है। पांचवां प्रश्न किसी भी खंड से हल किया जा सकता है। प्रत्येक प्रश्न 12 अंक का है।

खंड ए

1. फर्नीचर के चयन को प्रभावित करने वाले कारकों की व्याख्या करें।
2. फूलों की व्याख्या के विभिन्न प्रकारों की व्याख्या करें?

खंड बी

3. थकान के प्रकार और लक्षण क्या हैं? इसे कैसे दूर किया जा सकता है?
4. कार्य सरलीकरण के सिद्धांत क्या हैं?

खंड सी

5. (ए) रक्त के थक्के को समझाइए
(बी) दिल की संरचना को विस्तार से समझाइए।

6. आहार नाल की संरचना को विस्तार से समझाइए।

खंड डी

7. त्वचा की संरचना और कार्य की व्याख्या करें।

8. मासिक धर्म की प्रक्रिया का वर्णन करें।

Paper Code: 2114

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARM-2333 (I)
Bachelor of Science (Non-Medical)	103302	BSNM-2333 (I)
Bachelor of Science (Economics)		BECM-2333 (I)
Bachelor of Science (Computer Science)		BCSM-2333 (I)

Course Title: Mathematics (Calculus and Differential Equations)
Semester-II
(40)

Duration: 3 Hours

Max Marks: 40

Attempt eight questions of equal marks. Attempt five questions selecting atleast one from each section. The fifth question may be selected from any section. Each question carries 8 marks.

Section-A

$x^3 + y^3 = 3axy, a > 0$ (5)

Find the asymptotes if parallel to coordinate axes of the curve (3)

$x^2 + y^2 + 1 = 0$

Equation of the curve $x = a \sin^3 t; y = a \cos^3 t$ (5)

Find the values of x for which the curve $y = x^4 - 6x^3 + 12x^2 + 5x + 7$ is concave upwards. (3)

Section-B

State the Fundamental theorem for calculus. (5)

$\int \frac{dx}{x^2 - x^2}$ (3)

$\int_0^1 \sin x dx = -\frac{\pi}{2} \log 2$ (5)

Find the area of the region enclosed between the curve $y^2 = 8x$ and the line $x=2$ (3)

Section-C

$$\frac{dy}{dx} \cot x - y^2 = 0 \quad (5)$$

$$x + 2(x^2 y^2 + x + y^4) dy = 0 \quad (3)$$

Find the orthogonal trajectory of system of parabolas $y^2 = 4a(x + a)$ and hence show that they are orthogonal. (5)

Differential equation $p = \sin x \cos y + \cos x \sin y$, $p = \frac{dy}{dx}$ (3)

Section-D

Differential equation $(D - 2)^2 y = 8(e^{2x} + \sin 2x + x^2)$ (5)

Differential equation $x^2 \frac{d^2 y}{dx^2} + 9x \frac{dy}{dx} + 12y = 0$ (3)

Differential equation $\frac{d^2 y}{dx^2} - 6 \frac{dy}{dx} + 9y = \frac{e^{3x}}{x^2}$ (5)

Differential equation $\frac{d^4 y}{dx^4} + 8 \frac{d^2 y}{dx^2} + 16y = 0$ (3)

Paper Code: 2115

Programme	Exam Code	Course Code
Bachelor of Arts	103202	BARM-2333 (II)
Bachelor of Science (Non-Medical)	103302	BSNM-2333 (II)
Bachelor of Science (Economics)		BECM-2333 (II)
Bachelor of Science (Computer Science)		BCSM-2333 (II)

Course Title: Mathematics (Calculus)
Semester-II
(40)

Hours **Max Marks: 40**

Five questions, selecting at least one question from each section. The fifth attempted from any section. Each question carries 8 marks.

Section-A

Continuity of $f(x, y)$ at $(0,0)$ where

$$f(x, y) = \begin{cases} \frac{xy}{\sqrt{x^2+y^2}} & , (x, y) \neq (0,0) \\ 0 & , (x, y) = (0,0) \end{cases}$$

$x^2 + y^2 + z^2$, Prove that $(x^2 + y^2 + z^2) \left(\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} + \frac{\partial^2 u}{\partial z^2} \right) = 1$ [4,4]

Differentiability of the function $f(x, y) = (xy)^{1/3}$ at the origin.

$y, x = \log t, y = t^2$, find $\frac{du}{dt}$ by chain rule. Also verify it by direct calculations. [4,4]

Section-B

Verify Euler's theorem for homogeneous function of two variables.

$3x - 2$ in powers of $(x + 2)$ and $(y - 1)$ using Taylor's expansion. [4,4]

$(\sqrt{x^2 + y^2}, \tan^{-1} \frac{y}{x})$ for $x \neq 0$. Evaluate $J_f(1,2)$.

Radius of Curvature at any point (x,y) of the parabola $y^2 = 4ax$. Also find its Evolute. [4,4]

Section-C

Maximum value of the function $x^2 + y^2$ subject to the condition

$$3x^2 + 4xy + 6y^2 = 140$$

over the region bounded by the parabolas

$$y^2 = 4x \text{ and } x^2 = 4y. \quad [4,4]$$

changing the order of Integration

$$\int_0^{\infty} \int_x^{\infty} \frac{e^{-xy}}{y} dy dx$$

Verify that $\int_1^3 \int_{\frac{1}{x}}^1 \int_0^{\sqrt{xy}} xyz dz dy dx = \frac{13}{9} - \frac{1}{6} \log 3$

Section-D

enclosed by the cardioid $r = a(1 + \cos\theta), a > 0$

Volume of a truncated cone with end radii 'a' and 'b' and height 'h'.

Volume of the portion of the surface of the sphere $x^2 + y^2 + z^2 = a^2$ that lies in the first

octant of the region bounded by $x = 0, y = 0, x^2 + y^2 = 1, y = \frac{1}{2}$

Programme: Bachelor of Arts (Semester: II)

Course Title: Music (Instrumental)

Course Code: BARM-2357 ✓

Time Allowed: 3Hours

Max Marks: 40

Note: Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. What is the meaning of Phalley? How can you explain about Razakhani and Masseetkhani. Write in details.
2. Define 'Swara'. What is the role of Vivadi and Anvadi Swaras in Raga?

Section-B

3. What is the meaning of 'Raga'. What are main rules of Ragas. Also write the formation of 484 ragas in detail.
4. Write down the life-sketch and contribution of Vidooshi Annapoorna Devi towards the field of Classical Music.

Section-C

5. Write down about the Notation-system of Sh. Bhatkhande in detail.
6. Write down the Notation of Raga Bhairav in Razakhani Gat with two toras along with the introduction of Raga.

Section-D

7. Recognize the Ragas from the given Sheel-Sangatis:-
 - i. Ni Sa Ga Ma Pa Ma Pa Ga Ma Ga Re Sa.....
 - ii. Sa Sa, Re Re, Ga Ga, Ma Ma, Pa.....
8. Write down the Rupak taal with single and double layakaries along with the introduction of taal.

Punjabi Version

1. ਸੈਲੀ ਦਾ ਕੀ ਅਰਥ ਹੈ? ਰਜ਼ਾਖਾਨੀ ਅਤੇ ਸਿਤਾਰਖਾਨੀ ਬਾਰੇ ਤੁਸੀਂ ਕਿਵੇਂ ਸਮਝਾ ਸਕਦੇ
ਹੋ। ਵੇਰਵੇ ਵਿੱਚ ਲਿਖੋ।

2. 'ਸਵਰਾ' ਨੂੰ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ। ਰਾਗ ਵਿੱਚ ਵਿਵਾਦੀ ਅਤੇ ਅਨੁਵਾਦੀ ਸਵਰਾਂ ਦੀ ਕੀ ਤੁਮਿਕਾ
ਹੈ?

ਸੈਕਸ਼ਨ-ਬੀ

3. 'ਰਾਗ' ਦਾ ਕੀ ਅਰਥ ਹੈ? ਰਾਗਾਂ ਦੇ ਮੁੱਖ ਨਿਯਮ ਕੀ ਹਨ? 484 ਰਾਗਾਂ ਦੀ ਰਚਨਾ ਬਾਰੇ
ਹੀ ਵਿਸਥਾਰ ਨਾਲ ਲਿਖੋ।

4. ਸ਼ਾਸਤਰੀ ਸੰਗੀਤ ਦੇ ਖੇਤਰ ਵਿੱਚ ਵਿਦੁਸ਼ੀ ਅੰਨਪੂਰਨਾ ਦੇਵੀ ਦੇ ਜੀਵਨ-ਸਕੈਚ ਅਤੇ
ਯੋਗਦਾਨ ਨੂੰ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-ਸੀ

5. ਸ੍ਰੀ ਭਾਤਖੰਡੇ ਦੀ ਨੋਟੇਸ਼ਨ-ਸਿਸਟਮ ਬਾਰੇ ਵਿਸਤਾਰ ਵਿੱਚ ਲਿਖੋ।

6. ਰਾਗ ਭੈਰਵ ਦੀ ਜਾਣ-ਪਛਾਣ ਦੇ ਨਾਲ-ਨਾਲ ਰਜ਼ਾਖਾਨੀ ਗਤ ਵਿੱਚ ਰਾਗ ਭੈਰਵ ਦੇ
ਨੋਟੀਕਰਨ ਬਾਰੇ ਦੋ ਤੋਰਿਆਂ ਨਾਲ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-ਡੀ

7. ਦਿੱਤੇ ਗਏ ਸਵਰ-ਸੰਗਤਿਆਂ ਤੋਂ ਰਾਗਾਂ ਦੀ ਪਛਾਣ ਕਰੋ:-

i. ਨਿ ਸ ਗ ਮ ਪ ਮ ਪ ਗ ਮ ਗ ਰੇ ਸ.....

ii. ਸ ਸ, ਰੇ ਰੇ, ਗ ਗ, ਮ ਮ, ਪ.....

8. ਰੂਪਕ ਤਾਲ ਨੂੰ ਇੱਕਗੁਣ ਅਤੇ ਦੋਗੁਣ ਲਯਕਾਰੀਆਂ ਅਤੇ ਜਾਣ-ਪਛਾਣ ਦੇ ਨਾਲ ਲਿਖੋ।

3202

Paper Code: 2132

Programme: Bachelor of Arts (Semester: II)

Course Title: Music (Vocal)

Course Code: BARM 2366 ✓

3 Hours

Max Marks: 40

Give questions in all, selecting at least one question from each section. The
may be attempted from any section. Each question carries 08 marks.

Section - I

Following Musical Terms: Khatka, Kan and laya 8 Marks

Life sketch and Contribution given by Pt. V. D. Paluskar Ji in the field of Indian
Music. 8 Marks

Section - II

Features of Good Vocalist. 8 Marks

Punjabi Marital Songs with few examples. 8 Marks

Section - III

Define Musical Terms in the context of Gurmat Sangeet: Ashtpadi, Keertania, Ank.
8 Marks

Give biographical sketch and contribution of Bhai Mardana Ji towards Indian
Music. 8 Marks

Section - IV

Write the Notation of Chaartaal in Ekgun and Dugun Layakari. 8 Marks

Write the full Description of Raag Deshkar or Bhimpalasi. 8 Marks

HINDI VERSION

से कम से कम एक प्रश्न का चयन करते हुए, कुल मिलाकर पाँच प्रश्न कीजिए। पांचवां प्रश्न
चयन किया जा सकता है। प्रत्येक प्रश्न 08 अंकों का है।

खंड - एक

निम्नलिखित संकेतों को परिभाषित करें: खटका, कण और लय। 8 अंक

पं. व. ड. पालुस्कर जी द्वारा भारतीय शास्त्रीय संगीत के क्षेत्र में दिए गए योगदान की व्याख्या करें।
8 अंक

खंड - दो

निम्नलिखित विशेषताओं पर विस्तृत निबंध लिखिए। 8 अंक

निम्नलिखित गीतों को कुछ उदाहरणों के साथ स्पष्ट करें। 8 अंक

ਖੰਡ - ਤੀਜ

ਦਰਮ ਮੇਂ ਨਿਮਲਿਖਿਤ ਸੰਗੀਤ ਸੰਕੇਤੋਂ ਕੋ ਪਰਿਭਾਸ਼ਿਤ ਕੀਜਿਐ: ਅਠਪਦੀ, ਕੀਰਤਨਿਆ, ਅੰਕ।
8 ਅੰਕ
ਭਾਰਤੀਯ ਸੰਗੀਤ ਮੇਂ ਯੋਗਦਾਨ ਏਵੰ ਜੀਵਨ ਰੇਖਾਚਿਤ੍ਰ ਲਿਖਿਐ।
8 ਅੰਕ

ਖੰਡ - ਚਾਰ

ਕੋ ਏਕਗੁਣ ਔਰ ਦੁਗੁਣ ਲਯਕਾਰੀ ਮੇਂ ਲਿਖਿਐ।
8 ਅੰਕ
ਸਪਲਾਸੀ ਕਾ ਪੂਰਾ ਵਿਕਰਣ ਲਿਖਿਐ।
8 ਅੰਕ

PUNJABI SECTION

ਘੱਟੋ-ਘੱਟ ਇੱਕ ਪ੍ਰਸ਼ਨ ਚੁਣ ਕੇ, ਕੁੱਲ ਮਿਲਾ ਕੇ ਪੰਜ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਲਿਖੋ। ਪੰਜਵਾਂ ਉੱਤਰ ਠੀਕ ਜਾ ਸਕਦਾ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ 08 ਅੰਕਾਂ ਦਾ ਹੈ।

ਭਾਗ - ਇੱਕ

ਸੰਕੇਤਾਂ ਨੂੰ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ: ਖਟਕਾ, ਕਣ ਅਤੇ ਲੈਯ।
8 ਅੰਕ
ਸੰਗੀਤ ਦੇ ਖੇਤਰ ਵਿੱਚ ਪੰਡਿਤ ਵੀ. ਡੀ. ਪਲੁਸਕਰ ਦੁਆਰਾ ਦਿੱਤੇ ਗਏ ਯੋਗਦਾਨ ਦੀ ਸੂਚੀ ਲਿਖੋ।
8 ਅੰਕ

ਭਾਗ - ਦੋ

ਸੰਗੀਤ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਬਾਰੇ ਇੱਕ ਵਿਸਤ੍ਰਿਤ ਲੇਖ ਲਿਖੋ।
8 ਅੰਕ
ਸੰਗੀਤ ਨੂੰ ਕੁਝ ਉਦਾਹਰਣਾਂ ਦੇ ਕੇ ਸਮਝਾਓ।
8 ਅੰਕ

ਭਾਗ - ਤਿੰਨ

ਸੰਦਰਭ ਵਿੱਚ ਹੇਠ ਲਿਖੇ ਸੰਗੀਤਕ ਸੰਕੇਤਾਂ ਨੂੰ ਪਰਿਭਾਸ਼ਿਤ ਕਰੋ: ਅਸਟਪਦੀ, ਕੀਰਤਨੀਆਂ, ਚੌਥਰਭ ਵਿੱਚ ਭਾਈ ਮਰਦਾਨਾ ਜੀ ਦਾ ਜੀਵਨ ਚਿੱਤਰ ਅਤੇ ਯੋਗਦਾਨ ਲਿਖੋ।
8 ਅੰਕ

ਭਾਗ - ਚਾਰ

ਸੰਗੀਤ ਅਤੇ ਦੁਗੁਣ ਦੀ ਨੋਟੇਸ਼ਨ ਲਿਖੋ।
8 ਅੰਕ
ਸਪਲਾਸੀ ਦਾ ਪੂਰਾ ਵੇਰਵਾ ਲਿਖੋ।
8 ਅੰਕ

Exam Code: 103202
(50)

Paper Code: 2126

Programme: Bachelor of Arts
Semester-II

Course Title: Physical Education

Course Code: BARM-2384 ✓

Time Allowed: 3 Hours

Max Marks: 50

Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 10 marks.

Section-A

1. Describe the various types of Bones in Human Body.
2. What is meant by Joint? Write about the types of Human Joints.

Section-B

3. Explain the Meaning of Health Education and Scope of Health Education.
4. What is the meaning of Muscular System? Explain the Structure of Skeletal Muscles in Human Body.

Section-C

5. Explain Water Pollution and its Remedial Measures.
6. Write about the different organs and functions of the Digestive System.

Section-D

7. Describe the concept of Communicable Diseases and also explain the Mode of Transmission, process of Prevention and control of Tuberculosis, Hepatitis(A&B)
8. Describe the Treatment and First aid in the Case of Electric Shock and Burns.

Hindi Version

Section-A

1. मानव शरीर में विभिन्न प्रकार की हड्डियों का वर्णन करें।
2. जोड़ों का क्या अर्थ है? मानव जोड़ों के प्रकारों के बारे में लिखिए।

Section-B

3. स्वास्थ्य शिक्षा के अर्थ और स्वास्थ्य शिक्षा के क्षेत्र की व्याख्या करें।
4. मांसपेशिय तंत्र क्या अर्थ है? मानव शरीर में कंकाल की मांसपेशियों की संरचना की व्याख्या करें।

Section-C

5. जल प्रदूषण और इसके उपचार के उपाय बताएं।
6. पाचन तंत्र के विभिन्न अंगों और कार्यों के बारे में लिखिए।

Section-D

7. संघारी रोगों की अवधारणा का वर्णन करें और संघरण के तरीके, क्षय रोग, हेपेटाइटिस ए और बी की रोकथाम और नियंत्रण की प्रक्रिया की व्याख्या करें।
8. बिजली के झटके और जलने की स्थिति में उपचार और प्राथमिक उपचार का वर्णन करें।

Punjabi version

Section-A

1. ਮਨੁੱਖੀ ਸਰੀਰ ਵਿਚ ਵੱਖ-ਵੱਖ ਕਿਸਮਾਂ ਦੀਆਂ ਹੱਡੀਆਂ ਬਾਰੇ ਦੱਸੋ।
2. ਜੋੜਾਂ ਤੋਂ ਕੀ ਭਾਵ ਹੈ? ਮਨੁੱਖੀ ਜੋੜਾਂ ਦੀਆਂ ਕਿਸਮਾਂ ਬਾਰੇ ਲਿਖੋ।

Section-B

3. ਹੈਲਥ ਐਜੂਕੇਸ਼ਨ ਦੇ ਅਰਥ ਅਤੇ ਹੈਲਥ ਐਜੂਕੇਸ਼ਨ ਦੇ ਸਕੋਪ ਦੀ ਵਿਆਖਿਆ ਕਰੋ।
4. ਮਾਸਪੇਸ਼ੀ ਪ੍ਰਣਾਲੀ ਦਾ ਕੀ ਅਰਥ ਹੈ? ਮਨੁੱਖੀ ਸਰੀਰ ਵਿਚ ਪਿੰਜਰ ਮਾਸਪੇਸ਼ੀ ਦੇ ਬਣਤਰ ਦੀ ਵਿਆਖਿਆ ਕਰੋ।

Section-C

5. ਜਲ ਪ੍ਰਦੂਸ਼ਣ ਅਤੇ ਇਸ ਦੇ ਉਪਾਅ ਦੀ ਵਿਆਖਿਆ ਕਰੋ
6. ਪਾਚਨ ਪ੍ਰਣਾਲੀ ਦੇ ਵੱਖ-ਵੱਖ ਅੰਗਾਂ ਅਤੇ ਕਾਰਜਾਂ ਬਾਰੇ ਲਿਖੋ।

Section-D

7. ਸੰਚਾਰੀ ਰੋਗਾਂ ਦੀ ਧਾਰਨਾ ਦਾ ਵਰਣਨ ਕਰੋ ਅਤੇ ਸੰਚਾਰ ਦੇ ਢੰਗ, ਬਚਾਓ ਦੀ ਪ੍ਰਕਿਰਿਆ ਅਤੇ ਟੀ ਦੇ ਰੋਗ ਹੈਪਟਾਈਟਸ (ਏ ਅਤੇ ਬੀ) ਦੀ ਵਿਆਖਿਆ ਕਰੋ।
8. ਇਲੈਕਟ੍ਰਿਕ ਸਦਮਾ ਅਤੇ ਬਰਨ ਦੇ ਮਾਮਲੇ ਵਿੱਚ ਇਲਾਜ ਅਤੇ ਮੁੱਢਲੀ ਸਹਾਇਤਾ ਦਾ ਵਰਣਨ ਕਰੋ।

Exam Code: 103202
(40)

Paper Code: 2122

Programme: Bachelor of Arts
Semester-II

Course Title: Psychology (Psychological Processes)

Course Code: BARM-2443 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks. Use of non-programmable Calculators and statistical table is allowed.

