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# UPPCL JE EE

**Previous Year Paper**  
**29 March 2022 Shift 2**





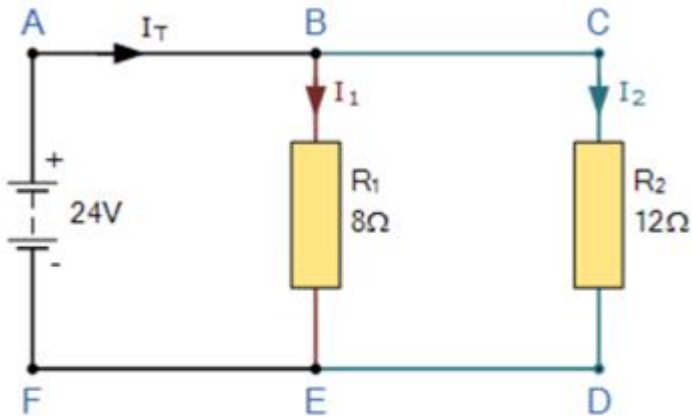
## UTTAR PRADESH POWER CORPORATION LTD.

Participant ID	
Participant Name	
Test Center Name	
Test Date	29/03/2022
Test Time	2:30 PM - 5:30 PM
Subject	Junior Engineer Trainee Electrical

Section : Domain Knowledge



Q.1



For the given circuit, which of the following is true?

Ans

✓ A.  $2I_1 = 3I_2$

✗ B.  $3I_1 = 2I_2$

✗ C.  $4I_1 = 3I_2$

✗ D.  $I_1 = I_2$

Question ID : 75322913914

Status : Answered

Chosen Option : A

Q.2 For a three-phase induction motor, when the rotor is blocked, the ratio  $\frac{\text{slip speed}}{\text{synchronous speed}} = ?$

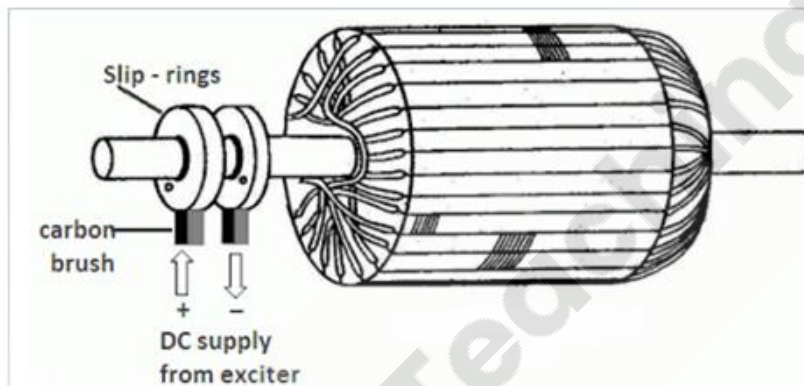
- Ans
- ✓ A. 1
  - ✗ B. 3
  - ✗ C. 4
  - ✗ D. 2

Question ID : 75322913888

Status : Answered

Chosen Option : A

Q.3 The rotor shown in the figure represents which of the following machines?



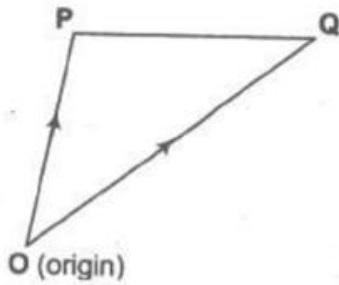
- Ans
- ✗ A. Shaded pole motor
  - ✗ B. DC shunt generator
  - ✗ C. Three-phase induction generator
  - ✓ D. Three-phase synchronous generator

Question ID : 75322913892

Status : Answered

Chosen Option : D

Q.4



For the given diagram, which of the following represents position vector of P?

Ans

☒ A.  $\overrightarrow{OQ}$

☒ B.  $\overrightarrow{QO}$

☒ C.  $\overrightarrow{OP}$

☒ D.  $\overrightarrow{PO}$

Question ID : 75322913854

Status : Answered

Chosen Option : C

Q.5 For performing pipe earthing, which of the following materials is NOT required?

Ans

☒ A. Salt and charcoal

☒ B. 60 cm × 60 cm × 6.0 mm GI plate

☒ C. Funnel with wire mesh

☒ D. 38mm dia GI pipe

Question ID : 75322913801

Status : Answered

Chosen Option : B

**Q.6 What is c-rate considering a battery?**

- Ans ☒ A. The rate at which battery gets discharged.
- ☒ B. The rate at which electrode melts.
- ☒ C. The rate at which electrolyte in the battery evaporates.
- ☒ D. The rate at which battery life reduces.

Question ID : **75322913788**

Status : **Not Answered**

Chosen Option : --

**Q.7 If the span of control is wide, then that structure is called:**

- Ans ☒ A. tall structure
- ☒ B. short structure
- ☒ C. curve structure
- ☒ D. flat structure

Question ID : **75322913811**

Status : **Answered**

Chosen Option : **D**

**Q.8 Which of the following does NOT have a direct correlation with the resistivity of electrical materials?**

- Ans ☒ A. Temperature
- ☒ B. Age hardening
- ☒ C. Frequency
- ☒ D. Alloying

Question ID : **75322913775**

Status : **Answered**

Chosen Option : **C**

**Q.9** In MCCB, the letter 'M' stands for which of the following?

- Ans
- ☒ A. Mono
  - ☒ B. Moulded
  - ☒ C. Mini
  - ☒ D. Miniature

Question ID : 75322913813

Status : **Answered**

Chosen Option : B

**Q.10** Which of the following connections of three-phase transformers, continues to operate even if one of the transformers is disabled?

- Ans
- ☒ A. Delta-star
  - ☒ B. Star-star
  - ☒ C. Delta-delta
  - ☒ D. Star-delta

Question ID : 75322913787

Status : **Answered**

Chosen Option : C

**Q.11** The possible number of random variables when a dice is rolled is:

- Ans
- ☒ A. 2
  - ☒ B. 4
  - ☒ C. 8
  - ☒ D. 6

Question ID : 75322913769

Status : **Answered**

Chosen Option : D

Q.12 Which of the following is referred as 'triggering' a thyristor?

- Ans ☒ A. Turning the SCR from forward blocking state to forward conduction state
- ☒ B. Turning the SCR from forward conduction state to forward blocking state
- ☒ C. Turning the SCR from reverse blocking state to forward blocking state
- ☒ D. Turning the SCR from forward blocking state to reverse blocking state

Question ID : 75322913798

Status : Answered

Chosen Option : A

Q.13



Identify the wave form shown in the figure.

- Ans ☒ A. Square wave
- ☒ B. Ramp wave
- ☒ C. Pulse wave
- ☒ D. Sine wave

Question ID : 75322913866

Status : Answered

Chosen Option : C

Q.14 The total number of segments in the environment are:

Ans  A. Four

 B. Five

 C. three

 D. two

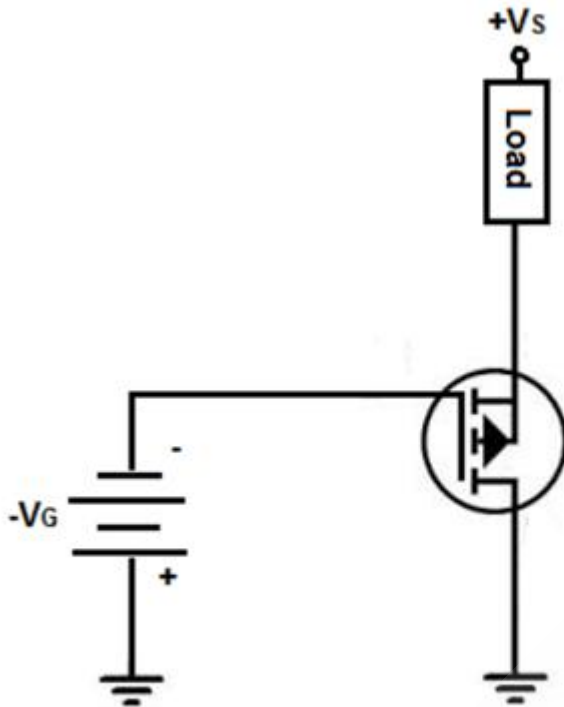
Question ID : **75322913791**

Status : **Answered**

Chosen Option : **A**



Q.15



Identify the terminals of the device shown in the circuit.

Ans

- ☒ A. Drain, anode, gate
- ☒ B. Anode, cathode, gate
- ☒ C. Drain, source, gate
- ☒ D. Emitter, base, collector

Question ID : 75322913879

Status : Answered

Chosen Option : C

**Q.16** The process of emission of electrons by bombarding the metal surface with electrons is called:

- Ans
- ☒ A. photo-electric emission
  - ☒ B. thermionic emission
  - ☒ C. field emission
  - ☒ D. secondary emission

Question ID : 75322913776

Status : Answered

Chosen Option : A

**Q.17** The total number of revolutions made over a period of time by an aluminium disc in a single-phase induction type energy meter is given by which of the following expressions? Consider  $N$  = speed of rotation of the disc.

- Ans
- ☒ A.  $\frac{dN}{dt}$
  - ☒ B.  $\int N dt$
  - ☒ C. Infinity
  - ☒ D.  $\frac{dt}{dN}$

Question ID : 75322913865

Status : Answered

Chosen Option : B

Q.18 In 8051 pin diagram, which of the following pin numbers is diagonally opposite to that of GND pin?

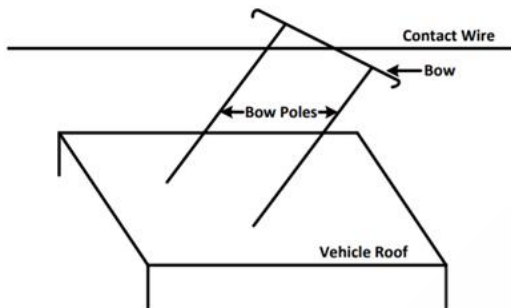
- Ans ☒ A. 20  
☒ B. 40  
☒ C. 1  
☒ D. 21

Question ID : 75322913851

Status : Answered

Chosen Option : B

Q.19



Study the given figure and identify the type of collector used for overhead lines in electric traction.

