

**FYUGP/1st Sem/25(NEP)New**

**2025**

**Four Year Under Graduate Programme (FYUGP)**

**1st Semester Examination (Under NEP)**

**(New Session 2024-25)**

**BCA (Major)**

**Paper Code : BCAMJ DC-101**

**(Introduction to Programming using C)**

**Full Marks : 30**

**Time : Two Hours**

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**

1. Answer any *five* questions : 2×5=10

- (a) What is the purpose of the C preprocessor?
- (b) What is the purpose of header files in C?
- (c) What is switch case?
- (d) What is the difference between structure and union?
- (e) Define dynamic memory allocation. Name any two allocation functions.

**P.T.O.**

- (f) What is the use of `strcpy ( )` function?
- (g) What is the use of `fopen ( )` function? Mention any one file opening mode.

**Group - B**

Answer any *four* questions : 5×4=20

- 2. (a) Define an algorithm. Write any three characteristics of a good algorithm.
  - (b) Draw a flowchart to find the largest of two numbers. 3+2
  - 3. (a) List any five keywords used in C programming.
  - (b) Explain type casting in C with a suitable example. 2+3
  - 4. (a) Differentiate between 'while loop' and 'do-while loop'.
  - (b) Which control statement is used to skip the current iteration of a loop? Write its syntax. 3+2
  - 5. (a) Define an array. Write the syntax for declaring a two-dimensional array.
  - (b) Write a C program snippet to reverse the elements of an array. 2+3
  - 6. (a) What is a pointer? Write the syntax for pointer declaration and initialization.
  - (b) What is a dangling pointer? Explain briefly. 3+2
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