SECTION A

1. What is meant by Psychophysics? Discuss in detail the concept of Threshold. 12
2. Write a short note on the following:
 - a. Method of Limits
 - b. Method of Constant Stimuli 6,6

SECTION B

3. Define Intelligence. Write a detailed note on the Nature of Intelligence. 12
4. What are the contributions of Spearman and Thorndike in theorizing Intelligence? 12

SECTION C

5. Write a detailed note on the concept of Personality. 12
6. Discuss Freud's Psychoanalytic Approach to Personality. 12

SECTION-D

7. Define Variability. What are the various measures of Variability? 2,10
8. Calculate the Standard Deviation for the following data.

S. No	A	B	C	D	E	F	G
X	22	20	18	17	16	14	10

12

03202

Paper Code -2133

Bachelor of Arts (Semester-II)

Course Title: Sanskrit (Elective) (Nitikatha, Vyakaran Evam Anuvad)

Course Code - BARM : 2466 ✓

- 3 Hours

Max. Marks - 60

माध्यम हिन्दी-संस्कृत होगा | उत्तर संस्कृत, हिन्दी, पंजाबी, अंग्रेजी में हो सकते हैं |
कैशन ABCD होंगे | प्रत्येक सैकशन में दो प्रश्न होंगे | इस प्रकार चारों सैकशन में कुल आठ प्रश्न
सैकशन से दोनों प्रश्न करना अनिवार्य है | शेष तीन सैकशन से केवल एक-एक प्रश्न करना अनिवार्य
अंक समान है | (12)

Section - A

दो श्लोकों की सप्रसंग व्याख्या करें -

12 अंक

आरभ्यते न खलु विघ्नभयेन नीचैः,
आरभ्य विघ्नविहता विरमन्ति मध्याः ।
पेध्नैः पुनः पुनरपि प्रतिहन्यमानाः,
आरब्धमुत्तमजना न परित्यजन्ति ॥
रं पर्यतदुर्गेषु भ्रान्तं वनचरैः सह ।
मूर्खजनसम्पर्कः सुरेन्द्रभवनेष्वपि ॥
साहित्यसंगीतकलाविहीनः साक्षात्पुः पुच्छविषाणहीनः ।
पुं न खादन्नपि जीवनमानस्तद्भागधेवं परमं पशूनाम् ॥
वदचेतनोऽपि पादैः स्पृष्टः प्रज्वलति सवितुरिनकान्तः ।
स्रोतस्वी पुरुषः परकृतनिकृतिं कथं सहते ? ॥

सूक्तियों की सप्रसंग व्याख्या करें -

12 अंक

वर्षविदां समाजे विभूषणं मौनमपण्डितानाम् ॥
कथय किं न करोति पुंसाम् ॥
सीमान्ध्वरिः त्रिविभूतयः ॥
नानां भवति विनिपातः शतमुखः ॥

Section - B

क में वर्णित विद्या के महत्त्व पर प्रकाश डालो ।

12 अंक

अथवा

भर्तृहरि की मान्यता को स्पष्ट करो ।

12 अंक

पेषतक में वर्णित धन के महत्त्व को स्पष्ट करो।

12 अंक

अथवा

नाथ के किन-किन कारणों का उल्लेख किया है ?

12 अंक

Section - C

लिखित में से किन्हीं 4 के शब्दरूप लिखो -

12 अंक

लता नदी पितृ त्रि (पुलिंग) हरि

लिखित में से किन्हीं 12 वाक्यों का संस्कृत में अनुवाद करो -

12 अंक

राम वन में खेलता है।	(ख)	हम दोनों महाविधातय जाते हैं।
अनीता गर्म दूध पीती है।	(घ)	पुष्प पवन को सुरभित करते हैं।
नदियां परोपकार के लिये बहती हैं।	(च)	धन से लोम पैदा होता है।
मोहन बोला, श्याम ने लिखा।	(ज)	मैंने निर्धन को दान दिया।
राम जायेगा, वह आयेगा।	(अ)	पुत्र को देखकर तू प्रसन्न होगा।
वह जीने के लिये झूठ भी बोलेगा।	(ड)	किसान हलों से जमीन को जोतेंगे।
वह आँख से काणा था।	(ढ)	राम के साथ मैं भी जाऊंगा।
पुत्र सत्कार्यों से पिता को प्रसन्न करे।		

Section - D

लिखित धातुओं के साथ निर्दिष्ट प्रत्यय लगाकर कोई 12 कृदन्तरूप बनाओ

12 अंक

- क्त्वा	भू + क्त	पत् + तव्यत्	वद् + अनीयर्
तुमुन्	दृश् + क्तवतु	लिख् + क्त्वा	श्रु + तव्यत्
तव्यत्	दा + तुमुन्	गम् + क्त्वा	हस् + तव्यत्
तुमुन्	वद् + क्त्वा	शक् + तव्यत्	

लिखित में से किन्हीं 6 उपपद विभक्तियों का प्रयोग करके संस्कृत में वाक्य बनायें -

12 अंक

नमः	सर्वतः	अन्तरेण
निकषा	साकम्	समया

Exam Code: 105402
(50)

Paper Code: 2264

Programme: Bachelor of Business Administration
Semester-II

Course Title: Managerial Economics-II

Course Code: BBRL-2175 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note:- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Write short notes on
 - a) Macro-Statics
 - b) Macro-dynamics8
2. What are the difficulties in the measurement of national income. 8

Section-B

3. Explain Keynes Psychological law of consumption with its implications. 8

4. Explain the term Propensity to Consume. What are the main features of Consumption Function? 8

Section-C

5. Explain the saving and Investment function. 8
6. Explain the Keynesian Theory of Investment. 8

Section-D

7. Discuss Demand Pull Inflation and Cost Push Inflation. 8
8. Explain Kaldor's Theory of Trade cycle. 8

Exam Code: 105402
(50)

Paper Code: 2262

Programme: Bachelor of Business Administration
Semester-II

Course Title: Business Laws

Course Code: BBRL-2323

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

SECTION A

1. "A contract without consideration is void" In the light of this statement explain the legal rules as to consideration? (8)
2. Explain in detail the law relating to competency of the parties to make a valid contract? (8)

SECTION B

3. Briefly explain the conditions and warranties implied by a law in a contract for the sale of goods? (8)
4. Who is an unpaid seller? Explain the rights of an unpaid seller? (8)

SECTION C

5. Explain the redressal machineries set up under the consumer protection act? (8)
6. What is the procedure to file a complaint under consumer protection act? (8)

SECTION D

7. When is negotiable instruments said to be discharged? Explain its different modes? (8)
8. What is crossing of cheque? Explain in detail? (8)

Exam Code: 105402
(50)

Paper Code: 2263

Programme: Bachelor of Business Administration
Semester-II

Course Title: Principles of Management

Course Code: BBRL-2324 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Candidates are required to attempt five questions selecting one question from each section. The fifth question can be attempted from any section. Each question carries 8 marks.

Section- A

1. "Management is both art as well as science" Do you agree with this statement? Discuss.
2. What do you mean by Management by Objective? Explain its process and importance.

Section- B

3. What do you mean by planning? Explain the steps followed in planning process.

4. What do you mean by organization? How line organization is different from staff organization?

Section- C

5. What is meant by departmentation? Explain its methods.
6. What is delegation of authority? What are the barriers to delegation? How can we overcome those barriers?

Section- D

7. What do you mean by selection? Explain the various steps involved in selection process.
8. Explain the following:
 - (a) Maslow's need hierarchy theory of motivation
 - (b) Trait theory of leadership

Exam Code: 105402
(50)

Paper Code: 2265

Programme: Bachelor of Business Administration
Semester-II

Course Title: Computer Based Accounting System

Course Code: BBRL-2326 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note:- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section A

1. What are the advantages of using computers in accounting? Explain.
2. Write the method of setting up an accounting package that includes the following.
 - a) Creating groups and groups
 - b) Designing and creating vouchers

Section B

3. What are the different symbols used in Entity relationship (ER) model? Write the purpose of each symbol.

4. How database is designed for Financial accounting? Explain.

Section C

5. What is 'Tally'? What are the features of Tally ERP accounting software? Explain.
6. Explain the different vouchers which are used in Tally.

Section D

7. Write short notes on the following
 - a. Accounts master
 - b. Accounts transactions
 - c. Accounts reports
 - d. Account management
8. What is meant by grouping of accounts? Why is it important? Explain how balance sheets of an organization is prepared and compiled.

Exam Code: 105402
(50)

Paper Code: 2266

Programme: Bachelor of Business Administration
Semester-II

Course Title: Fundamentals of Banking

Course Code: BBRL-2327 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: - Attempt five question, selecting at least one from each section. The fifth question may be attempted from any section. Each question carries eight marks.

Section-A

1. What are Commercial Banks? Discuss the nature of commercial Banks. Also describe the various services provided by these banks. 08
2. What are Public and Private Banks? How do Public Banks differ from Private Banks? 08

Section-B

3. What is Credit Creation? Discuss the mechanism and limitation of credit creation. 08
4. Define endorsement. Also explain the various types of endorsements. 08

Section-C

5. Do the errors in a Pass Book have any favourable effects on Banker and Customer? Discuss in detail. 08
6. Write a detailed note on clearing Mouse system in India. 08

Section-D

7. Write a note on Group and chain Banking Systems . 08
8. Discuss the relative merits and demerits of unit and Branch Banking Systems. 08

Exam Code: 107402
(30)

Paper Code: 2194

Programme: Bachelor of Science (Bio-Technology)
Semester-II

Course Title: Biostatistics

Course Code: BBTL-2333 ✓

Time Allowed: 3 Hours

Max Marks: 32

Note: There are 5 sections namely A, B, C, D, E.

Attempt any 8 questions from section A. Each carries 1 mark. Answer to each question should be of approximately 50 words.

Attempt any 4 questions from section B, C, D and E; selecting one question from each section. Each question carries 6 marks.

The students can use only Non Programmable & Non Storage Type Calculator and Statistical tables.

Section A

1. Define
 - (a) Mode
 - (b) Critical Region
 - (c) Standard Deviation
 - (d) Hypothesis
 - (e) Mutually Exclusive Events

- (f) Independent Events
- (g) Level of significance
- (h) Null and Alternative Hypothesis
- (i) Correlation
- (j) Regression

(8 X 1=8)

Section B

2. Given total no. of students are 110, find the missing frequency of the following data with median equal to 35:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of students	5	15	20	?	20	10	10

(6)

3. Calculate mean, standard deviation and variance of the following data

Class:	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16
Frequency:	3	5	8	8	10	8	6	2

(6)

Section C

4. (a) From a well shuffled pack of cards a card is drawn. What is the probability that it is a red card or a black card. (3)
- (b) If A and B are two non-mutually exclusive events and $P(A) = \frac{1}{4}$, $P(B) = \frac{1}{8}$ and $P(A \cup B) = \frac{1}{2}$. Find $P(A \cap B)$, $P(A^c)$. (3)

5. State Baye's theorem. There are 2 green, 1 orange and 3 red balls in Urn I and 1 green, 2 orange and 2 red balls in Urn II and 3 green, 4 orange and 1 red balls in Urn III. If one Urn is selected at random, find the probability of selecting 2 balls if they are green and red from Urn I. (6)

Section D

6. Calculate coefficient of correlation between X and Y for the data given below:

X :	3	4	8	10	1	5	7
Y :	10	12	11	10	15	16	9

(6)

7. For the following observations based on data for X and Y for which Variance of X=9, Regression lines are $3X+2Y-26=0$, $6X+Y-31=0$.
Find (i) mean value of X and Y
(ii) regression coefficients
(iii) variance for Y. (6)

Section E

8. The following table gives the number of good and bad parts produced by each of the three shifts in a factory

	Good parts	Bad parts	Total
Day Shift	60	40	100
Evening Shift	40	50	90
Night Shift	50	45	95
Total	150	135	285

Test whether or not the production of bad parts is independent of the shift on which they were produced. (6)

9. A sample of 400 male students is found to have a mean height of 67.87 inches. Can it be reasonably regarded as a sample from a large population with mean height 67.39 inches and standard deviation 1.30 inches. (6)

Exam Code: 107402
(30)

Paper Code: 2196

Programme: Bachelor of Science (Bio-Technology)
Semester-II

Course Title: Genetics

Course Code: BBTM-2065 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks.

Section-A

1. Mention the laws given by Mendel. Explain law of Independent assortment in detail with example.
2. Define epistasis. Explain following:
 - a) Complementary genes
 - b) Inhibitory genes.

Section-B

3. What is Linkage? How coupling and repulsion hypothesis explain linkage
4. Define crossing over. Explain mechanism of crossing over.

Section-C

5. What are mutagens? How physical and chemical mutagens cause mutations?
6. Define transduction. Explain its mechanism.

Section-D

7. Write a note on following
 - a) Eukaryotic chromosome
 - b) Satellite DNA
 - c) Telomere
8. What is population genetics? Discuss the law which explains population genetics.

Exam Code: 107402
(30)

Paper Code: 2197

Programme: Bachelor of Science (Bio-Technology)
Semester-II

Course Title: Biochemistry-II

Course Code: BBTM-2086 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks.

SECTION-A

1. (a) Define Metabolism and Metabolites with example (2)
(b) State laws of thermodynamics and relevance to biochemical system (2)
(c) Define Free energy and standard free energy (2)
2. Explain Interorgan Metabolism (6)

SECTION-B

3. (a) Why ATP is universal energy currency of cell? (2)

- (b) Define energy rich metabolites? Give examples of two energy rich metabolites other than ATP with structures. (4)
4. Elaborate metabolic roles of ATP (6)

SECTION-C

5. Explain Factors responsible for catalytic efficiency of enzymes. (6)
6. (a) Discuss Acid-base and covalent catalysis. (4)
(b) Explain how enzyme speed up reaction. (2)

SECTION-D

7. Write a note on enzyme inhibition and its kinetics. (6)
8. (a) Define Isozymes with example. (1)
(b) Derive Michaelis Menten equation and define K_m . (5)

Exam Code: 107402
(30)

Paper Code: 2198

Programme: Bachelor of Science (Bio-Technology)
Semester-II

Course Title: General Microbiology-II

Course Code: BBTM-2347 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks.

Section-A

1. Discuss and explain the non-specific defense mechanism against pathogenic micro-organism. (6)
2. Define Microbial growth. What are the factors affecting microbial growth w.r.t. temperature, pH, provision of growth? (6)

Section-B

3. What is Microbial pathogenicity? Mention the factors affecting Microbial pathogenicity. Describe the process of adhesion of microbial pathogens? (6)

4. What is Sporulation of bacteria. What are different stages involved in sporulation process. Draw Diagram (6)

Section-C

5. What are bacteriophages? Discuss in brief the structure and life cycle of T4 Bacteriophage (Lytic cycle)? (6)
6. How Municipal solid waste transformations can be done. Explain the methods? (6)

Section-D

7. Write down the classification based on the differences in their transcription process in viruses? (6)
8. A) What is Bioremediation. Write its advantages & disadvantages. (3)
- B) Explain Biomining in detail. (3)

Exam Code: 107402
(30)

Paper Code: 2195

Programme: Bachelor of Science (Bio-Technology)
Semester-II

Course Title: Zoology-I

Course Code: BBTM-2484 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks.

Section-A

1. What are the salient features of phylum porifera?
Give examples. 6
2. Write the characteristics features of phylum arthropoda and gives its classes with examples. 6

Section B

3. a) Draw well labelled diagram of human alimentary canal.
b) What is symbiotic digestion? (4+2)
4. Write a note on oxygen dissociation curve. 6

Section C

5. a) What is heart beat? Explain its origin and regulation.
b) What is cardiac cycle? (4+2)
6. Draw well labelled diagram of nephron and explain its structure. 6

Section D

7. a) Write a note on various hormones secreted by thyroid gland.
b) Define synapse (4+2)
8. Explain the structure of brain with the help of well labelled diagram. 6

7202

Paper Code: 2278

Programme: Bachelor of Computer Applications
Semester-II

Course Title: Principles of Digital Electronics

Course Code: BCAL-2113 ✓

Time: 3 Hours

Max Marks: 80

Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question can be attempted from any section. Each question carries 16 marks.

Section-A

Convert the following:

$(125)_{10} = (?)_2$

$(18.2)_8 = (?)_{10}$

$(27)_8 = (?)_2$

$(32)_{16} = (?)_8$

4x4

Write the advantages and applications of Grey code.

6x10

Section B

Implement the following:

1. Implement $PQR + PQ + QR + PQS$ using NAND Gate only.

2. Simplify $F = \sum (1, 3, 5, 7, 9)$ using Boolean algebra.

State the following:

1. De-Morgan's Law

2. Boolean Algebra

8x8

Section C

1. List the different types of flip-flops? Explain the working of master-slave flip-flop.

16

2. Implement the following Boolean function with any multiplexer

$F(P,Q,R,S) = (0,1,3,4,8,9,15)$

16

Section D

1. Explain the address selection logic with suitable example.

16

2. Explain the various types of memory systems used in digital design. Explain in detail any one.

16

202

Paper Code: 2279

Programme: Bachelor of Computer Applications
Semester-II

Course Title: Numerical Methods and Statistical Techniques

Course Code: BCAL-2114

3 Hours

Max Marks: 80

Five questions, selecting at least one question from each section. The fifth attempted from any section. Each question carries 16 marks. Students can use scientific calculator.

