

CodeAI Plus

Windows 10 with Office 2019

Also compatible with Office 2016



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|-------------------------|----------------------------|
| Artificial Intelligence | Multidisciplinary Approach |
| Animated Life Skills | Subject Integration |
| Coding | Art Integration |
| Computational Thinking | Skill Formation |
| Experiential Learning | Linked with SDGs |



Answer Key

SELF-EVALUATION

A. Tick (✓) the correct answer.

1. (a) Inkscape 2. (a) Zoom 3. (a) Draw freehand
4. (a) Fill and Stroke 5. (c) Node

B. Write 'T' for True and 'F' for False statements.

1. True 2. True 3. False 4. True
5. False

C. Fill in the blanks.

1. Swatches 2. Ellipse/Arc 3. Linear Gradient
4. Segment 5. Artistic and Paragraph

D. Define the following.

1. Blur: It is a filter effect that can be applied on the filled object.
2. Opacity: It sets the degree to which objects behind the affected object may be seen through it.
3. Node: It is a small square on a line, curve or object outline which is used to edit the object.

E. Differentiate between the following.

1. Canvas and Document Page

Canvas	Document Page
It is the workspace area that is bordered by scroll bars and rulers.it includes the document page and surrounding area.	It is the rectangular area that represents the printable section of the document window.

2. Artistic Text and Paragraph Text

Artistic Text	Paragraph Text
It offers us more freedom to assign artistic effects to letters	It is better suited for editing long blocks of text.

F. Answer in 1-2 sentences.

1. The four components of Inkscape interface are- Title bar, Commands bar, Ruler, and Canvas.
2. The various drawing shapes are- Rectangle, Square, Rounded Rectangle/ Square, Ellipse, Circle, Arc, Pie Shape, Polygons, Stars, Spirals.
3. Zoom in is used for a more detailed view whereas, Zoom-out is used for a broader view.

G. Answer briefly.

1. Inkscape is an open-source drawing tool for creating and editing vector graphics which includes creating professional artwork like logos, and technical illustrations.
It is used in advertising, printing, publishing, sign making or manufacturing.
2. The steps are:
 - a. Select the object to be resized with the selector tool. Eight arrow handles appear around the object. Place our mouse pointer over the handle.
 - b. Click and drag the handle to resize the shape of the object.
3. We can select an object with mouse or keyboard. To select, place our mouse pointer on the object and click on it. We can select more than one object, at a time, with the selector tool.

H. Application-based Question

She should use radial gradient tool.

Chapter – 2 [Inkscape – Vector Designing]

Worksheet - 1

Q1. Put your knowledge to the test by choosing the right option:

1. What is Inkscape primarily used for?
 - a. Video editing ☐
 - b. Vector graphics creation and editing ☐
 - c. 3D modeling ☐
 - d. Audio production ☐
2. Inkscape is beneficial for avoiding pixelation in graphics when:
 - a. Enlarging the graphics ☐
 - b. Reducing the graphics size ☐
 - c. Converting graphics to a different format ☐
 - d. Printing the graphics ☐
3. Which tool in Inkscape is used to draw freehand lines?
 - a. Ellipse/Arc tool ☐
 - b. Pencil tool ☐
 - c. Rectangle tool ☐
 - d. Text tool ☐
4. What is the purpose of the Fill and Stroke pane in Inkscape?
 - a. To add effects to text ☐
 - b. To change the background color of the canvas ☐
 - c. To control the appearance of outlines and fills ☐
 - d. To adjust the brightness and contrast of the graphics ☐
5. How can you select multiple objects in Inkscape?
 - a. Right-click on each object ☐
 - b. Hold down the Ctrl key while clicking on objects ☐
 - c. Drag a marquee around the objects ☐
 - d. All of the above ☐
6. Which file format is the default for saving Inkscape projects?
 - a. PNG ☐
 - b. SVG ☐
 - c. PDF ☐
 - d. JPEG ☐

Q2. Fill in the blanks:

1. _____ is a drawing program used to create and edit vector graphics.
2. The area bordered by scroll bars and rulers in Inkscape is called the _____.
3. To make a straight line in Inkscape, you can hold down the _____ key while drawing.
4. The tool used to move an object in Inkscape is called the _____ tool.

5. The Fill and Stroke pane in Inkscape allows you to control the appearance of outlines and _____.
6. Inkscape provides control over the look and shape of text through two types: _____ text and paragraph text.

Chapter – 2 [Inkscape – Vector Designing]

Worksheet - 2

Q1. Write one-word answers.

