



Uttar Pradesh Metro Rail Corporation Limited

उत्तर प्रदेश मेट्रो रेल कॉर्पोरेशन लिमिटेड

A joint Venture of Govt. of India and Govt. of Uttar Pradesh

Participant ID	
Participant Name	
Test Center Name	
Test Date	12/05/2024
Test Time	9:00 AM - 11:00 AM
Subject	Maintainer Electrical

Section : Section A

Q.1 Which of the following is true in case of statically induced EMF?

- Ans A. Conductor is stationary in a stationary magnetic field
 B. Conductor is stationary and flux linking is changing
 C. Conductor is moving in a stationary magnetic field
 D. Conductor is moving and flux linking is also changing

Question ID : 630680780937
Status : Answered
Chosen Option : B

Q.2 The thickness of galvanised iron plate electrodes used for earthing should not be less than:

- Ans A. 10 mm
 B. 12.33 m
 C. 6.3 mm
 D. 3.15 mm

Question ID : 630680780965
Status : Answered
Chosen Option : C

Q.3 Select the most appropriate option to fill in the blank.
The child _____ happy now.

- Ans A. seem
 B. seems
 C. seemed
 D. seeming

Question ID : 630680300682
Status : Answered
Chosen Option : B

Q.4 The theory of the Eightfold Path is primarily related to the sermon of:

- Ans A. Ananda
 B. Siddhartha Gautama
 C. Suddhodhana
 D. Mahaprajapati Gautami

Question ID : 630680305948
Status : Answered
Chosen Option : B

Q.5 A 400 V, three-phase, 50Hz supply is fed to a delta connected load having three identical coils, each coil having an impedance of 12 ohms. Determine the line current.

- Ans A. 115.46 A
 B. 19.24 A
 C. 57.73 A
 D. 38.48 A

Question ID : 630680780961
Status : Answered
Chosen Option : C

Q.6 Which of the following steps indicate the correct order for the operation of fire extinguisher?

- Ans A. Aim, pull, squeeze, sweep
 B. Pull, aim, squeeze, sweep
 C. Aim, squeeze, pull, sweep
 D. Pull, aim, sweep, squeeze

Question ID : 630680781010
Status : Answered
Chosen Option : B

Q.7 In a certain code language, 'GLOW' is coded as '3214' and 'LONG' is coded as '1438'. What is the code for 'N' in the given code language?

- Ans A. 1
 B. 3
 C. 2
 D. 8

Question ID : 630680568432
Status : Answered
Chosen Option : D

Q.8 When was World Radio Day 2021 celebrated to raise a greater awareness among the public and the media regarding the importance of radio?

- Ans A. 10th January
 B. 18th March
 C. 22nd April
 D. 13th February

Question ID : 63068074605
Status : Answered
Chosen Option : C

Q.9 The purpose of blocking diodes used in series-parallel connection of PV modules is to _____.

- Ans
- A. internal short circuit protection of PV cells
 - B. prevent power absorption by the failed string of PV modules
 - C. bypass the failed module in a string of PV modules
 - D. enhance the power generating capacity of the PV module

Question ID : 630680780959
Status : Answered
Chosen Option : B

Q.10 How much electrical energy is consumed in an electric heater rated as 1000 W, 250 V, used for 60 minutes?

- Ans
- A. 1 kWh
 - B. 60000 W
 - C. 1000 W
 - D. 60 kWh

Question ID : 630680780976
Status : Answered
Chosen Option : A

Q.11 For the construction of express way, part of Raju's field was taken by the Govt. As a result the length and the breadth of Raju's field got reduced by 10% and 5%, respectively. What is the net percentage decrease in the area of Raju's field?

- Ans
- A. 14.5%
 - B. 15.5%
 - C. 15%
 - D. 14%

Question ID : 630680756618
Status : Answered
Chosen Option : A

Q.12 The space between the two gates through which majority carriers pass from source to drain in a FET is called a _____.

- Ans
- A. channel
 - B. junction
 - C. probe
 - D. terminal

Question ID : 630680780969
Status : Answered
Chosen Option : A

Q.13 Which of the following statements are true?

- i) A semiconductor with excess of electrons is called N-type.
- ii) Free electrons are minority carriers in P-type semiconductor material.
- iii) Copper and aluminium are examples of semiconductor materials.
- iv) Once the depletion layer is established, carriers can move freely through the junction.

