3 (Sem–1) CSC M 1

2016

COMPUTER SCIENCE

(Major)

Paper : 1.1

(Computer Fundamentals and Programming)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following questions as directed : 1×7=7

(a) Optical disk is a primary storage device.

(State true or false)

(b) Resolution of a printer is measured in ____.

(Fill in the blank)

(c) Find out the output of the following program :

```
#include<stdio.h>
int main( )
{
    int i = 1;

    while (++i <= 5)
      printf ( "%d", i++ );
}
```

(d) What are the functions of a *linker*?

3. Answer any *three* questions : 5×3=15

(a) What are the characteristics of a digital computer?

(b) What is a computer program? List the important characteristics of an algorithm.

(c) What is storage class? State the different storage classes available in C with suitable example.

(d) Write a function that will return the factorial of a given number.

(e) Draw a flowchart for a program to find out the sum of the digits of an integer number.

(f) What is *data type*? What are the different types of data type used in C programming language?

(g) What is the purpose of *do....while* statement? How does it differ from the *while* statement?

4. Answer any *three* questions : 10×3=30

(a) Write a program to find out the largest of n numbers, where n is an input.

(b) Write a program using structure to accept names of n students, their date of birth, date of enrolment and print them.

(c) Write a program to delete an element in an integer array. The position of the element to be deleted should be specified by the user.

(d) Write a program to find out the sum of two 3×3 matrices.

(e) Define functions to perform the following tasks :

(i) Find out the reverse of a given integer number (*e.g. if a given number is 857, then reverse should be 758*).

(ii) Check whether a number is palindrome or not.

(f) Explain the following functions with examples :

(i) strcmp ( )

(ii) strcat ( )

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