SECTION A

1. What are the types of errors in numerical calculations? What are the commonly used measures of errors? (8)

2. Calculate the value of $(a^2 - b^2) / (a - b)$ with $a = 0.3424$ and $b = 0.3400$ using the floating point representation of numbers with four digits. Compare the value of $a + b$ and find the relative and absolute error of the former. (8)

3. Find the root of the equation $x^3 + 7x^2 + 9 = 0$ using Regula Falsi method correct to three decimal position. (8)

4. Solve the following 3×3 equations using the Gauss elimination method:

$$2x - y + 3z = 1 \quad (8)$$

$$-3x + 4y - 5z = 0$$

$$x + 3y - 6z = 0$$

SECTION B

5. Evaluate $\int_0^1 \frac{3x}{(4+x^2)^2} dx$ using trapezoidal and Simpson rule dividing the range into six equal sub-intervals. (16)

6. Using the following data, interpolate the number of students who secured more than 60 marks. (8)

25	36	45	55	70
65	63	40	18	7

7. Using the following table, estimate the number of students who obtained marks between 35-45.

35-45	45-55	55-65	65-75	75-85
18	40	64	50	28

(8)

SECTION C

out of 100 families, 14 families spend between Rs. 0 to 10 per week while 27 (16) families spend between Rs. 20 to 30. If 15 families spend between Rs. 40 to 50, find the number of families spending between Rs. 10 to 20 and Rs. 30 to 40. It is given that Median and mode of the distribution are 25 and 24 respectively.

Calculate median and mode from the following data:

in	25	30	35	40	45	50	55	60
	8	23	51	81	103	113	117	120

Median and mode of the following data are given to be 34.8 and 36.5 respectively (16)

	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	9	16	?	?	?	10	8

Find the missing frequencies when it is given that $N = 100$.

SECTION D

Judges ranked ten competitors in a debate competition as follows. Which pair of (8 * 2) competitors agree the most?

Competitors	1	2	3	4	5	6	7	8	9	10
Judge 1	9	3	7	5	1	6	2	4	10	8
Judge 2	9	1	10	4	3	8	5	2	7	6
Judge 3	6	3	8	7	2	4	1	5	9	10

Determine both the regression equations from the following data

X	0.1	0.2	0.3	0.4	0.5	0.6
Y	5.1	5.3	5.6	5.7	5.9	6.1

Find the regression coefficients

Use the data below:

X	1	2	3	4	5	6
Y	0.5	2.1	4.5	7.5	12.6	19.8

Fit a second degree polynomial and .

Programme	Exam Code:	Course Code
Bachelor of Computer Applications	107202	BCAL-2116 ✓
Bachelor of Science (Information Technology)	105702	BITL-2116 ✓

Semester- II

Course Title: Statistical Techniques for Data Science

Time Allowed: 3 hours

Max. Marks: 60

Note: Attempt five questions in all, selecting at least one from each section, fifth question may be attempted from any section. The students can use Non-programmable/ Scientific & Non-storage type calculator. Each question carries 12 marks.

SECTION A

- Q1. (a) What are various types of data and levels of measurement? (6)
(b) Explain creation of a Frequency distribution table by taking data of your choice. (6)
- Q2. (a) Explain Exhaustive and Equally-likely events. (3)
(b) Explain Independent and Dependent Events. (3)
(c) What is the Probability that a Leap year selected at random will contain 53 Sundays? (6)

SECTION B

- Q3. Explain Addition Theorem of Probability for Mutually Exclusive Events and Not Mutually Exclusive Events, taking examples of your choice. (12)

Q.4. (a) In a class of 25 students having Roll Numbers from 1 to 25, one student is picked up at random to answer a question. Find the Probability that the Roll Number of the selected student is either a multiple of 5 or 7. (6)

(b) A person is known to solve the problem in 3 out of 4 trials, whereas another person is known to solve the problem in 2 out of 3 trials. Find the Probability of the Problem being solved at all when they both try. (6)

SECTION C

Q.5.(a) Explain the concept of Skewness with the help of Frequency distribution. What are various measures of Skewness? (6)

(b) Explain Null Hypothesis and Alternate Hypothesis. (6)

Q.6. The number of accidents per week in a certain city were as follows:

12, 8, 20, 2, 14, 10, 15, 6, 9, 4

Are these numbers in agreement with the belief that accident's numbers were same during these 10 week period. (12)

SECTION D

Q.7. (a) What is Analysis of Variance? Explain the uses and techniques of ANOVA. (6)

(b) Explain the steps to perform Correlation analysis in MS Excel. (6)

Q.8. In a sample of 200 girls, of which 75 were intelligent, 40 had educated Mothers, while 85 of the unintelligent girls had uneducated mothers. Do these figures support the hypothesis that educated mothers have intelligent girls. Use chi square test.

(The value at 1 degree of freedom at 5% level is 3.84) (12)

Exam Code: 107202
(60)

Paper Code: 2280

Programme: Bachelor of Computer Applications
Semester-II

Course Title: Introduction to Object Oriented
Programming-I

Course Code: BCAM-2115 ✓

Time Allowed: 3 Hours

Max Marks: 50

Note:- Candidates are required to attempt five question, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 10 marks.

SECTION A

1. What are the various characteristics are of object oriented programming(OOP) technique? How the member functions of class can be defined inside the class? Illustrate with an example. (10)
2. Write a note on:
 - a) Polymorphism
 - b) Encapsulation (10)

SECTION B

3. What is a constructor? Explain different types of constructor with an example. (10)

4. Explain constructor overloading in detail. Write a program to demonstrate the concept of constructor overloading function. (10)

SECTION C

5. Explain the declaration, definition and calling of an overloaded functions with a program. (10)
6. How binary operator can be overloaded? Explain arithmetic operator overloading technique. (10)

SECTION D

7. What is an inheritance? Illustrate different types of an inheritance with a programming example? (10)
8. What is a polymorphism? Explain its types with an example. (10)

(Old Syllabus (2018-2019))

102

Paper Code: 9212

Programme: Bachelor of Commerce (Honours) Semester: II

Course Title: Advanced Financial Accounting

Course Code: BCOL-2093 ✓

Hours

Max. Marks: 80

Students are required to attempt five questions in all, selecting atleast one question from each section. Questions may be attempted from any section. Each question carries 16 marks.

Section- A

Students will and state the factors upon which it depends and methods which may be adopted to

There were two partners in a firm in the ratio of 5:3. Their balance sheet as on 31st March, follows:

Liabilities	Rs.	Assets	Rs.
	10,000	Goodwill	8,000
Share Capital	4,000	Building	17,000
Reserve Fund	14,000	Plant	13,500
Other Accounts:-		Furniture	2,000
	40,000	Debtors	16,500
	20,000	Bills receivable	7,500
		Stock	11,000
		Bank	5,500
		Profit & Loss A/c	7,000
	88,000		88,000

Partner Khosla into partnership giving him 1/5th share. He brings in Rs. 25,000 as his share of capital. The partners decide to revalue the assets as follows:

Goodwill Rs. 8,000, Plant Rs. 12,500, Debtors Rs. 15,500, Stock Rs. 16,250, Building Rs. 20,000, Furniture Rs. 2,000, Bills receivables Rs. 6,250. You are required to prepare necessary accounts.

Section- B

Balance sheet of A, B & C Who are in partnership stood as follows:

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Share Capital	55,000	Bank	6,250
Reserve	82,500	Debtors	62,500
Investment	55,000	Stock	87,500
		Investment	25,000
		Furniture	1,250
		B's Capital (Overdrawn)	10,000
	1,92,500		1,92,500

Partner A is dissolved as on that date. For the purpose of dissolution the investments were valued at Rs. 25,000 and stock at 70,000. C agreed to take over the investments and A to take over stock. A also took over the debtors at book value. The debtors realized Rs. 59,000 and the creditors were paid 53,500 in full settlement of their claims.

is insolvent and is unable to bring anything in respect of his debts to the firm, prepare
account, bank account and capital accounts of partners.

rent methods of treating Joint Life Policy in the books of the firm at the time of retirement
with suitable illustrations.

Section- C

set on voyage from Calcutta to Bombay. On 31st Dec. on which date accounts are closed
voyage had not been completed.

f entire voyage are as follows:

	Rs.		Rs.
	4,00,000	Insurance :	
		Ship	20,000
		Freight	30,000
	70,000	Primage	10%
	30,000	Address Commission	5%
s	15,000		
1	40,000		

0,000 freight was available on return journey. Prepare voyage account up to 31st December.

between Hire purchase and Instalment system. Discuss journal entries passed in the books
laser and Hire Vendor.

Section- D

vo departments- cloth and readymade clothes. The clothes were made by the firm itself out
plied by cloth department at its usual selling price. From the following figures prepare
trading and profit and loss account for the year 2009.

	Cloth (Rs.)	Readymade Clothes (Rs.)
ck	3,00,000	50,000
	20,00,000	15,000
	22,00,000	4,50,000
readymade department	3,00,000	-
ing expenses	-	60,000
nses	20,000	6,000
ck	2,00,000	60,000

the readymade clothes department may be considered as consisting of 75% clothes and
expenses. The cloth department earned Gross Profit at the rate of 15% in 2008. General
whole business are Rs. 1,10,000.

utes Normal and Abnormal loss of stock on consignment? Give in detail the accounting
both types of loss of stock.

Programme: Bachelor of Commerce (Honours) Semester: II

Course Title: Advanced Financial Accounting

Course Code: BCOL-2093

Max. Marks: 80

Required to attempt five questions in all, selecting atleast one question from each section.
One question to be attempted from any section. Each question carries 16 marks.

Section- A

Q.1. State the factors upon which it depends and methods which may be adopted to calculate

Q.2. A and B are partners in partnership and sharing profits and losses in the proportions of 1/2, 1/3 and 1/6.
C is admitted to the partnership and share of 1/10. C desires to keep up a working partner when their balance sheet stood as follows:

Liabilities	Rs.	Assets	Rs.
Capital	50,000	Cash in hand	8,000
Debtors	5,70,000	Debtors	2,52,000
Stock	3,20,000	Stock	2,90,000
Machinery	1,60,000	Machinery	70,000
Land and Building		Land and Building	4,80,000
	11,00,000		11,00,000

Q.3. C is admitted into partnership and give him a share of 1/10 share in the profits on the following

Q.4. C brings in Rs.30,000 as goodwill and Rs.1,28,000 as his capital.

Q.5. Depreciated at 12%.

Q.6. Depreciated by 10%.

Q.7. Provision of 5% be created for doubtful debts.

Q.8. Land and building be brought up to Rs.6,20,000.

Q.9. After making above adjustments the capital accounts of the old partners be adjusted on the basis of the

Q.10. C's capital to his share in the business. Prepare Revaluation Account, Partners' Capital

Q.11. Balance Sheet.

Section- B

Q.1. A, B and C are partners sharing profits 3:1:1 agree upon dissolution. They decide to take over certain assets and continue business separately.

Balance Sheet
as on 31st December, 2010

Liabilities	Rs.	Assets	Rs.
Cash	6,000	Cash	3,200
Sundry Assets	1,500	Sundry Assets	17,000
Debtors	27,500	Debtors	24,200
Less: Bad Debts Provision	10,000	Less: Bad Debts Provision	1,200
Stock	7,000	Stock	7,800
Fixtures		Fixtures	1,000
	52,000		52,000

Q.2. follows:

Original with KMV Library amounting to Rs.20,000 at 17,200. The creditors of assumed by A at this figure.

over all the stock at Rs.7,000 and certain of the sundry assets at Rs.7,200 (being book

er Sundry Assets at 90% of book value less Rs.100 allowances and assume responsibility of loan, together with the accruing interest of Rs.30 which has not been recorded in the

of dissolution were Rs.270. The remaining Debtors were sold to debt collecting agency value.

n Account, Partners' Capital Accounts and Cash Account.

adjustments made at the time of retirement of a partner in the books of firm with the help es.

Section- C

and its journey from Bombay to Calcutta. On 31st Dec. on which date accounts are closed, had not been completed.

re voyage are as follows:

	Rs.		Rs.
	80,000	Insurance :	
		Ship	10,000
		Freight	4,000
	14,000	Primage	10%
	6,000	Address Commission	5%
	3,000		
	8,000		
	8,000		

ight was available on return journey. Prepare voyage account up to 31st December.

n by Default and Repossession? Explain how default and repossession is treated in the chaser and Hire Vendor.

Section- D

ntal trading and profit and loss account from the following data for the year ending 31st

Particulars	Dept. X (Rs.)	Dept. Y (Rs.)
	40,000	-
outside	2,00,000	20,000
	10,000	1,000
s from department X	-	50,000
ember	30,000	10,000
	2,00,000	71,000

g stock of Dept. Y represents the goods from Dept. X which were transferred at 25% nistration and Selling expenses amounted to Rs.15,000 which are to be allocated in the

and Abnormal loss of stock on consignment? Give the accounting treatment of both types

Exam Code: 109102
(100)

Paper Code: 2256

Programme: Bachelor of Commerce (Honours)
Semester-II

Course Title: Business Laws

Course Code: BCOL-2095 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note:- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section A

1. Discuss briefly the law relating to communication of offer, acceptance and revocation. When may an offer and acceptance be revoked?
2. "A stranger to a contract cannot sue." Are there any exceptions to this rule?

Section -B

3. What remedies are available to an aggrieved party on the breach of contract?
4. When is a pledge created by non- owners valid?

Section -C

5. Who is an unpaid seller. Discuss the rights of an unpaid seller against the goods?
6. Give the circumstances when a Negotiable Instrument is discharged and also discuss the discharge of parties.

Section -D

7. Enumerate the provisions relating to Working hours of Adults under Factories Act, 1948.
8. Discuss the various modes of settlement of disputes under Industrial Disputes Act, 1947.

Bachelor of Commerce (Honours) Semester-II

Course Title: Communicative English

Course Code: BCOL-2102

Max. Marks: 40

questions in all, selecting at least one question from each section. The fifth question can be from any section. Each question carries 8 marks. (8x5=40 Marks)

Section A

Read the following text carefully and prepare notes from it. Use appropriate sub-headings for your notes and include what you have read.

There has been a curse to society since very old times. The great tragedy is that it is still continuing while scientific advancement. A very large number of innocent people still suffer because they belong to a particular race. The rising scourge of religious fanaticism and sectarianism is turning men into creatures worse

than the priests working at the grass roots level in all religions. Ignoring the high ideals enshrined in their religion in all the religions they misguide their co-religionists by misrepresenting their scriptures and in addition to this, selfish politicians also incite the people of their own community against other religious communities to broaden and strengthen their vote banks. They sometimes purposefully plan communal riots.

People should be aware of such elements. Right type of education can help a lot in this direction. All religions have common and non-essential elements. The irony is that self-styled protectors of different religions ignore the common elements and cause bloodshed. They do not stop to think that all religions are similar in fact all the great prophets and saints were great lovers of humanity. They saw great injustice, cruelty and oppression in their own communities and raised their voices against it. But what happened? The selfish elements and reformers did not want any reform; they turned against them and almost all the prophets, saints and reformers had to suffer for their other.

Jesus raised his voice against idolatry and other malpractices amongst the Arab tribes and had to leave Medina. The innocent saintly Jesus was mercilessly crucified on the cross because the priestly class of his community did not like his reformist zeal. His only fault was that he wanted his people to lead a truly moral life and to care for non-essentials in their religion. The well-trenched priests thought it to be a challenge to their self-interest and therefore incited the Roman ruler of the region to condemn him to death. Jesus was not a rebel; someone who incited rebellion against the Roman empire - the greatest crime in the eyes of the Romans. All religions were pure; they aimed at improving the

life of man. But by and by non-essential rituals overpowered the basic tenets of religions and spoiled the moral fabric, the great poet-saint of medieval India condemned in his verses the useless rituals in both Islam and Christianity. Religion disseminate the ideal of universal brotherhood and create in man a desire for social justice.

Or

Acupuncture is a system of treatment of diseases which has been practiced in China for nearly 5000 years. It involves the use of steel needles, about 6 centimeters long, that the doctor twirls between his thumb and forefinger. The needles are inserted at various acupuncture points on the body. When a puncture is made on a particular spot on the body, energy flows along lines known as meridians to the diseased organs. This flow of energy helps restore balance of the body and correct the disorder. The points of treatment may be far from the seat of the disease. For example, to cure a headache, a puncturist may insert a needle on the palm of the patient.

China is considered to be the country where acupuncture originated, some forms of treatment resembling it have been discovered in other parts of the world by anthropologists. Among some ancient tribes, stones and arrows were used for treatment, another form of treatment, the skin on particular spots of the body was burnt to bring about a cure for the disease. Whether these kinds of treatment can rightly be classed with acupuncture can be known only after further

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...perstition like witchcraft and magic cure. In China itself, the system of medicine was so great that the native systems of treatment were neglected or the theoretical basis for acupuncture that was propounded in China was a mixture of spirituality, ...logy. This stood in the way of its acceptance by Chinese scientists.

...uncture came to the notice of western scientists, who viewed it with scepticism as well as curiosity. ...ent to China to make a first hand study of this strange form of treatment. They were convinced by ...upuncture worked. Not only were diseases cured, but operations too were performed after ...ia by acupuncture. The patient of such an operation could see and know what was being done, but

...d get up and walk away. Doctors in other parts of the world took acupuncture seriously and some ...and set up practice in their countries. In China itself the status of acupuncture rose when Chairman ...uncturists with other physicians.

Section B

...any one topic:

Or

...really "weaker" sex?

Section C

...various methods of taking notes.

Or

...ences with appropriate words from the list below.

...ase, investigation, relevant to, combine, reveals

...the data _____ regular patterns of substitution in a child's speech.

...resting _____ of children's early English is that it differs from adult English in systemic ways.

...mar rules of our native language enables us to _____ words to form phrases and phrases to form

...me that I could improve my paper by cutting out three paragraphs that were not _____ the

Section D

...em Markers and Underline the Problem:

...ove to another country, one obstacle they may face is their inability to speak and understand the ...ir new home.

...ence by making two simpler sentences, with second sentence expressing the result of the first:

...990s, the British government did not maintain adequate funding for the National Health Service, ...uce the number of doctors and nurses they employed.

...g sentence, highlight the main verb and underline the entire nominalized subject:

...ow and painful adjustment to life overseas was to be expected.

...entence by two simpler sentences, with second one sentence expressing the result of the first:

...ve into the country, where they cut down the trees and other vegetation on hillsides, leaving the soil ...ction against erosion by wind and rain.

Or

...y one of the given topics:

...vs. Trees for fuel

Exam Code: 109102

Paper Code: 2255

Programme: Bachelor of Commerce (Honours) Semester: II

Course Title: Macroeconomics

Course Code: BCOL-2174

Time Allowed: 3 Hours

Max Marks: 80

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 16 marks.

SECTION-I

- 1) Explain the difference between Product at factor cost and Product at Market price. Discuss the difficulties in measuring National income.
- 2) Define Circular flow of Income. Explain the circular flow of income in an open economy.

SECTION-II

- 3) Explain the Keynesian approach to Aggregate Demand and Aggregate Supply. How is it different from Classical approach?
- 4) Explain the term Consumption Function. Discuss the various factors which determine the consumption function.

