B.Tech. 2nd Semester Examination, May-2016 FUNDAMENTALS OF COMPUTER PROG. IN 'C'

Paper-CSE-101-F

Common for all branches

Time allowed: 3 hours] [Maximum marks: 100

Note: Attempt five questions in total. Question No. 1 is compulsory. Attempt one question from each section A, B, C and D.

- Define the following terms:
 - (a) Microprocessor
 - (b) Input devices
 - (c) Timesharing Operating System
 - (d) Translators
 - (e) Network devices
 - (f) DNS
 - (g) HTTP
 - (h) Arrays
 - (i) Union
 - (j) Realloc.

 $2 \times 10 = 20$

Section-A

- 2. (a) What is a computer system ? Explain various components of computer in detail. 10
 - (b) Explain the structure of UNIX operating system.
 10
- 3. (a) Briefly discuss generations of Microprocessor.

10

5. 7.

What are the functions of an operating system?

Section-B

- 4. (a) Differentiate between low level language and high level language. 10
 - (b) Differentiate between Compiler and Interpreter.

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- 5. (a) Explain OSI Model in detail.
 - (b) What is Internet ? Explain its benefits and drawbacks.

Section-C

- 6. What are User defined functions? Explain call by value and call by reference methods in detail.
- 7. (a) Write a program to swap two numbers using function.
 - (b) Explain structure, array of structure, structure with structure with suitable examples. 10

Section-D

- 8. (a) What are Pointers? What are the disadvantages of pointer variables?
 - (b) Using pointer write a program to find desired element in an array of N elements.
- 9. (a) Explain Malloc, Calloc, free, New, Realloc. 10
 - (b) Write a program to copy contents of one file to another file.