

Problem Solving Methodologies and Programming in C (Theory) (Major-1)**Time: 2:00 Hours****Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

-
- | | | |
|-------|---|------|
| Que-1 | Answer the following questions (ANY 2) | (10) |
| | <ol style="list-style-type: none">1. Explain arithmetic, logical and comparison operators in C.2. Explain primary data types in C.3. Explain type casting and type conversion in C.4. Explain different symbols use for flow chart. | |
| Que-2 | Answer the following questions (ANY 2) | (10) |
| | <ol style="list-style-type: none">1. List out branching statements available in C. Explain any one with example.2. Explain exit control loop in C with suitable example.3. Explain break and continue with example.4. Explain nested loop with suitable example. | |
| Que-3 | Answer the following questions (ANY 2) | (10) |
| | <ol style="list-style-type: none">1. Differentiate: call by value and call by reference.2. Explain storage class in C.3. What is UDF? List out types of UDF. Explain any one type.4. List out string handling library functions in C. Explain any three in detail. | |
| Que-4 | Answer the following questions (ANY 2) | (10) |
| | <ol style="list-style-type: none">1. What is an Array? Explain 1D and 2D array.2. Explain String as an arrays in C.3. What is Structure? Explain array of structure with example.4. Differentiate: Structure v/s Union. | |
| Que-5 | Answer the following questions (ANY 2) | (10) |
| | <ol style="list-style-type: none">1. What is Pointer? Explain pointer to variable with example.2. Explain use of pointer in Dynamic Programming.3. Explain file handling in C with basic file handling functions.4. Explain Command line argument in C. | |