- Ans
- A. i and ii only
 - B. i, ii and iii only
 - C. iii and iv only
 - D. i, ii, iii, and iv

Question ID : 630680780971
Status : Answered
Chosen Option : A

Q.14 Which of the following is a three-terminal device capable of making or breaking two connections from a single position?

- Ans
- A. Two-way switch
 - B. Push-button switch
 - C. Intermediate switch
 - D. One-way switch

Question ID : 630680780993
Status : Answered
Chosen Option : C

Q.15 Which fire extinguisher should be used to extinguish a class C fire?

- Ans
- A. Halon type
 - B. Liquid type
 - C. Dry powder type
 - D. CO₂ type

Question ID : 630680781007
Status : Answered
Chosen Option : C

Q.16 A uni-junction transistor has _____ emitter(s) and _____ base(s).

- Ans
- A. two; two
 - B. one; two
 - C. one; one
 - D. two; one

Question ID : 630680780968
Status : Answered
Chosen Option : C

Q.17 Which of the following statements are true with respect to induced EMF?

- i) When changing flux produces EMF, the EMF is called statically induced EMF.
- ii) When the conductor moves and produces EMF, the EMF is called dynamically induced EMF.
- iii) EMF produced by flux linkages from the same coil is mutual induced EMF.
- iv) EMF produced by flux linkages from a neighbouring coil is self-induced EMF.

- Ans
- A. i, ii and iii only
 - B. i and ii only
 - C. i, ii, iii, and iv
 - D. iii and iv only

Question ID : 630680780985
Status : Answered
Chosen Option : B

Q.18 Which part of the DC machine is responsible for rectification in a DC generator?

- Ans
- A. Yoke
 - B. Field poles
 - C. Interpoles
 - D. Commutator

Question ID : 630680780942
Status : Answered
Chosen Option : D

Q.19 Which of the following is an example of non-conventional sources of energy?

- Ans
- A. Hydro energy
 - B. Nuclear energy
 - C. Biomass energy
 - D. Coal-based thermal energy

Question ID : 630680780953
Status : Answered
Chosen Option : C

Q.20 Which of the following is the drawback of AC electric power transmission?

- Ans
- A. It is impossible to transmit power over a long distance.
 - B. Step-up or step-down transformation of voltages is not possible.
 - C. Power cannot be generated at higher voltages due to commutation problems.
 - D. Effective resistance of AC transmission lines is increased due to skin effect.

Question ID : 630680780957
Status : Answered
Chosen Option : D

Section : Section B

Q.1 Select the most appropriate ANTONYM of the underlined word in the given sentence.

It was an awkward moment, and Mr. Satterthwaite was momentarily out of words.

- Ans A. Genius
 B. Composed
 C. Terrible
 D. Uneasy

Question ID : 630680375528
Status : Answered
Chosen Option : A

Q.2 At COP26, India has promised to become carbon neutral by _____.

- Ans A. 2050
 B. 2040
 C. 2070
 D. 2060

Question ID : 63068098967
Status : Answered
Chosen Option : C

Q.3 The carotid artery that is used to check the victim's pulse while providing first aid is located:

- Ans A. on either side of the neck, below the jaw bone
 B. on the either side of the head, between the forehead and the ear
 C. on the left side of the chest, close to the heart
 D. on the right side of the abdomen, close to the liver

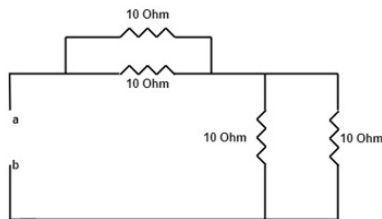
Question ID : 630680781015
Status : Answered
Chosen Option : A

Q.4 Which of the following actions is NOT recommended while reporting an emergency over the telephone to an emergency service?

- Ans A. Reporting the location of incident
 B. Describing the nature of the emergency
 C. Explaining how the incident occurred
 D. Not responding to the dispatcher's follow-up questions

Question ID : 630680781004
Status : Answered
Chosen Option : D

Q.5 Determine the equivalent resistance between the terminals a and b of the circuit shown in the given figure.



