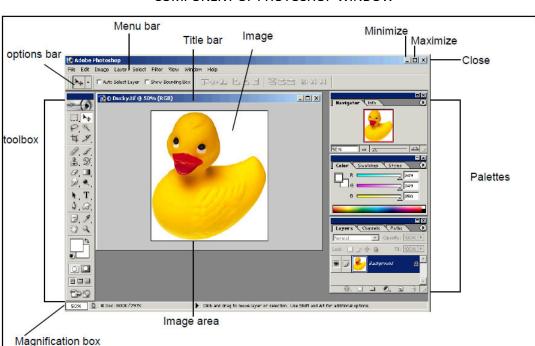
DCA-105: COMPUTER GRAPHICS (Based on Photoshop 7)

Welcome to Adobe Photoshop 7.0.: Photoshop is a software program used to edit and manipulate photographic images. Photoshop is designed to alter and improve existing images that have been acquired through digital photography, scanners, or other means.

1. WORKING WITH PHOTOSHOP ENVIRONMENT (4 Marks)



COMPONENT OF PHOTOSHOP WINDOW

Menu bar: The menu bar lists all the menus available in Photoshop.

Title bar: Lists the title of the image as well as the file extension, magnification, and color mode.

Toolbox: Gives users access to tools at the click of a button. In addition, many buttons have other hidden functions that are revealed when they are clicked on and the mouse button is held down.

Magnification box: Allows users to see the image's current level of magnification. The magnification of an image can also be changed by typing the desired percentage directly into this box.

Image area: The area of the Photoshop screen where an image is displayed and can be worked on.

Palettes: Palettes contain a variety of functions and can be opened or closed at will, depending on whether you need a certain palette's tool set. There are many different palettes in Photoshop and most palettes contain more than one tab.

PHOTOSHOP 7.0 MENUS

File: Commands relating to file management, such as Open, New, and Save as well as Import and Export.

Edit: While containing the usual Edit menu items such as Cut, Copy, and Paste, Photoshop's Edit menu also gives users access to the Undo function and the spell checker.

Image: The image menu allows users to define the color mode for their image, change the canvas size, and adjust various aspects of the current image. Layer Layers are an important part of working with images in Photoshop and this menu allows users to make adjustments to their layers.

Select: This menu is used to adjust selection techniques.

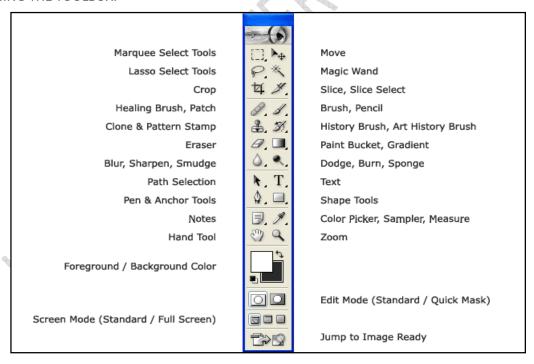
Filter: The Filter menu lists the various types of filters that can be used on Photoshop images as well as ways to adjust the filters already in place.

View: There are many different ways to view your image in Photoshop. This menu lists all the ways you can view an open image.

Window: The Window menu is where users select the palettes that they want to have opened in the workspace.

Help Menu: Use this menu if you need help working with Photoshop.

USING THE TOOLBOX:

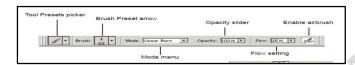


THE TOOLBOX: The toolbox contains the main tools for working on images. A small arrow next to a tool in the toolbox indicates that the tool also has additional options available. In Photoshop, click and hold your mouse on a tool to see its options. You can hide the toolbox by clicking Window \rightarrow tools.

