

M.Sc.-II (Mathematics) (New CBCS Pattern) Semester - IV
PSCMTH20C - C Programming

P. Pages : 2

Time : Three Hours



GUG/S/23/13778

Max. Marks : 100

- Notes : 1. Solve all **five** questions.
2. All questions carry equal marks.

UNIT – I

1. a) Write a note on rules for construction of variable names in C programming. **10**
b) Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert this temperature into centigrade degrees. **10**

OR

- c) Write a note on else-if clause in C programming. Write an appropriate program using else-if clause. **10**
d) Write a program to find the greatest of three numbers entered through the keyboard using conditional operators. **10**

UNIT – II

2. a) Discuss the concept of while loop in C programming. **10**
b) Write a program to add first seven terms of the following series using a for loop. **10**
$$\frac{1}{1!} + \frac{2}{2!} + \frac{3}{3!} + \dots$$

OR

- c) Write a program to print all the ASCII values and their equivalent character using a while loop. The ASCII values vary from 0 to 255. **10**
d) Discuss the switch control statement in C programming. **10**

UNIT – III

3. a) Write down a note on function in C programming. **10**
b) What is Recursion? Explain it. **10**

OR

- c) Write a function power (a,b) to calculate the value of a raised to b. **10**
d) Write down a note on storage classes in C-programming. **10**

UNIT – IV

4. a) Write a program to copy the contents of one array into another in the reverse order 10
b) Write a note on string. 10

OR

- c) What are the various features of structures in C? 10
d) Write a program to multiply any two 3x3 matrices. 10
5. a) Write a short note on C keywords. 5
b) What would be the output of the following programs: 5
i)

```
main()
{
    int i = 0;
    for (; i ; )
        printf (“\n Here is some mail for you”);
}
```


ii)

```
main()
{
    int i;
    for (i = 1; i <= 5; printf (“\n % d”, i));
    i ++ ;
}
```
- c) Write a short note on signed and unsigned chars. 5
d) Answer the following: 5
i) “A” is a ----- while ‘A’ is a -----.
ii) A string is terminated by -----
character, which is written as -----.
iii) Which is more appropriate for reading
in a multi – word string?
gets () printf () scanf () puts ()
