Zavia School System, Multan
Notes 2nd Term 2026
Class 7th Subject:Computer

Chapter NO 6 The Binary Computing

Qno 1: Terminologies

➢ Conversion	Respectively
➢ Processing	Complement
➢ Alphanumeric	Extended Binary Code
➢ Organised	American Standard Code
➢ Represented	Approximately

Objective: on book (pg. # 83, 84)
- (MCQs)

Answer the following:

1. Explain why a computer only understands the binary number system.

Ans. Computer are digital machines hence they do not understand the analog form of Data. The computer stores the data in digital or binary form, as it is the language that is understood by the computer.

2. Describe number system conversion of binary to decimal number system.

Ans. i. The binary number system is represented by only two digits i.e., 0 and 1.
ii. To convert the binary number to a decimal number, we use the multiplication method.
iii. In this conversion process, if a number with base 2 has to be converted into a number with base 10, then each digit of the given number is multiplied from the Most Significant Bit (MSB) to the Least Significant Bit (LSB) with reducing the power of the base

3. Compare the ASCII, EBCDIC, and Unicode systems.

Ans. **ASCII:** Uses 7/8 bits, supports ~128–256 characters, mainly for English.
EBCDIC: Uses 8b bits (4 bits for zone, 4 bits for digits). This system is usually used in Mainframe computers.
Unicode: Unicode uses 32 bits to represents a symbol in the data.

4. What is a number system?

Ans. A number system is a way of representing numbers using a set of digits or symbols and rules.
For example, the decimal system uses digits 0–9, while the binary system uses only 0 and 1.

5. Describe how to convert text to binary numbers.

Ans. A code where each number represents a character can be used to convert text into binary. One code we can use for this is called ASCII. The ASCII code takes each character on the keyboard and assigns it a binary number.

Chapter NO 7 Scratch Game Development

Qno 1: Terminologies

➢ Components	Required
➢ Develop	programming
➢ Movements	Scratch
➢ Coordinates	Sprite
➢ Monotonous	Engagement

Objective: on book (pg. # 96)

- (MCQs)

Answer the following:

1. How can you create a new sprite in Scratch?

Ans. You can create a new sprite by clicking on the "Choose a Sprite" button, then select from library, draw a new sprite, or upload one.

2. How can you make a sprite move using the arrow keys?

Ans. Use "when key pressed" blocks and add "change x" or "change y" blocks to move the sprite in different directions.

3. How can you change the background in a Scratch game?

Ans. Click on "Choose a Backdrop" and select or upload a background from the library.

4. How can you make the sprite jump when a key is pressed?

Ans. Use "when key pressed (e.g., space key)" and then add "change y by" to move the sprite up and down.

5. How can you add sound effects to a Scratch game?

Ans. Go to the Sounds tab, choose or upload a sound, and use sound blocks like "play sound".

6. How can Scratch sound blocks be used to add music and sound effects to a game?

Ans. You can use sound blocks like "start sound" or "play sound until done" to add music and effects during the game.

7. Describe the significance of x- and y-coordinates.

Ans. The x-coordinate controls left and right movement, while the y-coordinate controls up and down movement of a sprite.

8. Write the steps to add movement code to the player.

Ans. Select the sprite
Go to the Code tab
Add "when key pressed" blocks
Use "change x by" and "change y by" blocks
Test the movement

9. List the ways of using images in maze.

Ans. As background (maze design)

1. As player sprite
2. As obstacles or walls

As goal or destination object

Practical:

- **Introduction of Scratch**