SECTION-III

- 5) Explain the Keynesian theory of Demand for money. Give its limitations also.
- 6) Discuss the causes and measures to control the inflation.

SECTION-IV

- 7) Define Fiscal policy. Explain the various instruments of Fiscal policy to achieve the objective of price stability and Economic development.
- 8) Explain the different forms of balance of payment. Discuss various methods to correct the disequilibrium in balance of payment.

Exam Code: 109102
(100)

Paper Code: 2257

Programme: Bachelor of Commerce (Honours)
Semester-II

Course Title: Inferential Statistics for Business

Course Code: BCOL-2176 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note: Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. All Questions carry equal 16 marks.

Section-A

1. a) Explain the difference between population and sample.
b) Write a short note on central limit theorem.

2. a) A group of 9 patients treated with medicine A having their weights are 45, 47, 50, 52, 48, 47, 49, 53 and 51. Show that mean weight of 47.5 kg. of population is reasonable. Test at 5% level of significance.
b) A random sample of 100 students gave a mean weight of 58 kg. with a standard deviation of 4 kg. Test

the hypothesis that the mean weight of the population is 60 kg.

Section-B

3. Write down the procedure of hypothesis testing for difference between two means.

4. a) 490 boys and 450 girls appeared at an examination in commerce . The mean and standard deviation of marks of boys are 54.3 and 17.5 , where as those of girls are 50.6 and 18 . Is there a significant difference in marks of boys and girls at 1% level of significance.
b) Given below are the marks obtained by 5 and 7 students of two sections taught by two different teachers.

Teacher I	50	55	60	65	70		
Teacher II	60	63	58	70	55	68	73

Using the Mann-Whitney U-test at 5% level of significance to verify that the distribution of marks awarded by two teachers are equal.

Section-C

5. Explain the confidence interval for population proportion and difference in population proportions.
6. Two independent random samples drawn from normal population had the following values (weights in kg)

Sample 1	9	11	13	10	15	9	12	14
Sample 2	10	12	11	14	9	8	10	

Do population variances of two samples differ significantly.

Section-D

7. Two investigators study the income of group of persons. Following results were obtained by them

Investigator	Poor	Middle Class	Rich Class
A	160	30	10
B	140	120	40

Do the sampling techniques adopted by two researcher significantly different?

8. a) A die is thrown 100 times and the frequency of various faces are given as below.

Face	1	2	3	4	5	6
Frequency	15	17	20	16	18	14

Test the hypothesis that die is unbiased.

- b) Write down the assumptions of chi-square test

Exam Code: 109102
(100)

Paper Code: 2104

Programme: Bachelor of Commerce (Honours)
Semester II

Course Title: Punjabi (Compulsory)

Course Code: BCOL-2421 ✓

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹਨ। ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 08 ਅੰਕ ਹਨ।

40

ਭਾਗ-ੳ

1. ਗੁਰਮੁੱਖ ਸਿੰਘ ਮੁਸਾਫ਼ਿਰ ਦੀ ਕਹਾਣੀ "ਬਾਗੀ ਦੀ ਧੀ" ਦਾ ਸਾਰ ਲਿਖੋ?
2. ਪਿਛੇਤਰ ਕੀ ਹੁੰਦੇ ਹਨ? ਵਿਉਂਤਪੜੇ ਅਤੇ ਰੁਪਾਂਤਰੀ ਪਿਛੇਤਰਾਂ ਬਾਰੇ ਉਦਹਾਰਣਾ ਸਹਿਤ ਜਾਣਕਾਰੀ ਦਿਓ? (8)

ਭਾਗ-ਅ

3. "ਪੇਸ਼ੀ ਦੇ ਨਿਆਣੇ" ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।
4. ਹੇਠ ਲਿਖਿਆਂ ਵਿਸ਼ਿਆਂ ਵਿੱਚੋਂ ਕਿਸੇ ਇੱਕ ਵਿਸ਼ੇ ਤੇ ਪੈਰਾ-ਰਚਨਾ ਕਰੋ:-
 1. ਸਮੇਂ ਦੀ ਕਦਰ
 2. ਬੇਰੁਜ਼ਗਾਰੀ ਦੀ ਸੱਮਸਿਆ

3. ਇੰਟਰਨੈੱਟ ਦਾ ਮਹੱਤਵ (8)

ਭਾਗ-੮

5. ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ ਦੀ ਕਹਾਣੀ ਧਰਤੀ ਹੇਠਲਾ ਖੋਲਦਾ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ?
6. ਹੇਠ ਲਿਖੇ ਮੁਹਾਵਰਿਆਂ ਵਿੱਚੋਂ ਕਿਸੇ 4 ਦੇ ਅਰਥ ਸਪੱਸ਼ਟ ਕਰਕੇ ਵਾਕ ਬਣਾਓ:-
 1. ਟਕੇ ਵਰਗਾ ਜਵਾਬ
 2. ਹੱਥ ਚੰਗਾ
 3. ਸਰ ਕਰਨਾ
 4. ਅੱਖਾਂ ਫੇਰਨਾ
 5. ਸੋਨੇ ਤੇ ਸੁਹਾਗਾ ਹੋਣਾ
 6. ਗਿੱਲਾ ਪੀਹਣ ਪਾਉਣ
 7. ਕਲਮ ਦਾ ਧਨੀ ਹੋਣਾ।

(8)

ਭਾਗ-੯

7. "ਬੁੱਤ ਸ਼ਿਕਨ" ਕਹਾਣੀ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।
8. ਆਪਣੇ ਘਰ ਵਿੱਚ ਹੋਈ ਚੋਰੀ ਦੀ ਸੂਚਨਾ ਦੇਣ ਲਈ ਥਾਣੇ ਦੇ ਐੱਸ.ਐੱਚ.ਓ ਨੂੰ ਇੱਕ ਪੱਤਰ ਲਿਖੋ।

(8)

Exam Code: 109102
(20)

Paper Code: 2109

Programme: Bachelor of Commerce (Honours)
Semester-II

Course Title: Punjab History and Culture

Course Code: BCOL-2431 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt one question from each section and the fifth question may be attempted from any of the four sections. in 600 words. Each question carries 8 Marks.

SECTION-A

1. Explain in brief relations of the Sikhs with Abdus Samad Khan?
2. Describe the Civil Administration of Maharaja Ranjit Singh

SECTION-B

3. What were the causes of first Anglo Sikh war?
4. Describe the board of administration of British.

SECTION-C

5. Describe the economic development of Punjab during British period.
6. Describe the contribution of Arya Samaj in Punjab.

SECTION-D

7. Write a detail note on the Jallianwala Bagh massacre of April 13, 1919 A.D.
8. Discuss the festival of Maghi and Basant Panchami.

Exam Code: 108502
(40)

Paper Code: 2258

Programme: Bachelor of Commerce
Semester-II

Course Title: Functional Management

Course Code: BCRL-2093

Time Allowed: 3 Hours

Max Marks: 40

Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Explain the various functional areas of Management. 8
2. Explain the various principles of Management given by Fayol. 8

Section B

3. Explain the various steps involved in the selection process. 8
4. What are the different form of worker's participation in the management. 8

Section C

5. Explain marketing Mix and its various components. 8
6. "Advertising is the life blood of modern business".
Discuss. 8

Section D

7. What is Strategic Management? Discuss its importance
in detail. 8
8. Explain the objectives and importance of Production
planning and control. 8

Exam Code: 108502
(40)

Paper Code: 2259

Programme: Bachelor of Commerce
Semester-II

Course Title: Commercial Laws

Course Code: BCRL-2094

Time Allowed: 3 Hours

Max Marks: 40

Attempt five questions in all, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section A

1. "All agreements are not contracts, but all contracts are agreements". Discuss the statement explaining elements of a valid contract. 8
2. State the various ways in which a contract may be said to be discharged. 8

Section B

3. What is the nature of surety's liability? When he is discharged from liability. 8
4. Define bailment. Explain the rights and responsibilities of bailer and bailee. 8

Section C

5. Distinguish between 'Sale and Hire-Purchase Agreement'. What are essential elements of sales. 8
6. What is meant by an unpaid seller? What are the rights of unpaid seller against goods and buyer personally? 8

Section D

7. What is consumer dispute? Briefly explain the composition and working of the various redressal agencies. 8
8. Explain the provisions of the LLP Act 2008, regarding Dissolution and winding up of an LLP. 8

Exam Code: 108502
(40)

Paper Code: 2260

Programme: Bachelor of Commerce
Semester-II

Course Title: Business Economics

Course Code: BCRL-2175 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Explain the law of Equi-marginal Utility. Also criticise it. 8
2. Prove that Price Effect=Income Effect+Substitution effect. 8

Section-B

3. What are laws of return to scale. How do they differ from returns to factors. 8
4. Briefly distinguish between traditional and modern theory of costs. 8

Section-C

5. Discuss determination of price and output under Monopolistic competition. 8
6. What is price discrimination Explain its degrees. 8

Section-D

7. Explain Expenditure method to measure national income. Also highlight its problems in developing countries. 8
8. What is consumption function? Explain its determinants. 8

8/6/23
(Only for Reappear Candidates (2018-19))

Exam Code: 108502
(40)

Paper Code: ~~924~~

Programme: Bachelor of Commerce
Semester-II

Course Title: Advanced Financial Accounting

Course Code: BCRM-2093 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Students are required to attempt five questions in all, selecting one question from each section and fifth question can be attempted from any section. Each question carries 6 marks. Use of Calculator is allowed.

Section-A

1. Neha Ltd. purchased a machine worth Rs. 3,50,000 on 1st January, 2000. On 1st January 2002, it purchased a new machine for Rs. 1,90,000 and spent Rs. 10,000 towards its carriage and installation. On 1st January, 2003 it purchased another machine for Rs. 1,00,000. The machine purchased on 1st January, 2002 was sold off on 31st March, 2004 for Rs. 1,55,000. Depreciation is charged @15% per annum on Straight Line Method. Prepare Plant and Machinery Account for 5 years, assuming that the books are closed on 31st March every year.

-
2. Distinguish between Reserve and Provision. Also discuss the major types of reserves and provisions with examples.

Section B

3. Distinguish between Single Entry System and Double Entry System. Explain the Statement of Affairs Method used to ascertain profits with an example.
-
4. On 1st April 2008, The New Motor Company Ltd. purchased lorry from Bharat Motor Ltd. Mumbai on hire purchase basis, paying Rs. 10,000 immediately and undertaking to pay further sums of Rs. 10,000 each on 31st March, 2009 and 2010 and a further sum of Rs. 13,204 on 31st March, 2011. The cash price of lorry is Rs. 40,000. Interest at 5% is charged by the vendors and 15% depreciation is written off each year by fixed instalment method. Write up accounts in the books of New Motor Co. Ltd.

Section C

5. What do you mean by Goodwill? Under what circumstances does it arise? Explain and illustrate different methods of calculating goodwill?
6. The following is the Balance Sheet of X & Y who share profits and losses in the ratio of 3:2

Balance Sheet as on 31st March 2018

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Bills payable	1,50,000	Cash	3,00,000
Creditors	3,00,000	Debtors	4,50,000
General Reserve	1,00,000	Plant	2,00,000
Capitals:		Land	1,50,000
X 3,00,000			
Y 2,50,000	5,50,000		
Total	11,00,000	Total	11,00,000

On the following conditions, Z was admitted:

- Plant to be depreciated by 20%.
- Land to be appreciated by 10%.
- A provision of 4% is to be created on Debtors.
- Z will bring proportionate share of capital which is $\frac{1}{5}$ th.
- Goodwill of the firm is Rs. 10,00,000 and Z brings his share.
- Capital of the firm after reconstitution should be Rs. 10,00,000 which should be in new profit-sharing ratio. Surplus or deficit should be withdrawn or brought by the partners.

Prepare necessary accounts and Balance Sheet after admission.

Section D

7. What do you mean by dissolution? Distinguish between dissolution of firm and partnership? Also give the accounting treatment of dissolution of firm.

8. A, B and C were in partnership sharing profits and losses in the proportion of 2:2:1. On 31st December, 2015, A retired from the firm and B and C decided to carry on the business on the same terms and conditions under the same name. On the date of A's retirement the balance sheet of the firm is as following:

Balance Sheet as on 31st Dec, 2015

Liabilities	Rs.	Assets	Rs.
A's Capital	70,000	Freehold property	32,000
B's Capital	78,000	Plant & Machinery	79,800
C's Capital	1,08,000	Loose Tools	7,800
Creditors	69,280	Investments	1,00,000
		Debtors	81,832
		Cash	23,848
Total	3,25,280	Total	3,25,280

According to the agreement on A's retirement, assets are to be revalued. Freehold Property at Rs. 48,000; Plant & Machinery at Rs. 65,600; Loose tools at Rs. 6,000; Investments at Rs. 85,000 and Goodwill is valued at Rs. 1,00,000.

A agrees to accept investments at the revalued figure in part payment of his dues. B brought Rs. 30,000 as further capital and A was paid in cash. Prepare Revaluation Account, Cash Account, Capital Accounts and Balance Sheet of firm after A's retirement.

Exam Code: 108502
(40)

Paper Code: 2261

Programme: Bachelor of Commerce
Semester-II

Course Title: Advanced Financial Accounting

Course Code: BCRM-2096 ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Students are required to attempt five questions in all, selecting one question from each section and fifth question can be attempted from any section. Each question carries 6 marks. Use of Calculator is allowed.

Section-A

1. Neha Ltd. purchased a machine worth Rs. 3,50,000 on 1st January, 2000. On 1st January 2002, it purchased a new machine for Rs. 1,90,000 and spent Rs. 10,000 towards its carriage and installation. On 1st January, 2003 it purchased another machine for Rs. 1,00,000. The machine purchased on 1st January, 2002 was sold off on 31st March, 2004 for Rs. 1,55,000. Depreciation is charged @15% per annum on Straight Line Method. Prepare Plant and Machinery Account for 5 years, assuming that the books are closed on 31st March every year.

2. Distinguish between Reserve and Provision. Also discuss the major types of reserves and provisions with examples.

Section B

3. Distinguish between Single Entry System and Double Entry System. Explain the Statement of Affairs Method used to ascertain profits with an example.
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General Reserve	1,00,000	Plant	2,00,000
Capitals:		Land	1,50,000
X 3,00,000			
Y 2,50,000	5,50,000		
Total	11,00,000	Total	11,00,000

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- Plant to be depreciated by 20%.
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- Z will bring proportionate share of capital which is $\frac{1}{5}$ th.
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- Capital of the firm after reconstitution should be Rs. 10,00,000 which should be in new profit-sharing ratio. Surplus or deficit should be withdrawn or brought by the partners.

Prepare necessary accounts and Balance Sheet after admission.

Section D

7. What do you mean by dissolution? Distinguish between dissolution of firm and partnership? Also give the accounting treatment of dissolution of firm.

8. A, B and C were in partnership sharing profits and losses in the proportion of 2:2:1. On 31st December, 2015, A retired from the firm and B and C decided to carry on the business on the same terms and conditions under the same name. On the date of A's retirement the balance sheet of the firm is as following:

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Creditors	69,280	Investments	1,00,000
		Debtors	81,832
		Cash	23,848
Total	3,25,280	Total	3,25,280

According to the agreement on A's retirement, assets are to be revalued. Freehold Property at Rs. 48,000; Plant & Machinery at Rs. 65,600; Loose tools at Rs. 6,000; Investments at Rs. 85,000 and Goodwill is valued at Rs. 1,00,000.

A agrees to accept investments at the revalued figure in part payment of his dues. B brought Rs. 30,000 as further capital and A was paid in cash. Prepare Revaluation Account, Cash Account, Capital Accounts and Balance Sheet of firm after A's retirement.

Paper Code: 2120

Programme:	Exam Code	Course Code
Bachelor of Arts	103202	BECL-2026 ✓
Bachelor of Science (Economics)	103302	BARL-2026 ✓

Semester-II

Course Title: Banking (Reasoning and Mental Ability)

Hours

Max marks: 80

The paper consists of four sections -A, B, C and D. Candidates are required to attempt MCQs selecting at least 8 MCQs from each section. The remaining 8 MCQs can be attempted from any section. Each question carries 2 marks.

Section A

Following term: 2, 9, 28, 65, ____

- (b) 195
- (d) 103

Following term: 78, 65, 75, 62, 72, ____

- (b) 65
- (d) 90

Following term: 664, 332, 340, 170, ____, 89

- (b) 97
- (d) 178

Following term: 864, 420, 200, 96, 40, 16, 6

- (b) 420
- (d) 40

Following terms: PAH, QBK, RCN, SDQ, TET, ____

- (b) VGW
- (d) WFU

Choose the corrective alternative: JKL, LKJ, JKLM, MLKJ, JKLMN, _____

- (a) NMLKJ
- (b) LMJKN
- (c) LMNKJ
- (d) KLMNJ

Find the next term in the alpha-numeric series:
J2Z, K4X, L7V,?, N16R, O22P

- (a) M11T
- (b) L11S
- (c) L12T
- (d) M12S

Which word does NOT belong with the others?

- (a) Fingers
- (b) Palm
- (c) Knee
- (d) Wrist

Which word does NOT belong with the others?

- (a) Car
- (b) Scooter
- (c) Helicopter
- (d) Cycle

Odometer is to mileage as compass is to

- (a) speed
- (b) hiking
- (c) needle
- (d) direction

Flower : Bud :: Fruit : ?

- (a) Twig
- (b) Taste
- (c) Seed
- (d) Flower

From the given options, Find the odd one out.

- (a) Spain : Madrid
- (b) Japan : Tokyo
- (c) China : Beijing
- (d) Iran : Rial

Success is to Failure in the same way as Big is to

- (a) Small
- (b) Good
- (c) Rich
- (d) Great

Songs
Poetry

(b) Books : Lessors
(d) Letters : words

Best alternative.
16 : ?

(b) 32
(d) 49

Section B

In a certain code 'PURPOSE' is written as 'UPRSOE'. How would 'WATER' be written in that code?

- (a) WATRE (b) AWTRE
(c) AWETR (d) WEATR

In a certain code 'MISSIONS' is written as 'MSIISNOS'. How is 'ONLINE' written in that code?

- (a) OFPOMN (b) NOILEN
(c) OLNNIE (d) LNOENI

If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH?

- (a) 246173 (b) 214673
(c) 214763 (d) 216473

In a certain code language,

- (A) 'pic vic nic' means 'winter is cold'
(B) 'to nic re' means 'summer is hot'
(C) 're pic boo' means 'winter and summer'
(D) 'vic tho pa' means 'nights are cold'

Which of the following represents 'summer' in that language?

- (a) nic (b) re
(c) to (d) vic

If train is called bus, bus is called tractor, tractor is called car, car is called scooter, scooter is called bicycle, bicycle is called moped, which is used to plough a field?

- (a) Train (b) Bus
(c) Tractor (d) Car

In a certain code, '134' means 'Good and Tasty'; '478' means 'See Good Pictures' and '729' means 'Pictures Are Faint'. Which digit in that code stands for 'See'?

- (a) 9 (b) 2
(c) 1 (d) None of these

READ is coded as 7, then what is the code of 'DEAR' ?

