



Temp°C	397	398	399	400	401	402	403	404	405
Frequency of occurrence	1	3	12	23	37	16	4	2	2

Calculate.

- (1) Arithmetic mean
- (2) Mean deviation
- (3) Standard deviation. (6)

Or

- (b) (i) Explain the static characteristics of an instrument. (10)
- (ii) Explain in detail systematic error. (6)

12. (a) With circuit and phasor diagram, explain the working of single phase ac energy meter.

Or

- (b) Write a short notes on :
  - (i) Current Transformer (8)
  - (ii) Weston frequency meter (8)

13. (a) Draw the diagram of Co-ordinate type A.C. potentiometer and explain its working principle.

Or

- (b) Explain about
  - (i) Electrostatic and electromagnetic interference.
  - (ii) Need for Grounding for measuring instruments.

14. (a) With neat diagram, explain the basic components and working principle of magnetic tape recorders.

Or

- (b) With neat figure explain the working principle of a digital CRO. What are its advantages over analog CRO?

15. (a) Explain in detail about construction and working of LVDT.

Or

- (b) Explain successive approximation type ADC with its characteristics.