- Ans**
- A. 20 ohms
 - B. 10 ohms
 - C. 5 ohms
 - D. 15 ohms

Question ID : 630680780974

Status : Answered

Chosen Option : B

Q.6 Personal protective equipment (PPE) used for protection against injury from outside the body, i.e., for protecting the head, eye, face, hand, arm, foot, etc., is classified as:

- Ans**
- A. essential PPE
 - B. respiratory type PPE
 - C. non-respiratory type PPE
 - D. non-essential PPE

Question ID : 630680781005

Status : Answered

Chosen Option : A

Q.7 To reduce the error in a potential transformer, it is required to provide _____.

- Ans**
- A. magnetic insulation between primary and secondary coils
 - B. a short magnetic path
 - C. a long magnetic path
 - D. core of least permeability

Question ID : 630680781019

Status : Not Answered

Chosen Option : --

Q.8 The direction of the rotation of a DC shunt motor can be changed by _____.

- Ans**
- A. interchanging the supply connections
 - B. either changing the direction of the armature current or by changing the direction of the field current
 - C. changing the direction of the armature current only
 - D. changing the direction of the field current only

Question ID : 630680780944

Status : Answered

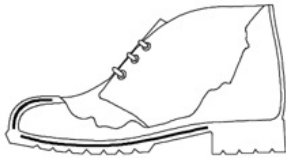
Chosen Option : B

Q.9 Which of the following logic gates gives low output (logic = 0) when all the inputs are in high state?

- Ans A. XNOR
 B. AND
 C. OR
 D. NAND

Question ID : 630680781013
Status : Answered
Chosen Option : D

Q.10 The personal protective equipment (PPE) shown in the given figure is categorised as:



- Ans A. PPE6
 B. PPE4
 C. PPE2
 D. PPE8

Question ID : 630680781016
Status : Not Answered
Chosen Option : --

Q.11 An earth electrode is a _____ piece of pipe electrically connected to the general mass of the earth

- Ans A. metal
 B. rubber
 C. PVC
 D. wooden

Question ID : 630680780962
Status : Answered
Chosen Option : A

Q.12 An item is marked for ₹2,000 and is sold for ₹1,440 after two successive discounts of which the first is 20%. What is the second discount percentage?

- Ans A. 20%
 B. 15%
 C. 8%
 D. 10%

Question ID : 630680756631
Status : Answered
Chosen Option : D

Q.13 What is the recommended immediate action to be taken when an accident victim is found to have no pulse after checking for it?

- Ans A. Take the victim to the hospital.
 B. Give water to the victim.
 C. Start CPR on the victim.
 D. Declare the death of the victim.

Question ID : 630680781009
Status : Answered
Chosen Option : C

Q.14 Cut-in speed in wind turbines is defined as:

- Ans A. the minimum speed at which the wind turbine starts movement
 B. the wind speed at which the wind turbine delivers the rated power
 C. the maximum wind speed at which the wind turbine is designed to produce power
 D. the minimum wind speed at which useful power can be generated

Question ID : 630680780954
Status : Answered
Chosen Option : A

Q.15 Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion/s logically follow/s from the given statements.

Statements:

Some doors are wardrobes.

All wardrobes are mirrors.

No mirror is a room.

Conclusions:

(I) No mirror is a door.

(II) At least some rooms are doors.

- Ans A. Both conclusions (I) and (II) follow.
 B. Neither conclusion (I) nor (II) follows.
 C. Only conclusion (I) follows.
 D. Only conclusion (II) follows.

Question ID : 630680349915
Status : Answered
Chosen Option : B

Q.16 Which of the following speed control method allows to control the direction of rotation of DC motor?

- Ans A. Supply voltage control method
 B. Ward-Leonard system of speed control
 C. Series field tapping method
 D. Field diverter method

Question ID : 630680780946
Status : Answered
Chosen Option : B

Q.17 Match the following.

List I	List II
a) Class A	i) Wood
b) Class B	ii) Gas
c) Class C	iii) Oil
d) Class D	iv) Metals

- Ans A. a-iv, b-iii, c-ii, d-i
 B. a-i, b-iii, c-ii, d-iv
 C. a-i, b-ii, c-iii, d-iv
 D. a-iv, b-ii, c-iii, d-i

Question ID : 630680781014
Status : Answered
Chosen Option : B

Q.18 Which switch is operated by means of a projecting lever that can be moved upwards and downwards?

- Ans A. Pull switch
 B. Bell-push switch
 C. Toggle switch
 D. Modular switch

Question ID : 630680780998
Status : Answered
Chosen Option : C

Q.19 The nucleus of an atom comprises of _____.

