

PROVISIONAL ANSWER KEY

Paper: Funtions of Electrical Inspectorate ... (Paper I)
Date of Test 02-11-2022

Question1:-Indian Electricity Rules, 1956 get repealed with the notification of

- A:-Indian Electricity Act 1910
- B:-Electricity Act 2010
- C:-Central Electricity Authority (Measures Relating to Safety and Electric Supply) 2010
- D:-KSLB Rules 2020

Correct Answer:- Option-C

Question2:-Where is the office of Kerala State Electricity Regulatory Commission located?

- A:-Thrissur
- B:-Thiruvananthapuram
- C:-Ernakulam
- D:-Kozhikode

Correct Answer:- Option-B

Question3:-Designative persons are made to operate and carry out the work on the Electric Lines and Apparatus as per which provisions of CEA (Measures Relating to Safety and Electric Supply) Regulations 2010

- A:-10
- B:-19
- C:-3
- D:-43

Correct Answer:- Option-C

Question4:-What is the recommended minimum insulation value for LV installation?

- A:-10 Mega ohm
- B:-100 Mega ohm
- C:-1 Mega ohm
- D:-1000 Mega ohm

Correct Answer:- Option-C

Question5:-Which among the following is not a mandatory requirement in the electrification of a High rise building?

- A:-Providing fire proof barriers at all floor levels of the cable duct
- B:-Provide an emergency switch of facility for the whole supply
- C:-Only MCBs/MCCBs/ACBs shall be used as LT switchgears
- D:-No service other than electrical power cables shall be taken through the electrical duct

Correct Answer:- Option-C

Question6:-The IS code of practice of Electrical wiring installation is

- A:-IS 732
- B:-IS 723
- C:-IS 1886
- D:-IS 8828

Correct Answer:- Option-A

Question7:-What is the minimum horizontal clearance for a building adjacent to an LT line?

- A:-2.9 M
- B:-5 M
- C:-1.2 M
- D:-4.9 M

Correct Answer:- Option-C

Question8:-Regulation 24 of CEA (Measures relating to Safety and Electric Supply) Regulations 2010 insists?

- A:-Distinction of different circuits
- B:-Authorised person
- C:-Clearence
- D:-Functions of Electrical inspector

Correct Answer:- Option-A

Question9:-How many service tappings can be taken off a support of an LT overhead line?

- A:-3
- B:-4
- C:-5
- D:-6

Correct Answer:- Option-B

Question10:-Which among the following amounts to resale of energy?

- A:-Supplying DG back up supply to the residents of an apartment on payment of charges based on individual energy meters
- B:-In a HT metered premise the owner rents out a portion and collects electricity charges using LT sub meter
- C:-In a single LT metered twin house both occupants share the electricity charges porportional to their connected loads
- D:-None of the above

Correct Answer:- Option-B

Question11:-The qualification of an Electrical Safety Officer shall be as per which Regulation of CEA (MRS and ES) Regulation 2010

- A:-3
- B:-4
- C:-5
- D:-6

Correct Answer:- Option-C

Question12:-Regulation 36 of CEA (MRS and ES) Regulations 2010 applies to

- A:-X-Ray
- B:-Neon Sign
- C:-Lift
- D:-High Rise Building

Correct Answer:- Option-D

Question13:-The agency enforcing CEA Regulation in Kerala

- A:-Electrical Inspectorate
- B:-KSEBL
- C:-EMC
- D:-ANERT

Correct Answer:- Option-A

Question14:-As per the Supply code 2014 what is contracted connected Load?

- A:-Connected load installed at the premises and recorded in kW in the service connection agreement
 - B:-Connected load installed at the premises and recorded in kVA in the service connection agreement
 - C:-Connected load installed at the premises and recorded in kVA/kW in the service connection agreement
 - D:-Connected load recorded in kVA/kW in the service connection agreement
- Correct Answer:- Option-C

Question15:-Which regulation of CEA (MRS and ES) Regulations 2010 makes it mandatory for owners of overhead lines to provide lighting diverters

- A:-76
- B:-75
- C:-74
- D:-73

Correct Answer:- Option-C

Question16:-Which regulation of CEA (MRS and ES) Regulation 2010 insists periodical inspection and testing of installations?

