

COMPUTER STUDIES 2019

Time: 2 ½ Hours

Max. Marks: 60

SECTION B (SHORT-ANSWER QUESTIONS)(36)

NOTE: Attempt 9 questions from this Section.

2. Write two advantages and disadvantages of computer in our daily life.
3. Write any four difference between Digital and Analog computers.
4. Define the following Boolean Algebra terms:
(i) Variables (ii) Complement
(iii) Truth Table (iv) Boolean Constant
5. State Demorgan's theorems and prove them
(i) $\overline{XY} = \overline{X} + \overline{Y}$ (ii) $\overline{X + Y} = \overline{X} \cdot \overline{Y}$
6. What is operating system? Describe its important tasks.
7. How does start button create easiness in windows?
8. Solve the following binary numbers:
(i) $1001101 - 110110$ (ii) 1010011×1001
(iii) $1110010 + 101011$
(iv) Find 2's complement of 10110_2
9. Write the difference between hardcopy and softcopy.
10. Convert the following:
(i) $(110111)_2 = (?)_{10}$ (ii) $(DEAD)_{16} = (?)_2$
(iii) $(346)_8 = (?)_{16}$ (iv) $(452)_{10} = (?)_8$
11. State the importance of system software & application software.
12. Define data and information.
Write the name of different types of data.
13. Write short note on any two of the following:
(i) Computer virus (ii) Find and search
(iii) Windows Explorer (iv) Wallpaper
14. How does a laser printer and dot matrix printer work?
15. Define various types of ROM.

SECTION C (DETAILED-ANSWER QUESTIONS)(24)

NOTE: Attempt 4 questions from this Section.

16. State the importance of CPU in a computer. Explain its parts and function with block diagram.
17. Define the computer bus and describe its types.
18. Prove the following rule with the help of truth table.
 $(x + y)(x + z) = x + yz$
19. Define programming language and write its types and explain high level language.
20. Explain types of computer according to their capacity.
21. Write note on any three of the following:
(i) Control Panel (ii) Ports (iii) Keyboard
(iv) Scanner (v) Mouse