

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 of structures ? How array of structures can be initialized ? 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 within 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 C and C++ ?
- (e) What are dynamic memory allocation operators ?
- (f) What is difference between feof 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 help in reducing the size of computers ? 4
- (b) Explain the similarities and differences of computer system with human being. 6
- (c) Explain use of computer in business. 6
- 3. (a) What are high-level languages ? Why are they known as problem oriented languages ? Name some high-level languages. 6
- (b) What is the impact of computers of society ? 5
- (c) Explain the computer application in medical care. 5

67042- (P-4)(Q-9)(16) (2)

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 a check the equality of two matrices. 8
- (c) What is recursion ? What advantage is there in its use ? 4

67042- (P-4)(Q-9)(16) (3)

P. T. O.