



Std.  
11

# COMPUTER

## DARPAN

Maximum MCQs for Theory Examination

New Approach for Practical Examination

For Science & Common Stream

Explanation + Maximum MCQ + Practical

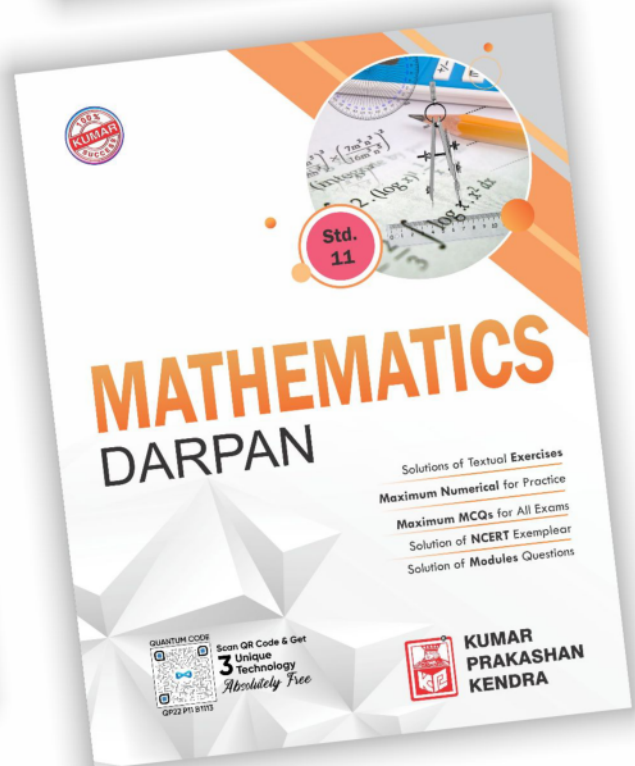
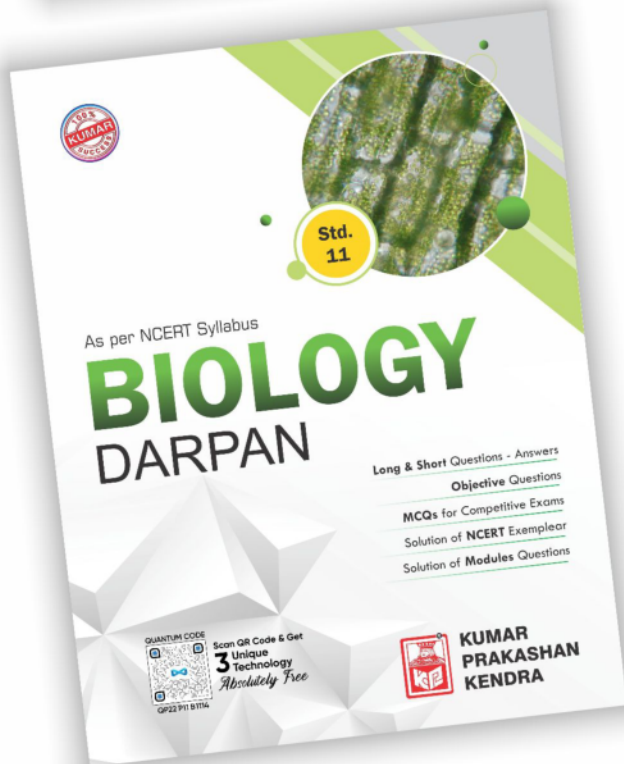
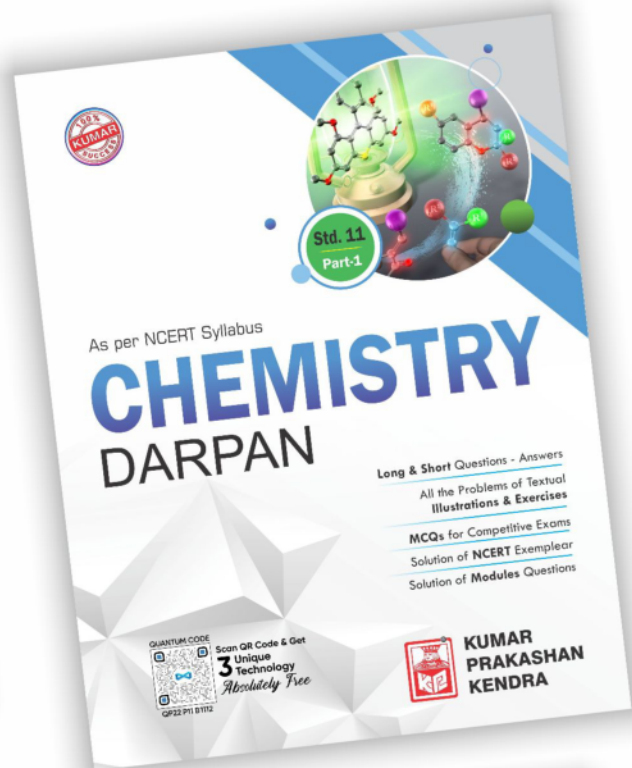
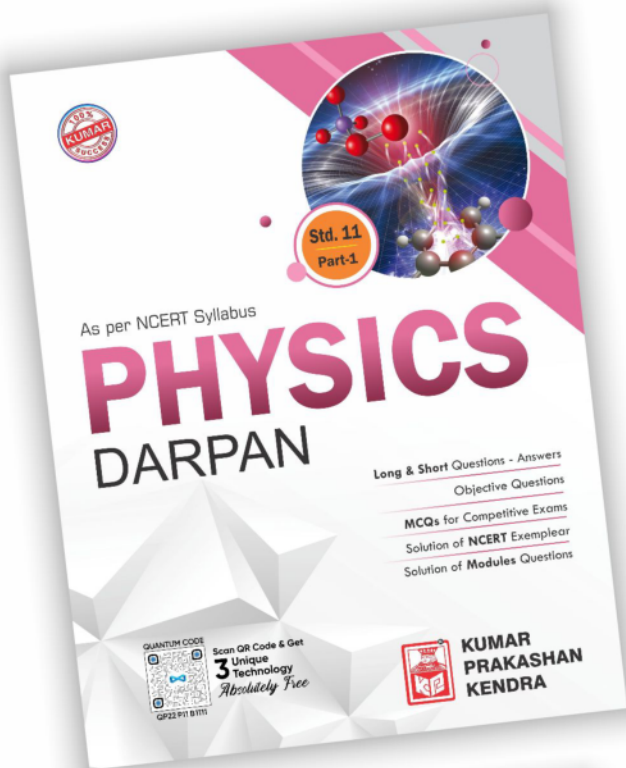
**ALL IN ONE**



**KUMAR  
PRAKASHAN  
KENDRA**

₹ 340/-

# For Std.-11 Latest Edition



**KUMAR  
PRAKASHAN  
KENDRA**



info@kumardarpan.com



www.kumardarpan.com



079-26562199, 26562200



Nirman Complex, 17-18, Ground Floor,  
Opp. Havmor, Stadium Circle,  
Navrangpura, Ahmedabad-09.



978-93-94555-15-0

**Introduction**

Dear Friends,

In the previous chapter, we discussed about multimedia and the basic building blocks of multimedia. In this chapter we will learn the authoring tools and its types for creating multimedia animations. First of all we will learn Pencil Program and then Synfig Studio Program. We will also learn the tools like toolbox, canvas, panel etc. How to create objects and how edited that we will learn. You would get the primary concept to make animation.

**Outline of the Chapter**

- 2.1 Authoring Tools And Its Types
- 2.2 Pencil
- 2.3 Synfig Studio
- 2.4 Getting Started In Synfig
- 2.5 Toolbox
- 2.6 Canvas
- 2.7 Panels
- 2.8 Creating a New File
- 2.9 Tools
- 2.10 Circle Tool
- 2.11 Duck
- 2.12 Rectangle Tool
- 2.13 Star and Polygon Tool
- 2.14 BLine Tool
- 2.15 Draw Tool
- 2.16 Fill Tool
- 2.17 Eyedrop Tool
- 2.18 Gradient Tool
- 2.19 Text Tool
- 2.20 Zoom Tool
- 2.21 Width Tool
- 2.22 Transform Tool
- 2.23 Smooth Move Tool
- 2.24 Scale Tool
- 2.25 Rotate Tool
- 2.26 Different Types of Tools And Uses

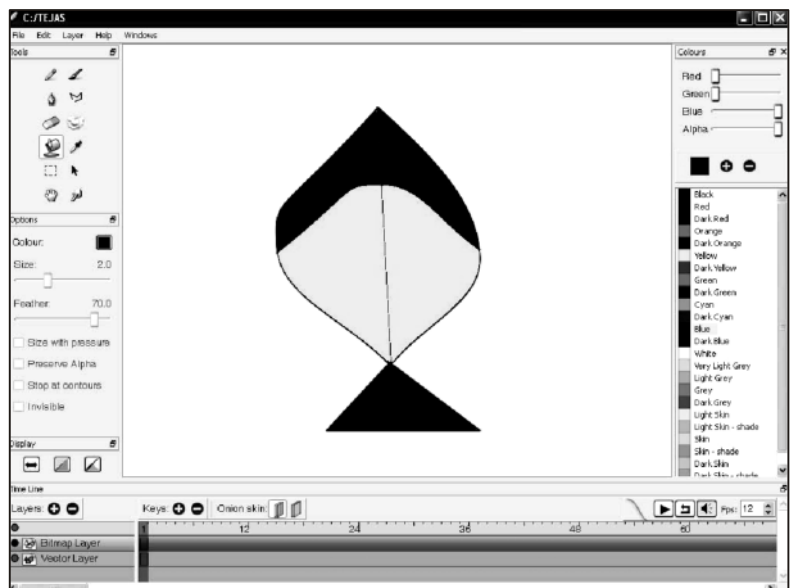
**2.1 Authoring Tools And Its Types**

- To create a multimedia presentation using these building blocks we need application programs known as "Multimedia Authoring Tools".
- These authoring tools provide the important framework to organize and edit the multimedia elements like graphics, sound, video and animation.
- Generally, the authoring tools are classified into three categories :
  - (1) **Card or Page based tools** :
    - ▶ In Card or Page based authoring tools the elements are organized as pages of a book or pile of cards.
    - ▶ The authoring tool links these pages into an organized sequence.

- ▶ These types of tool are useful when the different elements can be viewed individually like the pages of a book.
- ▶ Some examples of card based authoring tools are Hypercard and Multimedia Toolbox etc.
- (2) **Icon and Event based tools :**
- ▶ In Icon and Event based authoring tools the elements are organized as objects in a structural framework or process.
- ▶ Here you need to build the flowchart of the events or tasks and then add the elements as per the structure.
- ▶ Some examples of icon and event based authoring tools are Authorware and IconAuthor.
- (3) **Time based tools :**
- ▶ In Time based authoring tools the elements are organized along a timeline.
- ▶ They are useful when you want to give a message that has a beginning and an end.
- ▶ The elements are displayed as per the time or location of the events.
- ▶ Time based authoring tools are the most popular amongst all.
- ▶ Some examples of time based authoring tools are Synfig, Pencil, Flash and Director.
- ➔ There are many multimedia tools available in the market. Some of these tools are proprietary while others are open source.
- ➔ Some of the open source animation tools easily available on internet are Pencil and Synfig.

## 2.2 Pencil

- ➔ Pencil is a 2D animation software that lets you create traditional hand-drawn animation using both bitmap and vector graphics.
- ➔ It can be freely downloaded from <http://www.pencil-animation.org>.
- ➔ It is available on various operating systems like Linux, Windows and MacOS X.
- ➔ The interface of Pencil Software looks quite similar to other animation or drawing softwares.
- ➔ In pencil animation software, you can create good animation if you are good at free hand drawing instead of object drawing.



User interface of pencil animation software

## 2.3 Synfig Studio

- ➔ Synfig Studio is a time based multimedia authoring tool that falls in the category of open source.
- ➔ It is available free of cost on the internet and can be downloaded from <http://www.synfig.org>.
- ➔ Synfig Studio (or simply Synfig) is 2D vector animation software released in 2005 under the GNU GPL (General Public License).
- ➔ It is designed to produce film-quality animation with fewer people and resources.



- ➔ It is available on various operating systems like Linux, Windows and MacOS X.
- ➔ The first version of Synfig was 0.61.05 and new versions have been regularly launched with additional features till date.
- ➔ The latest version of Synfig is 0.63.05.
- ➔ Since it is not available as a standard package in Ubuntu Linux, we need to install it first.
- ➔ Once installed, it will be available under the Graphics option of Applications menu.
- ➔ Synfig stores animations in XML (extensible markup language) file format.
- ➔ File is often compressed using compression software gzip which stands for GNU zip.
- ➔ These files use the filename extension .sif in uncompressed form or .sifz in compressed form.