- (b) 7
- (d) 9

persons, the Position of Ajay is 30th from the left side of row, and the position from the right side of the row is 34th. Find the total no. of person in a row.

- (b) 64
- (d) 65

children, Srilekha is 9th from the left and Birla is 13th from the right. They exchange their positions and the Srilekha becomes 17th from the left. Find the new position of Birla.

- (b) 27th
- (d) None of these

5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?

- (b) North-East
- (d) South -West

20 m towards north. Then he turned right and walks 30 m. Then he turns right and walks 15 m. Then he turns left and walks 15 m. Finally he turns left and walks 15 m. In which direction and how many metres is he from the starting position?

- (b) 30m East
- (d) 45m East

10 km from his house towards North. After covering a distance of 8 km. he turned right and covered a distance of 6 km. What is the shortest distance now from his house?

- (b) 16 KM
- (d) 14 KM

roducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is
oy related to the girl?

- Brother (b) Nephew
Uncle (d) Son-in-law

+ B means A is the brother of B; A - B means A is the sister of B and A x B means A is the
r of B. Which of the following means that C is the son of M?

- M - N x C + F (b) F - C + N x M
N + M - F x C (d) M x N - C + F

ak said to Nitin, "That boy playing with the football is the younger of the two brothers of
laughter of my father's wife." How is the boy playing football related to Deepak?

- Brother (b) Cousin
Brother-in-Law (d) Son

Section C

words given below in a meaningful sequence.

Paragraph 3. Sentence 4. Letters 5. Phrase

- 3 (b) 4,1,3,5,2
3 (d) 4, 1, 5, 3, 2

words given below in a meaningful sequence.

2. Furniture 3. Forest 4. Wood 5. Trees

- , 2 (b) 1, 4, 3, 2, 5
, 5 (d) 5, 2, 3, 1, 4

words given below in a meaningful sequence.

1. Punishment 3. Crime 4. Judge 5. Judgement

- , 5 (b) 1, 2, 3, 4, 5
, 1 (d) 3, 1, 4, 5, 2

words given below in a meaningful sequence.

door 3. Lock 4. Room 5. Switch on

- , 3 (b) 4, 2, 1, 5, 3
, 5 (d) 3, 1, 4, 5, 2

words given below in a meaningful sequence.

1. Community 3. Member 4. Locality 5. Country

- , 5 (b) 3, 1, 2, 5, 4
, 5 (d) 3, 1, 4, 5, 2

of $n+n$
 $\times 8+8$.

- (b) 25/128
(d) 65/128

ve and find the value of x using BODMAS rule.

$$2 + x + 3330 = 2545.$$

5400

(b) -6947

6947

(d) 6800

Directions(38-41) :Seven people are sitting in a straight line all facing North.

Z is not a neighbor of Y and V.

V is also not a neighbor of Y.

Y is sitting 4th to the right of X.

M is sitting on the end of the line.

V is sitting to the 4th left of W.

L is to the 4th left of M.

Who is sitting at extreme right end?

X

(b) Z

W

(d) Y

Who is sitting at the extreme left end?

X

(b) W

V

(d) Y

Who is sitting between L and W?

X

(b) Z

W

(d) M

How many people are sitting between X and V

1

(b) 2

3

(d) None of these

Directions(42-45) :

Five friends are sitting in a circle and are facing the centre of the circle. Deepa is between Pankaj and Priti. Priti is between Mukesh and Lalit. Prakash and Mukesh are opposite to each other.

Who is sitting right to Prakash ?

Mukesh

(b) Deepa

Pankaj

(d) Lalit

ight to Pankaj?

- (b) Deepa
- (d) Lalit

neighbours of Mukesh?

h and Deepa
d Pankaj

- (b) Deepa and Priti
- (d) Lalit and Priti

g opposite to Priti ?

- (b) Deepa
- (d) Lalit

Section D

Choose the alternative which closely resembles the mirror image of the given combination.

SUPERVISOR

- (1) **ROSVIƆƆPUS** (2) **SUPERVISOR**
(3) **ƆSOPVƆEƆIΛ** (4) **SUPERVISOR**

- (a) 1 (b) 2
(c) 3 (d) 4

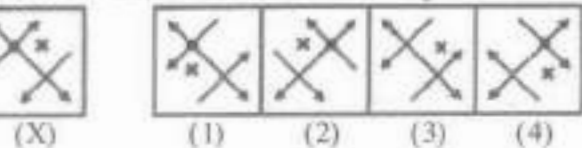
Choose the alternative which closely resembles the mirror image of the given combination.

TZFY6KH

- (1) **HKθYƆZΛU** (2) **UΛZƆYΛθKH**
(3) **HKθYƆZΛU** (4) **UΛZƆYθKH**

- (a) 1 (b) 2
(c) 3 (d) 4

Choose the alternative which closely resembles the mirror image of the given combination.



- (a) 1 (b) 2
(c) 3 (d) 4

Choose the alternative which closely resembles the water-image of the given combination.

PM3b

- (1) **ƆMΛƆP** (2) **ƆMΛƆP**
(3) **ƆMΛƆP** (4) **ƆMΛƆP**

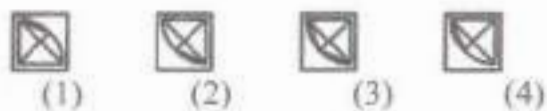
- (a) 1 (b) 2
(c) 3 (d) 4

Choose the correct water image of the given figure (X) from amongst the four alternatives.



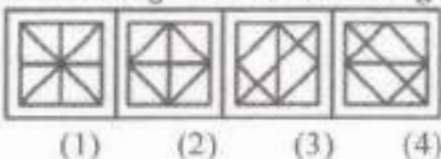
- (a) 1 (b) 2
(c) 3 (d) 4

Figure that completes the pattern.



- (b) 2
(d) 4

Alternative figure which contains figure (X) as its part.



- (b) 2
(d) 4

Shown four times and its four different positions are shown below. Find the number opposite the face showing 2.



- (b) 4
(d) 6

Q.54-57: The following questions are based on the information given below:

A cube of side 18cm is divided into small cubes of side 3cm. Before dividing the cube it is painted colour.

Q.54: How many small cubes are there whose no faces are coloured ?

- (b) 96
(d) None of these

small cubes are there whose 3 faces are coloured ?

- (b) 8
- (d) 24

small cubes are there whose only one face is coloured ?

- (b) 96
- (d) 108

small cubes are there whose at the most two faces are coloured ?

- (b) 56
- (d) 24

QNS (58-60) Study the following figure and answer the questions given below.



doctors are neither artists nor players ?

- (b) 5
- (d) 30

doctors are both players and artists ?

- (b) 8
- (d) 30

artists are players ?

- (b) 8
- (d) 16

Exam Code: 108602
(50)

Paper Code: 2301

Programme: Bachelor of Science (Fashion Designing)
Semester-II

Course Title: Traditional Textiles

Course Code: BFDM-2233

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Explain Kashmiri carpets and their various types in detail. (8)
2. What are Sangneri Prints? Explain the process of Sangneri and the motifs and colours used them. (8)

Section- B

3. Briefly explain -
 - a. Motifs used in Patola saree.
 - b. Gharchola and Leharia (4x2=8)
4. Write the process, colors, motifs and material used in Pochampalli of Andhra Pradesh. (8)

Section-C

5. Give a detailed account of
 - a. Characteristic features of Baluchar Butidars.
 - b. Kinkhabs and Himru (4x2=8)
6. Briefly explain the weaving process of Chanderi and Maheshwari saree. (8)

Section-D

7. Briefly explain the material, method, stitches, motifs and threads used in Chikankari of Uttar Pradesh. (8)
8. Write short notes on Phulkari and Bagh embroidery of Panjab. Differentiate between them. (8)

Exam Code: 108602
(50)

Paper Code: 2302

Programme: Bachelor of Science (Fashion Designing)
Semester-II

Course Title: Fabric Construction

Course Code: BFDM-2234

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

Section-A

1. Give brief account of various methods of fabric construction?
2. Draw a well labeled diagram of a simple loom and write the function of its various parts?

Section-B

3. Define weaving and explain the various simple weaves with suitable illustrations?
4. Define knitting. What are the various types of knitting? Explain with example.

Section-C

5. Explain the manufacturing process and properties of felt fabrics?
6. Discuss the manufacturing process, properties and uses of bonded fabrics?

Section-D

7. What are the various decorative methods of fabric construction? Explain lace making in detail?
8. Explain the methods of producing braided and knotted fabrics?

Exam Code: 108602

Paper Code: 2303

Bachelor of Science (Fashion Designing) Semester: II

Course Title: BASICS OF SEWING-II

Course Code: BFDM-2235

Time Allowed: 3 Hours

Max Marks: 50

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 10 marks.

Section-A

1. Discuss the following terms: 2.5×4=10
- True bias
 - Construction lines
 - Bust line
 - Seam line
2. What is anthropometry? Explain how we can take different body measurements? 10

Section-B

3. Write a note on pattern making and explain its tools? 10
4. Define drafting with its tools, importance and uses? 10

Section-C

5. Explain different types of collars with diagrams which are suitable for women? 10
6. Illustrate and explain different types of sleeves? 10

Section-D

7. Explain different types of yokes with illustration? 10
8. Write a brief note on decorative and functional trimmings? 10

Exam Code: 108202
(20)

Paper Code: 2199

Programme: Bachelor of Science (Home Science)
Semester-II

Course Title: Family and Social Welfare

Course Code: BHSL- 2283 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 8 marks.

SECTION A

1. a) Define marriage. (2)
b) What are the different objectives of marriage? (3)
c) Explain kinds of adjustment in marriage. (3)
2. a) What are the functions of family? (4)
b) Discuss the factors disintegrating joint family. (4)

SECTION B

3. a) What do you mean by term parenting? (2)
b) Differentiate between Authoritarian, Permissive and Disciplined Parenting. (6)
4. a) Define the term family planning. (2)

- b) How family planning is important for a family? (6)

SECTION C

5. Differentiate between social reform, social work and social Service. (8)
6. What is meant by social welfare? Explain in detail the role of family in socialization of a child. (8)

SECTION D

7. Describe the following agencies in detail.
- a) Balwadi (4)
 - b) Anganwadi (4)
8. Explain
- a) All India Women's Conference. (4)
 - b) Official and non- official local organization involved in social welfare. (4)

Exam Code: 108202
(20)

Paper Code: 2200

Programme: Bachelor of Science (Home Science)
Semester-II

Course Title: Elementary Physiology

Course Code: BHSL-2284 ✓

Time Allowed: 3 Hours

Max Marks: 40

Students are required to attempt 5 questions in all, selecting at least one question from each section. Fifth question can be from any section. Each question carries 8 marks .

Section-A

1. Explain the structure and function of skin.
2. Explain the digestion of carbohydrate, Proteins and Fats.

Section-B

3. Explain the structure of Heart and draw its diagram.
4. Explain the structure of Respiratory System and elaborate the mechanism of respiration.

Section-C

5. Explain the structure of nephron and formation of urine.
6. Explain the process of menstruation.

Section-D

7. Why Pituitary gland is known as 'Master gland' of the body? Explain
8. Explain the structure of Brain.

108202

Paper Code: 2203

Programme: Bachelor of Science (Home Science) Semester: II

Course Title: Computer Applications for Home Scientists

Course Code: BHSM-2127 ✓

Duration: 3 Hours

Max Marks: 50

Answer all questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries 10 marks.

Section A

Explain the difference between a workbook and a worksheet in spreadsheet. 5

What are some ways in which you can format data in a worksheet, and how these formatting options can help you present your data more effectively? 5

What do you mean by Internet? Discuss some potential risks associated with using the Internet and explain how you can protect your personal information and online privacy? 10

Section B

Explain how payment gateways work, and what are some common payment methods used in e-commerce? 5

Explain the difference between B2B, B2C, and C2C e-commerce models, and give examples of each. 5

Explain the difference between a web page and a website. How can you save a web page on a computer or device? Explain the role of hyperlinks in web pages. 10

Section C

Explain what a payment gateway is, and how does it facilitate online transactions? Discuss some advantages and disadvantages of using different payment methods for online transactions. 10

Explain the use of a web camera, and how can you use it to capture images and video for online education and content creation? 10

Section D

Explain what a blog is. How can you register a domain or subdomain with a website host, and what are some best practices for selecting a hosting provider? 10

Explain what an SMO strategy is, and how can businesses develop and implement effective SMO strategies to optimize their social media performance? 10

Exam Code: 108202
(20)

Paper Code: 2201

Programme: Bachelor of Science (Home Science)
Semester-II

Course Title: Introduction to Family Resource Management

Course Code: BHSM-2285 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Attempt five question in all, selecting at least one question from each section and fifth question may be attempted from any section. Each question carries 12 marks.

Section-A

1. What do you mean by family life cycle write its effect on management of resources. Also Discuss managerial responsibilities of family. 12
2. Write classification of resources and factor affecting their use. 12

Section-B

3. Write notes on
 - (i) Steps in decision making process.
 - (ii) Problem solving through resolving conflicts.

6,6

4. Write notes on
(i) Role of communication in effective management process.
(ii) Application of management process in resource utilization. 6,6

Section-C

5. What is time management its tools and steps in making time plans. 12
6. Write steps in money management and importance of Saving and investment. 12

Section-D

7. Discuss inter relationship of time & Energy. Also discuss general principal of work simplification. 12
8. Which disciplines are involved in ergonomics write use of ergonomics. 12

Exam Code: 108202
(20)

Paper Code: 2202

Programme: Bachelor of Science (Home Science)
Semester-II

Course Title: Advanced Food and Nutrition

Course Code: BHSM-2286 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section-A

1. Describe the functions, effect of deficiency and recommended daily allowance of Vitamin A, Vitamin C and Vitamin B1. (4,4,4)
2. A. Write down the Functions, food sources and factors affecting bioavailability of Iron, Sodium
B. What is importance of water in our body. (6,6)

Section-B

3. Discuss importance and principals of food preservation. (5,7)
4. What are the causes of spoilage of foods? Explain household methods of Food preservation. (6,6)

Section-C

5. Define Food adulteration. Discuss the methods to test presence of adulterants in food items. (2,10)
6. Write about different types of food standards. What are their uses? (8,4)

Section-D

7. What do you mean by food hygiene? Discuss the importance of food hygiene. (4,8)
8. Explain the hygienic procedure to be followed during different stages of cooking. (12)

Exam Code: 105702
(20)

Paper Code: 2281

Programme: Bachelor of Science(Information Technology)
Semester-II

Course Title: Principles of Digital Electronics

Course Code: BITL-2113 ✓

Time Allowed: 3 Hours

Max Marks: 80

Candidates are required to attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section-A

1. (a) Convert $(423)_{10}$ to Hexadecimal number (4)
(b) Explain excess 3 codes? How are decimal number converted to excess 3 code. (8)
(c) Find 1's and 2's Complement of 659. (4)
2. (a) What is GRAY Code? How Binary can be converted into GRAY Code. Explain it. (12)
(b) Convert 1472 into BCD. (4)

Section-B

3. What is NAND gate? How it is used to realize OR, NOT and AND gates? If Two Inputs $A=101010$ and $B=100101$ are applied to NAND gates. Find the output wave form. (16)
4. What is K-map? Explain how it can be used to simplify the 4-Variable Boolean expression using an example. (16)

Section-C

5. (a) What is SR flip-flop? Discuss the operation of clocked and edge triggered SR flip-flops. (12)
(b) What is the modules of a counter? (4)
6. (a) What is full subtractor? Draw logic circuit diagram. Write expression for difference and borrow bit. (10)
(b) What is Demultiplexer? Explain 1x4 Demultiplexer (6)

Section-D

7. (a) Explain 8x4 bit memory Rom using a block diagram. (10)
(b) Compare static RAMs, and Dynamic RAMs. (6)
8. (a) What is memory unit? Explain the concept of memory using registers with diagram of memory system. (10)
(b) Explain PROM and EPROM address selection logic. (6)

Bachelor of Science (Information Technology) Semester II
Course Title: Numerical Methods and Statistical Techniques
Course Code: BITL-2114

Time: 3 Hours

Max. Marks: 80

Attempt five questions in all, selecting at least one question from each section. Fifth question to be attempted from any section. Each question carries equal (16) marks. You are allowed to use non-storage and non-programmable type scientific calculator.

SECTION A

1. What are the types of an errors in numerical calculations? What are the commonly used types of errors? (8)

2. $X = 3.996094$. Find the relative error, absolute error and percentage error if X is rounded off to three decimal places. (8)

3. Find the root of the equation $x^3 + x - 1 = 0$ such that one root is near to 1. Find the root to three decimal places using Newton Raphson method. (8)

4. Use Gauss elimination method with complete pivoting solve the following equations:

$$x - y + 3z = 3 \quad (8)$$

$$2x + y + 4z = 7$$

$$3x + 5y - 2z = 6$$

SECTION B

1. Evaluate $\int_0^2 \frac{dx}{1+x^2}$ using trapezoidal, Simpson 1/3 rule and Simpson 3/8 rule with $h = 0.5$. (16)

2. Determine the Lagrange's method the percentage number of criminals under 35 years. (8)

Age below	25	30	40	50
% of Criminals	52	67.3	84.1	94.4

Using the table of values,

	2.5	3	3.5	4	4.5
	9.75	12.45	15.70	19.52	23.75

Find the value when $X = 4.25$. (8)

SECTION C

1. The median of the following data is 20.75. Find the missing frequencies F_1 and F_2 if the total frequencies is 100. (16)

Interval	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	7	10	F_1	13	F_2	10	14	9

2. Find the value of mean and mode from the following data:

	93-97	98-102	103-107	108-112	113-117	118-122	123-127	128-132
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					14	6	3	1
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Calculate Mean Deviation and Standard Deviation from the following data: (8)

an	80	70	60	50	40	30	20	10
cy	100	90	80	60	32	20	13	5

Regarding the income of the localities A and B data are given below:

	Locality A	Locality B
of persons	600	500
income	175	186
ce	100	81

(8)

In which locality is the variation of income greater?

What is the average income of the two localities taken together?

What is the combined standard deviation?

SECTION D

Calculate the rank correlation between marks obtained in Mathematics and marks in statistics from the following scores: (8 * 2)

	A	B	C	D	E	F	G	H	I	J
	30	20	40	50	30	20	30	50	10	50
	15	40	40	45	20	30	15	50	20	10

Calculate the two regression coefficients and equations for the data:

1	2	3	4	5
7	6	5	4	3

Use the data below:

(16)

1	1.5	2	2.5	3
1.1	1.3	1.6	2	3.4

Fit a second degree polynomial.

Fit the curve $y = ax^b$

Exam Code: 105702
(20)

Paper Code: 2283

Programme: Bachelor of Science(Information Technology)
Semester-II

Course Title: Introduction to Object Oriented
Programming-I

Course Code: BITM-2115



Time Allowed: 3 Hours

Max Marks: 50

Note:- Candidates are required to attempt five question, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 10 marks.

