

AU-243

M.Sc. Semester-I (C.B.C.S. Scheme) Examination**1ELE2 : ELECTRONICS****(Instrumentation and Measurement Techniques)**

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Draw well labelled diagrams wherever necessary.

EITHER

- | | |
|--|---|
| 1. (a) What is printer character set and explain drum printer. | 6 |
| (b) Explain construction and working of LED. | 4 |
| (c) Explain touch screen display. | 6 |

OR

- | | |
|---|---|
| (p) Explain the working of dot-matrix printer. | 4 |
| (q) Explain construction and working of LCD. | 4 |
| (r) Give the classification of display devices and explain any one of them. | 8 |

EITHER

- | | |
|---|---|
| 2. (a) What are digital instruments ? Explain digital multimeter with suitable diagram. | 8 |
| (b) Explain working of digital Tachometer. | 8 |

OR

- | | |
|--|---|
| (p) Explain the digital pH-meter with block diagram. | 8 |
| (q) Explain microprocessor based instrumentation system. | 8 |

EITHER

- | | |
|---|---|
| 3. (a) Explain the signal generator in detail. | 8 |
| (b) Draw and explain internal structure of CRT. | 8 |

OR

- (p) Draw and explain block diagram of ramp type digital voltmeter. 8
- (q) Draw and explain function of each block of spectrum analyser. 8

EITHER

- 4. (a) Draw and explain the block diagram of signal conditioning. 8
- (b) Discuss in detail the construction and working of LVDT. 8

OR

- (p) Describe temperature transducers. 8
- (q) Explain the working of strain gauge as a mechanical transducer. 8

EITHER

- 5. (a) Draw and explain cavity wave meter. 8
- (b) Explain the use of CRO for measurement of amplitude modulation. 8

OR

- (p) Explain any one of intermodulation method of measuring non-linear distortion. 8
- (q) Explain the measurement of frequency response in audio amplifier. 8