BTS(C) – I – 06 – 009 (B)

B. Tech Degree I & II Semester (Combined) Examination
June 2006

IT/CS/EC/CE/ME/SE/EB/EI/EE/MRE 109 COMPUTER FUNDAMENTALS

(2000 Admissions Onwards)

Time : 3Hours Maximum Marks : 100

I. (a) Explain briefly about the secondary storage devices in a computers system. (10)

(b) What are the differences between machine language, assembly language and high level language? (10)

OR

II. Write short notes on the following :

(i) Operating system (ii) Compilers and assemblers

(iii) LAN (iv) Internet (20)

III. (a) What are constants in C language? Explain different types of constants with examples. (10)

(b) Write program to convert a decimal number to binary number, provide flow chart and sample output. (10)

OR

IV. (a) Explain the following functions with examples.

(i) getchar() (ii) putchar() (5)

(b) Explain the different looping statements. (5)

(c) Write a program to calculate the roots of a quadratic equation, provide flowchart and sample output. (10)

V. (a) What are function prototypes? What are their functions? (4)

(b) Explain different parameter passing mechanisms. (6)

(c) Write a program to locate a particular string in a sentence, provide flowchart and sample output. (10)

OR

VI. (a) Write a program that includes a recursive function to determine the value of the nth Fibonacci number F_n where $F_n = F_{n-1} + F_{n-2}$ and $F_1 = F_2 = 1$. (12)

(b) What are library files? What is the importance of it? (8)

VII. (a) Write a program to read two tables of integers and calculate the sum of the corresponding elements. (12)

(b) Explain the importance of pointers in c language. (8)

OR

VIII. (a) Program to sort a list of strings alphabetically using a two dimensional character array. (12)

(b) Structures – Definition, Example Specialty (8)

IX. (a) Relational, network and hierarchical models (3 x 5 =15)

(b) Explain what is relational algebra. (5)

OR

X. (a) Relation, Attributes, Tuples, Domains (4 x 2 = 8)

(b) SQL – Definition (3)

Important SQL commands (9)

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