- Ans A. neutrons only
 B. protons only
 C. protons and neutrons only
 D. protons, neutrons, and electrons

Question ID : 630680780967
Status : Answered
Chosen Option : C

Q.20 How many fundamental elements are mentioned in Jainism to trace the natural and supernatural things of the universe?

- Ans A. Nine
 B. Seven
 C. Eight
 D. Five

Question ID : 630680216026
Status : Not Answered
Chosen Option : --

Section : Section C

Q.1 In this question, three statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All purses are covers.

All bags are covers.

Some suitcases are bags.

Conclusions:

I. Some purses are bags.

II. Some suitcases are covers.

- Ans A. Only conclusion II follows.
 B. Only conclusion I follows.
 C. Neither conclusion I nor II follows.
 D. Both conclusions I and II follow.

Question ID : 630680519108

Status : Answered

Chosen Option : A

Q.2 Calculate the power dissipated by a resistor with a resistance of $10\ \Omega$ when a current of $2\ \text{A}$ flows through it.

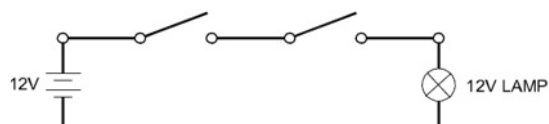
- Ans A. 5 W
 B. 10 W
 C. 40 W
 D. 20 W

Question ID : 630680780975

Status : Answered

Chosen Option : C

Q.3 The circuit shown in the given figure is an electrical equivalent of the _____ logic gate.



- Ans A. AND
 B. NAND
 C. NOT
 D. OR

Question ID : 630680781012

Status : Answered

Chosen Option : A

Q.4 The bypass diodes used in series-parallel connection of PV modules are connected _____.

- Ans A. in parallel with each blocking module
 B. in series with each blocking module
 C. in series with each PV module
 D. in parallel with each PV module

Question ID : 630680780955

Status : Not Attempted and Marked For Review

Chosen Option : --

Q.5 As per IE regulations, the load on each power sub-circuit should be restricted to _____.

- Ans
- A. 500 W
 - B. 2000 W
 - C. 1000 W
 - D. 3000 W

Question ID : 630680780987
Status : Answered
Chosen Option : D

Q.6 Select the most appropriate option that can substitute the highlighted segment in the given sentence.

He may not be a good worker, but he has a talent of speaking.

- Ans
- A. shown his teeth
 - B. a man of his words
 - C. the gift of the gab
 - D. his own counsel

Question ID : 630680756661
Status : Answered
Chosen Option : C

Q.7 Which of the following statements is true regarding the severity of an electric shock?

- Ans
- A. Severity of shock depends both on the magnitude of current and the duration of contact.
 - B. Severity of the shock depends on the duration of the current only.
 - C. Severity of shock is independent of the magnitude of current and the duration of contact.
 - D. Severity of the shock depends on the magnitude of the current only.

Question ID : 630680781006
Status : Answered
Chosen Option : A

Q.8 The recommended cable size for a 5 HP motor having a full load current of 7.5 A is _____.

- Ans
- A. 2.0 mm² copper conductor cable
 - B. 0.5 mm² copper conductor cable
 - C. 0.5 mm² aluminium conductor cable
 - D. 1.0 mm² aluminium conductor cable

Question ID : 630680780999
Status : Answered
Chosen Option : A

Q.9 A sum of money becomes ₹15,000 after 4 years and ₹22,500 after 8 years at the same rate of compound interest. Find the sum.

- Ans
- A. ₹12,500
 - B. ₹12,000
 - C. ₹10,000
 - D. ₹7,500

Question ID : 630680524024
Status : Answered
Chosen Option : B

Q.10 In which of the following years did Akbar finally succeed in annexing Malwa in the Mughal empire?

- Ans A. 1581
 B. 1562
 C. 1574
 D. 1570

Question ID : 630680326301
Status : Not Answered
Chosen Option : --

Q.11 In a household, the following electrical loads are daily used.
(i) 3 nos. of 40 W lights used for 6 hours/day
(ii) 2 nos. of 80 W fans used for 12 hours/day
(iii) 1 nos. of 1000 W immersion heater used for 1 hour/day
Calculate the cost of the electric bill for the month of August if the cost of energy is ₹3/unit.

