WEST BENGAL STATE UNIVERSITY

B.A./B.Sc. Programme 5th Semester Examination, 2020, held in 2021

CMAGDSE01T-COMPUTER APPLICATION (DSE1)

PROGRAMMING WITH PYTHON

Time Allotted: 2 Hours   Full Marks: 50

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

1.   Answer any *five* questions from the following: 2×5 = 10

(a) What type of language is python programming?

(b) What is a dictionary in python?

(c) What are the different data types of python?

(d) What is the difference between a local variable and a global variable in python?

(e) What is the difference between tuples and lists in python?

(f) How do we write Comment in python programming?

(g) What is the disadvantage of using pseudocode?

(h) Write the difference between debugging and testing.

Answer any *five* questions from the following   8×5 = 40

2. (a) Discuss why python is called as dynamic and strongly typed language.   4

(b) Why do we need break and continue in python?   2

(c) What is the purpose pass statement in python?   2

3. (a) What are the different characteristics of python programming language?   4

(b) Write a python program to check whether a given number is prime or not.   4

4. (a) Explain different types of control flow statements in python programming language.   4

(b) What do you mean by Conditional Operator? Give an example.   4

5. (a) Write the Algorithm to find sum of series $1+2+3+\cdots\cdots+N$. 3

   (b) Explain how to implement constructor and destructor in python with an example. 5

6. (a) What type of parameter passing is used in python? Justify it with an example. 5

   (b) Why do we need indentation in python programming language? 3

7. (a) Write a Python program that interchanges the first and last characters of a given string. 4

   (b) Explain bitwise operators $>>$ and $<<$ of python programming language. 4

8. (a) Explain methods split() and join() in python programming language. 6

   (b) What do you mean by a Module in python programming language? 2

9. (a) Show how an input and output is performed in python with an example. 4

   (b) Explain how to implement constructor and destructor in python with an example. 4

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within* 1 *hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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