

I. Write the function of the following

Marquee tool: -

The Marquee tool is used to create regular shaped selections. The shape of your selection is represented by a marquee; a line of cycling black and white squares in constant motion. The marquee is also known as a selection path. Available shapes includes a rectangular marquee for square and rectangular selections, elliptical marquee for circular and oval selection and single row and column marquee to select single row and columns. To access the supplementary marquee too you simply {click} and hold your mouse button on the rectangular marquee button in the tool box. A fly out menu appears giving you the rest of the tools.

Crop tool:-The crop is used tool to cut all non-selected content from your image. This tool is very useful for tweaking the composition of a photograph as it allows you to remove extraneous material quickly and easily. The crop tool is limited to rectangular shapes. When you get to the crop tool, you will notice boxes located at the corners of the marquee as well as in the center of each side. You can click and drag these to resize the selection path or marquee. Press {ENTER} on your key board to crop the image. The image data outside of the crop tool's selection is erased

and the image scale to the data within the selection. Notice that all the material outside of the marquee has been grayed out so as to give you a better idea of how your content will look once it has been crop.

Lasso tool:-

The lasso tool is used to create irregular shaped selection. The lasso tools includes the lasso for free hand selections, similar to drawing with the mouse as you would with a pencil on paper. {CLICK} hold and drags to create your selection. {RELEASE} the mouse button to close the selection. Out of lasso tool Magnetic and polygonal lasso tool are also available.

Magic Wand Tool:-

The Magic wand tool differs from the other selection tools in that rather than drawings a path yourself you simply {click} the magic wand in the area you wish to select and the magic wand creates the selection for you. It creates the selection based on a range of related colors. The range of colors is set in the option bar by adjusting the tolerance setting. Increasing the value increase the color range.

Pen tool:-

The pen tool can be used to create selection. Initially, as you create your selection path the pen tool does not make a marquee, but rather a fully editable vector based path. What does this means? When you create a path with the pen tool, it creates straight lines and curves called segments, which begin and end in anchor points. At each anchor point the curvature, length and position of connected segment can be modified by manipulating what are called direction lines.

Airbrush tool:-

The Airbrush tool effectively sprays color onto an image, similar to painting with a can of spray paint. The longer you spray a particular area the more opaque or dense the color or paint becomes. In other words, applying increase or consistent pressure the density of the color increases. When "Airbrush Tool" is used, appropriate brush and color should be selected and then use the options Bar to set the brush's behavior.

Paintbrush tool:-

The paint Brush tool applies color to your image instantly, with a (single click) unlike the Airbrush Tool which requires holding the mouse button down for a certain period of time to match the color of the swatch.

Clone Stamp Tool:-

The clone stamp tool operates like the paintbrush tool except that rather than selecting a color to paint with, we select an area of the image to duplicate or clone by the area we wish to duplicate. As we paint with the Rubber stamp tool, a cross hair passes over the selected for reference. The size of the brush selected in the brushes palette determined the size of radius of the cloning area.

Text Tool:-

The Text Tool when added text to an image by selecting the text tool and in the image window at the location we want the text to appear, a layer is automatically created above the currently active layer. The name of the layers defaults to the next we input. We make sure that the top layer in the layers palette is activated and the foreground color is white.

Gradient Tool:-

The Gradient Tool is use to create gradient fills. Gradient are gradual shifts from at least one color to another or one color to transparency. The effect is similar to the way the sky shifts from dark blue to lighter blue as we look towards the horizon. Gradients can also consist of multiple colors much like a rainbow.

Dodge Tool:-

The Dodge Tool is use to lighten areas of the image by painting over them. The brush shape and size are selected, range(shadows, Midtones, Highlights) and exposure accordingly.

II. Explain Color Depth.

Color Depth describes the maximum amount of colors an image can contain. The number of colors an image can contains dependent on the image's bit depth. When users describe an image's color depth they might also describe it in terms of bit depth. The higher the bit value the more colors the image can contain.

Images are made up of one of four standard bit depths given below:-

Bit Depth	colors
1-Bit	2
8-Bit	256
24-Bit	16.7 millions
32-Bit	16.7 billion

(1 bit, 8 bit, 24 bit and 32 bit)

A 1 bit image consists of either black or white. 8 bit images contain a maximum of 256 colors or 256 shades of gray. 24 bit images contain maximum of 16.7 millions colors. A 24 bit images is made up of three 8-bit channels, Red channels (256 shades of blue) and a green channel (256 shades of Green). 32 bit colors, however the final 8-bits of the images are commonly reserved for alpha channel information rather than color. Alpha channels are covered later.

III. Explain about Liquefy Function.

The liquefy function could easily be called Photoshop's funhouse tool. Applying these features to an image can be likened to standing in front of wavy mirrors at an amusement park. The reflection ends up completely distorted in the most unusual ways.

In liquefy function, following steps are observed:-

- 1) We open Photoshop, open an image to apply liquefy.
- 2) We go to image → liquefy
- 3) This will open the liquefy dialog box.
- 4) By default the wrap tool is selected if not, we select the following wrap tool at the top left of the dialog box.
- 5) Input 25 for brush size and 70 for brush pressure.
- 6) We placed the cursor to the image we want to liquefy and drag it slightly towards any direction.
- 7) Click OK and save the image.

IV. What is cropping in Photoshop? Explain how to crop an image.

Cropping is the process of removing portion of an image to create focus or strengthen the composition. We can crop an image using the crop tool and the crop command. We can also trim pixels using the trim command.

To crop an image, we select the crop tool and resize the image as per the requirement of the new image. Rotate the cropping clicking behind one of the points and swinging our mouse above the canvas. Clicking on a point will allow us to additionally modify the size of the cropping.

V. What is a layer in Photoshop?

One of the Photoshop's most powerful and most popular features is layers. Layers are similar to transparent paper. Each layer in a Photoshop document or image can contain image data that adds to the image data placed on the layer below. Effectively, each layer is an entire image unto itself within a master image. By combining these together we get composition meaning and image composed of many different elements, in this case made up of multiple layers. The best way to understand the concept of is how they work and why they are so powerful.

Layers are managed with the layers palette. The layers palette displays a small thumbnails view for each layer to help identify it. The appearance of a Photoshop document is a view of the layers stack from the top down.