- Ans A. ₹364
 B. ₹3,640
 C. ₹338.52
 D. ₹3,385.2

Question ID : 630680780984
Status : Answered
Chosen Option : C

Q.12 Usually every year, the National Sports Awards are given in a special ceremony on the National Sports Day, i.e., 29th August. But for the year 2021, this award was given on:

- Ans A. 26th January
 B. 15th August
 C. 13th November
 D. 2nd November

Question ID : 63068091163
Status : Not Answered
Chosen Option : --

Q.13 What is the rating of a two-pin socket?

- Ans A. 32 A, 250 V
 B. 2 A, 250 V
 C. 16 A, 250 V
 D. 6 A, 250 V

Question ID : 630680780997
Status : Answered
Chosen Option : D

Q.14 Fleming's right-hand rule is employed to:

- Ans A. determine the direction of dynamically induced EMF
 B. determine the direction of rotating magnetic field
 C. determine the direction of armature movement
 D. determine the direction of motor rotation

Question ID : 630680780938
Status : Answered
Chosen Option : A

Q.15 Which of the following is an example of ferromagnetic substances?

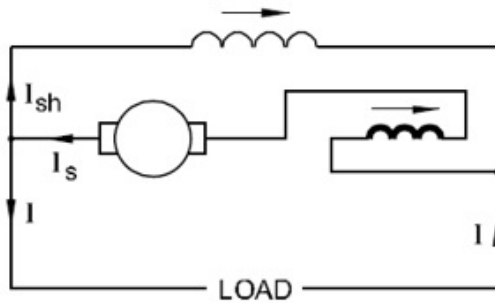
- Ans A. Platinum
 B. Bismuth
 C. Graphite
 D. Nickel

Question ID : 630680780980

Status : Answered

Chosen Option : D

Q.16 Identify the type of DC generator shown in the given figure.



- Ans A. Differential short shunt compound generator
 B. Cumulative short shunt compound generator
 C. Cumulative long shunt compound generator
 D. Differential long shunt compound generator

Question ID : 630680780943

Status : Answered

Chosen Option : D

Q.17 Consider the following statements as per IE regulations for the main switch and distribution board.

- i) The neutral wire should have a break in the form of a switch or fuse unit.
 - ii) All main switches should be either of metal-clad enclosed pattern or of any insulated enclosed pattern.
 - iii) The main switchgear should be located in a place where it is accessible.
 - iv) Switchboards shall not be erected above gas stoves or sinks.
- Which of the above statements are true?

- Ans A. ii, iii, and iv only
 B. i and ii only
 C. iii and iv only
 D. i, ii and iii only

Question ID : 630680781000

Status : Answered

Chosen Option : A

Q.18 The safety sign shown in the given figure is an example of _____.



- Ans
- A. warning sign
 - B. mandatory sign
 - C. information sign
 - D. prohibition sign

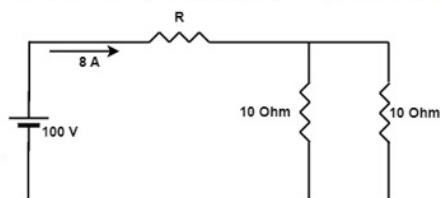
Question ID : 630680781002
Status : Answered
Chosen Option : B

Q.19 In the context of waste disposal methods, incineration refers to _____.

- Ans
- A. a process compaction of waste materials into blocks and sending for recycling
 - B. a process of landfilling in low lying areas
 - C. a process of controlled combustion of garbage to reduce it to incombustible matter
 - D. a natural process involving breaking down the waste material into organic compounds that can be used as manure

Question ID : 630680781008
Status : Answered
Chosen Option : C

Q.20 For the circuit shown in the given figure, determine the value of the unknown resistance R.



- Ans
- A. 7.5 ohms
 - B. 10 ohms
 - C. 5 ohms
 - D. 2.5 ohms

Question ID : 630680780972
Status : Answered
Chosen Option : A

Section : Section D

Q.1 The cable connected between the distributor to the consumers meter is called _____.

- Ans
- A. feeder
 - B. ring main
 - C. service mains
 - D. connector

Question ID : 630680780952
Status : Answered
Chosen Option : C

Q.2 _____ relays are capable of maintaining their contacts in the last assumed position without the maintained current in the coil.

