



UNIVERSAL EDUCATION

ICSE 2020-21

CLASS V

COMPUTER STUDIES

Introduction to Scratch Programming

I. Fill in the blanks:

1. **Scratch** is one of the block-based computer programming languages.
2. A computer follows stepwise instructions to complete any task, which is known as **program**.
3. **Sprite** is a graphic character which moves on the stage.
4. The blocks in the **pen** block allow the Sprite to draw lines on the stage, change the colour and thickness of lines.
5. In Scratch, the Sprite moves on the **stage** when you run a program.

II. Multiple choice questions:

1. Scratch 3.0 was officially released on **January 2**, 2019.
A. July 4 B. **January 2** C. June 2
2. **Blocks Palette** contains the set of blocks, which are used to program the sprite.
A. **Blocks Palette** B. Stage C. scripts area
3. **Pen down** block draws a line as the sprite moves on the stage.
A. **Pen down** B. move 10 steps C. **turn 15 degree**
4. Who is the founder of Scratch?
A. James Gosling B. Tim Berners - Lee C. **Mitchel Resnick**
5. In how many languages is scratch available?
A. **40+** B. 20 C. 30

III. Application-based questions:

1. **Aarav wants to make a Scratch project in which he wants to move the Sprite in the forward direction by 20 steps. Suggest him the appropriate block to perform the action.**

Ans. Aarav should use Motion Block -> Move 20 steps.

2. **Shreya wants to change the thickness of the pen while drawing a trail behind the Sprite. Suggest her the right block to be used.**

Ans. Shreya would use Pen block -> Set Pen Size to 10

3. **Sania wants to make a Scratch project in which she wants to rotate the Sprite continuously. Suggest her the appropriate block to perform the action.**

Ans. Sania should use Turn option from Motion block and Forever option from Control block.

4. **Riya wants to change costume of the Sprite. Suggest her the right block to be used.**

Ans. Riya should use Looks block.

IV. Write the function of the given block.

1. **What is the use of Pen block menu?**

Ans. The blocks in the Pen block menu allow the sprite to draw lines/shapes/pattern on the stage.

2. **What is the use of Sound block?**

Ans. The Sound blocks are used to add sound into your Scratch project.

3. **What do you understand by Green Flag icon?**

Ans. Clicking on the green flag will run the script step by step.

4. **What is the use of control block?**

Ans. It is used to control the sprite and script.

5. **What is the use of motion block?**

Ans. It is used to control the sprite movements.

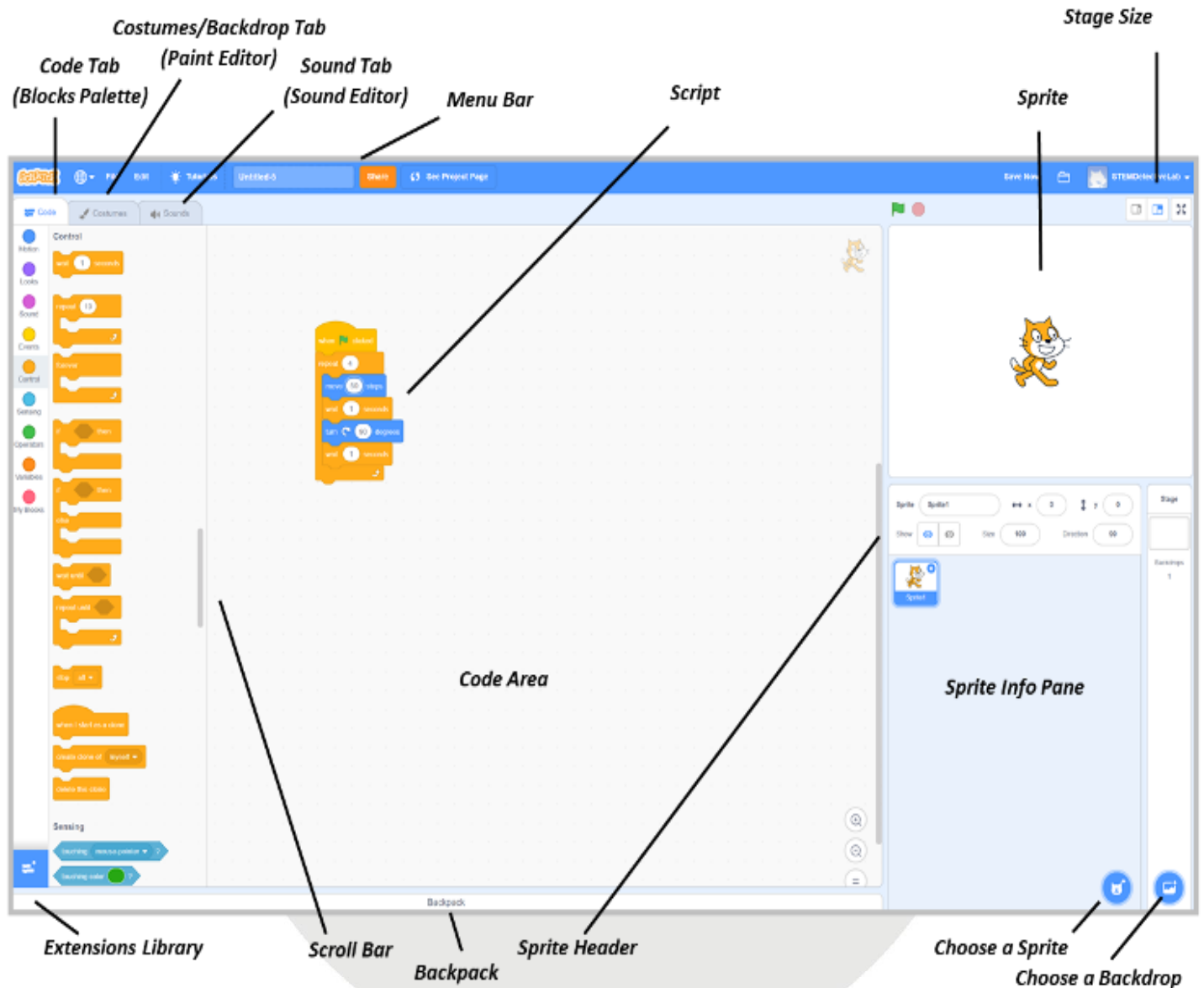
6. **What is the use of operator blocks?**

Ans. Operator blocks are used to script math equations and string handling.

V. Match the following:

A	B	Ans.
1. MOVE 10 STEPS	a. LOOKS BLOCK	1-b
2. FOREVER	b. MOTION BLOCK	2-c
3. WHEN SPACE CLICKED	c. CONTROL BLOCK	3-d
4. PEN UP	d. EVENT BLOCK	4-e
5. NEXT COSTUME	e. PEN BLOCK	5-a

VI. Study the parts of Scratch Interface:



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