

September 2026

**Sri MAHALINGESWARA ITI
KANAKAPURA**

Answer Key

Duration: 50 Mins**Total Marks: 25****Q.ID: ITISKILL3869QG****1. Which meter uses a moving coil for measurement?**

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

Answer: C) PMMC meter**2. Which parameter is used in the working of moving coil meter?**

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

Answer: D) Permanent magnetic fields**3. Which instrument used to measure resistance, capacitance and inductance?**

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

Answer: B) LCR bridge**4. 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) 2 Ohms
C) 1 Ohm D) 3 Ohms

Answer: D) 3 Ohms**5. Why the soft iron pieces in the moving iron meter is tongue shaped?**

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

Answer: C) To achieve uniformity of scale**6. What is the advantage of using digital multimeter?**

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

Answer: D) Accuracy**7. In which analog meter the battery is provided?**

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

Answer: A) Ohm meter**8. Which bearing is supporting the shaft of moving coil assembly in a PMMC instrument?**

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

Answer: D) Jewelled bearings**9. Which meter movement is not affected by stray magnetic fields?**

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

Answer: A) PMMC meter**10. How the sensitivity of voltmeter is determined?**

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

Answer: D) Ohms per volt rating**11. What is the name of the procedure carried out to ensure the trustworthy standards of the measuring instrument?**

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

Answer: B) Calibration**12. Which function control in CRO, adjust the trace sharper?**

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

Answer: A) Focus**13. Which frame is used for winding the coil of PMMC meter?**

- A) Aluminium frame B) Steel frame
C) Ceramic frame D) Wooden frame

Answer: A) Aluminium frame**14. Which electrode controls brightness of the image on the screen of oscilloscope?**

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

Answer: C) Control grid**15. What is the full form of the abbreviation PMMC meter?**

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

Answer: D) Permanent Magnet Moving Coil meter

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

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

Answer: B) Series

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

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

Answer: C) ITU band - 10

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

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

Answer: A) Band 9

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

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

Answer: A) Control the swinging of the coil

20. 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) Weight of the soft iron pieces
- D) Deflecting and controlling torques are

Answer: A) Deflection is independent of current direction

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

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

Answer: A) By built-in calibration signal

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

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

Answer: B) Spring control

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

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

Answer: B) Square wave

24. Which torque is used in PMMC meter movement?

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

Answer: D) Moderate torque

25. Which parameter is measured by a multimeter?

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

Answer: C) Voltage