- Ans ☒ A. Pantograph collector  
☒ B. Trolley collector  
☒ C. Bow collector  
☒ D. Tower collector

Question ID : 75322913896

Status : Answered

Chosen Option : C

**Q.20** 'Dielectric constant' is mathematically equal to which of the following?

- Ans
- ☒ A. Polarisation
  - ☒ B. Relative permeability
  - ☒ C. Relative permittivity
  - ☒ D. Loss factor

Question ID : 75322913777

Status : Answered

Chosen Option : C

**Q.21** For a synchronous machine, if  $P_m$  = total mechanical power develop,  $P_0$  = net power output at shaft, then  $P_m - P_0 = ?$

- Ans
- ☒ A. rotational losses
  - ☒ B. rotor copper losses
  - ☒ C. stator copper losses
  - ☒ D. iron losses

Question ID : 75322913891

Status : Answered

Chosen Option : A

**Q.22** The particulate 'FOG' refers to which of the following?

- Ans
- ☒ A. Aerosol produced by condensation of hot vapours of metals
  - ☒ B. Aerosol consisting of water droplets
  - ☒ C. Aerosol consisting of solid particles
  - ☒ D. Form of smoke coming out of a chimney

Question ID : 75322913792

Status : Not Answered

Chosen Option : --

Q.23 1 candela = \_\_\_\_\_ lumen.

- Ans ☒ A.  $4\pi$   
☒ B.  $8\pi$   
☒ C.  $2\pi$   
☒ D.  $6\pi$

Question ID : 75322913828

Status : Answered

Chosen Option : A

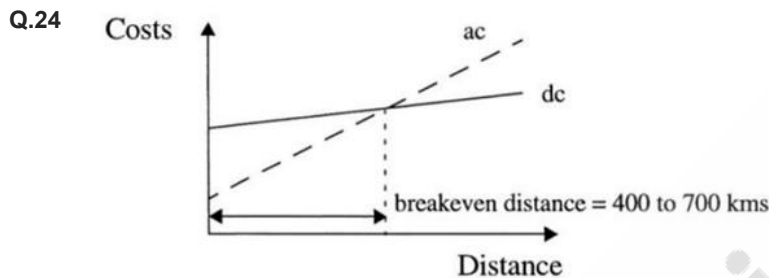


Figure: Relative costs of AC and DC transmission lines vs distance

The given graph represents relative costs of AC and DC transmission lines with reference to distance.

Identify the true statement.

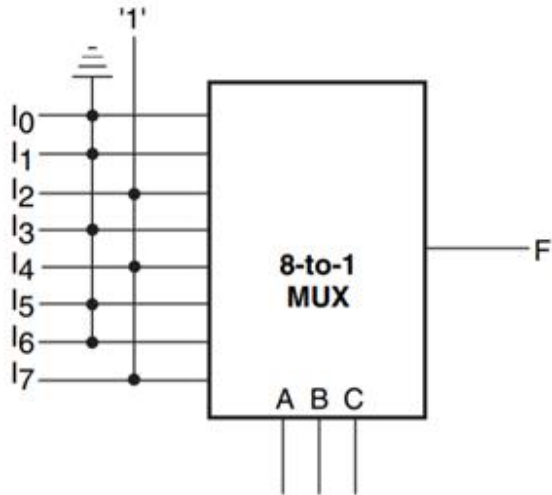
- Ans ☒ A.  
Both AC and DC transmissions are NOT economical for long distance transmission.  
☒ B.  
AC transmission is NOT economical for short to medium distance transmission.  
☒ C.  
DC transmission is NOT economical for long distance transmission.  
☒ D.  
AC transmission is economical for short to medium distance transmission.

Question ID : 75322913887

Status : Answered

Chosen Option : D

Q.25



For the given multiplexer, the number of selection lines is equal to:

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

Question ID : 75322913872

Status : Answered

Chosen Option : B

**Q.26 In an electric drive control unit sends signal to which of the following?**

- Ans ☒ A. Motor  
☒ B. Load  
☒ C. Sensing unit  
☒ D. Power modulator

Question ID : 75322913849

Status : Answered

Chosen Option : D

**Q.27 Which of the following groups comes under the first level (line) of management?**

- Ans ☒ A. Board members  
☒ B. Department heads  
☒ C. Foremen  
☒ D. Plant mangers

Question ID : 75322913808

Status : Answered

Chosen Option : D

**Q.28 Connecting a high resistance in series with the coil circuit of an instrument is used for which of the following applications?**

- Ans ☒ A. For extending the range of a power factor meter  
☒ B. For extending the range of a voltmeter  
☒ C. For extending the range of an ammeter  
☒ D. For extending the range of a frequency meter

Question ID : 75322913772

Status : Answered

Chosen Option : B

**Q.29 For which of the following type of motors is least maintenance required?**

- Ans** ☒ A. Three-phase squirrel cage motor  
☐ B. Synchronous motor  
☐ C. Three-phase slip ring induction motor  
☐ D. DC motor

Question ID : **75322913825**

Status : **Answered**

Chosen Option : **A**

**Q.30 Which of the following is NOT a characteristic of a transformer?**

- Ans** ☐ A. Very high efficiency  
☐ B. It has no moving parts  
☒ C. Windings are electrically coupled  
☐ D. Rugged in construction

Question ID : **75322913785**

Status : **Answered**

Chosen Option : **C**

**Q.31 Environmental science does NOT involve which of the following principles?**

- Ans** ☐ A. Chemical  
☒ B. Devotional  
☐ C. Geological  
☐ D. Biological

Question ID : **75322913790**

Status : **Answered**

Chosen Option : **B**

Q.32 Find the result of the following binary Arithmetic.

$$\begin{array}{r} 11011011 \\ + 00010010 \\ \hline \end{array}$$

- Ans
- ☒ A. 11101101
  - ☐ B. 11101111
  - ☐ C. 11111101
  - ☐ D. 11101100

Question ID : 75322913870

Status : Answered

Chosen Option : A

Q.33 When drawing a line using AutoCAD, on command window '@5<30' is typed. What is the length of the line?

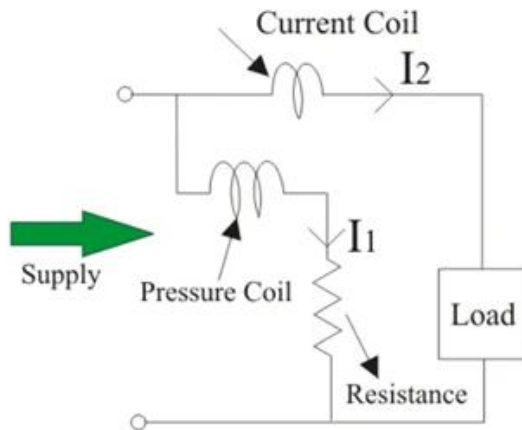
- Ans
- ☐ A.  $\frac{5}{30}$  units
  - ☐ B.  $\frac{30}{5}$  units
  - ☒ C. 5 units
  - ☐ D. 30 units

Question ID : 75322913900

Status : Answered

Chosen Option : A

Q.34



The given circuit represents which of the following measuring instruments?

Ans

- ☒ A. PMMC type voltmeter
- ☒ B. Dynamometer type wattmeter
- ☒ C. Induction type energy meter
- ☒ D. Moving iron type ammeter

Question ID : 75322913863

Status : Answered

Chosen Option : B

Q.35



Identify the wiring component shown in the given image. It is used in small residential building electrical installation.

- Ans
- ☒ A. Batten holder
  - ☒ B. Pendent holder
  - ☒ C. Ceiling rose
  - ☒ D. Socket

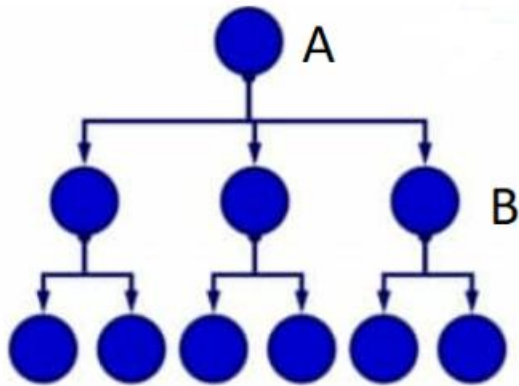
Question ID : 75322913911

Status : Answered

Chosen Option : B



Q.36



From the given figure, considering span of control which of the following is true?

Ans

- ☒ A. Span of control of manager B is 6
- ☒ B. Span of control of manager B is 3
- ☒ C. Span of control of manager A is 3
- ☒ D. Span of control of manager A is 2

Question ID : 75322913909

Status : Answered

Chosen Option : B

Q.37 Which of the following methods is NOT used to control temperature of resistance furnaces?

Ans

- ☒ A. Changing supply frequency
- ☒ B. Changing circuit configuration
- ☒ C. Changing supply voltage
- ☒ D. Intermittent switching

Question ID : 75322913830

Status : Answered

Chosen Option : A

**Q.38 Which of the following motors has a built in commutator?**

- Ans ☒ A. Repulsion motor  
☐ B. Shaded pole induction motor  
☐ C. Reluctance motor  
☐ D. Hysteresis motor

Question ID : **75322913818**

Status : **Answered**

Chosen Option : **A**

**Q.39 How many types of circuit breakers are available based on the arc quenching medium used?**

- Ans ☐ A. Two  
☐ B. Five  
☒ C. Four  
☐ D. Three

Question ID : **75322913814**

Status : **Answered**

Chosen Option : **C**



Q.40 Identify the field instrument used in SCADA. It is shown in the given image.



- Ans
- ☒ A. Limit switch
  - ☒ B. Selector switch
  - ☒ C. Float switch
  - ☒ D. Push button

Question ID : 75322913913

Status : Answered

Chosen Option : D

Q.41 In AutoCAD, the command 'pline' stands for which of the following?

- Ans
- ☒ A. Pony-line
  - ☒ B. Plural-line
  - ☒ C. Pen-line
  - ☒ D. Poly-line

Question ID : 75322913833

Status : Answered

Chosen Option : D

**Q.42** The total number of arms and the total number of balance detectors in an AC bridge, respectively, are:

- Ans** ☒ A. 4, 0  
☒ B. 6, 1  
☒ C. 4, 1  
☒ D. 6, 0

Question ID : 75322913774

Status : **Answered**

Chosen Option : **C**

**Q.43** If a steam power plant efficiency is equal to  $\left(\frac{Z}{\text{heat of coal combustion}}\right) \times \left(\frac{\text{heat equivalent of electrical output}}{Z}\right)$ , then what is 'Z'?

