

# Assistant Electricity Meter Reader, Billing and Cash Collector Question Bank

## Theory Questions:

1. What is the full form of SEBs?
  - a) Supply Electricity Board
  - b) State Electricity Board
  - c) South Electricity Board
  - d) None of the above
2. Ohm's Law states that
  - a)  $I=VR$
  - b)  $V=IR$
  - c)  $R=VI$
  - d) All of the above
3. The SI unit of Current is
  - a) Ampere
  - b) Volts
  - c) Ohm
  - d) Farad
4. 11,000 V AC line to connect Niagara Falls to Buffalo was built by?
  - a) George Westinghouse
  - b) Thomas Edison
  - c) Benjamin Franklin
  - d) Alessandro Volta
5. The power factor of an AC electrical power system is defined as
  - a) The ratio of the real power flowing to the load to the apparent power in the circuit
  - b) The ratio of the apparent power in the circuit to the real power flowing to the load
  - c) The ratio of active power flowing to the load to the reactive power in the circuit
  - d) The ratio of reactive power in the circuit to the active power flowing in the load
6. Voltage level to the end consumer is
  - a) 260/460 V
  - b) 110/240 V
  - c) 310/350 V
  - d) 240/415 V
7. The induction type single-phase watt-hour meters uses
  - a) Control spring
  - b) Pointer
  - c) Brake magnet and spindle
  - d) All of the above
8. Current Transformers and Potential Transformers are used to increase the range of

- a) AC ammeter and AC voltmeter respectively
  - b) AC ammeter and DC voltmeter respectively
  - c) DC ammeter and DC voltmeter respectively
  - d) DC ammeter and AC voltmeter respectively
9. The functions of power distribution company
- a) Purchase of power
  - b) Distribution of power to consumers
  - c) Accounting of energy purchased and sold
  - d) All of the above
10. The difference between reported energy is injected into a network and the reported energy is extracted from the network is known as
- a) Commercial losses
  - b) Reconciliation losses
  - c) Unaccounted for electricity
  - d) None of the above
11. The sequential flow of procedures and activities which are designed and linked to facilitate and monitor the movement of goods and services from the source to the consumer is known as
- a) Distribution System
  - b) Transmission System
  - c) Generating System
  - d) None of the above
12. Assistant Meter Reader Reports to
- a) Superintendent Engineer of Distribution Company
  - b) Meter Reader Inspector
  - c) Divisional head of Business
  - d) None of the above
13. The main regulatory authorities that regulate the tariff of generating companies are
- a) CERC
  - b) The Electricity Act 2003
  - c) SERC
  - d) Both (a) and (c)
14. In rural areas, which type of feeder system is used
- a) Radial system
  - b) Interconnected system
  - c) Ring main system
  - d) None of the above
15. Determining causes of operating errors and deciding what to do about it is
- a) System evaluation
  - b) Equipment selection
  - c) Operation monitoring
  - d) Troubleshooting
16. Every distribution system must carry out periodical review of

- a) Line losses
  - b) Revenue collections and system defects
  - c) Employee training
  - d) All of the above
17. A \_\_\_\_\_ is a company that has the license to distribute power to the consumers at the tariff fixed by the Electricity Regulatory Commission.
- a) DISCOM
  - b) SERC
  - c) CERC
  - d) All of the above
18. The tariff of power generating companies owned or controlled by the central government is regulated by
- a) CERC
  - b) SERC
  - c) Both (a) and (b)
  - d) None of the above
19. Accident at workplace can be caused by working on unsafe or dangerous equipment such as
- a) Cleaning/greasing or adjusting any of running machine
  - b) Working on machine under off condition
  - c) Using insulated tools
  - d) None of the above
20. Basic fundamental of safety are
- a) Cooperation of all co-workers is essential to avoid accident
  - b) Accident is the result of unsafe working condition and unsafe work
  - c) Use of incomplete or little knowledge is dangerous and may invite accident
  - d) All of the above
21. Hazards occur due to
- a) Inadequate wiring
  - b) Exposed electrical ports
  - c) Wires with bad insulation
  - d) All of the above
22. Tool used on electrical apparatus or equipment should be properly
- a) Insulated
  - b) Not insulated
  - c) Both (a) and (b)
  - d) None of the above
23. Authorized person to issue permit in a substation is
- a) Shift engineer or operation in-charge
  - b) All employees working in substation
  - c) Both (a) and (b)
  - d) None of the above
24. Safety requirement applicable at work include.