- Ans
- A. Latching
 - B. Magnetic
 - C. Sensing
 - D. Impulse

Question ID : 630680780992
Status : Answered
Chosen Option : A

Q.3 Two pipes P1 and P2, can fill a tank in 30 minutes and 42 minutes, respectively. The third pipe P3 can empty the completely filled tank in 24 minutes. Initially P1 and P2 are opened. After 6 minutes, P3 is also opened. The tank will get filled in:

- Ans
- A. $38\frac{4}{7}$ minutes
 - B. $32\frac{4}{7}$ minutes
 - C. $48\frac{6}{13}$ minutes
 - D. $32\frac{2}{13}$ minutes

Question ID : 630680629073
Status : Answered
Chosen Option : C

Q.4 Earthing of non-current carrying metal work and conductor, which is essential for safety is known as _____ earthing.

- Ans
- A. low voltage
 - B. high voltage
 - C. equipment
 - D. system

Question ID : 630680780963
Status : Answered
Chosen Option : C

Q.5 Shaggy horn wild ibex are found in which type of forests in India?

- Ans A. Mangrove forests
 B. Tropical deciduous forests
 C. The thorn forests and scrubs
 D. Montane forests

Question ID : 630680511334
Status : Not Answered
Chosen Option : --

Q.6 Select the most appropriate option to fill in the blank.
One hour has elapsed _____ she went outside.

- Ans A. early
 B. before
 C. after
 D. since

Question ID : 630680175874
Status : Answered
Chosen Option : D

Q.7 In December 2022, who among the following has set the national record in 100 m breaststroke in 25 m FINA World Swimming Championships?

- Ans A. Kanchanmala Pande
 B. Rupali Repale
 C. Chahat Arora
 D. Siva Sridhar

Question ID : 630680170435
Status : Not Answered
Chosen Option : --

Q.8 Which of the following is considered as an earth fault?

- Ans A. Insulated portion of an electrical system getting accidentally connected to insulated portion of a different electrical system
 B. Live portion of an electrical system getting accidentally connected to live portion of a different electrical system
 C. Live portion of an electrical system getting accidentally connected to insulation medium
 D. Live portion of an electrical system getting accidentally connected to earth

Question ID : 630680780970
Status : Answered
Chosen Option : D

Q.9 Match the following.

List I	List II
a) Resistance	i) Henry
b) Inductance	ii) Volts
c) Voltage	iii) Farad
d) Capacitance	iv) Ohms

- Ans A. a-iv, b-i, c-ii, d-iii
 B. a-iv, b-ii, c-i, d-iii
 C. a-iii, b-ii, c-i, d-iv
 D. a-iii, b-ii, c-iv, d-i

Question ID : 630680780977
 Status : Answered
 Chosen Option : A

Q.10 A voltage operated ELCB is designed to trip when the potential difference between the protected metal work of the installation and the general mass of earth exceeds _____.

- Ans A. 8 V
 B. 24 V
 C. 12 V
 D. 6 V

Question ID : 630680780989
 Status : Not Answered
 Chosen Option : --

Q.11 As per B.I.S. 9320 – 1979, in DC machines, the insulation resistance, when the high voltage test is applied, should NOT be less than _____.

- Ans A. 1 mega ohm
 B. 1 micro ohm
 C. 1 milli ohm
 D. 100 mega ohms

Question ID : 630680780949
 Status : Answered
 Chosen Option : D

Q.12 A three-phase balanced delta connection has a line voltage of 440 V. Determine the phase voltage.

- Ans A. 220 V
 B. 254.04 V
 C. 440 V
 D. 762.08 V

Question ID : 630680780978
 Status : Answered
 Chosen Option : C

Q.13 The decimal equivalent of the binary number $[1011]_2$ is _____.

- Ans A. $[11]_{10}$
 B. $[111]_{10}$
 C. $[100]_{10}$
 D. $[10]_{10}$

Question ID : 630680780966
Status : Answered
Chosen Option : A

Q.14 If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 3965742, how many digits will appear more than once in the new number thus formed?

- Ans A. One
 B. Three
 C. Two
 D. None

Question ID : 630680542535
Status : Answered
Chosen Option : B

Q.15 Which of the following losses is categorised as mechanical losses in DC machines?

- Ans A. Eddy current loss
 B. Friction and windage loss
 C. Copper loss
 D. Hysteresis loss

Question ID : 630680780940
Status : Answered
Chosen Option : B

Q.16 In case of an electric shock, which of the following items is suitable for removing the victim from contact with the live conductor?