SECTION A

1. What are the various characteristics are of object oriented programming (OOP) technique? (10)
2. How the member functions of class can be defined outside the class? Illustrate with an example. (10)

SECTION B

3. What are default constructor? How it can be accessed in the main program? Explain with concept of default constructor with a program example. (10)

4. Explain the concept of Constructor overloading with a programming example. (10)

SECTION C

5. What is Unary Operator Overloading? What is the difference between the prefix and postfix notation in operator overloading? Explain with examples? (10)
6. Explain comparison operators overloading technique with a program. (10)

SECTION D

7. What is an inheritance? What is the difference between direct and indirect base class? Explain multiple inheritance in detail. (10)
8. What is a polymorphism? Explain its types with an example. (10)

Exam Code: 108702
(20)

Paper Code: 2141

Programme: Bachelor of Arts (Journalism & Mass Communication)
Semester-II

Course Title: Press Laws and Media Ethics

Course Code: BJML-2313 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 12 marks.

Section-A

1. Write a detailed note on Article 19 of Indian Constitution.
2. What do you know about the Social Responsibility of Press in a country like India?

Section-B

3. Discuss the need, significance and recommendations of First Press Commission in India.
4. Draw the relationship between Press and Democracy.

Section-C

5. Write a note on the Law of Defamation in detail
6. What do you know about Official Secrets Act?

Section-D

7. Define the meaning of Copyright act in detail.
8. Write about the features of Working Journalist Act and comment upon its implementation in print media profession.

Exam Code: 108702
(20)

Paper Code: 2142

Programme: Bachelor of Arts (Journalism & Mass Communication)
Semester-II

Course Title: History of Print Media

Course Code: BJML-2314 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Candidates are required to attempt five question, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries twelve marks.

Section A

1. Trace the history of The Tribune?
2. Write in detail the history of Indian news agencies

Section B

3. Write a note on the newspaper started by James Augustus Hickey.
4. What is the contribution of Mahatma Gandhi in Indian Journalism?

Section C

5. Write a detailed note on Adam's Press Gagging Act?
6. Trace down the history of Amrita Bazar Patrika.

Section D

7. Write a detailed note on the history of Daily Ajit newspaper?
8. What are your views on the present status of Punjabi press?

Exam Code: 108702
(20)

Paper Code: 2143

Programme: Bachelor of Arts (Journalism & Mass Communication)
Semester-II

Course Title: Mass Communication: Concepts and Processes

Course Code: BJML-2315 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Candidates are required to attempt five question, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries twelve marks.

Section A

1. Write a detailed note on characteristics & features of Mass Communication?
2. How the New Media act as a tool for Mass Communication.

Section B

3. Discuss in detail the various functions of Mass Communication?
4. Discuss in detail the various topologies and characteristics of audience.

Section C

5. Explain in detail the Bullet theory and Two- step flow theory
6. Explain in detail the concept Demassification.

Section D

7. What are the various tools of Mass Communication?
8. What is the role of social media in mass communication in today's world?

Exam Code: 108702
(20)

Paper Code: 2144

Programme: Bachelor of Arts (Journalism & Mass Communication)
Semester-II

Course Title: Design and Graphics

Course Code: BJML-2316 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note:- Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 12 marks.

Section-A

1. What do you mean by Design and Graphics? Explain various elements of Design in detail.
2. Explain the concept of Convergence and Divergence.

Section-B

3. What do you know about Typography? Discuss the principles of a good Typography
4. Which are the various Typeface Families?

Section-C

5. Write a note on Character Generation and its significance in Design and Graphics?
6. What do you know Bout Multi Media? Discuss its uses in Design and Graphics?

Section-D

7. Which are the various types of Papers used in Print Media?
8. Explain different types of Printing Methods.

Paper Code: 2101

Programme	Exam Code	Course Code
Bachelor of Arts (Journalism & Mass Communications)	108702	BJML-2421
Bachelor of Science (Fashion Designing)	108602	BFDL-2421
Bachelor of Science (Home Science)	108202	BHSL-2421
Bachelor of Computer Applications	107202	BCAL-2421
Bachelor of Science (Information Technology)	105702	BITL-2421
Bachelor of Science (Bio-Technology)	107402	BBTL-2421

Course Title: Punjabi (Compulsory)
Semester-II
(140)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ A

1. ਸੰਤੋਖ ਸਿੰਘ ਧੀਰ ਦੁਆਰਾ ਲਿਖੀ ਕਹਾਣੀ ਸਾਂਝੀ ਕੰਧ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਲਿਖੋ?

2. ਮਾਤਾ ਬੰਦਾ ਕਹਾਣੀ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ?

ਸੈਕਸ਼ਨ B

3. ਮਨੁੱਖ ਕੁਦਰਤ ਦੀ ਨੇਕ ਔਲਾਦ ਨਹੀਂ ਲੇਖ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ?
4. ਗੱਪਬਾਜ਼ ਲੇਖ ਦਾ ਵਿਸ਼ਾ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ?

ਸੈਕਸ਼ਨ C

5. ਪਤਨਾਂਵ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿਓ ਅਤੇ ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਬਾਰੇ ਦੱਸੋ।
6. ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿਓ ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ?

ਸੈਕਸ਼ਨ D

7. ਹੇਠ ਲਿਖੇ ਪੈਰੂ ਦਾ ਢੁੱਕਵਾਂ ਸਿਰਲੇਖ ਦੇ ਕੇ ਸੰਖੇਪ ਰਚਨਾ ਕਰੋ
ਬੱਚੇ ਨੂੰ ਮਰਿਆਦਾ ਦਾ ਸਬਕ ਦੇਣਾ ਬੜੀ ਸਿਆਣਪ ਮੰਗਦਾ ਹੈ ਬੱਚੇ ਦੀ ਫਿਤਰਤ ਮਰਿਆਦਾ ਦੇ ਵਿਰੁੱਥ ਹੁੰਦੀ ਹੈ ਸਿਆਣੇ ਮਾਪੇ ਇਸ ਰੁੱਚੀ

ਨੂੰ ਤਾਤਦੇ ਰਹਿੰਦੇ ਹਨ ਤੇ ਇਹੋ ਜਿਹੇ ਤਰੀਕੇ ਨਾਲ ਮਰਿਆਦਾ
ਸਿਖਾਉਂਦੇ ਹਨ ਕਿ ਉਹ ਬਾਗੀ ਨਾ ਹੋ ਜਾਵੇ ਇਨਸਾਨ ਦਾ ਬੱਚਾ ਵੀ
ਸ਼ੁਰੂ ਵਿਚ ਵਹਿਸ਼ੀ ਹੁੰਦਾ ਹੈ। ਕੁੱਤਿਆਂ, ਬਿੱਲੀਆਂ, ਖੋਰਾਂ, ਚੀਤਿਆਂ ਨੂੰ
ਹੋਲੀ-ਹੋਲੀ ਮਰਿਆਦਾ ਸਿਖਾਈ ਜਾ ਸਕਦੀ ਹੈ ਹੁ ਬੂ ਹੁ ਉਸੇ ਤਰ੍ਹਾਂ
ਇਨਸਾਨ ਦੇ ਬੱਚੇ ਨਾਲ ਕਰਨਾ ਵੀ ਜ਼ਰੂਰੀ ਹੈ ਬੱਚਾ ਵੀ ਹਰ ਬੰਧਨ,
ਮਰਿਆਦਾ ਦੇ ਮੁਤਾਬਕ ਖਿਆਫ਼ ਹੁੰਦਾ ਹੈ ਇਸ ਦੀ ਵਹਿਸ਼ਤ ਦਾ
ਸਤਿਕਾਰ ਕਰ ਕੇ ਬੜੇ ਸਬਰ ਨਾਲ ਵਾਰ ਵਾਰ ਕੋਸ਼ਿਸ਼ ਕਰ ਕੇ
ਮਰਿਆਦਾ ਸਿਖਾਈ ਜਾ ਸਕਦੀ ਹੈ ਜਿਹੜੇ ਮਾਪੇ ਸਿਰਫ਼ ਉਪਦੇਸ਼
ਨਾਲ, ਹੁਕਮ ਜਾਂ ਡਰਾਵੇ ਨਾਲ ਮਰਿਆਦਾ ਸਿਖਾਉਣਾ ਚਾਹੁੰਦੇ ਹਨ ਉਹ
ਕਾਮਯਾਬ ਨਹੀਂ ਹੁੰਦੇ।

8. ਹੇਠ ਲਿਖੇ ਮੁਹਾਵਰਿਆਂ ਵਿਚੋਂ ਕੋਈ ਚਾਰ ਦੇ ਅਰਥ ਦੱਸ ਕੇ ਵਾਕਾਂ
ਵਿਚ ਵਰਤੋ
1. ਉਸਤਾਦੀ ਕਰਨੀ
 2. ਉਗਲ ਕਰਨੀ
 3. ਅੱਖਾਂ ਆਉਣੀਆਂ

4.ਸਬਰ ਦਾ ਘੁੱਟ ਭਰਨਾ

5.ਈਦ ਦਾ ਚੰਨ ਹੋਣਾ

6.ਹੱਥ ਪੈਰ ਮਾਰਨਾ

7.ਖਾਣ ਨੂੰ ਪੈਣਾ

Paper Code: 2112

Programme	Exam Code	Course Code
Bachelor of Arts (Journalism & Mass Communications)	108702	BJMM-2102
Bachelor of Science (Fashion Designing)	108602	BFDM-2102
Bachelor of Science (Home Science)	108202	BHSM-2102
Bachelor of Computer Applications	107202	BCAM-2102
Bachelor of Science (Information Technology)	105702	BITM-2102
Bachelor of Science (Bio-Technology)	107402	BBTM-2102
Bachelor of Science (Honours) Mathematics	112412	BOMM-2102
Bachelor of Vocation (Retail Management)	111802	BVRM-2102
Bachelor of Vocation (Management & Secretarial Practices)	111602	BVMM-2102
Bachelor of Vocation (Animation)	112202	BVAM-2102
Bachelor of Vocation (Textile Design & Apparel Technology)	111202	BVTM-2102
Bachelor of Vocation (Nutrition, Exercise & Health)	111402	BVNM-2102
Bachelor of Vocation (Beauty & Wellness)	113802	BVBM-2102
Bachelor of Vocation (Artificial Intelligence and Data Science)	114002	BVIM-2102
Bachelor of Vocation (Hospitality and Tourism)	113902	BVHM-2102
Diploma In Geriatric Care (Old Age Care and Nutrition)	403902	DGCM-2102

Course Title: Communication Skills in English
Semester-II
(400)

3 Hours

Max Marks: 25

The paper consists of four sections. Attempt five questions in all, selecting one from the question paper and the fifth question may be attempted from any of the other three questions. Each question carries 5 marks.

Section A

Write in detail about effective listening skills.

Explain the difference between hearing and listening? Explain the types of listening.

Section B

What are borne in mind while attending a telephone call?

What are the important steps for Note Taking of a Speech?

Section C

What are the objectives of speaking?

Write on the importance of 'cues' in a conversation.

Section D

Write a detailed note on the sounds of English.

Write on the following words.

(ii) Necessity

(iii) Machine

(v) Aloud

Exam Code: 107502

Paper Code: 2145

Bachelor of Arts (Honours) English (Semester-II)

Course Title: Neoclassical Poetry

Course Code: BOEL-2212 ✓

Time Allowed: 3hrs

Max. Marks: 40

Section- A

Question 1: (4x4=16marks)

A) Discuss the poetic form of 'Mac Flecknoc' in 100 words.

Or

Write the character sketch of Shadwell of Mac Flecknoe in 100 words.

B) How does Alexander Pope describe man in his "An Essay on Man"? Give the answer in 100 words.

Or

What does Alexander Pope want to convey in his poem "An Essay on Man"? Write the answer in 100 words.

C) Write a brief note on Thomas Gray's poem "Hymn to Adversity". The answer should be in 100 words.

Or

Discuss the central idea of Thomas Gray's poem "Ode to Spring" in 100 words.

D) Write a brief note on any one of the following literary terms. The answer should be in 100 words.

Epitaph

or

Lampoon

Section – B

Question 2: Discuss John Dryden 'Mac Flecknoe' as a mock-heroic poem. Give the answer in 600 words. (8 marks)

Or

Question 3: Critically evaluate the theme of John Dryden's 'Mac Flecknoe' in 600 words. (8 marks)

Section – C

Question 4: Critically evaluate Alexander Pope's State of Purpose in his poem "An Essay on Man". The answer should be in 600 words. (8 marks)

Or

Question 5: Discuss the main idea of "An Essay on Man" written by Alexander Pope. Give the answer in 600 words. (8 marks)

Section – D

Question 6: Discuss the major themes of Thomas Gray's poetry in 600 words. (8 marks)

Or

Question 7: Critically evaluate Thomas Gray's poem 'Elegy in a Country Church Yard' in 600 words. (8 marks)

Exam Code: 107502

Paper Code: 2146

Programme: Bachelor of Arts (Honours) English (Semester- II)

Course Title: Structure of English: English Grammar

Course Code: BOEL-2213

Time Allowed - 3 Hours

Maximum Marks: 40

Section-A

NOTE: Attempt any Four of the following. Each question carries 4 marks and answer should be in 100 words approximate.

1.

- a) Define 'Morpheme'. Give examples.
- b) Define 'Adjective' and give examples.
- c) What do you mean by adverbial clause?
- d) What is 'Auxiliary' Elucidate?
- e) What is 'Reciprocal Pronouns'?
- f) What is Noun Phrase?
- g) Define irregular Verb.
- h) Explain 'Base Morpheme'

(4 x 4=16)

Section-B

NOTE: Attempt 3 questions choosing at least one from each Section in 600 words. Each question carries 8 marks.

2. Define Noun and explain its types.

Or

3. Explain Irregular Verbs.

(8)

Section -C

4. Explain Attributive and Predicative adjectives.

OR

5. Define Clause and explain Nominal Clause.

(8)

Section-D

6. Discuss the basic sentence Patterns in English.

OR

7. Explain Relative Clauses in English.

(8)

Exam Code: 107502

Paper Code: 2147

Bachelor of Arts (Honours) English (Semester-II)

Course Title: One Act Plays

Course Code: BOEL-2214 ✓

Time Allowed: 3 Hours

Max Marks: 40

Section-A

I. Attempt the following in about 100 words each. (4×4=16)

1. How do the sisters identify the drowned man as Michael? (Riders to the Sea)

Or

Why do Arthur and Caroline cry before they eat the hot dogs? (The Happy Journey)

2. What is the purpose of Lomov's visit? (A Marriage Proposal)

Or

Explain:- i. Plot ii. Tragedy

3. Why does Silvette called Percinet a hero? (The Romancers)

Or

Explain:- i. Slapstick Comedy ii. Verbal Irony

4. What success does the group have in collecting autographs? (To Bobolink, For Her Spirit)

Or

Why does Nora come to visit Corporal Brewster? (Waterloo)

Attempt one question in 600 words from Section B, C and D. (1×8=8)

Section-B

II. Attempt the character of Maurya. (Riders to the Sea)

Or

III. Throw light on the members of the Kirby family and their relationship with neighbours. (The Happy Journey)

Section-C

IV. Narrate the series of events which bring about change in the attitude of Natalia towards Lomov. (A Marriage Proposal)

Or

V. Describe the character traits of young romancers as seen in Sylvette and Percinet. (The Romancers)

Section-D

VI. Describe the incidents that bring together Norah Brewster and Archie McDonald in the play Waterloo.

Or

VII. Sketch the character of Bobolink. (To Bobolink, For Her Spirit)

Exam Code: 107502

Paper Code: 2148

Bachelor of Arts (Honours) English (Semester-II)

Course Title: Nineteenth Century English Prose

Course Code: BOEL-2215

Time Allowed: 3hrs

Max. Marks: 40

Section-A

Note: Attempt the following questions in about 100 words each. Each question carries 4 marks

Q1 (A) How Lamb describes a poor relation.

Or

Discuss the theme of Charles Lamb's "A Bachelor's Complaint".

(B) How Hazlitt defines Fashion?

Or

Why Hazlitt prefers to go alone on a journey?

(C) Discuss the theme of 'A Defence of Nonsense'

Or

What according to Chesterton are the pleasures of not being very young?

(D) Write a note on Nonsense Literature.

Or

Write a note on Pathos.

(4×4=16 Marks)

Section-B

Note: Attempt the following question in about 600 words.

Q2. Discuss the prose style of Charles Lamb.

Or

Discuss the theme of Charles Lamb's "In Praise of Chimney Sweepers".

(1×8= 8 Marks)

Section-C

Note: Attempt the following question in about 600 words.

Q3. Discuss the theme of William Hazlitt's "On Fashion".

Or

Discuss William Hazlitt as an Essayist.

(1×8= 8 Marks)

Section-D

Note: Attempt the following question in about 600 words.

Q4. Discuss the prose style of G.K. Chesterton.

Or

Discuss the theme of G.K. Chesterton's 'A Piece of Chalk'.

(1×8= 8 Marks)

Exam Code: 107502

Paper Code: 2149

Bachelor of Arts (Honours) English (Semester-II)

Course Title: History of English Literature (1789-1960)

Course Code: BOEL-2216

Time Allowed: 3hrs

Max. Marks: 40

Section-A

Question I. Note: Attempt the following questions in about 100 words each.

Each question carries 4 marks.

(4×4=16 Marks)

1. Why was the Romantic Age Called "The Age of Revolution"?

or

Define Romanticism.

2. What is Pre- Raphaelite Poetry?

or

Define the term Dramatic Monologue.

3. What do you understand by Victorian Compromise?

or

What do you know about Poets of the Transition?

4. Define the term Modernism.

or

What do you understand by Imagist poetry?

Note: Attempt any one question from Section B, C and D in approximately 600 words. Each question carries 8 marks. (1×8=8Marks)

Section-B

Question II. Write a detailed note on the contribution of William Wordsworth.

or

Question III. Write in detail the growth of Prose in Romantic age.

Section-C

Question IV. Write a detailed note on the contribution of Thomas Hardy to Victorian Novel.

or

Question V. Write a detailed essay on contribution of Jane Austen's in the growth of Victorian novels?

Section-D

Question VI. Write a detailed essay on the contribution of T.S Eliot and W.B Yeats in the growth of modern Poetry

or

Question VII. Write a note on the contribution of D.H Lawrence in Modern fiction.

Exam Code: 107502
(30)

Paper Code: 2150

Programme: Bachelor of Arts (Honours) English
Semester-II

Course Title: History of England(1688-1782)

Course Code: BOEL-2277 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note:

Section —A:- Attempt any four questions, selecting at least one from each unit in 100 words. Each question carries 4 marks.

Section —B, C and D:-Attempt one question from each unit in 600 words. Each question carries 8 marks.

