

Roll No.

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.