SYLLABUS

5th SEMESTER

CINEMATOGRAPHY

SP. PAPER-2

LIGHTING FUNDAMENTALS

Credits: 3

L	T	P
3	0	10

1. The light

   Introduction to light, Difference between light and lighting

   Types of light energy: Visible light, Infrared, X-rays and Ultraviolet light:

   Properties of light: Intensity, Frequency and wave length

   Sources of light: Natural and artificial, Luminous and non-luminous, incandescence and phosphorescence, evolution of artificial light sources, electrical sources of light, fluorescence light and LED lights

2. Characteristics of light

   Quality: Hard, soft and diffused light

   Quantity / intensity: Directly connected with exposure, relative intensity of light on different areas within a scene

   Color: Color of sun light and other artificial sources, color temperature

   Direction: Angle of light falling on the subject, front, 3/4th front, side, 3/4th back, back and top

   Lighting contrast, Inverse square law

3. What lighting does?

   Reveals the shape, Separates background from the main subject, can alter the contrast

   Creates illusion of three dimension, Brings out texture , Builds proper exposure,

   Directs the eye to important elements in the scene/frame

4. Lighting instruments

   Types of film lights: Tungsten, HMI and fluorescent light, LED lights

Spot light, flood light, Fresnel light, lens-less lights, Day light or tungsten light balanced,

LED lights: Dimmable, Portable, versatile, Battery powered, flicker free, long lasting, controllable colour temperature

5. Lighting Techniques

Three point lighting: Lighting from three different directions shapes the subject, Key light, Fill light, Back light

Hard or Soft film lighting, effect of hardness or softness on shadows on the subject, Diffused overhead lighting

High key and low key lighting: low contrast vs. high contrast lighting

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