2E2006

B. Tech. II Sem. (Main / Back) Exam., May - 2017
206 Fundamentals of Computer Programming

Time: 3 Hours

Maximum Marks: 80
Min. Passing Marks Main: 26
Min. Passing Marks Back: 24

Instructions to Candidates:

*Attempt any **five questions**, selecting **one question** from **each unit**. All questions carry **equal** marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.*

Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. NIL _____   2. NIL _____

UNIT – I

Q.1 (a) Describe the structure of C Program in detail.   [8]

(b) What do you understand by Precedence of operator? How it is considered in expression evaluation?   [8]

OR

Q.1 (a) Describe the arithmetic and logical operator available in C Language.   [8]

(b) Explain following with suitable example:

(i) Basic Data types   [2]

(ii) Scope of variable   [2]

(iii) Type casting   [2]

(iv) Identifiers   [2]

UNIT – II

Q.2 (a) Write a C Program to reverse an inputted integer number, e.g. if input is 2375
then output is 5732.   [10]

(b) Write syntax of switch case decision making statement.   [6]

OR

Q.2 (a) What are command line arguments? Explain with example.   [6]

(b) Write a C program to multiply two matrices.   [10]

UNIT – III

Q.3 What do you understand by file handling? Enumerate and explain various file handling
functions used in C language.   [16]

OR

Q.3 (a) What is structure? Explain.   [6]

(b) What do you understand by dynamic memory allocation?   [5]

(c) Explain typedef.   [5]

UNIT – IV

Q.4 (a) Write a C program using function to display first n numbers of a Fibonacci
series.   [8]

(b) What is function? Explain call by value and call by reference with example.   [8]

OR

Q.4 (a) Define and explain pointers in C language.   [6]

(b) What is void pointer? Discuss its uses.   [5]

(c) Discuss pointer to structure.   [5]

UNIT – V

Q.5 Explain:

    (a)   Primary memory and secondary storage.   [6]

    (b)   Representing algorithm through flow chart   [5]

    (c)   Random, direct ad sequential access method   [5]

OR

Q.5 Convert following:

    (a) $(123.63)_{10} = (?)_2$ [4]

    (b) $(111.0001)_2 = (?)_{16}$ [4]

    (c) $(A\ B2OC.00C)_{16} = (?)_{10}$ [4]

    (d) $(1010.267)_8 = (?)_2$ [4]