

PD-362-S.E.-CV-19
M.A./M.Sc. MATHEMATICS (3rd Semester)
Examination, Dec.-2020
Paper-III
PROGRAMMING IN C WITH ANSI FEATURES-I

Time : Three Hours]

[Maximum Marks : 80]

[Minimum Pass Marks : 29]

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1. Fill in the blanks with appropriate words:- **1x10=10**

- (a) The expression containing all the integer operands is called.....expression.
- (b) The operator.....cannot be used with real operands.
- (c) An expression that combines two or more relational expressions is termed as.....expression.
- (d)is used to determine the order in which different operators in an expression are evaluated.
- (e) The keyword.....can be used to create a data type identifier.
- (f)is the largest value that an unsigned short int type variable can store.
- (g) A variable can be made constant by declaring it with the qualifier.....at the time of initialization.
- (h) Every program statement in C program must end with a.....
- (i) The.....header file contains mathematical functions.
- (j) The escape sequence character.....causes the cursor to move to the next line on the screen.

2. Answer the following short answer type questions:- **2x5=10**

- (a) Define assignment operator.
- (b) How many special operator, give its name.
- (c) Define declaring a variable as volatile.
- (d) Define string constants.
- (e) Define compiling a program.

Section-B

12x5=60

Answer all questions.

3. (a) Write a program to read a four digit integer and print the sum of its digits.
OR
(b) Write a program to read two floating point numbers using a scanf statement, assign their sum to an integer variable and then output the values of all the three variables.

4. (a) Write a program to illustrate the use of cast operator in a real life situation.
OR
(b) Write a program that prints the even numbers from 1 to 100.

5. (a) Given the values of the variables x, y and z write a program to rotate their values such that x has the value of y, y has the value of z and z has the value of x.
OR
(b) Write a program using one print statement to print the pattern of asterisks as shown below.

*
* *
* * *
* * * *

6. (a) Write a program to count and print the number of negative and positive numbers in a given set of numbers.

OR

(b) The line joining the points (2, 2) and (5, 6) which lie on the circumference of a circle is the diameter of the circle. Write a program to compute the area of the circle.

7. (a) Write a program to illustrate the use of symbolic constants in a real life application.

OR

(b) Given the radius of a circle, write a program to compute and display its area.