

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 18**

**B.Tech. (Chemistry Group) (2018 & Onwards) (Sem.-1,2)**

# PROGRAMMING FOR PROBLEM SOLVING

**Subject Code : BTPS-101-18**

**M.Code : 75346**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.
4. Select atleast TWO questions from SECTION - B & C.

## SECTION-A

**Write briefly :**

1. What is the syntax of nested If statement?
2. What is difference between Local and global variables?
3. What is a relational operator in C?
4. What is a scope of any variable?
5. What is the structure of a C program?
6. What are the logical operators available in C?
7. What is a Pointer?
8. What is Format Specifier?
9. How structure is represented?
10. What is a Do-While statement?

### SECTION-B

11. What is the meaning of a Bit, byte, KB, MB & GB? Explain the difference between software & hardware giving suitable examples.
12. Explain the syntax of following in C :
  - a) FOR statement
  - b) Switch statement
13. Draw flow chart to find the largest and smallest of three numbers.
14. What are the various data types in C? Explain with example.

### SECTION-C

15. What is an array? Write a program in 'C' language to subtract two matrices.
16. What are the various file opening statements available in C?
17. What are the methods through which the parameters are passed to a function in C language? How do they make a difference?
18. Using sorting method of your choice, write a program to sort 8 numbers.

**NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.**