2023 FYUGP 1ST SEMESTER EXAMINATION

MATHEMATICS

(Skill Enhancement Course)

Paper:SEC0101303

(Basic Programming in C)

Full Marks: 30

Time- 1 hour and 30 minutes

The figures in the margin indicate full marks for the questions.

1. Answer the following questions:

- $1 \times 5 = 5$
- (a) Mention two data types that are used in C language.
- (b) Write down the utility of clrscr() function.
- (c) What do you mean by constant?
- (d) Write the output of a int a; a=5/2;
- (e) Name the header file that is used to compile the function sqrt(x).

Contd.

2. Answer any five:

- $2 \times 5 = 10$
- (a) What is the difference between array and structure?
- (b) What is syntax of nested if statement.
 - (c) For x=5 y=2, write the output of x%y.
 - (d) What is the difference between character and string?
 - (e) What do you mean by function?
 - (f) Difference between call by reference and call by value?
 - (g) What are the rules for naming a variable?
- (h) Write the relational operators that are used in C.
- (i) What are the string constant? Give one example.
- (j) Name the assignment and logical operators that are used in C.
- 3. Answer any three:

5×3=15

- (a) Write the general form of do-while loop and explain how it works with the help of suitable example.
- (b) Compare while, do-while and For loop.
- (c) What is the use of break and continue statement with the help of suitable example.
- (d) Why array is required in C programming? How are 1-D array declared and inputs given to array? Explain with an example.
- (e) Write a C program to find the factorial of a number.
- (f) Write a C program to check a number whether it is even or odd.