

2024

**INFORMATION TECHNOLOGY**

*(Discipline Specific Core)*

**Paper Name: Introduction to Computer Programming**

**Paper Code: BIT-DSC-143**

*Full Marks: 45*

*Time: Two Hours*

***(The figures in the margin indicate full marks for the questions)***

*Answer in English*

**1. Answer the following multiple-choice questions** **1x4=4**

- (a) Pseudocode is used for,
  - i. Denoting the program flow
  - ii. To write the program steps
  - iii. Program code
  - iv. For coding the program
- (b) A function which calls itself is called
  - i. Auto Function
  - ii. Static Function
  - iii. Self-Function
  - iv. Recursive Function
- (c) Global variables are
  - i. Internal
  - ii. External
  - iii. Both internal and external
  - iv. None of the above

(d) How is an array with 5 integers declared in C

- i. `int a(5);`
- ii. `int a[5]`
- iii. `int[5] a;`
- iv. None of the above

**2. Answer the following questions briefly**

**2x3=6**

- (a) What is a function?
- (b) What are the primary data types in C?
- (c) What do you mean by compiler and assembler?

**3. Answer the following questions (Any three)**

**5x3=15**

- (a) What is an Algorithm and a Flow Chart?
- (b) Define storage classes in C programming.
- (c) What do you mean by array? What are the types of it?  
Give example.
- (d) Draw the flowchart for finding the average of n natural numbers.

**4. Answer the following questions (Any two)**

**10x2=20**

- (a) Write a C programming to find factorial of a positive integer.
- (b) What do you mean by structure? What are the uses of it?  
Give the declaration statement of structure.
- (c) Describe briefly different conditional statements.
- (d) Explain different types of operators used in C language with examples.

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