### Exam Oriented Question from Darpan

- 1) ..... application software is used to create multimedia presentation.
  - (A) Authoring Tool
  - (B) Editing Tool
  - (C) Extra Tool
  - (D) Animated Tool
- 2) These authoring tools provide the important framework to organize and edit the multimedia elements like ..... .
  - (A) text and picture
  - (B) audio and video
  - (C) animation
  - (D) all of these
- 3) The authoring tools are classified into ..... categories.
  - (A) 2
  - (B) 3
  - (C) 4
  - (D) 5
- 4) ..... is the type of authoring tool.
  - (A) Card or Page based tools
  - (B) Icon and Event based authoring tools
  - (C) Time based authoring tools
  - (D) All of these
- 5) In ..... tools the elements are organized as pages of a book or pile of cards.
  - (A) card or page based tools
  - (B) icon and event based authoring tools
  - (C) time based authoring tools
  - (D) all of these
- 6) ..... arranges the pages into an organized sequence.
  - (A) Card tool
  - (B) Page Based tool
  - (C) Authoring tool
  - (D) Animated tool
- 7) ..... tools are useful when the different elements can be viewed individually like the pages of a book.
  - (A) Card or Page based tools
  - (B) Icon and Event based authoring tools
  - (C) Time based authoring tools
  - (D) All of these
- 8) ..... option is the example of Card or Page Based Tool.
  - (A) Synfig, Pencil, Flash, Director
  - (B) Hyper Card, Multimedia Toolbox
  - (C) Authorware, IconAuthor
  - (D) All of these
- 9) Hyper card and Multimedia Toolbox are of ..... types.
  - (A) card or page based tools
  - (B) icon and event based authoring tools
  - (C) time based authoring tools
  - (D) all of these
- 10) In ..... authoring tools the elements are organized as objects in a structural framework or process.
  - (A) card or page based tools
  - (B) icon and event based authoring tools
  - (C) time based authoring tools
  - (D) all of these
- 11) In icon and event based tool, we need to build the ..... of the events or tasks and then add the elements as per the structure.
  - (A) program
  - (B) function
  - (C) flowchart
  - (D) algorithm
- 12) In ..... tool we need to build the flowchart of the events or tasks and then add the elements as per the structure.
  - (A) card or page based tools
  - (B) icon and event based authoring tools
  - (C) time based authoring tools
  - (D) all of these
- 13) ..... is the example of icon or event based tools.
  - (A) Synfig, Pencil, Flash, Director
  - (B) Hyper card, Multimedia Toolbox
  - (C) Authorware, IconAuthor
  - (D) All of these

- 14) **Authorware and IconAuthor are of ..... types of tools.**  
 (A) card or page based tools  
 (B) icon and event based authoring tools  
 (C) time based authoring tools  
 (D) all of these
- 15) **In ..... authoring tools the elements are organized along a timeline.**  
 (A) card or page based tools  
 (B) icon and event based authoring tools  
 (C) time based authoring tools  
 (D) all of these
- 16) **..... tools are useful when you want to give a message that has a beginning and an end.**  
 (A) Card or page based tools  
 (B) Icon and event based authoring tools  
 (C) Time based authoring tools  
 (D) All of these
- 17) **In ..... tools, the elements are displayed as per the time or location of the events.**  
 (A) card or page based tools  
 (B) icon and event based authoring tools  
 (C) time based authoring tools  
 (D) all of these
- 18) **..... authoring tools are the most popular amongst all.**  
 (A) Card or page based tools  
 (B) Icon and event based authoring tools  
 (C) Time based authoring tools  
 (D) All of these
- 19) **..... is the example of time based authoring tools.**  
 (A) Synfig, Pencil, Flash, Director  
 (B) Hyper card, Multimedia Toolbox  
 (C) Authorware, IconAuthor  
 (D) All of these
- 20) **Synfig, Pencil, Flash and director are of ..... types of authoring tools.**  
 (A) card or page based tools  
 (B) icon and event based authoring tools  
 (C) time based authoring tools  
 (D) all of these
- 21) **..... types of multimedia tools are available in the market.**  
 (A) Proprietary (B) Open source  
 (C) Both (A) and (B) (D) None of these
- 22) **..... is the animation tools easily available on internet for free download.**  
 (A) Hyper card, Multimedia Toolbox  
 (B) Synfig, Pencil  
 (C) Authorware, IconAuthor  
 (D) Flash, Director
- 23) **..... type of tool is the Pencil.**  
 (A) Bitmap (B) Vector  
 (C) Both (A) and (B) (D) None of these
- 24) **..... is used create traditional hand-drawn animation using both bitmap and vector graphics.**  
 (A) Pencil  
 (B) Synfig  
 (C) Hyper card  
 (D) Multimedia Toolbox
- 25) **Pencil is a ..... animation software.**  
 (A) 1D (B) 2D  
 (C) 3D (D) All of these
- 26) **Pencil software can be downloaded from ..... website.**  
 (A) www.pencilanimation.com  
 (B) www.pencil-animation.com  
 (C) www.pencilanimation.org  
 (D) www.pencil-animation.org
- 27) **Pencil is ..... type of tool.**  
 (A) proprietary (B) open source  
 (C) both (A) and (B) (D) none of these
- 28) **Pencil can be downloaded in ..... way.**  
 (A) free (B) payable  
 (C) partly payable (D) all of these
- 29) **Pencil program can be installed in ..... operating system.**  
 (A) Windows (B) Linux  
 (C) Mac (D) all of these
- 30) **In pencil animation software, you can create good animation if you are good at ..... .**  
 (A) element drawing (B) free hand drawing  
 (C) object drawing (D) pen drawing
- 31) **Synfig is ..... type of an authoring tool.**  
 (A) card or page based tools  
 (B) icon and event based authoring tools  
 (C) time based authoring tools  
 (D) all of these
- 32) **Synfig is ..... type of tool.**  
 (A) proprietary (B) open source  
 (C) both (A) and (B) (D) none of these

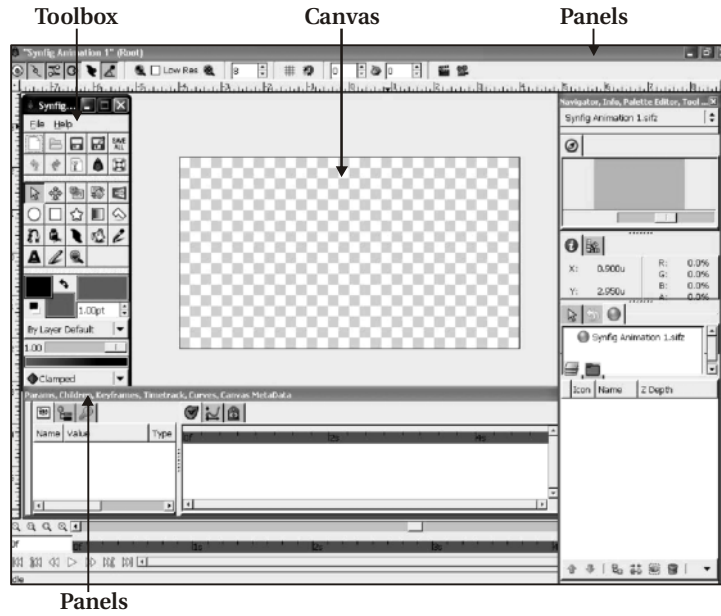
- 33) Synfig can be downloaded from ..... website.  
 (A) www.synfig.org  
 (B) www.synfig.com  
 (C) www.synfig-animation.org  
 (D) www.synfig-animation.com
- 34) How the Synfig software can be downloaded from internet ?  
 (A) Free (B) Payable  
 (C) Partly payable (D) All of these
- 35) Synfig software was released in 2005 under the ..... .  
 (A) GNU GLP (B) GNU GPL  
 (C) GUN GLP (D) GUN GPL
- 36) ..... is the full name of GPL.  
 (A) General Public License  
 (B) General Private License  
 (C) General Pagewise License  
 (D) General Performance License
- 37) Synfig was released in ..... .  
 (A) 2002 (B) 2003 (C) 2004 (D) 2005
- 38) ..... type of animation is used in Synfig.  
 (A) 1D Animation (B) 2D Animation  
 (C) 3D Animation (D) All of these
- 39) ..... is designed to produce film-quality animation with fewer people and resources.  
 (A) Pencil  
 (B) Synfig  
 (C) Hyper card  
 (D) Multimedia toolbox
- 40) Synfig can be installed on ..... operating System.  
 (A) Windows (B) Linux  
 (C) Mac (D) All of these
- 41) ..... was the first version of Synfig.  
 (A) 0.61.05 (B) 0.62.05  
 (C) 0.63.05 (D) 0.64.05
- 42) ..... is the latest version of Synfig.  
 (A) 0.61.05 (B) 0.62.05  
 (C) 0.63.05 (D) 0.64.05
- 43) After installing Synfig, it is available in ..... menu-option.  
 (A) Application → Image  
 (B) Application → Graphics  
 (C) Application → Synfig  
 (D) Application → Picture
- 44) Synfig saves the file in ..... format.  
 (A) XLM (B) XLS (C) XLA (D) XML
- 45) ..... is the full form of XML.  
 (A) Extensible Markup Language  
 (B) Extension Markup Language  
 (C) Explanation Markup Language  
 (D) Extra Markup Language
- 46) Using ..... software, Synfig program can be compressed.  
 (A) WinZip (B) WinRAR  
 (C) Gzip (D) Archive Explorer
- 47) gzip stands for ..... .  
 (A) GPL zip (B) GNU zip  
 (C) GLP zip (D) GUN zip
- 48) Synfig files use the filename extension ..... in uncompressed form.  
 (A) .sif (B) .syf (C) .syn (D) .snf
- 49) Synfig files use the filename extension ..... in compressed form.  
 (A) .sifz (B) .syfz (C) .synz (D) .snfz

<b>Ans. :</b>	(1 – A)	(2 – D)	(3 – B)	(4 – D)	(5 – A)	(6 – C)	(7 – A)	(8 – B)	(9 – A)	(10 – B)
	(11 – C)	(12 – B)	(13 – C)	(14 – B)	(15 – C)	(16 – C)	(17 – C)	(18 – C)	(19 – A)	(20 – C)
	(21 – C)	(22 – B)	(23 – C)	(24 – A)	(25 – B)	(26 – D)	(27 – B)	(28 – A)	(29 – D)	(30 – B)
	(31 – C)	(32 – B)	(33 – A)	(34 – A)	(35 – B)	(36 – A)	(37 – D)	(38 – B)	(39 – B)	(40 – D)
	(41 – A)	(42 – C)	(43 – B)	(44 – D)	(45 – A)	(46 – C)	(47 – B)	(48 – A)	(49 – A)	

## 2.4 Getting Started in Synfig

- ➔ To start Synfig, in the menu bar click Applications → Graphics → Synfig.
- ➔ When you start Synfig Studio you must have observed that it does not start in one window, but opens a number of individual windows on the desktop.
- ➔ We can drag the windows to change its size.
- ➔ If you want to reset the Synfig studio window to default window arrangement, Select Toolbox → File menu → Panels → Reset Windows to Original Layout.

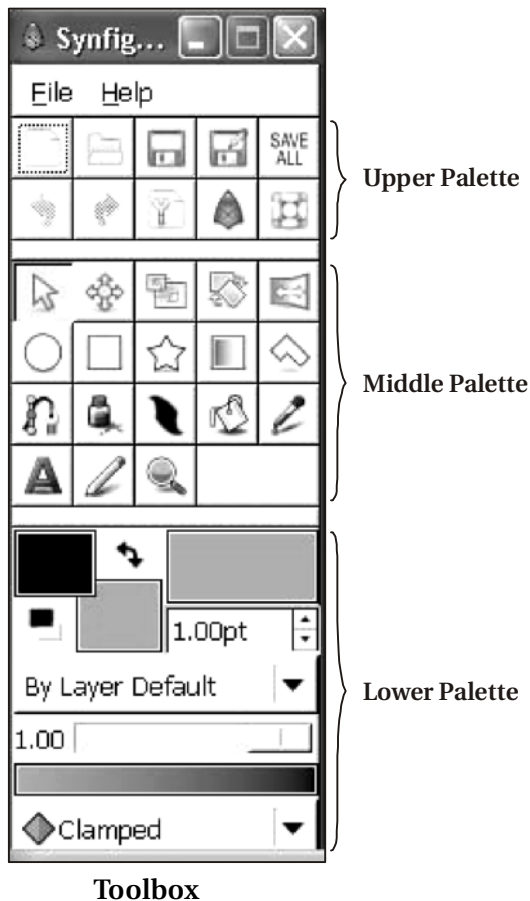
➔ The components in the user interface are: (1) Toolbox (2) Canvas and (3) Panels.



Synfig user interface

## 2.5 Toolbox

- ➔ Toolbox is the main window.
- ➔ It contains system menu and tools to create and edit your artwork.
- ➔ Closing the toolbox exits the application.

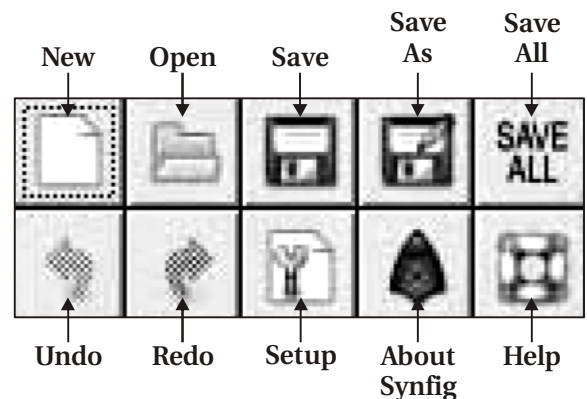


- ➔ Even if you have several projects open there will only be one Toolbox for all.
- ➔ Using the toolbox we can create a new file, open an existing file, save the file and setup properties.
- ➔ The toolbox also contains the general tools like circle, rectangle, transform and others, for creating and editing an object.
- ➔ The toolbox window is separated into three areas or palette :

- (1) The Upper Palette
- (2) The Middle Palette
- (3) The Lowest Palette



















### (1) The Upper Palette :

- ▶ Work related to the file can be done.
- ▶ It contains buttons for standard file operations like create a new file, open a file, save, save all files, undo and redo as well as access to the settings dialog and the help system.



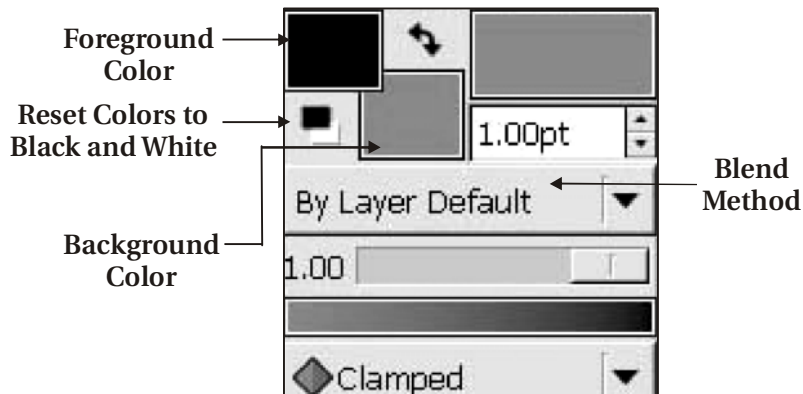
**(2) The Middle Palette :**

- ▶ In the middle palette we have the tools like circle, rectangle, transform and others.
- ▶ It is useful for creating and manipulating an object.
- ▶ It has 18 tools like...