SECTION-A

- I. 1. Massacre of Glenoe
2. Test Act
3. Mutiny Act
4. What were the results of Seven Years War
5. Results of battle of Plassey.
6. Convention Parliament 1689 4x4=16

SECTION-B

- II. Explain Bill of Rights and Act of Settlement. 8
- III. Discuss Domestic Policy of William III 8

SECTION-C

- IV. Evaluate Walpole's role as Prime Minister of England 8
- V. Discuss the Provisions of union Act of 1707 8

SECTION-D

- VI. What were the causes of American Revolution. 8
- VII. What led to the Establishment of British Power in India. 8

Paper Code: 2105

Programme	Exam Code	Course Code
Bachelor of Arts (Honours) English	107502	BOEL-2421
Bachelor of Science (Honours) Mathematics	112412	BOML-2421

Course Title: Punjabi (Compulsory)

Semester-II

(100)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 08 ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ-1

1. ਕਿਰਤ ਨਿਬੰਧ ਦਾ ਸਾਰ ਲਿਖੋ।
2. ਗੰਗਾਦੀਨ ਨਿਬੰਧ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਲਿਖੋ। 8

ਸੈਕਸ਼ਨ-2

3. ਡਾ. ਗੰਡਾ ਸਿੰਘ ਰੇਖਾ ਚਿੱਤਰ ਦਾ ਸਾਰ ਲਿਖੋ।
4. ਮਿਲਖਾ ਸਿੰਘ ਰੇਖਾ ਚਿੱਤਰ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਲਿਖੋ। 8

ਸੈਕਸ਼ਨ-3

5. ਹੇਠ ਲਿਖੀਆਂ ਚਾਰ ਮੁਹਾਵਰਿਆਂ ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਇਸ ਤਰ੍ਹਾਂ ਵਰਤੋਂ ਕੀ ਅਰਥ ਸਪਸ਼ਟ ਹੋ ਜਾਣ।

- ੳ) ਉੱਗਲਾਂ ਤੇ ਨਚਾਉਣਾ
ਅ) ਹੱਥ ਪੈਰ ਮਾਰਨਾ
ੲ) ਉੱਖਲੀ ਵਿੱਚ ਸਿਰ ਦੇਣਾ
ਸ) ਅਕਲ ਤੇ ਪਰਦਾ ਹੋਣਾ
ਹ) ਈਦ ਦਾ ਚੰਨ ਹੋਣਾ
ਕ) ਸਬਰ ਦਾ ਘੁੱਟ ਭਰਨਾ
6. ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਲਿਖੋ
ਧਰਮ ਤੇ ਸਦਾਚਾਰ ਦਾ ਆਦਿ ਜੁਗਾਦ ਦਾ ਮੇਲ ਹੈ। ਹਰ ਧਰਮ ਅਨੁਸਾਰ ਸਦਾਚਾਰ ਜੀਵਨ ਦਾ ਇੱਕ ਬਹੁਤ ਹੀ ਚਰਚੀ ਅੰਗ ਹੈ। ਧਰਮ ਕੀ ਹੈ? ਜੀਵਨ ਨੂੰ ਸਭ ਤੋਂ ਚੰਗੇ ਢੰਗ ਨਾਲ ਜੀਣ ਤੇ ਇਸ ਦੁਆਰਾ ਸੱਚ ਦੀ ਪਛਾਣ ਦਾ ਨਾਮ ਧਰਮ ਹੈ। ਧਰਮ ਦਾ ਮਨੋਰਥ ਪ੍ਰਾਪਤ ਕਰਨ ਨਾਲੋਂ ਵਧੇਰੇ ਕੁਝ ਬਣਨਾ, ਕੁਝ ਹੋਣਾ ਹੈ। ਧਰਮ ਜੀਵਨ ਜਾਂਚ ਸਿਖਾਉਂਦਾ ਹੈ। ਸੱਚਾ ਸੁੱਚਾ ਜੀਵਨ ਤਾਂ ਹੀ ਹੈ, ਜੇ ਆਚਰਣ ਉੱਚਾ ਹੈ। ਸਦਾਚਾਰ ਚੰਗੀ ਜੀਵਨ ਦੀ ਨੀਂਹ ਹੈ। ਮਨੁੱਖ ਨਾਲ ਚੰਗੇ ਵਰਤਾਓ ਦਾ ਨਾਂ ਸਦਾਚਾਰ ਹੈ, ਇਲਖਾਕ ਹੈ।
1. ਧਰਮ ਤੇ ਸਦਾਚਾਰ ਦਾ ਸੰਬੰਧ ਕਿਹੋ ਜਿਹਾ ਹੈ?
 2. ਸਦਾਚਾਰ ਤੋਂ ਕੀ ਭਾਵ ਹੈ?
 3. ਧਰਮ ਦਾ ਮਨੋਰਥ ਕੀ ਹੈ?
 4. ਪੈਰੇ ਦਾ ਢੁਕਵਾਂ ਸਿਰਲੇਖ ਲਿਖੋ।

8

ਸੈਕਸ਼ਨ-4

7. ਨਾਂਵ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿੰਦਿਆਂ ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਤੇ ਚਰਚਾ ਕਰੋ।
8. ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿੰਦਿਆਂ ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਤੇ ਨੋਟ ਲਿਖੋ।

8

Exam Code: 107502
(30)

Paper Code: 2151

Programme: Bachelor of Arts (Honours) English
Semester-II

Course Title: Fundamentals of Sociology-B

Course Code: BOEL-2478 ✓

Time Allowed: 3 Hours

Max Marks: 40

Note: 1. Attempt any 4 questions from Section -A, selecting one from each unit in 100 words. Each question carries 4 marks.

2. Attempt 1 question each from section B,C,D in 600 words. Each question carries 8 marks.

SECTION-A

- I. 1. Discuss the role of Socialization?
2. What is Play Stage and Game Stage?
3. Family as an agency of social control?
4. Discuss 3 Factors of Socialization?
5. Describe Cognition?
6. Discuss the two ways of cultural diffusion?

4x4=16

SECTION- B

- II. What are the stages of Socialization?
- III. Discuss Cooley's theory of " Looking Glass Self "?

SECTION- C

- IV. Discuss Ogburn's theory of Cultural Lag?
- V. What are the functions of Culture?

SECTION - D

- VI. Why is social control imperative ?
- VII. Discuss the agencies of social control?

3x8=24

Exam Code: 112412
(30)

Paper Code: 2204

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Calculus-II

Course Code: BOML-2333



Time Allowed: 3 Hours

Max Marks: 80

Candidates are required to attempt five questions, selecting at least one question from each section and the fifth question may be attempted from any section. All questions carry 16 marks.

Section-A

1. (a) If a sequence is convergent, then it converges to a unique limit.
(b) Prove that Monotonically increasing sequence $\{a_n\}$ converges iff it is bounded above.
2. (a) State and Prove Sandwich theorem.
(b) Prove that convergent sequence is always Cauchy seq.

Section-B

3. (a) Using cauchy's Integral Test, discuss the convergence

or divergence of series $\sum_{n=1}^{\infty} \frac{1}{n^p}$, $p > 0$

(b) If $\lim_{n \rightarrow \infty} \frac{a_{n+1}}{a_n} = \ell$ Then the Positive terms series $\sum a_n$ converges if $\ell < 1$ and diverges if $\ell > 1$.

4. (a) *Discuss the convergence or divergence of the series $\sum \frac{1}{n^p}$ for $p > 0$.*
 (a) If $\lim_{n \rightarrow \infty} \frac{a_{n+1}}{a_n} = \ell$, Then the Positive terms series $\sum a_n$ converges if $\ell < 1$ and diverges if $\ell > 1$.

(b) Discuss the convergence of the series $\frac{1^2}{4^2} + \frac{1^2 \cdot 5^2}{4^2 \cdot 8^2} + \frac{1^2 \cdot 5^2 \cdot 9^2}{4^2 \cdot 8^2 \cdot 12^2} + \dots \infty$

Section-C

5. (a) If $\sum a_n$ is absolutely convergent and $\{\lambda_n\}$ is Bounded sequence, Then Prove that $\sum \lambda_n a_n$ is absolutely convergent.

(b) State and Prove Leibnitz Theorem.

6. (a) Using Taylor's series Prove that $\log(x+h) =$

$\log h + \frac{x}{h} - \frac{x^2}{2h^2} + \frac{x^3}{3h^3} - \dots$

- (b) Give an example to show that $\sum_n a_n$ is convergent But $\sum_n |a_n|$ is not convergent.

Section-D

7. (a) Obtain the Half-Range cosine series for

$$F(x) = \begin{cases} kx, & 0 \leq x < \frac{l}{2} \\ k(l-x), & \frac{l}{2} \leq x \leq l \end{cases}$$

- (b) Obtain the Fourier series for e^x in the Interval $[-\pi, \pi]$.

8. (a) Sum to n-terms of the series $\operatorname{cosec} \alpha + \operatorname{Cosec} 2\alpha + \operatorname{cosec} 4\alpha + \dots$

- (b) Find the Fourier series to represent $F(x) = x^2 - 2$ in the Interval $-2 < x < 2$.

Exam Code: 112412
(30)

Paper Code: 2205

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Matrices and Theory of Equations

Course Code: BOML-2334 ✓

Time Allowed: 3 Hours

Max Marks: 80

Candidates are required to attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. All questions carry equal 16 marks.

Section-A

1. (a) Define Hermitian and skew-Hermitian matrices, with examples. 4

(b) Prove that addition to the elements of any row of a matrix the corresponding elements of any other row multiplied by any number, does not alter the rank of the matrix. 6

(c) If

$A = \begin{bmatrix} 1 & 1 & 1 \\ 3 & 1 & 1 \\ 1 & -1 & -1 \end{bmatrix}$, then find the matrices P and Q s.t. PAQ is

in the normal form. Hence find the rank of matrix A. 6

2. (a) Find the row rank and column rank of

$$\begin{bmatrix} 1 & 3 & 2 & 4 \\ 5 & 2 & 0 & 1 \\ 3 & -4 & -4 & -7 \\ -7 & 5 & 6 & 10 \end{bmatrix}$$

6

- (b) Solve the equation:-

$$x + y + z = 0$$

$$x + 2y + 3z = 0$$

$$x + 3y + 4z = 0$$

6

- (c) Discuss the consistency of the system of equations:-

$$x - y + z + 1 = 0$$

$$x - y + z - 1 = 0$$

$$x - y - z + 1 = 0$$

4

Section-B

3. (a) If λ is an eigen value of square matrix A , then prove that λ^m is an eigen value of $A^m, \forall m \in \mathbb{N}$. 6

- (b) Find the characteristic root and characteristic vectors of the matrix, 10

$$\begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$$

4. (a) Find the value of 'a' in order that $2x-1$ may be a factor of $4x^4 - (a-1)x^3 + ax^2 - 6x + 1$. 4

(b) Find g.c.d of $f(x) = x^4 + 3x^3 + 2x^2 + x + 1$ and $g(x) = x^3 + x^2 + x + 1$ and write it as $a(x)f(x) + b(x)g(x)$. 8

(c) If $f(x) = x^4 - 3x^3 + 2x^2 - x + 1$, Calculate $f(x-1)$. 4

Section-C

5. (a) Transform the equation $x^4 - 4x^3 - 18x^2 - 3x + 2 = 0$ in to one where third term is missing. 8

(b) If α, β, γ are the roots of the cubic $x^3 + 3x + 2 = 0$. Find an equation whose roots are $(\alpha - \beta)(\alpha - \gamma)$, $(\beta - \gamma)(\beta - \alpha)$, $(\gamma - \alpha)(\gamma - \beta)$. Hence show that the given cubic has two imaginary roots. 8

6. (a) If $\alpha, \beta, \gamma, \delta$ are roots of $x^4 + px^3 + qx^2 + rx + s = 0$, then find the value of

- i. $\sum \alpha^2 \beta$
- ii. $\sum \alpha^2 \beta \gamma$
- iii. $\sum \alpha^2 \beta^2$
- iv. $\sum \frac{\alpha}{\beta}$ 12

(b) Find the values of $\alpha^6 + \beta^6 + \gamma^6$, where α, β, γ , are roots equation $x^3 - px + q = 0$ 4

Section-D

7. (a) Discuss nature of roots of equation 8
 $x^3+2x+1=0$
- (b) Use Descartes's method to solve 8
 $x^4-2x^2+8x-3=0$
8. (a) Solve by Ferrari's method 8
 $x^4+12x-5=0$
- (b) Use Cardan's Method to solve the following equation
 $2x^3-7x^2+8x-3=0$ 8

412

Paper Code: 2206

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Solid Geometry

Course Code: BOML-2335

Duration: 3 Hours

Max Marks: 80

Answer five questions in all, selecting at least one question from each section. The fifth question to be attempted from any section. Each question carry equal 16 marks.

Section A

Three planes $2x + 3y + 4z - 6 = 0$; $3x + 4y + 5z = 20$; $x + 2y + 3z = 0$ meet in a prism? Find the equation of one of its edges in the symmetrical form.

Find the transformed equation of the surface $x^2 + 3y^2 + 5z^2 + 2yz + 2zx + 2xy - 1 = 0$ referred to the same origin and having direction ratios $(2, 2, 1)$, $(-2, 1, 2)$ and $(1, -2, 2)$.

[8 X 2=16]

Find the equation of the sphere which passes through the points $(1, 0, 0)$, $(0, 1, 0)$ and $(0, 0, 1)$ and has its radius as small as possible.

Find the equation of the circle lying on the sphere $x^2 + y^2 + z^2 = 25$, by the plane $2x - y + z = 9$.

[8 X 2=16]

Section B

Find the equation of the tangent plane at (x_1, y_1, z_1) to the sphere $x^2 + y^2 + z^2 = a^2$.

Find the equation of the spheres which touches the plane $3x + 2y - z + 2 = 0$ at $(1, -2, 1)$ and passes through the sphere $x^2 + y^2 + z^2 - 4x + 6y + 4 = 0$.

[8 X 2=16]

Find the equation of the radical axis of the spheres $x^2 + y^2 + z^2 + 2x + 2y + 2z + 2 = 0$, $x^2 + y^2 + z^2 + 4y = 0$, $x^2 + y^2 + z^2 + 3x - 2y + 8z + 6 = 0$.

Find the equation of the sphere coaxial with the spheres $x^2 + y^2 + z^2 - 2x + 3y + 4z - 7 = 0$ and $3x + 2y + 5z + 1 = 0$ and passes through $(1, 0, 0)$.

[8 X 2=16]

Section C

value of k if the plane $kx + y + z = 0$ cuts the cone $xy + yz + zx = 0$ in lines.

Equation $x^2 - 2y^2 + 3z^2 - 4xy + 5yz - 6zx + 8x - 19y - 2z - 20 = 0$, represents a surface. Find its vertex. [8 X 2=16]

Find the equation of the cylinder whose generators are parallel to the line $\frac{x}{1} = \frac{y}{-2} = \frac{z}{3}$ and which passes through the curve is the ellipse $x^2 + 2y^2 = 1, z = 0$.

Find the equation of the enveloping cylinder of the sphere $x^2 + y^2 + z^2 + 2x + 2y + 2z + 2 = 0$ whose generators are parallel to the line $x = -y = z$. [8 X 2=16]

Section D

Find the equation of the surface of revolution of the curve $y^2 + z^2 = 9, x = 0$ about the x -axis.

Find the equation of the surface $\frac{x^2}{9} - \frac{y^2}{4} - \frac{z^2}{1} = 1$ roughly. [8 X 2=16]

Reduce the equation $x^2 - 6yz - 6x + 6y - 2z - 2 = 0$ to the standard form and state the nature of surface. [16]

Exam Code: 112412
(30)

Paper Code: 2207

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Dynamics

Course Code: BOML-2336

Time Allowed: 3 Hours

Max Marks: 80

Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section-A

- (a) A particle is projected upwards with a velocity of v m/sec and after t seconds another particle is projected upwards from the same point and with the same velocity. Prove that the particles meet at height $\frac{4v^2 - g^2 t^2}{8g}$ metres after a time $\left(\frac{t}{2} + \frac{v}{g}\right)$ seconds. 12

(b) Two masses are connected by a string passing over a small pulley. Show that if the sum of the masses be constant, the greater the acceleration, the less is the tension in the string. 4

2. (a) A, B, C are three points vertically below the point O such that $OA = AB = BC$. If the particle falls from rest at O, then prove that times of describing OA, AB and BC are 1: $(\sqrt{2} - 1)$: $(\sqrt{3} - \sqrt{2})$. 10
- (b) An engine of mass 30 Metric tons pulls a train of 130 metric tons. Supposing the friction to be $\frac{1}{40}$ th of weight of the whole train, calculate the force exerted by the engine, if at the end of the first kilometre from rest, the speed be raised to 18 km. p.h. 6

Section-B

3. (a) A particle moves in a straight line, starting from rest from a distance C to a centre of attraction towards which the force per unit mass is $\frac{\mu}{x^3}$ where x is measured from the centre, show that the time required to reach the centre is $\frac{c^2}{\sqrt{\mu}}$. 12
- (b) A particle executing S.H.M. has amplitude a Show that the distance of the point from the centre at which the velocity is half of the maximum velocity is $\frac{\sqrt{3}}{2} a$. 4
4. (a) A particle is performing S.H.M. of period T about a centre O and it passes through the position P ($OP=b$) with velocity v in the direction OP. Prove that the time which elapses before it returns to P is $\frac{T}{\pi} \tan^{-1} \left(\frac{v \ell}{2\pi b} \right)$. 8

(b) A particle is projected upward with velocity $\sqrt{2 g_0 h}$, where g_0 is the acceleration due to gravity on the surface of earth. Show that if variation of gravity with height is taken into consideration then the particle will reach a height H Given by $\frac{1}{h} - \frac{1}{H} = \frac{1}{R}$; R being the radius of the earth. 8

Section-C

5. A particle is projected with velocity $2\sqrt{ag}$ so that it just clears two walls of equal heights 'a' which are at a distance $2a$ from each other. Show that the latus-rectum of the path is $2a$ and that time of passing between the walls is $2\sqrt{\frac{a}{g}}$. 16
6. (a) A particle is projected with velocity U from a point on an incline plane. If V_1 be its velocity on striking the plane when the range up the plane is maximum and V_2 the velocity on striking the plane when the range down the plane is maximum. Prove that $U^2 = V_1 V_2$. 8
- (b) Prove that the semi-vertical angle θ of a conical pendulum is given by $\tan \theta = \frac{v^2}{rg}$. 8

Section-D

7. State and prove principle of conservation of energy.

16

8. (a) A bullet moving horizontally with velocity U strikes and penetrates a fixed vertical target of thickness a and emerges with horizontal velocity v . Prove that same bullet would have just failed to penetrate the target fully, had the thickness been $\frac{a U^2}{U^2 - v^2}$, the average resistance to penetration being the same in the two cases.

8

(b) A particle of mass m is projected with a velocity U straight up a rough inclined plane of inclination α and coefficient of friction μ . Prove that the work done against friction before the particle comes to rest is

$$\frac{m U^2 \mu \cos \alpha}{2 (\sin \alpha + \mu \cos \alpha)}$$

8

Exam Code: 112412
(30)

Paper Code: 2209

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Computer Fundamentals and Introduction to
'C' Programming Language

Course Code: BOMM-2137 ✓

Time Allowed: 3 Hours

Max Marks: 50

- Candidates are required to attempt five question, selecting at least one question from each section. The Fifth question can be attempted from any section.
- Each question will carry equal i.e 10 marks for each question.
- Non-Scientific and Non- programmable calculator is allowed.

