

Paper Code: 8201(150)

| | | | | | | |
|-------------|------------|-----------|-------------|-----------|-----------|-----------|
| Programme | B.A. (JMC) | B.Sc (FD) | B.Sc.(H.Sc) | BCA | B.Sc(IT) | B.Sc(BT) |
| | (Sem: I) | (Sem: I) | (Sem: I) | (Sem: I) | (Sem: I) | (Sem: I) |
| Exam Code | 108701 | 108601 | 108201 | 107201 | 105701 | 107401 |
| Course Code | BJML-1421 | BFDL-1421 | BHSL-1421 | BCAL-1421 | BITL-1421 | BBTL-1421 |

Course Title: Punjabi Compulsory**ਪੰਜਾਬੀ ਲਾਜ਼ਮੀ****Time Allowed: 3 Hours****Max Marks: 40**

ਨੋਟ : ਵਿਦਿਆਰਥੀ ਨੇ ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਯੂਨਿਟ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਯੂਨਿਟ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਯੂਨਿਟ - 1

ਪ੍ਰਸ਼ਨ 1. ਹੇਠ ਲਿਖੇ ਕਾਵਿ-ਟੋਟੇ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ।

ਮੇਰੇ ਹੱਡ ਤਾਣ ਨਾਹੀ,

ਸੱਕਾ ਨ ਖੜੋਣਿ ਪੈਰੀ,

ਖੜੀ ਸੱਜਣ ਆਸਰੇ ਹਾਂ,

ਅਬਲਾ ਮੈਂ ਅਮਾਪੀਆ।

(08)

ਪ੍ਰਸ਼ਨ 2. 'ਧਰਤੀ ਦੇ ਹੇਠਾਂ' ਕਵਿਤਾ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਕੀ ਹੈ ? ਸਪੱਸ਼ਟ ਕਰੋ।

ਯੂਨਿਟ - 2

ਪ੍ਰਸ਼ਨ 1. 'ਗੁਰੂ ਕਾ ਬਾਗ ਅਤੇ ਮੁਲਤਾਨ' ਨਿਬੰਧ ਦੀ ਲਿਖਣ ਸ਼ੈਲੀ ਬਾਰੇ ਆਪਣੇ ਵਿਚਾਰ ਪ੍ਰਗਟ ਕਰੋ।

ਪ੍ਰਸ਼ਨ 2. 'ਹਿੰਦੋਸਤਾਨ ਛੋੜ ਦੋ' ਨਿਬੰਧ ਦਾ ਵਿਸ਼ੈ-ਵਸਤੂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

(08)

ਯੂਨਿਟ - 3

ਪ੍ਰਸ਼ਨ 1. ਹੇਠ ਲਿਖੇ ਵਿਸ਼ਿਆਂ ਵਿਚੋਂ ਕਿਸੇ ਇਕ ਵਿਸ਼ੈ ਉੱਤੇ ਭਾਵ-ਪੂਰਤ ਪੈਰਾ ਰਚਨਾ ਕਰੋ।

ਵਿਦਿਆਰਥੀ ਤੇ ਵਿਦੇਸ਼ੀ ਪੜ੍ਹਾਈ

ਜਾਂ

ਸਰਕਾਰ ਤੇ ਰੁਜ਼ਗਾਰ

(08)

ਪ੍ਰਸ਼ਨ 2. ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਦਿਓ।

ਪੰਜਾਬ ਦਾ ਵਾਤਾਵਰਣ ਤਬਾਹ ਹੋ ਰਿਹਾ ਹੈ। ਫਸਲਾਂ ਉਪਰ ਕੀੜੇ ਮਾਰ ਦਵਾਈਆਂ ਦੇ ਅਸਰ ਨੇ ਹਵਾ ਵਿਚ ਜ਼ਹਿਰ ਘੋਲ ਦਿੱਤਾ ਹੈ। ਰਸਾਇਕ ਖਾਦਾਂ ਨੇ ਜ਼ਮੀਨ ਦਾ ਸਤਿਆਨਾਸ ਕਰ ਦਿੱਤਾ ਹੈ। ਪਰਾਲੀ ਦੇ ਧੂੰਏਂ ਨੇ ਸਾਹ ਲੈਣਾ ਔਖਾ ਕਰ ਦਿੱਤਾ ਹੈ। ਧਰਤੀ ਹੇਠੋਂ ਪਾਣੀ ਕੱਢ ਕੇ ਪੰਜਾਬ ਨੂੰ ਬੰਜਰ ਬਣਾਉਣ ਦੀ ਕਗਾਰ 'ਤੇ ਖੜਾ ਕਰ ਦਿੱਤਾ ਹੈ। ਫਲਾਂ ਤੇ ਸਬਜ਼ੀਆਂ ਉਤੇ ਭਰੋਸਾ ਨਹੀਂ ਰਿਹਾ। ਜੰਗਲ ਕੱਟੇ ਗਏ ਹਨ। ਪ੍ਰਕਿਰਤੀ ਨਾਲ ਖਿਲਵਾੜ ਕੀਤਾ ਜਾ ਰਿਹਾ ਹੈ। ਪਰ ਦੁੱਖ ਦੀ ਗੱਲ ਇਹ ਹੈ ਕਿ ਸਰਕਾਰ ਤੇ ਆਮ ਲੋਕ ਅਜੇ ਇਸ ਨੂੰ ਗੰਭੀਰਤਾ ਨਾਲ ਨਹੀਂ ਲੈ ਰਹੇ।