No.	Tools Name	Icon	No.	Tools Name	Icon
(1)	Transform tool		(10)	Polygon tool	
(2)	SmoothMove tool		(11)	BLine tool	
(3)	Scale tool		(12)	Draw tool	
(4)	Rotate tool		(13)	Width tool	
(5)	Mirror tool		(14)	Fill tool	
(6)	Circle tool		(15)	Eyedrop tool	
(7)	Rectangle tool		(16)	Text tool	
(8)	Star tool		(17)	Sketch tool	
(9)	Gradient tool		(18)	Zoom tool	

**(3) The lowest palette :**

- ▶ The lowest palette contains the default settings for new layers like :



**(A) Foreground and Background Color**

- ▶ It creates the fill and the outline colors for the object.
- ▶ When we create a layer without outline then it has only fill color.
- ▶ We can change the color by clicking on fill or outline color.

**(B) Brush Size**

- ▶ Sets the size of the line for new outline layers.

**(C) Blend Method**

- ▶ It sets the blend method.
- ▶ It is set to "By layer default".

**(D) Opacity**

- ▶ It controls the layers visibility.
- ▶ 0 means the layer is invisible and 1 means the layer is visible.

**(E) Gradient**

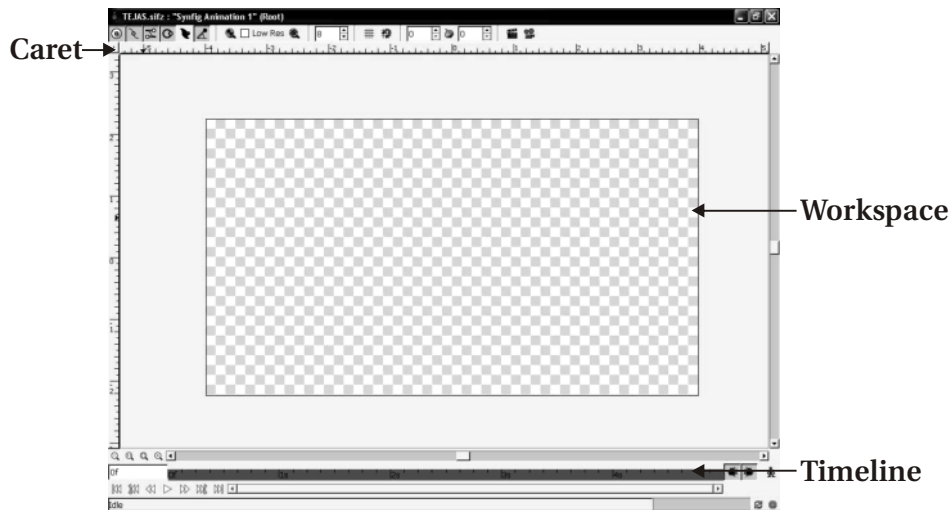
- ▶ Used by Gradient layers as their fill.
- ▶ It sets to a default gradient between the foreground color and background color.

**(F) Interpolation**

- ▶ Each waypoint has an interpolation setting.
- ▶ It determines the manner in which the parameter changes.

## 2.6 Canvas

- ➔ When you open a new file or create a new project you will see the canvas window.
- ➔ It can be seen at the center of the user interface.
- ➔ This is the place where you display your artwork and create animation.
- ➔ Whenever we start Synfig studio a new canvas window appears.
- ➔ The area with the grey check-board pattern is the working area in which you can create elements/layers and manipulate them.



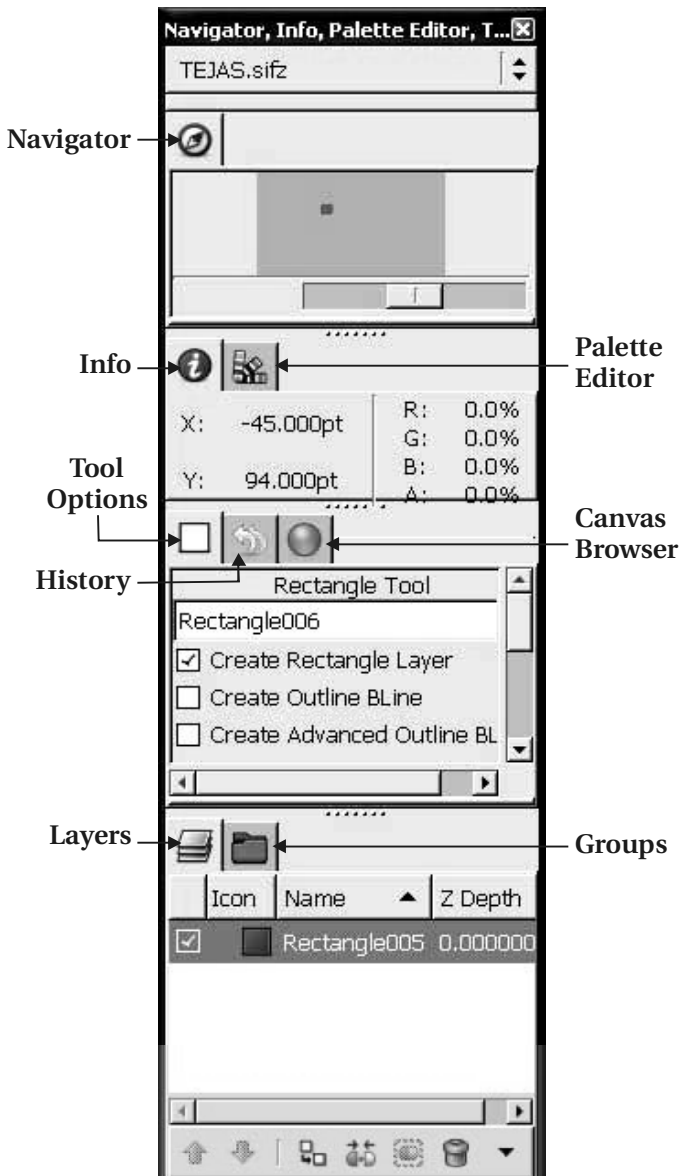
Canvas window

- ➔ In the upper left corner of the canvas window you can see 'Caret' a little black triangle.
- ➔ Clicking on this button, the canvas window menu will pop up which allows access to most of the Synfig features.
- ➔ Generally, in most of the applications you find the set of menus at the top of the screen or at the top of the drawing window.
- ➔ You can also see the timeline which appears only when you have non-zero duration in the settings dialog of your project.
- ➔ To the left you can see the number of the current frame.

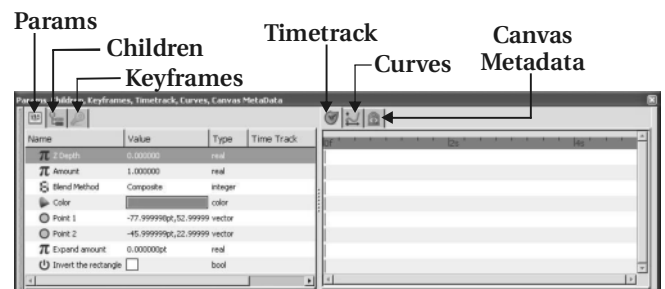
- ➔ On the right side two buttons are there.
  - ▶ To lock/unlock the keyframes a button is there named "Unlock Past Keyframes"
  - ▶ To switch the animation status a button is there named "Turn on animation editing mode."

## 2.7 Panels

- ➔ Synfig has different type of panels like layers, parameter, history etc.
- ➔ Panels contain tools and information about certain elements of your project.
- ➔ Some panels will allow you to modify these elements.
- ➔ The two windows on the bottom and to the right are customizable dock dialogs.
- ➔ Each dock dialog contains a set of panels which are arranged horizontally or vertically.
- ➔ Some panels share the same space inside the dock dialog and we can switch between them by clicking on their tabs.
- ➔ We can rearrange the contents of dock dialogs by dragging the panel tab to where we want it.
- ➔ If accidentally we close a panel go to the Toolbox, select File → Panels and click on the name of the panel you need. Then drag the panel into the dock dialog where you want to place it.



Vertically Panel



Horizontally Panel

### ➔ Some Important Panels :

#### (1) Layers Panel

- ▶ Displays the layers of working canvas.
- ▶ Allows to manipulate the layers.

#### (2) Params Panel

- ▶ Shows the currently selected layer parameters.
- ▶ When multiple layers are selected, only the parameters that are common in the selected layers are displayed.

#### (3) Tool Options Panel

- ▶ Shows options that are specific to the currently selected tool.

#### (4) Navigator

- ▶ Shows a thumbnail image of what the currently selected canvas look like.
- ▶ We can also zoom in and move the focus around.

#### (5) History Panel

- ▶ Keeps track of all the actions that are done while editing the file.
- ▶ The checkbox column is used to disable specific actions without going through the entire action list.
- ▶ If we want to redo or undo an action or group of actions just click on the check box.

## 2.8 Creating a New File

- ➔ Select ToolBox → New option.
- ➔ Click on the Caret → Edit → Properties.
- ➔ You can set the name of the file and give a description to your animation.
- ➔ In the window, you can see three tabs namely (1) Image (2)Time (3) Other.
- ➔ The Image tab is used to set the image size and image area.

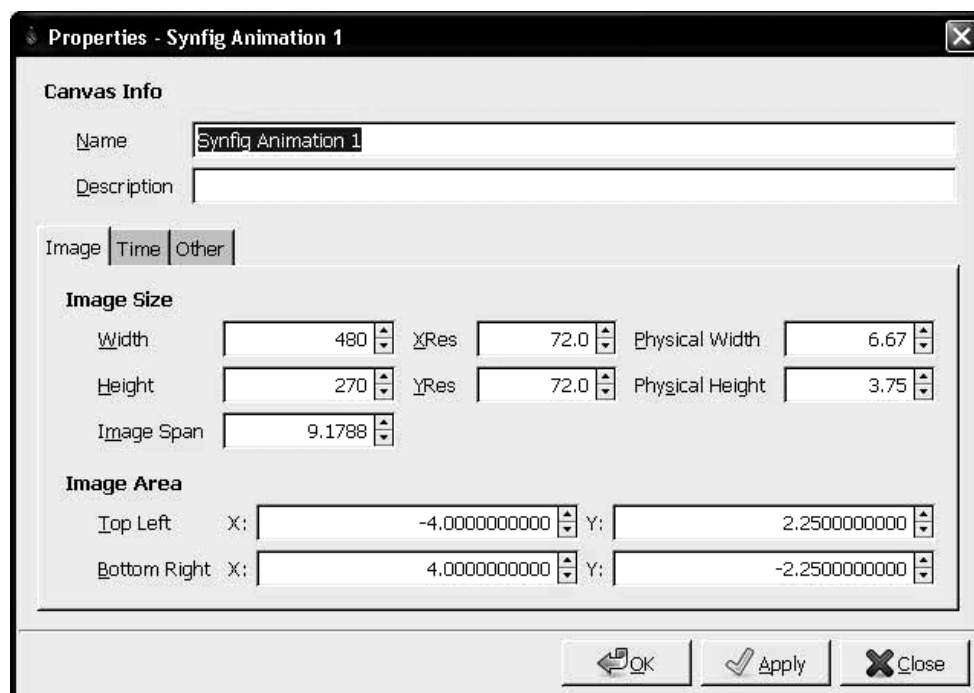
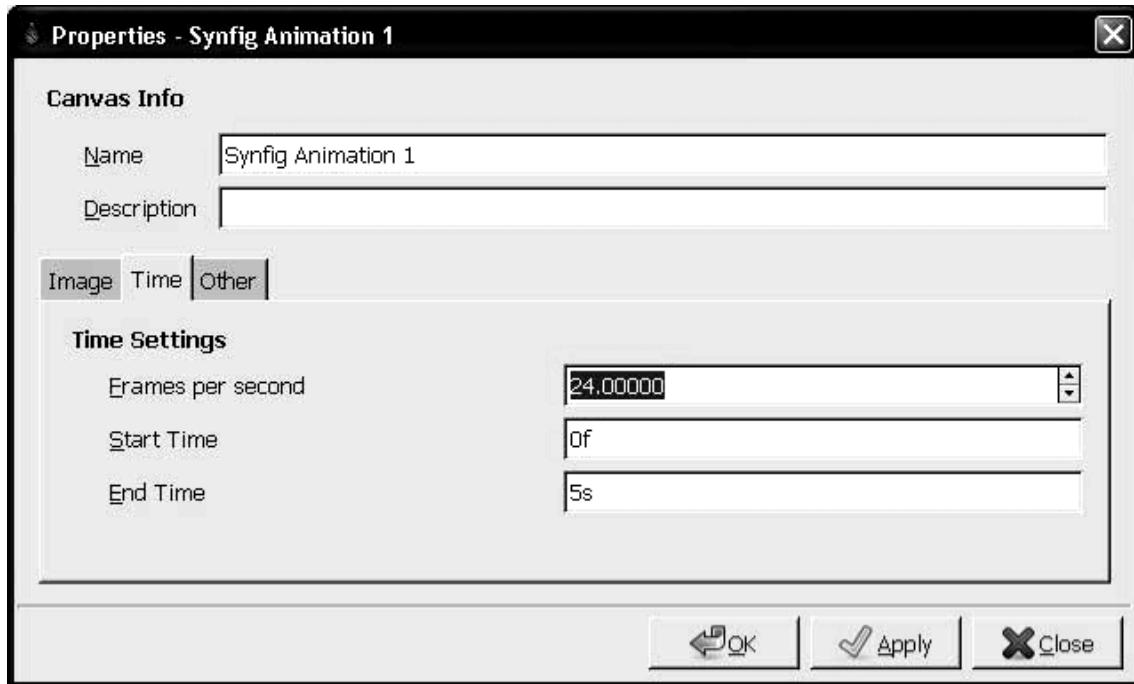


Image Tab Information

- ➔ The Time tab is used for setting the start time, end time and frames per second.



