

**B.Sc. - I (Information Technology) (CBCS Pattern) Semester-II**  
**UBITT203 - Paper-III : Structured Programming Using C**

P. Pages : 2

Time : Three Hours



**GUG/W/24/10922**

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram and use supporting data whenever necessary.
  3. Avoid vague answer and write specific answer related to question.

**Either :**

1. a) Give the history of 'C'. Also explain the application of C. 8
- b) What is identifier? Give the rules to name the identifier. 8

**OR**

- c) What is C character set? Explain in detail. **8**
- d) Explain the basic structure of C program with suitable example. **8**

**Either :**

2. a) What is field width? Explain the role of field width in printf statement. 8
- b) Write a program in C to find largest among any five numbers using minimum condition. 8

**OR**

- |      |  |                   |
|------|--|-------------------|
| c)   | Explain the following in detail.                         | <b>8</b>          |
| i)   | getch( )   | ii)    putch( )   |
| iii) | getche( )  | iv)    putchar( ) |
| d)   | Write a program in C to check entered no is even or odd. | <b>8</b>          |

**Either :**

3. a) Explain for loop in 'C' with suitable example. **8**
- b) Write a program in C to find factorial of a given number. **8**

**OR**

- c) Explain how to validate the input using do—while statement using suitable program. **8**
- d) Explain the following with suitable example. **8**
- i) Nested loop                      ii) Infinite loop

**Either :**

- |           |    |   |          |
|-----------|----|---|----------|
| <b>4.</b> | a) | Define one dimensional array. Explain the declaration and initialization of one dimensional array with example. | <b>8</b> |
|           | b) | Write a program in 'C' to accept and display the elements of two dimensional array in matrix form.              | <b>8</b> |

**OR**

- |           |    |  |          |
|-----------|----|--|----------|
|           | c) | Explain the concept of Binary search with suitable example.  | <b>8</b> |
|           | d) | Write a program to find transpose of a given matrix.         | <b>8</b> |
| <b>5.</b> |    | Solve all the questions.                                     |          |
|           | a) | What is variable in C? Explain how to declare variable in C. | <b>4</b> |
|           | b) | Explain Nested if statement in detail.                       | <b>4</b> |
|           | c) | Describe while statement in C in detail.                     | <b>4</b> |
|           | d) | What is Bound checking? Explain.                             | <b>4</b> |

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