

Roll No. ....

**67007**

**MCA 1st Sem. (Current) CBSC Scheme  
wef Dec-2016**

**Examination – November, 2017**

**COMPUTER FUNDAMENTAL & PROG. IN C**

**Paper : MCA-102(C)**

*Time : Three Hours ]*

*[ Maximum Marks : 80*

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*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.*

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**Note :** Attempt *five* questions in all. Question no. 1 is *compulsory*. In addition to *compulsory* question, attempt *four* more questions selecting *one* question from each Unit.

**1. Compulsory Question :**

- (i) What can be the remedial solution for computer crime ?
- (ii) What is cache memory ? How is it different from primary memory ?
- (iii) How decision table are used in problem solving ?

- (iv) "C is format-free language". Justify the statement.
- (v) How function specifies the concept of modularization in C ?
- (vi) What is the role of indirection operator in pointer ? Differentiate \*p++ and p++.
- (vii) Differentiate structure and array.
- (viii) What are command line arguments ?

### UNIT – I

2. (a) What are the components that make up a computer system ? Discuss with the help of diagram.
- (b) What is computer virus ? What are various types of threat that can be faced by computer system ?
3. (a) What is an operating system ? Why it is known as resource manager ?
- (b) Explain the concept of programming language with its classification.

### UNIT – II

4. (a) What is problem solving ? Write down different stages of problem solving.
- (b) Explain the syntax of switch construct with its rules. Illustrate with an example.
5. (a) What are the common approaches used for problem solving and program design ? Explain with example.
- (b) How C is structured programming language ? Discuss the characteristics of structured program.

### UNIT – III

6. (a) Discuss the rules that apply to a function call in C. What relationship must be maintained between actual and formal arguments ? Explain with example.
- (b) What is an array ? How array is initialized in C ? Write a program to find the second largest value in array of 'n' element.
7. (a) What are various storage classes in C ? Discuss their uses and scope with example.
- (b) How array can be accessed through pointers ? Discuss the concept of reading and writing values in an array using pointer.

### UNIT – IV

8. (a) What is union ? For what kind of applications are unions useful ? Explain with an example.
- (b) What is preprocessor ? Explain various preprocessor directives.
9. (a) What are different ways for categorization of files ? Discuss various file handling functions with example.
- (b) What is debugging ? Explain different types of errors occurred at the compile time.