(ੳ) ਪੈਰੇ ਦਾ ਢੁੱਕਵਾਂ ਸਿਰਲੇਖ ਦਿਓ।

(ਅ) ਪੰਜਾਬ ਦਾ ਵਾਤਾਵਰਣ ਕਿਹੋ ਜਿਹਾ ਹੈ ?

(ੲ) ਇਸ ਵਾਤਾਵਰਣ 'ਚ ਮਨੁੱਖ ਨੂੰ ਕੀ ਕੀ ਖਤਰੇ ਹਨ।

(ਸ) ਵਾਤਾਵਰਣ ਦੇ ਇਸ ਖਤਰੇ ਬਾਰੇ ਸਰਕਾਰ ਕੀ ਕਰ ਰਹੀ ਹੈ ?

ਯੂਨਿਟ - 4

ਪ੍ਰਸ਼ਨ 1. ਧੁਨੀ ਉਚਾਰਨ ਦੇ ਅੰਗਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ।

ਪ੍ਰਸ਼ਨ 2. ਪੰਜਾਬ ਦੀਆਂ ਉਪ-ਭਾਸ਼ਾਵਾਂ ਦਾ ਸੰਖੇਪ ਵਰਣਨ ਕਰੋ ਤੇ ਉਨ੍ਹਾਂ ਦੇ ਖੇਤਰ ਤੇ ਪਛਾਣ ਚਿੰਨ੍ਹਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ।

(08)

28-11-18

Page

Paper Code: 8206 (130)

| Programme | Course Code | Exam Code |
|--------------------------------|-------------|-----------|
| B.A Sem-I | BARL-1031 | 103201 |
| B.Sc. (Non-Medical) Sem-I | BSNL-1031 | 103301 |
| B.Sc.(Medical) Sem-I | BSML-1031 | 103301 |
| B.Sc.(Eco) Sem-I | BECL-1031 | 103301 |
| B.Sc.(C.Sc) Sem-I | BCSL-1031 | 103301 |
| B.Com Sem-I | BCRL-1031 | 108501 |
| BBA Sem-I | BBRL-1031 | 105401 |
| B.A (JMC) Sem-I | BJML-1031 | 108701 |
| B.Sc (FD) Sem-I | BFDL-1031 | 108601 |
| B.Sc(H.Sc) Sem-I | BHSL-1031 | 108201 |
| BCA Sem-I | BCAL-1031 | 107201 |
| B.Sc(IT) Sem-I | BITL-1031 | 105701 |
| B.Sc(BT) Sem-I | BBTL-1031 | 107401 |
| B.A(Hons.) in English Sem-I | BOEL-1031 | 107501 |
| B.Sc (Hons.) Agriculture Sem-I | BACL-1031 | 108301 |

Course Title: Basic Punjabi

Time Allowed: 3 Hours

Max Marks: 40

Note:

1. ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰੋ।
2. ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ।
3. ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
4. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ-ਏ

1. ਪੈਂਤੀ ਅੱਖਰੀ ਬਾਰੇ ਵਿਸਥਾਰ ਸਹਿਤ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਇਹ ਦੱਸੋ ਕਿ ਇਸ ਸਮੇਂ ਇਸਦੇ ਕਿੰਨੇ ਵਰਨ ਹਨ?
2. ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਨ ਕਿਹੜੇ-ਕਿਹੜੇ ਹਨ? ਇਨ੍ਹਾਂ ਦੀ ਵਰਤੋਂ ਨੂੰ ਉਦਾਹਰਨਾਂ ਸਹਿਤ ਸਪੱਸ਼ਟ ਕਰੋ।

ਸੈਕਸ਼ਨ-ਬੀ

3. ਸੰਯੁਕਤ ਸ਼ਬਦ ਬਣਤਰ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਕੋਈ ਸੰਯੁਕਤ ਸ਼ਬਦ ਬਣਾ ਕੇ ਲਿਖੋ।
4. ਹੇਠ ਲਿਖੇ ਅਗੇਤਰਾਂ ਦੀ ਵਰਤੋਂ ਨਾਲ ਦੋ-ਦੋ ਸ਼ਬਦ ਬਣਾਉ।

