



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.*

—x—