1. What is the default file format for saving projects in Inkscape? _____
2. Which tool is used to draw freehand lines in Inkscape? _____
3. How can you change the font style of artistic text in Inkscape? _____
4. What is the benefit of creating graphics in Inkscape, according to the provided information?

5. How do you change the outline color of an object in Inkscape using the Color Palette?

Q2. Write 'T' for true and 'F' for false statements:

1. Inkscape is a pixel-based graphic design tool. ☐
2. The default file format for saving Inkscape projects is PNG. ☐
3. The Zoom tool in Inkscape allows you to zoom in by clicking and dragging a marquee box. ☐
4. Inkscape can open and edit files in proprietary formats such as CorelDRAW. ☐
5. The purpose of the Node tool in Inkscape is to create freehand curves. ☐
6. SVG stands for Scalable Vector Graphics, and it is Inkscape's native file format. ☐

Chapter – 2 [Inkscape – Vector Designing]

Worksheet - 3

Q1. Define the following.

1. Inkscape –
.....
2. Vector Graphics –
.....
3. SVG (Scalable Vector Graphics) –
.....
4. Outline (Stroke) –
.....
5. Artistic Text –
.....

Q2. Answer the following questions:

1. What is Inkscape, and what is its primary purpose in graphic design?

2. How can you change the fill color of an object in Inkscape?

3. Explain the process of creating a new document in Inkscape and setting up the canvas.

4. Explain the difference between drawing a circle and an ellipse in Inkscape

5. What is the purpose of the Ruler and Color Palette in the Inkscape interface?

Q3. Application-based question:

1. Imagine you are tasked with designing a logo for a new company using Inkscape. Outline the steps you would take, including the choice of shapes, colors, and any special effects.

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2. Imagine you are tasked with designing infographics for a presentation. Explain how Inkscape's tools would be beneficial in creating visually engaging and informative infographics.

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Worksheet – 01

Q1. Put your knowledge to the test by choosing the right option:

1. b 2. a 3. b 4. c 5. b 6. d Both b and c

Q2. Fill in the blanks:

1. Inkscape 2. Canva 3. Ctrl 4. Selector 5. Fills 6. Artistic

Worksheet – 02

Q1. Write one-word answers.

1. SVG 2. Pencil 3. Select the text and click on **Select Font Family**.
4. looks like professional layout.
5. By using Set stroke you can change the outline color of an object in Inkscape.

Q2. Write 'T' for true and 'F' for false statements:

1. False 2. False 3. True 4. True 5. True 6. True

Worksheet – 03

Q1. Define the following.

1. **Inkscape:** Inkscape is an open-source drawing tool for creating and editing vector graphics which includes creating professional artwork like logos and technical illustrations.
2. **Vector Graphics:** Vector graphics use mathematical equations to create images from points, lines, and shapes, allowing for infinite scaling without loss of quality. They are ideal for logos and illustrations.
3. **SVG (Scalable Vector Graphics):** Scalable Vector Graphics (SVG) is Inkscape's native format, but it can also open the majority of image file types, including PDF, JPG, GIF, and PNG.
4. **Outline (Stroke):** Inkscape provides many outline styles, such as thick and thin, dashed and dotted. You can see the figures shown below with different outlines. Each outline gives the figure a different look, and the outlined figures combine for their own composite effect.
5. **Artistic Text:** Artistic text offers you more freedom to assign artistic effects to letters.

Q2. Answer the following questions:

1. Inkscape is an open-source drawing tool for creating and editing vector graphics which includes creating professional artwork like logos and technical illustrations.
Inkscape offers the tools you need to create accurate and professional looking page layouts. It is used in advertising, printing, publishing, sign making or manufacturing.

2. The steps to change the fill color of an object are-

a. Select the object and click on any color in the Color Palette that you want.

The selected color will be applied to the object.

3. You can create a new document in Inkscape, anytime you want, to create a new design. Creating the new document is just like opening your notebook and start writing on a fresh, new piece of paper. You can create the new document by clicking on File menu and then click on New. When you create the new document, a new Inkscape window will be opened.

- 4.

Drawing a Circle	Drawing an ellipse
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1. Click on Ellipse/Arc tool (or Press E) in the toolbox.
2. Click anywhere in the drawing area and hold down the Ctrl key while dragging the mouse pointer.
3. Release the mouse button where you like to end the circle.

1. Click on Ellipse/Arc tool (or Press E) in the toolbox.
2. Click anywhere in the drawing area and drag the mouse pointer.
3. Release the mouse button where you like to end the ellipse.

5. Ruler: Horizontal and vertical rulers let you determine the size and position of objects in a document.

Color Palette: Color Palette is a bar that contains color swatches. Swatches is a quick way to apply color on shapes. It is displayed at the bottom of the Canvas.