| Toolbox(Shortcut) | Tools features |
|---|--|
| Marquee tool (M) | 4 Marquee Tools – Rectangular, Elliptical, single row and single column |
| waiquee tool (IVI) | selections. These tools allow you to select portions of an object for editing. |
| Move Tool (V) | Allows you to move an entire image or the selected part of an image. Use with |
| | marquee tools to make part of the image selection. |
| Lasso tool (L) | 3 lasso tools — Lasso tool, polygonal lasso tool, magnetic lasso tool. The lasso |
| | tools lets you draw around an object freehand, using curves and lines. |
| Magic Wand tool (W) | This tool selects a similar coloured area without tracing its outline. |
| Crop tool (C) | This tool is used for selecting and removing a portion of an image. |
| Slice tool (K) | Slice tool are generally used to define areas of an image that will be used later |
| | for animating a web page. |
| Healing Brush, spot healing, patch | Is used to correct or repair imperfections in images, such as dirt, smudges, and |
| tool (J) | even dark circles under an image eyes. |
| Brush/Pencil tool (B) | The brush tool paints brush strokes. The pencil tool paints hard edged strokes. |
| Clone Stamp tool (S) | The clone tool paints with a sample of an image which can be applied to another |
| | image or part of the same image. The pattern stamp tool paints with part of an |
| | image as a pattern. |
| History / Art History brush tool (Y) | The history brush allows you to paint over an area in an image that you have |
| | previously changed and revert that particular part of the image to its original |
| | state. The art history brush tool paints with stylized strokes that simulate the |
| | look of different paint styles. |
| Eraser/Background Eraser/Magic Eraser tool (E) | The eraser tool erases colours and deletes picture. The background eraser tool |
| | lets you erase pixels on a layer to transparency as you drag. The magic eraser |
| | tool erases solid-coloured areas to transparency with a single click. |
| Gradient/Paint Bucket tool (G) | The types of gradient are useful in creating straight line, radial, angle, reflected |
| | and diamond blends between colours. Paint bucket tool fills an area with a solid |
| | colour using the foreground. |
| Blur/Sharpen/Smudge tool (R) | The blur tool blurs hard edges in an image. The sharpen tool sharpens soft edges |
| | in an image. Smudge tool simulates the effect when you drag a finger through |
| | wet paint. |
| Dodge/Burn/Sponge tool (O) | The dodge tool lightens areas in an image. The burn tool darkens areas in an image. The sponge tool changes the colour saturation of an area. |
| | · · · · · · · · · · · · · · · · · · · |
| Path selection tool (A) | You can use these tools to select a portion of your path and reshape it. |
| Horizontal Type tool (T) | 4 type tools are; Vertical, horizontal, vertical mask and horizontal mask type |
| | tool. These tools are used to add word to the image. |
| Pen tool (P) | Pen tool provides multiple pen tools so as to create lines or curves with anchor |
| Line/shape tool (U) | points. |
| | The shape tool can draw both filled and unfiled shapes, including rectangles, |
| | ellipses, polygons and custom shapes. The line tool draws straight lines which, when you hold down the shift key can be constrained to 45 or 90 degree angles. |
| | |
| | The custom shape tool is used to make customize shape selected from a custom |
| | shape list. The notes tool is used to place "sticky" notes on your documents while you are |
| Notes tool (N) | working on them. |
| | The eyedropper and the color sampler tools allow you to match a colour exactly |
| Fundropper and sales | by clicking on an area of the image to see information about the colour. The |
| Eyedropper and color sampler/measure and count tool (I) | measure tool measures distances, locations and angles of the picture. The count |
| | tool lets you click to count elements in an image. |
| | The hand tool moves an image within its window. The hand tool is useful after |
| Hand tool (H) | the zoom tool have been used to work on a part of a picture. |
| | the 200m tool have been used to work on a part of a picture. |

| Zoom tool (Z) | The zoom tool magnifies and reduces the view of an image. |
|---------------------------------|--|
| Forground/Background colors (X) | Foreground colour are to paint, fill and stroke selection. Background colour are |
| | used for gradient fills and fill in the erased areas of an image. |
| Edit in Standard Mode (Q) | The edit in quick mask mode option allows you to tweak selections using the |
| | brush tool to paint the exact shape. |
| | |

THE OPTIONS BAR: The options bar is where you can preset your tools and changes appearance depending on which tool you have currently selected.