- A:-43
- B:-63
- C:-30
- D:-36

Correct Answer:- Option-C

Question17:-How many joints are allowed in one span of an overhead line?

- A:-1
- B:-2
- C:-3
- D:-4

Correct Answer:- Option-A

Question18:-Which relay is most essential when two generators are operated in parallel?

- A:-Reverse Power Relay
- B:-Over Voltage Relay
- C:-Over Current Relay
- D:-Differential Relay

Correct Answer:- Option-A

Question19:-As per the Supply Code 2014 what is Energy Charges?

- A:-Charge for energy supplied in kWh or kVAh
- B:-Charge for energy supplied in kW
- C:-Charge for energy consumed in kW
- D:-Charge for Energy consumed in kVA

Correct Answer:- Option-A

Question20:-What is the cumulative solar power capacity that can normally be connected to the LT side of a distribution transformer in terms of the transformer capacity?

- A:-50%
- B:-25%
- C:-30%
- D:-15%

Correct Answer:- Option-D

Question21:-As per _____ regulation of CEA (MRS and ES) Regulation 2010, the consumer shall take precautions for safe custody of the equipments on his premises belonging to the supplier

- A:-16(3)
- B:-13(3)
- C:-31(1)
- D:-4(5)

Correct Answer:- Option-B

Question22:-What is the clearance above ground level for an LT overhead line along any street?

- A:-6.4 m
- B:-5.8 m
- C:-6.1 m
- D:-5.5 m

Correct Answer:- Option-D

Question23:-Polarisation index is usually measured for

- A:-Oil type transformer
- B:-Dry type transformer
- C:-HV cables
- D:-Circuit Breakers

Correct Answer:- Option-A

Question24:-The voltage level prescribed by the KSEBL for three phase supply is

- A:-430 V between phases and neutral
- B:-415 V between phases and 240 V between each phase and neutral
- C:-415 between phases and neutral
- D:-400 between phases and neutral

Correct Answer:- Option-B

Question25:-What is the distance from a substation below which permission from the owner of the substation is required for carrying out blasting of any type?

- A:-300 M
- B:-350 M
- C:-400 M
- D:-450 M

Correct Answer:- Option-A

Question26:-Which regulation of CEA (MRS and ES) Regulation 2010 governs the handling of supply lines and apparatus?

- A:-12
- B:-50
- C:-32
- D:-19

Correct Answer:- Option-D

Question27:-What is the frequency of periodical inspection of HT installation in the state?

- A:-Once in three years
- B:-Every year
- C:-Once in a five years
- D:-Once in two years

Correct Answer:- Option-B

Question28:-The minimum size of AYFY cable on the secondary side of 630 kVA 11kV/433V Transformer

- A:-4 x 400 Sq mm
- B:-3 x 400 Sq mm
- C:-2 x 400 Sq mm
- D:-400 Sq mm

Correct Answer:- Option-A

Question29:-What causes fire in a wiring?

- A:-Leakage
- B:-Short circuit
- C:-Over current
- D:-All the above

Correct Answer:- Option-D

Question30:-What is the rate of Electricity duty per unit of consumption applicable to HT consumers in the state?

- A:-1.2 paise
- B:-12 paise
- C:-Rs. 2/-
- D:-10 paise

Correct Answer:- Option-D

Question31:-The validity of scheme approval issued by Electrical Inspectorate department is

- A:-2 years
- B:-5 years
- C:-4 years
- D:-3 year

Correct Answer:- Option-A

Question32:-What is the maximum periodicity of inspection of Electrical installations as per CEA?

