MCA Bridge Course (MCA 2 Year Programme)

w.e.f. 2020-21 Examination,

December-2022

COMPUTER FUNDAMENTALS AND

PROGRAMING IN C

Paper-20BCC11C1

Time allowed : 3 hours] [*Maximum marks : 80*

Note : Question number 1 will consist of total 8 parts (short-answer type questions) covering the entire syllabus and will carry 16 marks. In addition to the compulsory question there will be four units i.e. Unit-I to Unit-IV. Question number 1 will be compulsory. In addition question, student will have to attempt four more questions, selecting one question from each unit.

1. (a) Define the features of C language.

   (b) What is debugging ?

   (c) Explain briefly volatile and non-volatile memory.

   (d) Explain functions of OS in informtion management.

   (e) What is file pointer ? What information is provided by it ?

Unit-IV

8. (a) What are input and output functions written in C for files ? 4

   (b) What are the methods used to access the structure elements using pointers ? Explain those using examples. 6

   (c) Differentiate between pointer (*) and address (&) operator using examples. 6

9. (a) Write a structure definition having elements : name, rollno, class, sex, height, weight for 50 students. 8

   (b) How array can be used within the structures ? Differentiate it with array of structures. 8

(f)   What is the purpose of return statement ?

(g)   Describe fputs() and fgets() function.

(h)   What are capabilities of computers ?   8×2

Unit-I

2.   (a)   What is an IC ? How does it help in reducing the size of computers ?   4

(b)   What are the three criteria necessary for effective and efficient networks ?   6

(c)   What is an operating system ? Why is it necessary for a computer system ?   6

3.   (a)   Define and distinguish between application software and system software.   3

(b)   Explain the difference between Complier and Interpreter.   8

(c)   What is the impact of Computers on society ?   5

Unit-II

4.   (a)   Explain various options of presentations views of MS-PowerPoint.   5

(b)   Explain the working and importance of Header and Footer in MS-Word.   5

(c)   What do you mean Mail-Merge in MS-Word ?   6

5.   (a)   Create a list of 10 best friends. Create a Thank you letter. Use Mail Merge features of MS-WORD to create a Thank you letter for each of your friends from the above two files.   8

(b)   Write a macro that is run using the shortcut Ctrl+F for formatting the files as

(i)   Change the left margin of entire files as 2.0 inches.

(ii)   Change the line spacing to 2 (Double).

(iii)   Change the format of file in 3 columns.   8

Unit-III

6.   (a)   What do you understand by C character set ?   8

(b)   Explain the following :

(i)   Presence of operators

(ii)   Comment statement

(iii)   Stdio.h header file   8

7.   (a)   Differentiate between Call by reference and Call by value.   8

(b)   What is the purpose of while and do-while statement ? What is the minimum number of times while and do-while statement will be executed ?   8