1 SEM TDC GECS (CBCS) GE 1

2021

(March)

COMPUTER SCIENCE

(Generic Elective)

Paper : GE-1

(Computer Fundamentals)

Full Marks : 53 Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks :

- 1×5=5
- (a) ROM is an example of ____ memory.
- (b) The access method used for magnetic tape is _____.
- (c) _____ device can be used to directly input printed text.
- (d) Actual execution of instructions in a computer takes place in _____.
- *(e)* _____ errors can be pointed out by compilers.

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(Turn Over)

(2)

- **2.** Answer the following : $2 \times 5 = 10$
 - (a) Convert $(11110001)_2 = (?)_{16}$.
 - (b) Differentiate between primary memory and secondary memory.
 - (c) State two functions performed by an operating system.
 - (d) List the different types of scanner.
 - *(e)* Why use of pendrive is more suitable rather than the use of floppy?
- **3.** Answer any six from the following : $3 \times 6 = 18$
 - (a) State the difference between Windows and UNIX operating systems.
 - (b) Define impact printers. Explain any one of them.
 - (c) Convert $(725 \cdot 25)_8$ to its decimal and hexadecimal equivalent.
 - (d) Find 2's complement :
 - (*i*) $(156)_{10} (99)_{10}$
 - (*ii*) $(11010)_2 (10000)_2$
 - (e) Explain how a Bluetooth device work.
 - *(f)* Describe the importance of cache memory.
 - (g) Compare data bus with system bus.
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(Continued)

(3)

- **4.** Answer any *four* from the following : 5×4=20
 - (a) Define bit, byte, nibble and word.
 - (b) Explain the computer system with a neat diagram.
 - (c) What is the main function of SMPS? State the different types of SMPS.
 - (d) What is big data? Explain how big data analytics help to overcome different problems.
 - *(e)* Define data mining. State the different areas where data mining application exist.