#### Time Tab Information

- ➔ Using other tab under "Locks and Links", we can control Image Width, Image Height, Image Aspect, Image Span, Pixel Width, Pixel Height, Pixel Aspect etc.
- ➔ After creating the file and setting properties, we can now start creating our artwork and animation.

#### Exam Oriented Question from Darpan

- 50) ..... menu-option is used to Synfig Software.  
 (A) Application → Graphics → Synfig  
 (B) Application → Image → Synfig  
 (C) Application → Publishing → Synfig  
 (D) Application → Animation → Synfig
- 51) As soon as Synfig starts multi windows appear. Choose the correct option.  
 (A) False  
 (B) True  
 (C) Can't Say  
 (D) None of these
- 52) How to change the size of window of Synfig Studio ?  
 (A) By maximizing  
 (B) Using drag and drop  
 (C) By double clicking on the window  
 (D) Dragging the boundary lines
- 53) How to reset the Synfig Studio Window to its default window ?  
 (A) File Menu → Panels → Reset to Original Window  
 (B) File Menu → Panels → Reset Windows to Original Layout  
 (C) File Menu → Reset → Panels Windows to Original Layout  
 (D) File Menu → Reset → Panels to Original Layout
- 54) How many components are there in the user interface for synfig studio ?  
 (A) 2 (B) 3 (C) 4 (D) 5
- 55) ..... is included as the component of Synfig studio.  
 (A) Toolbox (B) Canvas  
 (C) Panel (D) All of these
- 56) ..... is the main window of Synfig.  
 (A) Toolbox (B) Canvas  
 (C) Panel (D) All of these
- 57) ..... windows includes system menu and tools to create and edit your artwork.  
 (A) Canvas (B) Panel  
 (C) Toolbox (D) All of these
- 58) Closing the ....., exists the Synfig application.  
 (A) toolbox (B) canvas  
 (C) panel (D) all of these

- 59) ..... work is done using toolbox.  
 (A) Create a new file  
 (B) Save the file  
 (C) Open the saved file  
 (D) All of these
- 60) ..... tool is included in Toolbox.  
 (A) Circle (B) Rectangle  
 (C) Transform (D) All of these
- 61) There are ..... menus in Toolbox.  
 (A) 2 (B) 3  
 (C) 4 (D) 5
- 62) ..... are the menus of toolbox.  
 (A) Animation, Image  
 (B) Format, Help  
 (C) File, Help  
 (D) Edit, Help
- 63) The toolbox window is separated into ..... areas or palettes.  
 (A) 2 (B) 3  
 (C) 4 (D) 5
- 64) ..... is the option of toolbox area or palette.  
 (A) The upper palette  
 (B) The middle palette  
 (C) The lowest palette  
 (D) All of these
- 65) Work related to ..... can be done in the upper palette.  
 (A) create a new file , organize the files  
 (B) saving a file, open saved file  
 (C) undo / redo process  
 (D) all of these
- 66) There are ..... tools in the upper palette.  
 (A) 8 (B) 10  
 (C) 12 (D) 14
- 67) ..... tool is available in the Upper Palette.  
 (A) File, Open, Save, Save As, Save All  
 (B) Undo, Redo  
 (C) Setup, About Synfig Studio  
 (D) All of these
- 68) ..... work is done using Middle palette.  
 (A) Create an object  
 (B) Modify an object  
 (C) Both (A) and (B)  
 (D) Creating a file and save it.
- 69) There are ..... tools in the middle palette.  
 (A) 10 (B) 14  
 (C) 16 (D) 18
- 70) ..... tool is available in the Lowest Palette.  
 (A) Transform, Smoothmove, Scale, Rotate  
 (B) Mirror, Circle, Rectangle, Star  
 (C) Gradient, Polygon, BLine, Draw  
 (D) All of these
- 71) ..... tool is available in the Middle Palette.  
 (A) Circle (B) Rectangle  
 (C) Transform (D) All of these
- 72) The lowest palette contains the default settings for ..... .  
 (A) toolbox (B) layers  
 (C) canvas (D) timeline
- 73) ..... option is available in the Lowest Palette.  
 (A) Foreground and Background Color  
 (B) Brush, Size, Blend Method  
 (C) Opacity, Gradient  
 (D) All of these
- 74) ..... creates the fill and the outline colors for the object.  
 (A) Opacity  
 (B) Gradient  
 (C) Foreground and Background Color  
 (D) Blend Method
- 75) When we create a layer ..... then it has only fill color.  
 (A) Without out line  
 (B) With out line  
 (C) Without fill colour  
 (D) With fill colour
- 76) ..... sets the size of the line for new outline layers.  
 (A) Opacity (B) Gradient  
 (C) Brush Size (D) Blend Method
- 77) ..... is set to "By layer default".  
 (A) By Blend Layer (B) By Layer Default  
 (C) By Default Layer (D) By Default Blend
- 78) ..... controls the layers visibility .  
 (A) Gradient (B) Brush Size  
 (C) Blend Method (D) Opacity
- 79) ..... means the layer is invisible.  
 (A) 0 (B) 1 (C) On (D) Off

- 80) ..... means the layer is visible.  
(A) 0 (B) 1 (C) On (D) Off
- 81) ..... is used by layers as their fill.  
(A) Foreground Color (B) Background Color  
(C) Gradient (D) Interpolation
- 82) ..... sets to a default gradient between the foreground color and background color.  
(A) Foreground Color (B) Background Color  
(C) Gradient (D) Interpolation
- 83) Each waypoint has ..... setting.  
(A) foreground color (B) background color  
(C) gradient (D) interpolation
- 84) ..... determines the manner in which the parameter changes.  
(A) Foreground Color (B) Background Color  
(C) Gradient (D) Interpolation
- 85) When you open a new file or create a new project you will see the ..... window.  
(A) canvas (B) user  
(C) animation (D) all of these
- 86) Canvas can be seen at the ..... of the user interface.  
(A) upper part (B) center part  
(C) lower part (D) none of these
- 87) ..... is the place where you display your artwork and create animation.  
(A) Toolbox (B) Panels  
(C) Canvas (D) None of these
- 88) The area with the grey check-board pattern is the ..... .  
(A) working area (B) document area  
(C) graphics area (D) animation area
- 89) The area with the ..... check-board pattern is the working area.  
(A) green (B) black  
(C) blue (D) grey
- 90) ..... work is done in the working area of Synfig.  
(A) Creating elements/layers  
(B) Manipulating elements/layers  
(C) Both (A) and (B)  
(D) None of these
- 91) In the upper left corner of the canvas window you can see ..... a little black triangle.  
(A) carriage (B) caret  
(C) carrot (D) caster
- 92) ..... is true for caret.  
(A) It is in the upper left corner of canvas.  
(B) It is black.  
(C) It is in triangle shape.  
(D) All of these
- 93) ..... is useful for most of the facilities of Synfig Studio.  
(A) Canvas Menu (B) Synfig Menu  
(C) Layer Menu (D) Panel Menu
- 94) How many menus are there when we open the Canvas menu ?  
(A) 6 (B) 7 (C) 8 (D) 9
- 95) Generally, in most of the applications you find the set of menus at the ..... of the screen.  
(A) upper part (B) lower part  
(C) left side (D) right side
- 96) We can also see ..... which appears only when you have non-zero duration in the settings dialog box.  
(A) rulerbar (B) timeline  
(C) toolbar (D) scrollbar
- 97) To the left of the canvas we can see ..... .  
(A) status of animation  
(B) buttons to lock/unlock the keyframe.  
(C) the number of current frame.  
(D) all of these
- 98) From the right side of the canvas, we can know ..... .  
(A) status of animation  
(B) buttons to lock/unlock the keyframe.  
(C) both (A) and (B)  
(D) the number of current frame.
- 99) How many buttons are there on the right side of the canvas ?  
(A) 2 (B) 3  
(C) 4 (D) 5
- 100) ..... button is displayed on the right side of the canvas.  
(A) Unlock past keyframe  
(B) Unlock future keyframe  
(C) Turn on animation editing mode  
(D) All of these
- 101) ..... is available in Synfig Studio.  
(A) Layer (B) Parameter  
(C) History (D) All of these

- 102) ..... contains tools and information about certain elements of your project.  
 (A) Layer (B) Panel  
 (C) Canvas (D) Toolbox
- 103) How many windows are there on the bottom and to the right are customizable dock dialogs ?  
 (A) 2 (B) 3  
 (C) 4 (D) 5
- 104) The two windows on the bottom and to the right are customizable ..... dialogs.  
 (A) dome (B) dos  
 (C) dock (D) door
- 105) Each dock dialog contains a set of panels which are arranged ..... .  
 (A) horizontally (B) vertically  
 (C) (A) or (B) (D) none of these
- 106) We can rearrange the contents of dock dialogs by ..... the panel tab to where we want it.  
 (A) clicking (B) double clicking  
 (C) triple clicking (D) dragging
- 107) ..... menu option is used to display any panels.  
 (A) File / View / Panels  
 (B) File / Panels  
 (C) File / Panels / View  
 (D) File / View
- 108) Panels display ..... option.  
 (A) layers panel, params panel  
 (B) tool options panel, history panel  
 (C) navigator  
 (D) all of these
- 109) ..... shows the layer of the current working canvas.  
 (A) Layers panel (B) History panel  
 (C) Params panel (D) Tool options panel
- 110) ..... shows the parameters of the current layer.  
 (A) Layers panel (B) History panel  
 (C) Params panel (D) Tool options panel
- 111) When multiple layers are selected, only the parameters that are common in the selected layers are displayed in ..... panels.  
 (A) Layers panel (B) History panel  
 (C) Params panel (D) Tool options panel
- 112) ..... show options that are specific to the currently selected tool.  
 (A) Layers panel (B) History panel  
 (C) Params panel (D) Tool options panel
- 113) ..... shows a thumbnail image of what the currently selected canvas look like.  
 (A) Navigator (B) History panel  
 (C) Params panel (D) Tool options panel
- 114) Using ..... , we can also zoom in and move the focus around.  
 (A) navigator  
 (B) history panel  
 (C) params panel  
 (D) tool options panel
- 115) ..... keeps track of all the actions that are done while editing the file.  
 (A) Layers panel (B) History panel  
 (C) Params panel (D) Tool options panels
- 116) The ..... column is used to disable specific actions without going through the entire action list.  
 (A) Checkbox (B) Radio button  
 (C) Pull down (D) Drop down
- 117) We can ..... an action or group of actions just click on the check box.  
 (A) cut, copy (B) copy, paste  
 (C) undo, redo (D) drag, drop
- 118) When we move the mouse pointer across the penal, ..... displays the information related to the task.  
 (A) viewer tip (B) tool tip  
 (C) work tip (D) panel tip
- 119) ..... is the menu-option to make a new file in Synfig.  
 (A) Toolbox / New Tool  
 (B) File / New  
 (C) (A) or (B)  
 (D) None of these
- 120) ..... menu-option is used to open the synfig file property window.  
 (A) Caret / Edit / Properties  
 (B) Caret / File / Properties  
 (C) Caret / Format / Properties  
 (D) Create / View / Properties

- 121) ..... can be done using File properties dialog box of Synfig.  
 (A) Set the name of the file  
 (B) Give a description to the animation  
 (C) Give information related to image and time  
 (D) All of these
- 122) ..... tabs are available in the File properties dialog box of Synfig.  
 (A) 2 (B) 3 (C) 4 (D) 5
- 123) Which tab is available in the File properties dialog box of Synfig ?  
 (A) Image (B) Time  
 (C) Other (D) All of these
- 124) The ..... tab is used to set the image size and image area.  
 (A) image (B) time  
 (C) other (D) none of these
- 125) Which tab is used for setting the start time, end time and frames per second ?  
 (A) Image (B) Time  
 (C) Other (D) All of these
- 126) Number of frames running every second is known as ..... .  
 (A) fps (B) fsp  
 (C) fpa (D) fap
- 127) fps stands for ..... .  
 (A) File Per Second  
 (B) Form Per Second  
 (C) Frame Per Second  
 (D) Font Per Second
- 128) Clicking ..... button in the Field properties dialog box, changes can be saved.  
 (A) Finish (B) OK  
 (C) End (D) Save
- 129) After creating ..... we can now start creating our artwork and animation.  
 (A) creating a file  
 (B) set the properties  
 (C) both (A) and (B)  
 (D) none of these

**Ans. :** (50 – A) (51 – B) (52 – D) (53 – B) (54 – B) (55 – D) (56 – A) (57 – C) (58 – A) (59 – D)  
 (60 – D) (61 – A) (62 – C) (63 – B) (64 – D) (65 – D) (66 – B) (67 – D) (68 – C) (69 – D)  
 (70 – D) (71 – D) (72 – B) (73 – D) (74 – C) (75 – A) (76 – C) (77 – B) (78 – D) (79 – A)  
 (80 – B) (81 – C) (82 – C) (83 – D) (84 – D) (85 – A) (86 – B) (87 – C) (88 – A) (89 – D)  
 (90 – C) (91 – B) (92 – D) (93 – A) (94 – C) (95 – A) (96 – B) (97 – C) (98 – C) (99 – B)  
 (100 – D) (101 – D) (102 – B) (103 – A) (104 – C) (105 – C) (106 – D) (107 – B) (108 – D) (109 – A)  
 (110 – C) (111 – C) (112 – D) (113 – A) (114 – C) (115 – D) (116 – A) (117 – C) (118 – B) (119 – C)  
 (120 – A) (121 – D) (122 – B) (123 – D) (124 – A) (125 – B) (126 – A) (127 – C) (128 – B) (129 – C)

