Exam. Code : 107201
Subject Code : 1748

Bachelor of Computer Application (BCA) 1st Sem.

PUNJABI COMPULSORY

Paper—VI (i)

Time Allowed—3 Hours] [Maximum Marks—50

ਨੋਟ :- ਕੁੱਲ **ਅੱਠ** ਪ੍ਰਸ਼ਨ ਹਨ। ਪਰੀਖਿਆਰਥੀ ਕੋਈ **ਪੰਜ** ਪ੍ਰਸ਼ਨ ਕਰਨ। ਸਾਰੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।

सैकशन-ए

1. 'ਬਾਰਾਂਮਾਹ' ਕਵਿਤਾ ਦਾ ਸਾਰ ਲਿਖੋ।
2. 'ਜਹਾਜ਼ ਵਾਲੀ ਟੈਂਕੀ' ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

सैकशन-बी

3. 'ਅਫਰੀਕਾ ਦੀ ਯਾਦ' ਲੇਖ ਦਾ ਸਾਰ ਲਿਖੋ।
4. 'ਸਾਕਾ ਸ੍ਰੀ ਨਨਕਾਣਾ ਸਾਹਿਬ' ਲੇਖ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

सैकशन-सी

5. ਹੇਠ ਲਿਖੇ ਤਿੰਨ ਵਿਸ਼ਿਆਂ ਵਿਚੋਂ ਕਿਸੇ **ਇੱਕ** ਵਿਸ਼ੇ 'ਤੇ ਪੈਰ੍ਹਾ ਰਚਨਾ ਕਰੋ :

   (ੳ) ਵਿਦੇਸ਼ ਜਾਣ ਦਾ ਰੁਝਾਨ

   (ਅ) ਪੰਜਾਬੀ ਰਿਸ਼ਤਾ-ਨਾਤਾ ਪ੍ਰਬੰਧ

   (ੲ) ਲਾਇਬ੍ਰੇਰੀ ਦਾ ਮਹੱਤਵ।

6. ਹੇਠ ਲਿਖੇ ਪੈਰ੍ਹੇ ਨੂੰ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਦਿਓ :

ਨੌਂਵੇਂ ਸਤਿਗੁਰੂ ਧਰਮ ਦੀ ਮੂਰਤ ਸਨ। ਉਸਰ ਰਹੇ ਨਵੇਂ ਸਮਾਜ ਨੂੰ ਉਨ੍ਹਾਂ ਨੇ ਆਤਮ-ਤਿਆਗ ਅਤੇ ਪਰਉਪਕਾਰ ਦਾ ਸਬਕ ਚਾਂਦਨੀ ਚੌਂਕ ਦਿੱਲੀ ਵਿੱਚ ਸੀਸ ਭੇਟ ਕਰਕੇ ਦਿੱਤਾ। ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਇਸ ਮਹਾਨ ਵਿਰਸੇ ਦੇ ਉੱਤਰਾਧਿਕਾਰੀ ਸਨ। ਸੰਗਤ, ਪੰਗਤ, ਸੰਗਠਨ, ਕੇਂਦਰੀ ਸਥਾਨ, ਸ਼ਬਦ ਬੋਹਿਥ, ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਿਬ, ਸੰਜਮ, ਬਿਬੇਕ ਅਤੇ ਪਰਉਪਕਾਰ ਨੌਂ ਨਿਧਾਂ ਦਾ ਭੰਡਾਰ ਇਨ੍ਹਾਂ ਦਾ ਅਮੁੱਕ ਵਿਰਸਾ ਸੀ। ਇਸ ਅਮੁੱਲ ਵਿਰਸੇ ਅਤੇ ਪ੍ਰਭੂ ਦੀ ਇਕੋ ਇਕ ਓਟ ਉੱਤੇ ਅਟੱਲ ਵਿਸ਼ਵਾਸ਼ ਰੱਖਦਿਆਂ ਹੋਇਆਂ ਆਪ ਨੇ ਖਾਲਸਾ ਪੰਥ ਦੀ ਅਗਵਾਈ ਕੀਤੀ।

(ੳ) ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਨੇ ਪੰਥ ਦੀ ਅਗਵਾਈ ਕਿਵੇਂ ਕੀਤੀ ?

(ਅ) ਗੁਰੂ ਤੇਗ਼ ਬਹਾਦਰ ਜੀ ਨੇ ਮਨੁੱਖਤਾ ਨੂੰ ਕੀ ਸਿੱਖਿਆ ਦਿੱਤੀ ?

(ਏ) ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਦਾ ਅਮੁੱਲ ਵਿਰਸਾ ਕੀ ਹੈ ?