- A:-4 years
- B:-5 years
- C:-2 years
- D:-1 year

Correct Answer:- Option-B

Question33:-In 5P10 CT 5 stands for

- A:-Composite error in %
- B:-Burden
- C:-Accuracy limit factor
- D:-Number of turns

Correct Answer:- Option-A

Question34:-Which statement is not correct?

- A:-Current always flows to the earth
- B:-Always tries to flow to the earth
- C:-Flows through the path of the least resistance
- D:-Always flows through a closed path

Correct Answer:- Option-A

Question35:-Who appoints the Chairperson of Consumer Grievance Redressal Forum?

- A:-The State Government
- B:-State Electricity Regulatory Commission
- C:-The License
- D:-Public Service Commission

Correct Answer:- Option-C

Question36:-Regulation _____ of CEA(MRS and ES) Regulations 2010 insisting electrical contractor licence for electrical installation work.

- A:-30
- B:-63
- C:-3
- D:-29

Correct Answer:- Option-D

Question37:-Which Regulation of CEA (MRS and ES) Regulations 2010 prescribes earth guarding for overhead lines

- A:-67
- B:-73
- C:-60
- D:-114

Correct Answer:- Option-B

Question38:-A Circuit Breaker of adequate rating shall be provided after the appoint of commencement of EHV substation as per which regulation of CEA (MRS and ES) Regulation 2010

- A:-21(2)
- B:-19(1)
- C:-35(2)
- D:-63(4)

Correct Answer:- Option-C

Question39:-The KSEB detected some unauthorised loads in a premise, the estimation of which was not acceptable. He should file his complaint first with whom

- A:-The Asst. Engineer of the electrical section
- B:-The consumer Grievance Redressal Forum of the KSEB
- C:-The Electrical Inspector
- D:-The Electricity Ombudsman

Correct Answer:- Option-A

Question40:-How many years of experience in practice of Electrical Engineering is required besides other qualifications, for a person to be appointed as Electrical Inspector?

- A:-20
- B:-15
- C:-10
- D:-5

Correct Answer:- Option-C

Question41:-Which Regulation of CEA(MRS and ES) Regulation 2010 governs to be done if a leakage on consumers premise is suspected?

- A:-34
- B:-11

C:-12

D:-55

Correct Answer:- Option-A

Question42:-When a 66kV line crosses a 110kV line, what is the minimum clearance to be maintained?

A:-6.89 M

B:-2.44 M

C:-4.58 M

D:-3.05 M

Correct Answer:- Option-D

Question43:-Minimum vertical clearance required for a building under an existing 66kV line :

A:-4 M

B:-3.7 M

C:-4.7 M

D:-5.7 M

Correct Answer:- Option-A

Question44:-What would be the current flowing through the body of a person with resistance 1000 ohms if he directly contacts with a live part of 230V?

A:-230 A

B:-230 mA

C:-2.3 A

D:-0.23 mA

Correct Answer:- Option-B

Question45:-When a 220kV line crosses a 110kV line, what is the minimum clearance to be maintained?

A:-4.58 M

B:-5.49 M

C:-7.94 M

D:-2.44 M

Correct Answer:- Option-A

Question46:-Notice of accidents to Electrical Inspector is insisted as per _____ section of The Electricity Act 2003

A:-165

B:-161

C:-160

D:-156

Correct Answer:- Option-B

Question47:-Which is the normal period of demand for electricity supply specified for the state?

A:-10:00 hours to 17:00 hours

B:-08:00 hours to 16:00 hours

C:-18:00 hours to 22:00 hours

D:-06:00 hours to 18:00 hours

Correct Answer:- Option-D

Question48:-Phase to phase clearance of a line at AB switch shall be

A:-915 mm

B:-2 M

C:-3.1 M

D:-1.8 M

Correct Answer:- Option-A

Question49:-Which decides the rating of the MCB to be provided for a circuit protection?

