

7. (a) What do you mean by function prototype ? Write down the advantages of function prototypes in C. 4
- (b) Write a program to find the number of vowels in the given line text. 8
- (c) Explain the difference between a function declaration and function definition. 4

UNIT – IV

8. (a) What do you mean by array structures ? How array of structures can be defined ? 5
- (b) What are input and output functions written in C for files ? 5
- (c) What are the methods used to access the structure elements using pointers ? Explain those using examples. 6
9. (a) How array can be used with the structures ? Differentiate it with array of structures. 4
- (b) Write a program to prepare a list of holiday in a year. 8
- (c) What are enumerated data types ? Explain their declaration and use in programming. 4

Roll No.

67042

MCA 1st Semester Last Session

Dec.-15 (with New Notes)

Examination – December, 2016

COMPUTER FUNDAMENTALS & PROGRAMMING IN C

Paper : MCA-102

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all. Questions Number 1 is compulsory. Attempt four more questions selecting one question from each Unit. All questions carry equal marks.

1. Short answer type questions : 8 × 2 = 16

- (a) How computers can be classified according to size ?
- (b) What is debugging ?

- (c) Explain briefly volatile and non-volatile memory.
- (d) What is the difference between pointer and C++?
- (e) What are dynamic memory allocation operators?
- (f) What is difference between EOF and EOF functions?
- (g) What are the different modes in which a file can be opened?
- (h) What is the purpose of return statement?

UNIT – I

- 2. (a) What is an IC? How does it reduce the size of computers? 4
- (b) Explain the similarities and differences of computer system with human. 6
- (c) Explain use of computer in business. 6
- 3. (a) What are high-level languages known as problem oriented languages? Name some high-level languages. Why are they called problem oriented languages? Name some high-level languages. 6
- (b) What is the impact of computer on society? 5
- (c) Explain the computer applications in medical care. 5

UNIT – II

- 4. (a) 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
- (b) Write a program to generate Fibonacci series upto the number of elements. 8
- 5. (a) What is character constant? How do strings constant differ from character constant? 5
- (b) Write an algorithm to arrange the given set of numbers in an ascending order. 6
- (c) Use of goto statement should be avoided in programming. Why? 5

UNIT – III

- 6. (a) What is an array? How it differs from the ordinary variable? 4
- (b) Write a program to read and check the equality of two matrices. 8
- (c) What is recursion? What advantage is there in its use? 4