SECTION-A

1. Draw the block diagram of Computer and explain all its components. 10
2. (a) Explain any Five Input Devices 5
(b) Write the difference between System Software and Application Software. 5

SECTION-B

3. Explain the various Data Types used in C Language. 10
4. Explain the various Operators of C Language with their precedence. 10

SECTION-C

5. Explain all the storage classes used in C Language with example. 10
6. Discuss the different methods of passing arguments to function by taking the suitable example of C program. 10

SECTION-D

7. Write a C Program to Multiply two Matrices. 10
8. Write the algorithm or C program to search an element in an array. 10

Exam Code: 112412
(30)

Paper Code: 2208

Programme: Bachelor of Science (Honours) Mathematics
Semester-II

Course Title: Modern Physics-I

Course Code: BOMM-2396 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

SECTION-A

1. (a) Explain De-Broglie hypothesis. Derive an expression for velocity of de-broglie waves. (6)
(b) What is the Physical Meaning of Wave Packet. (2)
(c) Derive the relation between phase velocity and group velocity. (4)
2. Explain principle, construction and Working of Electron Microscope. What are its uses. (12)

SECTION-B

3. (a) State Laws of Radioactive Decay. Show that law of Radioactive decay is exponential in nature. (8)

(b) The activity of certain radio nuclide decreases by 15% of its original value in 10 days. Find its half life.

(4)

4. (a) What is artificial radioactivity. Explain with examples.

(4)

(b) What are radio isotopes? What are their uses? Explain in details two methods of radioactive dating.

(8)

SECTION-C

5. Explain principle, construction and working of cloud chamber. (12)

6. Give the principle of G.M Counter. Explain Dead time and Recovery Time. Why quenching is necessary in G.M Counter. What is the role of ethyl alcohol in quenching?

(12)

SECTION-D

7. What are Elementary particles. How are they classified. Explain. (12)

8. Discuss the origin of Cosmic Rays. Distinguish between primary and secondary cosmic rays. Also Explain cosmic Showers. (12)

(Only for reappear candidates)

9206

Exam Code: 171802

Paper Code: 2212

Programme: Bachelor of Science (Honours) Physics

(Semester: II)

Course Title: Mathematics-II

Course Code: BOPL - 2335 ✓

Time allowed: 3 Hours

Max. Marks: 40

Note: Attempt Five questions in all selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries equal marks.

Section- A

1. Solve the following differential equation

$$(x^2 D^2 + 3xD + 1)y = \frac{1}{(1-x)^2} \quad (8)$$

2. State and prove the orthogonal property of Legendre polynomials. (8)

Section- B

3. What do you mean by partial differential equation? Form a partial differential equation by eliminating the arbitrary function ϕ from

$$\phi(x + y + z, x^2 + y^2 - z^2) = 0 \quad (8)$$

4. Obtain the general solution of heat flow equation $k \frac{\partial^2 u}{\partial x^2} = \frac{\partial u}{\partial t}$ by the method of separation of variables. (8)

Section- C

5. (a) Find the Laplace transformation of $t^2 \sin at$

(b) Using Laplace transform, solve the differential equation

$$\frac{d^2 y}{dt^2} + 2 \frac{dy}{dt} + y = 3te^{-t}; y(0) = 4, y'(0) = 2 \quad (4,4)$$

6. (a) Evaluate $L^{-1}\left(\frac{s+2}{s^2(s+1)(s-2)}\right)$

(b) Define Laplace transformation with the help of an example. Also find Laplace transform of

$$f(t) = \begin{cases} 1, & 0 < t \leq 1 \\ t, & 1 < t \leq 2 \\ 0, & 2 < t \end{cases} \quad (4,4)$$

Section- D

7. Find a fourier cosine transformation of $f(x) =$

$$\begin{cases} x, & 0 < x < 1 \\ 2-x, & 1 < x < 2 \\ 0, & 2 < x \end{cases} \quad (8)$$

8. Obtain Fourier series for $f(x) = x \cos x$ in $(-\pi, \pi)$ (8)

Exam Code: 103302
(40)

Paper Code: 2191

Programme: Bachelor of Science
Semester-II

Course Title: Botany (Cell Biology)

Course Code: BSMM-2075 (I) ✓

Time Allowed: 3 Hours

Max Marks: 30

Attempt five question selecting at least one question from each section (A-D). The fifth question may be attempted from any section. Each question carries 6 marks. Support your answer with neat and well labelled diagrams wherever necessary.

Section-A

1. (a) Briefly describe the structure of nucleor pore.
(b) Write a short note on Chromatin. 4+2
2. (a) Give the Structure and functions of nucleolus. 4
(b) Describe the structure of Escherichia coli. 2

Section-B

3. Briefly Describe the structure and functions of Golgi bodies. 6

4. What is the difference between mitochondrial and chloroplast DNA. Describe in detail Mitochondrial DNA.

6

Section-C

5. Write Short notes on
(a) Histones
(b) Centromere
(c) Karyotype (2+2+2)
6. Write short Notes on
(a) Anenploidy
(b) Robertsonian Translocation
(c) Sex Chromosomes. (2+2+2)

Section-D

7. (a) Briefly explain fluid-mosaic model of cell membrane.
(b) Describe the mechanism of active transport across membrane. 3+3
8. Write short notes on
(a) Plasmodesmata
(b) Primary and secondary cell wall.
(c) Pectin 2+3+1

Exam Code: 103302
(40)

Paper Code: 2192

Programme: Bachelor of Science
Semester-II

Course Title: Botany (Genetics)

Course Code: BSMM-2075 (II) ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks. Draw well-labelled diagram wherever necessary.

Section A

1. Give a detail account on DNA replication. 6
2. Write note on following:
 - a. Nucleotides
 - b. Chargaff's rule
 - c. Purines2X3 =6

Section B

3. Describe various stages of Meiosis-I with the help of well labelled diagrams. 6
4. Describe Mendel's Law of Independent Assortment with suitable examples. 6

Section C

5. Describe primary, secondary and tertiary structures of protein molecules and their significance. 6
6. Discuss structure of tRNA and the process of translation. 6

Section D

7. What are transposable elements and their biological significance? 6
8. Describe genetic mutations and their role in inducing variations. 6

Lib

KMV-II

6/5/23 (eue)

Paper Code: 2187

Programme	Exam Code	Course Code
Bachelor of Science (Medical)	103302	BSMM-2084 (1)
Bachelor of Science (Non-Medical)	103302	BSNM-2084 (1)

Course Title: Chemistry (Inorganic Chemistry)
Semester-II
(60)

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions by selecting one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks.

Section-A

- (a) What is catenation? Discuss with the help of examples.
(b) Does borazine prefer electrophilic or nucleophilic reactions? Explain. (3,3)
- (a) What is the inert pair effect? Discuss the oxidation states of group 13 elements in the light of inert pair effect.
(b) Give reason why CO_2 is a gas while SiO_2 is a solid. (4,2)

Section B

3. (a) What is Lewis acid? Give examples, Which would you expect to be better Lewis acid BCl_3 or $\text{B}(\text{CH}_3)_3$ and why?
(b) Why NH_3 is more basic than NF_3 ? Explain. (4,2)
4. (a) Discuss the structure of BeCl_2 in solid state and vapour state. What is the coordination number of Be in each case?
(b) Why alkali metals show low ionization energies? (4,2)

Section C

5. (a) Based on tetrahedral structure of SiO_4^{2-} , describe the structure of various types of silicates.
(b) What are silicones? Give examples. (4,2)
6. Draw and discuss the structure of tetrasulfutetranitride. Comment on the electron distribution in the ring. (6)

Section D

7. (a) Cu^{2+} ions are coloured and paramagnetic while Zn^{2+} ions are colourless and diamagnetic. Explain.
(b) Account for the magnetic behaviour of tetrahedral and square planar complexes of Ni (II). (2,4)
8. (a) Why do transition elements exhibit different oxidation states? (3)
(b) What is coordination number? How does it determine the geometry of a molecule? Explain using an example of transition elements. (3)

Paper Code: 2188

Programme	Exam Code	Course Code
Bachelor of Science (Medical)	103302	BSMM-2084 (II)
Bachelor of Science (Non-Medical)	103302	BSNM-2084 (II)

Course Title: Chemistry (Physical Chemistry)
Semester-II
(60)

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions in all. Selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 6 marks. Simple calculators and log tables are allowed.

Section A

1. (a) Derive Reduced equation of State & hence, define Law of Corresponding States. Give its significance.
(b) Derive expressions for critical constants in terms of van der Waals constants and hence derive the

relationship between them [$P_c V_c = (3/8) RT_c$].

(3, 3)

2. (a) Calculate from vander Waals equation the temperature at which 3 moles of SO_2 would occupy a volume of 10 litres at 15 atm ($a = 6.7 \text{ atm L}^2 \text{ mol}^{-2}$, $b = 0.0564 \text{ L mol}^{-1}$, $R = 0.082 \text{ L atm/degree/mol}$)
- (b) What do you understand by mean free path? Derive an expression of it in terms of molecular diameter of the gas molecules. (3, 3)

Section B

3. (a) Write differences between multimolecular, macromolecular and associated colloids.
- (b) What are emulsions? Discuss the types of emulsions with examples. (3,3)
4. Explain the following:
- (i) Electrodialysis
 - (ii) Ultrafiltration
 - (iii) Tyndall Effect (2,2,2)

Section C

5. (a) Describe the application of liquid crystals in medical/clinical field. What type of liquid crystals are used?
- (b) What are liquid crystals? Discuss the types of liquid crystals. (3, 3)
6. (a) Discuss the principal of LCD (Liquid Crystal Display) in watches and calculators.
- (b) Explain the theories or models of the liquid state. (3, 3)

Section D

7. (a) Explain the terms osmosis and osmotic pressure. Derive an expression for Van't Hoff equation for the osmotic pressure of dilute solution. How is it used for the determination of molar mass of a solute?

(b) Write differences between negative deviation & positive deviation in non-ideal solutions.

(3, 3)

8. (a) 2 g of benzoic acid dissolved in 25 g of benzene shows a depression in freezing point equal to 1.62 K. Molal depression constant K_f of benzene is 4.9 K Kg/mol. What is the percentage association of the acid?

(b) What do you mean by elevation in boiling point? How it can be used to determine the molar mass of a compound?

(3, 3)

KMV-II

Exam Code: 103302
(20)

Paper Code: 2193

Programme: Bachelor of Science
Semester-II

Course Title: Food Science and Quality Control (Food Plant
Hygiene and Sanitation)

Course Code: BSMM-2255 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section-A

1. What is the importance of personal hygiene to a food handler? (12)
2. Differentiate between the following:
 - a. GHP vs GLP
 - b. COP vs CIP (12)

Section B

3. How sanitation is different from cleaning? What are the various sanitizing agents used in food plant? (12)

4. Give a sanitation plan for fruits and vegetable processing unit. (12)

Section C

5. Give the mode of action of various sanitizing agents used in food handling unit. (12)
6. What are different types of infestations that may happen in a food plant? Give various methods to control them. (12)

Section D

7. Explain the working of a wastewater treatment section in a food plant. (12)
8. Discuss the importance of water hygiene for a food plant. (12)

Exam Code: 103302
(20)

Paper Code: 2186

Programme: Bachelor of Science
Semester-II

Course Title: Microbiology (Basic Food Microbiology)

Course Code: BSMM-2343 ✓

Time Allowed: 3 Hours

Max Marks: 60

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section - A

1. (a) Explain the role of yeasts and molds in deterioration of food quality? Give a detailed list of name of these microbes during period of spoilage of food? (8 marks)
- (b) What are the various intrinsic factors which speed up and slow down the speed of growth of microbes in foods? (4 marks)
2. What are the various sources of contamination of foods? Explain the role of various bacteria in spoilage of food materials? (12 marks)

Section — B

3. Give the detailed process for the production of following fermented foods
a) Tempeh b) bread (12 marks)
4. Explain the complete process for the production of
a) Bread b) Dosa (12 marks)

Section — C

5. a) Explain the various methods used for preservation of foods? (6 marks)
b) Explain the role of various types of aseptic or inert packaging in preservation of foods? (6 marks)
6. Write a detailed note on use and application of prebiotics and probiotics in food industry, as is studied by you? Write down various advantages associated with use of these foods also? (12 marks)

Section — D

7. What do you know about "Food poisoning" and "Food infections"? Give the impact of these two processes on human health with special reference to Clostridium and Staphylococcal bacterial intoxications of food? ' (12 marks)
8. Write a detailed note on microbiology of spoilage of
a) Meat and any one meat product
b) Cereals and any one cereal product
c) Canned food (3 x 4=12 marks)

Exam Code: 103302
(50)

Paper Code: 2184

Programme: Bachelor of Science
Semester-II

Course Title: Zoology (Ecology)

Course Code: BSMM-2483 (I) ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions, selecting at least one question from each section(A to D). The fifth question may be attempted from any section. Each question carries 6 marks.

Section A

1. Write a note on following.
 - a) Components of ecosystem 3
 - b) Food web 3
2. Discuss role of Temperature as ecological factor. 6

Section B

3. Explain carbon and oxygen cycle in detail along with diagram. 6
4. Explain following
 - a) Cursorial adaptations 3
 - b) Desert adaptations 3

Section C

- | | |
|--|---|
| 5. a) What is ecological succession? Discuss xerarch succession in detail. | 4 |
| b) Define dominant species. | 2 |
| 6. a) Write a note on biotic stratification. | 4 |
| b) What is pioneer community. | 2 |

Section D

- | | |
|--|---|
| 7. a) Enlist factors that reduce soil fertility. | 3 |
| b) Write a note on conservation of soil. | 3 |
| 8. What are the various effects of water pollutants? Suggest the control measures. | 6 |

Exam Code: 103302
(50)

Paper Code: 2185

Programme: Bachelor of Science
Semester-II

Course Title: Zoology (Biodiversity-II)

Course Code: BSMM-2483 (II) ✓

Time Allowed: 3 Hours

Max Marks: 30

Note: Attempt five questions, selecting at least one question from each section(A to D). The fifth question may be attempted from any section. Each question carries 6 marks.

Section A

1. Explain nervous system of cockroach with the help of well labelled diagram. 6
2. Write a note on social organisation of honey bees. 6

Section B

3. Explain nervous system of Pila with suitable diagram. 6
4. a) What is Radula?
b) Give an account of pulmonary respiration in Pila. 6

Section C

5. Discuss Ambulacral system of Asterias. 6
6. Write a note on external characters of star fish. 6

Section D

7. Discuss the external characters of Balanoglossus. 6
8. Write a note on the affinities of Hemichordates with Non-Chordates and Chordates. 6

Paper Code: 2189

Programme	Exam Code	Course Code
Bachelor of Science Non-Medical	103302	BSNM-2395 (I)
Bachelor of Science Computer Science	103302	BCSM-2395 (I)

Course Title: Physics (Relativity and Electro Magnetism)
Semester-II
(30)

Time Allowed: 3 Hours

Max Marks: 30

Note: - Attempt five question, selecting at least one question from each section. Fifth question may be attempted from any section. Each question carries 6 marks. Student can use Non- Scientific Calculators or Logarithmic tables.

Section-A

- (a) Calculate the relative velocity between two Photons travelling in opposite direction. 4

(b) A Particle moves with 0.6 times the velocity of light. Calculate the ratio of the mass of the particle to its rest mass. 2
- (a) The rest mass of an electron is 9.1×10^{-31} kg. What is its mass when travelling with a speed of $0.8c$? 3

- (b) Prove that $(P^2 - \frac{E^2}{c^2})$ is an invariant under Lorentz Transformations. 3

Section-B

3. (a) Explain Lorentz force law. 2
(b) Explain and Prove Biot-Savart's law. 4
4. (a) Explain and Prove Ampere's Circuital Law. 4
(b) Explain vector Potential. 2

Section-C

5. (a) Explain Faraday's Law in integral and differential forms. 4
(b) Explain quality factor of series LCR circuit. 2
6. Explain and Prove the reciprocity theorem. 6

Section-D

7. (a) Explain Maxwell's equation in detail. 4
(b) Determine the impedance of the dielectric having $\epsilon_r = 3$ and $\mu_r = 1$. 2
8. (a) Discuss the solution of wave equation for a conducting medium. 4
(b) Explain Skin depth. 2

Paper Code: 2190

Programme	Exam Code	Course Code
Bachelor of Science Non Medical	103302	BSNM-2395 (II)
Bachelor of Science Computer Science	103302	BCSM-2395 (II)

Course Title: Physics (Vibration and Waves)
Semester-II
(30)

Time Allowed: 3 Hours

Max Marks: 30

1. Attempt five question, selecting at least one question from each section. Fifth question may be attempted from any section. Each question carries 6 marks.
2. Student can use Non- Scientific Calculators or Logarithmic tables.

Section-A

1. (a) What is a compound pendulum? Derive an expression for its time period. Find the condition for the time period to be minimum. 4
(b) A mass is placed on a platform which vibrates simple harmonically in vertical direction at a frequency of 5Hz.

Show that the mass loses contact with the platform when displacement exceeds $10^{-2}m$. 2

2. (a) Explain analytically how two simple harmonic vibration at right angles to each other having same time periods can be compounded, the two vibrations are acting simultaneously on a particle. 4
- (b) What is the phase relationship between velocity and acceleration in SHM. Show it graphically also. 2

Section-B

3. (a) What are damped vibrations? Obtain an expression for displacement in case of damped oscillatory motion. What is the effect of damping on frequency? 4
- (b) Explain, Whether discharge of a capacitor of capacitance $1 \mu F$ through a resistor of 400Ω and an inductance of $0.1H$ is oscillatory or not. 2
4. (a) Define Logarithmic decrement. Find an expression for it in case of a mechanical oscillator. 4
- (b) The smaller the damping, Larger will be the relaxation time and greater the quality factor. Is its so? Explain. 2

Section-C

5. (a) What is forced electrical oscillator? Discuss variation of Current amplitude with driving emf frequency.
(b) Show that in a resonant LCR Circuit, maximum potential drop across the inductor is Q times the applied emf. 2
6. (a) Show that average power supplied by the driving force is equal to average power dissipated against damping force for a forced damped oscillator. 4
(b) Show that band width of the resonance absorption curve defines the phase angle range $\tan \phi = \pm 1$. 2

Section-D

7. (a) What are transverse waves? Derive the wave equation for such waves in a string. Discuss its solution. 4
(b) A wave of frequency 400 Hz is travelling with a velocity of 800 ms^{-1} along x-axis. How far are two points situated whose displacements differ in phase by $\pi/4$? 2

8. (a) Show that all energy arriving at the boundary in the incident wave leaves the boundary in the reflected and transmitted waves. 4
- (b) Two strings of linear densities 0.5 gcm^{-1} and 1.5 gcm^{-1} are joined together and stretched. Find reflection and transmission coefficients of energy. 2