- Ans** ☒ A.  
Heat equivalent of electrical energy transmitted to turbine shaft.  
☒ B.  
Electrical equivalent of mechanical energy transmitted to turbine shaft.  
☒ C.  
Heat equivalent of mechanical energy transmitted to turbine shaft.  
☒ D.  
Electrical equivalent of heat energy transmitted to turbine shaft.

Question ID : 75322913882

Status : **Answered**

Chosen Option : **C**

**Q.44** Considering installation of transmission and distribution equipment, what is 'ROW'?

- Ans
- ☒ A. Red or White
  - ☒ B. Right or Wrong
  - ☒ C. Right of Way
  - ☒ D. Right of Warning

Question ID : 75322913826

Status : Not Answered

Chosen Option : --

**Q.45** Considering  $x = 3t^4$  and if  $\frac{dx}{dt} = Zt^3$ , then find the value of 'Z'.

- Ans
- ☒ A. 12
  - ☒ B. 3
  - ☒ C. 16
  - ☒ D. 4

Question ID : 75322913858

Status : Answered

Chosen Option : A

**Q.46** A three-phase induction motor is supplied with 50 Hz supply. When the rotor of the same is blocked, what is the operating frequency of the rotor-induced EMF?

- Ans
- ☒ A. 50 Hz
  - ☒ B. 25 Hz
  - ☒ C. 2 Hz
  - ☒ D. 10 Hz

Question ID : 75322913845

Status : Answered

Chosen Option : A

Q.47 For a voltage controlled device like IGBT, which of the following is true?

- Ans
- ☒ A. Output current depends on output voltage.
  - ☒ B. Input current depends on output current.
  - ☒ C. Output current depends on input current.
  - ☒ D. Output current depends on input voltage.

Question ID : 75322913841

Status : Answered

Chosen Option : D

Q.48 If  $s = f(t) - g(t)$ , then calculate  $\frac{ds}{dt}$ .

- Ans
- ☒ A.  $\frac{dg}{dt} - \frac{df}{dt}$
  - ☒ B.  $\frac{df}{dt} + \frac{dg}{dt}$
  - ☒ C.  $\frac{df}{dt} - 1$
  - ☒ D.  $\frac{df}{dt} - \frac{dg}{dt}$

Question ID : 75322913859

Status : Answered

Chosen Option : D

**Q.49** An electrical welding machine usually operates under which of the following scenarios?

- Ans ☒ A. Both, voltage and current operate at high values
- ☒ B. Low operating voltage and high operating current
- ☒ C. Both, voltage and current operate at low values
- ☒ D. High operating voltage and low operating current

Question ID : 75322913848

Status : Answered

Chosen Option : B

**Q.50** In the underground cable XLPE, 'X' stands for:

- Ans ☒ A. Extra
- ☒ B. Elastic
- ☒ C. Cross
- ☒ D. Excess

Question ID : 75322913807

Status : Answered

Chosen Option : C

**Q.51** Which of the following type of DC motors is rarely used?

- Ans ☒ A. Shunt motor
- ☒ B. Series motor
- ☒ C. Cumulative compound motor
- ☒ D. Differential compound motor

Question ID : 75322913784

Status : Answered

Chosen Option : D

Q.52 For which of the following bulbs is working temperature very high?

- Ans ☒ A. Neon indicating lamp  
☒ B. Incandescent bulb  
☒ C. LED lamp  
☒ D. Fluorescent lamp

Question ID : 75322913829

Status : Answered

Chosen Option : B

Q.53  $10 \frac{\text{joule}}{\text{coulomb}} = ?$

- Ans ☒ A. 10 A  
☒ B. 1 A  
☒ C. 1 V  
☒ D. 10 V

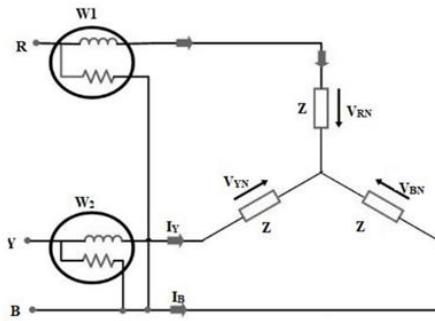
Question ID : 75322913862

Status : Answered

Chosen Option : D



Q.54



For the 2-wattmeter method shown in the figure, which of the following is a common terminal to both the pressure coils?

- Ans
- ☒ A. R
  - ☒ B. B
  - ☒ C. N
  - ☒ D. Y

Question ID : 75322913864

Status : Answered

Chosen Option : B

Q.55 In systems of track electrification in electric traction, single-phase to three-phase composite system is called:

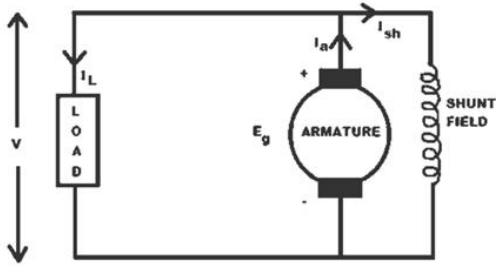
- Ans
- ☒ A. Kando system
  - ☒ B. Tando system
  - ☒ C. Cando system
  - ☒ D. Sando system

Question ID : 75322913831

Status : Answered

Chosen Option : A

Q.56



For the given DC shunt machine, which of the following is the expression for power generated by the machine?

Ans

- ☒ A.  $V I_a$
- ☒ B.  $E_g I_a$
- ☒ C.  $E_g I_L$
- ☒ D.  $V I_L$

Question ID : 75322913874

Status : Answered

Chosen Option : B

Q.57 What is the number of the column in which silicon is placed in the modern periodic table?

Ans

- ☒ A. 15
- ☒ B. 16
- ☒ C. 14
- ☒ D. 13

Question ID : 75322913836

Status : Answered

Chosen Option : C

**Q.58** An 'X' pole, 50 Hz alternator is driven by a 60 Hz synchronous motor. Then calculate the number of poles for the synchronous motor?

**Ans** ☒ A. 1.2 X

☐ B.  $\frac{1.2}{x}$

☐ C. 2.4 X

☐ D.  $\frac{1.24}{x}$

Question ID : 75322913910

Status : **Answered**

Chosen Option : **A**

**Q.59** If  $\frac{d}{dx} f(x) = 3x^2$ , then what is f(x) here?

**Ans** ☐ A.  $x^5$

☐ B.  $x^4$

☒ C.  $x^3$

☐ D.  $x^2$

Question ID : 75322913904

Status : **Answered**

Chosen Option : **C**

**Q.60** For which of the following power plants is the initial cost very high and the mass (quantity) of fuel required per MW of output produced less?

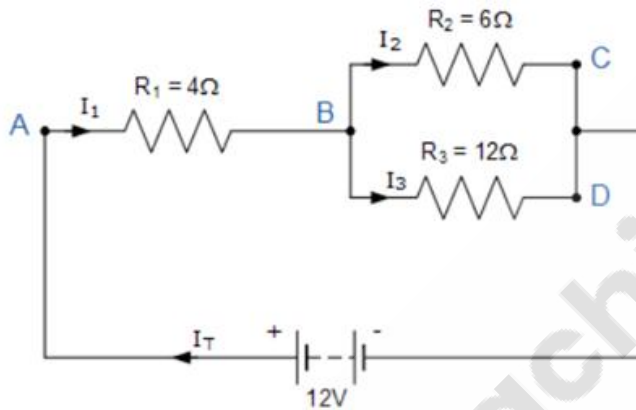
- Ans ☒ A. Diesel power plant  
☒ B. Nuclear power plant  
☒ C. Gas power plant  
☒ D. Steam power plant

Question ID : 75322913803

Status : Answered

Chosen Option : B

**Q.61**



In the circuit shown, the total number of currents meeting at node 'B' is equal to:

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

Question ID : 75322913916

Status : Answered

Chosen Option : C

Q.62 The total number of management principles proposed by Fayol is:

- Ans ☒ A. 24  
☒ B. 14  
☒ C. 4  
☒ D. 34

Question ID : 75322913809

Status : Not Answered

Chosen Option : --

Q.63 Solve the equation.

$$\int 3x^2 dx = ?$$

- Ans ☒ A.  $x^2$   
☒ B.  $x^3$   
☒ C.  $x^3 + C$   
☒ D.  $x^2 + C$

Question ID : 75322913855

Status : Answered

Chosen Option : C

Q.64 The starting torque in a three-phase induction motor, will be maximum when,  $\frac{\text{rotor resistance per phase}}{\text{rotor reactance per phase}} = ?$

- Ans ☒ A. -1  
☒ B. 0  
☒ C. 1  
☒ D. infinity

Question ID : 75322913889

Status : Answered

Chosen Option : C

**Q.65** On which of the following motor poles is a copper ring placed?

- Ans ☒ A. Resistance start single phase induction motor  
☒ B. Capacitor start single phase induction motor  
☒ C. Shaded pole motor  
☒ D. Repulsion motor

Question ID : 75322913846

Status : **Answered**

Chosen Option : C

**Q.66** The term 'Bell Curve' is related to which of the following distributions?

- Ans ☒ A. Uniform distribution  
☒ B. Exponential distribution  
☒ C. Normal distribution  
☒ D. Binomial distribution

Question ID : 75322913770

Status : **Not Answered**

Chosen Option : --

**Q.67** MT1, MT2 and GATE are the terminals of which of the following power electronics devices?

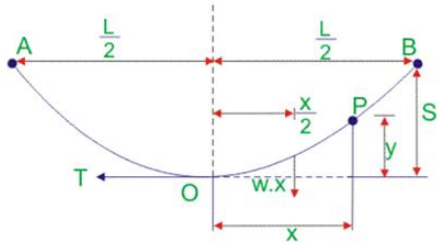
- Ans ☒ A. DIAC  
☒ B. GTO  
☒ C. SCR  
☒ D. TRIAC

Question ID : 75322913797

Status : **Answered**

Chosen Option : D

Q.68



In the given figure, if AOB is the conductor and A and B are points of supports, then which of the following expressions is used to calculate sag? (Assume all other quantities with usual notations)

Ans

☒ A.  $\frac{wl^2}{4T}$

☒ B.  $\frac{wl^2}{2T}$

☒ C.  $\frac{wl^2}{8T}$

☒ D.  $\frac{wl^2}{T}$

Question ID : 75322913907

Status : Answered

Chosen Option : C

Q.69



Identify the type of battery structure shown in the figure.

