

2018

MCA

MCA: 1.1

**INTRODUCTORY PROGRAMMING (IP)**

Full Marks: 75

Time: 3 hours

*The figures in the margin indicates full marks for the questions*

**1. Answer the following:(Any ten)**

2x10=20

- A. What are the common properties to define a variable?
- B. What is preprocessor directive?
- C. What is token in C language?
- D. What are the common properties to define a variable?
- E. What is the function of : operator?
- F. Define building block of a function.
- G. What are formal and actual arguments?
- H. What is base address of an array?
- I. What is pointer? How can it be initialized?
- J. What is the difference between structure and union?
- K. What is the difference between i++ and ++i ?
- L. What are the differences between a keyword and an identifier?

**2. Answer the followings: (any three)**

3 × 5=15

- A. Give a brief idea about the classification of C operators.
- B. Explain the use of *goto* and *continue* statement with example.
- C. What is storage class of a variable? Define all the categories of storage class.
- D. Define various types of notations of algorithm.

**3. Write the following C programs (any five)**

5×6=30

- A. Write a program to check a number palindrome or not.
- B. Write separate program to swap two numbers by using call by value and call by reference.
- C. Write a program on bubble sort technique using function.
- D. Write a program to take an array and display it by using pointer..
- E. Write a program on binary search technique using function.
- F. Write a program to multiply two matrices using function.
- G. Write a program to create a marksheet of n number of students consider the following attributes like marks of each subject, percentage, pass or fail and back information.

**4. Write short notes for the following (any two)**

5×2=10

- A. Assembly language and High level language.
- B. Control statement.
- C. Recursive function with example.

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