



First Term Exam - 2071

Grade: XI
Time: 3:00 hrs .

Subject: Computer Science

FM: 75
PM: 30

Set A

Group A

Attempt **all** questions: [3×10=30]

1. Define hardware, software and firmware. Also, classify and explain various types of software with respective examples. [3+7]
2. What is the function of output unit? Explain the various types of monitors with respective merits and demerits. [2+8]
3. Explain the importance of Boolean algebra in digital electronics and also state and prove Distributive laws and De Morgan's laws of Boolean algebra. [4+6]

Group B

Attempt **all** questions: [5×9=45]

4. What is mobile computing? Explain the merits and demerits of mobile computing.
5. Explain the contribution of Dr. Herman Hollerith in the field of history of computer.
6. Differentiate between Digital computer and Analog Computer.
7. What is NAND gate? Why is it called universal gate? Explain with diagrams.
8. Solve the problems:
 - Convert $(540.45)_{10}$ into octal number system
 - Subtract 10100 and 11110 using 1's Complement
9. Differentiate between SRAM and DRAM.
10. What is input device? Explain the working principles of touch panel.
11. What is MS Windows? Lists any three system tools provided by MS Windows.
12. Write short notes:
 - EDSAC
 - USB Port



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Group A

Attempt **all** questions: [3×10=30]

1. Define data, instruction and information. Explain the major seven applications of computers in our life. [3+7]
2. Distinguish the terms: computer architecture and computer organization. Explain the logical block diagram of computer system with diagram [2+8]
3. What is memory? Classify and explain the importance of various types of memory used in computer system. [2+8]

Group B

Attempt **all** questions: [5×9=45]

4. What is computer system? Explain the characteristics of computer system.
5. Explain the contribution of Charles Babbage in the field of history of computer.
6. Differentiate between minicomputer and microcomputer.
7. What is NOR gate? Why is it called universal gate? Explain with diagrams.
8. Solve the problems:
 - Convert $(904.4A)_{16}$ into decimal number system
 - Subtract 11010 and 10010 using 2's Complement
9. What is bus system? Explain three types of buses used in computer system.
10. What is output device? Differentiate between impact printers and non impact printers.
11. What is MS DOS? Explain the major features of MS DOS.
12. Write short notes:
 - ENIAC
 - IEEE Port