

## RSGSML Instrumentation Questions and Answers



1. The use of \_\_\_\_\_ instruments is merely confined within laboratories as standardizing instruments.

- (a) absolute
- (b) indicating
- (c) recording
- (d) integrating
- (e) none of the above

Ans: a

2. Which of the following instruments indicate the instantaneous value of the electrical quantity being measured at the time at which it is being measured ?

- (a) Absolute instruments
- (b) Indicating instruments
- (c) Recording instruments
- (d) Integrating instruments

Ans: b

3. \_\_\_\_\_ instruments are those which measure the total quantity of electricity delivered in a particular time.

- (a) Absolute
- (b) Indicating
- (c) Recording
- (d) Integrating

Ans: d

4. Which of the following are integrating instruments ?

- (a) Ammeters
- (b) Voltmeters
- (c) Wattmeters
- (d) Ampere-hour and watt-hour meters

Ans: d

5. Resistances can be measured with the help of

- (a) wattmeters
- (b) voltmeters

## RSGSML Instrumentation Questions and Answers



- (c) ammeters
- (d) ohmmeters and resistance bridges
- (e) all of the above

Ans: d

6 According to application, instruments are classified as

- (a) switch board
- (b) portable
- (c) both (a) and (b)
- (d) moving coil
- (e) moving iron
- (f) both (d) and (e)

Ans: c

7. Which of the following essential features is possessed by an indicating instrument ?

- (a) Deflecting device
- (b) Controlling device
- (c) Damping device
- (d) All of the above

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: d

8. A \_\_\_\_\_ device prevents the oscillation of the moving system and enables the latter to reach its final position quickly

- (a) deflecting
- (b) controlling
- (c) damping
- (d) any of the above

Ans: c

9. The spring material used in a spring control device should have the following property.

- (a) Should be non-magnetic
- (b) Most be of low temperature co-efficient
- (c) Should have low specific resistance

## RSGSML Instrumentation Questions and Answers



- (d) Should not be subjected to fatigue
- (e) All of the above

Ans: e

10. Which of the following properties a damping oil must possess ?

- (a) Must be a good insulator
- (b) Should be non-evaporating
- (c) Should not have corrosive action upon the metal of the vane
- (d) The viscosity of the oil should not change with the temperature
- (e) All of the above

Ans: e

11. A moving-coil permanent-magnet instrument can be used as \_\_\_\_\_ by using a low resistance shunt.

- (a) ammeter
- (b) voltmeter
- (c) flux-meter
- (d) ballistic galvanometer

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: a

12. A moving-coil permanent-magnet instrument can be used as flux-meter

- (a) by using a low resistance shunt
- (b) by using a high series resistance
- (c) by eliminating the control springs
- (d) by making control springs of large moment of inertia

Ans: c

13. Which of the following devices may be used for extending the range of instruments ?

- (a) Shunts
- (b) Multipliers
- (c) Current transformers
- (d) Potential transformers
- (e) All of the above

Ans: e

## RSGSML Instrumentation Questions and Answers



14. An induction meter can handle current up to

- (a) 10 A
- (b) 30 A
- (c) 60 A
- (d) 100 A

Ans: d

15. For handling greater currents induction wattmeters are used in conjunction with

- (a) potential transformers
- (b) current transformers
- (c) power transformers
- (d) either of the above
- (e) none of the above

Ans: b

16. Induction type single phase energy meters measure electric energy in

- (a) kW
- (b) Wh
- (c) kWh
- (d) VAR
- (e) None of the above

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: c

17. Most common form of A.C. meters met with in every day domestic and industrial installations are

- (a) mercury motor meters
- (b) commutator motor meters
- (c) induction type single phase energy meters
- (d) all of the above

Ans: c

18. Which of the following meters are not used on D.C. circuits

- (a) Mercury motor meters
- (b) Commutator motor meters
- (c) Induction meters
- (d) None of the above

## RSGSML Instrumentation Questions and Answers



Ans: c

19. Which of the following is an essential part of a motor meter ?

- (a) An operating torque system
- (b) A braking device
- (c) Revolution registering device
- (d) All of the above

Ans: d

20. A potentiometer may be used for

- (a) measurement of resistance
- (b) measurement of current
- (c) calibration of ammeter
- (d) calibration of voltmeter
- (e) all of the above

Ans: e

21. <https://www.freshersnow.com/previous-year-question-papers/> is an instrument which measures the insulation resistance of an electric circuit relative to earth and one another,

- (a) Tangent galvanometer
- (b) Meggar
- (c) Current transformer
- (d) None of the above

Ans: b

22. The household energy meter is

- (a) an indicating instrument
- (b) a recording instrument
- (c) an integrating instrument
- (d) none of the above

Ans: c

23. The pointer of an indicating instrument should be

- (a) very light
- (b) very heavy
- (c) either (a) or (b)
- (d) neither (a) nor (b)

## RSGSML Instrumentation Questions and Answers



Ans: a

24. The chemical effect of current is used in

- (a) D.C. ammeter hour meter
- (b) D.C. ammeter
- (c) D.C. energy meter
- (d) none of the above

