BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2022 COURSE)

B.C.A. Sem-I :SUMMER : 2023

SUBJECT : FUNDAMENTALS OF INFORMATION TECHNOLOGY

Day : Wednesday | Time : 02:00 PM-05:00 PM

Date : 3/5/2023 | **S-25952-2023** | Max. Marks : 100

N.B. :

1) Attempt **ANY FIVE** questions from **Section – I** each questions carries **12** marks.
2) Attempt **ANY TWO** questions from **Section – II** each questions carries **20** marks.

SECTION-I

Q.1 What is output device? Explain in detail any two output devices of computer system. **(12)**

Q.2 Define computer? Explain in detail various applications of computer. **(12)**

Q.3 What is software? Explain in detail system software with proper example. **(12)**

Q.4 What is secondary memory? Explain various secondary storage devices in computer system. **(12)**

Q.5 Explain in detail high level language with its advantages and disadvantages. **(12)**

Q.6 What is Network topology? Explain in detail various types of topologies with its advantages and disadvantages. **(12)**

Q.7 Write a short notes on **ANY TWO** of the following: **(12)**

a) Limitations of computer
b) Keyboard
c) Generations of computer

SECTION-II

Q.8 Explain with example importance of Excel in financial department of any organization. **(20)**

Q.9 Global English Medium School (GEMS) is one of the leading School. GEMS wants to advertise their school. Explain the various steps of advertisement using power point presentation. **(20)**

Q.10 What is Mail Merge? Explain in detail various steps used in mail merge with proper example. **(20)**

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BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2022 COURSE)

B.C.A. Sem-I :SUMMER : 2023

SUBJECT : C PROGRAMMING

Day : Saturday | Time : 02:00 PM-05:00 PM

Date : 6/5/2023 | **S-25953-2023** | Max. Marks : 100

N.B:

1) Attempt any **FIVE** questions form Section-I. Each question carries 12 marks.
2) Attempt any **TWO** questions form section –II. Each questions carries 20 marks.

Section-I

Q.1 Explain built in I/O functions used in C. **(12)**

Q.2 Explain in detail features of programming language and structure of a C program. **(12)**

Q.3 What is pointer? Explain declaration and initialization of pointer. **(12)**

Q.4 Explain the operators used in C. **(12)**

Q.5 What is array? Explain the types of array in C. **(12)**

Q.6 Write **Short Notes** on ANY TWO: **(12)**

a) Union

b) Structure

c) Algorithm

Section-II

Q.7 **a)** Write a C program to swap two numbers without using third variable. **(10)**

b) Write a C program to find sum of natural numbers using recursion. **(10)**

Q.8 **a)** Write a C program to print prime numbers between 1 to 100. **(10)**

b) Write a C program to add two matrices using two dimensional array. **(10)**

Q.9 **a)** Write a C program to find the frequency of character in a given string. **(10)**

b) Write a C program to generate multiplication table of given number. **(10)**

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BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2022 COURSE)

B.C.A. Sem-I :SUMMER : 2023

SUBJECT : ORGANIZATION OF IT BUSINESS

Day : Tuesday | Time : 02:00 PM-05:00 PM

Date : 9/5/2023 | **S-25954-2023** | Max. Marks : 100

N.B.

1) Attempt **ANY FOUR** questions from Section – I.
2) Attempt **ANY TWO** questions from Section – II.
3) Figures to the **RIGHT** indicate **FULL** marks.
4) Answers to both the sections should be written in **SAME** answer book.

SECTION – I

Q.1 Explain the concept of business. Why does business need multiple objectives? Explain any five such objectives. **(15)**

Q.2 What is corporate strategy? Explain in detail a framework for the strategic use of IT. **(15)**

Q.3 What is Joint Hindu Family Business? Explain with proper example its advantages and disadvantages. **(15)**

Q.4 Explain the concept of industry. Explain in detail Industrialization in India. **(15)**

Q.5 What is Article of Association? Explain its role in business with proper example. **(15)**

Q.6 With suitable example, Explain the impact of information technology on the business environment. **(15)**

Q.7 Write short notes on **ANY THREE** of the following : **(15)**

a) External Trade
b) Value Chain
c) Public Enterprises
d) Prospectus

SECTION – II

Q.8 The proprietor of a retail store wishes to open a branch in other locality of a big city, would you advise him to take a partner or employ a manager to run the branch. Justify your answer. **(20)**

Q.9 List and explain various stages involved in Formation of a Company. **(20)**

Q.10 Explain with example, how we can create and sustain a competitive edge in business environment. **(20)**

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BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2022 COURSE)

B.C.A. Sem-I :SUMMER : 2023

SUBJECT : DISCRETE MATHEMATICS

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 12/5/2023

S-25955-2023

Max. Marks : 100

N.B.

1. Attempt **ANY FIVE** questions from Section – I. Each question carries 12 Marks.
2. Attempt **ANY TWO** questions from Section – II. Each question carries 20 Marks.
3. Figures to the **RIGHT** indicate **FULL** marks.
4. Answers to both the sections should be written in **SAME** answer book.

SECTION – I

Q.1 Given , **(12)**

$A = \{1, 2, 3, 5\}$

$B = \{2, 3, 4, 6\}$

$C = \{1, 2, 4, 5, 7\}$

$U = \{1, 2, \ldots\ldots\ldots\ldots, 10\}$

Find

a) $A \cap (B \cap C)$ **b)** $A' \cup B'$

c) $(A \cup B) \cap C$

Q.2 $f(x)=2x+3$ and $g(x)=x^2+3x-4$ **(12)**

Find

a) f o g **b)** g o f

Q.3 What is a Matrix? Explain various types of matrices with appropriate examples. **(12)**

Q.4 Find the truth tables for the following statements **(12)**

a) $(p \wedge q) \rightarrow (\sim p \vee q)$

b) $(p \rightarrow q) \wedge (q \vee p)$

Q.5 Explain the following **(12)**

a) Cardinality of a set

b) Representation of relations.

Q.6 A pair of fair dice is thrown. If the two numbers appearing are different, then find the probability that: **(12)**

a) The Sum is 6

b) The Sum is 4 or less.

Q.7 Write short note on **ANY TWO** of the following : **(12)**

a) Venn Diagram.

b) Transpose of a matrix.

c) Partitions.

P.T.O.

SECTION – II

Q.8 Given, **(20)**

$$A=\begin{bmatrix}1 & 2 & 3\\ 4 & 5 & 6\\ 7 & 8 & 9\end{bmatrix},\quad B=\begin{bmatrix}2 & 3 & 1\\ 4 & 7 & 2\\ 1 & 2 & 3\end{bmatrix},\quad C=\begin{bmatrix}1 & 1 & 1\\ 1 & 2 & 4\\ 3 & 4 & 5\end{bmatrix}$$

Find Matrix X, such that 3A – 2B + 5X = 4C.

Q.9 Find the number of distinct permutations that can be formed from all the letters of each word. **(20)**

a) ENGLISH

b) RADAR

Q.10 Explain the following: **(20)**

a) Conditional Probability

b) Logic Gates

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