Reg. No. : ....

Name : ....

II Semester B.Sc. Degree (CBCSS – Supple.) Examination, April 2021
(2014-2018 Admission)
CORE COURSE IN COMPUTER SCIENCE
2B02 CSC : Advanced Programming in C

Time : 3 Hours   Max. Marks : 40

SECTION – A

1. **One** word answer :   (8×0.5=4)

   a) When an array name is passed to function, what gets passed ?

   b) In an array x[10], the x represents the _____

   c) A variable declared inside a function is called _____

   d) _____ refers to a region where a variable is actually available for use.

   e) It is possible to cast a pointer to float as a pointer to integer (True/False).

   f) The only integer that can be assigned to a pointer variable is _____

   g) Calloc is used to change the memory allocation previously allocated with malloc. (True/False)

   h) The _____ directive discords a macro.

SECTION – B

Write short notes on **any seven** of the following questions :   (7×2=14)

2. What is a calling function and a called function ?

3. What is a NULL character ? Why is it important ?

4. What is meant by dynamic memory allocation ?

5. What are macros ?

6. What are array of pointers ?

7. What is nesting of function ?

8. What will be the output of the following statement ?

   printf ("%d", strcmp("push", "pull"));

9. How to initialize two dimensional array of string ?

10. What are pointer expressions ? Give an example.

11. State the rules for initializing structures.

SECTION – C

Write short notes on **any four** of the following questions :   (4×3=12)

12. Explain about the string input and output functions.

13. Write a program to reverse a string.

14. Distinguish between int *p(int a); and int (*p)(int a);

15. Mention the differences between character array and integer array.

16. What are the features of pointers ?

17. Differentiate between library and user defined functions.

SECTION – D

Write short notes on **any two** of the following questions :   (2×5=10)

18. What are the differences between structures and unions ? Write a program to demonstrate how structure and unions are created in C.

19. What is a pointer ? How a 1D array and 2D array are passed to a function using pointers ? Explain with example.

20. Write a program to read set of numbers from a file and write odd numbers in one file and even numbers in another file.

21. Define a structure data type called time_struct containing three members integer hour, minute and second. Develop a program that would assign values to the individual members and display the time in the following format 13:20:43.