Ans: a

25. In majority of instruments damping is provided by

- (a) fluid friction
- (b) spring
- (c) eddy currents
- (d) all of the above

Ans: c

26. An ammeter is a

- (a) secondary instrument
- (b) absolute instrument
- (c) recording instrument
- (d) integrating instrument

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: a

27. In a portable instrument, the controlling torque is provided by

- (a) spring
- (b) gravity
- (c) eddy currents
- (d) all of the above

Ans: a

28. The disc of an instrument using eddy current damping should be of

- (a) conducting and magnetic material
- (b) non-conducting and magnetic material
- (c) conducting and non-magnetic material
- (d) none of the above

Ans: c

## RSGSML Instrumentation Questions and Answers



29. The switch board instruments
- (a) should be mounted in vertical position
  - (b) should be mounted in horizontal position
  - (c) either (a) or (b)
  - (d) neither (a) nor (b)

Ans: a

30. The function of shunt in an ammeter is to
- (a) by pass the current
  - (b) increase the sensitivity of the ammeter
  - (c) increase the resistance of ammeter
  - (d) none of the above

Ans: a

31. The multiplier and the meter coil in a voltmeter are in
- (a) series
  - (b) parallel
  - (c) series-parallel
  - (d) none of the above

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: a

32. A moving iron instrument can be used for
- (a) D.C. only
  - (b) A.C. only
  - (c) both D.C. and A.C.

Ans: c

33. The scale of a rectifier instrument is
- (a) linear
  - (b) non-linear
  - (c) either (a) or (b)
  - (d) neither (a) nor (b)

Ans: a

34. For measuring current at high frequency we should use
- (a) moving iron instrument
  - (b) electrostatic instrument

## RSGSML Instrumentation Questions and Answers



- (c) thermocouple instrument
- (d) none of the above

Ans: c

35. The resistance in the circuit of the moving coil of a dynamometer wattmeter should be

- (a) almost zero
- (b) low
- (c) high
- (d) none of the above

Ans: c

36. A dynamometer wattmeter can be used for

- (a) both D.C. and A.C.
- (b) D.C. only
- (c) A.C. only
- (d) any of the above

Ans: a

<https://www.freshersnow.com/previous-year-question-papers/>

37. An induction wattmeter can be used for

- (a) both D.C. and A.C.
- (b) D.C. only
- (c) A.C. only
- (d) any of the above

Ans: b

38. The pressure coil of a wattmeter should be connected on the supply side of the current coil when

- (a) load impedance is high
- (b) load impedance is low
- (c) supply voltage is low
- (d) none of the above

Ans: a

39. In a low power factor wattmeter the pressure coil is connected

- (a) to the supply side of the current coil
- (b) to the load side of the current coil



## RSGSML Instrumentation Questions and Answers



- (c) in any of the two meters at connection
- (d) none of the above

Ans: b

40. In a low power factor wattmeter the compensating coil is connected

- (a) in series with current coil
- (b) in parallel with current coil
- (c) in series with pressure coil
- (d) in parallel with pressure coil

Ans: c

41. In a 3-phase power measurement by two wattmeter method, both the watt meters had identical readings. The power factor of the load was

- (a) unity
- (b) 0.8 lagging
- (c) 0.8 leading
- (d) zero

Ans: a

<https://www.freshersnow.com/previous-year-question-papers/>

42. In a 3-phase power measurement by two wattmeter method the reading of one of the wattmeter was zero. The power factor of the load must be

- (a) unity
- (b) 0.5
- (c) 0.3
- (d) zero

Ans: b

43. The adjustment of position of shading bands, in an energy meter is done to provide

- (a) friction compensation
- (b) creep compensation
- (c) braking torque
- (d) none of the above

Ans: a

44. An ohmmeter is a

- (a) moving iron instrument

## RSGSML Instrumentation Questions and Answers



- (b) moving coil instrument
- (c) dynamometer instrument
- (d) none of the above

Ans: b

45. When a capacitor was connected to the terminal of ohmmeter, the pointer indicated a low resistance initially and then slowly came to infinity position. This shows that capacitor is

- (a) short-circuited
- (b) all right
- (c) faulty

Ans: b

46. For measuring a very high resistance we should use

- (a) Kelvin's double bridge
- (b) Wheat stone bridge
- (c) Meggar
- (d) None of the above

<https://www.freshersnow.com/previous-year-question-papers/>

Ans: c

47. The electrical power to a meggar is provided by

- (a) battery
- (b) permanent magnet D.C. generator
- (c) AC. generator
- (d) any of the above

Ans: b

48. In a meggar controlling torque is provided by

- (a) spring
- (b) gravity
- (c) coil
- (d) eddy current

Ans: c

49. The operating voltage of a meggar is about

- (a) 6 V
- (b) 12 V

## RSGSML Instrumentation Questions and Answers



- (c) 40 V
- (d) 100 V

Ans: d

50. Murray loop test can be used for location of

- (a) ground fault on a cable
- (b) short circuit fault on a cable
- (c) both the ground fault and the short-circuit fault
- (d) none of the above

Ans: c