



SJVN LIMITED

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Participant ID	
Participant Name	
Test Center Name	
Test Date	18/03/2023
Test Time	4:30 PM - 6:30 PM
Subject	Field Engineer(Electrical)

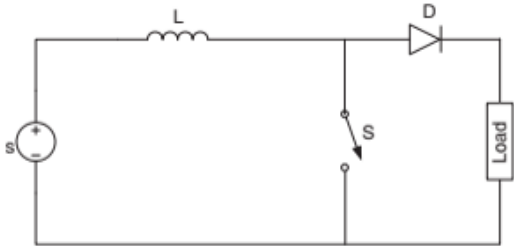
Section : Subject Related

Q.1 The device which behaves neither as a good insulator nor a good conductor is known as _____.

- Ans
- 1. conducting device
 - 2. resistive device
 - 3. semi-conductor device
 - 4. semi-insulator device

Question ID : 630680178502
Status : Answered
Chosen Option : 3

Q.2



Identify the following chopper type shown in the above figure.

- Ans
- 1. Step down
 - 2. Step up
 - 3. Forward converter
 - 4. Backward converter

Question ID : 630680178598
Status : Marked For Review
Chosen Option : 3

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Q.3 Which part of a cable provides a path for fault and leakage currents as the sheath is earthed at one cable end?

- Ans
- ☐ 1. Conductor screen
 - ☐ 2. Insulation
 - ☒ 3. Metallic sheath
 - ☐ 4. Bedding

Question ID : 630680178570

Status : Marked For Review

Chosen Option : 3

Q.4 If the diode clipping levels are set too low or the input waveform is too great, then the elimination of both waveform peaks could end up with a _____ shaped waveform.

- Ans
- ☐ 1. triangular wave
 - ☒ 2. square wave
 - ☐ 3. impulse wave
 - ☐ 4. ramp wave

Question ID : 630680178573

Status : Marked For Review

Chosen Option : 3

Q.5 Which of the following conditions of the number of poles and zeros of a transfer function shows all the root locus branches start at finite open loop poles and end at finite open loop zeros?

- Ans
- ☐ 1. Poles > Zeros
 - ☐ 2. Zeros > poles
 - ☒ 3. Poles = zeros
 - ☐ 4. Poles – zeros = 1

Question ID : 630680178534

Status : Answered

Chosen Option : 3

Q.6 What should be the duty cycle of the Buck-Boost converter to have infinity voltage as output?

- Ans
- ☐ 1. Duty cycle = 0
 - ☐ 2. Duty cycle = 0.5
 - ☒ 3. Duty cycle = 1
 - ☐ 4. Duty cycle = 0.01 near to zero

Question ID : 630680178600

Status : Marked For Review

Chosen Option : 4

Q.7 Which of the following is an INCORRECT stage of nuclear power plant?

- Ans
- ☐ 1. Nuclear reactor
 - ☐ 2. Heat exchanger
 - ☒ 3. Gear box for changeable speed
 - ☐ 4. Alternator

Question ID : 630680178562

Status : Answered

Chosen Option : 4

Q.8 Which rotational speed counting system consists of seven geared rings each marked with 0 to 9 digits on its rim and all the rings together show the reading in kWh?

- Ans
- ☐ 1. Cyclo dial
 - ☐ 2. Clock system
 - ☐ 3. Display system
 - ☒ 4. Number dial

Question ID : 630680178520

Status : Marked For Review

Chosen Option : 3

Q.9 Which force becomes noticeable when an attempt is made to compress a solid?

- Ans
- ☐ 1. Alterative forces
 - ☒ 2. Repulsive forces
 - ☐ 3. Energy bond
 - ☐ 4. Reaction bond

Question ID : 630680178494

Status : Answered

Chosen Option : 2

Q.10 What is the power producer of a ${}_{92}\text{U}^{235}$ reactor, if 2 kg fuel is taken in 30 days and energy released per fission is 200 MeV and Avogadro's number is 6.023×10^{26} per kilo mole?

- Ans
- ☐ 1. 42.3 MW
 - ☒ 2. 63.2 MW
 - ☐ 3. 73.4 MW
 - ☐ 4. 93.4 MW

Question ID : 630680178563

Status : Marked For Review

Chosen Option : 2

Q.11 Which of the following is INCORRECT for non-conventional type generation source?

- Ans
- ☐ 1. Produce low voltage
 - ☐ 2. Installation cost is less and running cost is more
 - ☒ 3. Synchronous generator are used to produced power
 - ☐ 4. Directly supply to distribution system

Question ID : 630680178558
Status : Answered
Chosen Option : 3

Q.12 The Butterworth approximation is superior at and near _____.

- Ans
- ☐ 1. the cut-off frequency
 - ☒ 2. $\omega = 0$
 - ☐ 3. pass band edge
 - ☐ 4. stop-band

Question ID : 630680178515
Status : Answered
Chosen Option : 1

Q.13 What is the full-scale deflection of an electrodynamic instrument if the actual load current is 0.5A and the actual supply voltage is 120V?

- Ans
- ☐ 1. 15W
 - ☐ 2. 30W
 - ☒ 3. 60W
 - ☐ 4. 120W

Question ID : 630680178523
Status : Answered
Chosen Option : 3

Q.14 The Hall effect cannot be applied in which of the following cases?

- Ans
- ☐ 1. Magnetic field sensing equipment
 - ☐ 2. Measurement of direct current
 - ☐ 3. Phase angle measurement
 - ☒ 4. Frequency measurement

Question ID : 630680178501
Status : Marked For Review
Chosen Option : 4

Q.15 What type of step response is produced when poles are on the real and right side of the s-plane?

- Ans
- ☐ 1. Fixed amplitude oscillations
 - ☐ 2. Reach infinity with damped oscillations
 - ☒ 3. Reach to infinity without any oscillations
 - ☐ 4. Steady state value without any oscillations

Question ID : 630680178541
Status : Marked For Review
Chosen Option : 2

Q.16 Which type of component increases when trivalent material is mixed with pure semiconductor material?

- Ans
- ☒ 1. Holes
 - ☐ 2. Electrons
 - ☐ 3. Insulation property
 - ☐ 4. Heating property

Question ID : 630680178504
Status : Answered
Chosen Option : 2

Q.17 What is the new reactance of a transmission line at the new base MVA rating of 100 and 11 KV, if the 0.4 pu reactance produces the same transmission line at a base 75MVA rating with 10 KV?

- Ans
- ☒ 1. 0.44
 - ☐ 2. 0.38
 - ☐ 3. 0.41
 - ☐ 4. 0.49

Question ID : 630680178567
Status : Marked For Review
Chosen Option : 2

Q.18 W_2 = is the maximum percentage error in the difference of two measured powers when $W_1 = 100W \pm 1\%$ and $W_2 = 80W \pm 5\%$?

- Ans
- ☐ 1. 5%
 - ☐ 2. 15%
 - ☒ 3. 25%
 - ☐ 4. 35%

Question ID : 630680178521
Status : Answered
Chosen Option : 3

Q.19 Which modulation index condition is correct for maintaining the constant output voltage from the PWM inverter?

- Ans
- ☐ 1. Modulation index less than unity
 - ☒ 2. Modulation index greater than unity
 - ☐ 3. Modulation index equal to unity
 - ☐ 4. Modulation index equal to zero

Question ID : 630680178597

Status : Marked For Review

Chosen Option : 3

Q.20 Read the following statement and gives the correct answer according to SCR gate triggering circuit?