(ਸ) ਪੈਰ੍ਹੇ ਦਾ ਢੁੱਕਵਾਂ ਸਿਰਲੇਖ ਲਿਖੋ।

(ਹ) ਲਕੀਰੇ ਸ਼ਬਦਾਂ ਦੇ ਅਰਥ ਲਿਖੋ।

ਸੈਕਸ਼ਨ-ਡੀ

7. ਭਾਸ਼ਾ ਦੇ ਟਕਸਾਲੀ ਰੂਪ 'ਤੇ ਚਰਚਾ ਕਰੋ।

8. ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ ਸਪੱਸ਼ਟ ਕਰੋ।

Exam. Code : 107201
Subject Code : 1744

Bachelor of Computer Application (BCA) 1st Semester

INTRODUCTION TO PROGRAMMING-C

Paper—I

Time Allowed—3 Hours] [Maximum Marks—75

Note:—Attempt any **five** questions, selecting at least **one** question from each Section. The **fifth** question may be attempted from any Section. All questions carry equal marks.

SECTION—A

1. Write short notes on the following :
   (a) Character set (b) Constant
   (c) Symbolic constant (d) Reserve words
   (e) Identifiers 5×3=15
2. What are different types of operators in C ? What is the difference between operator precedence and associativity ? Explain. 15

SECTION—B

3. What are the different types of loops available in C ? Explain giving suitable examples. 15
4. Write a program demonstrating uses of all types of storage classes available in C. 15

SECTION—C

5. (a) Define functions. What is the differnce between formal and actual parameters ? Explain giving examples. 10

   (b) Write a recursive function for finding factorial of a given number. 5

6. Write a program to multiply two matrices and store the result in third matrix. 15

SECTION—D

7. Define and distinguish between structures and unions. What are the uses of unions ? Explain giving examples. 15

8. Define pointer. How pointer to functions is used ? Explain giving example. 15

Exam. Code : 107201
Subject Code : 1747

Bachelor of Computer Application (BCA) 1st Semester

COMMUNICATION SKILLS IN ENGLISH—I

Paper—V

Time Allowed—3 Hours] [Maximum Marks—50

Note :—Attempt any **FIVE** questions, selecting at least **ONE** question from each section. The **fifth** question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Discuss reading purposes, its several kinds and reading tactics. 10

2. Define briefly the models of Reading. 10

SECTION—B

3. Read the passage given below and answer the questions that follow :

Tom was aggravated. He said. "Sid" ! and shook him. The course worked well, and Tom began to groan again. Sid yawned, stretched, then brought himself up on his elbow with a snort, and began to stare at Tom. Tom went on groaning. Sid said ! "Tom ! Say, Tom !"

No response.

"Here. Tom ! Tom ! What is the matter, Tom ?" And he shook him and looked in his face anxiously. Tom moaned out.

"Oh don't Sid. Don't juggle me."

"Why, what's the matter ? Tom. I must call Auntie."

"No,-never mind. It'll be over and by and by, may be. Don't call anybody."

"But I must ! Don't groan so, Tom, It's awful. How long have you been this way ?"

"Hours Ouch ! Oh, don't stir so, Sid, you'll kill me."

"Tom, why didn't you wake me sooner ? Oh. Tom, don't ! It makes my flesh crawl to hear you. Tom, what is the matter ?"

"I forgive you everything, Sid (*Groan*). Everything you've ever done to me. When I'm gone —".

Questions :

(i) Whom did Tom shake ?

(ii) What did Tom forgive Sid ?

(iii) Match any **two** of the words in Column 'A' with their meaning in Column 'B' :

Column 'A'	**Column 'B'**
(a) Aggravated	Sound through nose
(b) Snort	Became serious
(c) Groan	Cry

(iv) Fill in the blanks with suitable words from the passage :

(a) Our teacher has finished the _____.

(b) The thief _____ her gold chain.

(v) Give in simple English the meanings of any **two** of the following :

course, stare at, juggle. 10

4. Read the passage given below and answer the questions that follow :

The conductor pulled the bell and the bus stopped. "This bus doesn't go on until that dog is brought out." And he stepped on to the pavement and waited. It was his moment of triumph. He had the law on his side.

The storm inside rose high "Shameful", "Call the police," "Let's all report him." "Let's make him give us our fares back". For everybody was on the side of the lady and the dog.

The conductor came to the door. "What's your number ?" said one, taking out a pocket book with a gesture of terrible things. "There's my number," said the conductor. "Give us our fares back – you've engaged to carry us, you can't leave us here all night." "No fares back," said the conductor.

Questions :

(i) Why did the conductor pull the bell ?

(ii) It was a moment of triumph. How ?

