

Mock Test - 03
Mid-Term Examination 2024-25
BCA – I Semester
Subject Code: BCA107
Subject: C Programming
Time: 02:00 Hrs
Maximum Marks: 25
NOTE: Attempt all three sections.

SECTION – A
(2/3 Marks each)

1. How do you declare an floating point variable and initialize it with a value in C? (2 marks)
2. Explain the difference between float and double data types in C. Provide an example. (3 marks)

SECTION – B
(4 Marks each)
Attempt any two questions.

1. Write a C program to check whether a given number is even or odd.
2. Write a C program that takes the radius of a circle as input and calculates the area and circumference.
3. Write a C program to print the following pattern:

```
*****  
*****  
***  
**  
*
```

SECTION – C
(6 Marks each)
Attempt any two questions.

1. Explain the difference between if-else and switch statements in C. Provide an example for both.

2. What are the advantages of modular programming in C? Write a C program that uses a function to calculate the factorial of a number.

3. Write a C program to calculate the area of square, and use comments to explain each part of your program. Also, mention the importance of comments in C programs.