- I. It provides accurate firing control over the required range.
- II. Produce a gate signal of suitable magnitude and sufficiently short rise time.

- Ans
- ☐ 1. Only statement I is correct.
 - ☒ 2. Only statement II is correct.
 - ☐ 3. Both statement I and II are correct.
 - ☐ 4. Both statement I and II are incorrect.

Question ID : 630680178589

Status : Answered

Chosen Option : 3

Q.21 Which of the following is considered as the pressure coil of the electro dynamo type watt meter?

- Ans
- ☐ 1. Fixed coil
 - ☒ 2. Moving coil
 - ☐ 3. Spring force coil
 - ☐ 4. Friction coil

Question ID : 630680178524

Status : Answered

Chosen Option : 1

Q.22 Which of the following theorems is used to identify the resistance of the speaker that must be matched to the audio power amplifier to obtain the highest output?

- Ans
- ☐ 1. Reciprocity Theorem
 - ☒ 2. Maximum Power Transfer theorem
 - ☐ 3. Compensation Theorem
 - ☐ 4. Millman's Theorem

Question ID : 630680178518

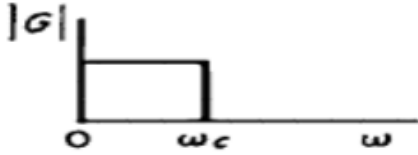
Status : Answered

Chosen Option : 2

Q.23 Which of the following characteristics is shown in the band elimination filter?

Ans

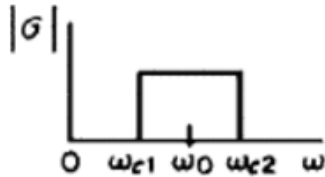
✗ 1.



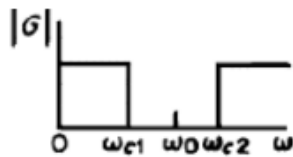
✗ 2.



✗ 3.



✓ 4.



Question ID : 630680178514

Status : Answered

Chosen Option : 4

Q.24 What is called the reference value that is expressed in power system network voltage, power, current and impedance rating?

Ans

✗ 1. Unit value

✗ 2. Per unit value

✓ 3. Base value

✗ 4. Specific value

Question ID : 630680178564

Status : Answered

Chosen Option : 3

Q.25 What type of energy conversion happens in hydroelectric power station?

Ans

✗ 1. Temperature variation used for production of electricity

✗ 2.

Bonding energy of water is used for production of electricity

✓ 3.

Potential energy of water is used for production of electricity

✗ 4.

Chemical effect with water is used for the production of electricity

Question ID : 630680178560

Status : Answered

Chosen Option : 3

Q.26 What is the base KV on LT side of transformer if the 400 kV base KV on HT side and the voltage rating in LT side and HT side is 1000V and 5000V?

- Ans**
- ☒ 1. 200 kV
 - ☒ 2. 140 kV
 - ☒ 3. 80 kV
 - ☒ 4. 40 kV

Question ID : **630680178566**
Status : **Answered**
Chosen Option : **3**

Q.27 Which of the following flip flop inverts the output corresponding to every leading edge of the clock signal when input is high?

- Ans**
- ☒ 1. SR latch
 - ☒ 2. SR flip flop
 - ☒ 3. D type flip flop
 - ☒ 4. T type flip flop

Question ID : **630680178581**
Status : **Marked For Review**
Chosen Option : **1**

Q.28 Which of the following combinational circuits is used to perform the addition of two bits?

- Ans**
- ☒ 1. Half adder
 - ☒ 2. Full adder
 - ☒ 3. Counter
 - ☒ 4. Latch

Question ID : **630680178583**
Status : **Marked For Review**
Chosen Option : **1**

Q.29 Which type of circuit is made by parallel resonance AC circuits?

- Ans**
- ☒ 1. Selector circuit
 - ☒ 2. Rejecter circuit
 - ☒ 3. Controller circuit
 - ☒ 4. Shifter circuit

Question ID : **630680178511**
Status : **Marked For Review**
Chosen Option : **2**

Q.30 Why is Ampere's law NOT applied to finite conductors?

Ans ☒ 1.

The magnetic field in a finite conductor is in uniform condition.

☒ 2.

The magnetic field in a finite conductor is not in uniform condition.

☒ 3. Finite conductors have a very low magnetic field.

☒ 4.

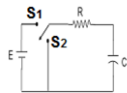
Finite conductors have very high and unstable magnetic fields.

Question ID : 630680178490

Status : Marked For Review

Chosen Option : 2

Q.31



According to the above circuit, what is the value of voltage across the capacitor after shifting the switch position from 1 to 2?

Ans ☒ 1. E

☒ 2. Zero

☒ 3. $\frac{1}{RC} \text{ K e}^{\text{st}}$

☒ 4. $-\frac{1}{RC}$

Question ID : 630680178508

Status : Marked For Review

Chosen Option : 2

Q.32 What is the magnetic field intensity just inside the wall of the pipe if a long straight pipe wire with outer diameter 5 cm with pipe wall thickness of 0.5 cm and current flowing within 100A?

Ans ☒ 1. 105.5 A/m

☒ 2. 48.6 A/m

☒ 3. 3.25 A/m

☒ 4. Zero

Question ID : 630680178491

Status : Marked For Review

Chosen Option : 3

Q.33 Which of the category is considered cycloconverters?

Ans ☒ 1. AC to DC converter

☒ 2. AC to AC converter

☒ 3. DC to AC converter

☒ 4. DC to DC converter

Question ID : 630680178586

Status : Marked For Review

Chosen Option : 2

Q.34 In which type of instrument, there are no errors due to stray magnetic fields?

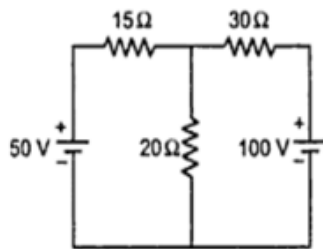
- Ans
- ☐ 1. Moving iron meter
 - ☐ 2. Induction watt hour meter
 - ☐ 3. Electrodynamo meter
 - ☒ 4. Electrostatic meter

Question ID : 630680178526

Status : Marked For Review

Chosen Option : 3

Q.35



What is the voltage across 20Ω in the above circuit?

- Ans
- ☐ 1. 21.5V
 - ☒ 2. 44.4V
 - ☐ 3. 58.6V
 - ☐ 4. 77.7V

Question ID : 630680178517

Status : Answered

Chosen Option : 4

Q.36 Which of the following is the correct divergence of any position vector?

- Ans
- ☐ 1. Two
 - ☒ 2. Three
 - ☐ 3. Four
 - ☐ 4. Six

Question ID : 630680178482

Status : Marked For Review

Chosen Option : 1

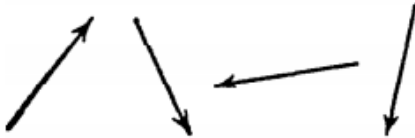
Q.37 Which of the following spin arrangements shows paramagnetic material?

Ans

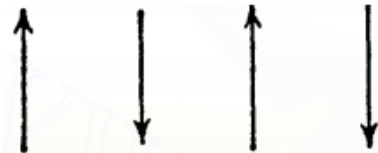
✗ 1.



✓ 2.



✗ 3.



✗ 4.



Question ID : 630680178499

Status : Answered

Chosen Option : 1

Q.38 What is the minimum current required for full-scale deflection in the electrodynamic instrument?

