

**6216**  
**BOARD DIPLOMA EXAMINATION**  
**MARCH/APRIL - 2019**  
**DIPLOMA IN APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING**  
**ELECTRONIC MEASURING INSTRUMENTS**  
**THIRD SEMESTER EXAMINATION**

**Time: 3 Hours**

**Total Marks: 80**

**PART - A (3m x 10 = 30m)**

*Note 1: Answer all questions and each question carries 3 marks*

*2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences*

1. State the principle of PMMC instrument
2. State the principle of Series type ohmmeter
3. Define sensitivity of voltmeter
4. List the specifications of digital voltmeter
5. Mention various parameters measured with multi meter
6. State the procedure for measurement of Time Period and frequency in CRO
7. List the front panel controls of CRO
8. Mention major parts of cathode ray Oscilloscope
9. Draw the block diagram of RF signal generator
10. Draw the diagram of Q-meter

**PART - B (10m x 5 = 50m)**

*Note 1: Answer any five questions and each question carries 10 marks*

*2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer*

11. Explain the construction and principle of operation of Shunt type ohmmeter with diagram
- \* 12. Explain the Inductance measurement using Maxwell's bridge with diagram
13. Explain the working of digital LCR meter with diagram
14. Explain the working of Successive approximation type digital voltmeter with diagram

15. Explain the Vertical deflection system, Cathode ray tube and Power supply system in CRO
16. Explain triggered sweep with necessary circuit and mention its advantages
17. Explain the working of Audio Frequency Oscillator (sine & square) with diagram
18. Explain the working of XY recorders with diagram

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