PALETTES: Those little boxes you see on the right hand side of the Photoshop screen are called PALETTES. Each box contains several palettes that are related.

Navigator Palette: It provides a handy tool for scrolling and zooming of an image.

Histogram Palette: It offers many options for viewing tonal and colour information about an image.

Info Palette: It enables you to view location and colour information in the image window.

Color Palette: It displays the colour values for the current foreground and background colour.

Swatches Palette: It is used to choose a foreground or background colour.

Styles Palette: You can apply preset styles from the styles palette.

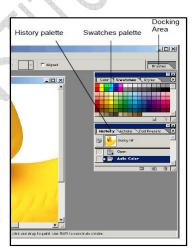
History Palette: keeps track of the actions that you perform on an image.

Action Palette: You can use this palette to save, record, play, edit, load and delete action files.

Layers Palette: The layers palette lists all layers, layer groups, and layer effects in an image.

Paths Palette: It lists the name and a thumbnail image of each saved path and the current work path.

To show or hide Palettes, do this: To show or hide all open palettes, the options bar, and the toolbox, Press **Tab**. To show or hide all palettes, press **Shift + Tab**. To reset all toolbox in its original position, go to window > highlight workspace > reset palette locations.





The Docking Area is a useful place to store palettes on your screen when you don't need them. You can remove palettes from the docking area by simply clicking on them and dragging them to the work area.

OPENING FILE: Choose File MENU > Open. Select the name of the file you want to open.

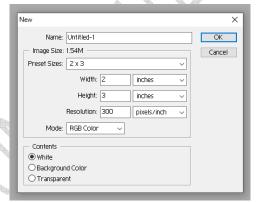
SAVING FILE: Click File > Save or Press Ctrl + S. To save in a different file format - click file > Save as choose a different file format, name, or location.

2. WORKING WITH THE IMAGES (4 marks)

SETTING IMAGE SIZE AND MODE: To open a new Photoshop preset size, follow the steps below:

- 1. In the main menu, go to File > New.
- 2. In the **New** dialog box, click on the **Preset** dropdown menu. You will see several preset sizes, such as 2×3 , 4×6 , 5×7 , 8×10 with the preset resolution of 200 ppi.
- 3. Choose the size that you wish and click OK.

NOTE: All the preset sizes are in portrait orientation. If you wish to resize an image with the landscape orientation, you need to create your own preset. To create your own size, do the following:



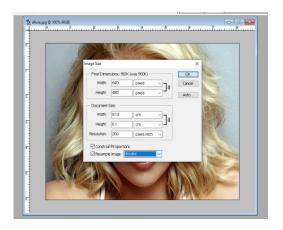
- 1. Type in the values for **Width** and **Height**, for example 7 x 5 in the new dialog box.
- 2. Type in your desired resolution. (Eg. 150 ppi). Press Ok.

RESIZING DIGITAL PHOTOS: To resize the digital photos without losing the quality, follow these steps:

- 1. Open the digital photo you wish to resize.
- 2. In the main menu, go to View > Rulers. You will be able to see the dimension of your photo.
- 3. In the main menu, go to Image > Image Size.
- 4. In the **Image Size** dialog box, check the **Resample Image** box off. Type in your desired resolution (*anything between 150 and 300 ppi*). Press Ok.

ENLARGING: If you want to make your digital photo into a poster size image, you can do it in the **Image Size** dialog box. However, just increasing the dimensions will make the image appear blurry and pixilated. To enlarge the image without losing the quality, follow these steps:

1. Open the digital image you wish to enlarge.



- 2. In the main menu, go to Image > Image Size.
- 3. In the **Image Size** dialog box, make sure the **Resample Image** box is checked off and choose **Bicubic** from the dropdown box.
- 4. Change the **Document Size** measurements to **Percent**. Type in 110; this will increase the size of the image by 10 percent.
- 5. Continue enlarging by 10 percent till you are satisfied with the size.

COPYING AND PASTING IMAGES: Adobe Photoshop allows you to copy and paste selections to create duplicates or move data from one file to another.

