



Railway Recruitment Board 2018

RRB ALP/TECH 2018 CBT 2 EXAM

Notations :

- 1.Options shown in **green** color and with  icon are correct.
- 2.Options shown in **red** color and with  icon are incorrect.

Question Paper Name:	Electronics Mechanic
Duration:	150
Total Marks:	175
Display Marks:	No
Share Answer Key With Delivery Engine:	Yes
Actual Answer Key:	Yes
Calculator:	

Question Number : 1 Question Id : 2134098926 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which country did India beat to win the Under19 Cricket Asia Cup 2018?

Options :

1. ✘ Pakistan
2. ✘ Afghanistan
3. ✔ Sri Lanka
4. ✘ Bangladesh

Question Number : 2 Question Id : 2134098927 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The thanksgiving festival of Pongal is primarily celebrated in which state of India?

Options :

1. ✔ Tamilnadu
2. ✘ Rajasthan
3. ✘ Maharashtra
4. ✘ Uttar Pradesh

Question Number : 3 Question Id : 2134098928 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Who invented the World Wide Web?

Options :

1. ✘ Vint Cerf
2. ✔ Tim Berner-Lee
3. ✘ Robert E. Kahn
4. ✘ Antonio Meucci

Question Number : 4 Question Id : 2134098929 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The construction of the "Sanchi Stupa" was commissioned by which Mauryan Emperor?

Options :

1. ✓ Ashoka
2. ✗ Chandragupta Maurya
3. ✗ Bindusara
4. ✗ Kautilya

Question Number : 5 Question Id : 2134098930 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of these is not a novel written by Premchand?

Options :

1. ✗ Godaan
2. ✗ Gaban
3. ✗ Nirmala
4. ✓ Deepshikha

Question Number : 6 Question Id : 2134098931 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The idea of a Constituent Assembly was given by:

Options :

1. ✗ Dr. Rajendra Prasad
2. ✓ M.N Roy
3. ✗ Maulana Abul Kalam Azad
4. ✗ B.R. Ambedkar

Question Number : 7 Question Id : 2134098932 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following organisations prepares a Red List of Threatened Species?

Options :

1. ✓ IUCN
2. ✗ WWF
3. ✗ OIE

4. ✘ RPPO

Question Number : 8 Question Id : 2134098933 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Who was appointed as the Chief Justice of India on 03.10.2018?

Options :

1. ✔ Mr. Ranjan Gogoi

2. ✘ Mr. Kurian Joseph

3. ✘ Mr. Arjan Kumar Sikri

4. ✘ Mr. N.V. Ramana

Question Number : 9 Question Id : 2134098934 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of these is not a type of string musical instrument?

Options :

1. ✘ Violin

2. ✘ Cello

3. ✘ Bass

4. ✔ Tuba

Question Number : 10 Question Id : 2134098935 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Laho dance belongs to the state of _____ in India.

Options :

1. ✘ Orissa

2. ✘ Rajasthan

3. ✘ Andhra Pradesh

4. ✔ Meghalaya

Question Number : 11 Question Id : 2134098936 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following quantities does not have dimensions?

Options :

1. ✘ Frequency

2. ✘ Force

3. ✘ Volume

4. ✔ Relative permeability

Question Number : 12 Question Id : 2134098937 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Bio-gas is an excellent fuel as it contains up to _____ % methane.

Options :

1. ✘ 50

2. ✔ 75

3. ✘ 80

4. ✘ 85

Question Number : 13 Question Id : 2134098938 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A black surface absorbs _____ as compared to a white surface, under identical conditions.

Options :

1. ✘ lesser heat

2. ✘ same heat

3. ✔ more heat

4. ✘ negligible heat

Question Number : 14 Question Id : 2134098939 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Our electricity bills carry the energy consumption, expressed in units of _____.

Options :

1. ✘ kW

2. ✔ kWh

3. ✘ KJ

4. ✘ KVA

Question Number : 15 Question Id : 2134098940 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A ball of 200 g is thrown vertically upward with a speed of 20 m/s. The energy of the ball at the highest point of its path is (take $g = 10 \text{ m/s}^2$):

Options :

1. ✘ 20 J

2. ✔ 40 J

3. ✘ 100 J

4. ✘ 200 J

Question Number : 16 Question Id : 2134098941 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A boy weighing 50 kg runs up a staircase of 40 steps, each of 16 height cm, in 10 s. Calculate his power. (Take $g = 10 \text{ m/s}^2$).

Options :

1. ✘ 80 W

2. ✘ 120 W

3. ✔ 320 W

4. ✘ 480 W

Question Number : 17 Question Id : 2134098942 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The work to be done to increase the speed of a 0.5 kg ball from 4 m/s to 8 m/s is:

Options :

1. ✘ 4 J

2. ✘ 8 J

3. ✔ 12 J

4. ✘ 16 J

Question Number : 18 Question Id : 2134098943 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A block of wood floats in water with 30% of its volume above water (density 10^3 kg/m^3) The density of wood (in kg/m^3) is:

Options :

1. ✘ 0.3×10^2
2. ✘ 0.5×10^2
3. ✘ 0.6×10^3
4. ✔ 0.7×10^3

Question Number : 19 Question Id : 2134098944 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Increasing the pressure on an object _____ the volume of the object and therefore _____ its density.

Options :

1. ✔ decreases, increases
2. ✘ increases, decreases
3. ✘ increases, increases
4. ✘ decreases, decreases

Question Number : 20 Question Id : 2134098945 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The weight of an object on the Earth is 150 N. Its weight on moon will be:

Options :

1. ✘ 150 N
2. ✘ 75 N
3. ✘ 50 N
4. ✔ 25 N

Question Number : 21 Question Id : 2134098946 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which type of pencil has the hardest graphite lead?