Ans

- ☒ A. Cylindrical cell
- ☒ B. Prismatic cell
- ☒ C. Button cell
- ☒ D. Pouch cell

Question ID : 75322913878

Status : Not Answered

Chosen Option : --

Q.70 Which of the following is the cheapest among the others?

Ans

- ☒ A. Aluminium
- ☒ B. Copper
- ☒ C. Silver
- ☒ D. Gold

Question ID : 75322913834

Status : Answered

Chosen Option : A

Q.71 If  $\int f(x)dx = -\cos x + c$  ; then what is f(x) here?

- Ans
- ☒ A.  $\cos x$
  - ☒ B.  $\cot x$
  - ☒ C.  $\sin x$
  - ☒ D.  $\tan x$

Question ID : 75322913903

Status : Answered

Chosen Option : C

Q.72 Operation and maintenance of which of the following substations is cumbersome?

- Ans
- ☒ A. Outdoor substation
  - ☒ B. Plinth mounted substation
  - ☒ C. Pole mounted substation
  - ☒ D. Indoor substation

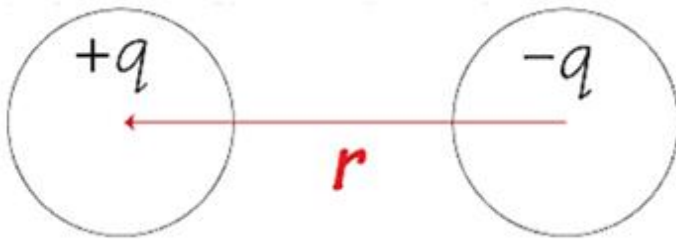
Question ID : 75322913847

Status : Answered

Chosen Option : D



Q.73 Calculate dipole moment for the arrangement shown in the figure.



Ans

- ☒ A.  $\frac{qr}{2}$
- ☒ B.  $-qr$
- ☒ C.  $\frac{-qr}{2}$
- ☒ D.  $qr$

Question ID : 75322913867

Status : Answered

Chosen Option : D

Q.74 In industrial management, MBO stands for which of the following?

- Ans
- ☒ A. Managing By Objectives
  - ☒ B. Management By Objectives
  - ☒ C. Managing By Offices
  - ☒ D. Management By Offices

Question ID : 75322913843

Status : Answered

Chosen Option : A

**Q.75** What is 'work specialisation' in an organisation also called?

- Ans
- ☒ A. Division of company
  - ☒ B. Division of profit
  - ☒ C. Division of management
  - ☒ D. Division of labour

Question ID : 75322913810

Status : Answered

Chosen Option : D

**Q.76** With the usual notations in the equation  $Eg = \frac{\phi Z N}{60} \times \frac{P}{A}$ , find the ratio of  $\frac{P}{A}$ , if the DC machine is LAP WOUND.

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

Question ID : 75322913875

Status : Answered

Chosen Option : B

**Q.77** For which of the following power plants is the ratio  $\frac{\text{operating cost}}{\text{initial cost}}$  the least?

- Ans
- ☒ A. Gas power plant
  - ☒ B. Nuclear power plant
  - ☒ C. Hydro-electric power plant
  - ☒ D. Thermal power plant

Question ID : 75322913884

Status : Answered

Chosen Option : C

Q.78 The full form of circuit simulator PSpice is given by which of the following?

- Ans ☒ A. Personal Simulation Program with Integrated Circuit Emphasis
- ☐ B. Personal Simultaneous Program with Integrated Circuit Emphasis
- ☐ C. Personal Simulation Program with Integrated Circuit Enhancement
- ☐ D. Powerful Simulation Program with Integrated Circuit Emphasis

Question ID : 75322913832

Status : Answered

Chosen Option : A

Q.79 The number of conduction mode(s) of operation of SCR is:

- Ans ☐ A. two
- ☒ B. three
- ☐ C. four
- ☐ D. one

Question ID : 75322913796

Status : Answered

Chosen Option : A

Q.80 If  $f(x) = e^{kx}$ , then find the indefinite integral of  $f(x)$ .

- Ans ☐ A.  $e^x + c$
- ☐ B.  $-e^{-x} + c$
- ☐ C.  $\frac{1}{k} \sin kx + c$
- ☒ D.  $\frac{1}{k} e^x + c$

Question ID : 75322913856

Status : Answered

Chosen Option : D

Q.81 In earthing, which of the following is referred to as waterman pipe?

- Ans
- ☒ A. Copper pipe
  - ☒ B. PVC pipe
  - ☒ C. GI pipe
  - ☒ D. Aluminium pipe

Question ID : 75322913821

Status : Answered

Chosen Option : C

Q.82 Cleaning of transformer and oil leakage at joints is done on a \_\_\_\_\_ basis.

- Ans
- ☒ A. quarterly
  - ☒ B. yearly
  - ☒ C. daily
  - ☒ D. weekly

Question ID : 75322913822

Status : Answered

Chosen Option : C

Q.83 When a coin is tossed,  $\frac{\text{probability of getting a head}}{\text{probability of getting a tail}} = ?$

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

Question ID : 75322913860

Status : Answered

Chosen Option : A

**Q.84** In MATLAB, on the command window, command prompt is indicated by which of the following symbols?

**Ans**  **A.** >>

 **B.** <

 **C.** >

 **D.** <<

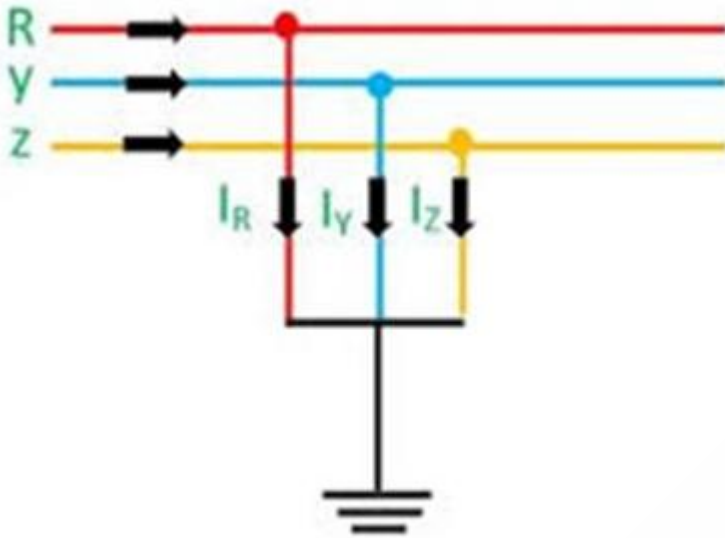
Question ID : **75322913897**

Status : **Not Answered**

Chosen Option : --



Q.85



The given figure represents which of the following faults?

Ans

- ✓ A. Symmetrical fault
- ✗ B. Line to line fault
- ✗ C. Line to ground fault
- ✗ D. Double line to ground fault

Question ID : 75322913908

Status : Answered

Chosen Option : A

Q.86 Adding silicon 0.5 to 4% by weight to iron will have which of the following implications?

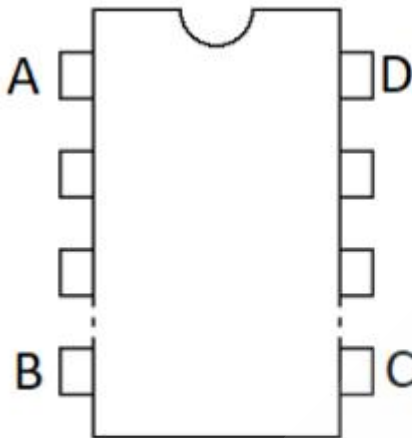
- Ans
- ☒ A. Saturation magnetization increases
  - ☒ B. Eddy current losses increase
  - ☒ C. Hysteresis losses increase
  - ☒ D. Electrical resistivity of iron increases

Question ID : 75322913779

Status : Answered

Chosen Option : D

Q.87



In the given image of IC, identify the pin number 1?

- Ans
- ☒ A. D
  - ☒ B. B
  - ☒ C. C
  - ☒ D. A

Question ID : 75322913901

Status : Answered

Chosen Option : D

**Q.88** If  $\mathbf{a}$  and  $\mathbf{b}$  are two unit vectors, then the scalar product of  $\mathbf{a}$  and  $\mathbf{b}$  = ?

- Ans
- ☐ A. Tan (angle between  $\mathbf{a}$  and  $\mathbf{b}$ )
  - ☐ B. Sec (angle between  $\mathbf{a}$  and  $\mathbf{b}$ )
  - ☐ C. Sin (angle between  $\mathbf{a}$  and  $\mathbf{b}$ )
  - ☒ D. Cos (angle between  $\mathbf{a}$  and  $\mathbf{b}$ )

Question ID : 75322913767

Status : **Answered**

Chosen Option : D

**Q.89** Which of the following three-phase transformer connections is called a T-T connection?

- Ans
- ☐ A. Star-delta connection
  - ☐ B. Star-star connection
  - ☒ C. Scott connection
  - ☐ D. Open delta connection

Question ID : 75322913786

Status : **Answered**

Chosen Option : B

**Q.90** Which of the following common parameters is considered for drawing both 'V' and 'inverted-V' curves for a three-phase synchronous motor?

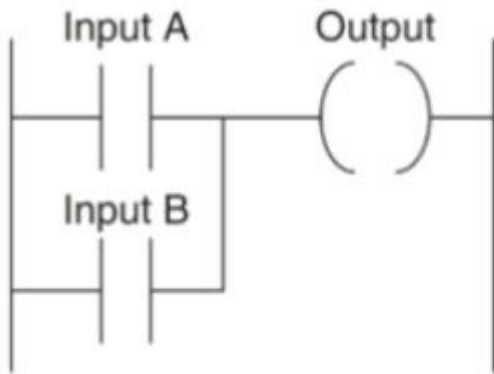
- Ans
- ☐ A. Armature current
  - ☐ B. Power factor
  - ☒ C. Field current
  - ☐ D. Supply voltage

Question ID : 75322913816

Status : **Answered**

Chosen Option : C

Q.91



The given ladder diagram represents which of the following?

Ans

- ☒ A. PLC NAND Logic
- ☒ B. PLC AND Logic
- ☒ C. PLC NOT Logic
- ☒ D. PLC OR Logic

Question ID : 75322913902

Status : Answered

Chosen Option : D

Q.92 Considering adding impurities to semiconductors, what is the full form of 'ppm'?