Step 1: Click either the Marquee tool or the Lasso tool icon. Marquee allows you to select a predefined shape, while with the lasso you can draw your own selection.

Step 2: Click and drag on an image to select the area you want to copy. If you need to add additional parts to your selection, click the "Add to Selection" icon from the option bar, which looks like two overlapping squares, and select another part of the image.



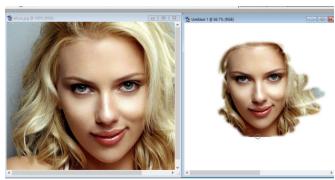
Step 3: Press **Ctrl + C** to copy the selected part of the current layer. Alternatively, press **Shift + Ctrl + C** to copy a merged version of all layers.

Step 4: Open the image you want to paste into.

Step 5: Press **Ctrl + V** to paste the selection. It will appear on a new layer in the center of the image, after which you can position it using the Move Tool.

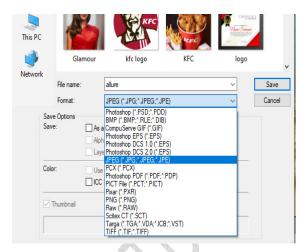
CLONING IMAGES: We can clone image by using clone stamp. Clone stamp is used for copying object that we want to copy.

- 1. Select the **Clone stamp tool** from the tools box or pressing the "S" key from the keyboard.
- 2. Press **ALT and click** where you want to clone.
- 3. Start cloning by clicking where you want to keep the copy.



TYPES OF IMAGES: Some popular file formats in photoshop are:

- 1. PSD Photoshop Document: This is the photoshop default file extension format is .psd
- 2. Bmp Bitmap
- 3. JPEG (or JPG) Joint Photographic Experts Group
- 4. PNG Portable Network Graphics
- 5. GIF Graphics Interchange Format
- 6. TIFF Tagged Image File
- 7. PDF Portable Document Format



3. WORKING WITH LAYERS (4 Marks)

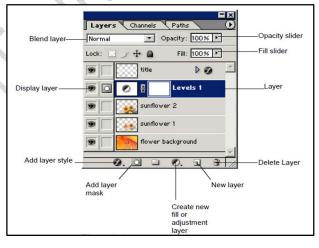
LAYERS: Layers are like sheets of plain glass placed one on top of the other elements. If there is no image, they are transparent and opaque. *To display a Layer Palette click the window*

menu > choose Layers.

- We can create layer by
 - i) Pressing Ctrl + Shift + N OR ii) Pressing create new layer icon on the bottom of the layer palette. OR iii) Pressing layer menu \rightarrow New \rightarrow layer... New Layer dialog box \rightarrow Ok.
- We can rename layer by
 - i) Double clicking on the layer palette we

want to rename. OR ii) Right click on the layer and choose Layer properties... OR iii) Click layer menu and click layer properties...

- We can **duplicate layer** by
 - i) Pressing Ctrl + J; OR ii) Dragging the layer toward *Create new layer* icon. OR iii) Right click on the layer and click on duplicate layer....
- Layer can be deleted by
 - i) Right clicking on the layer and choose delete layer... OR ii) Clicking on the **delete layer** icon. OR iii) Pressing layer menu \rightarrow delete \rightarrow layer... confirmation dialog box \rightarrow Ok.
- We can **lock layer** by clicking the lock button **1** on the layer palette.
- Layer can be hide by clicking on the display layer icon () icon.



- **Grouping layer** implies creating a Set 1 which contains adjacent layers and acts as a folder on the palette. To create groups do this:
 - i) Click the Layer menu highlight New and choose Layer set... OR
 - ii) Click on **new layer set icon** through **Layer palette**.

3. MASKING LAYERS (4 Marks)

Masking allows us to show or hide portion of a layer. Mask use these three colors (white, black and gray) to control the transparency of a layer. It actually means that the black colors are hiding and white are shown in layer masks.

There are two types of masks. Layer mask: It refers to bitmap images and is resolution-dependent. Painting or Selection tool is used to create the layer mask. Vector mask: It refers to images that are resolution-independent. Pen or Shape Tool is used to create the vector mask.