- Ans A. Dry wooden bar
 B. Metallic rod
 C. Bare human hand
 D. Wet wooden bar

Question ID : 630680781003
Status : Answered
Chosen Option : A

Q.17 Which series MCBs are designed to protect circuits with resistive loads?

- Ans A. L series
 B. DC series
 C. R series
 D. AC series

Question ID : 630680780988
Status : Not Answered
Chosen Option : --

Q.18 In a wind turbine system, adjusting the nacelle about the vertical axis to bring the rotor facing the wind is termed as _____.

- Ans
- A. teeter control
 - B. hub control
 - C. yaw control
 - D. pitch control

Question ID : 630680780960
Status : Answered
Chosen Option : C

Q.19 As continuity tests may not reveal internal short circuits in windings, it is recommended to perform which of the following tests to determine such short circuits?

- Ans
- A. Resistance measurement test
 - B. Armature reaction test
 - C. Brush movement test
 - D. Insulation resistance test

Question ID : 630680780950
Status : Answered
Chosen Option : A

Q.20 What is the possible reason for DC motor failing to start upon connecting to supply?

- Ans
- A. Loose foundation bolts
 - B. Short circuit between filed coil turns
 - C. Brushes ahead of neutral plane
 - D. Open circuit in starter

Question ID : 630680780947
Status : Answered
Chosen Option : D

Section : Section E

Q.1 Who among the following organised a Salt March in Tamil Nadu to break the Salt Law in 1930?

- Ans
- A. C Rajagopalachari
 - B. Gopalbandhu Chaudhuri
 - C. K Kelappan
 - D. Ambika Kant Sinha

Question ID : 630680163726
Status : Answered
Chosen Option : C

Q.2 Two wattmeters connected to measure the power of a three-phase, balanced load indicate 300 W and 500 W, respectively. What is the total power input to the load?

- Ans A. 1558.8 W
 B. 100 W
 C. 173.2 W
 D. 800 W

Question ID : 630680780983
Status : Answered
Chosen Option : D

Q.3 A fuse selected for over-current protection should NOT have a fusing factor of more than _____.

- Ans A. 3.4
 B. 1.4
 C. 8.3
 D. 5.9

Question ID : 630680780991
Status : Answered
Chosen Option : B

Q.4 In a DC generator, the MMF due to armature conductors is absent in which of the following cases?

- Ans A. No load
 B. Half full load
 C. Full load
 D. Above full load

Question ID : 630680780939
Status : Answered
Chosen Option : A

Q.5 Determine the rating of a fuse having 4 strands each of 35 SWG - copper wire of 5 A. (Assume the paralleling factor as 0.8.)

- Ans A. 35 A
 B. 16 A
 C. 25 A
 D. 2.5 A

Question ID : 630680781001
Status : Not Answered
Chosen Option : --

Q.6 In a current operated ELCB, the toroid ring is made of _____ material.

- Ans A. high conductivity electrical
 B. high permeability magnetic
 C. high reluctance magnetic
 D. high resistivity electrical

Question ID : 630680780986
Status : Not Answered
Chosen Option : --

Q.7 What is the rms value of the voltage of the sinusoidal wave wave if the peak value is 100 V?

- Ans A. 70.7 V
 B. 282.4 V
 C. 35.4 V
 D. 141.4 V

Question ID : 630680780956
Status : Answered
Chosen Option : A

Q.8 Which of the following statements is NOT correct in case of a series circuit?

- Ans A. The total resistance is always less than the sum of individual resistances that make up the circuit.
 B. Total power is equal to the dissipated by the individual resistances
 C. Current is the same in all parts of the circuit.
 D. The sum of voltage drops across the individual resistances equals the applied voltage

Question ID : 630680780982
Status : Answered
Chosen Option : A

Q.9 The no-load current in a transformer _____ the primary voltage.

- Ans A. leads
 B. lags
 C. is in phase with
 D. is exactly in phase opposition with

Question ID : 630680781018
Status : Answered
Chosen Option : B

Q.10 The bimetallic relays where the bimetallic element changes its shape, in response to changes in temperature comes under the category of _____ relays.

- Ans A. ferreed
 B. thermal
 C. electromagnetic
 D. latching

Question ID : 630680780994
Status : Answered
Chosen Option : B

Q.11 In a certain code language, 'OWNS' is coded as '2964' and 'SONG' is coded as '6479'. What is the code for 'G' in the given code language?