Ans

✗ 1. 1 mA

✗ 2. 10 mA

✓ 3. 100 mA

✗ 4. 1A

Question ID : 630680178522

Status : Marked For Review

Chosen Option : 1

Q.39 Which type of test is NOT performed by DC series motor?

Ans

✗ 1. Short circuit test

✗ 2. Load test

✗ 3. Determination of efficiency

✓ 4. Swinburn's test

Question ID : 630680178546

Status : Marked For Review

Chosen Option : 1

Q.40 Which of the following statements is INCORRECT for induction motor?

- Ans
- ☒ 1. It is a self-starting motor.
 - ☒ 2. No extra supply is required for DC excitation.
 - ☒ 3. It is operated in all power factor.
 - ☒ 4. It is simple in construction and less costly.

Question ID : 630680178553

Status : Answered

Chosen Option : 1

Q.41 A thin linear conductor of length 'l' and carrying a current 'I' is coincident with y axis. One end of the conductor is at y_1 , and the other end is at y_2 from the origin. What is the flux density due to the conductor at a point on the x-axis at a distance x_1 from the origin by using Biot-Savart's law?

- Ans
- ☒ 1. $\frac{\mu_0 I}{4\pi x_1} \left[\frac{y_2}{\sqrt{x_1^2 + y_2^2}} + \frac{y_1}{\sqrt{x_1^2 + y_1^2}} \right]$
 - ☒ 2. $\frac{\mu_0 I}{4\pi x_1} \left[\frac{y_2}{\sqrt{x_1^2 + y_2^2}} - \frac{y_1}{\sqrt{x_1^2 + y_1^2}} \right]$
 - ☒ 3. $\frac{\mu_0 I}{4\pi y_1} \left[\frac{y_2}{\sqrt{x_1^2 + y_2^2}} + \frac{y_1}{\sqrt{x_1^2 + y_1^2}} \right]$
 - ☒ 4. $\frac{\mu_0 I}{4\pi y_1} \left[\frac{y_2}{\sqrt{x_1^2 + y_2^2}} - \frac{y_1}{\sqrt{x_1^2 + y_1^2}} \right]$

Question ID : 630680178489

Status : Marked For Review

Chosen Option : 2

Q.42 What type of analysis is now used for change from one steady state to another at a particular time?

- Ans
- ☒ 1. Steady state analysis
 - ☒ 2. Transient state analysis
 - ☒ 3. Frequency analysis
 - ☒ 4. Direct analysis

Question ID : 630680178506

Status : Marked For Review

Chosen Option : 2

Q.43 What is the value of the magnetic field of the inner surface of a mica ring of space section with an internal diameter of 40 cm and external diameter of 60 cm carries a uniform toroidal winding of 500 turns with a current of 1A?

- Ans
- ☒ 1. 325.7 A/m
 - ☒ 2. 397.8 A/m
 - ☒ 3. 485.2 A/m
 - ☒ 4. 658.2 A/m

Question ID : 630680178492

Status : Marked For Review

Chosen Option : 1

Q.44 Which type of system is NOT included in electromechanical conversion?

- Ans
- ☒ 1. Electrical system
 - ☒ 2. Magnetic coupling system
 - ☒ 3. Mechanical system
 - ☒ 4. Thermo coupling system

Question ID : 630680178548

Status : Marked For Review

Chosen Option : 4

Q.45 Which class of induction motor has a low impedance squirrel cage motor?

- Ans
- ☒ 1. Class A
 - ☒ 2. Class B
 - ☒ 3. Class C
 - ☒ 4. Class D

Question ID : 630680178551

Status : Marked For Review

Chosen Option : 2

Q.46 Which type of circuit is very similar to that of the combinational circuits along with the feedback?

- Ans
- ☒ 1. Fast sequential circuit
 - ☒ 2. Timing sequential circuit
 - ☒ 3. Asynchronous sequential circuit
 - ☒ 4. Synchronous sequential circuit

Question ID : 630680178582

Status : Marked For Review

Chosen Option : 4

Q.47 Which circuit switches the operation of the inverter between the battery and the charging modes according to the mains availability in the PWM inverter?

- Ans
- ☒ 1. Change over circuit
 - ☒ 2. AC mains sensing circuit
 - ☒ 3. Shut down circuit
 - ☒ 4. Soft start circuit

Question ID : 630680178595

Status : Marked For Review

Chosen Option : 2

Q.48 What is the time constant of an RC circuit, where $R = 20 \text{ ohm}$ and $C = 400 \mu\text{F}$?

- Ans
- ☒ 1. 4ms
 - ☒ 2. 8ms
 - ☒ 3. 16ms
 - ☒ 4. 32ms

Question ID : 630680178509
Status : Answered
Chosen Option : 2

Q.49 A very small air gap in the induction motor CANNOT cause _____.

- Ans
- ☒ 1. noise
 - ☒ 2. pulsation losses
 - ☒ 3. a magnetic pull
 - ☒ 4. an increase in overload capacity

Question ID : 630680178550
Status : Marked For Review
Chosen Option : 3

Q.50 Which is the correct stability condition of the following characteristics equation?

$$s^3 + 5s^2 + 6s + 30 = 0$$

- Ans
- ☒ 1. Marginally stable
 - ☒ 2. Stable
 - ☒ 3. Unstable
 - ☒ 4. Force stable

Question ID : 630680178539
Status : Marked For Review
Chosen Option : 3

Q.51 What is done when a 2×2 element matrix inter-change the diagonal elements and changes the sign of the remaining elements?

- Ans
- ☒ 1. Finding the adj of matrix
 - ☒ 2. Finding identity matrix
 - ☒ 3. Calculating the determinant of matrix
 - ☒ 4. Finding the inverse of matrix

Question ID : 630680178543
Status : Marked For Review
Chosen Option : 1

Q.52 Which type of coupling is used in the voltage amplifier?

- Ans
- ☐ 1. R-L coupling
 - ☒ 2. RC coupling
 - ☐ 3. Invariably transformer coupling
 - ☐ 4. Variably transformer coupling

Question ID : 630680178577

Status : Answered

Chosen Option : 4

Q.53 Which type of filter is used to transmit every type of signal?

- Ans
- ☐ 1. Band stop filter
 - ☒ 2. All-pass filter
 - ☐ 3. Band pass filter
 - ☐ 4. High-pass filter

Question ID : 630680178513

Status : Answered

Chosen Option : 2

Q.54 Which of the following is correct when it is given in PMMC instrument then indicating ZERO reading?

- Ans
- ☐ 1. DC supply
 - ☒ 2. AC supply
 - ☐ 3. Half wave rectifier supply
 - ☐ 4. Full bridge rectifier supply

Question ID : 630680178529

Status : Answered

Chosen Option : 2

Q.55 What is the divergence of the function of $xi + ye^{-y}j - yzk$?

- Ans
- ☐ 1. $(1 + y)(1 - e^{-y})$
 - ☒ 2. $(1 - y)(1 + e^{-y})$
 - ☐ 3. $(1 - x)(x + e^{-y})$
 - ☐ 4. $(y - 1)(e^{-y} + 1)$

Question ID : 630680178483

Status : Marked For Review

Chosen Option : 2

Q.56 How many poles are in the right half of the s-plane, if the two sign changes the first element of any row in a Routh array?

- Ans
- ✓ 1. Two
 - ✗ 2. Three
 - ✗ 3. Four
 - ✗ 4. Undefined

Question ID : 630680178538
Status : Marked For Review
Chosen Option : 1

Q.57 Which of the following properties is correct for an electrostatic instrument?