A:-Total load of the circuit

B:-Total points in the circuit

C:-The size of the smallest conductor used in the circuit

D:-The size of the biggest conductor used in the circuit

Correct Answer:- Option-C

Question50:-Which is the IS code for the fire safety of buildings?

A:-3837/1976

B:-1646/1997

C:-3854/1997

D:-732/1989

Correct Answer:- Option-B

Question51:-As per which section of the Electricity Act 2003 Central Electricity Authority achieve powers to make regulations?

A:-176

B:-177

C:-181

D:-185

Correct Answer:- Option-B

Question52:-What is the rate of Electricity Duty per unit consumption for public lighting in the state?

A:-10 paise

B:-12 paise

C:-0 paise

D:-1.2 paise

Correct Answer:- Option-C

Question53:-EHV means

A:-Voltage greater than or equal to 11Kv

B:-Voltage greater than or equal to 33 Kv

C:-Voltage greater than or equal to 66Kv

D:-Voltage greater than equal to 110 Kv

Correct Answer:- Option-B

Question54:-Which part of human body offers the maximum resistance to electricity?

A:-Skin

B:-Fingers

C:-Toes

D:-Tissues

Correct Answer:- Option-A

Question55:-How much is the connected load above which Energy Conservation Building code is to be implemented?

A:-1000 Kw

B:-100 Kw
C:-500 Kw
D:-200 Kw

Correct Answer:- Option-B

Question56:-Section 70 of the Electricity Act related to the constitution of

A:-Central Regulatory Commission
B:-State Regulatory Commission
C:-Central Electricity Authority
D:-State Electricity Board

Correct Answer:- Option-C

Question57:-Permissible Voltage variations in 33kV feeders

A:-12.5% to +10%
B:-9% to +6%
C:-6% to +6%
D:-3% to +3%

Correct Answer:- Option-B

Question58:-Which relay is required when the Transformer of having OLTC?

A:-Over Current Relay
B:-Reverse power relay
C:-Over voltage relay
D:-Earth fault relay

Correct Answer:- Option-C

Question59:-What is the maximum load that can be connected to a power circuit as per Indian Standards?

A:-2000 W or 3 sockets
B:-2000 W or 2 sockets
C:-3000 W or 3 sockets
D:-3000 W or 2 sockets

Correct Answer:- Option-D

Question60:-Which is the 'Peak Hours' of demand for electricity supply specified for the state?

A:-10:00 hours to 17:00 hours
B:-08:00 hours to 16:00 hours
C:-18:00 hours to 22:00 hours
D:-06:00 hours to 18:00 hours

Correct Answer:- Option-C

Question61:-National Electricity Policy Plan insisted in _____ section of the Electricity Act 2003

A:-3
B:-4
C:-5
D:-6

Correct Answer:- Option-A

Question62:-With whom an appeal is to be filed against an order of an Electrical Inspector?

A:-Deputy Chief Electrical Inspector
B:-Chief Electrical Inspector
C:-State Government
D:-Central Government

Correct Answer:- Option-B

Question63:-OLTC is provided

A:-In the primary side of the transformer
B:-In the secondary side of the transformer
C:-Both primary and secondary side of the transformer
D:-None of the above

Correct Answer:- Option-C

Question64:-Which is not an electricity supply licensee in Kerala?

A:-The Municipal Corporation, Thrissur
B:-Techno park, Thiruvananthapuram
C:-Cochin Special Economic Zone, Kochi
D:-The Southern Railway, Palakkad

Correct Answer:- Option-D

Question65:-Which is the IS for Switches for domestic use?

A:-732/1989
B:-2412/1975
C:-3043/1987
D:-3854/1997

Correct Answer:- Option-D

Question66:-The Electricity Supply Code is insisted in _____ section of the Electricity Act 2003

A:-50
B:-42
C:-48
D:-74

Correct Answer:- Option-A

Question67:-Who is the competent authority to appoint Electricity Ombudsman of a state?