(ੳ) ਉਪ (ਅ) ਅਣ

(ੲ) ਕਮ (ਸ) ਨਿਰ

ਸੈਕਸ਼ਨ-ਸੀ

5. ਨਾਨਕੇ ਅਤੇ ਦਾਦਕੇ ਪਰਿਵਾਰ ਨਾਲ ਸੰਬੰਧਿਤ ਚਾਰ-ਚਾਰ ਰਿਸ਼ਤਿਆਂ ਦੇ ਨਾਂ ਲਿਖੋ।
6. ਵਪਾਰਕ ਵਰਤੋਂ ਵਾਲੇ ਕੋਈ ਅੱਠ ਸ਼ਬਦ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-ਡੀ

7. ਪੰਜਾਬ ਦੀਆਂ ਰੁੱਤਾਂ ਦੇ ਨਾਂ ਲਿਖੋ।
8. 41 ਤੋਂ 50 ਤੱਕ ਦੀ ਗਿਣਤੀ ਨੂੰ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

281118

Paper Code: 8209 (100)

| Programme | Course Code | Exam Code |
|--------------------------------|-------------|-----------|
| B.A Sem-I | BARL-1431 | 103201 |
| B.Sc. (Non-Medical) Sem-I | BSNL-1431 | 103301 |
| B.Sc.(Medical) Sem-I | BSML-1431 | 103301 |
| B.Sc.(Eco) Sem-I | BECL-1431 | 103301 |
| B.Sc.(C.Sc) Sem-I | BCSL-1431 | 103301 |
| B.Com Sem-I | BCRL-1431 | 108501 |
| BBA Sem-I | BBRL-1431 | 105401 |
| B.A (JMC) Sem-I | BJML-1431 | 108701 |
| B.Sc (FD) Sem-I | BFDL-1431 | 108601 |
| B.Sc(H.Sc) Sem-I | BHSL-1431 | 108201 |
| BCA Sem-I | BCAL-1431 | 107201 |
| B.Sc(IT) Sem-I | BITL-1431 | 105701 |
| B.Sc(BT) Sem-I | BBTL-1431 | 107401 |
| B.A(Hons.) in English Sem-I | BOEL-1431 | 107501 |
| B.Sc (Hons.) Agriculture Sem-I | BACL-1431 | 108301 |
| B.Com (Hons.) Sem-I | BCOL-1431 | 109101 |

Course Title: Punjab History & Culture

Time Allowed: 3 Hours

Max Marks: 40

Note:

- (i) Question paper consist of four units.
- (ii) Attempt five questions in all at least selecting one from each unit.
- (iii) Each question will carry 8 marks

Unit-1

1. Discuss briefly the physical features of the Punjab. 8
2. Write a note on the following as sources of Punjab History and Culture:-
 - a. Vedic Literature
 - b. Accounts of foreign travellers. 4+4=8

Unit-2

3. Discuss the town planning and Architure, art and religion of Harappan civilization. 8
4. Critically discuss the various theories regarding original home of the Aryans. 8

Unit-3

5. Write a note on social and economic life of Rig Vedic people. 8
6. Elaborate the changes in religious and economic life of people in later Vedic age. 8

Unit-4

7. Write a brief note on life and teachings of Lord Bhuddha. 8
8. Discuss the spread and impact of Jainism in Punjab. 8

Hindi Version

नोट :-

- (1) प्रश्न पत्र चार यूनिट पर आधारित है।
- (2) प्रत्येक यूनिट से एक प्रश्न करते हुए कुल पाँच प्रश्नों के उत्तर लिखो।
- (3) प्रत्येक प्रश्न के आठ अंक हैं।

यूनिट-1

1. प्राचीन पंजाब की भूगोलिक विशेषताओं का वर्णन करो। 8
2. निम्नलिखित पर पंजाब के ऐतिहासिक स्रोतों के रूप में नोट लिखो:- 8
 - (क) वैदिक साहित्य
 - (ख) विदेशी यात्रियों के वृतांत

यूनिट-2

3. हड़प्पा सभ्यता नगर योजना, भवन निर्माण कला, कला धार्मिक जीवन का वर्णन करो। 8
4. आर्यों के मूल निवास-स्थान के बारे में भिन्न-भिन्न सिद्धान्तों का आलोचनात्मक वर्णन करो। 8

यूनिट-3

5. ऋग्वैदिक आर्यों की सामाजिक और आर्थिक जीवन पर नोट लिखो। 8
6. उत्तर वैदिक काल में धार्मिक और आर्थिक जीवन में हुए परिवर्तन का उल्लेख करो। 8

यूनिट-4

7. महात्मा बुद्ध के जीवन और शिक्षाओं पर नोट लिखो। 8
8. जैन धर्म के पंजाब में विकास और प्रभाव का वर्णन करो। 8