To **apply layer mask**, do this:

- 1. Open an image in which you want to apply mask.
- 2. Make a duplicate layer of background layer.
- Click the Edit menu and choose Transform. A submenu appears select Flip Horizontal.
- 4. The background copy layer flips horizontally.
- 5. Click the **Layer** Menu highlight **Layer Mask**. A sub menu option appears. Select **Reveal All** option.



7. The Layer Masking has been added to the Layer. This effect can be seen in above.

USING SHAPE MASKING: To create a Shape Masking, do this:

- 1. Open an image in which you want to apply layer mask.
- 2. Click **Layer** menu, highlight **New**. A sub menu appears. Select **Layer from Background... OR** Go to layer palette; double click on the background layer to unlock the layer.
- 3. Now the background layer is converted into an editable layer.



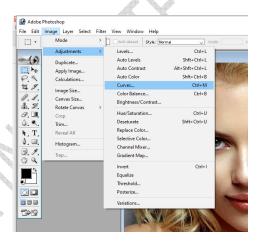
- 4. Select **Custom Shape Tool** from Toolbox. And drag the mouse pointer to draw the shape.
- 5. Go to Layer Menu > Add Vector Mask > Current Path.
- 6. Now, the image is cropped inside the thumbnail shape in the document as shown in the above figure.

DISCARDING LAYER MASK: If you don't like the way a layer mask looks, you can delete it by simply dragging the layer from the Channels palette to the Delete current channel button at the bottom of the palette.

5. WORKING WITH ADJUSTMENT LAYERS AND FILL LAYERS.(3 Marks)

In this section we are going to take a look at Global Adjustments. This means adjusting the whole image to correct colour, contrast or exposure of an image.

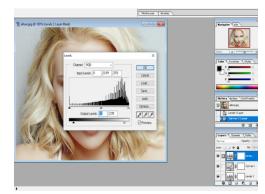
There are two different ways in which you can apply an adjustment to an image. The first is to go to the **Image** menu and choose **Adjustments**. However, if you apply an adjustment to your image and save it, the adjustment is permanent and destructive.



The second method for applying an adjustment is non-destructive and utilizes a special type of layer called an **Adjustment layer**.

Creating Adjustment layers:

- Click the New Adjustment Layer button at the bottom of the Layers panel, and choose an adjustment layer type.
- Choose Layer > New Adjustment Layer, and choose an option. Name the layer, set layer options, and click OK.



There are many different adjustments, but the most useful adjustments for beginners to start with are: Levels, Hue/Sat

useful adjustments for beginners to start with are: **Levels, Hue/Saturation (***please see no. 9 below for hue/saturation adjustment***)**.

When you apply a Levels correction you will notice that there is a histogram, this is a representation of all of the tonal values in the image. The black point slider on the left is set at 0 which is pure black and the white point slider on the right is set at 255 which is pure white.

FILLING LAYERS:

• Choose Layer > New Fill Layer, and choose an option. Name the layer, set layer options, and click OK. Or Click the New Adjustment Layer button

at the bottom of the Layers panel, and choose a fill layer type.

EDITING ADJUSTMENT AND FILL LAYERS:

- Double-click the adjustment or fill-layer thumbnail in the Layers panel. Or Click Layer Menu > Choose Layer Content Options.
- Make the desired changes in the Properties panel.

6. WORKING WITH LAYER STYLES (3 MARKS)

Photoshop provides a variety of style effects—such as shadows, glows, and bevels—that change the appearance of a layer's contents in a non-destructive way. Layer effects are linked to the layer contents. For example, if you apply a drop shadow to a text layer and then add new text, the shadow is added automatically to the new text.

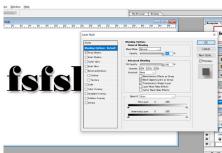
ADDING A PRESET STYLE: To show a preset styles, go to Window > Styles.