Ans

- ☒ A. Parts per Million
- ☒ B. Parts per Mass
- ☒ C. Parts per Milligram
- ☒ D. Parts per Microgram

Question ID : 75322913780

Status : Answered


Chosen Option : A

**Q.93** From the following insulators identify the dielectric material.

**Ans**  **A. Wood**

 **B. Ceramic**

 **C. Transformer oil**

 **D. Rubber**

Question ID : **75322913835**

Status : **Answered**

Chosen Option : **C**



Q.94 Identify the type of insulator shown in the figure.



- Ans
- ☒ A. Shackle insulator
  - ☒ B. Disc insulator
  - ☒ C. Guy insulator
  - ☒ D. Pin insulator

Question ID : 75322913893

Status : Answered

Chosen Option : C

**Q.95 Which of the following CANNOT be used for protection against lightning?**

- Ans
- ☒ A. Lightning arrester
  - ☒ B. Earthing screen
  - ☒ C. Overhead earth wire
  - ☒ D. Circuit breaker

Question ID : **75322913815**

Status : **Answered**

Chosen Option : **D**

**Q.96 In plate earthing, which of the following is the only difference, if we use GI plate instead of copper plate?**

- Ans
- ☒ A. Thickness of the plate
  - ☒ B. Depth at which the plate is buried
  - ☒ C. Width of the plate
  - ☒ D. Length of the plate

Question ID : **75322913802**

Status : **Answered**

Chosen Option : **A**

**Q.97 For a given DC machine, which of the following parts do(es) NOT rotate?**

- Ans
- ☒ A. Shaft
  - ☒ B. Brushes
  - ☒ C. Armature core
  - ☒ D. Commutator

Question ID : **75322913783**

Status : **Answered**

Chosen Option : **B**

Q.98

For a thyristor, the ratio  $\frac{\text{latching current}}{\text{holding current}}$  is:

Ans

- ☐ A. less than 1
- ☐ B. equal to 1
- ☐ C. equal to 0
- ☒ D. greater than 1

Question ID : 75322913880

Status : Answered

Chosen Option : D



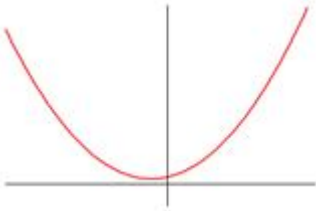
**Q.99** Which of the following graphs explains the relation between power loss due to corona and air density factor?

**Ans**

☒ A.



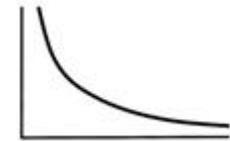
☒ B.



☒ C.



☒ D.



Question ID : 75322913886

Status : Answered

Chosen Option : D

**Q.100 Which of the following accounts for the 99% of the gases in dry air?**

- Ans ☒ A. Hydrogen and carbon monoxide
- ☒ B. Nitrogen and oxygen
- ☒ C. Oxygen and hydrogen
- ☒ D. Nitrogen and hydrogen

Question ID : **75322913795**

Status : **Answered**

Chosen Option : **D**

**Q.101 The protective device that employs a bimetallic strip or element is:**

- Ans ☒ A. relay
- ☒ B. fuse
- ☒ C. MCB
- ☒ D. lightning arrestor

Question ID : **75322913827**

Status : **Answered**

Chosen Option : **C**

**Q.102 Lead sheathed wiring comes under the category of which of the following systems of wiring?**

- Ans ☒ A. Cleat wiring
- ☒ B. Casing and capping wiring
- ☒ C. Batten wiring
- ☒ D. Conduit wiring

Question ID : **75322913799**

Status : **Answered**

Chosen Option : **C**

Q.103



From the given arrangement, find Q.

Ans

☒ A.  $A + B$

☒ B.  $A + \bar{B}$

☒ C.  $\bar{A} + \bar{B}$

☒ D.  $\bar{A} + B$

Question ID : 75322913869

Status : Answered

Chosen Option : C

Q.104 If the counter has 3 flip-flops, then the maximum binary number that it counts is equal to:

Ans

☒ A. 101

☒ B. 011

☒ C. 111

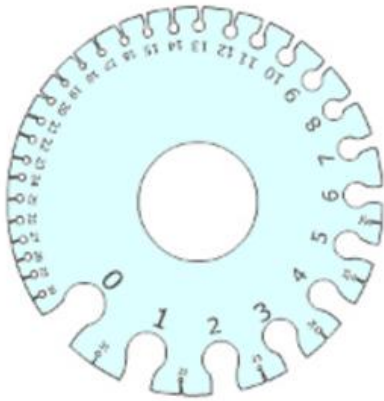
☒ D. 110

Question ID : 75322913781

Status : Answered

Chosen Option : C

Q.105



Identify the device / part of machine / measuring instrument shown in the given figure.

- Ans
- ☒ A. Rotor slots of a DC machine
  - ☒ B. Rotor slots of a squirrel cage motor
  - ☒ C. Aluminium disc used induction type energy meter
  - ☒ D. SWG

Question ID : 75322913906

Status : Answered

Chosen Option : D

Q.106 What is TOD, in electric tariff?

- Ans
- ☒ A. Time Of Day
  - ☒ B. Tenure Of Day
  - ☒ C. Time Of Delay
  - ☒ D. Tenure Of Delay

Question ID : 75322913842

Status : Answered

Chosen Option : C

Q.107



Identify the type of switch shown in the given image.

Ans

- ✓ A. Double pole iron clad switch
- ✗ B. Triple pole iron clad switch
- ✗ C. Triple pole single throw switch
- ✗ D. Double pole double throw switch

Question ID : 75322913912

Status : Answered

Chosen Option : A

**Q.108 The number of conductors in bipolar and homo-polar HVDC links, respectively, are:**

- Ans
- ☒ A. 1, 2
  - ☒ B. 2, 1
  - ☒ C. 2, 2
  - ☒ D. 3, 3

Question ID : **75322913805**

Status : **Answered**

Chosen Option : **C**

**Q.109 Which of the following describes the relation between susceptance of magnetic material and temperature?**

- Ans
- ☒ A. Curie's law
  - ☒ B. Coulomb's law
  - ☒ C. Kelvin's law
  - ☒ D. Ampere's law

Question ID : **75322913778**

Status : **Answered**

Chosen Option : **A**

**Q.110 Firewood comes under which of the following types of energy?**

- Ans
- ☒ A. Primary and non-commercial
  - ☒ B. Secondary and commercial
  - ☒ C. Secondary and non-commercial
  - ☒ D. Primary and commercial

Question ID : **75322913804**

Status : **Answered**

Chosen Option : **B**

Q.111 पर्यावरण अध्ययन में, 'स्थलमंडल' शब्द निम्न में से किससे संबंधित है?

- Ans
- ☒ A. जंतु
  - ☒ B. जल
  - ☒ C. पृथ्वी की सबसे ऊपरी सतह
  - ☒ D. वायु

Question ID : 75322913793

Status : Answered

Chosen Option : C

Q.112 If the binary number 1010 is added to 1110, then the resulting binary number contains how many number of zeroes(0) in it?

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

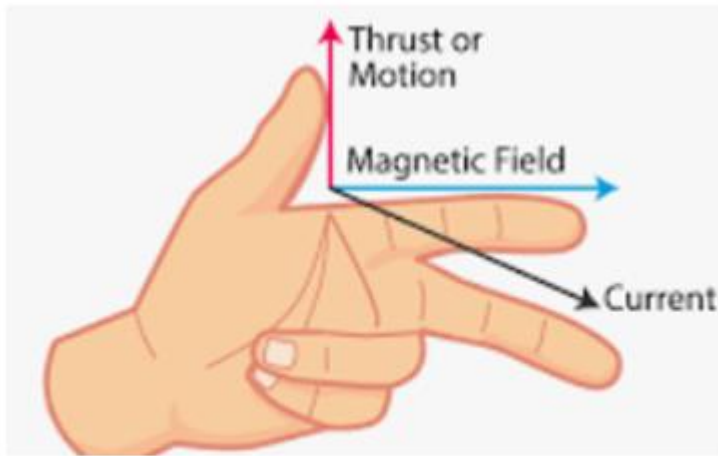
Question ID : 75322913838

Status : Answered

Chosen Option : A



Q.113



The figure represents which of the following laws?

Ans

- ☒ A. Fleming's right-hand rule
- ☒ B. Fleming's left-hand rule
- ☒ C. Right hand curl rule
- ☒ D. Left hand curl rule

Question ID : 75322913915

Status : Answered

Chosen Option : B

Q.114 If the indefinite integral of  $\cos 6t = x$ , then how many number of times do we write 6 in  $x$ ?

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

Question ID : 75322913768

Status : Not Answered

Chosen Option : --

Q.115 The induction heat produced in a charge is given by  $\frac{V^X}{R}$ , where V is the voltage induced in the charge and R is the charge resistance. What is the value of 'X'?

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

Question ID : 75322913894

Status : Answered

Chosen Option : D

Q.116  $1\text{kWh} = 860 \text{ kCal} = \underline{\hspace{2cm}} \text{ kJ (kilo Joules)}.$

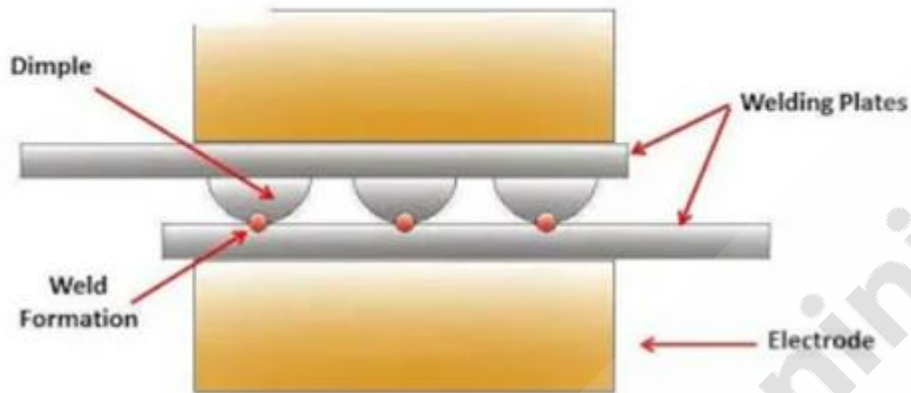
- Ans ☒ A. 36  
☒ B. 360  
☒ C. 3.6  
☒ D. 3600

Question ID : 75322913883

Status : Answered

Chosen Option : D

Q.117 Identify the type of welding employed in the given figure.



