St. Andrews Scots Sr. Sec. School

9th Avenue, I.P. Extension, Patparganj, Delhi – 110092 Session: 2024-2025

Class: VII Subject: Computer Topic: Ch-1 Answer Key

Checkpoint

A. Tick (✓) correct option:-

- 1. LSD
- 2. Binary Number System
- 3. 0 and 1
- 4. (101011001)2
- 5. 1

B. Tick (\checkmark) the correct statements and (X) the wrong statements:-

- 1. 🗸
- 2. **X**
- ✓
- 4.
- √

C. Answer the following questions:

1. What is an octal number system?

Ans. An octal number system consists of eight digits from 0 to 7 and is used as a shorthand representation of long binary numbers.

2. How many bits are there in 1 nibble?

Ans. There are 4 bits in 1 nibble.

3. What do mean by base in a number system?

Ans. The total number of digits used in a number system is called its base or radix.

4. What is a number system? Explain.

Ans. The technique to represent and work with numbers is called number system. It is a collection of numbers used to describe various quantities. There are many types of number system. Computers also have their own number system, known as the binary number system.

5. What are the rules to convert a decimal number into a binary number?

Ans. To convert decimal number into binary number, following are the rules:-

- 1. Divide the decimal number by 2.
- 2. Note down the quotient and the remainder.
- 3. Divide the quotient obtained again by 2 and note down the resulting quotient and remainder.
- 4. Repeat the procedure till you reach a quotient less than 2.
- 5. List the last quotient and all the remainders moving from bottom to top.

Scratch Your Brain.

1. a. $(21)_{10}$

e. (1100101)₂

c. (101101001)₂

 $g. (12)_{10}$

i. $(81)_{10}$

b. $(123)_{10}$

 $d. (110)_2$

 $f. (301)_{10}$

h. (10100101)₂

j. (106)₁₀