



THEORY EXAMINATION (SEM-VIII) 2016-17
ADVANCED DISPLAY TECHNOLOGIES & SYSTEMS

Time : 3 Hours

Max. Marks : 100

Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.

SECTION-A

1. Explain the following :

(10×2=20)

- Define snells law of refraction.
- Define Horopter
- What are the materials used in capacitive touchscreen.
- What are the differences between LED and conventional diodes.
- Explain the basic principle of CRT.
- Explain charge transport in OLEDs.
- Explain digital holography.
- Classify microdisplays.
- Explain LCOS principle of operation.
- What are the advantages of DLP projections.

SECTION-B

2. Attempt any five of the following :

(10×5=50)

- Explain optical modulation in detail.
- Explain graphic controllers in detail.
- Explain transparent conductors.
- Explain fabrication and operation of OLED.
- Explain the principles of holographic display.
- Explain MEMS Microdisplay.
- Explain head won displays.
- Explain RT in detail.

SECTION-C

Attempt any two of the following :

(15×2=30)

- Explain the concept of optical modulation in detail.
- Explain the following
 - Photolithographic Process.
 - Volumetric 3D display
 - Electronic viewfinder
- Explain multifocus displays and occlusion display in detail.

