

Advanced Image Processing

Final Exam

Ques1:- What is 3D rendering?

Ans1:- 3D rendering is the 3D computer graphics process of converting 3D models into 2D images on a computer. 3D renders may include photorealistic effects or non-photorealistic styles.

Ques2:- Write steps to perform 3D rendering?

Ans2:-

Ques3:- How to do a color match in GIMP. Mention the steps.

Ans3:- 1. Launch GIMP, then click "File" and "New" to create a new image. Enter the width and height of the image in the designated input boxes, then click "OK." Ensure that your canvas size is the same as that of the images you want to layer.

2. Click "Advance Options" and enter a resolution for your canvas. Select "72-dpi" if the image is only going to be displayed on the Web, or "300-dpi" if it is going to be printed, then click "OK."

3. Click "File" and "Open as Layers." Hold down the "Ctrl" key while clicking the images you want to layer.

4. Click "Open" to load all the images into GIMP as separate layers. Click and drag the images on the Layers panel to arrange them in your desired order.

5. Orient the different layers using the "Align," "Move," "Rotate," "Scale," "Shear" and "Flip" tools from the Toolbox.

6. Click the "Color Picker" tool from the Toolbox once you are satisfied with the arrangement of the layered images. Click on the "Background Color" box on the Toolbox.

7. Click on the layer in the Layers panel that has the image containing the color you want to match. Click on the color in the image using the "Color Picker" tool. The color in the Background Color box on the Toolbox changes to match the color you have selected.

8. Click the "Background" layer on the Layers tab, then click the "Bucket Fill" tool on the Toolbox. Click "BG color fill" on the Bucket Fill tool options just below the Toolbox.

9. Click anywhere inside the canvas on the Background layer to fill it with the background color you have selected. This allows the images to blend together better and prevent any blank areas from showing through where the images are not overlapping.

10. Click "File" and "Save" to store the image on your computer. Select "XCF" as the file format for the image in order to preserve the layers. Selecting another format merges all the layers together, making it impossible to edit them individually.

Ques4: What are filters in Gimp?

Ans4:- Filters are one of the most used features for photo editing. It is a unique tool that takes an input layer or image, applies a mathematical algorithm to it, and provides a layer or image in a modified format. GIMP has various Filters such as Blur, enhance, distorts, light and Shadow, etc.

Ques5:- How to apply blur filter on an image using GIMP? Mention the steps.

Ans5:- 1. Open GIMP and load the image with the objects that you want to blur.

2. Click the selection tool from the GIMP Toolbox that is best suited for selecting the things in your image that you want to blur. For example, use the Rectangle Select tool for signs, the Ellipse Select tool for faces or the Free Select tool for things that have irregular shapes.

3. Click and drag your mouse cursor over the part of the image you want to blur.

4. Click "Filters" from the menu bar, hover the cursor over "Blur," and then select the type of blur that you want to apply from the list of options.

5. Adjust the settings for the type of blur that you are applying. The normal Blur effect only softens the selection, but can be applied multiple times for a stronger effect; the Gaussian blur enables you to adjust the horizontal and vertical blur radius for a very blurry effect; the Motion blur enables you to adjust the blur length and angle to create the impression of movement; and the Pixelize blur enables you to adjust the pixel width and height of the selection to create a pixelated blur distortion.

6. Click "OK" after you are satisfied with the preview to apply the blur effect to the selection in the image.

7. Use one of the selection tools to select another area of the image, and then repeat the process to make more things blurry, if needed. You can apply different blur effects to different things in your image, such as applying a Pixelize blur to a face and a Gaussian blur to an offensive slogan.

8. Export the image with a new file name to save the changes while preserving the original image.

Ques6:- What is HDR toning?

Ans6:- HDR is where layered image editing programs such as GIMP are very useful. Using a technique called layer masks, GIMP stacks the photos with different exposures, rather like a stack of acetate sheets, and make the parts we don't want transparent so the best parts show through the stack. GIMP is doubly useful for this because we can make them do the hard work of actually making the layer masks.

Ques7:- How to create a video timeline?

Ans7:-

Ques8:- What are scripts in Photoshop?

Ans8:- Automation is useful in the work of every designer. It saves precious time on repetitive tasks and helps us solve certain problems more quickly and easily. You can automate your workflow in

Photoshop with actions, which are pretty popular and which most of you already know about and use. A script is more dynamic; its behavior changes according to the parameters you input or the context of its application.

Ques9:- What is batch processing in photoshop?

Ans9:- The Batch feature in Photoshop CS6 enables you to apply an action to a group of files. Suppose you want to make changes to a series of files. That might take a while if you do it individually. If you want to keep your original file, too, you have to remember to save each file in a new folder. Batch processing can automate tedious chores for you.

Ques10:- What are droplets?

Ans10:- Droplets are the way to automate your Photoshop work for batch processing. Creating a Droplet in Photoshop makes an icon shaped like a downward-pointing arrow that you drag multiple images onto to apply an action in a batch.

Ques11:- What is contact sheet II?

Ans11:-

Ques12:- Mention the steps to create a contact sheet II?

Ans12:- 1. In Photoshop, go to File > Automate > Contact Sheet II.

2. In the Source Images section of the Contact Sheet II dialog box, choose the folder that contains your images.

3. Under Document, set the Units, Width/Height, Resolution, and Mode (color mode) for the contact sheet.

4. If desired, select the Flatten All Layers option.

5. Under Thumbnails, decide how you want your images arranged on the page.

6. Select the Use Filename as Caption option to label each image based on its file name.

7. Click OK and Photoshop will create your contact sheet. You can save or print it from the File menu.

Ques13:- What are pre-defined scripts in photoshop?

Ans13:-

Ques14:- What is file information in photoshop?

Ans14:- The File Info dialog box displays camera data, caption, and copyright and authorship information that has been added to the file. Using this dialog box, you can modify or add information to files saved in Photoshop Elements.

Ques15:- Mention the steps to add file information in photoshop?