

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech (Chemistry Group) (2018 Batch) (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**

**1. Write short notes on :**

- a. What is the syntax of If-else statement?
- b. What is the pseudo code?
- c. What is an flow chart?
- d. What is the difference secondary and primary memory?
- e. What is the Scope of a extern variable?
- f. What are the arithmetic operators available in a language?
- g. How many byte are required for real a[20] statement?
- h. What are the syntax of Printing statements in a programming language?
- i. What is printf statements?
- j. What is a compiler?

## SECTION-B

2. What is an algorithm? Differentiate between an algorithm and a flow chart. What are the symbols used in flowchart?
3. Draw a flowchart to find the maximum number of a given series of data.
4. Explain the following terms of C language with examples.
  - a) Static variables
  - b) External variables
  - c) Automatic Variables
5. Write a Recursive and non-recursive function for determining the factorial of a given number.

## SECTION-C

6. What are the various types of software used in computer? Explain each of them with example.
7. What is the specification of a Latest PC? Explain the functionality of each of the component.
8. What are the various Control Structures available in a programming Language? Explain with example.
9. Write a program to find the difference of two matrix using functions.

**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.**