WEST BENGAL STATE UNIVERSITY

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

CMAHGEC01T/CMAGCOR01T-COMPUTER APPLICATION (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.

Answer Question Number 1 and any *four* from the rest

1.   Answer any *four* questions from the following: $2 \times 4 = 8$

(a) What do you mean by logic gates?

(b) What is software?

(c) Convert the following: $(123)_8 = (?)_{16}$

(d) What do you mean by process?

(e) What do you mean by auxiliary memory?

(f) What is expansion cards?

(g) What is OCR?

2. (a) Find x.   3+3+2

$$(123)_{10} = (173)_x$$

(b) Perform the subtraction with 2's complement.
$$(1101)_2 - (11010)_2$$

(c) What is the need of utility programs?

3. (a) What are the differences between system software and application software? Give   4+2+2
example.

(b) What is operating system?

(c) What do you mean by PORT?

4. (a) Simplify the following using boolean algebra   3+3+2
$$ABC + A'B'C + A'BC + ABC' + A'B'C'$$

(b) Simplify the following using k map
$$F = xy'z + xyz' + x'yz + xyz$$

(c) Why plotter is used for?

5. (a) Describe the differences between RAM and ROM.   4+3+1

   (b) What is the need of cache memory?

   (c) What do you mean by secondary memory?

6. (a) What are the functions of SMPS?   2+3+3

   (b) What is system bus?

   (c) What are the utilities of the packages SPSS?

7. (a) How Data analysis helps in Education and Research?   4+4

   (b) Briefly describe ASCII code.

8.   Write short notes on any *two* of the following: 4+4

   (a) Cloud computing

   (b) Data mining

   (c) Open Source Software

   (d) Monitor.

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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