Options :

1. ✔ 9H
2. ✘ 2H
3. ✘ HB

4. ✘ 3H

Question Number : 22 Question Id : 2134098947 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A 'compass' is used to draw:

Options :

1. ✔ Circle
2. ✘ Triangle
3. ✘ Straight line
4. ✘ Rectangle

Question Number : 23 Question Id : 2134098948 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

"Title block" is generally made at the:

Options :

1. ✘ Centre of the drawing sheet
2. ✘ Left hand upper corner of the drawing sheet
3. ✔ Right hand bottom corner of the drawing sheet
4. ✘ Right hand upper corner of the drawing sheet

Question Number : 24 Question Id : 2134098949 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The view of an object produced on a vertical plane is referred to as:

Options :

1. ✔ Front view
2. ✘ Top view
3. ✘ Right hand side view
4. ✘ Left hand side view

Question Number : 25 Question Id : 2134098950 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In the fit-angle projection:

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. Object lies in the third quadrant
2. Object lies between observer and plane of projection
3. Object lies in the fourth quadrant
4. The plane of the projection lies between the object and the observer

Question Number : 26 Question Id : 2134098951 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Identify the metal having the lowest thermal conductivity.

Options :

1. ✘ Silver
2. ✘ Copper
3. ✘ Aluminium
4. ✔ Mercury

Question Number : 27 Question Id : 2134098952 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Identify the non-metal, having high thermal conductivity.

Options :

1. ✘ Insulating brick
2. ✘ Water
3. ✔ Ice
4. ✘ Wood

Question Number : 28 Question Id : 2134098953 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The specific heat capacity of a substance is defined by:

Options :

1. ✘ $m(\Delta Q/\Delta T)$
2. ✔ $(1/m)(\Delta Q/\Delta T)$

3. ✘ $(1/m)(\Delta T/\Delta Q)$

4. ✘ $m(\Delta T/\Delta Q)$

Question Number : 29 Question Id : 2134098954 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The Celsius temperature (t_C) and the Fahrenheit temperature (t_F) are related as:

Options :

1. ✔ $t_F = (9/5) t_C + 32$

2. ✘ $t_F = (9/5) t_C$

3. ✘ $t_F = (5/9) t_C$

4. ✘ $t_F = (5/9) t_C + 32$

Question Number : 30 Question Id : 2134098955 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Identify the material having the lowest coefficient of linear expansion.

Options :

1. ✘ Brass

2. ✔ Lead

3. ✘ Copper

4. ✘ Iron

Question Number : 31 Question Id : 2134098956 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Standing up and supporting the lower back with hands, then gently arching back and holding this posture for some time is called as:

Options :

1. ✘ Wrist stretch

2. ✘ Finger fan

3. ✘ Pectoral stretch

4. ✔ Back arching

Question Number : 32 Question Id : 2134098957 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A component that adds to a software program's functionality is called as: _____.

Options :

1. ✘ Modem
2. ✘ Server
3. ✘ Processor
4. ✔ Plug-in

Question Number : 33 Question Id : 2134098958 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A/An _____ is the software that manages all of a computer's processes and allows programs and applications to run.

Options :

1. ✘ spam
2. ✘ malware
3. ✘ modem
4. ✔ operating system

Question Number : 34 Question Id : 2134098959 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If we compare the effort arm length with the load arm length in a class 1 lever, _____

Options :

1. ✘ effort arm length is always $>$ load arm length
2. ✘ effort arm length is always $<$ load arm length
3. ✘ effort arm length is always $=$ load arm length
4. ✔ effort arm length can be greater than,
equal to or less than the length of the load arm

Question Number : 35 Question Id : 2134098960 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A pair of plier and scissor are together considered as a _____ Class 1 lever.

Options :

1. ✔ double
2. ✘ single

3. ✘ triple

4. ✘ simple

Question Number : 36 Question Id : 2134098961 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In a Class 2 lever, effort and load move in the:

Options :

1. ✔ same direction

2. ✘ opposite direction

3. ✘ the movement depends on the load

4. ✘ perpendicular direction

Question Number : 37 Question Id : 2134098962 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If we compare the effort arm length with the load arm length in a Class 2 lever, _____.

Options :

1. ✔ effort arm length is always $>$ load arm length

2. ✘ effort arm length is always $<$ load arm length

3. ✘ effort arm length is always $=$ load arm length

4. ✘ effort arm length can be greater than, equal to or less than the length of the load arm

Question Number : 38 Question Id : 2134098963 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An object starts from rest at $x = 0$ m and $t = 0$ s. It moves with a constant acceleration of 3 m/s^2 along x axis. What is its average velocity between time duration of 2 s and 4 s?

Options :

1. ✘ 3 m/s

2. ✘ 6 m/s

3. ✔ 9 m/s

4. ✘ 12 m/s

Question Number : 39 Question Id : 2134098964 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

How much heat should be transferred to the 100 g of an edible oil to raise its temperature by 20 °C? (Specific heat of oil 1965 Jkg⁻¹K⁻¹)

Options :

1. ✘ 1.32 kJ
2. ✘ 2.70 kJ
3. ✔ 3.93 kJ
4. ✘ 4.31 kJ

Question Number : 40 Question Id : 2134098965 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A sheet of styrofoam of thickness 2 cm and area 0.1 m² has a temperature difference of 30 °C between its inner and outer surfaces. Considering thermal conductivity as 0.01 J/s m K, the rate of heat flow through the sheet is:

Options :

1. ✘ 1.0 J/s
2. ✔ 1.5 J/s
3. ✘ 2.0 J/s
4. ✘ 3.0 J/s

Question Number : 41 Question Id : 2134098966 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Two resistor, one of 10 Ω and the other of 15Ω, are connected in parallel. This combination is connected in series with a 24 Ω resistor and a 12 V battery. The current in the 15 Ω resistor is:

Options :

1. ✘ 0.12 A
2. ✔ 0.16 A
3. ✘ 0.24 A
4. ✘ 0.40 A

Question Number : 42 Question Id : 2134098967 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A cylindrical wire of length L and radius r has a resistance R. The resistance of another wire of the same material but of half its length and twice its radius is given by:

Options :

1. ✘ R

2. ✘ R/2

3. ✘ R/4

4. ✔ R/8

Question Number : 43 Question Id : 2134098968 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An object is accelerating at 5 m/s^2 from its rest position. The velocity of this object after 5 s is:

Options :

1. ✘ 5 m/s

2. ✘ 15 m/s

3. ✘ 20 m/s

4. ✔ 25 m/s

Question Number : 44 Question Id : 2134098969 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An object travels distance of first 30 m in 5 s and the next distance of 30 m in 3 s. The average speed of the object is:

Options :

1. ✘ 4.5 m/s

2. ✘ 6.5 m/s

3. ✔ 7.5 m/s

4. ✘ 9.0 m/s

Question Number : 45 Question Id : 2134098970 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What will be the distance covered by a bus moving with a speed of 72 km/h in 5 seconds?

Options :

1. ✘ 200 m

2. ✘ 50 m

3. ✔ 100 m

4. ✘ 400 m

Question Number : 46 Question Id : 2134098971 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Identify the insulator from the below having high resistivity.

Options :

1. ✓ Hard rubber
2. ✗ Glass
3. ✗ Dry paper
4. ✗ Diamond

Question Number : 47 Question Id : 2134098972 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If we double the length of a copper wire, its resistance increases by _____ times.

Options :

1. ✗ one
2. ✗ three
3. ✓ two
4. ✗ four

Question Number : 48 Question Id : 2134098973 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A source of voltage V maintains a current I in a circuit. The power (P) input to the circuit by the source is given by:

Options :

1. ✓ $P = V I$
2. ✗ $P = 1 / (V I)$
3. ✗ $P = V / I$
4. ✗ $P = I / V$

Question Number : 49 Question Id : 2134098974 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Two resistor, each of 20 ohm, are connected in parallel and this combination is connected across a 40 V supply voltage.
Find the resistance offered by the voltage source.

Options :

1. ✓ 10 ohm
2. ✗ 25 ohm

3. ✘ 20 ohm

4. ✘ 40 ohm

Question Number : 50 Question Id : 2134098975 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the power dissipated in a 5-ohm resistor carrying 2 A current?

Options :

1. ✘ 10 W

2. ✔ 20 W

3. ✘ 2.5 W

4. ✘ 0.6 W

Question Number : 51 Question Id : 2134098976 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The least number consisting of five digits and that is divisible by 97 is x. What is the sum of digits of x?

Options :

1. ✘ 13

2. ✘ 15

3. ✘ 16

4. ✔ 17

Question Number : 52 Question Id : 2134098977 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the digit that will come at the unit's place in the result of $(423)^{423} \times (1237)^{28}$.

Options :

1. ✘ 1

2. ✔ 7

3. ✘ 3

4. ✘ 9

Question Number : 53 Question Id : 2134098978 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The resulting value of $0.5 \div 12.5 + 0.25 \times 0.05 - 0.0125$ is:

Options :

1. ✘ 0.4

2. ✘ 0.5

3. ✘ 0.05

4. ✔ 0.04

Question Number : 54 Question Id : 2134098979 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

At what price should a computer be sold so as to get a profit of 25% when its cost price is ₹ 18000?

Options :

1. ✘ ₹ 20500

2. ✘ ₹ 21000

3. ✔ ₹ 22500

4. ✘ ₹ 23000

Question Number : 55 Question Id : 2134098980 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An article was sold for ₹ 1000. Had a discount of 16% was offered, a profit of 5% would have been made. What is the cost price of the article?

Options :

1. ✘ ₹ 750

2. ✔ ₹ 800

3. ✘ ₹ 840

4. ✘ ₹ 880

Question Number : 56 Question Id : 2134098981 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

X jogs a total of 7.5 km in a day. He jogged $\frac{25}{6}$ km in the morning. How much did he jog in the evening?

Options :

1. ✘ $\frac{8}{3}$ Km

2. ✘ $\frac{5}{3}$ Km

3. ✔ $\frac{10}{3}$ Km

4. ✘ 11/3 Km

Question Number : 57 Question Id : 2134098982 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the HCF of 275 and 308?

Options :

1. ✘ 17

2. ✘ 15

3. ✔ 11

4. ✘ 19

Question Number : 58 Question Id : 2134098983 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The length and breadth of a rectangle is 6 cms and 8cms respectively. Then what will be the area of a square whose side is equal to the length of the diagonal of this rectangle.

Options :

1. ✔ 100 cm²

2. ✘ 92 cm²

3. ✘ 96 cm²

4. ✘ 196 cm²

Question Number : 59 Question Id : 2134098984 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the side of a cube if the total surface area is 96 sq. cm?

Options :

1. ✘ 2 cm

2. ✔ 4 cm

3. ✘ 3 cm

4. ✘ 5 cm

Question Number : 60 Question Id : 2134098985 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Two trains start moving towards each other when they are 2000 meter apart. First train travels at the speed of 20 m/s and the other one at 30 m/s. After how many seconds do they meet?

Options :

1. ✘ 35

2. ✔ 40

3. ✘ 45

4. ✘ 50

Question Number : 61 Question Id : 2134098986 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A sum of ₹ 10000 was deposited in a bank that offer 20% annual compound interest. What will the amount be in the bank after 2 year?

Options :

1. ✘ ₹ 8000

2. ✘ ₹ 12000

3. ✘ ₹ 13600

4. ✔ ₹ 14400

Question Number : 62 Question Id : 2134098987 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A sum of money invested at a compound interest amounts to 800 in 2 year and 840 in 3 year. The rate of interest is:

Options :

1. ✔ 5 %

2. ✘ 7 %

3. ✘ 4 %

4. ✘ 6 %

Question Number : 63 Question Id : 2134098988 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The number 80 is divided in 2 parts such that one part is $\frac{9}{7}$ times the other. The larger part is:

Options :

1. ✘ 50

2. ✘ 48

3. ✔ 45

4. ✘ 50

Question Number : 64 Question Id : 2134098989 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The sum of a number and 16 times its reciprocal is 10. The number is:

Options :

1. ✘ 5

2. ✘ 6

3. ✘ 7

4. ✔ 8

Question Number : 65 Question Id : 2134098990 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the distance between the points $(-2, 4)$ and $(4, 4)$?

