GALGOTIAS UNIVERSITY

School of Basic Sciences
Bachelor of Science Honours in Chemistry
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - E2UC120B - Introduction to Python programming

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Define a Python variable and explain its role in programming. K1 (2)

2) Find and explain three different ways to assign a value to a Python variable. K1 (3)

3) Write a Python program that takes a user's age as input and determines if they are eligible to vote (considering the legal voting age is 18). K2 (4)

4) a) Show how to replace elements in the user-defined string. Illustrate with example in python code. b) Show how to find elements in user-defined dictionary with example in python code. K2 (6)

5) Develop a program to output the grade of a Student for input marks between 0-100. Grade 'A+' if 95< marks<=100 ; Grade 'A' if 90< marks<=95 Grade 'B' if 80< marks<=90 ; Grade 'C' if 70< marks<=80 Grade 'D' if 60< marks<=70 ; Grade 'F' if marks<=60 K3 (6)

6) Write a python program of finding the common elements between two given lists and returning them as a new list. K3 (9)

7) Examine error in the following code. nterms = int.input("How many terms? ") n1, n2 = 0, 1 count = 5 if nterms <= 0: print("Please enter a positive integer) elif nterms == 1: print("Fibonacci sequence upto",nterms,":") print(n1) else: print("Fibonacci sequence:") while count < nterms: print(n1) nth = n1 - n2 n1 = n2 n2 = nth count += 1 K4 (8)

8) a) Analyze and write a program that takes two user-defined lists as input and returns a new list containing only the common elements. b) Analyze and write a program that checks whether a user-defined list is empty or not. K4 (12)

OR

Analyze and write a program that takes a user-defined string as input and returns the count of vowels and consonants. K4 (12)