- Choose any style in the Styles panel to apply it to the currently selected layers OR
- Drag a style from the Styles panel onto a layer in the Layers panel. OR
- Drag a style from the Styles panel to the document window, and release the mouse button when the pointer is over the layer content to which you want to apply the style.



TO APPLY CUSTOM STYLES:-

- Double-click the layer, outside the layer name or thumbnail. OR
- Click the Add a Layer Style icon at the bottom of the Layers panel and choose an effect from the list.
 OR Choose an effect from the Layer > Layer Style submenu.
- To edit an existing style, double-click an effect displayed below the layer name in the Layers panel. (Click the triangle next to the Add A Layer Style icon to display the effects contained in the style.)



7. CREATING WORK PATH USING PEN TOOL(3 MARKS)

PEN TOOL: The Pen Tool allows you to create straight lined, smooth curved paths and shapes (vector). A path is a straight or curved shape. It is rather like a road - it can curve one

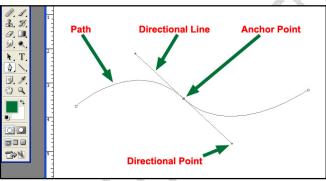
Shape Layers

Path Layers

File Edit Image Layer Select Filter Analysis 3D View Window Help

way or the other but it is always part of the same path. There are sections in a path defined by anchor points.

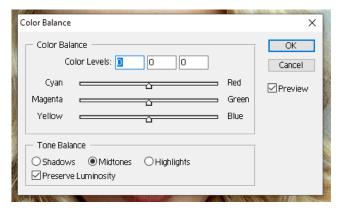
- Straight path can be drawn by pressing shift while joining the point.
- **Curve line** can be drawn by adjusting from the direction point.
- To adjust direction point, press ctrl and click on the path
- We can convert path in selection by right clicking > make selection on the paths while
 using pen tool.



8. MODIFYING IMAGES (3 MARKS)

BALANCING COLORS:

- Choose Image → Adjustments → Color Balance or Press Ctrl + B to access the Color Balance dialog box.
- Choose the Shadows, Midtones, or Highlights option to select the tones of an image you want to work on. Usually, Midtones is the best choice.
- Select the Preserve Luminosity option.
- Move the Cyan/Red, Magenta/Green, or Yellow/Blue slider to add or subtract color, watching the effects of your adjustments on the original image.



The Color Levels boxes show the amount of each color that Photoshop adds and subtracts while you move the sliders.

9. MAKING QUICK ADJUSTMENT TO AN IMAGE (3 MARKS)

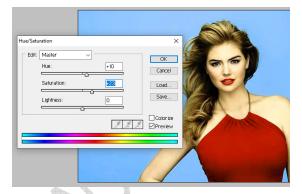
APPLY THE BRIGHTNESS/CONTRAST ADJUSTMENT: The Brightness/Contrast adjustment lets you make simple adjustments to the tonal range of an image.

• Choose Layer > New Adjustment Layer > Brightness/Contrast.

APPLY A HUE/SATURATION ADJUSTMENT: Hue/Saturation lets you adjust the hue, saturation,

and lightness of a specific range of colors in an image or simultaneously adjust all the colors in an image. This adjustment is especially good for fine-tuning colors in a CMYK image so that they are in the gamut of an output device.

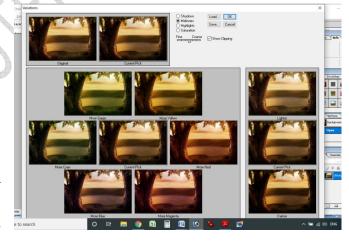
Choose Layer > New Adjustment
 Layer > Hue/Saturation. Click OK in the
 New Layer dialog box.



USING OF VARIATION: The Color Variations command in Photoshop Elements is a digital color-correction feature. You may use this command when you're not quite sure what's wrong with the color or what kind of colorcast your image has.

To use the Color Variations command:

- Choose Image → Adjustment →
 Variations...
- The Color Variations dialog box appears, displaying a preview of your original image (before) and the corrected image (after).
- Select a tonal range or color richness (if you're unsure which range to select, start with the Midtones)



- Specify how much adjustment you want with the Adjust Color Intensity slider.
- Drag left to decrease the amount of adjustment and drag right to increase the amount.
- If you selected Midtones, Shadows, or Highlights in Step 2, adjust the color by clicking the various Increase or Decrease Color buttons.