6/12 M

Paper Code: 8213 (400)

| Programme | Course Code | Exam Code |
|--------------------------------|--------------------|------------------|
| B.A (JMC) Sem-I | BJML-1102 | 108701 |
| B.Sc (FD) Sem-I | BFDL-1102 | 108601 |
| B.Sc(H.Sc) Sem-I | BHSL-1102 | 108201 |
| BCA Sem-I | BCAL-1102 | 107201 |
| B.Sc(IT) Sem-I | BITL-1102 | 105701 |
| B.Sc(BT) Sem-I | BBTL-1102 | 107401 |
| B.Sc (Hons.) Agriculture Sem-I | BACL-1102 | 108301 |
| B.Voc(RM) Sem-I | BVRL-1102 | 111801 |
| B.Voc(MSP) Sem-I | BVML-1102 | 111601 |
| B.Voc(Animation) Sem-I | BVAL-1102 | 112201 |
| B.Voc(TDAT) Sem-I | BVTL-1102 | 111201 |
| B.Voc(NEH) Sem-I | BVNL-1102 | 111401 |
| B.Voc(B&W) Sem-I | BVBL-1102 | 113801 |

Course Title: Communication Skills in English**Time : 3 Hours****Marks : 40**

1. Note : Attempt 5 questions in all, selecting one question from each section and the fifth from any section. Each question carries 8 marks.

2. Write legibly.

Section A

1. What do you understand by the meaning, definition and process of communication?

Discuss in detail.

Or

Explain Intensive Reading skills.

8

Section B

2. Read the following passage and answer the questions in multiple choice form. Mark (v) in front of the right answer.

When I go into a stranger's library, I wander round the book-shelves to learn what sort of a person the stranger is and when he comes in, I feel that I know the key to his mind and the range of his interests. A house without books is a characterless house, no matter how rich

the persian rugs and how elegant. The settees and the ornaments may be. The persian rugs only tell you that he has got money, but the books tell you he has got a mind as well. It is not the question of money that we don't buy books. I repeat that books are the cheapest as well as the best part of the equipment of a house. You can begin your library with the expenditure of a couple of shillings. Nearly all the best literature in the world is at our command at two shillings a volume. For five pounds, you can get a library of fifty books. Even if you don't read them yourself, they are a priceless investment for your children. what delight is there like the revelation of books, the sudden impact of a master-spirit, the sense of window flung wide open on the universe! It is these adventures of the mind, The joy of which does not pass away, that gives the adventure of life itself, beauty and fragrance.

1. The narrator learns about the stranger's interest when :

- a) he enters the library
- b) he looks at the bookshelves
- c) he picks up some books
- d) he sees the stranger

2. What distinguishes a house and its owner?

- a) the rich persian rugs
- b) gorgeous settees
- c) costly ornaments
- d) presence of books

3. Mark the correct statement :

- a) Buying books is very costly.
- b) Books are the best part of a house.
- c) The best literature in the world costs two shillings.
- d) A library of fifty books will cost less than five pound.

4. Which of the following is not an adventure of the mind?

- a) immediate effect of great writers
- b) experience of delight by reading books
- c) glimpse of the whole universe

d) Valuable investment for the children

5. What does an adventure mean?

a) Courage

b) an unusual, exciting event

c) enterprise

d) guess

$$1\frac{1}{2} + 1\frac{1}{2} + 1\frac{1}{2} + 1\frac{1}{2} + 2 = 8$$

3. Read the following passage and answer the questions that follow:

One of the greatest advances in modern technology has been the invention of computer. They are already widely used in industry and in universities. Now there is hardly any sphere of human life where computer have not been pressed into the service of man. We are heading fast towards a situation when a computer will be as much part of man's daily life as a telephone or calculator.

Computer are capable of doing extremely complicated work in all branches of learning. They can solve the most complex mathematical problems or put thousands of unrelated facts in order. These machine can be put to varied uses. For instance, they can provide information on the best way to prevent traffic accidents, or they can count number of times the word "and" has been used in the Bible. Because they work accurately and at high speeds, they save research workers years of hard work. This whole process by which machines can be used to work for us has been called "automation." In the future automation may enable human beings far more leisure than they do today. The coming of automation is bound to have important social consequences.

Some years ago an expert on automation, Sir Leon Bagrit, pointed out that it was a mistake to believe that these machines could "think". There is no possibility that human beings will be "controlled" by machines. Though computer are capable of learning from their mistakes and improving on their performance, the need detailed instructions from human beings to be able to operate. They can never, as it were, lead independent lives or "rule the world" by making decisions of their own.

