SRKBV MATRIC HIGHER SEC.SCHOOL, KULASEKHARAM

SUBJECT: COMPUTER SCIENCE

I VOLUME IMPORTANT 2 & 3 & 5 MARKS

LESSON: 1

1) What is meant by computers?
2) What is the name of the machine developed by Charles Babbage?
3) What are peripheral Devices?
4) Difference between Data & Information?
5) Define Algorithm.
6) What is word processing Software?
7) What is Operating System?
8) What is Analog Computing System?
9) What is laptop Computer?
10) What are the components of Computer System?
11) List out the classifications of computer.
12) List out the classifications of Digital Computer.
13) List out the classifications of Micro Computer.
14) Define Computer Program.
15) Difference between System Software & Application Software.
16) List out some word processing packages.
17) What are the classifications of computer Hardware?

LESSON: 2

1) Convert Decimal to Binary:
   a) 512    b) 1729    c) 1001    d) 777
   e) 160
2) Convert Decimal to octal:
   a) 512    b) 1729    c) 1001    d) 777
   e) 160
3) Convert Decimal to Hexadecimal:
   a) 512    b) 1729    c) 1001    d) 777
   e) 160
4) Write \(-27\) as an 8 bit 2's complement Number.
5) Write the largest positive and negative numbers for an 8 bit signed numbers in decimal and 2’s complement Notation.
6) State and prove that \(A + AB = A\)

Prepared By: M SATHEESH, Computer Instructor
7) Simplify the following Boolean Expression:
   a) AC + B + C
   b) (AC') + B + C

8) Difference between BIT & BYTE.

9) Convert Hexadecimal to Decimal: 2C₁₆.

10) To represent -2₃₁₀ in an 8 bit 2’s Complement Number.

11) Add +2₁₀ and +5₁₀. Write the operands and the sum as 4 bit signed Binary.

12) Add: (-7₁₀ ) + (-5₁₀) (4 bit).

13) Calculate the sum of the numbers:
    a) 1100 + 1011
    b) 1011 + 10110

14) Binary Subtraction:
    a) 1101 – 1010
    b) 1000 – 101

15) What are the laws of Complementation?

16) What are the properties of AND operator?

17) What are the properties of OR operator?

18) Define Literal.

19) Explain: Product Term & Sum term

20) Define Min term & Max Term.

21) Define SOP.

22) Define POS.

23) List out the De-Morgans Theorems.

24) Subtract (-6) – (+4) using 4 bit system.

**LESSON : 3**

1) How are the Human being and the computers related?

2) What are the components of Digital Computer?

3) What are the functional units of computer?

4) Write the essential of the stored program concept?

5) Write the main functions of CPU.

6) What are the different types of main memory?

7) Define memory Read & Write operations.

8) Define Memory Access Time.

9) What are the advantages of EEPROM over PROM.

10) When do we use ROM?

11) What is an Input Device?

12) List out some Input Devices?

13) What is output Devices?
14) List out some output devices.
15) What is storage devices?
16) List out some storage devices.
17) What is the role of ALU?
18) Define Control Unit.
19) What is Registers?
20) What is Bus?
21) What are the characteristics of
   a) Impact
   b) Non Impact Printers.

LESSON: 4

1) What is Logic Gate?
2) List out the fundamental Logic Gates.
3) Why NAND & NOR gates are called as Universal Gates?
4) How AND gate can be realized using NOR Gate?
5) How OR gate can be realized using AND gate?
6) Give the truth table of XOR gate for 2 inputs.
7) What is Half Adder?
8) What is Full Adder?
9) What is Combinational Circuit?
10) What is Sequential Circuit?
11) Define Adders. What are the types of Adders?
12) Define Flip Flop.
13) Define Multi Sim.
14) Explain: Electronic Workbench.

LESSON: 5

1) Who will access the computer hardware directly?
2) Explain the different roles of OS.
3) What are the steps of Process Management?
4) What are the advantages of Distributed OS & Network OS?
5) List out some required features of OS.
6) Define Work Station.
7) Define Buffer.
8) What is meant by DMA?
9) What is meant by Spooling?
10) What is Multi-Programming?
11) Define Data Security?
12) What is System Call?
13) Define Fault Tolerance.

