# 24006

## B. Tech. 1st Semester

## (Common for All Branches)

## Examination – December, 2018

### FUNDAMENTALS OF COMPUTER AND PROGRAMMING IN 'C'

### Paper : CSE-101-F

Time : Three Hours ]                    [ Maximum Marks : 100

*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 :* Question No. 1 is *compulsory* and attempts *four* more questions selecting *one* question from each Unit. All questions carry equal marks.

1. Write the short note on the following :

    (i)   What are the functions of Operating System ?

    (ii)  Differentiate between RAM and ROM.

    (iii) Differentiate between Interpreter and Compiler.

    (iv)  Explain Network Devices.

    (v)   What is Loop ? Give its various types.

(vi) What is File ? Write its operations.

(vii) Differentiate between Array and Structure.

(viii) Explain HTTP and DNS.

## UNIT – I

2. What is a Computer ? Explain its architecture with block diagram.

3. (a) Write and explain the Computer Generations in detail.

   (b) Explain the different functions of operating system.

## UNIT – II

4. (a) What do you mean by programming language ? Explain its types.

   (b) What is network ? Give its various Topologies.

5. Write a short note on :

   (a) Fibre optics

   (b) DNS

   (c) Connecting Devices

## UNIT – III

6. What is a function ? Define its types. Also write a program of swapping using call by values and call by reference.

7. What is a string ? How it is different from array ? Write any *five* inbuilt string functions in C.

## UNIT – IV

8. Write the application of dynamic memory allocation over static memory allocation. Also write the functions used in dynamic memory allocation.

9. What is a File ? Write program which counts the no of alphabets, no of words, no of lines in a file ? Also give its types and various operations performed on it.

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