- a) Wear personal protective equipment
  - b) Use tools in proper manner
  - c) Both (a) and (b)
  - d) None
25. CO<sub>2</sub> fire extinguisher are designed for
- a) Class B only
  - b) Class B and C
  - c) Class C only
  - d) None of the above
26. Class A type of fire extinguisher are used to extinguish fire on
- a) Solid that is not metal
  - b) Flammable liquid
  - c) Flammable gas
  - d) Metals
27. First-aid box contains
- a) Clean and sterilized cotton pads
  - b) Three angle bandage
  - c) Bottle of Dettol or Savlon liquid
  - d) All of the above
28. Mouth to mouth procedure of artificial respiration should be repeated about
- a) 10 to 12 times in a min
  - b) 30 to 32 times in a min
  - c) 50 to 52 times in a min
  - d) 1 to 2 times in a min
29. The undertakings shall provide suitable hoisting apparatus for hauling and carriage of loads above
- a) 500kg
  - b) 50 kg
  - c) 5 kg
  - d) 10 kg
30. The workmen shall be trained in safe methods of handling. They shall avoid
- a) Lifting too quickly and with a jerk
  - b) Lifting while in an awkward position or with a poor footing
  - c) Handling loads which are unwieldy or too heavy or loads which obstruct vision
  - d) All the above
31. Under no circumstances should the released \_\_\_\_\_ be disposed off by dumping or pouring in sewers or conductor pipes leading into sewers.
- a) Water
  - b) Carbon dioxide gas
  - c) Transformer oil
  - d) None of the above
32. The representative of employee is nominated under regulation
- a) Regulation 4(5)
  - b) Regulation 5(4)

- c) Regulation 3(4)
  - d) Regulation 4(3)
33. Things needed to succeed in a team player
- a) Recognize your role
  - b) Take ownership of the team goal
  - c) Earn trust
  - d) All the above
34. Characteristics of disciplined behavior
- a) Punctual
  - b) Maintain work standard
  - c) Both (a) and (b)
  - d) None of the above
35. Leadership skills includes
- a) Problem-solving
  - b) Decision-making
  - c) Personal stress management
  - d) All of the above
36. Conflict can be resolved by
- a) Being anguish
  - b) Being calm and listening views
  - c) Negative body language
  - d) All of the above
37. Methods to develop positive attitude include
- a) Make failure a teacher
  - b) Keep Complaining
  - c) Not to forgive others
  - d) None of the above
38. What are the ways to build self- confidence?
- a) Identify the problem
  - b) Don't fear mistake
  - c) Look on the bright side
  - d) All the above
39. What are the tips to deal with change?
- a) Stay prepared
  - b) Understand and accept change
  - c) View change as an opportunity
  - d) All the above
40. The tool that must be carried by assistant meter reader, billing and cash collector is
- a) Ladder
  - b) Torch
  - c) Wrench
  - d) All of the above

41. Review of application for new connection, additional load/demand, etc. falls under the jurisdiction of
- a) CERC
  - b) SERC
  - c) Both (a) and (b)
  - d) None of the above
42. Duties of Distribution Licensee come under section
- a) Section 12
  - b) Section 24
  - c) Section 42
  - d) Section 53
43. Single phase energy meter is rated for
- a) 300 V
  - b) 240 V
  - c) 415 V
  - d) 450 V
44. Three phase energy meter is rated for
- a) 260 V
  - b) 240 V
  - c) 415 V
  - d) 450 V
45. Tariff regulation comes under section
- a) Section 57
  - b) Section 61
  - c) Section 135
  - d) Section 153
46. Sealing of energy meter is done by
- a) Licensee
  - b) Consumer
  - c) Seller
  - d) None of the above
47. What is the purpose of The Electricity Act 2003?
- a) Handling complaints about meter
  - b) Create liberal framework for power development
  - c) Regulate the tariff of generating companies
  - d) Specify and enforce the standards with respect to quality, continuity, reliability of services by the licensees
48. What is the full form of CMRI?
- a) Common Meter Reading Instrument
  - b) Computerized Meter reading Instrument
  - c) Compact Meter Reading Instrument
  - d) None of the above

