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School of Computing Science and Engineering

Bachelor of Computer Applications

Mid Term Examination - Nov 2023

Duration : 90 Minutes

Max Marks : 50

Sem I - E1UA102C - Programming for Problem Solving

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) Describe the role of libraries and modules in Python programming. Provide examples of commonly used libraries and explain their purposes. K2 (2)
- 2) Define an Algorithm A for withdrawing money from ATM machine. K1 (3)
- 3) Compute the output of this code: `print(2**3 + (5 + 6)**(1 + 1))` K2 (4)
- 4) Give example of python code that removes duplicate elements from a given list. Also find the minimum and maximum value for the item of the list K2 (6)
- 5) Compare different ways to add comments in Python code and explain their purpose of use. K3 (6)
- 6) Differentiate between 'if', 'elif', and 'else' statements in Python. When would you use each? Explain with example K3 (9)
- 7) Explain what nested loops are and why they are used in programming. K4 (8)
- 8) Develop a program about fundamental Data types in Python Programming. (i.e., int, float, complex, bool and string types) K4 (12)

OR

Explain the working of an infinite loop, and how can it be created using while loop? Provide any mechanism to exit from an infinite loop. K4 (12)