A:-The Licensee
B:-The High Court
C:-The Electricity Regulatory Commission
D:-The Chief Electrical Inspector

Correct Answer:- Option-C

Question68:-The maximum rating of a change over switch

A:-400A
B:-800A
C:-1000A
D:-630A

Correct Answer:- Option-D

Question69:-Which of the following does not belong to the responsibility of the Electrical Safety Officer?

A:-Conduct periodical inspection and testing on the installation

- B:-Serve defect report on the consumer/owner
- C:-Rectify the defects noticed during such inspection
- D:-Conduct safety training to the Electrical staff

Correct Answer:- Option-D

Question70:-What is the rate of duty applicable for each unit of energy generated for self consumption?

- A:-12 paise
- B:-1.2 paise
- C:-2 paise
- D:-20 paise

Correct Answer:- Option-B

Question71:-The electrical system set up to generate power and distribute electricity in a specified area without connection to the grid is named as

- A:-Stand by system
- B:-Cogeneration system
- C:-Independent system
- D:-Stand alone system

Correct Answer:- Option-D

Question72:-Who appoints appellate authority?

- A:-Chief Electrical Inspector
- B:-State Government
- C:-Licensee
- D:-State Electricity Regulatory Commission

Correct Answer:- Option-B

Question73:-Group Control AB shall be provided for

- A:-Oil transformer
- B:-Out door transformer
- C:-Multiple transformer
- D:-Dry type transformer

Correct Answer:- Option-C

Question74:-Which is the Indian standard for code of practice for earthing?

- A:-IS 3034
- B:-IS 3043
- C:-IS 4033
- D:-IS 4303

Correct Answer:- Option-B

Question75:-What is the maximum permissible number of 1.5 sq.mm. single core cables that may be drawn into a 20 mm Rigid non metallic conduit?

- A:-4
- B:-6
- C:-8
- D:-10

Correct Answer:- Option-B

Question76:-State Load despatch centre established under _____ section of The Electricity Act 2003

- A:-Subsection 3 of Section 26
- B:-Subsection 1 of Section 33
- C:-Subsection 1 of Section 31
- D:-Subsection 2 of Section 32

Correct Answer:- Option-C

Question77:-What is the minimum factor of safety for stay wires?

- A:-1.5
- B:-2.0
- C:-2.5
- D:-3.0

Correct Answer:- Option-C

Question78:-Out door Transformer can be allowed in corporation area only when

- A:-Cable end boxes are provided both on primary and secondary side
- B:-Breaker / HTSFU is provided in the primary side
- C:-Places where free access of fire engine
- D:-All of the above

Correct Answer:- Option-D

Question79:-A 160kVA DG set is to feed the MSB with MD of 300 kVA fed by a 400 Transformer. Is it approvable?

- A:-No, as the MD exceeds the DG capacity
- B:-Loads requiring back up supply be segregated and DG fed to them
- C:-Can be approved if the consumer substantiate that the load on the DG can be kept below DG capacity and then the DG utility and flexibility will be maximum
- D:-EI has no authority to approve such schemes

Correct Answer:- Option-C

Question80:-Who is the Ex-Officio secretary of the Kerala State Electricity Licensing Board?

- A:-The Deputy Chief Electrical Inspector of Chief Electrical Inspectorate
- B:-The Power Secretary to Government
- C:-Additional Chief Electrical Inspector
- D:-The senior most Electrical Inspector

Correct Answer:- Option-A

Question81:-Control and transmission of electricity is referred in which section of the Electricity Act 2003?

- A:-58
- B:-54
- C:-67
- D:-101

Correct Answer:- Option-B

Question82:-What is the minimum cross sectional area of a trolley wire?

- A:-0.5 sq.mm
- B:-1.0 sq.mm
- C:-1.5 sq.mm
- D:-2.0 sq.mm

Correct Answer:- Option-A

Question83:-Minimum clearance required in front of the Switch Board shall be

- A:-2 M
- B:-50 cm
- C:-1 M
- D:-1.5 M

Correct Answer:- Option-D

Question84:-Why electrical installations are earthed?