49. The instrument used for spot billing is
- Multimeter
  - Meter reading instrument or Hand Held Unit (HHU)
  - Both (a) and (b)
  - None of the above
50. The size of service cable for the sanctioned load of 1-5 kW
- 2x10 sq mm
  - 2x25 sq mm
  - 4x50 sq mm
  - 3.5x150 sq mm
51. The size of service cable for combined load of 2 single phase meter of load 6-10 kW
- 2x10 sq mm
  - 2x25 sq mm
  - Separate service line as per individual load to be individual load to be provided
  - None of the above
52. Which of the following is the correct procedure for meter reading
- Note down the readings in meter or download
  - Show identification proof before taking readings
  - Calculate bill accounting to tariff
  - Keep all the details about customers
  - Check energy meter
- I – II – III – IV – V
  - II – I – III – V – IV
  - III – I – II – IV – V
  - IV – II – V – I – III
53. Zero ID downloaded cases are due to
- Manufacturing defect in the sensing system of meter
  - Burnt meter
  - Restarting of meter after six months
  - All of the above
54. Electricity consumption is recorded in terms of
- Kilowatt/hour
  - Watt/hour
  - Watt-hour
  - Kilowatt-hour
55. In all states the tariff structure for residential consumers are designed in such a way that per unit charge is
- More if your consumption is less
  - Less if your consumption is less
  - More if the consumption is more
  - Both (b) and (c)
56. The amount of power which a customer agrees to pay to have available at all times is known as

- a) Maximum demand
  - b) Contract demand
  - c) Sanctioned load
  - d) Maximum demand indication
57. An electricity supply line through which energy is or is intended to be supplied by the licensee from a distributing main to a single or group of consumers is known as
- a) Energy consumption pattern
  - b) Feeder line
  - c) Service cable or service line
  - d) None of the above
58. While calculating total cost of electrical energy, the constant which when multiplied by maximum kW demand give the semi fixed cost, takes into account
- a) The size of power plant as maximum demand determines the size of power plant
  - b) The cost of land, labour, interest on capital cost, depreciation etc.
  - c) The cost of fuel consumed in producing power
  - d) None of the above
59. According to categories of consumer, bulk supply for residential colonies comes under
- a) Commercial-LT
  - b) Domestic-LT
  - c) Domestic-HT
  - d) Commercial-HT
60. If the demand exceeds \_\_\_\_\_ LTCT meter is installed
- a) 1-5 kW
  - b) 5-10 kW
  - c) 11-25 kW
  - d) 21-100 kW
61. The consumer shall avail supply at 33kV and above when the demand is
- a) 2 kVA and above
  - b) 5 MVA and above
  - c) 5 kVA and above
  - d) None of the above
62. Dynamic tariffs are designed to lower the system costs for utilities and bring down consumer's bills by
- a) Lowering tariffs during peak hours and increasing them during off-peak hours
  - b) Increasing tariffs during peak hours and lowering them during off-peak hours
  - c) Keeping the tariffs unchanged during peak hours and off-peak hours
  - d) None of the above
63. The tariff design that features electricity tariff that vary by time period, being higher in peak periods and lower in off-peak period is known as
- a) Time of Day tariff (TOD)
  - b) Critical Peak Pricing (CPP)
  - c) Extreme Day Pricing (EDP)



- d) Real Time Pricing (RTP)
64. The power is \_\_\_\_\_ over a period which gives the energy utilized over that period
- a) Added
  - b) Differentiated
  - c) Integrated
  - d) None of the above
65. For larger load, step down \_\_\_\_\_ must be placed to isolate energy meter from higher currents
- a) Magnet
  - b) Current Transformer
  - c) Potential Transformer
  - d) None of the above
66. Glowing of EL-LED indicates
- a) Reverse flow of energy due to incorrect wiring
  - b) Unbalanced current due to earth wire being used as neutral
  - c) Current without voltage on meter
  - d) All of the above
67. High performance microprocessors are used in
- a) Electromechanical energy meter
  - b) Dial electricity meter
  - c) Analogue electric meter
  - d) Digital electric meter
68. Energy meter that is capable of communicating in both directions i.e. transmit the data to the utilities like energy consumption, parameter values, alarms etc. and also can receive information from utility is
- a) Electromechanical energy meter
  - b) Digital energy meter
  - c) Smart energy meter
  - d) All of the above
69. Smart metering infrastructure includes
- a) Smart meter
  - b) Communication device
  - c) Processing at utility office
  - d) All of the above
70. Common Meter Reading Instrument (CMRI) is compatible with
- a) Electromechanical energy meter
  - b) Dial electricity meter
  - c) Electronic Tri Vector energy meter
  - d) None of the above
71. The transformer reduces the voltage and current applied to meter in certain proportion which is called
- a) Transformation Ratio

