

2E2303

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B. Tech. II Sem. (Back) Exam., May - 2019
CS – 103 Computer Programming - II

Time: 3 Hours

Maximum Marks: 80
 Min. Passing Marks: 28

Instructions to Candidates:

Attempt any five questions including Question No. 1, which is compulsory. 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. NIL2. NIL

~~Q.1~~ Compulsory, Answers for each sub-question be given in about 25 words.

- (a) What do you mean by freeware? [2]
- (b) Why loader is used in computer system? [2]
- (c) What is difference between application and system software? [2]
- (d) What is a difference Size of Array and Index of Array? [2]
- (e) What are pointers? [2]
- (f) What is dynamic memory allocation? [2]
- (g) Explain various file operations. [2]
- (h) What is command line argument? [2]

Q.2 What are peripherals? Differentiate input and output devices used in computer system. [16]

Q.3 Explain the following –

- (1) Firmware [4]
- (2) Open – source [4]
- (3) Compiler [4]
- (4) Loader [4]

Q.4 (a) How do you create array using dynamic memory allocation? Give example and also list benefits of this scheme. [10]

(b) Write a program in C language for swapping two numbers using pointers. [6]

Q.5 (a) What is difference b/w structure and union? [3]

(b) Write a program to define structure with tag state with fields – state name, no. of districts and total population. Read and display the data. [8]

(c) Define union with example. [5]

Q.6 (a) Write a program to check whether a given character is vowel or not? [8]

(b) What do you mean by function? How many type of functions are available in C? [8]

Q.7 Write short note on -

- (1) Macro [4]
 - (2) Malloc and Calloc [4]
 - (3) Multi file handling [4]
 - (4) Inline function [4]
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