- Ans
- ☒ A. Flash butt welding
  - ☒ B. Spot welding
  - ☒ C. Seam welding
  - ☒ D. Projection welding

Question ID : 75322913895

Status : Answered

Chosen Option : D

Q.118

If  $T = \theta^5$ , then calculate  $\frac{dT}{dx}$ .

Ans

☒ A.  $5\theta^4$

☒ B. 1

☒ C. 0

☒ D.  $4\theta^3$

Question ID : 75322913857

Status : Answered

Chosen Option : A

Q.119 Which of the following is NOT a feature of 8051?

Ans

☒ A. It has 1 serial port.

☒ B. It has 4 k bytes of ROM.

☒ C. It has 4 timers.

☒ D. It has 128 bytes of RAM.

Question ID : 75322913850

Status : Answered

Chosen Option : C

Q.120

If the impedances of primary and secondary transformers are  $Z_1$  and  $Z_2$ , respectively, then the ratio  $\frac{Z_1}{Z_2} = ?$

Ans

☒ A. (Turns ratio)<sup>2</sup>

☒ B. Turns ratio

☒ C. 1 + Turns ratio

☒ D. 1 – Turns ratio

Question ID : 75322913876

Status : Answered

Chosen Option : A

Q.121

For domestic wiring,  $\frac{\text{rating of 15A socket}}{\text{rating of 5A socket}} = ?$

- Ans
- ☒ A. 100
  - ☒ B. 10
  - ☒ C. 0.5
  - ☒ D. 1

Question ID : 75322913881

Status : Answered

Chosen Option : B

Q.122 In case of internal wiring, which of the following is placed between incoming service cable and energy meter?

- Ans
- ☒ A. Main switch
  - ☒ B. Cut-out
  - ☒ C. Distribution board
  - ☒ D. Fuse

Question ID : 75322913800

Status : Answered

Chosen Option : B

Q.123 Two voltmeters are connected in series across 240 V supply. The resistance of voltmeter A and B are 5 k  $\Omega$  and 10 k  $\Omega$ ,

respectively.  $\frac{\text{Reading of meter B}}{\text{Reading of meter A}} = ?$

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

Question ID : 75322913861

Status : Answered

Chosen Option : B

**Q.124 Which of the following is also called an operator?**

- Ans ☒ A. Isolator  
☒ B. Actuator  
☒ C. Circuit breaker  
☒ D. Relay

Question ID : **75322913844**

Status : **Answered**

Chosen Option : **D**

**Q.125** A three-phase synchronous motor is made to operate at no-load, with field excitation. Assuming no-losses are present under this condition, what is the phase difference between supply voltage and back EMF?

- Ans ☒ A.  $180^\circ$   
☒ B.  $90^\circ$   
☒ C.  $60^\circ$   
☒ D.  $0^\circ$

Question ID : **75322913890**

Status : **Answered**

Chosen Option : **A**

**Q.126 The second nearest layer of atmosphere to the earth is called:**

- Ans ☒ A. Thermosphere  
☒ B. Troposphere  
☒ C. Mesosphere  
☒ D. Stratosphere

Question ID : **75322913840**

Status : **Answered**

Chosen Option : **D**

Q.127



To create a 3D solid in AutoCAD, as shown in the figure, which of the following commands should be used?

- Ans
- ☒ A. Loft
  - ☒ B. Box
  - ☒ C. Extrude
  - ☒ D. Revolve

Question ID : 75322913899

Status : **Answered**

Chosen Option : C

Q.128  $x = 2*3;$

$y = x*2$

When the above commands are executed in MATLAB, the MATLAB will return which of the following?

- Ans
- ☒ A.  $y = 12$
  - ☒ B.  $x = 2*3$   
 $y = 12$
  - ☒ C.  $y = 2*3*2$   
 $x = 6$
  - ☒ D.  $y = 12$

Question ID : 75322913898

Status : **Answered**

Chosen Option : A

**Q.129 Which of the following motors employs a copper strip?**

- Ans
- ☒ A. Capacitor-start motor
  - ☒ B. Capacitor start capacitor run motor
  - ☒ C. Universal motor
  - ☒ D. Shaded pole induction motor

Question ID : 75322913820

Status : Answered

Chosen Option : D

**Q.130 Usually underground cables are NOT tested for which of the following?**

- Ans
- ☒ A. Short circuiting
  - ☒ B. Mechanical damage
  - ☒ C. Earth fault
  - ☒ D. Discontinuity

Question ID : 75322913806

Status : Answered

Chosen Option : A

**Q.131 A synchronous generator, with 'P' number of poles, can produce \_\_\_\_\_ number of cycles per revolution of rotor.**

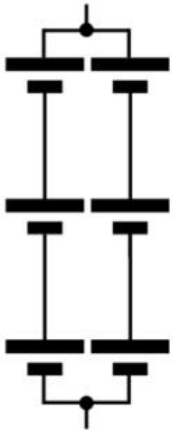
- Ans
- ☒ A. 0.5P
  - ☒ B. 1.5P
  - ☒ C. P
  - ☒ D. 2P

Question ID : 75322913819





Status : Answered

Chosen Option : A

**Q.132**



In the given figure, if each cell voltage is 2 V, then total voltage of the combination is equal to:

Ans  A. 18 V  
 B. 6 V  
 C. 24 V  
 D. 12 V

Question ID : 75322913905

Status : **Answered**

Chosen Option : **B**

**Q.133** If  $n$  = number of times voltage rating is increased, then for a distributor design, the conductor size reduces by \_\_\_\_\_ of the original.

Ans

☒ A.  $\frac{1}{n^4}$

☒ B.  $\frac{1}{n^3}$

☒ C.  $\frac{1}{n^2}$

☒ D.  $\frac{1}{n}$

Question ID : 75322913885

Status : **Answered**

Chosen Option : **C**

**Q.134** Which of the following is the objective of performing dielectric loss test on a transformer?

Ans

☒ A. To check cleanliness of winding

☒ B. To identify insulation deterioration

☒ C. To identify short-circuited turns

☒ D. To measure organic and inorganic acids

Question ID : 75322913823

Status : **Answered**

Chosen Option : **B**

**Q.135 The total number of capacitors in capacitor start, capacitor run single-phase induction motor is:**

- Ans**
- ☒ A. five
  - ☒ B. four
  - ☒ C. two
  - ☒ D. three

Question ID : 75322913817

Status : **Answered**

Chosen Option : **C**

**Q.136 In a DC machine, if  $V$  = terminal voltage and  $E$  = induced EMF in the armature, then which of the following is true for the DC machine to work like a DC motor?**

- Ans**
- ☒ A.  $V < E$
  - ☒ B.  $V > E$
  - ☒ C.  $V + E = 0$
  - ☒ D.  $V = E$

Question ID : 75322913839

Status : **Answered**

Chosen Option : **B**

**Q.137 Considering classification of instruments, which of the following is true?**

- Ans**
- ☒ A. An integrating instrument is a null instrument.
  - ☒ B. An indicating instrument is a digital instrument.
  - ☒ C. A digital instrument is a secondary instrument.
  - ☒ D. An analogue instrument is an absolute instrument.

Question ID : 75322913771

Status : **Answered**

Chosen Option : **C**

Q.138 Identify the odd one, depending on whether the given cell is rechargeable or not?

- Ans
- ☒ A. Lead acid cell
  - ☒ B. Nickel cadmium cell
  - ☒ C. Lithium cell
  - ☒ D. Lithium-ion cell

Question ID : 75322913789

Status : Answered

Chosen Option : C

Q.139 In SCADA systems which of the following gathers data from remote locations?

- Ans
- ☒ A. PAC
  - ☒ B. HMI
  - ☒ C. PLC
  - ☒ D. RTU

Question ID : 75322913852

Status : Answered

Chosen Option : D

Q.140 If an AC bridge is balanced, then the current through the detector is equal to:

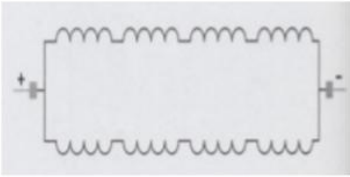
- Ans
- ☒ A. 0.5 A
  - ☒ B. infinity
  - ☒ C. 1 A
  - ☒ D. 0 A

Question ID : 75322913773

Status : Answered

Chosen Option : D

**Q.141** A DC machine has 4 poles and the entire armature winding is connected in the given fashion. Identify the type of winding employed.



- Ans
- ☒ A. Simplex lap winding
  - ☒ B. Wave winding
  - ☒ C. Triplex lap winding
  - ☒ D. Duplex lap winding

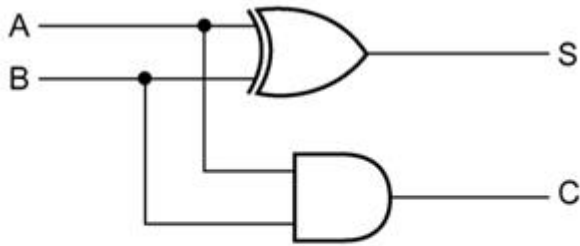
Question ID : 75322913873

Status : **Answered**

Chosen Option : **B**



Q.142



For the circuit shown, find the expression for 's'.

Ans

☒ A.  $AB + A$

☒ B.  $\bar{B}B + A\bar{B}$

☒ C.  $\bar{A}B + B\bar{B}$

☒ D.  $\bar{A}B + A\bar{B}$

Question ID : 75322913871

Status : Answered

Chosen Option : D

Q.143 For which of the following boundaries are NOT marked by legislation?

Ans

☒ A. Biosphere reserve

☒ B. Municipal park

☒ C. Sanctuary

☒ D. National park

Question ID : 75322913794

Status : Answered

Chosen Option : D

Q.144



Identify the logic gate shown in the figure.

Ans

- ☒ A. XOR
- ☒ B. NAND
- ☒ C. NOR
- ☒ D. XNOR

Question ID : 75322913868

Status : Answered

Chosen Option : C

Q.145 What is the application of digital micro ohm meter in substation operation and maintenance?

Ans

- ☒ A. To measure earth resistance
- ☒ B. To measure circuit breaker or isolator contact resistance
- ☒ C. To measure insulation resistance
- ☒ D. To measure transformer winding resistance

Question ID : 75322913824

Status : Answered

Chosen Option : A

Q.146 How many major styles of leaderships are there in an organisation?