- b) Voltage Ratio
  - c) Current Ratio
  - d) None of the above
72. The benefits of smart metering for the utility is
- a) Accurate meter reading, no more estimates
  - b) Greater potential for monitoring by other/unauthorized/third parties
  - c) Increased security risk from network or remote access
  - d) All of the above
73. The \_\_\_\_\_ can be used either as prepaid meter or postpaid meter
- a) Digital Energy Meter
  - b) Analog Energy Meter
  - c) Smart Card Energy Meter
  - d) All of the above
74. If the meter reader found EL-LED 'ON' (provided in electronic meter) he shall inform the following
- a) The customer
  - b) Concerned manager/ Engineer of district
  - c) Both (a) and (b)
  - d) None of the above
75. If for any reason, meter is not read during any bill cycle, the distribution company shall send
- a) A provisional bill
  - b) An enforcement team
  - c) A special reader
  - d) All of the above
76. AMR technology mainly saves distribution company the expense of
- a) Periodic trips to each physical location to read a meter
  - b) Bill can be based on near real-time consumption
  - c) (b) is correct but (a) is wrong
  - d) Both (a) and (b) are correct
77. Tampering methods practiced in meter are
- a) Applying shunt
  - b) Disturbing micro chips
  - c) Disturbing disc and counter
  - d) All of the above
78. The theft of electricity manifest into
- a) Increased technical losses
  - b) Excessive temperature rise of conductor, insulation ageing
  - c) Both (a) and (b)
  - d) Increased reliability of distribution transformer
79. Direct Theft (DT) takes into account
- a) Cases of meter tampering
  - b) Hooking/tapping service line

- c) Usage of electricity for the purpose other than for which the usage was authorized
  - d) All of the above
80. Dishonest Abstraction of Energy (DAE) takes into account
- a) Cases of meter tampering
  - b) Hooking/tapping service line
  - c) Bypassing the meter by changeover switch or by any other means
  - d) All of the above
81. The roles and objectives of vigilance in distribution utility can be broadly classified as
- a) Educative Vigilance
  - b) Preventive and pro-active Vigilance
  - c) Investigative Vigilance
  - d) All of the above
82. The activity to carry out system studies of areas from which maximum number of complaints are emerging with a view to plug loop hole, comes under
- a) Educative Vigilance
  - b) Preventive and pro-active Vigilance
  - c) Investigative Vigilance
  - d) All of the above
83. Enforcement conduct raids to control
- a) Direct Theft (DT)
  - b) Dishonest Abstraction of Energy (DAE)
  - c) Unauthorized usage of electricity
  - d) All of the above
84. The amount paid against provisional bill shall be adjusted
- a) On the basis of actual meter reading during subsequent billing cycle
  - b) Cannot be adjusted as it was consumer's mistake
  - c) Within two months after receiving the actual bill amount
  - d) None of the above
85. If the consumer desires to have a special reading taken, the same shall be arranged by the distribution company and the charges
- a) Cannot be levied as it is the job of distribution company
  - b) Meter reader gets salary for reading thus no charges on consumer
  - c) Shall be included in the next bill of the consumer as per the prescribed regulation
  - d) All of the above
86. As per the convenience Reading Cycle Monitoring (RCM) department of the entire utility prepare reading schedule for
- a) Every 3 months
  - b) Every 6 months
  - c) Every month
  - d) Every 8 months
87. As per electricity supply code and performance standard regulation, meter should be read
- a) Twice in every billing cycle

- b) Once in every billing cycle
  - c) Thrice in every billing cycle
  - d) None of the above
88. Due to any reason meter is not read in any billing cycle, the provisional bill generated and send to consumer shall not continue for more than
- a) Four billing cycle at a stretch
  - b) One billing cycle at a stretch
  - c) Three billing cycle at a stretch
  - d) Two billing cycle at a stretch
89. What are the uses of Smart Energy Meter
- a) Measure and record how much electricity consumer is using at 30 min intervals
  - b) Communicate meter readings directly to electricity distributors
  - c) Eliminate the need for someone to come out and read meters
  - d) All of the above
90. How to reduce the Power Distribution Losses?
- a) Controlling direct tapping by non-customers and customers
  - b) Changing the sequence of terminal wiring
  - c) Installation of distribution transformers away from load centers
  - d) All of the above
91. Measure to minimize the commercial loss are
- I. Replacing all 11 kV feeder line and three phase distribution lines with insulated conductors'/cables
  - II. Correct billing and timely delivery of bills
  - III. Installation of prepaid energy meter in major theft area
- a) Only (II) is correct
  - b) Both (I) and (III) are correct
  - c) All (I), (II), (III) are correct
  - d) None of them are correct
92. In theft by direct hooking, people tends to
- a) Tap HT lines
  - b) Tap LT lines
  - c) Tap both HT and LT lines
  - d) None of the above
93. FAE stands for
- a) Frequent Abstraction of Electricity
  - b) Fraudulent Abstraction of Electricity
  - c) Fraudulent Absorption of Electricity
  - d) Frequent Absorption of Electricity
94. Tampering of meter by high frequency remotes can be done in case of
- a) Digital energy meter
  - b) Electro-mechanical energy meter
  - c) Dial electricity meter

