

BTECH
(SEM VIII) THEORY EXAMINATION 2018-19
ADVANCE DISPLAY TECHNOLOGIES & SYSTEMS

Time: 3 Hours**Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt all questions in brief.** **2 x 10 = 20**
- Write down the Maxwell's equation.
 - What are twisted nematic display's.
 - Explain Photometry.
 - What is ricco's law.
 - What is Bassel Convention.
 - Explain flexible display.
 - What are the advantages and disadvantages of scanning IR.
 - Enlist the difference between LED and LCD.
 - What are electrophoretic displays.
 - Explain autostereoscopic displays.

SECTION B

- 2. Attempt any three of the following:** **10x3=30**
- Explain the effect of noise on detection of light.
 - What is optical touch screen technology.
 - What are organic electroluminescent displays? Explain the manufacturing process of active matrix organic light emitting diode (AMOLED).
 - What are micro displays . Also give its classification and architecture process.
 - What are volumetric and 3-D volumetric displays.

SECTION C

- 3. Attempt any one part of the following:** **10x1=10**
- Explain the fundamentals of passive matrix display.
 - What are graphics controllers.
- 4. Attempt any one part of the following:** **10x1=10**
- What are OLED displays.
 - What is etching? Also explain its types in detail
- 5. Attempt any one part of the following:** **10x1=10**
- What is vacuum fluorescent display? Explain its principle of operation and construction process.
 - Explain theory of operation of thin film electroluminescence.
- 6. Attempt any one part of the following:** **10x1=10**
- What is 3D cinema technology? Also explain various projection technologies used in this.
 - What is autostereoscopic 3D technology?
- 7. Attempt any one part of the following:** **10x1=10**
- Explain the architecture of Head-worn displays.
 - Explain multifocus and occlusion displays.