1 Answer the following in brief: (Any 7)

(1) Which major devices were used in the First, Second and Third Generation of Computers?

(2) What do you mean by 32 bit and 64 bit computers?

(3) What are SIMMs and DIMMs?

(4) Define the terms: Volatile and Non-volatile memory.

(5) Define Seek Time and Rotational Latency.

(6) What is USB and PS/2?

(7) On which principle does a joystick work? Which device is used in the joystick to measure it?

(8) What do you mean by the base of a number system? What is the base of Binary, Octal, Decimal and Hexadecimal number system?

(9) Why DRAM is preferred over SRAM in computer's memory.

2 Answer the following questions: (Any 2)

(1) Draw the block diagram of computer. Also, explain its functional units.

(2) Explain the structure of Winchester disk. Also explain, how it works?

(3) Explain the different types of printers in detail.
Answer the following:

1. Explain Virtual memory and Cache memory in detail.
2. Explain any one non-impact printer.

OR

1. Explain any one input device in detail
2. Explain the following DOS commands:
   (a) MKDIR  (b) PROMPT  (c) RD  (d) MOVE

Write short notes:

1. Laser printer
2. BCD and EBCDIC
3. Types of computers.

OR

3. Booting process of computer

Do as Directed:

1. Solve any three:
   (1) \((1010101100)_2 = (?)_8 = (?)_{10} = (?)_{16}\)
   (2) \((235670)_8 = (?)_{10}\)
   (3) \((45AD.EF)_{12} + (12BC.45)_{12}\)
   (4) Subtract \((000101.1101)_2\) from \((1101.101011)_2\)

2. Solve the following:

   Step 1: Perform the sum of \((11001010)_2, (1101101010)_2\) and \((111100001100)_2\)
   Step 2: Subtract \((10101010)_2\) from the answer obtained in step 1.
   Step 3: Multiply \((1101)\) with the answer of step 2.
   Step 4: Divide the answer obtained in step 3 by \((1011)_2\)
   Step 5: Also write the 1's and 2's complement of the answer obtained in step 4.