24006

B.Tech 1st Semester F-Scheme
Examination, December–2016
FUNDAMENTALS OF COMPUTER AND
PROGRAMMING IN C
Paper–CSE-101-F

Time allowed : 3 hours]   [Maximum marks : 100

Note : *Attempt any five questions. Question No. 1 is*
compulsory and select one question from each
section. All question carry equal marks.

1. (a) What is ROM ? Why it is called non-volatile
       memory ?

   (b) What are systems utilities in Windows O.S. ?

   (c) Describe briefly that do we still use machine
       language.

   (d) Why the internet also described as a network of
       networks ?

   (e) What is the difference between syntax and
       semantics of C language ?

   (f) Briefly explain the use of break with switch
       statement in C.

   (g) What is dangling pointer in C language ?

   (h) What is the impact of fclose() on buffered data ?

   (i) Explain the utility of typedef keyword in
       structures.

   (j) Under which circumstances ftell() fails ?   10×2

Section–A

2. (a) Explain with the help of diagram that how RAM, ROM and CPU interact with each other. Also explain the importance of system bus and main memory in functioning of processor.   15

   (b) Compare a Cartridge with the magnetic tape.   5

3. (a) What is the need of trackball as a pointing device in the presence of mouse ? Explain.   6

   (b) Explain the procedure of storing data on a hard disk.   7

   (c) Compare the characteristics of a primary storage with the auxillary storage.   7

Section–B

4. (a) What device will you prefer to form a network—Hub or a Switch? Justify your answer.   6

   (b) In what situations must the network have a gateway?   4

   (c) Explain the term programming language. Give certain examples of such Languages.   10

5. (a) Describe briefly about various data communication equipment's and also discuss about FTP and TELNET.   10

   (b) What is meant by a language translator ? Explain different types of language translators.   10

Section–C

6. (a) What are control statements in C ? Explain with example.   10

   (b) Differentiate Structure and Union in C. Write a C program to store the student details using union.   10

7. (a) Explain logical and bit operators in 'C' with examples.   10

   (b) Write about formatted and unformatted input/output functions in C.   10

Section–D

8. (a) State the features of pointers. Write a C Program to sort a given number using pointers.   10

   (b) List various files operation in C. Write a C program to count the number of characters in a file.   10

9. (a) What is dynamic memory allocation ? Write and explain the different dynamic memory allocation functions in C.   10

   (b) Explain the array of pointers with example.   4

   (c) Write a C program to swap two numbers using call by pointers method.   6