- Ans
- ✗ 1. Uniform scale
 - ✗ 2. Use very large magnitude for deflection
 - ✗ 3. Low cost
 - ✓ 4. Designed for large voltage

Question ID : 630680178527
Status : Marked For Review
Chosen Option : 4

Q.58 Which of the following speed-controlling methods of DC motor is work as Ward Leonard method?

- Ans
- ✓ 1. Armature voltage control
 - ✗ 2. Armature resistance control
 - ✗ 3. Flux control in field winding
 - ✗ 4. Field diverter method

Question ID : 630680178545
Status : Marked For Review
Chosen Option : 1

Q.59 Which is the correct representation of the capacitance of a spherical capacitor?

- Ans
- ✗ 1. $C = \epsilon A/d$
 - ✓ 2. $C = \frac{Q}{V_{ab}} = 4\pi\epsilon (ab)/(a-b)$
 - ✗ 3. $C = \frac{Q}{V_{ab}} = \frac{2\pi\epsilon}{\ln(b/a)}$
 - ✗ 4. $C = A/[d_1/\epsilon_1 + d_2/\epsilon_2 + \dots + d_n/\epsilon_n]$

Question ID : 630680178485
Status : Marked For Review
Chosen Option : 3

Q.60 Which of the following is an INCORRECT semiconductor material?

- Ans
- ☐ 1. Silicon
 - ☐ 2. Gallium arsenide
 - ☐ 3. Germanium
 - ☒ 4. Lead

Question ID : 630680178503
Status : Answered
Chosen Option : 4

Q.61 What amount of power is produced by a hydroelectric station, if the head height is 100m, hydraulic efficiency is 0.86 and electrical efficiency is 0.92?

- Ans
- ☐ 1. 256 kW
 - ☐ 2. 562 kW
 - ☒ 3. 775 kW
 - ☐ 4. 855 kW

Question ID : 630680178561
Status : Marked For Review
Chosen Option : 4

Q.62 Which of the following factors is higher in the squirrel cage induction motor than the slip ring induction motor?

- Ans
- ☐ 1. Space factor in slots
 - ☐ 2. Cost
 - ☐ 3. Starting torque
 - ☒ 4. Efficiency

Question ID : 630680178552
Status : Marked For Review
Chosen Option : 3

Q.63 What is called the ratio of AC output power to the zero-signal power supplied by the battery of a power amplifier?

- Ans
- ☐ 1. Power efficiency
 - ☒ 2. Collector efficiency
 - ☐ 3. Emitter efficiency
 - ☐ 4. Distortion

Question ID : 630680178580
Status : Marked For Review
Chosen Option : 1

Q.64 Which of the following is INCORRECT for per unit impedance?

Ans ☒ 1. Actual impedance/base impedance

☒ 2.

Actual impedance \times (Base mega volt amps/ square of line-to-line base kilo volts)

☒ 3. Base mega volt amps/ square of line-to-line base kilo volts

☒ 4.

(Base Kilo volt amps \times Actual impedance)/(square of Line-to-line base kilo volts \times 1000)

Question ID : 630680178565

Status : Marked For Review

Chosen Option : 3

Q.65 Which among the following materials has the highest thermal conductivity?

Ans ☒ 1. Aluminium

☒ 2. Iron

☒ 3. Nickel

☒ 4. Carbon

Question ID : 630680178498

Status : Marked For Review

Chosen Option : 2

Q.66 Which of the following methods of voltage control in a power system is INCORRECT?

Ans ☒ 1. Excitation control at generating station

☒ 2. Induction regulator

☒ 3. Shunt capacitor

☒ 4. Series resistor

Question ID : 630680178569

Status : Answered

Chosen Option : 3

Q.67 Which of the following statements is INCORRECT for relative dielectric constant?

Ans ☒ 1. It is a dimensionless quantity.

☒ 2. It is equal to one for a vacuum.

☒ 3. It is greater than one for all substances.

☒ 4. It is measured by the inductance effect.

Question ID : 630680178496

Status : Answered

Chosen Option : 4

Q.68 Which of the following is INCORRECT for DC to DC converter?

Ans ☒ 1.

To regulate the DC output voltage against load and line variations

☒ 2.

To reduce the AC voltage ripple on the DC output voltage below the required level

☒ 3. To provide isolation between the input source and the load

☒ 4.

Not to protect the supplied system and the input source from electromagnetic interference

Question ID : 630680178588

Status : Answered

Chosen Option : 4

Q.69 What is the input rms voltage of a full wave rectifier, if the output DC voltage is 9V?

Ans ☒ 1. 10V

☒ 2. 11.1V

☒ 3. 12V

☒ 4. 12.8V

Question ID : 630680178574

Status : Marked For Review

Chosen Option : 4

Q.70 Which of the following energy source systems produced power in more MW capacity compared to the other?

Ans ☒ 1. Solar

☒ 2. Nuclear

☒ 3. Tidal

☒ 4. Biomass

Question ID : 630680178557

Status : Answered

Chosen Option : 2

Q.71 Which of the following is a valence crystal?

Ans ☒ 1. Sodium Chloride

☒ 2. Diamond

☒ 3. Copper

☒ 4. Aluminium

Question ID : 630680178495

Status : Marked For Review

Chosen Option : 4

Q.72 Which of the following PWM techniques produces higher harmonic than another method?

- Ans**
- ✓ 1. Single pulse width modulation
 - ✗ 2. Multiple pulse width modulation
 - ✗ 3. Sinusoidal pulse width modulation
 - ✗ 4. Modified sinusoidal pulse width modulation

Question ID : 630680178596
Status : Answered
Chosen Option : 2

Q.73 Which of the following speed control methods of a DC machine is used only to decrease the speed at the normal speed of the motor?

- Ans**
- ✗ 1. Field current control method
 - ✓ 2. Armature voltage control method
 - ✗ 3. Field voltage control method
 - ✗ 4. Armature reversal method

Question ID : 630680178544
Status : Answered
Chosen Option : 2

Q.74 Which of the following is correct for a single-phase energy meter?

- Ans**
- ✓ 1. It is an induction type of watt hour meter.
 - ✗ 2. It has two winding connected with series each other.
 - ✗ 3. It has three magnet system.
 - ✗ 4. It uses a permanent magnet in the meter for deflection force.

Question ID : 630680178519
Status : Answered
Chosen Option : 4

Q.75 In the three-phase inverter 120° conduction mode, the signals are applied and removed at _____ interval of the output voltage waveform.

- Ans**
- ✗ 1. 30°
 - ✓ 2. 60°
 - ✗ 3. 40°
 - ✗ 4. 90°

Question ID : 630680178593
Status : Marked For Review
Chosen Option : 1

Q.76 What amplifiers handle a few μV or a few mV input AC signals?

- Ans
- ✓ 1. Small signal amplifier
 - ✗ 2. Large signal amplifier
 - ✗ 3. Low power amplifier
 - ✗ 4. High power amplifier

Question ID : 630680178576

Status : Answered

Chosen Option : 1

Q.77 Which method can be used to locate open circuit faults very accurately?

- Ans
- ✓ 1. Cable thumping
 - ✗ 2. Time domain reflectometer
 - ✗ 3. High voltage radar methods
 - ✗ 4. Arc reflection method

Question ID : 630680178571

Status : Answered

Chosen Option : 4

Q.78 Which of the following methods is used to inject or absorb reactive power in the transmission line?