10. USING CHANNEL (3 MARKS)

WORKING WITH CHANNEL: To put it simply, color channels are the red, green, blue, cyan, magenta, yellow and black elements of an image. You can view an image's individual

channels by opening the Channels palette. Using color channels is useful when you are converting a color image to grayscale or when you are trying to select a very specific area of color. Let's try it:

1. Open an image in which you want to work with. As you can see from the image's title bar, this is an RGB image. Therefore the channels displayed in the Channels palette will include red, green, and blue as well as an RGB channel which shows all the RGB elements combined.



- 2. Click the display icon to the left of the Red layer. Your image should look like very different pictured. This is because the red pixels of the image have been hidden. Click where the display icon was to make the red channel reappear. You can do the same thing with the green and blue channels.
- 3. Select Image → Mode → CMYK Color from the menu. So, the image is converted from RGB to CMYK. Look at the Channels palette, its layers have changed from four channels labeled RGB, Red, Green, and Blue to five channels labeled CMYK, Cyan, Magenta, Yellow, and Black.
- 4. Select **File** \rightarrow **Revert** from the menu.

DELETING CHANNELS: To delete the channel in the Channels panel, do one of the following:

i) Alt + click the Delete icon 3. OR ii) Drag the channel name in the panel to the Delete icon. OR iii) Choose Delete Channel from the Channels panel menu. OR iii) Click the Delete icon at the bottom of the panel, and then click Yes.

11. WORKING WITH MASKS. (3 MARKS)

CREATING MASKS IN QUICK MASK MODE: If you want to make a change to a select part of an image, you can use a Quick Mask. Areas painted black on a mask are protected, and areas painted white are editable (unprotected).



Follow these steps to create your very own Quick Mask:

- Open a new document and, using any selection tool, select the element you want in your image.
- Click the Edit in Quick Mask Mode button in the Tools panel (or press the Q key).
- Refine the mask by using brush or pencil tool.
- After you finish editing your mask, click the Edit in Standard Mode button in the Tools panel to exit the Quick Mask. You can also press the Q key.

To apply layer mask for changing image background, do this:

- 1. In Photoshop, open two images for the foreground and background image.
- 2. Drag the foreground image on top of the background image. Press Ctrl + T (same as click edit > Free transform) for resizing the image if required.
- 3. In the foreground image, select part of the area by using any selection tool. (Do not be careful here, you can adjust selection area again later)



- 4. To create a mask that reveals the entire layer, click the Add Layer
 - Mask Dutton in the Layers panel, OR choose Layer > Layer Mask > Reveal Selection.
- 5. Refine the selected area using the Brush tool, press [or] to resize the diameter of the Brush. Switch to foreground and background color to adjust the selected part of an image. Remember that areas painted black on a mask are hidden and areas painted white are shown.

STORING MASKS IN ALPHA CHANNELS: Masks are stored in alpha channels. If you have made a particularly time-consuming selection or one that you will need to make repeatedly, you can save the selection as a channel and then load it whenever you need it. However, in order to load a selection into an image you need to have saved one first.

To save the selection as a channel, try this:

- 1. Select Select \rightarrow Save Selection from the menu. The Save Selection dialog box appears. Here you can specify the name of your selection and it will appear within the Channels palette.
- 2. Select **Select** \rightarrow **Deselect** from the menu or press <Ctrl> + <D>.
- 3. Select Select \rightarrow Load Selection from the menu. The selection reappears!

12. FILTER BASICS AND ITS TYPES (3 MARKS)

Photoshop has plenty of powerful built-in Filters. Apply special visual effect to your images using Filters. Filters allow you to manipulate entire photographs. To apply filter, go to **Filter** menu > choose any filter that you want to apply.

