

Roll No.

67007

MCA 1st Semester (Current)

CBCS Scheme w.e.f. 2016-17

Examination – December, 2018

COMPUTER FUNDAMENTAL & PROGRAMMING IN C

Paper : 16MCA-31C2

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. Question No. 1 is *compulsory*. In addition to compulsory question, attempt *four* more questions selecting *one* question from each Unit.

1. Answer the following questions briefly : $2 \times 8 = 16$

- (a) Define system software and write its two uses.
- (b) Write use of computers in remote sensing.
- (c) Describe two advantages of C pre-processor.
- (d) Discuss pointer operators with examples.

- (e) Explain nesting of structures with C code segment.
- (f) Write one use of union with C code segment.
- (g) Explain advantages of lesser number of keywords in C.
- (h) Discuss array of pointer with C code.

UNIT – I

- 2. (a) What is operating system? How is it useful and used ? Discuss its functions with examples. 8
- (b) Discuss uses and advantages of loaders, linkers, 4GL languages with examples. 8
- 3. Explain the following briefly with suitable examples :
 - (i) Computer crimes and their solutions.
 - (ii) Programming languages classification and their relative merits 8 each

UNIT – II

- 4. (a) What are bit-wise operators ? How these are useful and used ? Explain with examples. 8
- (b) Discuss uses and advantages of switch, break and continue statements with suitable C code segments. 8
- 5. Describe the following with examples : 16
 - (a) Differentiate between decision tables and Pseudo codes
 - (b) Use of nested for loops with C codes

UNIT – III

- 6. (a) What is dynamic memory allocation ? How is it used and useful ? Explain with suitable C codes. 8
- (b) Discuss function returning pointers with C code segment. 8
- 7. Explain the following with examples : 8 each
 - (i) Storage classes with C code segments
 - (ii) Uses of recursion with C codes examples

UNIT – IV

- 8. (a) What is modes of files ? How these are used and useful ? Discuss with C codes. 10
- (b) Explain command line arguments with suitable examples and C codes. 6
- 9. Explain the following with examples : 16
 - (i) Five file handling functions with C codes
 - (ii) Passing structure to a function with C code