

2E2006

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B.Tech. I Year II Sem. Main / Back June-July Examination, 2015**206 Fundamentals of Computer Programming**

Time: 3 hours

Maximum Marks: 80

Min. Passing Marks: 26

Note: 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.

1. NIL2. NIL

UNIT-I

- Q. 1 (a) Explain the concept of preprocessor? Also describe the preprocessor directives in detail. 8
- (b) What are identifiers? Explain the rules for identifiers declaration. 8

OR

- Q. 1 (a) Explain the storage classes used in 'C' language with the help of examples. 6
- (b) What is scope of variable in 'C' meant? Explain type casting in detail also. 5
- (c) Explain the difference between automatic and static variable. 5

UNIT-II

- Q. 2 (a) Write a program to pass a matrix as an argument to a function and display the matrix in the function. 10
- (b) Write a C language program to SWAP two numbers using pointers and function. 6

OR

- Q. 2 (a) Write a program to read the coordinates of vertices of a triangle and evaluate and display in length of all the sides and the area. Use a function to retain all the required values in a structure. 12
- (b) Write a short note on typedef declaration. 4

UNIT-III

- Q. 3 (a) Explain Array of structure with the help of a suitable program also describe structure within structure with an example. 11
- (b) Write a program which explains pointers in one dimensional array. 1

OR

- Q. 3 (a) With the help of a program explain pointer as function parameters.
- (b) Explain file handling functions in 'C'.

UNIT-IV

- Q. 4 (a) Write and explain string handling function and user defined functions.
- (b) Write and explain a program for passing parameter by value.
- (c) Write a program to copy one string into another and count the number of characters copied.

OR

- Q. 4 (a) Write and explain a program which demonstrate the array of structures in detail.
- (b) Write a program which specifies to access the elements of structure using pointer variable.
- (c) Write short note on the void pointer.

UNIT-V

- Q. 5 (a) Give classification for the types of language working in computer programming environment.
- (b) Write short notes on:
- Pseudo Code
 - Flow chart and algorithms

OR

Q. 5 Perform the following:

- $(89D)_{16} + (259)_{10}$
- $(263)_8 + (100100101)_2$
- $(10101)_2 - (01110)_2$
- Multiply $(101)_2$ with $(011)_2$