WEST BENGAL STATE UNIVERSITY

B.Sc. Honours/Programme 1st Semester Examination, 2020, held in 2021

CMSHGEC01T/CMSGCOR01T-COMPUTER SCIENCE (GE1/DSC1)

Time Allotted: 2 Hours   Full Marks: 40

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.

GROUP-A

1.   Answer any *four* questions from the following: 2×4 = 8

   (a) What is flow-chart?

   (b) How performance of an algorithm can be measured?

   (c) What is the purpose of exit() function in Python?

   (d) What do you mean by interpreter?

   (e) "Python is a high level programming language" ….. Justify it.

    (f) Mention all four categories of CPU registers.

   (g) What is meant by cache memory?

GROUP-B

Answer any *four* questions from the following   8×4=32

2. (a) Explain all type of errors that can occur during programming.   3

   (b) Write down any two advantages of program documentation.   2

   (c) Write an algorithm to check whether a number is palindrome or not.   3

3. (a) Differentiate between primary memory and secondary memory.   2

   (b) What do you mean by I/O interfaces?   2

   (c) Write the functions of ALU and CU.   2+2

4. (a) Write a program in Python to display the first *n* terms of the Fibonacci series.   4

   (b) Write a program in Python to find the factorial of any number *n*.   4

5. (a) What are classes and objects? Give examples.   3

   (b) State the basic features of OOPS.   3

   (c) What do you mean by indentation in Python?   2

6. (a) What do you mean by built-in-functions in Python? Give examples. 2

   (b) Distinguish among 'break' and 'continue' statements in Python with example program. 3+3

7. (a) What is List in Python? 2

   (b) Name in-built methods of Python List which are responsible for the followings and state how they can be called for:

     (i) To add a new element in the Python List 2

     (ii) To delete an item with the specified value from the Python List. 2

   (c) What is tuple in Python? 2

8.   Write short notes on any *two* of the following: 4×2=8

     (i) Top-down vs. Bottom-up approach

     (ii) Types and generations of Computers

     (iii) Memory Hierarchy.

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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