1. Why does the writes call computers the greatest invention of modern technology?

2. Give examples of the various uses to which the computer can be put.

3. What is automation?
4. What is the theory of Sir Leon Bagrit?
5. Will computers over "rule the world?"
6. Give the meaning of

i) Sphers ii) consequence iii) Performance

5+3 = 8

Section C

4. What are the basics of effective writing?
5. What are the principles of business letters?

8

Section D

6. Explain in detail the importance of preparing a resume.
7. Write a note on minutes of the meeting.

8

08/12/18

Paper Code: 8215 (950)**Programme****Exam Code**

| | |
|---------------------------|--------|
| B.A. | 103201 |
| B.Sc. Non-Medical | 103301 |
| B.Sc. Med. | |
| B.Sc. Eco. | |
| B.Sc. C.Sc. | |
| B.Com. | 108501 |
| BBA | 105401 |
| B.A. (JMC) | 108701 |
| B.Sc. (FD) | 108601 |
| B.Sc (H.Sc.) | 108201 |
| BCA | 107201 |
| B.Sc.(IT) | 105701 |
| B.Sc.(BT) | 107401 |
| B.A. (Hons.) in English, | 107501 |
| B.Sc (Hons.) Agriculture) | 108301 |
| B.Com (Hons.) | 109101 |
| B.Voc Retail Mgmt. | 111801 |
| B.Voc MSP | 111601 |
| B.Voc Animation | 112201 |
| B.Voc TDAT | 111201 |
| B.Voc NEH | 111401 |
| B.Voc Beauty & Wellness | 113801 |

Course Code : AECD 1161**Course Title: Drug Abuse****Time Allowed: 3 Hours****Max Marks: 40**

Note : Attempt 5 question one from each section & fifth question from any of the sections. Each question carries 8 marks.

Section A

1. What is drug abuse? What is the status of Punjab in this aspect? 8
2. Discuss major reasons of drug abuse and its demand in Punjab 8

Section B

3. How drug abuse effects the personal life of an individual?
4. Write notes on :
 - a) Crime rate in society increases due to drugs.
 - b) The drug abuses are burden on nation, explain.

Section C

5. Define drug relapse management what are its types?
6. Discuss medical treatment of drug abuse.

Section D

7. What are various types of therapies used to assist drug de-addiction. Discuss any one in detail.
8. Discuss the role of family in drug de-addiction.

Punjabi Version

ਨੋਟ : ਕੁਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰੋ। ਹਰ ਇਕ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਜ਼ਰੂਰੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਤੋਂ ਵੀ ਕਰੋ। ਹਰ ਸਵਾਲ 8 ਨੰਬਰ ਦਾ ਹੈ।

ਸੈਕਸ਼ਨ - ਓ

1. ਨਸ਼ਾ ਦੁਰਵਰਤੋਂ ਕੀ ਹੈ ? ਪੰਜਾਬ ਵਿਚ ਇਸ ਦੀ ਸਥਿਤੀ ਬਾਰੇ ਲਿਖੋ। (8)
2. ਨਸ਼ਾਖੋਰੀ ਦੇ ਕਾਰਨਾਂ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿਚ ਲਿਖੋ ਅਤੇ ਪੰਜਾਬ ਵਿਚ ਇਸ ਦੀ ਮੰਗ ਦੇ ਕਾਰਨ ਲਿਖੋ। (8)

ਸੈਕਸ਼ਨ - ਅ

3. ਨਸ਼ਾਖੋਰੀ ਇਕ ਵਿਅਕਤੀ ਦੇ ਨਿੱਜੀ ਜੀਵਨ ਨੂੰ ਕਿਵੇਂ ਪ੍ਰਭਾਵਿਤ ਕਰਦੀ ਹੈ ? (8)
4. ਹੇਠ ਲਿਖਿਆਂ ਤੇ ਨੋਟ ਲਿਖੋ :
 - (1) ਨਸ਼ਾਖੋਰੀ ਕਰਕੇ ਸਮਾਜ ਵਿਚ ਜੁਰਮ ਵੱਧਦਾ ਹੈ
 - (2) ਨਸ਼ੇੜੀ ਦੇਸ਼ ਉੱਤੇ ਇਕ ਬੋਝ ਹਨ, ਵਿਸਥਾਰ ਕਰੋ (8)

ਸੈਕਸ਼ਨ - ਏ

5. ਨਸ਼ਾ ਮੁੜ ਵਰਤੋਂ ਤੋਂ ਬਚਣ ਦੇ ਪ੍ਰਬੰਧਨ ਕੀ ਹੈ ? ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ ਵਿਸਥਾਰ ਵਿਚ ਲਿਖੋ। (8)
6. ਨਸ਼ਾਖੋਰੀ ਦੇ ਮੈਡੀਕਲ ਪ੍ਰਬੰਧਨ ਬਾਰੇ ਲਿਖੋ।