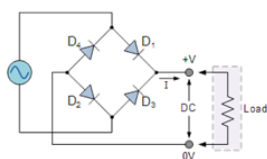
- Ans
- ✓ 1. Synchronous phase modifiers
 - ✗ 2. Tap changing transformer
 - ✗ 3. Induction voltage regulators
 - ✗ 4. Shunt reactors

Question ID : 630680178568

Status : Answered

Chosen Option : 2

Q.79



Which of the following diode groups is forward-biased in the negative half cycle in the above rectifier?

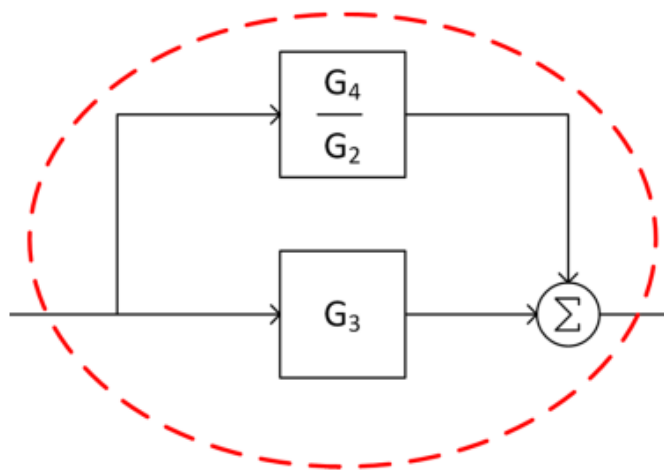
- Ans
- ✗ 1. D_1 and D_2
 - ✗ 2. D_2 and D_3
 - ✓ 3. D_3 and D_4
 - ✗ 4. D_4 and D_1

Question ID : 630680178575

Status : Marked For Review

Chosen Option : 4

Q.80



What is the simplified form of the above block diagram?

- Ans
- ☒ 1. $G_3 * G_4 / G_2$
 - ☒ 2. $G_3 * G_2 / G_4$
 - ☒ 3. $G_3 + G_4 / G_2$
 - ☒ 4. $G_3 - G_4 / G_2$

Question ID : 630680178533

Status : Answered

Chosen Option : 1

Q.81 Electrostatic instrument working depends on the _____.

- Ans
- ☒ 1. magnetic field between two conductors
 - ☒ 2. electromagnetic induction principle
 - ☒ 3. attraction or repulsion of electrodes that carry electric charge
 - ☒ 4. conclusion force produced by dipole

Question ID : 630680178525

Status : Answered

Chosen Option : 2

Q.82 What is the gain margin in the dB of the system if the gain is 1/15.7?

- Ans
- ☒ 1. 12.9
 - ☒ 2. 19.5
 - ☒ 3. 23.9
 - ☒ 4. 32.3

Question ID : 630680178540

Status : Marked For Review

Chosen Option : 1

Q.83 Which of the following rules is found in the last step of root locus?

- Ans ☒ 1. Angle of departure
☐ 2. Break-away point
☐ 3. Centroid
☐ 4. Real axis root locus branches

Question ID : 630680178535
Status : Answered
Chosen Option : 3

Q.84 What is the slip at a speed of 1490 rpm of a 4 pole induction motor which operates with 400V, 50Hz supply?

- Ans ☐ 1. 0.067
☒ 2. 0.0067
☐ 3. 0.053
☐ 4. 0.0053

Question ID : 630680178554
Status : Marked For Review
Chosen Option : 3

Q.85 Which type of method is used to find the efficiency of a small DC motor?

- Ans ☒ 1. Direct method
☐ 2. Indirect method
☐ 3. Regenerative method
☐ 4. Loading method

Question ID : 630680178547
Status : Marked For Review
Chosen Option : 3

Q.86 Which of the following power electronics devices is used in the chopper for high-power applications?

- Ans ☒ 1. SCR
☐ 2. GTO
☐ 3. IGBT
☐ 4. Power MOSFET

Question ID : 630680178599
Status : Marked For Review
Chosen Option : 1

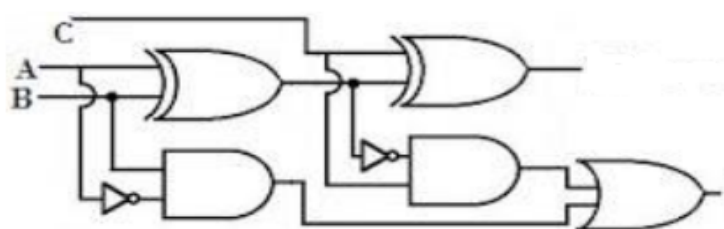
Q.87 Which of the following options is correct for a single-phase induction motor?

- I. Its output is only 50% of the three-phase motor for a given frame size and temperature rise.
- II. It is more expensive than three phase motor of the same output.

Ans ☒ 1. Both I and II are correct
☐ 2. Both I and II are incorrect
☐ 3. Only I is correct
☐ 4. Only II is correct

Question ID : 630680178556
Status : Answered
Chosen Option : 3

Q.88



Identify the above combinational circuit.

Ans

- ☒ 1. Full adder logic
- ☐ 2. Full subtractor logic
- ☒ 3. Full 4-bit counter
- ☒ 4. Full encoder

Question ID : 630680178584
Status : Marked For Review
Chosen Option : 3

Q.89 What is the output of the RMS value of line voltage V_L given by three-phase inverter in 180° conduction mode with an input voltage is V_s ?

Ans ☒ 1. $0.4714Vs$
☒ 2. $0.7797Vs$
☒ 3. $0.8165Vs$
☒ 4. $0.4502Vs$

Question ID : 630680178594
Status : Marked For Review
Chosen Option : 2

Q.90 According to Biot-Savart's law, which of the following is inversely proportional to the magnitude of dH ?

- Ans
- ☒ 1. Current element
 - ☒ 2. Square of the distance
 - ☒ 3. Distance between element to point
 - ☒ 4. Sine of the angle between current element and distance vector

Question ID : 630680178488

Status : Answered

Chosen Option : 4

Q.91 Which of the following is the correct advantage of the core-magnet type of construction of a PMMC instrument?

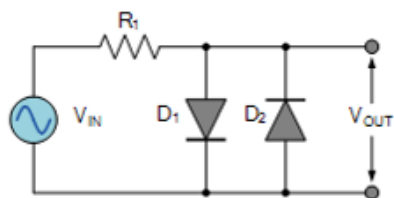
- Ans
- ☒ 1. High current can be measured
 - ☒ 2. Work with high deflection
 - ☒ 3. Shielded moving coil from an external magnetic field
 - ☒ 4. No auxiliary power is required to operate

Question ID : 630680178530

Status : Marked For Review

Chosen Option : 4

Q.92



Identify the above clipping circuit shown in the figure.

- Ans
- ☒ 1. Positive diode clipping circuits
 - ☒ 2. Negative diode clipping circuit
 - ☒ 3. Clipping of both half cycles
 - ☒ 4. Clipping of one forth cycles

Question ID : 630680178572

Status : Marked For Review

Chosen Option : 3

Q.93 Which of the following is the correct statement for a parallel resonance circuit?

- Ans
- ☒ 1. The circuit impedance becomes purely inductive.
 - ☒ 2. The value of resonance impedance will be very high.
 - ☒ 3. The ratio L/C is very small at parallel resonance.
 - ☒ 4. The circuit current is very high.

Question ID : 630680178510

Status : Marked For Review

Chosen Option : 3

Q.94 Which is defined as the ratio of mutual inductance between the coils and the square root of the product of self-inductance of each coil?

