Minor 1

Course Name: Computer Programming and Problem Solving   Course Code: CS100

Paper Code C   Full Marks: 25   Duration: 45 minutes   Date: 14.12.2022

Note: It is mandatory to: A) Write the paper code at the start of your answer script.
B) Only write the option number for Q1.
C) Write comments explaining the purpose of an instruction/code block in your code.
D) Write proper cues/prompts for user input and code output in your codes.

1. Choose the correct option: **(5)**

    a) A pointer is
        i.   A keyword in C
        ii.   A variable that stores address of an instruction
        iii.   A variable that stores address of another variable
        iv.   All of the above
    b) Which will not increment the value of **a** by 1?
        i.   a++   ii. ++a   iii. a+=1   iv. +a=1
    c) %d and %f are known as
        i.   Format specifiers
        ii.   Place holders
        iii.   Format holders
        iv.   All of the above
    d) Which is a primary datatype in C
        i.   int   ii. function   iii. pointer   iv. for
    e) A C variable name cannot start with
        i.   An alphabet
        ii.   A number
        iii.   A special symbol other than underscore
        iv.   Both (ii) & (iii) above

2. Write a C program to take a 5-digited integer from user, and print if each digit is zero/even/odd.
    Eg. If input is 10234 → Output should be: **(10)**

    4 is even

    3 is odd

    2 is even and so on

3. Write a C program to implement two separate functions (funcA and funcB) to determine if an user input integer is prime or not. Take user input and print results from main(). Do NOT use recursion.   **(10)**
    a) Use call by value in funcA   b. Use call by reference in funcB