Options :

1. ✔ 6 units

2. ✘ 2 units

3. ✘ 4 units

4. ✘ 8 units

Question Number : 66 Question Id : 2134098991 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

$\triangle DEF$ is similar to $\triangle PQR$. If the ratio of semi-perimeter of $\triangle DEF$ and $\triangle PQR$ is $4 : 5$ and if $PQ = 15$ cm, then the length of DE is:

Options :

1. ✘ 20 cm

2. ✘ 8 cm

3. ✘ 10 cm

4. ✔ 12 cm

Question Number : 67 Question Id : 2134098992 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What was the day of the week on January 26, 1989?

Options :

1. ✘ Sunday
2. ✘ Monday
3. ✘ Tuesday
4. ✔ Thursday

Question Number : 68 Question Id : 2134098993 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Pipes P and Q fill a cistern in 12 minutes when operated together, Q and R fill it in 20 minutes when operated together and P and R fill it in 15 minutes when operated together. In how many minutes can all 3 pipes fill the cistern if operated together?

Options :

1. ✔ 10 minutes
2. ✘ 3 minutes
3. ✘ 4 minutes
4. ✘ 2 minutes

Question Number : 69 Question Id : 2134098994 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Pipes A and B fill a tank at $30 \text{ m}^3/\text{hr}$ and $40 \text{ m}^3/\text{hr}$ respectively. Together they fill the tank in 4 hour. Find the volume of the tank.

Options :

1. ✘ 200 m^3
2. ✔ 280 m^3
3. ✘ 180 m^3
4. ✘ 360 m^3

Question Number : 70 Question Id : 2134098995 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What will be A's share of profit if the total profit is ₹ 1000 and is to be divided amongst A, B and C in the ratio 3 : 2 : 5?

Options :

1. ✘ ₹ 200
2. ✘ ₹ 250
3. ✔ ₹ 300

4. ✘ ₹ 500

Question Number : 71 Question Id : 2134098996 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

10 % of 1000 % of 100 = ?

Options :

1. ✔ 100

2. ✘ 102

3. ✘ 105

4. ✘ 110

Question Number : 72 Question Id : 2134098997 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The median of 2, 9, 11, 7, 3, 4, 8, 5, 3, 6 is:

Options :

1. ✘ 3.5

2. ✘ 4

3. ✔ 5.5

4. ✘ 5

Question Number : 73 Question Id : 2134098998 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the square root of 0.000225?

Options :

1. ✔ 0.015

2. ✘ 0.005

3. ✘ 0.0015

4. ✘ 0.0125

Question Number : 74 Question Id : 2134098999 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If a person goes from his house to office walking at 80% of his usual speed, then he is late by 18 minutes to reach the office. What is the usual time taken by him to cover that same distance with his usual speed?

Options :

1. ✘ 70 minutes
2. ✔ 72 minutes
3. ✘ 75 minutes
4. ✘ 78 minutes

Question Number : 75 Question Id : 2134099000 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The sum of the present ages of a father and a son is 45 year. 5 year ago, the ratio of their ages was 6 : 1. Find the current age of the father.

Options :

1. ✘ 30 year
2. ✔ 35 year
3. ✘ 40 year
4. ✘ 25 year

Question Number : 76 Question Id : 2134099001 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Select the word that is related to the third word in the same way as the second word is related to the first word.

Walnut : Shell :: Banana : ?

Options :

1. ✘ Fruit
2. ✘ Green
3. ✔ Peel
4. ✘ Ripe

Question Number : 77 Question Id : 2134099002 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Select the number that is related to the third number in the same way as the second number is related to the first number
 $2/5 : 0.4 :: 1/200 : ?$

Options :

1. ✘ 0.05
2. ✘ 0.2

3. ✓ 0.005

4. ✗ 0.002

Question Number : 78 Question Id : 2134099003 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

TTTTTTO, TTTTTOT, TTTTOTT, TTTOTTT

Options :

1. ✗ TTOTTT

2. ✓ TTOTTTT

3. ✗ TTTOTTTT

4. ✗ TTTOTTTTO

Question Number : 79 Question Id : 2134099004 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A series is given, with one number missing. Choose the correct alternative from the given ones that will complete the series.

7.4, 8.7, 10.0, 11.3, ?, 13.9

Options :

1. ✗ 11.7

2. ✗ 11.9

3. ✗ 12.3

4. ✓ 12.6

Question Number : 80 Question Id : 2134099005 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In a certain code language, 512 means 'steel makes tower', 175 means 'brick makes tower', and 327 means 'brick and steel'. Find the code for 'and'.

Options :

1. ✗ 7

2. ✗ 2

3. ✗ 1

4. ✓ 3

Question Number : 81 Question Id : 2134099006 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In a certain code language, if STUDIO is coded as QRBGM, then how will RAW be coded in that language?

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options :

1. TGB
2. UKN
3. PYU
4. ₹W

Question Number : 82 Question Id : 2134099007 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In a certain code language, '+' represents 'x', '-' represents '+', 'x' represents '÷' and '÷' represents '-', calculate the answer of the following equation.

$$8 + 3 \times 4 - 2 = ?$$

Options :

1. ✘ 12
2. ✔ 8
3. ✘ 6
4. ✘ 10

Question Number : 83 Question Id : 2134099008 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which two signs should be interchanged to correct the given equation?

$$15 \div 3 + 2 \times 10 - 6 = 14$$

Options :

1. ✘ ÷ and +
2. ✘ + and -
3. ✔ + and x
4. ✘ ÷ and -

Question Number : 84 Question Id : 2134099009 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If $C \% D$ means C is the wife of D; $C \& D$ means C is the father of D; and If $C \$ D$ means C is the daughter of D, then what would $X \$ Y \% W \& Z$ mean if W has only one daughter?