## 2.9 Tools

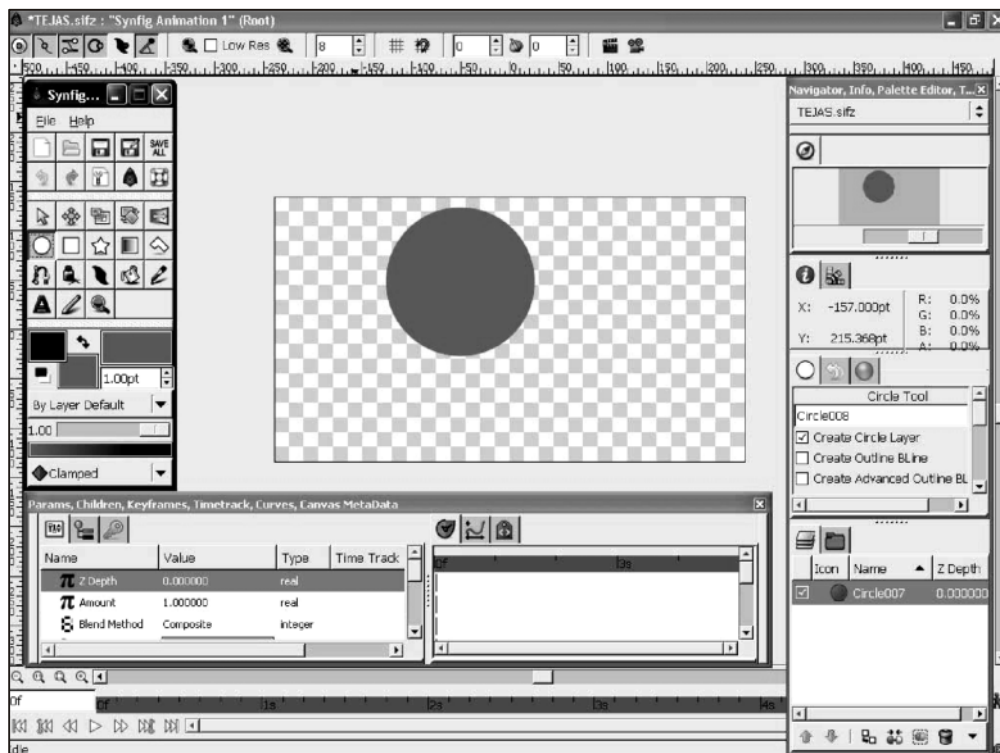
- ➔ Tools help you to create the artwork for your multimedia project.
- ➔ Synfig provides various tools to create and manipulate an object.
- ➔ Each tool has its own set of options and parameters.
- ➔ Tools are visible in the tool options panel.
- ➔ Parameters are visible in the parameter panel.
- ➔ When you select a particular tool, the tool options panel displays the options that are available for that tool.



Tools

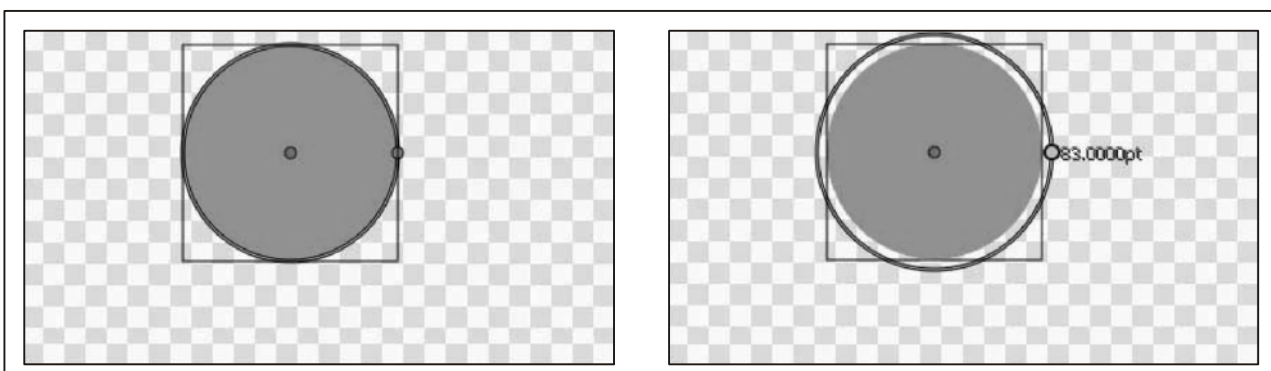
## 2.10 Circle Tool

- The Circle tool is used to create a new circle layer. Circle layers are used to represent circles.
- A circle has two important parameters centre and radius.
- We can see the parameters in the parameter panel.
- We can change any of the parameter after drawing the object.
- To draw a circle select the circle tool.
- Click in the working area where you want the center of the circle to be and then drag to set the radius.
- If we select the Create Outline BLine option then the circle object will be created with and outline.



Use of Circle Tool

- We can also use the Tools options panel to change the name or circle layer.
- We can create additional layers using the checkboxes like create outline layer which is used to create and outline around the circle.
- To increase the radius of the circle or move the circle then click on the duck.
- If ducks are not visible then click on the transform tool to see the ducks.



Circle on the duck

## 2.11 Duck

- ➔ A duck is a handle that is used to control some parameter of a layer.
- ➔ A circle will have two ducks.
  - (1) To control the position of its centre.
  - (2) To control its radius.
- ➔ We can see the green and blue colored ducks.
- ➔ Ducks come in different color and they have specific meaning.
- ➔ The color of the duck signifies a change in the following aspects of the object.

(1) Green	-	position of the object
(2) Blue	-	radius of the circle.
(3) Orange	-	vertices
(4) Yellow	-	curves
(5) Dark blue	-	to change the angle in star

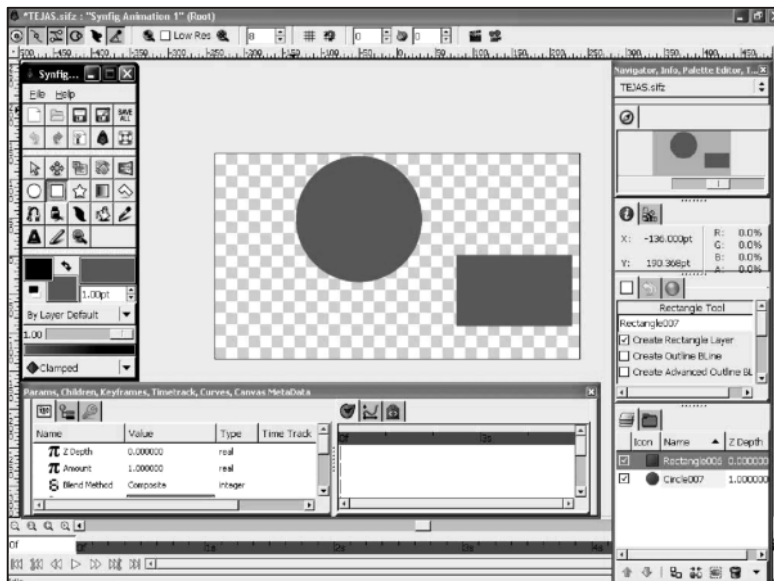
- ➔ Ducks are displayed in the work area for all the currently selected layers.
- ➔ We have to drag the ducks to change the parameters.
- ➔ For more precise control, the cursor keys can be used.
- ➔ If we want to constrain the movement to be either horizontal or vertical then hold down the shift key while dragging.
- ➔ Sometimes, one type of duck interferes or gets into the way of another duck.
- ➔ We can turn the ducks on/off by selecting the option present on the top of the canvas window.



Turn On/Off Various ducks

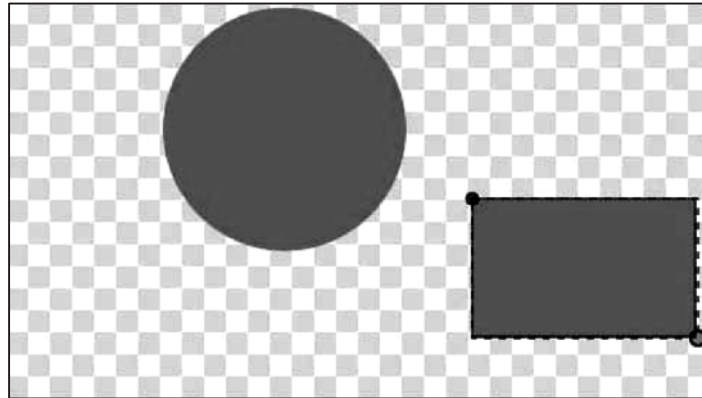
## 2.12 Rectangle Tool

- ➔ It is used to create a rectangle layer.
- ➔ To draw a rectangle, it is selected.
- ➔ Click where we want any corner of the rectangle to be and then drag to the opposite corner.



Use of Rectangle tool

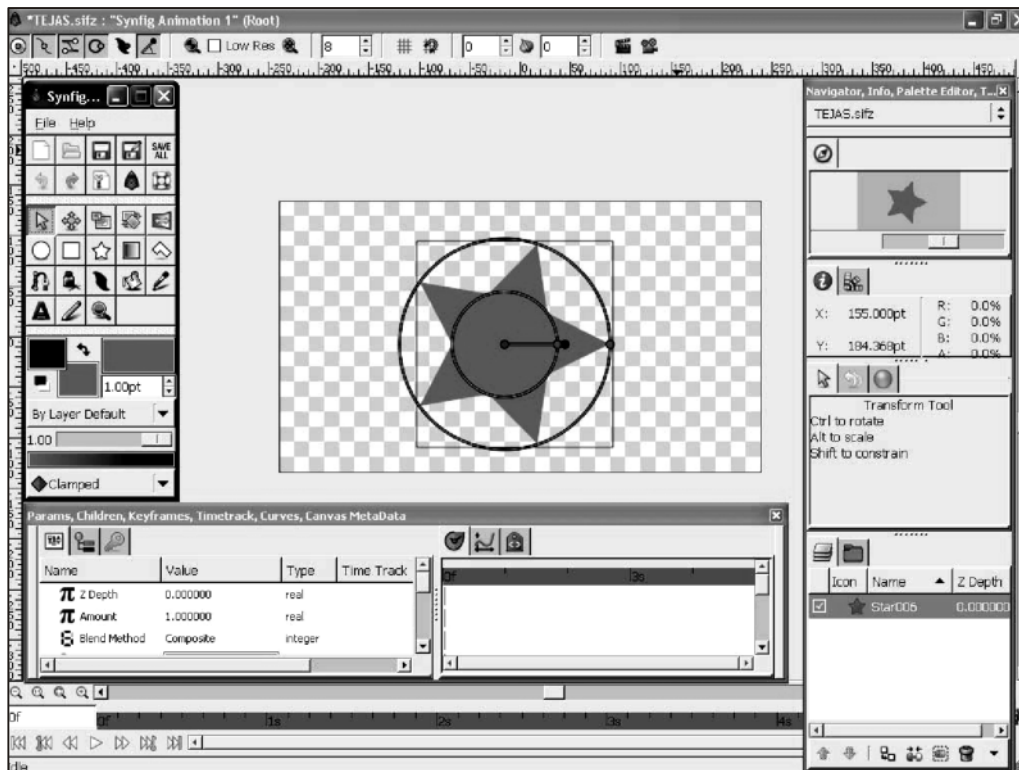
- ➔ We can see the tool options available in the tool options panel.
- ➔ The parameters are displayed in the parameter panel.
- ➔ As we have two objects on the working area, the parameter panel displays the parameters that are common to circle and rectangle.
- ➔ This way we can change a single parameter to make changes in all the objects.
- ➔ If we want to see the parameters of only the rectangle object, then in the layers panel we can select rectangle layer which will display the parameters of rectangle only.
- ➔ We can make changes to the rectangle by selecting the duck and then dragging it.



Ducks for Rectangle tool

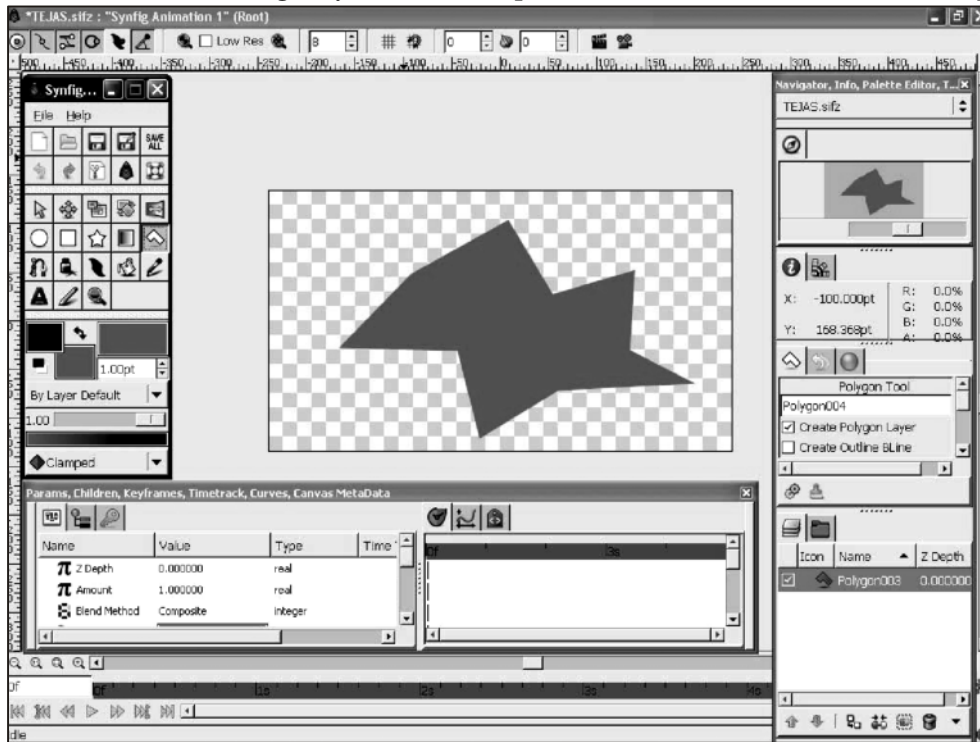
### 2.13 Star and Polygon Tool

- ➔ We can use the star and polygon tool to create the star layer and polygon layer.
- ➔ The only change that you can see is while editing them.
- ➔ The ducks for each shape is different and change accordingly.



