WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours/Programme 1st Semester Examination, 2021-22

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: 2×4 = 8

 (a) Define data and data types.

 (b) What is cache memory?

 (c) Difference between DRAM and SRAM.

 (d) What is the use of bluetooth?

 (e) What is don't care condition in k-map?

 (f) Write two applications of data mining.

 (g) What is MICR (Magnetic Ink Character Reader)?

2. (a) Prove the following expression using Boolean algebra: 3+3+2

   $$(A + B) \cdot (A + C) = (A + B \cdot C)$$

 (b) Simplify the following Boolean expression using k map

   $$F = A' \cdot B \cdot C + A' \cdot C + A' \cdot B' \cdot C' + A' \cdot C'$$

 (c) What is meaning of memory dump?

3. (a) What is booting?   2+4+2

 (b) Difference between Dot matrix printers and Daisy wheel printers.

 (c) List any four storage device.

4. (a) Convert the following numbers   (2+2)+4

   (i) $(135.65)_{10} = (?)_2$

   (ii) $(A2B.D4)_{16} = (?)_8$

 (b) Why NAND gate called universal gate? Explain.

5.   What are CPU registers? Mention three CPU registers. Define a micro-processor.   2+4+2

6.   Why the EPROM is called erasable programmable read only? Briefly explain   2+4+2
different types of RAM. What is hard disk?

7. (a) What is bus? What is the function of address bus? Why is the data bus   3+2+2+1
bidirectional?

  (b) What is function of accumulator?

  (c) How many address lines are necessary to address two megabytes of memory?

  (d) What is the memory word size required in an 8085 system?

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

  (a) Google Meet vs. CISCO Webex

  (b) Big Data

  (c) Internet.

  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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