Options :

1. ✓ X is the sister of Z
2. ✗ Z is the sister of X
3. ✗ Z is the sister of the mother of X
4. ✗ X is the son of Z

Question Number : 85 Question Id : 2134099010 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If $G + H$ means G is daughter of H; $G - H$ means G is father-in-law of H; and $G * H$ means G is husband of H, then which of the following shows that O is the sister of L?

Options :

1. ✓ $O + M - N * L$
2. ✗ $O - N + M * L$
3. ✗ $O - N * M + L$
4. ✗ $O * N - M + L$

Question Number : 86 Question Id : 2134099011 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In the question, two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow(s) from the given statements.

Statement 1 : All storms are cyclones.

Statement 2 : All cyclones are tornadoes.

Conclusion I : Some tornadoes are storms.

Conclusion II : Some cyclones are storms.

Options :

1. ✗ Only conclusion I follows
2. ✗ Only conclusion II follows
3. ✓ Both I and II follow
4. ✗ Neither I nor II follows

Question Number : 87 Question Id : 2134099012 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In the question, two statements are given, followed by three conclusions, I, II and III. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow(s) from the given statements.

Statement 1 : All bamboo are tall.

Statement 2 : All tall are grass.

Conclusion I : Some grass are bamboo.

Conclusion II : Some tall are bamboo.

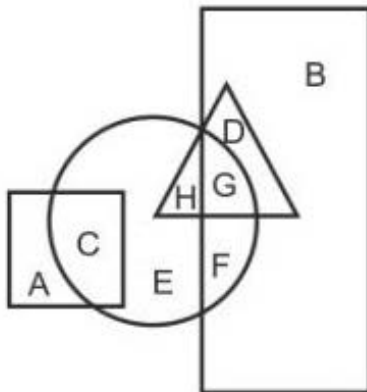
Conclusion III : Some grass are tall.

Options :

1. ✘ Only conclusions I and II follow
2. ✘ Only conclusions II and III follow
3. ✘ Only conclusions I and III follow
4. ✔ All conclusions I, II and III follow

Question Number : 88 Question Id : 2134099013 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

In the following figure, square represents Asians, triangle represents writers, circle represents fathers and rectangle represents actors. Which set of letters represents actors who are writers?



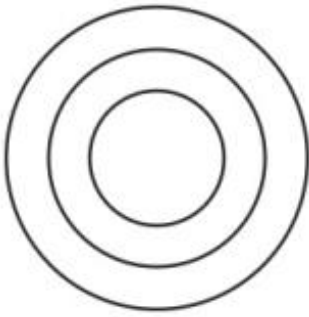
Options :

1. ✘ GF
2. ✔ GD
3. ✘ CEG
4. ✘ HGF

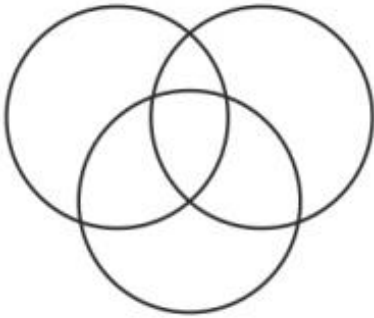
Question Number : 89 Question Id : 2134099014 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following venn diagrams best represents the relationship between women, mother and doctor?

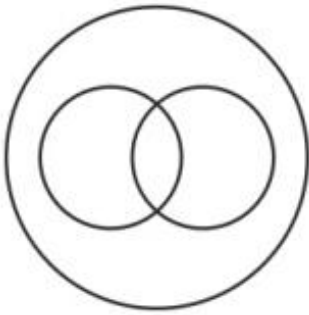
Options :



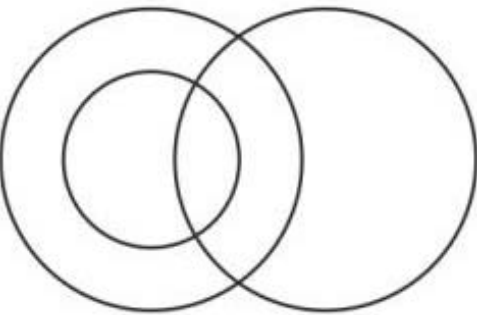
1. ✘



2. ✘



3. ✘



4. ✔

Question Number : 90 Question Id : 2134099015 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Read the question below followed by two statements. Study them and decide which statement(s) is/are sufficient to answer the question.

Question: What was the revenue of the zoo on a certain day?

Statements:

- I) 120 persons visited the zoo on that certain day.
- II) A discount of 25% on ticket price was offered on that certain day.

Options :

1. ✘ Statement I alone is sufficient while II alone is not sufficient
2. ✘ Statement II alone is sufficient while I alone is not sufficient
3. ✘ Either statement I or II is sufficient
4. ✔ Neither statement I nor II is sufficient

Question Number : 91 Question Id : 2134099016 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A statement/group of statements is given followed by some conclusions. Choose the conclusion that logically follows from the given statement/s.

Statement: All hardworking worker in the factory have been promoted in the last five year.

Options :

1. ✘ There are no worker in the factory who are not hardworking.
2. ✔ Some worker who were promoted in the last five year are hardworking.
3. ✘ After promotion, some worker stopped working hard.
4. ✘ Hardworking is the only criteria for promotion.

Question Number : 92 Question Id : 2134099017 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Find the odd set of letter from the given alternatives.

Options :

1. ✔ MNO
2. ✘ RTV
3. ✘ CEG
4. ✘ JLN

Question Number : 93 Question Id : 2134099018 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Find the odd word from the given alternatives.

