1. What does RGBA stand for?

ANS:-

RGBA(Red-Green-Blue-Alpha)

The RGB color model is extended in this specification to include “alpha” to allow specification of the opacity of a color.

2. From the Pillow module, how do you get the RGBA value of any images?

ANS:-

In Pillow, RGBA values are represented by a tuple of four integer values. For example, the color red is represented by (255, 0, 0, 255) . This color has the maximum amount of red, no green or blue, and the maximum alpha value, meaning it is fully opaque.

3. What is a box tuple, and how does it work?

ANS:-

The box. tuple submodule provides read-only access for the tuple userdata type. It allows, for a single tuple: selective retrieval of the field contents, retrieval of information about size, iteration over all the fields, and conversion to a Lua table.

4. Use your image and load in notebook then, How can you find out the width and height of an Image object?

ANS:-

The syntax to use size property of PIL Image object is given below.

im = Image.open("sample-image.png")

im.size

### Example 1: Get Image Size

In the following program, we will read and image and then print its size using **size** property of the Image.

**Python Program**

from PIL import Image

#read the image

im = Image.open("sample-image.png")

#image size

print(im.size)

**Output**

(640, 400)

5. What method would you call to get Image object for a 100×100 image, excluding the lower-left quarter of it?

ANS:-

To get an Image object for a 100x100 image, excluding the lower-left quarter of it, we would need to use the HTML5 Canvas API to manipulate the image data.

6. After making changes to an Image object, how could you save it as an image file?

ANS:-

PIL is the Python Imaging Library which provides the python interpreter with image editing capabilities. The Image module provides a class with the same name which is used to represent a PIL image. The module also provides a number of factory functions, including functions to load images from files, and to create new images.

**Image.save()** Saves this image under the given filename. If no format is specified, the format to use is determined from the filename extension, if possible.

7. What module contains Pillow’s shape-drawing code?

ANS:-

The 'ImageDraw' module provides simple 2D graphics support for Image Object. Generally, we use this module to create new images, annotate or retouch existing images and to generate graphics on the fly for web use. The graphics commands support the drawing of shapes and annotation of text.

8. Image objects do not have drawing methods. What kind of object does? How do you get this kind of object?

ANS:-

Draw() to get an ImageDraw object, and storing the ImageDraw object in draw , we can call drawing methods on draw .