Use of Star Tool

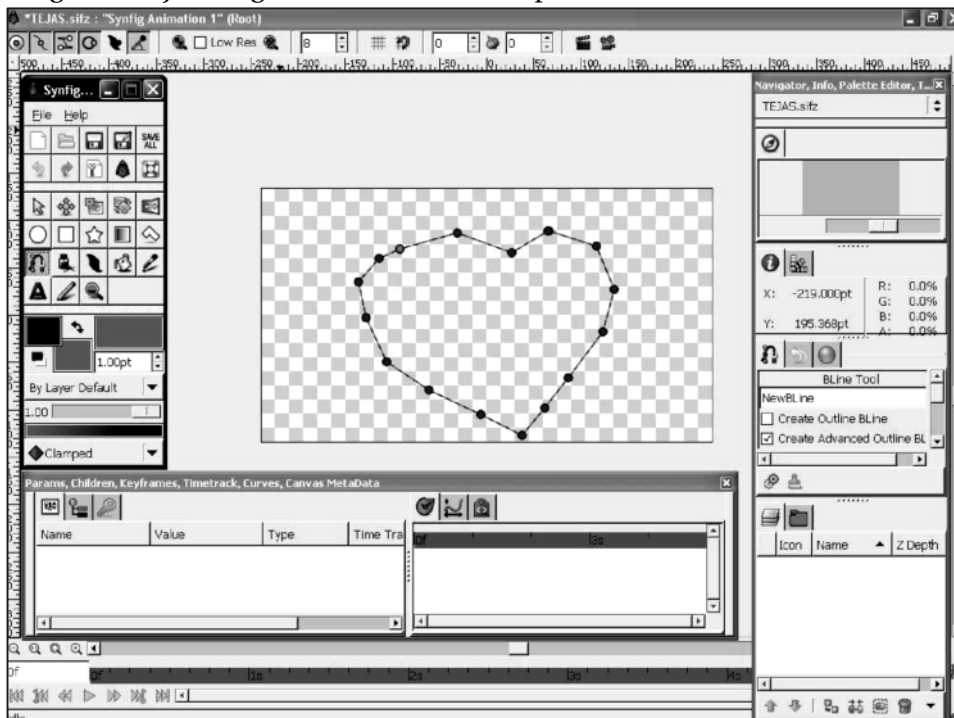
- ➔ To make a star, click the star tool and then drag in the working area.
- ➔ A polygon can be created using any number of points and then click on the first point to close it.



Use of Polygon Tool

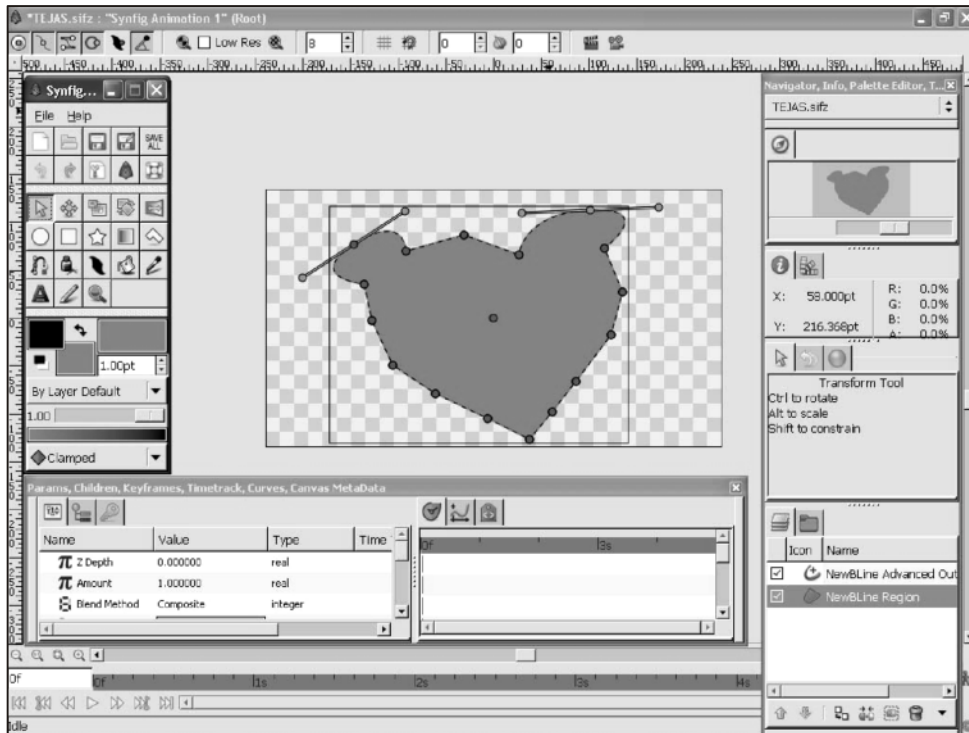
## 2.14 BLine Tool

- ➔ Bline tool is used to make objects with any number of points and curves.
- ➔ Click on the Bline tool and start inserting the points.
- ➔ To stop drawing the object, right click on the last point.



Bline Tool

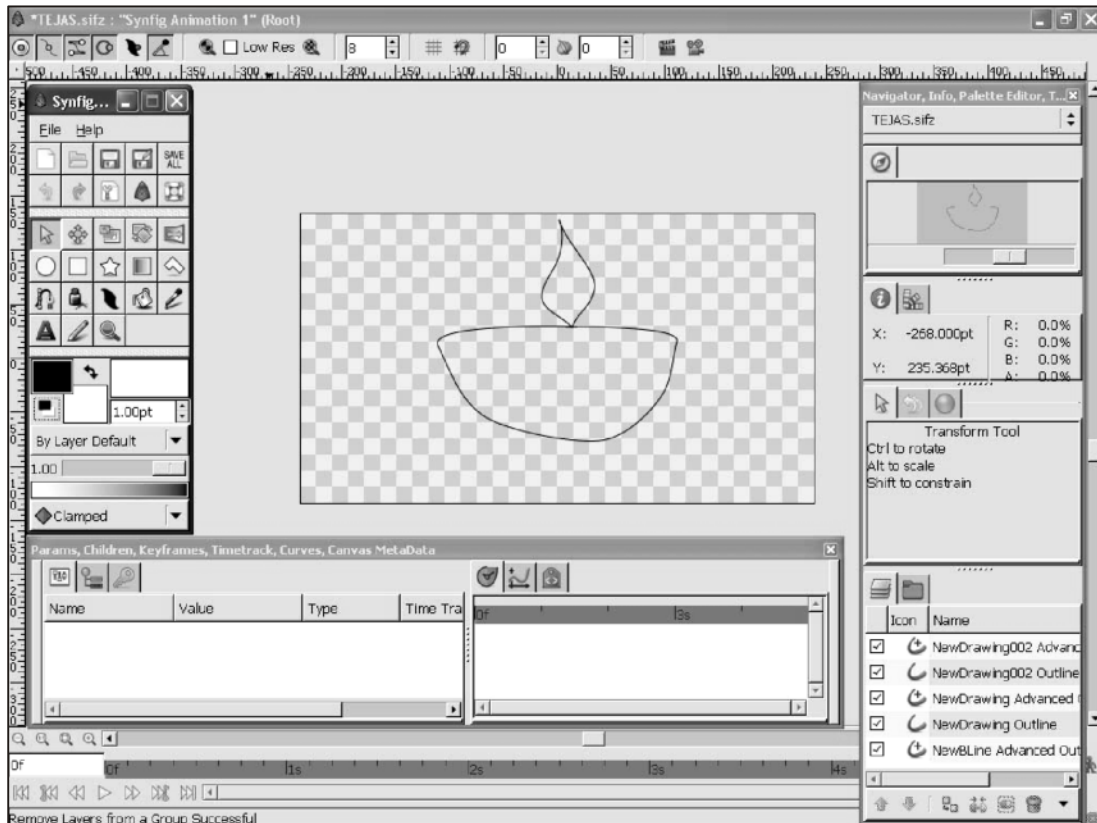
- ➔ The object can be edited using the ducks.



Drawn shape with the ducks

### 2.15 Draw Tool

- ➔ We must be familiar with the draw tool as it is the most common tool used for drawing.
- ➔ We can draw with the help of mouse.



Draw Tool

## 2.16 Fill Tool

- ➔ The Fill tool changes the color of objects.
- ➔ To fill a color in the object, select the color from the color palette.
- ➔ Select the Fill tool button and then click on the object.
- ➔ This tool has an effect on the following layers:
  - (1) Circle Layer                      (2) Rectangle Layer
  - (3) Polygon Layer                    (4) Star Layer
  - (5) Region Layer                      (6) Outline Layer
  - (7) Checkboard Layer
- ➔ The other layers are not affected by this tool because they use gradient to fill the visual area.

## 2.17 Eyedrop Tool

- ➔ The Eyedrop tool allows you to select colors from the work area.
- ➔ Select the Eyedrop tool and then click in the work area to set the default foreground color in the Eyedrop tool to be the color you are currently pointing at.

### Exam Oriented Question from Darpan

- 130) ..... help you to create the artwork for your multimedia project.
- (A) Layers                      (B) Panels  
(C) Canvas                      (D) Tools
- 131) Using tools, ..... can be done.
- (A) creating and object  
(B) modifying objects  
(C) both (A) and (B)  
(D) none of these
- 132) How many tools are there in the middle palette of Synfig ?
- (A) 10                              (B) 14  
(C) 16                              (D) 18
- 133) What does each tool contain ?
- (A) Options                      (B) Parameters  
(C) Both (A) and (B)      (D) None of these
- 134) Options of tools are displayed in ..... .
- (A) tools options panel  
(B) tools panel  
(C) options panel  
(D) tools view panel
- 135) Parameters of the tools are displayed in ..... panel.
- (A) Para Panel                      (B) Params Panel  
(C) Pera Panel                      (D) Perams Panel
- 136) When you select a particular tool, the ..... panel displays the options that are available for that tool.
- (A) tools options panel  
(B) params panel  
(C) layer panel  
(D) tools panel
- 137) Which tool is used to create object ?
- (A) Circle, Rectangle      (B) Polygon, Star  
(C) Both (A) and (B)      (D) Fill, Eyedrop
- 138) ..... layers are used to represent circles.
- (A) Round                              (B) Oval  
(C) Ring                              (D) Circle
- 139) To draw a circle select the ..... tool.
- (A) Round                              (B) Circle  
(C) Oval                              (D) Ring
- 140) A circle has ..... important parameters.
- (A) 2                                      (B) 3  
(C) 4                                      (D) 5
- 141) A circle has important ..... parameters.
- (A) center, line                      (B) center, radius  
(C) center, point                      (D) none of these
- 142) We can see the parameters of circle in the ..... panel.
- (A) layer panel                      (B) canvas panel  
(C) tools panel                      (D) parameter panel

- 143) We can change any of the parameter ..... .  
 (A) before drawing a picture  
 (B) while drawing  
 (C) after drawing a picture  
 (D) none of these
- 144) Click in the where you want the center of the circle to be and then ..... to set the radius.  
 (A) drag the mouse  
 (B) drop the mouse  
 (C) clicking the mouse  
 (D) double clicking the mouse
- 145) ..... panel is used to change the name of the circle layer.  
 (A) Tools panel (B) Tool options panel  
 (C) Circle panel  
 (D) Circle options panel
- 146) Using ..... in circle, we can add a layer for Outline.  
 (A) checkbox (B) radio button  
 (C) pull down menu (D) dropdown menu
- 147) If we select the ..... option then the circle object will be created with an outline.  
 (A) create BLine  
 (B) create circle BLine  
 (C) create outline BLine  
 (D) creater innerline BLine
- 148) ..... is clicked to change the radius or to move the circle.  
 (A) Layer (B) Duck  
 (C) Circle (D) None of these
- 149) ..... can be done by clicking duck.  
 (A) To change the radius  
 (B) To move the circle  
 (C) Both (A) and (B) (D) None of these
- 150) By clicking on ..... tool, duck can be displayed.  
 (A) transform (B) select  
 (C) fill (D) view
- 151) The handle controlling the parameters are known as ..... .  
 (A) zoom (B) view  
 (C) transform (D) duck
- 152) How many ducks has a circle ?  
 (A) 2 (B) 3 (C) 4 (D) 5
- 153) ..... option shows the ducks of the circle.  
 (A) Duck controlling the position of its centre.  
 (B) Duck controlling its radius  
 (C) Both (A) and (B) (D) None of these
- 154) Duck is displayed in ..... .  
 (A) different ducks (B) different colours  
 (C) different object (D) different navigators
- 155) What does the green colour of the duck suggest in an object ?  
 (A) Location of an object  
 (B) Curve  
 (C) Radius of circle (D) Vertices
- 156) What does the blue colour of the duck suggest in an object?  
 (A) Location of an object  
 (B) Curve  
 (C) Radius of circle (D) Vertices
- 157) What does the orange colour of the duck suggest in an object?  
 (A) Location of an object  
 (B) Curve  
 (C) Radius of circle (D) Vertices
- 158) What does the yellow colour of the duck suggest in an object ?  
 (A) Location of an object  
 (B) Curve  
 (C) Radius of circle (D) Vertices
- 159) What does the dark blue colour of the duck suggest in an object ?  
 (A) Location of an object  
 (B) Curve  
 (C) Radius of circle (D) Vertices
- 160) ..... duck is used to change the location of the circle.  
 (A) Green (B) Blue (C) Orange (D) Yellow
- 161) ..... duck is used to change the radius of the circle.  
 (A) Green (B) Blue (C) Orange (D) Yellow
- 162) ..... is displayed for all the layers selected in Working area.  
 (A) Window (B) Tool  
 (C) Duck (D) Center
- 163) ..... is done to change the parameters.  
 (A) Drag the duck  
 (B) Double click the duck  
 (C) Select the duck  
 (D) Control the duck

