

Roll No.

24006

**B. Tech 1st Semester (Common for All
Branches) Examination – December, 2017**

**FUNDAMENTALS OF COMPUTER & 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 : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

- 1. (a)** What is a volatile and non-volatile memory ?
- (b)** What is a CPU ? List out the various operations of CPU.
- (c)** Write a short note on evolution of Internet ?
- (d)** Define Call by Value and Call by Reference with example.
- (e)** What are * and & operators means ? $4 \times 5 = 20$

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SECTION - A

2. (a) Elaborate the various Input and Output Devices with examples? 10
(b) Explain the classification of computers? 10
3. (a) Differentiate Multiprogramming and Multiprocessing operating system. 10
(b) Explain the role of an operating system as a resource manager of a computer system. 10
4. (a) State different language translators and explain their functions. 10
(b) Differentiate between high-level language and low-level language. List the name of some high level languages. 10
5. (a) What is network topology? Explain BUS and Tree topology with their advantages and disadvantages? 10
(b) Explain the different networking connecting devices. 10

SECTION - B

6. Write short notes on the following : $5 \times 4 = 20$

- (a) 'for' loop
(b) 'while' loop
(c) 'do-while' loop
(d) 'Switch case'

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7. (a) Differentiate Structure and Union with suitable examples. 10
(b) Explain array of structure? How an array of structures initialized? 10

SECTION - D

8. (a) What is a Pointer? How a variable is declared as a pointer? Give example. 10
(b) Write short note on : $5 \times 2 = 10$
(i) Array of pointers
(ii) Pointer to functions

9. (a) Write down the different I/O operations that can be performed on Files in 'C' Language? 10
(b) Write a program to swap the values of two variables (without temporary variable). 10

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