ਸੈਕਸ਼ਨ - ਸ

7. ਵਿਭਿੰਨ ਪ੍ਰਕਾਰ ਦੀਆਂ ਨਸ਼ਾ ਛੜਾਉ ਥੈਰੇਪੀਆਂ ਬਾਰੇ ਦੱਸੋ। ਕਿਸੇ ਇਕ ਬਾਰੇ ਵਿਸਥਾਰ ਕਰੋ। (8)
8. ਨਸ਼ਾ ਛੜਾਉਣ ਵਿਚ ਪਰਿਵਾਰ ਕਿਵੇਂ ਸਹਾਈ ਹੋ ਸਕਦਾ ਹੈ - ਲਿਖੋ। (8)

Hindi Version

नोट : कुल पांच प्रश्न करें। हर भाग में से एक प्रश्न जरूरी है। पांचवां प्रश्न कहीं से भी करें। प्रत्येक प्रश्न 8 नंबर का है।

भाग क

1. नशाखोरी क्या है? पंजाब में नशाखोरी की स्थिति का उल्लेख करें। 8
2. पंजाब में नशाखोरी के मुख्य कारण तथा उसकी मांग का वर्णन करें। 8

भाग ख

3. नशाखोरी व्यक्ति के निजी जीवन को किस प्रकार प्रभावित करती है। 8
4. निम्नलिखित पर नोट लिखें :-
 1. नशाखोरी के कारण समाज में बढ़ते अपराध। 8
 2. नशाखोरी देश पर एक बोझ हैं। विस्तार कीजिए। 8

भाग ग

5. नशे के दोबारा प्रयोग से बचने के प्रबन्धन क्या हैं और इसकी किसमों का वर्णन करें। 8
6. नशाखोरी के मैडीकल प्रबन्धनों का उल्लेख कीजिए। 8

भाग घ

7. नशा छुड़ाने के लिए विभिन्न चिकित्साओं (therapies) कौन सी है? किसी एक का विस्तार करें। 8
8. नशा छुड़वाने में परिवार किस प्रकार सहयोगी हो सकता है। 8

26-11-18

Exam Code: 107401

Paper Code: 8323 (40)

Programme: B.Sc. (Bio Tech.) Sem : I

Course Title: Zoology-A

Course Code: BBTM-1483

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. Well labeled diagram must be given where ever required to support your answer.

Section-A

1. (a) Write a note on digestive glands of Man. (8)
(b) Describe the various types of teeth & their function and give the dental formula of milk and permanent set of teeth. (4)
2. Discuss the various types of Nutrition in human and discuss why inter-cellular digestion is advantagous over intra-cellular digestion. (12)

Section-B

3. (a) Draw a well labeled diagram of Human heart. (8)
- (b) Give the plan of circulation of blood in body. (8)
4. Write a Short note on
- (a) Cardiac Cycle (4)
- (b) Blood clotting (4)
- (c) Double circulation (4)

Section-C

5. Describe the respiratory system in man and also draw a well labeled diagram. (12)
6. Describe the exchange of respiratory gases O^2 and CO^2 at lung level & at tissue level (12)

Section-D

7. Define the integumentary system and discuss the various derivatives of integumentary system in mammals. (12)
8. Give the functions of integumentary system and the various glands associated with it. (12)

Exam Code : 107401

Paper Code : 8324 (40)

Programme : B.Sc. (Biotech) Sem-I

Course Title : Botany- A

Course Code : BBTM-1074

Time Allowed : 3 Hours

Max Marks : 30

Note: Attempt Five questions in all by selecting at least one question from each section. All questions carry equal marks.

SECTION-A

1. Write a detailed note on Tunica Corpus Theory to explain the organization of shoot apex. (6)
2. a) What are meristems? Classify them on the basis of their position. (3)
- b) Differentiate between (3)
 - a) Meristematic & Permanent tissue
 - b) Root Apex and Shoot Apex
 - c) Vegetative shoot apex and Reproductive apex.

SECTION-B

1. Write a note on structure and development of normal type/monosporic embryo sac with diagrams. (6)
2. What is Anther? Trace the origin & development of microsporangium in angiosperms till its dehiscence. (6)

SECTION-C

1. a) Write a concise note on various events leading to fertilization in angiosperms using diagram. (4)
- b) How can the self incompatibility be overcome? (2)
2. a) Describe various factors that favour self pollination. What are limitations of self pollination? (3)
- b) What is polyembryony? Describe various types of polyembryony and its significance. (3)

SECTION-D

1. Describe the taxonomic importance of floral parts of solanaceae family. (6)
2. Describe the taxonomic characteristics and floral diagram of the following:
 - a) *Murraya* (3)
 - b) *Petunia* (3)

Exam Code: 107401

Paper Code: 8325 (40)

Programme: B.Sc. (Bio Tech.) Sem: I
Course Title: Inorganic Chemistry-A
 Course Code: BBTM-1085