- A:-As the statute mandates
- B:-For human protection
- C:-For providing an easy path for the fault current to flow back to the source actuating the protective relays
- D:-All the above

Correct Answer:- Option-D

Question85:-What is the time limit for restoration of electric supply in case of normal fuse off calls in urban areas?

- A:-8 hours
- B:-10 hours
- C:-6 hours
- D:-12 hours

Correct Answer:- Option-C

Question86:-Provision as to the opening up of streets, railways, etc detailed in _____ section of the Electricity Act 2003

- A:-99
- B:-110
- C:-67
- D:-163

Correct Answer:- Option-C

Question87:-Which of the following is not under the administrative control of the Department of Electrical inspectorate?

- A:-Kerala State Electricity Licensing Board
- B:-Kerala State Electricity Board Ltd
- C:-The meter testing and standards laboratory
- D:-Kerala State Cinema Operators Examination Board

Correct Answer:- Option-B

Question88:-REF protection shall be provided for Generators having capacity

- A:-1 MVA and above
- B:-1.6 MVA and above
- C:-2 MVA and above
- D:-750 kVA and above

Correct Answer:- Option-A

Question89:-The electrification in a place where 100 or more persons assembles is inspected and sanctioned by the Electrical Inspector under which provision of the The Electricity Act 2003?

- A:-63
- B:-47
- C:-54
- D:-32

Correct Answer:- Option-C

Question90:-Which of the following is give recommendations on Safety Procedures and Practices in Electrical Work?

- A:-5216/1982
- B:-3034/1993
- C:-3043/1987
- D:-7689/1989

Correct Answer:- Option-A

Question91:-Which Regulation of CEA (MRS and ES) Regulations 2010 governs the cutting of soil near transmission tower?

- A:-75(2)
- B:-73(3)
- C:-65(3)
- D:-27(1)

Correct Answer:- Option-C

Question92:-What is the maximum height at which the Emergency Switch for disconnecting supply to a Multi-storied building has to be located?

- A:-1.5 M
- B:-1.6 M
- C:-1.7 M
- D:-1.8 M

Correct Answer:- Option-C

Question93:-Minimum size of 11kV Jumper in Transformer is

- A:-No. 10 Copper
- B:-No. 0 Copper
- C:-No. 8 Copper
- D:-No. 6 Copper

Correct Answer:- Option-B

Question94:-The appropriate neutral CT for low set earth fault relay for a 500 kVA transformer is

- A:-150/5 A class 5P10
- B:-150/5 class PS
- C:-150/5 class 1
- D:-150/5 class 0.5

Correct Answer:- Option-A

Question95:-How many months is the maximum validity normally for a temporary connection?

- A:-12
- B:-3
- C:-9
- D:-6

Correct Answer:- Option-A

Question96:-For over voltage protection of transformer, the tripping shall be given normally to

- A:-Secondary side
- B:-Both primary side and secondary side
- C:-Primary side
- D:-None of the above

Correct Answer:- Option-C

Question97:-What is the maximum connected load that can be connected to a 415 V supply?

- A:-50 kVA
- B:-200 kVA
- C:-100 kVA
- D:-5 kVA

Correct Answer:- Option-C

Question98:-The clearance of fencing from the Transformer body is

- A:-2 M
- B:-1 M
- C:-1.5 M
- D:-2.5 M

Correct Answer:- Option-C

Question99:-Which one does not satisfy the Regulation 42, earth leakage protective device?

- A:-ELCB
- B:-MCB
- C:-RCCB
- D:-GFCI

Correct Answer:- Option-B

Question100:-Which of the following is not a general function of Central Electricity Regulatory Commission?

- A:-Build and operate power generating stations
- B:-Determine tariff for inter state transmission of Electricity
- C:-Regulate inter state transmission of electricity
- D:-Specify Grid Code having regard to Grid standards

Correct Answer:- Option-A