



INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KOTTAYAM
Department of Computer Science & Engineering
MID SEMESTER-1 EXAMINATION- DECEMBER, 2022
COURSE TITLE: ICS112 Computer Programming

Date: 20.12.2022

Time: 10:00 AM - 11:30 AM

Max. Marks: 50

Course Instructor: Dr. Koppala Guravaiah/Dr. Cinu C Kiliroor/Dr. Lavanya Settipalli

Part-A

(Each question carries 5 marks)

4 X 5 = 20M

Answer all Questions

1. Write an algorithm to print the factorial of a given positive integer.
2. Draw a flowchart to check whether a given positive integer is prime number or not.
3. Define the following with example.
 - i. Constant
 - ii. Variable
 - iii. Identifier
 - iv. Data type
 - v. Keyword
4. Identify the syntax errors from the following C program. Rewrite the program without any syntax errors and write the output for the debugged code.

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b;
5     float c;
6     scanf("%d%d",&a,&b);
7     if(a%2==0) {
8         printf("%d is an even number\n",a);
9     }
10    if(b%2==0) {
11        printf("%d is an even number\n",b);
12    }
13    c=a/b;
14    printf("Result of division is:%f",c);
15 }
```

Part-B

Answer all Questions

1. Discuss in detail about different types of operators in C language with suitable examples. 12M
2. Kavitha is playing a game with Kavya. Kavitha will give two inputs: a positive integer number and choice in between 1, 2, or 3. Kavya needs to print the following according to the choice given by Kavitha:

Choice 1: Number of digits present in the given number

Choice 2: Sum of digits of the given number

Choice 3: Reverse of the given number

Write a C program to help Kavya win the game.

18M