(iii) Fill in the blanks with suitable words from the passage :

(a) Everyone condemned his _____ act.

(b) The beggar slept on the _____ last night.

(iv) Explain in simple English the meanings of the following words :

(a) Engaged

(b) Terrible.

(v) Match the words under 'A' with their meanings given under 'B' :

'A'	'B'
(a) Gesture	Footpath
(b) Pavement	Victory
(c) Triumph	Movement of the hand

10

SECTION—C

5. Write a letter to a friend congratulating him on his success in the examination. 10

6. Write an application to the Principal for the concession in fee. 10

SECTION—D

7. Draft an Auction Notice for Sale of Shops. 10

8. Write a memo to an employee for his absence from duty. 10

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Subject Code: 1746

Bachelor of Computer Application (BCA) 1st Semester

APPLIED AND DISCRETE MATHEMATICS

Paper—III

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt any **five** questions by selecting at least **one** from each Section. The fifth question may be attempted from any Section.

SECTION—A

1. (a) Let A = [1, 2, 3, 4, 5, 6] and B = [2, 4, 6, 8]; show that $A - B \neq B - A$.

   (b) A = [1, 2, 3, 4, 5], B = [1, 3, 5, 7, 9] and C = [2, 4, 8, 10];

   verify $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$.

   (c) In a class of 25 students, 12 have taken Economics, 8 have taken Economics but not History. Find the number of students who have taken Economics and History and those who have taken History but not Economics. 5+5+5

2. (a) Let $A = [1, 2, 3]$ $B = [2, 3, 4]$ $C = [4, 5]$; verify $A \times (B \cap C) = (A \times B) \cap (A \times C)$.

(b) Define :

(i) Reflexive relation

(ii) Symmetric relation

(iii) Transitive relation

(iv) Anti-symmetric relation

(v) Intersection of two sets. 7.5+7.5

SECTION—B

3. (a) Prove the validity of following arguments with truth table 'if man is bachelor, he is unhappy', 'if man is unhappy, he dies young'. Therefore bachelor die young.

(b) Prove that $(p \rightarrow q) \wedge (q \rightarrow r) \Rightarrow (p \rightarrow q)$ is tautology. 7.5+7.5

4. (a) Show that $[p \vee (q \wedge r)] \cong (p \vee q) \wedge (p \vee r)$ are logically equivalent using truth table.

(b) Define :

(i) Conjunction connector

(ii) Disjunction connector

(iii) XOR connector

(iv) Conditional connector

(v) Bi-conditional connector, with help of truth table.

7.5+7.5

SECTION—C

5. (a) $[(xy)'z]'.[(x'+z)(y'+z')']$. Reduce to DN form.

   (b) Show that xz' is prime implicant of

   $xy'+xyz'+x'yz'$. 7.5+7.5

6. (a) Show that $(A + B)(\bar{A} + C) = AC + \bar{A}B$.

   (b) $f(A, B, C) = \sum m(0, 3, 5, 6, 7) + d(2, 4)$.

   (c) Define Fundamental product with example. 5+5+5

SECTION—D

7. (a) If $A=\begin{bmatrix}1 & 0 & 2\\ 0 & 2 & 1\\ 2 & 0 & 3\end{bmatrix}$ Show $A^3 - 6A^2 + 7A + 2I = 0$.

   (b) Find inverse of matrix $A=\begin{bmatrix}1 & 3 & 3\\ 1 & 4 & 3\\ 1 & 3 & 4\end{bmatrix}$. 7.5+7.5

8. (a) Find rank of matrix $A=\begin{bmatrix}4 & 2 & 3\\ 8 & 5 & 2\\ 12 & -4 & 5\end{bmatrix}$.

   (b) Express the given matrix as sum of symmetric and

   Skew-Symmetric matrix $A=\begin{bmatrix}4 & 2 & -3\\ 1 & 3 & -6\\ -5 & 0 & -7\end{bmatrix}$.

   7.5+7.5

Exam. Code : 107201
Subject Code : 1745

Bachelor of Computer Application (BCA) 1st Semester

INTRODUCTION TO COMPUTERS & INFORMATION TECHNOLOGY

Paper—II

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt **five** questions, selecting at least **one** question from each Section. The **fifth** question may be attempted from any Section. All questions carry equal marks.

SECTION—A

1. Explain the functional units of a computer using diagram.
2. How are computer applications classified ? Explain in detail.

SECTION—B

3. Explain Bar code reader and MICR.
4. How are printers classified ?

SECTION—C

5. Explain the various kinds of memories.
6. What is page formatting ? Explain any two features of page formatting.

SECTION—D

7. How will you add video to your presentation ?

8. Write steps to find the average of a list of 100 numbers using spreadsheet.