- Ans ☒ A. Five  
☐ B. Three  
☐ C. Two  
☐ D. Four

Question ID : 75322913812

Status : Answered

Chosen Option : B

Q.147 The 12th digit in standard hexadecimal system is equal to:

- Ans ☐ A. D  
☒ B. B  
☐ C. A  
☐ D. C

Question ID : 75322913837

Status : Answered

Chosen Option : B

Q.148 Considering a, b and c as vectors, the property  $\vec{a} + (\vec{b} + \vec{c}) = (\vec{a} + \vec{b}) + \vec{c}$  is called:

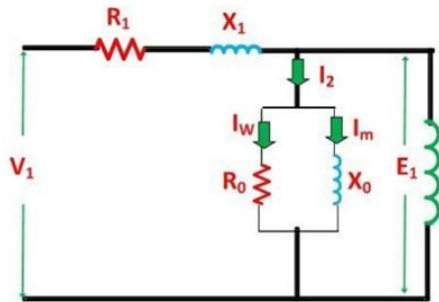
- Ans ☐ A. additive inverse  
☐ B. additive identity  
☐ C. commutativity  
☒ D. associativity

Question ID : 75322913853

Status : Answered

Chosen Option : C

Q.149



If the given figure represents primary side equivalent circuit of a transformer, then which of the following relations is true?

- Ans
- ☒ A.  $X_1 = X_0$
  - ☒ B.  $X_1 \gg X_0$
  - ☒ C.  $X_1 > X_0$
  - ☒ D.  $X_1 < X_0$

Question ID : 75322913877

Status : Answered

Chosen Option : D

Q.150 For any given electrical machine, which of the following equations is true?

- Ans
- ☒ A. Output = Input
  - ☒ B. Input = Losses – Output
  - ☒ C. Output = Input – Losses
  - ☒ D. Input = Output – Losses

Question ID : 75322913782

Status : Answered

Chosen Option : D

Section : General Knowledge and Awareness

Q.1 डल झील पर देश का पहला तैरता हुआ ATM निम्न में से किस बैंक द्वारा लगाया गया था?

- Ans ☒ A. PNB  
☒ B. यूनियन बैंक ऑफ इंडिया  
☒ C. स्टेट बैंक ऑफ इंडिया  
☒ D. IDFC बैंक

Question ID : 75322913925

Status : Not Answered

Chosen Option : --

Q.2 The Organisation of the Commissioner for Linguistic Minorities is a Constitutional body as provided under Article \_\_\_\_\_ of the Constitution of India.

- Ans ☒ A. 351 A  
☒ B. 370 A  
☒ C. 371 B  
☒ D. 350 B

Question ID : 75322913917

Status : Not Answered

Chosen Option : --

Q.3 To which dynasty did Mahendravarman I belong who was defeated by Pulakesin II?

- Ans ☒ A. Chola  
☒ B. Hoysala  
☒ C. Pallava  
☒ D. Rashtrakuta

Question ID : 75322913921

Status : Answered

Chosen Option : A

**Q.4** In which year was the Veda Samaj which was inspired by the Brahmo Samaj established?

- Ans**
- ☒ A. 1865
  - ☒ B. 1870
  - ☒ C. 1868
  - ☒ D. 1864

Question ID : 75322913920

Status : **Not Answered**

Chosen Option : --

**Q.5** Which of the following Indian states has a population density more than the population density of India according to the census 2011?

- Ans**
- ☒ A. Rajasthan
  - ☒ B. Gujarat
  - ☒ C. Tamil Nadu
  - ☒ D. Karnataka

Question ID : 75322913930

Status : **Answered**

Chosen Option : C

**Q.6** Which of the following is NOT correctly matched?

- Ans**
- ☒ A. Gagan Narang - Football
  - ☒ B. Ashwini Ponnappa - Badminton
  - ☒ C. Somdev Devvarman - Tennis
  - ☒ D. Ravindra Jadeja - Cricket

Question ID : 75322913918

Status : **Not Answered**

Chosen Option : --

**Q.7** How much rainfall is required for the Tropical Evergreen Forests in India?

**Ans** ✓ A. More than 200 cm

✗ B. 50 to 80 cm

✗ C. 100 to 150 cm

✗ D. Below 50 cm

Question ID : 75322913928

Status : **Answered**

Chosen Option : A

**Q.8** Which of the following passes is located in the Karakoram mountains?

**Ans** ✗ A. Niti Pass

✗ B. Lekhapani Pass

✗ C. Diphu Pass

✓ D. Qara Tagh Pass

Question ID : 75322913929

Status : **Answered**

Chosen Option : D

**Q.9** निम्नलिखित में से कौन सा हार्मोन एक एंटीऑक्सिडेंट है जो आपके शरीर को मुक्त मूलकों से होने वाले नुकसानों जैसे कि सिगरेट के धुएं या विकिरण से बचाने में सहायक होता है?

**Ans** ✗ A. विटामिन C

✗ B. विटामिन K

✗ C. विटामिन A

✓ D. विटामिन E

Question ID : 75322913932

Status : **Not Answered**

Chosen Option : --

**Q.10 Which of the following statements is correct about the writ Quo Warranto?**

- Ans ☒ A. Under this writ, the court orders a lower court or another authority to transfer a matter pending before it to the higher authority.
- ☒ B. This writ is issued when the court finds that a person is holding office but is not entitled to hold that office.
- ☒ C. This writ orders to set free an arrested person if the manner or grounds of arrest are not lawful or satisfactory.
- ☒ D. This writ is issued when the court finds that a particular office holder is not doing a legal duty.

Question ID : 75322913934  
Status : Answered  
Chosen Option : C

**Q.11 Who appoints the chairperson of the Finance commission according to the Article 280 of the Constitution of India?**

- Ans ☒ A. Prime minister
- ☒ B. Chairman of Lok Sabha
- ☒ C. Finance minister
- ☒ D. President

Question ID : 75322913936  
Status : Answered  
Chosen Option : D

**Q.12 The formation of water from  $\text{H}_2(\text{g})$  and  $\text{O}_2(\text{g})$  is an example of:**

- Ans ☒ A. Decomposition reaction
- ☒ B. Combination reaction
- ☒ C. Displacement reaction
- ☒ D. Double displacement reaction

Question ID : 75322913933  
Status : Answered  
Chosen Option : B

**Q.13 The National Housing Bank (NHB) of India was set up by an Act of Parliament in:**

- Ans ☒ A. 1985  
☒ B. 1987  
☒ C. 1984  
☒ D. 1983

Question ID : **75322913926**

Status : **Not Answered**

Chosen Option : --

**Q.14 Which animal is related to Adoor Gajamela festival that is celebrated in Parthasarathy Temple of Kerala?**

- Ans ☒ A. Elephant  
☒ B. Cow  
☒ C. Buffalo  
☒ D. Horse

Question ID : **75322913923**

Status : **Answered**

Chosen Option : **A**

**Q.15 According to the Human Development Index Report 2020, what was India's HDI value for 2019?**

- Ans ☒ A. 0.756  
☒ B. 0.567  
☒ C. 0.645  
☒ D. 0.587

Question ID : **75322913927**

Status : **Not Answered**


Chosen Option : --


**Q.16 Match List-1 with List-2 and select the correct answer from the codes given below the lists:**


**List-1 (Place) List-2 (Art Work)**

- a. Sanchi 1. Dashavatara Temple  
b. Karle 2. The Stupa  
c. Deogarh 3. Kandariya Temple  
d. Khajuraho 4. Chaitya Hall

**Ans**  A. a-1, b-2, c-3, d-4

 B. a-2, b-4, c-1, d-3

 C. a-4, b-2, c-3, d-1

 D. a-3, b-2, c-1, d-4

Question ID : **75322913922**

Status : **Answered**

Chosen Option : **B**

**Q.17 What is the percentage of voters who participated in the 2019 election of the 17th Lok Sabha?**

**Ans**  A. 67.11%

 B. 58.19%

 C. 57.98%

 D. 66.40%

Question ID : **75322913935**

Status : **Not Answered**

Chosen Option : **--**

**Q.18** In which of the following states is the Kambala festival celebrated?

- Ans
- ☒ A. Kerala
  - ☒ B. Tamil Nadu
  - ☒ C. Karnataka
  - ☒ D. Andhra Pradesh

Question ID : 75322913924

Status : **Not Answered**

Chosen Option : --

**Q.19** The sequences of enzyme-catalysed reactions by which relatively large molecules in living cells are broken down, or degraded are called:

- Ans
- ☒ A. catabolism
  - ☒ B. leaching
  - ☒ C. sere
  - ☒ D. mineralisation

Question ID : 75322913931

Status : **Not Answered**

Chosen Option : --

**Q.20** When did Mahatma Gandhi begin walking from his ashram at Sabarmati towards the ocean for a salt march?

- Ans
- ☒ A. 12 February 1930
  - ☒ B. 18 January 1930
  - ☒ C. 18 April 1930
  - ☒ D. 12 March 1930

Question ID : 75322913919

Status : **Answered**

Chosen Option : D

Section : Reasoning

- Q.1 'A # B' means 'A is the sister of B'  
'A + B' means 'A is the brother of B'  
'A & B' means 'A is the mother of B'  
'A = B' means 'A is the daughter of B'

If  $P + T \& K \# U \& G = N$ , then which of the following statements is correct?

- Ans ☒ A. P is the father of U.  
☒ B. K is the mother of G.  
☒ C. N is the husband of U.  
☒ D. T is the mother of N.

Question ID : 75322913949

Status : Answered

Chosen Option : C

- Q.2 Select the option that is related to the third word in the same way as the second word is related to the first word.

Kelvin : Temperature :: Ampere : ?

- Ans ☒ A. Electric Current  
☒ B. Luminance  
☒ C. Energy  
☒ D. Resistance

Question ID : 75322913950

Status : Answered

Chosen Option : A

Q.3 Select the option figure in which the given figure is embedded (rotation is NOT allowed).



Ans

✓ A.



✗ B.



✗ C.



✗ D.



Question ID : 75322913956

Status : Answered

Chosen Option : A

Q.4 Select the correct combination of mathematical signs that can sequentially replace \* signs from left to right to balance the following equation.

$$72 * 81 * 27 * 18 * 9 * 231$$

- Ans ☒ A. +, -, ÷, ×, =  
☒ B. +, -, ×, ÷, =  
☒ C. -, ÷, +, ×, =  
☒ D. +, ×, ÷, -, =

Question ID : 75322913953

Status : Answered

Chosen Option : C

Q.5 Classes of six subjects, History, Civics, Biology, Psychology, Geology and Statistics, are held on six different days of the week, except Sunday. Geology is on Monday. Biology is just a day before Civics. History is just after Psychology. Statistics is just before Psychology. Civics is on Saturday. Which subject's classes are held on Thursday?