- 164) For more precise control, the ..... can be used.  
 (A) ducks (B) objects  
 (C) cursor keys (D) windows
- 165) If we want to constrain the movement to be either horizontal or vertical then hold down the ..... key while dragging  
 (A) Ctrl (B) Shift  
 (C) Alt (D) Enter
- 166) One type of duck interferes or gets into the way of another duck. Select the statement.  
 (A) True (B) False  
 (C) Can't say (D) None of these
- 167) We can turn the ducks ..... by selecting the option present on the top of the canvas window.  
 (A) Big-Small (B) Short - Long  
 (C) On - Off (D) None of these
- 168) Rectangle tool can be used as per ..... tool.  
 (A) Transform (B) Circle  
 (C) Select (D) Polygon
- 169) ..... tool is used to create a rectangle layer.  
 (A) Rectangle (B) Angle  
 (C) Diamond (D) Four-sided figure
- 170) Options of rectangle tool are displayed in .....  
 (A) parameter options  
 (B) rectangle options  
 (C) tool options  
 (D) user options
- 171) We can use ..... tool to create the polygon layer.  
 (A) Diamond (B) Polygon  
 (C) Rectangle (D) None of these
- 172) A polygon can be created using ..... number of points.  
 (A) Two (B) Four  
 (C) Six (D) Any number of
- 173) Where we have to click to complete the polygon ?  
 (A) First Point  
 (B) Last Point  
 (C) Right Click on first point  
 (D) Right Click on last point
- 174) ..... tool is used to make objects with any number of points and curves.  
 (A) Star (B) Polygon  
 (C) BLine (D) Draw
- 175) To stop drawing the object, right click on the ..... in BLine tool.  
 (A) first point  
 (B) last point  
 (C) right click on first point  
 (D) right click on last point
- 176) ..... is the common tool for drawing.  
 (A) Circle tool (B) Draw tool  
 (C) BLine tool (D) Eyedrop tool
- 177) Using ..... tool, you can draw with the help of mouse.  
 (A) fill (B) eyedrop  
 (C) draw (D) circle
- 178) ..... tool is used to change the color of the object.  
 (A) Fill (B) Eyedrop  
 (C) Draw (D) BLine
- 179) From ..... colour is selected to fill in the object.  
 (A) viewer palette (B) object palette  
 (C) fill palette (D) color palette
- 180) Fill Tool affects ..... layer.  
 (A) circle, rectangle (B) polygon, star  
 (C) area, outline, checkerboard  
 (D) all of these
- 181) Some layers are not affected by Fill tool because they use ..... to fill the visual area.  
 (A) gradient (B) eyedrop  
 (C) duck (D) panel
- 182) The ..... tool allows you to select colors from the working area.  
 (A) fill (B) eyedrop  
 (C) draw (D) gradient
- 183) If we click work area, the color filled in it is selected as ..... color.  
 (A) foreground color (B) background color  
 (C) fill color (D) handle color

**Ans. :** (130 – D) (131 – C) (132 – D) (133 – C) (134 – A) (135 – B) (136 – A) (137 – C) (138 – D) (139 – B)  
 (140 – A) (141 – B) (142 – D) (143 – C) (144 – A) (145 – B) (146 – A) (147 – C) (148 – B) (149 – C)  
 (150 – A) (151 – D) (152 – A) (153 – C) (154 – B) (155 – A) (156 – C) (157 – D) (158 – B) (159 – C)  
 (160 – A) (161 – B) (162 – C) (163 – A) (164 – C) (165 – B) (166 – A) (167 – C) (168 – B) (169 – A)  
 (170 – C) (171 – B) (172 – D) (173 – A) (174 – C) (175 – D) (176 – B) (177 – C) (178 – A) (179 – D)  
 (180 – D) (181 – A) (182 – B) (183 – A)

## 2.18 Gradient Tool

- ➔ The Gradient tool is used to create smooth transitions between two or more colors in an object.
- ➔ When you select the Gradient tool, the tool options panel will show the options for the Gradient tool.
- ➔ It allows you to set a name for the layer and choose the type of gradient.
- ➔ There are four types of gradients namely linear, radial, conical and spiral.

### (1) Linear :

- ▶ This produces a simple transition in a straight line.
- ▶ Set the foreground and background colors.
- ▶ Click where you want the gradient to begin and drag to where you want the transition to end.
- ▶ The gradient will be created perpendicular to the line you drag out.
- ▶ We can edit the gradient by moving the end point in any direction using the normal tool.

### (2) Radial :

- ▶ This produces circular colors with the transition being at the center of those circles.
- ▶ Click where you want the center of the circles to be, and drag to set the radius of the transition.

### (3) Conical :

- ▶ This has the appearance of looking down on a tip of a cone.
- ▶ The gradient is along the circular arc of the center and goes in all directions.
- ▶ Click to set the center and drag to indicate the direction in which the foreground and background colors should go.
- ▶ The center endpoint adjusts the center of the gradient and the other endpoint adjusts the direction of the gradient.

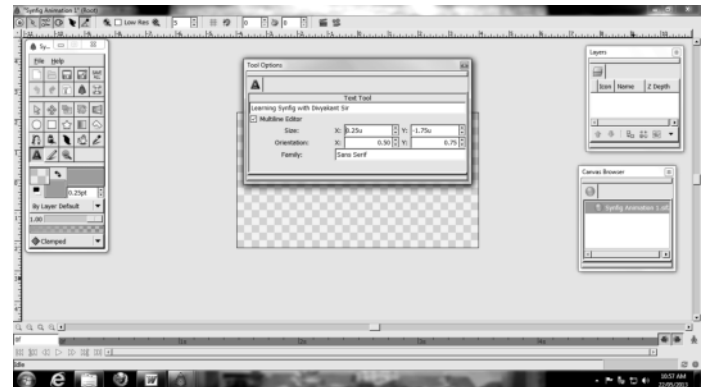
### (4) Spiral :

- ▶ This produces a spiral gradient. Click to set the center of the spiral and drag to set the 'tightness'.

## 2.19 Text tool

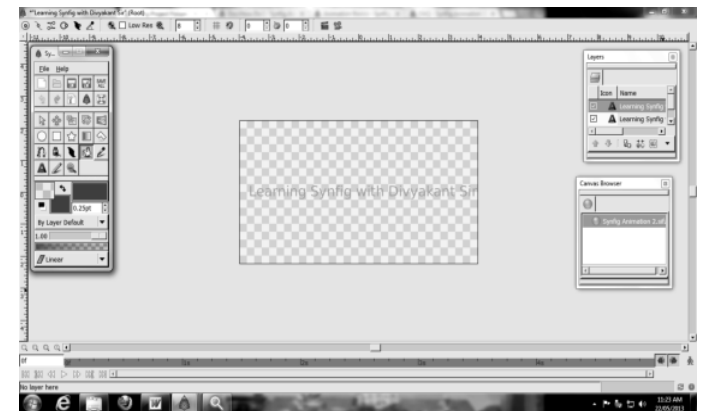
- ➔ Text tool allows you to enter text by creating a text layer. Select the text tool icon from the toolbox and then click in the canvas window where you want the text layer to be created.

- ➔ A dialog box will appear, allowing you to enter the text you want in the created layer.



### To Enter text in Text layer dialog box

- ➔ A new text layer created along with its ducks.
- ➔ Using the parameter panel we can change the entered text later on according to our need.



### Text with ducks

- ➔ The tool options panel will allow us to:
  - ▶ Select the name for the new layer; this number will increase as we add new layer.
  - ▶ Select single or multi line editor for entering the text.
  - ▶ If single line is selected then click the enter key to submit the value while, in multiline editor, click the OK button to submit the value.
  - ▶ Select the horizontal and vertical size of the text.
  - ▶ Select the 'orientation' of the text. By default (0.5, 0.5) is selected which means that the text will be centered around the point you clicked on.
  - ▶ Select the font family.

## 2.20 Zoom Tool

- ➔ The Zoom tool is used to get a closer or far away view of the objects in the working area.
- ➔ The zooming does not affect the output results.
- ➔ It is used to just view the objects from close or far range.

## 2.21 Width Tool

- ➔ The Width tool helps to increase or decrease the width of a line.
- ➔ It acts like the way you use pencil to make a line thicker or eraser to make it thinner.
- ➔ Select the outline layer to change the width on particular segment of a line and then move mouse over that line. Press the left mouse button and move cursor back and forth along the line.
- ➔ The width of outline will be increased at the places where you moved the cursor.
- ➔ To decrease the width hold "CTRL" key while moving the cursor.
- ➔ This tool is used to fine tune the line width.

## 2.22 Transform Tool

- ➔ Transform tool allows you to select objects and to move, rotate or scale the ducks.
- ➔ Select the object on the canvas window and click the transform tool.
- ➔ If the object cannot get selected as it is obscured by another layer then you can select its layer in the layer panel.
- ➔ This will display the ducks of the object.
- ➔ Select the duck and make the change according to your need.

## 2.23 Smooth Move Tool

- ➔ Smooth move tool works just like transform tool, except when multiple ducks are selected.
- ➔ Select multiple ducks by pressing CTRL + A or dragging a rectangle around the ducks.
- ➔ Now when you drag one of the selected duck, the other selected ducks will also move along with it.

















## 2.24 Scale Tool













- ➔ It is similar to Smooth Move Tool.
- ➔ When we select multiple ducks and drag one of the selected ducks the other selected ducks will scale relative to the centre of the selected group.

## 2.25 Rotate Tool

- ➔ It is similar to Smooth Move Tool and Scale Tool.
- ➔ As in smooth move and scale tool, when we select multiple ducks and drag one of the selected ducks the other selected ducks will move rotating about the centre of the selected group.

## 2.26 Different Types of Tools And Uses

No.	Tool	Tools Name	Use
(1)		New	To create a new file
(2)		Open	Open a file
(3)		Save	Save a file
(4)		Save As	To save the file with another name
(5)		Save All	To save all the opened files
(6)		Undo	To cancel the last operation
(7)		Redo	To redo the previous undo again
(8)		Setup	To arrange/organize
(9)		About Synfig Studio	To get information about Synfig Studio
(10)		Help	To get help about Synfig Studio
(11)		Transform Tool	Transform tool allows you to select objects and to move, rotate or scale the ducks.
(12)		SmoothMove Tool	Smooth move tool works just like transform tool, except when multiple ducks are selected.
(13)		Scale Tool	When we select multiple ducks and drag one of the selected ducks the other selected ducks will change.
(14)		Rotate Tool	As in smooth move and scale tool, when we select multiple ducks and drag one of the selected ducks the other selected ducks will move rotating about the centre of the selected group.
(15)		Mirror Tool	For the mirror effect
(16)		Circle Tool	To create a circle layer

(17)		Rectangle Tool	To create a rectangle layer
(18)		Star Tool	To create a star layer
(19)		Gradient Tool	The Gradient tool is used to create smooth transitions between two or more colors in an object.
(20)		Polygon Tool	To create a polygon layer
(21)		BLine Tool	Bline tool is used to make objects with any number of points and curves.
(22)		Draw Tool	Most common tool to create a picture using mouse
(23)		Width Tool	To increase/decrease the width of line.
(24)		Fill Tool	To fill colour in object.
(25)		Eyedrop Tool	The Eyedrop tool allows you to select colors from the work area.
(26)		Text Tool	To insert text
(27)		Sketch Tool	To draw a sketch
(28)		Zoom Tool	The Zoom tool is used to get a closer or far away view of the objects in the working area.

### Exam Oriented Question from Darpan

184) The ..... tool is used to create smooth transitions between two or more colors in an object.

- (A) fill (B) eyedrop  
(C) draw (D) gradient

185) There are ..... types of gradient.

- (A) 2 (B) 3  
(C) 4 (D) 5

186) ..... is the type of gradient.

- (A) Linear (B) Radial and Conical  
(C) Spiral (D) All of these

187) ..... produces a simple transition in a straight line.

- (A) Conical (B) Spiral  
(C) Linear (D) Radial

188) In ..... gradient, click where you want the gradient to begin and drag to where you want the transition to end.

- (A) Conical (B) Spiral  
(C) Linear (D) Radial

189) The gradient will be created perpendicular to the line you drag out in Linear.

- (A) Radial (B) Linear  
(C) Conical (D) Spiral

190) We can edit the gradient by moving the end point in any direction using the ..... tool.

- (A) normal (B) gradient  
(C) editor (D) selection

191) ..... produces circular colors with the transition.