Options :

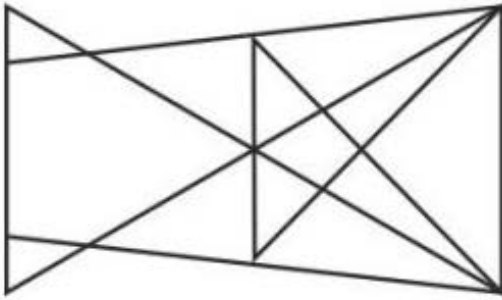
1. ✔ Carom board
2. ✘ Coin

3. ✖ Wheel

4. ✖ Hula hoop

Question Number : 94 Question Id : 2134099019 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the minimum number of lines required to make the given image?



Options :

1. ✖ 10

2. ✔ 9

3. ✖ 11

4. ✖ 12

Question Number : 95 Question Id : 2134099020 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

M, N, O and P are sitting around a round table? M does not want to sit next to P. N is to the right of P. Which statement of the below is false?

Options :

1. ✔ O is to the right of P

2. ✖ O is facing N

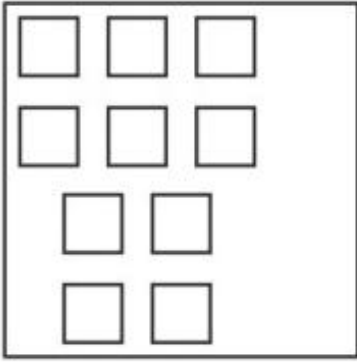
3. ✖ M is facing P

4. ✖ M is to the right of N

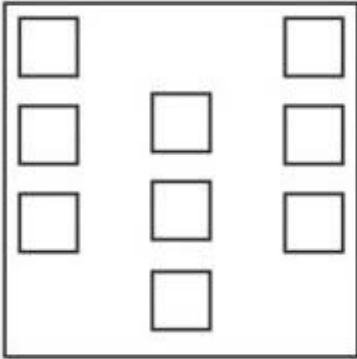
Question Number : 96 Question Id : 2134099021 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Choose the figure that is different from the rest.

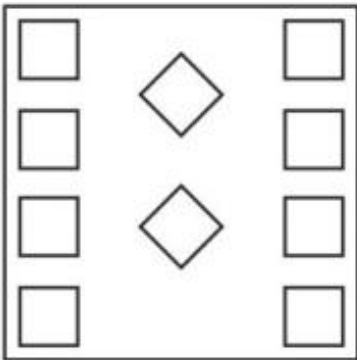
Options :



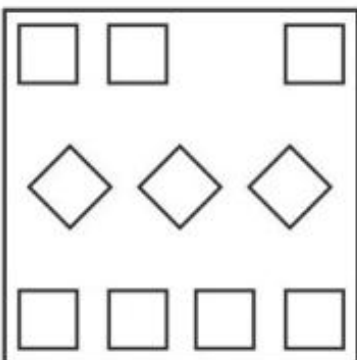
1. ✘



2. ✔



3. ✘

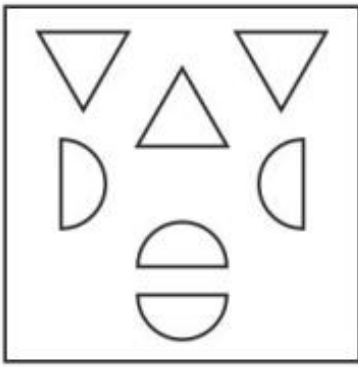


4. ✘

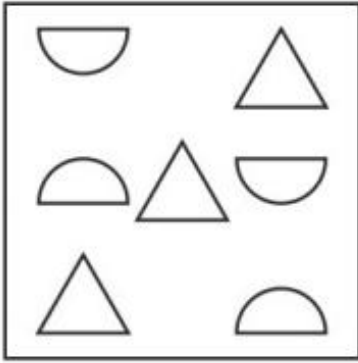
Question Number : 97 Question Id : 2134099022 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Choose the figure that is different from the rest.

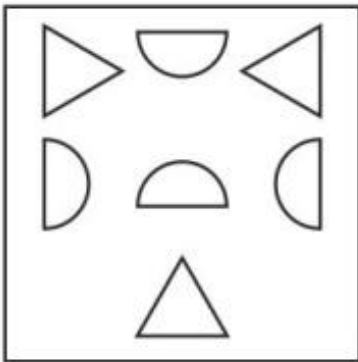
Options :



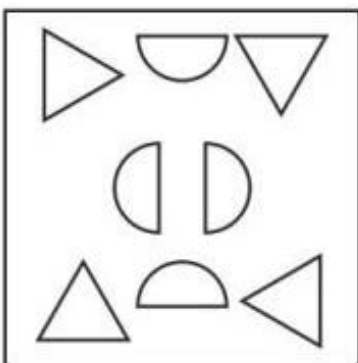
1. ✘



2. ✘



3. ✘



4. ✔

Question Number : 98 Question Id : 2134099023 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

A jogger jogs 1 km East, then turns North and jogs 4 km, then turns West and jogs 6 km, then turns to his left and jogs 4 km. Where is he now with reference to his starting position?

Options :

1. ✔ 5 km West

2. ✘ 5 km East

3. ✘ 7 km West

4. ✘ 7 km East

Question Number : 99 Question Id : 2134099024 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Two cows G and H are grazing in a field. They start from the same point. G moves 1.5 km South, then turns East and moves 2.5 km, then turns to its right and moves 3.5 km. Meanwhile H has moved 2.5 km East. Where is H with respect to G?

Options :

1. ✘ H is 5 km South of G

2. ✔ H is 5 km North of G

3. ✘ H is 2 km North of G

4. ✘ H is 2 km South of G

Question Number : 100 Question Id : 2134099025 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Given below is a statement followed by two assumptions numbered I and II. You have to decide which of the assumptions is/are implicit in the statement.