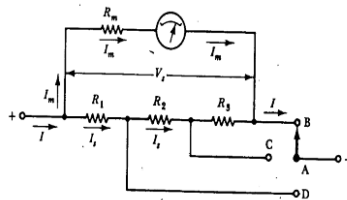
- Ans
- ☒ 1. Magnetic power
 - ☒ 2. Magnetic strength
 - ☒ 3. Coefficient of coupling
 - ☒ 4. Power of coupling

Question ID : 630680178549

Status : Answered

Chosen Option : 3

Q.95



Three resistor Ayrton shunt connected across a PMMC ammeter instrument is shown in the above figure. The meter has $R_m = 1\text{K}\Omega$ and $\text{FSD} = 50\mu\text{A}$, find the range of ammeter at C terminal if the resistance values are $R_1 = 0.05\Omega$, $R_2 = 0.45\Omega$, and $R_3 = 4.5\Omega$.

- Ans
- ☒ 1. 10mA
 - ☒ 2. 100mA
 - ☒ 3. 1A
 - ☒ 4. 1.2A

Question ID : 630680178531

Status : Marked For Review

Chosen Option : 1

Q.96 Which of the following materials has the resistivity in the range of 10^{14} ohm metres?

- Ans
- ☒ 1. Constantan
 - ☒ 2. Nichrome
 - ☒ 3. Pure silicon
 - ☒ 4. Diamond

Question ID : 630680178500

Status : Marked For Review

Chosen Option : 4

Q.97 Which of the following quantities is measured by a moving iron instrument?

- Ans
- ☒ 1. Current and Voltage
 - ☒ 2. Current, Voltage and Power
 - ☒ 3. Current, Voltage, Power and Energy
 - ☒ 4. Power and Energy

Question ID : 630680178528

Status : Marked For Review

Chosen Option : 3

Q.98 Which is the correct stability condition of the following characteristics equation?

$$s^4 + 4s^3 + 4s^2 + 2s + 1 = 0$$

- Ans
- ☒ 1. The system is stable.
 - ☐ 2. The system is unstable.
 - ☐ 3. The system is marginally stable.
 - ☐ 4. The system is complex.

Question ID : 630680178537
Status : Marked For Review
Chosen Option : 2

Q.99 Which of the following devices is considered as the principle of DC to AC converter?

- Ans
- ☐ 1. Chopper
 - ☐ 2. Cycloconverter
 - ☒ 3. Inverter
 - ☐ 4. Controlled rectifier

Question ID : 630680178592
Status : Marked For Review
Chosen Option : 4

Q.100 Which of the following single-phase motors is a commutator type?

- Ans
- ☒ 1. Repulsion induction motor
 - ☐ 2. Reluctance start induction motor
 - ☐ 3. Shaded pole induction motor
 - ☐ 4. Resistance start induction motor

Question ID : 630680178555
Status : Marked For Review
Chosen Option : 4

Q.101 The relative permeability value is _____ for non-magnetic media and _____ for magnetic materials.

- Ans
- ☒ 1. unity, greater than unity
 - ☐ 2. greater than unity, unity
 - ☐ 3. unity, less than unity
 - ☐ 4. less than unity, unity

Question ID : 630680178493
Status : Answered
Chosen Option : 4

Q.102 Which of the following defines the amplification factor of JFET?

- Ans
- ☐ 1. V_{DS} / I_D
 - ☐ 2. I_D / V_{DS}
 - ☐ 3. I_D / V_{GS}
 - ☒ 4. V_{DS} / V_{GS}

Question ID : 630680178578
Status : Answered
Chosen Option : 2

Q.103 In RL and RC circuits, the _____ across a capacitor as well as the _____ in an inductor CANNOT have a discontinuity.

- Ans
- ☐ 1. voltage, voltage
 - ☐ 2. current, current
 - ☐ 3. current, voltage
 - ☒ 4. voltage, current

Question ID : 630680178507
Status : Answered
Chosen Option : 4

Q.104 $\mathbf{M} = (\mu_r - 1)\mathbf{H} = \chi\mathbf{H}$

The above equation represents the relation between magnetization M and field intensity H, what is called the proportionality constant in the above equation?

- Ans
- ☐ 1. Permeability
 - ☐ 2. Permittivity
 - ☒ 3. Susceptibility
 - ☐ 4. Relativity

Question ID : 630680178505
Status : Answered
Chosen Option : 1

Q.105 What is the value of electron velocity with 1eV kinetic energy, if the one electron charge is 1.6×10^{-19} unit and electron mass is 9.1×10^{-31} unit?

- Ans
- ☐ 1. 2.3×10^6 m/s
 - ☐ 2. 3.2×10^5 m/s
 - ☒ 3. 5.9×10^5 m/s
 - ☐ 4. 7.6×10^6 m/s

Question ID : 630680178484
Status : Marked For Review
Chosen Option : 2

Q.106 Which of the following parameters can be destroyed by using critical field?

- Ans
- ☐ 1. Conductance
 - ☐ 2. Resistance
 - ☐ 3. Magnetic field
 - ☒ 4. Superconductivity

Question ID : 630680178487

Status : Marked For Review

Chosen Option : 3

Q.107 What is the efficiency in percentage produced by a DC generator, if the generator delivers 32.2A at 120V when supplying the mechanical energy at the rate of 4200 J/s on the rotor shaft?

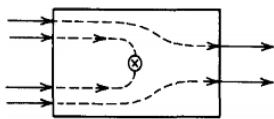
- Ans
- ☐ 1. 71%
 - ☐ 2. 78%
 - ☐ 3. 86%
 - ☒ 4. 92%

Question ID : 630680178559

Status : Marked For Review

Chosen Option : 2

Q.108 Which is the correct relation between flux in and flux out in an enclosed volume shown in the figure?



- Ans
- ☐ 1. Flux in < flux out
 - ☒ 2. Flux in > flux out
 - ☐ 3. Flux in = flux out
 - ☐ 4. Not define

Question ID : 630680178481

Status : Answered

Chosen Option : 2

Q.109 The dielectric strength of an insulator can be changed by _____.

- Ans
- ☐ 1. force
 - ☒ 2. heat
 - ☐ 3. cooling
 - ☐ 4. compressing

Question ID : 630680178486

Status : Marked For Review

Chosen Option : 2

Q.110 Drain current _____ above pinch off voltage in output characteristics of JFET.

- Ans
- ☐ 1. increases rapidly
 - ☐ 2. decreases very slowly
 - ☐ 3. decreases rapidly
 - ☒ 4. remains constant

Question ID : 630680178579
Status : Marked For Review
Chosen Option : 3

Q.111 Which of the following properties of state transient matrix $\phi(t)$ is correct?

- Ans
- ☐ 1. $\phi(0) = 1$
 - ☐ 2. $\phi^{-1}(t) = \phi(t)$
 - ☒ 3. $\phi(t_2 + t_1) = \phi(t_2) \cdot \phi(t_1)$
 - ☐ 4. $[\phi(t)]^k = \phi(k + t)$

Question ID : 630680178542
Status : Marked For Review
Chosen Option : 3

Q.112 Which is a set of branches forming the closed path?

- Ans
- ☐ 1. Nodes
 - ☐ 2. Equivalent resistance circuit
 - ☒ 3. Mesh
 - ☐ 4. Junction

Question ID : 630680178516
Status : Answered
Chosen Option : 3

Q.113 Which of the following magnetic materials does NOT have permanent dipoles?

