

Q-4

III Assignment-4

4(a)

After image:-

→ are optical illusion, particularly were perceived when finding an image for an extended period of time. Then looking at a neutral background, where an inverted copy of the original stimulus appears. The time mechanism that produce the perceived specific colours and shape is complex & not entirely understood, but most of the important attributes can be well explained by behaviour of retinal photoreceptors (retinal kinetics)

4(b)

Color Moiré:-

→ is the artificial color banding that can appear in image with repetitive pattern of high spatial freq., like fountain & pickled tomatoes. Color Moiré is the result of aliasing (image energy above the Nyquist freq) in image sensor that employ Bayer's color filter arrays. It is affected by lens sharpness, the sensor anti-aliasing (lowpass) filter (which softens the image), and deconvolution software. It tends to be worst with the sharpest lens. It measured by log frequency, which uses a sine that of logarithmically ↑ spatial freq.

#### 4(3) Str. Coloration:

→ is the production of color by microscopically str. surface fine enough to interfere with various light sometime in continuous with pigments. It is based on the principle of wave interference

→ It caused by interference effect rather than by pigments.

→ Colors are produced when a material is coated with fine parallel lines, formed of one or more thin layers, or otherwise composed of microstructures on the scale of the color wavelength.