Time Allowed: 3 Hours

Max Marks: 30

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

Section A

- Q 1. (a) Write down the molecular formula of the following coordination compounds
 (i) Ammoniumtetrachlorocuprate (II) (ii) Potassiumhexafluorocobaltate (2)
- (b) Write IUPAC name of the following compounds
 (i) $[\text{Co}(\text{SO}_4)(\text{NH}_3)_5]^+$ (ii) $[\text{Fe}(\text{NH}_3)_6][\text{Cr}(\text{CN})_6]$ (2)
- (c) $\text{Ni}(\text{CO})_4$ is diamagnetic and $[\text{NiCl}_4]^{2-}$ is paramagnetic. Explain. (2)
- Q 2. (a) Write the state of hybridization, shape and IUPAC name of the following complexes.
 (i) $[\text{CoF}_6]^{3-}$ (ii) $[\text{MnCl}_4]^{2-}$ (3)
- (b) Compare the following complexes w.r.t. their molecular shape and magnetic behavior
 (i) $[\text{Cr}(\text{NH}_3)_6]^{3+}$ (ii) $[\text{Fe}(\text{CN})_6]^{4-}$ (iii) $[\text{NiCl}_4]^{2-}$ (3)

Section B

- Q 3. (a) What are the main limitations of Valence bond theory? (3)
- (b) The tetrahedral complex of Mn (II) are more intensely coloured than the octahedral complex of Mn (II). Explain. (3)
- Q 4. Explain the following by giving an example in each case
 (a) Linkage Isomerism (b) An Outer orbital complex (c) Bidentate ligand (6)

Section C

- Q 5. (a) Which complex has larger crystal field splitting $[\text{CoF}_6]^{3-}$ or $[\text{CoF}_6]^{3-}$ and why? (3)
- (b) Discuss the splitting of d-orbitals in tetrahedral complexes. (3)
- Q 6. (a) What is the difference between an inner orbital complex and outer orbital complex? Discuss with one example each. (4)

(b) Why is the magnitude of crystal field splitting in tetrahedral complexes smaller than octahedral complexes? (1)

(c) What is the basic assumption of crystal field theory? (1)

Section D

Q 7. (a) Explain with the help of Molecular orbital theory why Cl^- acts as a weak ligand whereas CN^- acts as a strong ligand in octahedral transition metal complexes. (3)

(b) Discuss and draw molecular orbital diagram showing sigma bonding in tetrahedral complex. (3)

Q 8. (a) Why is molecular orbital theory preferred over crystal field theory in explaining metal ligand bonding in transition metal complexes? (3)

(b) Discuss the sigma and pi metal bonding in transition metal complexes with reference to tetrahedral complexes. (3)

Exam Code: 107401

Paper Code: 8326 (40)

Programme : B.Sc.(Biotech) Sem-I

Course Title: Organic Chemistry-A

Course Code: BBTM-1086

Time Allowed: 3 Hours

Max Marks: 30

There are four sections (A-D) containing eight questions, candidates are required to attempt five questions selecting at least one question from each section. The fifth question may be attempted from any section.

Section A

1. (a) Write down various conformations of cyclohexane and mark them on energy profile diagram $3\frac{1}{2}$

(b) Discuss the mechanism of free radical halogenations of alkanes $2\frac{1}{2}$

2. (a) Primary alcohols react with halogen acids by S_N2 mechanism, whereas secondary and tertiary alcohols tends to react by S_N1 , Explain with mechanism $3\frac{1}{2}$

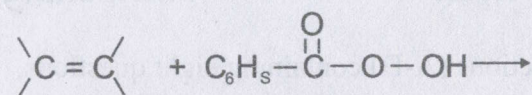
(b) Draw Newmann projections of axial and equatorial methyl cyclohexane and comment upon their relative stability $2\frac{1}{2}$

Section B

3. (a) Discuss the mechanism of addition of hypohalous acid to alkene 2

(b) Explain the mechanistic basis for the Markownikoff's rule 2

(c) Complete and give mechanism for reaction 2



4. (a) What do notations E and Z stand for? What are advantages of E and Z over Cis-trans system 2

(b) What is peroxide effect? Explain the mechanism of peroxide initiated by addition of hydrobromic acid on propylene 2

(c) What is Saytzeff's rule, discuss briefly 2

Section C

5. (a) What do you understand by rectus and sinister system of designation of chiral centre, Draw Newman projection formula of (2S, 3R) - 3-bromo butan-2-ol 3½

(b) What is Walden inversion, explain the statement "Walden inversion does not necessarily mean optical inversion." 2½

6 (a) Draw the Fisher Projection formulae of various stereoisomers of tartaric acid. Which is one of the isomers optically inactive. 3

(b) Bring out the difference between mesoform and racemic form with suitable examples. 1½

(c) What are erythro and Threo isomers? 1½

Section D

7. (a) What are bimolecular nucleophilic substitution (S_N2) reactions. Discuss back side attack of nucleophile and its energy profile diagram. 3

