

1. Describe the roles of aperture and shutter speed in photography and how do they influence the final image provide practical example.

An aperture is a hole or an opening through which light is admitted. The aperture

controls the brightness of the light that reaches the film. The aperture works like the pupil of an eye; it can be enlarged or contracted to admit more light or less. Film is very particular as to the amount of light it needs. If you let in too little, it will fail to register your picture properly and print will be very dark. If you let in too much, it will be swamped and the print will be very light with no detail in the brighter parts. In other words, the film will be either under or over exposed. The piece of the mechanism, which does this, is called the diaphragm or aperture. It is made up of very thin metal blades, which open or close over each other and alter the size of the hole in the center. This hole is called **aperture**.

Shutter speed is time period for which the camera is opening, how long the camera shutter is open and capturing light. Shutter speed influences motion, fast shutter speed creates a shorter exposure- the amount of light which camera takes in; and slow shutter speed gives the photographer a longer exposure.

Aperture and shutter speed both play an important role for a picture as it controls the exposure and creative effects of a photograph. Different adjustments and settings of aperture and shutter speed are needed to be done by a photographer for an impactful image.

examples:





2. Explain the concept of three point lighting. Provide a step by step guide on how to effectively set and utilise three point lighting for professional photography?

There are three main sources of three point lighting which are :-

1. Keylight
2. Fill light
3. Backlight

- Key Light is strong enough to illuminate the object
- Fill Light is weak enough to illuminate the object
- Back Light is to create glow on hair
- It is most common and the most useful lighting formula

The steps which should be taken to effectively utilise three point lighting for professional photography:

- 1.Start with the key light such as studio strobe or a large softbox, at a 45 angle to the subject.
- 2.Add the fill light like a smaller softbox or reflector on the opposite of key light.
- 3.Set up the backlight such as small strobe or a snoot, behind the subject . This will add depth.
- 4.Adjust the intensity of each light to achieve the desired look. You can increase or decrease the power of each light to control the balance.
- 5.Modify the light using modifiers like diffusers, reflector or grids to shape and control the direction of light .
6. Try different compositions to bring out the best in your pictures.

3.Explain the importance of reading signs and signifiers in visuals for social messaging. How understanding semiotics contributes to decoding and analysing visual messages in context of culture and society?