- d) All of the above
95. AMR devices can raise alarm for
- I. Tampering of meter
  - II. Low battery
  - III. Reverse flow
  - IV. Leak detection
- a) (I) and (IV) are correct
  - b) (I), (III) and (IV) are correct
  - c) (II) and (III) are correct
  - d) (I), (II), (III) and (IV) are correct
96. As per specified IS standards the accuracy class of single phase and three phase meters is
- a) Class 1.0
  - b) Class 0.2
  - c) Class 0.5
  - d) None of the above
97. CMRI or HHU device can directly capture data or download data from
- a) HT feeder meter
  - b) DT meter
  - c) Consumer's energy meter
  - d) All of the above
98. In dial electricity meters each dial with numbers zero to nine turns in
- a) Same direction to the dial before
  - b) Opposite direction to the dial before
  - c) Both (a) and (b)
  - d) None of the above
99. When a domestic consumer gives prior information in writing about inaccessibility of the meter to the distribution company due to continued absence from residence, the distribution company shall
- a) Send notice/provisional bill to the consumer
  - b) Not send any notice/provisional bill to the consumer provided the consumer pays
  - c) Send the assistant meter reader for inspection
  - d) None of the above
100. If the meter is rendered inaccessible on two consecutive meter reading dates, the distribution company shall serve a
- a) five days clear notice to the consumer under proper receipt, to keep open the premise for taking meter reading on date and time indicated in the notice
  - b) twenty days clear notice to the consumer under proper receipt, to keep open the premise for taking meter reading on date and time indicated in the notice
  - c) fifteen days clear notice to the consumer under proper receipt, to keep open the premise for taking meter reading on date and time indicated in the notice
  - d) one month clear notice to the consumer under proper receipt, to keep open the premise for taking meter reading on date and time indicated in the notice

101. Multiplying factor in case of LT CT Meter is equal to
- a) Transformation ratio of CT
  - b) CT ratio x VT ratio
  - c) 1
  - d) 0

## **Viva Questions:**

1. What are the main duties of meter reader?
2. What is the full form of MRI?
3. What is the meaning of cycle in meter reading?
4. What is the function of MRI?
5. Why is pre-audit conducted in meter reading?
6. Name the personal protective equipment required for meter reader, billing and cash collector.
7. Describe a sample schedule for metering, billing and collection.
8. How to detect theft during meter reading?
9. What is the full form of DAE?
10. What action should be taken if the meter is found burnt, meter is not downloading reading etc. by the meter reader?
11. If the meter reading is not downloaded more than twice, what former actions will be initiated?
12. If the premises is found locked permanently, what action will be initiated?
13. If a meter is found unbilled, what action will be initiated in that case?
14. If a consumer creates hindrance at site, what further course of action will be initiated by the meter reader?
15. In which condition meter reader issue notice to consumer?

## **On Job Training Questions:**

1. Identify the tools equipment required by assistant meter reader, billing and cash collector.
2. Demonstrate the use of each tool and equipment.
3. Download readings from consumer's energy meter using MRI.
4. Demonstrate correct way of connection of port during meter reading.
5. Demonstrate how to identify neutral in three phase energy meter
6. Identify the correct indication given by glowing of LED mounted on electronic meter.
7. If a customer is unaware about rules and regulations of DISCOM, make him understand the process of metering, billing and cash collection. Ask for their co-operation.
8. Explain customer the tariff schedules of DISCOM. Answer their queries if any.

9. Explain the customer about penalty clauses of DISCOM, in case the payment has not been made timely.
10. Describe the use of PPE with practical applications.