- (A) Conical (B) Spiral  
(C) Linear (D) Radial

- 192) ..... produces the transition being at the center of those circles.  
 (A) Conical (B) Spiral  
 (C) Linear (D) Radial
- 193) In ..... , we have to click where the center of the circles to be and drag to set the radius of the transition.  
 (A) Conical (B) Spiral  
 (C) Linear (D) Radial
- 194) ..... has the appearance of looking down on a tip of a cone.  
 (A) Conical (B) Spiral  
 (C) Linear (D) Radial
- 195) Conical has the appearance of looking down on a ..... of a cone.  
 (A) bottom of a cone  
 (B) top to bottom  
 (C) (A) or (B)  
 (D) none of these
- 196) In the ....., gradient is along the circular arc of the center and goes in all directions.  
 (A) conical (B) spiral  
 (C) linear (D) radial
- 197) In ....., click to set the center and drag to indicate the direction in which the foreground and background colors should go.  
 (A) conical (B) spiral  
 (C) linear (D) radial
- 198) In ..... gradient, the center endpoint adjusts the center of the gradient and the other endpoint adjusts the direction of the gradient  
 (A) conical (B) spiral  
 (C) linear (D) radial
- 199) ..... produces a spiral gradient.  
 (A) Conical (B) Spiral  
 (C) Linear (D) Radial
- 200) In ..... gradient, we have to click to set the center of the spiral and drag to set the 'tightness'.  
 (A) conical (B) spiral  
 (C) linear (D) radial
- 201) ..... tool is used to insert text.  
 (A) Text (B) Font  
 (C) Word (D) View
- 202) Using the ..... panel we can change the entered text later on according to our need.  
 (A) text panel (B) editor panel  
 (C) parameter panel (D) font panel
- 203) ..... can be done using Tool Panel Option.  
 (A) To select the name of new layer  
 (B) To decide horizontal and vertical size of the text.  
 (C) To select fonts  
 (D) None of these
- 204) ..... is used to insert text.  
 (A) One line (B) Two line  
 (C) (A) or (B) (D) None of these
- 205) If single line is selected then click the ..... to submit the value while, in multiline editor.  
 (A) Enter key (B) Shift key  
 (C) OK button (D) Finish button
- 206) We have to click the ..... to submit the value.  
 (A) Enter key (B) Shift key  
 (C) OK button (D) Finish button
- 207) By default ..... size is selected which means that the text will be centered around the point you clicked on.  
 (A) 0.3, 0.3 (B) 0.5, 0.5  
 (C) 0.7, 0.7 (D) 0.9, 0.9
- 208) The ..... tool is used to get a closer or far away view of the objects in the working area.  
 (A) Zoom (B) View  
 (C) Hand (D) Duck
- 209) ..... tool does not affect the result.  
 (A) Draw (B) Fill  
 (C) Zoom (D) Transform
- 210) ..... is used to just view the objects from close or far range.  
 (A) Zoom tool (B) View tool  
 (C) Hand tool (D) Duck tool
- 211) The ..... tool helps to increase or decrease the width of a line.  
 (A) Line (B) Draw  
 (C) Size (D) Width
- 212) ..... acts like the way you use pencil to make a line thicker or eraser to make it thinner.  
 (A) Line tool (B) Draw tool  
 (C) Size tool (D) Width tool
- 213) To decrease the width, we have to hold ..... key while moving the cursor.  
 (A) Ctrl (B) Alt  
 (C) Shift (D) Ctrl + Alt

- 214) This tool is used to fine tune the line width.  
 (A) Line Tool (B) Draw Tool  
 (C) Width Tool (D) Size Tool
- 215) ..... tool allows you to select objects and to move, rotate or scale the ducks.  
 (A) Zoom (B) Transform  
 (C) Move (D) Movement
- 216) Transform tool allows ..... .  
 (A) to move the object  
 (B) to rotate the object  
 (C) to change the size  
 (D) all of these
- 217) If the object cannot get selected as it is obscured by another layer then you can select its layer in the ..... .  
 (A) layer panel  
 (B) object panel  
 (C) transform panel  
 (D) background panel
- 218) Smoothmove tool works as ..... tool.  
 (A) Rotate (B) Zoom  
 (C) Scale (D) Transform
- 219) In ..... tool if we drag one of the selected duck, the other selected ducks will also move along with it.  
 (A) Smoothmove (B) Zoom  
 (C) Scale (D) Transform
- 220) ..... key is used to select multiple ducks.  
 (A) Ctrl + E  
 (B) Ctrl + A  
 (C) Ctrl + S  
 (D) Ctrl + W
- 221) ..... option is used to select multiple ducks.  
 (A) Ctrl + A  
 (B) Dragging a rectangle around the duck  
 (C) (A) or (B)  
 (D) None of these
- 222) ..... tool is similar to Smooth Move Tool.  
 (A) Rotate  
 (B) Zoom  
 (C) Scale  
 (D) Transform
- 223) In ..... tool if we drag one of the selected ducks the other selected ducks will move rotating about the centre of the selected group.  
 (A) Rotate (B) Zoom  
 (C) Scale (D) Transform
- 224) In ..... tool, when we select multiple ducks, and drag one of the selected ducks the other selected ducks will scale relative to the centre of the selected group.  
 (A) Rotate (B) Zoom  
 (C) Scale (D) Transform

**Ans. :** (184 – D) (185 – C) (186 – D) (187 – C) (188 – C) (189 – B) (190 – A) (191 – D) (192 – D) (193 – D)  
 (194 – A) (195 – B) (196 – A) (197 – A) (198 – A) (199 – B) (200 – B) (201 – A) (202 – C) (203 – D)  
 (204 – C) (205 – A) (206 – C) (207 – B) (208 – A) (209 – C) (210 – A) (211 – D) (212 – D) (213 – A)  
 (214 – C) (215 – B) (216 – D) (217 – A) (218 – D) (219 – A) (220 – B) (221 – C) (222 – C) (223 – C)  
 (224 – A)

## EXERCISE

- 1) What are authoring tools ? List different types of authoring tools.  
 ➔ To create a multimedia presentation using these building blocks we need application programs known as "Multimedia Authoring Tools".

No.	Class	Example
1	Card or Page based tools	Hyper card, Multimedia Toolbox
2	Icon and Event based authoring tools	Authorware, IconAuthor
3	Time based authoring tools	Synfig, Pencil, Flash, Director

- 2) What is the purpose of gradient tool ? State the use of four types of gradient learned in this chapter.
- ➔ The Gradient tool is used to create smooth transitions between two or more colors in an object. There are four types of gradient tool.
- ▶ **Linear** : This produces a simple transition in a straight line.
  - ▶ **Radial** : This produces circular colors with the transition being at the center of those circles
  - ▶ **Conical** : This has the appearance of looking down on a tip of a cone.
  - ▶ **Spiral** : This produces a spiral gradient.
- 3) Briefly explain the three palettes of toolbox window.
- ➔ See the topic no. 2.5
- 4) List the important panels and their function.
- ➔ See the topic no. 2.7
- 5) Choose the most appropriate option from those given below :
- 1) The elements are organized as pages of a book or pile of cards in which of the following forms ?
    - (A) Card or page based tools
    - (B) Icon and event based tools
    - (C) Time based tools
    - (D) Animation tools
  - 2) Which of the following tool helps in changing the color of objects ?
    - (A) Draw
    - (B) Fill
    - (C) Circle
    - (D) Rectangle
  - 3) Synfig Studio represents which of the following type of authoring tools ?
    - (A) Time based authoring tool
    - (B) Event based authoring tool
    - (C) Page based authoring tool
    - (D) Icon based authoring tool
  - 4) Which of the following terms represents the number of palettes a toolbox window separated into ?
    - (A) Two
    - (B) Three
    - (C) Four
    - (D) Five
  - 5) Which of the following is the file extension of a file created in Synfig Studio ?
    - (A) .fiz
    - (B) .sifz
    - (C) .zif
    - (D) .fis
- 6) Which of the following panel shows the currently selected layer parameter ?
    - (A) Layer
    - (B) Params
    - (C) Timetrack
    - (D) History
  - 7) Which of the following represents the colour of the duck used to change the radius of the circle ?
    - (A) Green
    - (B) Yellow
    - (C) Orange
    - (D) Blue
  - 8) Which of the following tools is used to make objects with any number of points and curves ?
    - (A) BLine
    - (B) Circle
    - (C) Rectangle
    - (D) Star
  - 9) Which of the following tools is used to create smooth transitions between two or more colours in an object ?
    - (A) Width
    - (B) Fill
    - (C) Eyedrop
    - (D) Gradient
  - 10) Which of the following gradient produces simple transition in a straight line ?
    - (A) Conical
    - (B) Radial
    - (C) Linear
    - (D) Spiral
  - 11) Authorware and IconAuthor are examples of which of the following types of tools ?
    - (A) Card or page based tools
    - (B) Icon and event based tools
    - (C) Time based tools
    - (D) Animation tools
  - 12) Which of the following animation software lets you create traditional hand-drawn animation ?
    - (A) Pencil
    - (B) Synfig
    - (C) Flash
    - (D) Director
  - 13) Which of the following are two important parameters of circle tool ?
    - (A) Centre, diameter
    - (B) Diameter, point
    - (C) Radius, diameter
    - (D) Centre, radius
  - 14) Which of the following terms represent a handle used to control some parameter of the layer ?
    - (A) Point
    - (B) Tool
    - (C) Duck
    - (D) Panel
  - 15) The duck used to change the position of the object has which of the following colour ?
    - (A) Green
    - (B) Blue
    - (C) Red
    - (D) Yellow

16) The layers visibility is controlled by which of the following operations ?

- (A) Opacity
- (B) Gradient
- (C) Interpolation
- (D) Blend

17) Which of the following tools allow you to enter text by creating a text layer ?

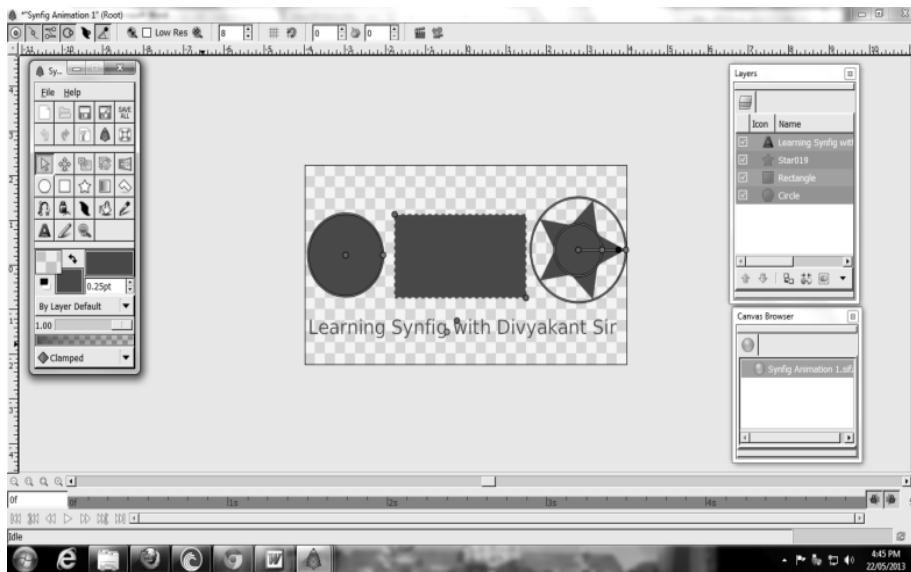
- (A) Circle
- (B) Text
- (C) Draw
- (D) Fill

**Ans. :** (1 – A) (2 – B) (3 – A) (4 – B) (5 – B) (6 – B) (7 – D) (8 – A) (9 – D) (10 – C)  
 (11 – B) (12 – A) (13 – D) (14 – C) (15 – A) (16 – A) (17 – B)

## LABORATORY EXERCISE

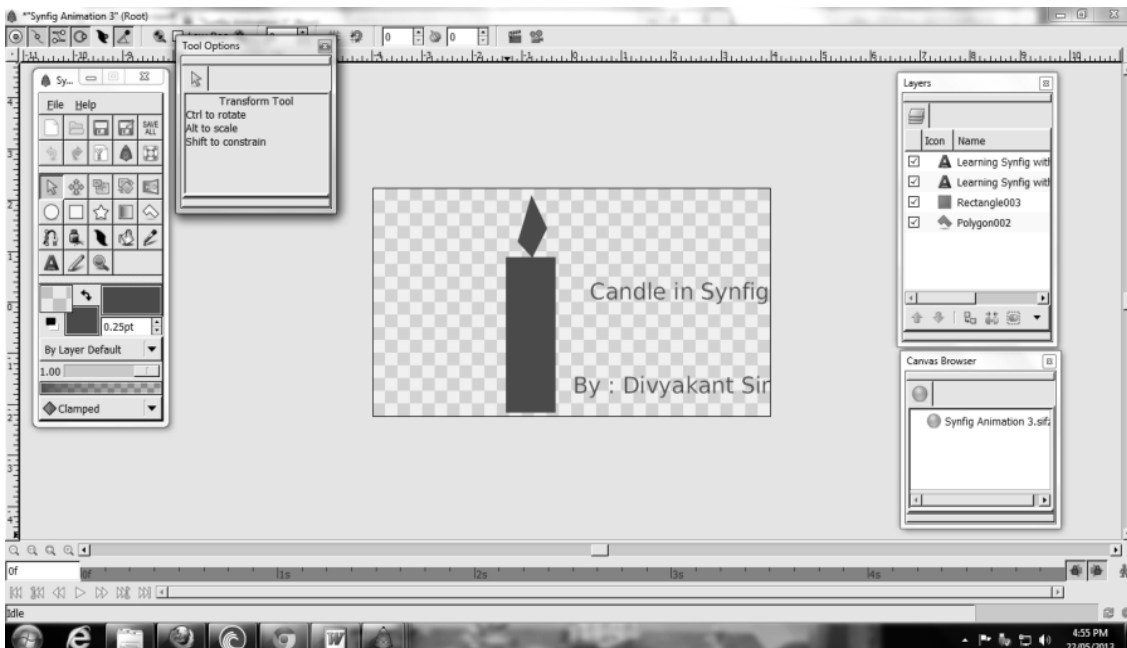
1) Draw a circle, rectangle and star on the canvas. Select different color for each object. Also insert text as per the object.

➔ Using circle, rectangle and star tools, draw the shapes in the canvas. Using Fill tool fill the desired colors. Taking text tool enter the content "Learning Synfig with Divyakant Sir".



2) Using BLine tool draw a candle.

➔ Using BLine Tool make a rectangle. Also make a flame. Using text tool write down the content "Candle in Synfig" "By: Divyakant Sir" etc.



3) **Using appropriate tools draw a flower and a candle.**

- ➔ Using circle tool we can make a flower. Using circle tool draw a circle on the canvas. Using the same tool again draw another circle and Using Fill tool, fill the colour. To make a candle use BLine tool and Draw tool.