Statement: College students should work during summer holidays to improve their chances of getting a job.

Assumption I: Not all college students want a job.

Assumption II: There are enough summer jobs for most college students.

Options :

1. ✘ Only assumption I is implicit

2. ✘ Only assumption II is implicit

3. ✘ Both I and II are implicit

4. ✔ Neither I nor II is implicit

Part B

Group Number :	2
Group Id :	213409104
Group Maximum Duration :	60
Group Minimum Duration :	60
Revisit allowed for view? :	No
Revisit allowed for edit? :	No

Break time: 0
Group Marks: 75

Electronics Mechanic

Section Id : 213409104
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 75
Number of Questions to be attempted: 75
Section Marks: 75
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 213409104
Question Shuffling Allowed : Yes

Question Number : 101 Question Id : 2134099026 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If current = 1.414 A and resistance = 50 Ω , then find power.

Options :

1. ✘ 300 Watts
2. ✔ 100 Watts
3. ✘ 200 Watts
4. ✘ 400 Watts

Question Number : 102 Question Id : 2134099027 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Sine Wave RMS = _____.

Options :

1. ✘ Peak voltage / Square root of 3
2. ✔ Peak voltage / Square root of 2
3. ✘ Peak voltage / Square root of 5
4. ✘ Peak voltage / Square root of 6

Question Number : 103 Question Id : 2134099028 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following is a function of a resistor?

Options :

1. ✓ It allows the flow of current.
2. ✓ It opposes the flow of current.
3. ✓ It both allows and opposes the flow of current.
4. ✗ It neither allows nor opposes the flow of current.

Question Number : 104 Question Id : 2134099029 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A capacitor consists of _____ metal plates separated by an insulator.

Options :

1. ✓ Two
2. ✗ four
3. ✗ one
4. ✗ Three

Question Number : 105 Question Id : 2134099030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following is a function of an inductor?

Options :

1. ✗ It allows the flow of current.
2. ✓ It opposes the flow of AC
3. ✗ It opposes the flow of DC.
4. ✗ It opposes the flow of both AC and DC.

Question Number : 106 Question Id : 2134099031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following statements is true with respect to a Primary Cell?

Options :

1. ✗ It can be recharged and reused.
2. ✗ It cannot be recharged but can be reused.

3. ✘ It can be recharged but cannot be reused.

4. ✔ It can neither be recharged nor be reused.

Question Number : 107 Question Id : 2134099032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

10 cells each with an EMF of 1.5 V and an internal resistance of 0.1 Ω are connected in series. What will be the total EMF and resistance of the circuit?

Options :

1. ✘ 1.18 V and 1.5 Ω

2. ✔ 15 V and 1.0 Ω

3. ✘ 3.21 V and 1.5 Ω

4. ✘ 4.15 V and 2.0 Ω

Question Number : 108 Question Id : 2134099033 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Transformer losses are due to:

Options :

1. ✔ core and copper losses

2. ✘ only copper losses

3. ✘ only core losses

4. ✘ primary loss

Question Number : 109 Question Id : 2134099034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following is an application of transformers?

Options :

1. ✘ AC to DC conversion

2. ✘ DC to AC conversion

3. ✔ AC to AC conversion with isolation

4. ✘ Regulate DC voltage

Question Number : 110 Question Id : 2134099035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The current towards a junction is:

Options :

1. equal to the current away from the junction
2. equal to the sum of currents towards the junction
3. not equal to the current away from the junction
4. twice the current towards the junction

Question Number : 111 Question Id : 2134099036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The power factor of a D.C. circuit is always

Options :

1. Lagging
2. Unity
3. Leading
4. zero

Question Number : 112 Question Id : 2134099037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

CRO stands for:

Options :

1. Cathode Rectifier Oscilloscope
2. Cathode Ray Oscilloscope
3. Cathode Relay Oscilloscope
4. Cathode register oscilloscope

Question Number : 113 Question Id : 2134099038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A full-wave bridge rectifier consists of:

Options :

1. two diodes
2. three diodes

3. ✓ four diodes

4. ✗ one diode

Question Number : 114 Question Id : 2134099039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Forward biasing of a PN junction diode is indicated by which of the following connections?

Options :

1. ✓ +ve to anode and -ve to cathode for full cycle

2. ✗ -ve to anode and +ve to cathode for full cycle

3. ✗ -ve to cathode and -ve to anode for full cycle

4. ✗

+ve to cathode and -ve to anode for one half cycle, and +ve to anode and -ve to cathode for the second half cycle.

Question Number : 115 Question Id : 2134099040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

78xx series ICs are:

Options :

1. ✗ shunt regulated

2. ✓ series regulated

3. ✗ series and shunt regulated

4. ✗ zener regulated

Question Number : 116 Question Id : 2134099041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Windows 10 is a/an:

Options :

1. ✓ operating system

2. ✗ booting system

3. ✗ operating and booting system

4. ✗ counting pulse

Question Number : 117 Question Id : 2134099042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following circuit has its output dependent only upon the present input?

Options :

1. ✘ Analog Circuits
2. ✔ Combinational Circuits
3. ✘ Sequential Circuits
4. ✘ Flip Flops

Question Number : 118 Question Id : 2134099043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The average value of sine wave is _____ times the peak value.

Options :

1. ✔ 0.637
2. ✘ 1.414
3. ✘ 1.732
4. ✘ 2.414

Question Number : 119 Question Id : 2134099044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In MS Excel, we cannot calculate:

Options :

1. ✘ arithmetic solutions
2. ✔ integration solutions
3. ✘ division solutions
4. ✘ multiplication solutions

Question Number : 120 Question Id : 2134099045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A _____ can be represented as two port linear network.

