DCCS – 101

I Semester B.Sc. Degree Examination, February/March 2023
(NEP)
COMPUTER SCIENCE
DSC-1 : Computer Fundamentals and Programming in C

Time : 2½ Hours | Max. Marks : 60

Instruction : *Answer **all** the Sections.*

SECTION – A

I. Answer **any 6** questions, **each** question carries **2** marks. **(6×2=12)**

1) Convert the following :

   a) $(615)_{10} = (\ )_2$

   b) $(101010)_2 = (\ )_8$

2) Mention any two features of C.

3) What is a keyword ? Give an example.

4) What is an operator ? Mention the arithmetic operators in C.

5) Write the difference between = and = = in C.

6) Write any two character handling functions.

7) What is a pointer ?

8) Write the advantages of a structure.

9) Write the difference between structure and union.

SECTION – B

II. Answer **any 4** questions, **each** question carries **6** marks. **(4×6=24)**

10) Write a note on language translators.

11) Write a note on scanf() and printf() statements in C.

12) Write the difference between while and do-while statements.

13) Write a note on if-else ladder statement in C.

14) Write a note on string handling functions.

15) Write a C program to check a number for prime by defining is prime() function.

SECTION – C

III. Answer **any 3** questions, **each** question carries **8** marks. **(3×8=24)**

16) a) State and prove De Morgan's Law using three variables. **4**

b) State and prove associative law. **4**

17) Explain the basic structure of a C program with an example. **8**

18) a) Write a note on for loop with example. **4**

b) Write a note on switch statement with example. **4**

19) Explain memory representation of two dimensional array. **8**

20) Explain the concept of user defined function with an example. **8**