

**F.Y. B. SC. (COMPUTER SCIENCE) SEM –II (CBCS - 2016
COURSE) : SUMMER - 2018
SUBJECT : PROGRAMMING IN C - II**

Day : **Thursday**
Date : **12/04/2018**

S-2018-0802

Time : **03.00 PM TO 06.00 PM**
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labelled diagram **WHEREVER** necessary.
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Q. 1 A) Select the correct option and rewrite the statement: **(06)**

- a) The library function used to find the last occurrence of a character in a string is _____
- | | |
|---------------|-------------------|
| i) laststr() | iii) strstr() |
| ii) strrstr() | iv) None of these |
- b) The address of 0th location of an array is called _____ address.
- | | |
|----------------|------------|
| i) Lower bound | iii) Index |
| ii) Base | iv) None |
- c) A structure is a collection of data items with _____ data types.
- | | |
|---------------|-------------------|
| i) Same | iii) Simple |
| ii) Different | iv) None of these |
- d) Which of the following array is not possible statically in C?
- | | |
|-----------------------|-------------------|
| i) Single dimensional | iii) Jagged array |
| ii) Multidimensional | iv) None of these |
- e) User – defined data types can be derived by _____.
- | | |
|-----------|--------------------------|
| i) struct | iii) typedef |
| ii) enum | iv) All of the mentioned |
- f) Which of the following is not a structure member?
- | | |
|-------------|----------------|
| i) Function | iii) Structure |
| ii) Array | iv) Pointer |

B) Answer in **ONE** sentence: **(06)**

- a) List various File opening modes.
- b) What is union?
- c) Define Pointer.
- d) List any two File functions with their usage.
- e) Define structure 'account' with members (acc_no, acc_name and balance).
- f) What is nested structure?

P. T. O.

Q. 2 Attempt **ANY THREE** of the following: **(12)**

- a) What is a File? What types of file are supported by C language?
- b) Describe row – major and column – major representation of two dimensional array.
- c) Define an array of structure ‘book’ with members(book_id, title,author_name and price)
- d) Explain various dynamic memory allocation functions.

Q. 3 Attempt **ANY FOUR** of the following: **(12)**

- a) Write a C program to swap the contents of two variables by using function.
- b) How the members of an array are accessed? Explain with suitable example.
- c) State various features of a structure.
- d) Differentiate between static and dynamic memory allocation methods.
- e) Write a C program to find sum of elements of 1-D array.

Q. 4 Attempt **ANY TWO** of the following: **(12)**

- a) Write a C program to accept a string of characters and count total number of vowels in it.
- b) Describe how a pointer is used to access the members of a structure.
- c) Write a C program using file for accepting a line of text and count total number of characters in it.

Q. 5 Attempt **ANY TWO** of the following: **(12)**

- a) Write a C program using array for sorting the elements of an array in ascending order.
- b) Write a C program to make use of following string manipulation functions strlen() and strcmp()
- c) Write a C program using structure for accepting 10 student records and display only those records where fees is less than Rs. 27500/-.

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