

March 2026

Sri Mahalingeswara ITI

Answer Key

Duration: 30 Mins**Total Marks: 25****Q.ID: ITISKILL6895PJ**

1. Which meter movement is not affected by stray magnetic fields?

- A) MI meter - attraction type B) Thermo couple meter
C) PMMC meter D) MI meter - Repulsion type

Answer: C) PMMC meter

2. Which function control in CRO, adjust the trace sharper?

- A) Amplitude (V/Div) B) Intensity
C) Time/Div trigger D) Focus

Answer: D) Focus

3. Which instrument used to measure resistance, capacitance and inductance?

- A) LCR bridge B) Wheatstone bridge
C) Wein bridge D) Kelvin bridge

Answer: A) LCR bridge

4. In which arrangement the high value of resistor is connected to extend the range of voltmeter?

- A) Series B) Delta
C) Star D) Parallel

Answer: A) Series

5. Find the value of shunt resistance required for 1 mA meter to extend the range and measure 10 mA (RM = 27 Ohm) ?

- A) 4 Ohms B) 1 Ohm
C) 2 Ohms D) 3 Ohms

Answer: D) 3 Ohms

6. Which control is used in repulsion type moving iron instrument to keep the pointer at zero position?

- A) Spring control B) Air damping control
C) Magnetic attraction control D) Magnetic repulsion control

Answer: A) Spring control

7. Which electrode controls brightness of the image on the screen of oscilloscope?

- A) Focussing electrode B) Anode
C) Control grid D) Cathode

Answer: C) Control grid

8. Which frame is used for winding the coil of PMMC meter?

- A) Steel frame B) Aluminium frame

- C) Wooden frame D) Ceramic frame

Answer: B) Aluminium frame

9. Which parameter is used in the working of moving coil meter?

- A) Eddy current damping B) Permanent magnetic fields
C) Stray magnetic fields D) Spring control

Answer: B) Permanent magnetic fields

10. Why the soft iron pieces in the moving iron meter is tongue shaped?

- A) To achieve uniformity of scale B) To damp the oscillations
C) To produce magnetic attraction D) To generate heat

Answer: A) To achieve uniformity of scale

11. How the accuracy of amplitude and frequency measured by CRO is checked?

- A) By sine wave signal B) By function generator
C) By built-in calibration signal D) By complex wave form

Answer: C) By built-in calibration signal

12. Which type of wave is generated in Schmitt trigger circuit?

- A) Square wave B) Sine wave
C) Saw tooth wave D) Triangular wave

Answer: A) Square wave

13. What is the name of the procedure carried out to ensure the trustworthy standards of the measuring instrument?

- A) Range test B) Calibration
C) Testing standards D) Re-alignment

Answer: B) Calibration

14. Which band of frequency is used for RADAR in frequency spectrum allotted by the International Telecommunication Union (ITU)?

- A) ITU band - 6 B) ITU band - 10
C) ITU band - 4 D) ITU band - 8

Answer: B) ITU band - 10

15. In which analog meter the battery is provided?

- A) Ohm meter B) Ammeter
C) Voltmeter D) Watt meter

Answer: A) Ohm meter

16. Which meter uses a moving coil for measurement?

- A) MI repulsion type B) PMMC meter
C) MI attraction type D) LCR meter

Answer: B) PMMC meter

17. Which torque is used in PMMC meter movement?

- A) High torque B) Moderate torque
C) Low torque D) Insufficient torque

Answer: B) Moderate torque

18. What is the advantage of using digital multimeter?

- A) Easy portability B) Linear scale
C) Accuracy D) Logarithmic scale

Answer: C) Accuracy

19. Which band is used for UHF in International Telecommunication System?

- A) Band 11 B) Band 6
C) Band 4 D) Band 9

Answer: D) Band 9

20. Which bearing is supporting the shaft of moving coil assembly in a PMMC instrument?

- A) Steel bearings B) Bush bearings
C) Jewelled bearings D) Gun metal bearings

Answer: C) Jewelled bearings

21. What is the purpose of damping torque in PMMC meter?

- A) Control the pivot point B) Control the swinging of the coil
C) Control the jewel bearing D) Control the magnetic field

Answer: B) Control the swinging of the coil

22. How the sensitivity of voltmeter is determined?

- A) Maximum voltage measurement B) Ohms per volt rating
C) Meter coil resistance D) FSD current

Answer: B) Ohms per volt rating

23. Which parameter is measured by a multimeter?

- A) Time duration B) Frequency
C) Voltage D) Energy

Answer: C) Voltage

24. Which characteristics enable the deflection of pointer in the attraction type moving iron meter?

- A) Deflection is independent of current direction B) Deflection is inversely proportional to current
C) Deflecting and controlling torques are D) Weight of the soft iron pieces

Answer: A) Deflection is independent of current direction

25. What is the full form of the abbreviation PMMC meter?

- A) Principle Magnet Moving Coil meter B) Parallel Magnet Moving Coil meter
C) Position Magnet Moving Coil meter D) Permanent Magnet Moving Coil meter

Answer: D) Permanent Magnet Moving Coil meter