

Section A

Q.-1. Respond to any three of the following questions in brief. (30)

- (1) Discuss the various types of programming languages and explain the differences between Assembler, Interpreter, and Compiler.
- (2) Explain the structure of a C-Program in detail, including all its sections.
- (3) Explain the different types of C-Tokens, including constants, variables, and keywords.
- (4) Explain Decision Making with If, If-Else, and Nested If statements using flowcharts and code snippets.
- (5) Explain the three types of loops (While, Do-While, and For) in C with their syntax and examples.

Section B

Q.-2. Write short notes on any four of the following topics. (20)

- (1) Explain the use of the Ternary operator (?:) with an example.
- (2) What is the purpose of the 'goto' statement? Provide a brief example.
- (3) Explain the 'break' and 'continue' statements used in loops.
- (4) Define a Multi-Dimensional array with an example.
- (5) What is an array of structures? Give an example of its declaration.
- (6) What are the common error-handling functions used during file I/O operations?

Section C

Q.-3. Choose the correct answer from the options given below. (10)

(1) Who developed the C programming language?

- | | |
|--------------------|----------------------|
| A) Dennis Ritchie | B) Ken Thomson |
| C) Martin Richards | D) Bjarne Stroustrup |

(2) Which character is used to mark the end of a string?

- | | |
|-------|-------|
| A) \n | B) \t |
| C) \0 | D) \b |

(3) Which function is used for formatted output?

- | | |
|------------|-------------|
| A) scanf() | B) printf() |
| C) gets() | D) puts() |

(4) Which operator is a ternary operator?

- | | |
|-------|-------|
| A) && | B) |
| C) ?: | D) ++ |

(5) Which loop is an exit-controlled loop?

- | | |
|-------------|----------|
| A) for | B) while |
| C) do-while | D) if |

(6) What is the index of the first element in an array?

- | | |
|------|---------|
| A) 1 | B) -1 |
| C) 0 | D) NULL |

(7) Arrays are a collection of _____ data types.

- | | |
|------------------|----------------|
| A) Heterogeneous | B) Homogeneous |
| C) Dynamic | D) Linked |

(8) A function that calls itself is known as:

- | | |
|--------------|--------------|
| A) Iteration | B) Recursion |
|--------------|--------------|