CONSTRUCTIVE FILTERS: The constructive filters complement one another. The Blur group contains eight individual filters: Average, Blur, Blur More, Gaussian Blur, Lens Blur, Motion Blur, Radial Blur, and Smart Blur.

DESTRUCTIVE FILTERS: Destructive filters are used to create some kind of special effect. Pixels are also modified, but the image may look quite

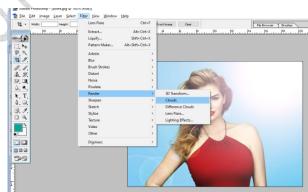




a bit different from its original. These kinds of filters create effects, such as textures, brush strokes, mosaics, lights, and clouds. They can also distort an image with waves, spheres, and ripples.

RENDER FILTERS: The Render filters create 3D shapes, cloud patterns, refraction patterns, and simulated light reflections in an image. You can also manipulate objects in 3D space, create 3D objects (cubes, spheres, and cylinders), and create texture fills from grayscale files to produce 3D-like effects for lighting.

THE LIQUIFY: The Liquify filter lets you push, pull, rotate, reflect, pucker, and bloat any area of an image. The distortions you create can be subtle or drastic, which makes the Liquify command a powerful tool for retouching images as well as creating artistic effects.



ESSENTIAL PHOTOSHOP SHORTCUT COMMANDS

- **F (Cycle Screen Modes)** Switch between normal screen, full screen with task bar without title bar, and full screen with black background. Works great when used in conjunction with *Tab* to hide toolbars maximum working space, no distractions.
- **X (Switch Colors)** Swap your foreground and background colors. Very handy when working with masks.
- **D (Default Colors)** Reset your foreground and background colors to black and white, respectively.
- Ctrl + '+'/'-' (Zoom In/Out) Quickly zoom in or out without changing your current tool.

- Alt + Mouse Scroll (Zoom In/Out) Fastest way to zoom scroll up to zoom in, and scroll down to zoom out.
- **Ctrl + Alt + Z** (Step Back) *Ctrl + Z* is OK if you catch a mistake immediately after it happens, but this command will continue to march its way up the history tree.
- Ctrl + S (Save) Save your work.
- Ctrl + Alt + Shift + N (New Layer No Dialog) Quickly insert a new empty layer on top of the active layer.

USEFUL PHOTOSHOP SHORTCUT COMMANDS

- Shift + Click Mask (Enable/Disable Layer Mask) Disabling the mask allows you to check the results of your masking against the original.
- Alt + Click Mask (Toggle Mask Visibility) Doing this will bring up the mask as a grayscale image so you can see what you're working with. Useful if you have areas that need to be filled in or smoothed out.
- Ctrl + J (New Layer Via Copy) Can be used to duplicate the active layer into a new layer.
- Caps Lock (Toggle Cross Hairs) Switch between the standard tool icon and a set of precision cross hairs.
- Shift + Backspace (Fill Dialog) Good time saver when working with masks. Also, use the *Ctrl* + *Backspace* to fill with background color and *Alt* + *Backspace* to fill with foreground color.
- **Ctrl + H** (Hide Selection Lines) When working with selections, use this command to hide the "marching ants" while keeping the selection.
- **Ctrl + I** (Invert Selection) Select the opposite of what is already selected. Also a good tool when working with mask creation.
- Ctrl + D (Deselect) After working with your selection, use this combo to discard it.
- **Ctrl** + **G** (Group Layers) This command groups selected layers in the layer tree. Adding *Shift* to this combo will ungroup layers when the grouped layer is selected.
- Ctrl + A (Select All) Creates a selection around the entire canvas.
- **Ctrl** + **T** (Free Transform) Brings up the free transform tool for resizing, rotating, and skewing the image using a dragable outline.
- **Ctrl + E** (Merge Layers) Merges selected layer with the layer directly below it. If multiple layers are selected, only those will be merged.
- **Crtl + Shift + E** (Merge Visible) Merges all visible layers into one. Not recommended practice in typical photo editing because you'll lose layer information.
- SPACEBAR (Temporary Hand Tool) Hold down the spacebar to temporarily bring up the hand tool so you can move around.

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