- Ans
- ☐ 1. Paramagnetic
 - ☒ 2. Diamagnetic
 - ☐ 3. Ferromagnetic
 - ☐ 4. Anti-ferromagnetic

Question ID : 630680178497
Status : Marked For Review
Chosen Option : 3

Q.114 What is the average power dissipated by the gate when a gate triggering circuit for an SCR provides frequency of 100 Hz with a pulse width of 2ms and pulse peak power is 0.2W?

- Ans
- ☒ 1. 0.1W
 - ☒ 2. 0.2W
 - ☒ 3. 0.4W
 - ☒ 4. 0.8W

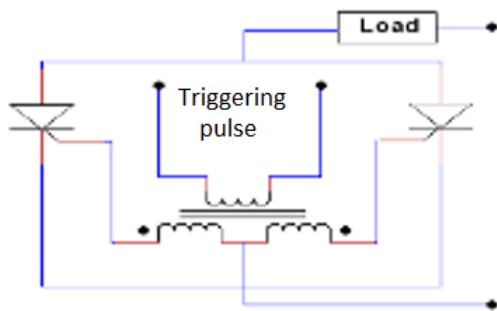
Question ID : 630680178590
Status : Answered
Chosen Option : 1

Q.115 Which part of the block diagram in the control system represents a subsystem typically modelled and labelled with a transfer function?

- Ans
- ☒ 1. Signal
 - ☒ 2. Summing junction
 - ☒ 3. Blocks
 - ☒ 4. Take off point

Question ID : 630680178532
Status : Marked For Review
Chosen Option : 2

Q.116



Which type of triggering connection is shown in the above gate triggering circuit?

- Ans
- ☒ 1. In series
 - ☒ 2. In parallel
 - ☒ 3. In cascaded
 - ☒ 4. In series and parallel combination

Question ID : 630680178591
Status : Answered
Chosen Option : 2

Q.117 Which of the identities is represented by the following expression in AND form: $(XY)Z = X(YZ)$?

- Ans
- ☒ 1. Idempotent law
 - ☒ 2. Inverse law
 - ☒ 3. Associative law
 - ☒ 4. Distributive law

Question ID : 630680178585
Status : Marked For Review
Chosen Option : 3

Q.118 What is the value of Q-factor of a series RLC circuit if the value of $R = 4 \text{ ohm}$, $L = 0.08 \text{ H}$ and the capacitance is $8 \mu\text{F}$?

- Ans
- ☐ 1. 12
 - ☒ 2. 25
 - ☐ 3. 36
 - ☐ 4. 42

Question ID : 630680178512
Status : Answered
Chosen Option : 2

Q.119 What is the value of first element of second row Routh array of the n^{th} order characteristic polynomial

$$a_0s^n + a_1s^{n-1} + a_2s^{n-2} + \dots + a_{n-1}s^1 + a_ns^0?$$

- Ans
- ☐ 1. $a_1a_4 - a_5a_0/a_1$
 - ☒ 2. $a_1a_2 - a_3a_0/a_1$
 - ☐ 3. $a_1a_6 - a_7a_0/a_1$
 - ☐ 4. $a_1a_2 - a_3a_0/b_1$

Question ID : 630680178536
Status : Marked For Review
Chosen Option : 4

Q.120 How many thyristors are required to make three phases, three pulse cycloconverter?

- Ans
- ☐ 1. 4
 - ☒ 2. 6
 - ☐ 3. 8
 - ☐ 4. 12

Question ID : 630680178587
Status : Answered
Chosen Option : 2

Section : General Aptitude

Q.1 Ram Krishan is an organisational leader who believes in maintaining a personal relationship with subordinates by opening channels of communication, providing socio-emotional support (psychological strokes), and engaging in facilitating behaviour. Which type of behaviour is Ram Krishan following?

- Ans
- ☐ 1. Rational behaviour
 - ☒ 2. Relationship behaviour
 - ☐ 3. Sympathetic behaviour
 - ☐ 4. Transformational behaviour

Question ID : 630680178359
Status : Marked For Review
Chosen Option : 2

Q.2 A clothing store sold kurtas at a price of ₹2,600 each with a 'Buy One Get One Free' offer. If the store owner could get 30% profit, then what is the cost price each kurta?

- Ans
- ☒ 1. ₹1,300
 - ☒ 2. ₹1,039
 - ☒ 3. ₹1,000
 - ☒ 4. ₹1,040

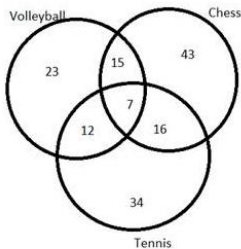
Question ID : 63068076108
Status : Marked For Review
Chosen Option : 4

Q.3 If the ratio of the surface area of two spheres is 49:64, then the ratio of their volume is equal to:

- Ans
- ☒ 1. 343:512
 - ☒ 2. 363:528
 - ☒ 3. 528:343
 - ☒ 4. 256:384

Question ID : 63068078473
Status : Answered
Chosen Option : 1

Q.4 The following Venn diagram shows a group of people playing different games like Volleyball, Chess and Tennis.



How many people play chess?

- Ans
- ☒ 1. 43
 - ☒ 2. 31
 - ☒ 3. 81
 - ☒ 4. 74

Question ID : 630680107755
Status : Answered
Chosen Option : 3

Q.5 Identify the states with the lowest literacy rate in India as per Census 2011.

- Ans
- ☒ 1. Arunachal Pradesh and Rajasthan
 - ☒ 2. Rajasthan and Jharkhand
 - ☒ 3. Bihar and Rajasthan
 - ☒ 4. Bihar and Arunachal Pradesh

Question ID : 63068082761
Status : Marked For Review
Chosen Option : 4

Q.6 From where did Gandhiji begin his famous Dandi March?

- Ans
- ☒ 1. Champaran
 - ☒ 2. Cuttack
 - ☒ 3. Sabarmati Ashram
 - ☒ 4. Porbandar

Question ID : 63068087337
Status : Answered
Chosen Option : 3

Q.7 A and B can do a piece of work in 18 days, B and C in 24 days, A and C in 36 days.In what time they all can do it working together?

- Ans
- ☒ 1. 6
 - ☒ 2. 12
 - ☒ 3. 8
 - ☒ 4. 16

Question ID : 630680103107
Status : Answered
Chosen Option : 1

Q.8 Select the most appropriate synonym of the underlined word.

She is always whining about her health

- Ans
- ☒ 1. boasting
 - ☒ 2. discussing
 - ☒ 3. appreciating
 - ☒ 4. complaining

Question ID : 630680129497
Status : Marked For Review
Chosen Option : 3

Q.9 Who among the following founded the MAO College, Aligarh in 1875?

- Ans
- ☒ 1. Sayyid Bulbul Khan
 - ☒ 2. Sayyid Ahmad Khan
 - ☒ 3. Baba Asghar
 - ☒ 4. Shaikh Jelapet

Question ID : 63068089837
Status : Marked For Review
Chosen Option : 2

Q.10 Select the term from among the given options that can replace the question mark (?) in the following series.
AZ62, CX64, FU68, KP74, ?

- Ans
- ☒ 1. SI83
 - ☒ 2. RI82
 - ☒ 3. RI85
 - ☒ 4. RJ82

Question ID : 63068063253
Status : Marked For Review
Chosen Option : 3

Q.11 What are the mountains on India's eastern border with Myanmar called?

