

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 3rd Sem
Subject Code: (03608205)
Subject Name: Electronic Measurements and Instrumentation

Date: (09/08/2022)
Time: (1hr: 30min)
Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1 Answer any six out of Ten. (2 Marks Each) (12)**
1. What is Accuracy?
 2. What is Resolution in terms of measurement?
 3. List out Applications of CRO.
 4. List of Different components of CRT.
 5. What is the importance of delay line?
 6. Define (i) Pulse width (ii) Duty cycle.
 7. What are the limitations of Wheatstone bridge?
 8. List different types of Errors.
 9. What is Sensitivity?
 10. Define: Limiting error.
- Q.2 A) Explain Maxwell's bridge. (03)**
- OR**
- A) Draw the diagram of CRT. (03)
B) Explain Hay's Bridge. (03)
- OR**
- B) Explain Systematic Error. (03)
C) Explain Vertical Deflection system of CRO using block diagram. (04)
- OR**
- C) Explain Anderson Bridge. (04)
D) Explain any 4 components of Cathode Ray Tube. (04)
- Q.3 A) Explain Horizontal deflection system of CRO. (03)**
- OR**
- A) Draw Kelvin double arm bridge and discuss its applications. (03)
B) Explain Multiple Trace CRO. (03)
- OR**
- B) Explain Voltage Measurement in CRO. (03)
C) Explain Wheatstone Bridge in detail. (04)
- OR**
- C) Explain Digital Storage Oscilloscope. (04)
D) Draw and explain block diagram of CRO. (04)