TDC (CBCS) Odd Semester Exam., 2020
held in March, 2021

COMPUTER APPLICATION

(1st Semester)

Course No. : BCACC–101T

(Computer Fundamentals)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

SECTION—A

1. Answer any *ten* of the following questions : 2×10=20

(a) Write down the difference between data and information.

(b) Why is computer known as data processor?

(c) Write down the advantages of mainframe computer.

(d) Mention some characteristics of fifth generation computer.

(e) What do you mean by shell and kernel of an operating system?

(f) What is utility software? Give example.

(g) Write down the advantages of scanner.

(h) What is OCR?

(i) What are the different types of RAM available?

(j) What is ROM?

(k) Write down two characteristics of cache memory.

(l) What is the read/write head of hard disk?

(m) What is cloud computing?

(n) Write down the usages of PS2 port and USB port.

(o) Write down the functions of different cables used to connect different units.

(p) Why is SMPS necessary?

(q) Mention some uses of computer in research area.

(Continued)

(r) Write down the steps to search an article in Google Scholar.

(s) Mention some advantages of e-library.

(t) Why is SPSS used? Mention two areas where SPSS is used.

SECTION—B

Answer *any* **five** questions

2. (a) What are bit and byte? Also, define kilobyte (KB) and Megabyte (MB). 2

(b) Perform complementary subtraction : 1

$(92)_{10}$ from $(56)_{10}$

(c) Convert the following : 1×3=3

(i) $(101101110)_2 = (?)_{16}$

(ii) $(3AB6)_{16} = (?)_8$

(iii) $(10011 \cdot 10)_2 = (?)_{10}$

3. (a) Explain different generations of computer. 4

(b) Write down the difference between mini- and micro-computer. 2

(Turn Over)

4. Write short notes on the following : 2×3=6

   (a) Joystick

   (b) OMR

   (c) Barcode Reader

5. (a) Explain different types of printer and their advantages. 3

   (b) Briefly describe different types of system software. 3

6. What is secondary memory? Explain different types of secondary memory. What is SSD? 1+4+1=6

7. How does cache memory work? Explain with suitable diagram. 6

8. What is data mining? Explain different applications of data mining. 2+4=6

9. Explain the architecture of CPU showing different components with diagram. 6

10. Explain different features of Mathematica. 6

11. What is heterogeneous storage? How is heterogeneous storage used in different sectors? 3+3=6

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