(b) Discuss the stereo chemistry as observed in the case of S_N1 Reaction 3

8. (a) Discuss the reaction pathways when n-butyl chloride and tertiary butyl chloride are treated with aqueous NaOH separately 2

(b) Discuss the factors which influence the occurrence and rate of S_N2 reaction. 2

(c) Polar solvents favour which type of nucleophilic substitution mechanism of Alkyl halide 2

Exam Code: 107401

Paper Code: 8327 (40)

Programme: B.Sc. (Biotech.) Sem: I

Course Title: Computer Fundamentals and Bioinformatics

Course Code: BBTM-1137

Time Allowed: 3 Hours

Max Marks: 30

Note:

Attempt Five question in all, selecting at least one question from each section A to D compulsorily & one question of your choice.

All parts of a question should be done in continuation.

Section-A

1. (a) What is a computer software? Give suitable example. 03
- (b) Write a note on various types of computer storage devices, giving suitable examples. 03
2. (a) Differentiate between system & application software, giving example. 03
- (b) Discuss organization of computer. 03

Section-B

3.(a) Write a note on various types of output devices available. 04

(b) Giving suitable example explain computer peripheral device. 02

4.(a) What is an input device of a computer? Explain giving suitable example. 04

(b) Differentiate between CD & DVD? 02

Section-C

5.(a) Discuss the various steps in the algorithm of BLAST for sequence alignment. 04

(b) Give full name of NCBI & PDB. 02

6.(a) Write a note on Swissprot. 04

(b) Differentiate between BLASTP & BLASTN. 02

Section-D

7.(a) Discuss the various steps in the Smith Waterman algorithm, taking any 2 short protein sequences (upto 8 residues) 04

(b) What are the advantages/applications of multiple sequence alignment? 02

8.(a) Differentiate between local & global alignment. 04

(b) What is a gap penalty? 02

Exam Code: 107401

Paper Code: 8328 (40)

Programme: B.Sc. (Bio Tech.) Sem: I

Course Title: General Microbiology-A

Course Code: BBTM-1348

Time Allowed: 3 Hours

Max Marks: 30

Note:

Attempt five questions in all, selecting one question from each of the four sections (A-D). The fifth question may be attempted from any other section. All questions carry equal marks.

Section-A

1. (a) Briefly discuss moist and dry heat sterilization. (4)
(b) What are D and Z values? (2)
2. (a) Explain the principle and applications of bright field microscopy. (4)
(b) Define the term "Pasteurization". (2)

Section-B

3. (a) Why do we need to preserve microorganisms? Discuss any two methods of culture preservation. (4)
- (b) What are bacteriophages? Who coined this term. (2)
4. (a) Discuss lytic life cycle of viruses in detail. (4)
- (b) Define the term "hyperthermophiles" (2)

Section-C

5. (a) Explain along with examples, the mechanism of action of two antibiotics which inhibit protein synthesis in bacterial cell. (4)
- (b) Explain the terms: peritrichous and monotrichous. (2)
6. (a) What do you mean by differential staining? Discuss along with example. (4)
- (b) Write a short note on broad spectrum antibiotics. (2)

Section-D

7. (a) Briefly discuss how we can use % G+C content for classification of bacteria. (4)
- (b) Write a Short note on binomial system of nomenclature. (2)
8. (a) Discuss the use of Bergey's Manual as a tool for classification of bacteria. (4)
- (b) List the different taxonomic ranks into which bacteria are classified. (2)

Exam Code: 107401

Paper Code: 8329 (40)

Programme: B.Sc. (Biotech.) Sem: I

Course Title: Biochemistry -A

Course Code: BBTM-1089

Time Allowed: 3 Hours

Max Marks: 30

*Note: Candidate are required to attempt any five questions, selecting at least one question from each section.
The fifth question may be attempted from any section.*

Section A

- 1(a) Write the various biological roles of water. (3)
(b) Define the pH and write its significance in biological systems. (3)
- 2(a) Derive the Henderson and Hasselbalch (HH) equation. What are the significances of this equation? (3)
(b) What is the buffer? Also write the buffer mechanism. (3)

Section B

- 3(a) Write the various biological functions of carbohydrates. (3)
(b) What are the epimers? Give structures of two glucose epimers. (3)
- 4 Write the biochemical structure of starch and its significance in your food. (6)

Section C

- 5(a) What is the proteoglycan? Write also the structural roles of proteoglycan. (3)
(b) What is the difference between glycoproteins and glycolipids? (3)
- 6 Explain how carbohydrates can act as the informational molecules. (6)

Section D

- 7 (a) Write the names of energy related nucleotides. (3)
(b) Give the structural features of various types of DNA. (3)
- 8 (a) Write the structural features of Watson and Crick's model of DNA. (3)
(b) How the acid and alkaline conditions affect the DNA structure. (3)