

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.

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- (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.

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- 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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