- Ans
- ☐ 1. Vindhyas
 - ☐ 2. Satpuras
 - ☐ 3. Aravalli
 - ☒ 4. Patkai

Question ID : 63068069438
Status : Marked For Review
Chosen Option : 3

Q.12 On selling an article for ₹540, a shopkeeper incurs 10% loss. At what price must he sell the article to get 20% profit?

- Ans
- ☐ 1. ₹420
 - ☐ 2. ₹750
 - ☐ 3. ₹520
 - ☒ 4. ₹720

Question ID : 63068094345
Status : Marked For Review
Chosen Option : 4

Q.13 In a certain language, HIGH is written as 8978. How will BHAJ be written in that code language?

- Ans
- ☐ 1. 2345
 - ☐ 2. 2817
 - ☒ 3. 2819
 - ☐ 4. 2681

Question ID : 630680107818
Status : Marked For Review
Chosen Option : 3

Q.14 Which of the following can determine the qualifications which shall be a requisite for appointment as members of the Finance Commission and the manner in which they shall be selected?

- Ans
- ☒ 1. Parliament
 - ☐ 2. President
 - ☐ 3. Prime Minister
 - ☐ 4. Vice -President

Question ID : 63068059666
Status : Answered
Chosen Option : 1

Q.15 Q, S, T, R, N, D and E are sitting in a row, facing north. T sits in the middle of the row. T sits to the immediate left of Q and right of N. D is at the extreme left of the row. R sits between D and N. S sits to the immediate right of Q. Who is at the extreme right?

- Ans
- ☐ 1. S
 - ☒ 2. E
 - ☐ 3. Q
 - ☐ 4. N

Question ID : 630680143020
Status : Answered
Chosen Option : 2

Q.16 Select the most appropriate verb form and complete the sentence.

The Rajah allowed no cows _____ in his territory. It was his custom.

- Ans
- ☐ 1. to slaughter
 - ☐ 2. slaughtering
 - ☒ 3. to be slaughtered
 - ☐ 4. slaughtered

Question ID : 630680124919
Status : Answered
Chosen Option : 3

Q.17 If the numerator of a fraction be increased by 20% and its denominator be diminished by 10%, the value of the fraction is $\frac{15}{18}$, then the original fraction is:

- Ans
- ☐ 1. $\frac{1}{8}$
 - ☐ 2. $\frac{3}{5}$
 - ☒ 3. $\frac{5}{8}$
 - ☐ 4. $\frac{4}{5}$

Question ID : 630680101474
Status : Answered
Chosen Option : 3

Q.18 Rahul takes 30 days to complete 11 units of work by doing 30 min of daily work. If he does daily work for 1 h 30 min, how many days will he take to complete the same work?

- Ans
- ☐ 1. 7
 - ☐ 2. 8
 - ☐ 3. 9
 - ☒ 4. 10

Question ID : 630680143035
Status : Marked For Review
Chosen Option : 2

Q.19 Which of the following styles of Carnatic music is a scholarly composition in Telugu and Tamil, which is not only composed as a dance form but also sung in concerts?

- Ans
- ☐ 1. Suladi
 - ☐ 2. Gitam
 - ☐ 3. Kirtanam
 - ☒ 4. Pada

Question ID : 63068082742
Status : Marked For Review
Chosen Option : 3

Q.20 Who was the first scientist to observe the ribosomes as dense particles under the electron microscope?

- Ans ☒ 1. Theodor Schwann
☒ 2. Camillo Golgi
☒ 3. SJ Singer
☒ 4. George Palade

Question ID : 63068099637
Status : Marked For Review
Chosen Option : 4

Q.21 Choose the correct sequence of sentences between 1 and 6:

1. The USA had faced two powerful enemies in World War II in the year 1945.
6. This mass destructive weapon ended the Second World War.
Options:
a. Germany and Japan were a very strong opposition to America.
b. This resulted in the production of the atom bomb.
c. The American Government ordered research and produced a new deadly weapon.
d. The USA thought that their conventional warfare tactics are not enough to end their enemy's power and dominion.

- Ans ☒ 1. dcba
☒ 2. adcb
☒ 3. bcda
☒ 4. cbad

Question ID : 630680108939
Status : Answered
Chosen Option : 2

Q.22 If a number is divisible by 5 and 7, it must be divisible by:

- Ans ☒ 1. 5+7
☒ 2. 7-5
☒ 3. 5×7
☒ 4. 70

Question ID : 63068068310
Status : Answered
Chosen Option : 3

Q.23 Which of the following is NOT an instrument of the monetary policy?

- Ans ☒ 1. Bank rate
☒ 2. Repo rate
☒ 3. Tax rate
☒ 4. Open market operations

Question ID : 630680142995
Status : Marked For Review
Chosen Option : 4

Q.24 Which of the following states are connected with the HVJ pipeline?

- Ans
- ☒ 1. Delhi, Uttarakhand, Bihar
 - ☒ 2. Maharashtra, Madhya Pradesh, Gujarat
 - ☒ 3. Gujarat, Madhya Pradesh, Uttar Pradesh
 - ☒ 4. Haryana, Rajasthan, Himachal Pradesh

Question ID : 630680137233
Status : Marked For Review
Chosen Option : 4

Q.25 Find the simple interest on ₹5,000 at 10% p.a. for 15 years.

- Ans
- ☒ 1. ₹7,500
 - ☒ 2. ₹7,000
 - ☒ 3. ₹5,000
 - ☒ 4. ₹7,400

Question ID : 63068094351
Status : Answered
Chosen Option : 1

Q.26 Which Article mentions the freedom to not pay taxes for religious promotion?

- Ans
- ☒ 1. 22
 - ☒ 2. 27
 - ☒ 3. 21
 - ☒ 4. 29

Question ID : 630680143011
Status : Marked For Review
Chosen Option : 4

Q.27 45 students of 10th A section students took a Maths test. 15 students got an average (arithmetic mean) score of 85, and the rest got an average score of 70. What is the average score of A section?

- Ans
- ☒ 1. 76
 - ☒ 2. 75
 - ☒ 3. 74.5
 - ☒ 4. 75.5

Question ID : 630680143023
Status : Answered
Chosen Option : 2

Q.28 E is the father of P, Q and S. AA, AB and AC are the daughters of P. O is the husband of P. D is the mother of O. How is AC related to D?

- Ans
- ☒ 1. Daughter
 - ☒ 2. Father's mother
 - ☒ 3. Son's daughter
 - ☒ 4. Daughter's daughter

Question ID : 630680143018
Status : Answered
Chosen Option : 3

Q.29 Every time a child drops a coin in a chocolate vending machine, the machine delivers a chocolate. Consequently the child's behaviour is reinforced. According to the schedule of reinforcement, the machine is showing which of the following schedules?

- Ans**
- ☒ 1. Intermittent reinforcement
 - ☒ 2. Autonomic reinforcement
 - ☒ 3. Mechanical reinforcement
 - ☒ 4. Continuous reinforcement

Question ID : 630680178353
Status : Answered
Chosen Option : 3

Q.30 On seeing a policeman from a distance of 375 m, a thief started running at a speed of 13 km/h. The policeman chased him immediately, at a speed of 15 km/h, and the thief was caught. What was the distance run by the thief before he was caught by the policeman?

- Ans**
- ☒ 1. 2439.5 m
 - ☒ 2. 2438.5 m
 - ☒ 3. 2437.5 m
 - ☒ 4. 2436.5 m

Question ID : 630680108908
Status : Not Answered
Chosen Option : --