

Roll No.

24006

B. Tech. (1st Semester) "F Scheme"

Examination – December, 2011

FUNDAMENTALS OF COMPUTER & PROG. IN 'C'

Paper : CSE - 101 - F

Time : Three hours]

[Maximum Marks : 100

Before answering the question, 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 any *five* questions in all. Question No. 1 is *compulsory* and attempt at least *one* question from each Section.

1. (a) Differentiate primary & secondary memory.

$$8 \times 2.5 = 20$$

(b) Differentiate between Multiprogramming operating system and Multiprocessing operating system.

(c) Explain ternary operator in C by providing suitable example.

- (d) Describe Hypertext and its usability.
- (e) How an array of structures initialized ?
- (f) Declare a pointer to a function that accepts three integer arguments and returns a floating point quantity.
- (g) Explain break and continue statements.
- (h) Compare the statements by providing suitable example :- i++ and ++i.

SECTION – A

2. Explain the following : 20

- (a) Generation of microprocessors.
- (b) Differentiate between Windows and linux.
- (c) Working of scanner.

3. Explain the following : 20

- (a) Various input/output ports and connectors.
- (b) Classification of Operating Systems.
- (c) Working of Laser Printers.

SECTION – B

4. (a) Explain different types of programming language.
How we can execute a program written in these languages ? 10
- (b) Explain TCP/IP reference model. 10
5. (a) Explain OSI reference model. 10
- (b) Describe relationship between compiler, interpreter, loader and linker. 10

SECTION – C

6. (a) Write a program in 'C' which generate every 3rd integer between 2 and 100 and calculate the sum of those integers that are evenly divisible by 5. 10
- (b) WAP in 'C' to print the total count of all the prime numbers between 100 and 500. 10
7. (a) WAP in 'C' to find out the second smallest and second largest number in the list. 12
- (b) How structures within structures are implemented ? How we can access the members of these structures ? 8

SECTION – D

8. Explain the following :

20

- (a) Array of pointers,
- (b) Pointer of functions,
- (c) Dynamic memory allocation,
- (d) Command line arguments.

9. (a) Write a program to count the number of words, characters and lines in a file. 10

- (b) WAP using function to clarify the concept of the two parameter passing methods : call by value and call by reference. 10