- Ans A. 6
 B. 7
 C. 9
 D. 4

Question ID : 630680568451
Status : Answered
Chosen Option : B

Q.12 The population of a society reduced from 2500 to 2275 due to continuous problem of dirty water supply. What is the percentage decrease in population of the society?

- Ans A. 10%
 B. 8%
 C. 11%
 D. 9%

Question ID : 630680756624

Status : Answered

Chosen Option : D

Q.13 Which of the following statements is the best elaboration of India's state in the Global Hunger Index (GHI) 2023?

- Ans A. India ranks 111, and the report highlights substantial progress against hunger since 2015.
 B. India ranks 125, and the report suggests no change in the progress against hunger since 2015.
 C. India ranks 111, and the report suggests progress against hunger has nearly halted since 2015.
 D. India ranks 125, and the report indicates significant progress against hunger since 2015.

Question ID : 630680579879

Status : Not Answered

Chosen Option : --

Q.14 Match the following.

List I	List II
a) Moderator	i) Provides fission material
b) Fuel rods	ii) Cadmium
c) Control rods	iii) Transfers heat
d) Coolant	iv) Slows down neutrons

- Ans A. a-iii, b-ii, c-i, d-iv
 B. a-iii, b-ii, c-iv, d-i
 C. a-iv, b-ii, c-i, d-iii
 D. a-iv, b-i, c-ii, d-iii

Question ID : 630680780958

Status : Answered

Chosen Option : D

Q.15 In a transformer, the number of turns per volt is 10. The primary voltage is 110 V. Find the primary and secondary turns required if secondary voltage is to be 25 V.

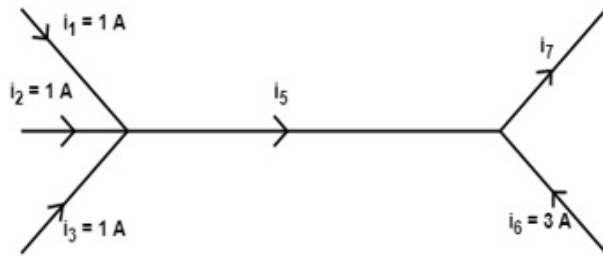
- Ans A. Primary turns = 25 and secondary turns = 11
 B. Primary turns = 11 and secondary turns = 25
 C. Primary turns = 110 and secondary turns = 25
 D. Primary turns = 1100 and secondary turns = 250

Question ID : 630680781021

Status : Answered

Chosen Option : D

Q.16 Find the current i_7 in the following figure.



- Ans
- A. 3 A
 - B. 6 A
 - C. 2 A
 - D. 0 A

Question ID : 630680780973
 Status : Answered
 Chosen Option : B

Q.17 Reluctance and permeability in magnetic circuits are analogous to _____ and _____, respectively, in electric circuits.

- Ans
- A. conductivity; resistance
 - B. permanence; conductance
 - C. resistance; conductivity
 - D. conductance; permanence

Question ID : 630680780979
 Status : Answered
 Chosen Option : C

Q.18 Select the most appropriate ANTONYM of the word 'Gorgeous' from the given sentence.

She is magnificent and brilliant, but her behaviour is dull but honest towards me.

- Ans
- A. magnificent
 - B. brilliant
 - C. dull
 - D. honest

Question ID : 630680597335
 Status : Answered
 Chosen Option : A

Q.19 Which of the following methods is suggested to bring down the earth electrode resistance to an acceptable value?

- Ans
- A. Connecting a number of earth electrodes in series
 - B. Coating the earth electrodes with paint
 - C. Connecting a number of earth electrodes in parallel
 - D. Treating the earth pit with silica gel

Question ID : 630680780964
 Status : Answered
 Chosen Option : C

Q.20 Which of the following is NOT true in case of DC motors?

- Ans** A. Never open the shunt field of a compound motor when the motor is operating at high load.
- B. The direction of force produced on a current-carrying conductor placed in a magnetic field can be determined by Fleming's right-hand rule.
- C. It is advisable to short-circuit the series field of the differential compound motor at the time of starting.
- D. DC compound motor has both shunt and series fields for producing the required main flux in the poles.

Question ID : **630680780945**

Status : **Answered**

Chosen Option : **B**