

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 <i>four</i> questions from the following:	$2 \times 4 = 8$
	(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

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(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
(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
	(b) (a) (b)	 (a) What is List in Python? (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 (ii) To delete an item with the specified value from the Python List.

8. Write short notes on any *two* of the following:

 $4\times2=8$

- (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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