- Ans ☒ A. Psychology  
☒ B. History  
☒ C. Statistics  
☒ D. Biology

Question ID : 75322913939

Status : Answered

Chosen Option : B

Q.6 A, B, C, D, E and F are sitting in a straight line. All are facing the west. B is at the left end. More than three persons are sitting between B and C. Only two persons are towards the right of A. F is between B and D. Who is sitting to the immediate right of D?

- Ans
- ☒ A. F
  - ☒ B. C
  - ☒ C. A
  - ☒ D. E

Question ID : 75322913937

Status : Answered

Chosen Option : C

Q.7 If 'Musician' is called 'Architect', 'Architect' is called 'Teacher', 'Teacher' is called 'Engineer', 'Engineer' is called 'Chef', and 'Chef' is called 'Doctor', then who cooks food?

- Ans
- ☒ A. Engineer
  - ☒ B. Doctor
  - ☒ C. Teacher
  - ☒ D. Chef

Question ID : 75322913945

Status : Answered

Chosen Option : B



**Q.8** Select the option that indicates the correct arrangement of the given words in the order in which they appear in an English dictionary.

1. Leprosy
2. Leopard
3. Leverage
4. Letter
5. Lettuce

**Ans** ☒ A. 2, 1, 4, 3, 5

☒ B. 2, 1, 4, 5, 3

☒ C. 1, 2, 4, 5, 3

☒ D. 4, 1, 2, 5, 3

Question ID : 75322913943

Status : **Answered**

Chosen Option : **B**

**Q.9** Vinita's father-in-law is the father of Suyash, who is the only child of Meeta's husband. How is Vinita related to Suyash?

**Ans** ☒ A. Sister

☒ B. Niece

☒ C. Daughter

☒ D. Wife

Question ID : 75322913948

Status : **Answered**

Chosen Option : **D**

**Q.10** Select the number from among the given options that can replace the question mark (?) in the following series.

45, 61, 79, 99, 121, 145, ?

Ans ☒ A. 166

☒ B. 169

☒ C. 171

☒ D. 160

Question ID : 75322913951

Status : Answered

Chosen Option : C

**Q.11** How many odd numbers are there in the given string of elements which are immediately preceded by an 'odd number' and immediately followed by an 'even number'?

4 5 9 7 4 3 6 2 1 7 6 5 9 8 4 3 5 2 7 8 3 4 6 9 2 4 9 6 2 3 5 4 7 8

Ans ☒ A. 5

☒ B. 7

☒ C. 6

☒ D. 4

Question ID : 75322913944

Status : Answered

Chosen Option : A

**Q.12** In a code language, ORDENT is written as 3739, and NOVICE is written as 5117. How will CREAMS be written in that language?

**Ans** ☒ A. 2633

☐ B. 2638

☐ C. 2452

☐ D. 2435

Question ID : 75322913946

Status : Answered

Chosen Option : A

**Q.13** Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

**Statements:**

Some chocolates are fruits.

Some fruits are biscuits.

Some biscuits are capsicums.

**Conclusions:**

I. Some chocolates are capsicums.

II. No chocolate is a capsicum.

III. No biscuit is a chocolate.

**Ans** ☐ A. Either conclusion I or III follows

☒ B. Either conclusion I or II follows

☐ C. Only conclusion I follows

☐ D. All of conclusions I, II and III follow

Question ID : 75322913941

Status : Answered

Chosen Option : B

**Q.14** Eight friends, M, N, O, P, Q, R, S and T, are sitting in a straight line facing the north. Only 3 persons are sitting between M and N. S is to the immediate right of N. Only P is between M and Q. Q is fourth from the right end. R is to the immediate left of O. S is at one of the ends. Which two persons are sitting between P and N?

- Ans**
- ☒ A. M and T
  - ☒ B. Q and S
  - ☒ C. Q and T
  - ☒ D. Q and O

Question ID : **75322913938**

Status : **Answered**

Chosen Option : **C**

**Q.15** What approximate value should come in place of the question mark (?) in the following equation?

$$23.985 \times 2.032 \div 7.996 - 15.0042 + 12.998 + 17.988 = ?$$

- Ans**
- ☒ A. 29
  - ☒ B. 26
  - ☒ C. 18
  - ☒ D. 22

Question ID : **75322913952**

Status : **Answered**

Chosen Option : **D**



**Q.16** In the morning time, Preeti and Sanjana are sitting facing each other in a park, and the shadow of Sanjana falls to the right of Preeti. After that, if Sanjana turns 90° clockwise, then in which direction would she be facing?

- Ans
- ☒ A. North
  - ☒ B. South
  - ☒ C. West
  - ☒ D. East

Question ID : 75322913947

Status : Answered

Chosen Option : D

**Q.17** Select the correct water image of the given combination.

N t g f 5 4 \$

- Ans
- ☒ A. N f a t 5 4 \$
  - ☒ B. N f a t 2 4 \$
  - ☒ C. N f g t 2 4 \$
  - ☒ D. N t a f 2 4 \$

Question ID : 75322913955

Status : Answered

Chosen Option : B

**Q.18** In a class of 100 students, 60 students score lesser marks than Rumi, whereas 26 students score more marks than Shweta. Arpita is the topper of the classes. Rachna performs better by being just ahead of Rumi in the class. How many students score more marks than Rachna?

**Ans** ☒ A. 36

☒ B. 38

☒ C. 37

☒ D. 39

Question ID : 75322913940

Status : Answered

Chosen Option : B

**Q.19** If  $T < G < M > R > G$  and  $U > R = C > D$ , then which of the following conclusions is definitely correct?

**Ans** ☒ A.  $U = C$

☒ B.  $R = T$

☒ C.  $G < C$

☒ D.  $D < U$

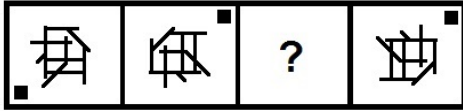
Question ID : 75322913942

Status : Answered

Chosen Option : D

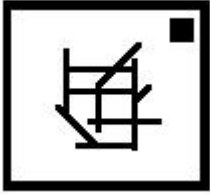


**Q.20** Select the figure from among the given options that can replace the question mark (?) in the following figure series.

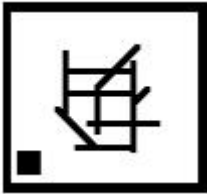


**Ans**

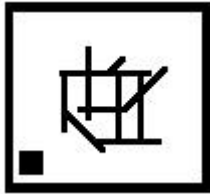
✗ A.



✓ B.



✗ C.



✗ D.



Question ID : **75322913954**

Status : **Answered**

Chosen Option : **B**

Section : **General Hindi**

Q.1 'सात घाट का पानी पीना' मुहावरे का सही अर्थ क्या है?

- Ans
- ☒ A. भरोसेमंद न होना
  - ☒ B. स्वार्थी होना
  - ☒ C. विस्तृत अनुभव होना
  - ☒ D. अडिग न रहना

Question ID : 75322913963

Status : Answered

Chosen Option : C

Q.2 निम्नलिखित में से कौन सा विकल्प 'मध्यम पुरुष' है?

- Ans
- ☒ A. यह
  - ☒ B. वह
  - ☒ C. हम
  - ☒ D. तुम

Question ID : 75322913961

Status : Answered

Chosen Option : D

Q.3 \_\_\_\_\_, अप्रधान पुरुषवाचक है।

- Ans
- ☒ A. उत्तम पुरुष और मध्यम पुरुष
  - ☒ B. उत्तम पुरुष
  - ☒ C. अन्य पुरुष
  - ☒ D. मध्यम पुरुष

Question ID : 75322913962

Status : Answered

Chosen Option : C

Q.4 'यह तेल खदान से निकलता होगा।' वाक्य में कौन सा काल है?

- Ans ☒ A. संदिग्ध वर्तमान  
☒ B. संभाव्य वर्तमान  
☒ C. सामान्य वर्तमान  
☒ D. सामान्य भविष्यत्

Question ID : 75322913957

Status : Answered

Chosen Option : A

Q.5 'सिकन्दर ने हिंदुस्तान पर चढ़ाई की थी।' वाक्य में कौन सा काल है?

- Ans ☒ A. संदिग्ध भूत  
☒ B. पूर्ण भूत  
☒ C. अपूर्ण भूत  
☒ D. सामान्य भूत

Question ID : 75322913958

Status : Answered

Chosen Option : B

Q.6 'आप भला तो जग भला।' यहाँ प्रयुक्त 'आप' किस प्रकार का सर्वनाम है?

- Ans ☒ A. निश्चयवाचक  
☒ B. अनिश्चयवाचक  
☒ C. संबंधवाचक  
☒ D. निजवाचक

Question ID : 75322913960

Status : Answered

Chosen Option : D

Q.7 'पाँचों उँगलियाँ घी में' लोकोक्ति का उपयुक्त अर्थ क्या है?

- Ans
- ✓ A. सब लाभ ही लाभ
  - ✗ B. सब आदमी एक जैसे नहीं होते
  - ✗ C. सर्वसम्मति से काम करना
  - ✗ D. सब नुकसान ही नुकसान

Question ID : 75322913964

Status : Answered

Chosen Option : A

Q.8 ऐसे क्रियाविशेषण जो बिना रूपान्तर के किसी विशेष स्थान में आते हैं, वे किस तरह के क्रियाविशेषण कहलाते हैं?

- Ans
- ✗ A. मूल
  - ✗ B. मिश्रित
  - ✗ C. यौगिक
  - ✓ D. स्थानीय

Question ID : 75322913959

Status : Not Answered

Chosen Option : --

Q.9 'हंस' का पर्यायवाची शब्द कौन सा है?

- Ans
- ✓ A. मराल
  - ✗ B. मरीचि
  - ✗ C. हिरण्य
  - ✗ D. वाजि

Question ID : 75322913965

Status : Answered

Chosen Option : A

Q.10 'व्यभिचारी' का विलोम क्या होगा?

- Ans
- ☒ A. नवाचारी
  - ☒ B. अत्याचारी
  - ☒ C. सदाचारी
  - ☒ D. दुराचारी

Question ID : 75322913966

Status : Answered

Chosen Option : C