**Lesson 6**

1) What are the reasons for Networking?
2) Mention a few areas where Computer Networks are employed?
3) What are the elements that computer communication should ensure?
4) What are the 3 types of Network?
5) Explain WAN.
6) What are the two types of Data Transmission?
7) What are the three types of Transmission Mode?
8) Define TCP.
9) Define URL.
10) Explain ICANN.
11) What is meant by LAN?
12) Define MAN.
13) Define Network Topology.
14) What are the types of Topology?
15) Define Computer Network.
17) Define MODEM.
18) What is meant by Data Transmission Rate?
19) What are the futures of Internet?
20) What is meant by Hyperlink?
21) Define FTP.
22) Define Telnet.
23) Difference between Intranet & Extranet.
Five Mark Questions

Lesson: 1

1) Explain: Various Generations of computer.
2) Explain: Hardware & Software
3) What are the Futures of Micro, Mini, Main Frame, Super Computer?
4) What are the Classifications of Computer Hardwar?

Lesson: 2

1) Add the signed numbers + 15\text{\textsubscript{10}} and + 36\text{\textsubscript{10}} Write the operands and the sum as 8 bit Complement notation.
2) Binary Arithmetic:
   a) 10\text{\textsubscript{10}} + 15\text{\textsubscript{10}}
   b) 14\text{\textsubscript{10}} - 12\text{\textsubscript{10}}
   c) \text{-}12\text{\textsubscript{10}} + 5\text{\textsubscript{10}}
   d) \text{-}2\text{\textsubscript{10}} - \text{-}6\text{\textsubscript{10}}
3) Convert the following Binary to Decimal:
   a) 1011\text{\textsubscript{2}}
   b) 101110\text{\textsubscript{2}}
   c) 1010011\text{\textsubscript{2}}
4) Convert the following Binary to Hexadecimal:
   a) 101\text{\textsubscript{2}}
   b) 11010\text{\textsubscript{2}}
   c) 111101000010\text{\textsubscript{2}}
5) Convert the following Hexadecimal to decimal:
   a) B6\text{\textsubscript{16}}
   b) 5E9\text{\textsubscript{16}}
   c) CAFE\text{\textsubscript{16}}
6) Convert the following Hexadecimal to Binary:
   a) F2\text{\textsubscript{16}}
   b) 1A8\text{\textsubscript{16}}
   c) 39EB\text{\textsubscript{16}}
7) Do the following Arithmetic:
   a) 11011001 + 1011101
   b) 101110 \text{--} 1011
8) Draw the Truth table:
   a) (A+B) (A+C) = A+BC
   b) A+ B+ C
9) Simplify the following Boolean Expression
   a) \overline{A} \overline{B} \overline{C} + \overline{A} \overline{B} \overline{C} + A \overline{B} \overline{C}
   b) a) \overline{A} \overline{B} \overline{C} + \overline{A} \overline{B} \overline{C} + A \overline{B} \overline{C}

Lesson: 3

1) Explain: Various Units of CPU
2) Explain: Various types of Memory.
3) List out the input device and explain it (Any 5)
4) Explain: Output device

Lesson: 4

1) Determine the truth table for the following Boolean Function:
   E= \overline{A} + (B.C) + \overline{D}
2) Convert the truth tables to a Boolean function (Book Back Page No: 153)
3) Convert the following logic circuit to Boolean Equation (Book Back Page No: 153)
4) Realize the Boolean function to a logical circuit. (Book Back Page No : 153)
5) Explain the steps involved in designing a logic circuit.
6) What are the different types of logic gates? Explain (Any 5)

Lesson: 5
1) Explain: Process and Memory Management.
2) Explain: User Interface.

Lesson: 6
1) What are the different forms of data transmission? Explain.
2) What are the 3 types of transmission Mode? Explain.
3) What are the 3 types of Network? Explain
4) Explain: Network Topology.

*******All The Best*******

Prepared By
M.SATHEESH
COMPUTER INSTRUCTOR

SRKBV MATRIC HIGHER SEC.SCHOOL
PADANILAM, KULASEKHARAM
KANIYAKUMARI DIST
CELL : 7598828982