Options :

1. ✘ common collector

- ✘ common emitter
- ✘ common base
- ✔ hybrid parameter

Question Number : 121 Question Id : 2134099046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In a bipolar transistor, alpha is the ratio of:

Options :

- ✘ collector current to base current
- ✔ collector current to emitter current
- ✘ base current to collector current
- ✘ emitter current to collector current

Question Number : 122 Question Id : 2134099047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following shows the proper biasing of a PNP transistor?

Options :

- ✘ base and emitter - reverse bias; collector and emitter - forward bias
- ✔ base and emitter - forward bias; collector and emitter - reverse bias
- ✘ base and emitter - forward bias; collector and emitter - forward bias
- ✘ base and emitter - reverse bias; collector and emitter - reverse bias

Question Number : 123 Question Id : 2134099048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In case of an AC input signal in CE Transistor Load line can be given by a plot of

Options :

- ✔ VCE & I_c
- ✘ VCE & R_c
- ✘ VBE vs I_c
- ✘ VBE vs I_b

Question Number : 124 Question Id : 2134099049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

BC194 is the transistor used for:

Options :

1. ✘ the amplification of RF signal
2. ✔ the amplification of AF signal
3. ✘ the amplification of AF and RF signals
4. ✘ the rectification of AC

Question Number : 125 Question Id : 2134099050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Heat sink of a power transistor can be used for:

Options :

1. ✔ additional heat dissipation
2. ✘ additional heat observation
3. ✘ additional heat dissolution in water
4. ✘ increasing the heat

Question Number : 126 Question Id : 2134099051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In two-stage LC coupling, the function of a C_c capacitor is:

Options :

1. ✘ to block AC input signal
2. ✔ to block DC voltage
3. ✘ to block AC and DC
4. ✘ to allow AC and DC to pass

Question Number : 127 Question Id : 2134099052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The gain of an amplifier with feedback is known as _____ gain.

Options :

1. ✘ Open loop

2. ✓ Closed loop

3. ✗ High

4. ✗ Low

Question Number : 128 Question Id : 2134099053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In an amplifier with a positive feedback circuit, gain:

Options :

1. ✓ Increases

2. ✗ Decreases

3. ✗ remains constant

4. ✗ first increases and then decreases

Question Number : 129 Question Id : 2134099054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A push-pull amplifier is used for:

Options :

1. ✗ voltage amplification

2. ✗ current amplification

3. ✓ power amplification

4. ✗ RF signal amplification

Question Number : 130 Question Id : 2134099055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The output of Schmitt trigger is:

Options :

1. ✗ Sine wave

2. ✓ Square wave

3. ✗ Random wave

4. ✓ Rectangle wave

Question Number : 131 Question Id : 2134099056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A limiter circuit is also known as a:

Options :

1. ✘ clamp circuit
2. ✔ clipper circuit
3. ✘ chopper circuit
4. ✘ chopping circuit

Question Number : 132 Question Id : 2134099057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The following short name is also called as _____ for diode alternating current.

Options :

1. ✘ SCR
2. ✔ DIAC
3. ✘ TRIAC
4. ✘ FET

Question Number : 133 Question Id : 2134099058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

UJT is not used for:

Options :

1. ✘ timing circuits
2. ✘ triggering an SCR/TRIAC
3. ✘ phase control
4. ✔ amplification

Question Number : 134 Question Id : 2134099059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In simple oscillators, _____ are used.

Options :

1. ✘ TRIACs

2. ✘ SCRs

3. ✔ UJTs

4. ✘ zener diodes

Question Number : 135 Question Id : 2134099060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The output impedance of a MOSFET is:

Options :

1. ✔ Low impedance

2. ✘ Medium impedance

3. ✘ High impedance

4. ✘ Extreme high impedance

Question Number : 136 Question Id : 2134099061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Burglar alarm circuits consist of

Options :

1. ✘ LVDs

2. ✔ IRLEDs

3. ✘ LCDs

4. ✘ VCDs

Question Number : 137 Question Id : 2134099062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

A circuit that changes a code into a set of signals is called

Options :

1. ✔ Decoder

2. ✘ Encoder

3. ✘ Selector

4. ✘ multiplexer

Question Number : 138 Question Id : 2134099063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Race Around condition can be avoided in Digital logic circuits using?

Options :

1. ✘ Full Adder
2. ✔ Master Slave JK Flip Flop
3. ✘ Shift Register
4. ✘ AND Gate

Question Number : 139 Question Id : 2134099064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

For which of the following gates the output is zero when one or more inputs are zero?

Options :

1. ✔ AND
2. ✘ OR
3. ✘ NOT
4. ✘ NOR

Question Number : 140 Question Id : 2134099065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An IC with four NOR gates is:

Options :

1. ✘ 7486
2. ✔ 7402
3. ✘ 7432
4. ✘ 7404

Question Number : 141 Question Id : 2134099066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The binary representation for the hexadecimal number 4A is:

Options :

1. ✔ 1001010
2. ✘ 111101

3. ✘ 101111

4. ✘ 101101

Question Number : 142 Question Id : 2134099067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The combination of two half adders is a _____.

Options :

1. ✔ full adder

2. ✘ half adder

3. ✘ Schmitt trigger

4. ✘ Comparator

Question Number : 143 Question Id : 2134099068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

16-bit registers consist of:

Options :

1. ✔ 16 flip-flops

2. ✘ 20 flip-flops

3. ✘ 8 flip-flops

4. ✘ 12 flip-flops

Question Number : 144 Question Id : 2134099069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In an op-amp, the input impedance is _____ and the output impedance is _____.

Options :

1. ✘ low; high

2. ✔ high; low

3. ✘ low; low

4. ✘ high; high

Question Number : 145 Question Id : 2134099070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

If a capacitor is placed in the feedback path of an op-amp circuit, then the circuit can act as

Options :

1. ✘ subtractor
2. ✘ divider
3. ✔ integrator
4. ✘ multiplier

Question Number : 146 Question Id : 2134099071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

For pulse generation, the IC used is:

Options :

1. ✘ 7432
2. ✘ 7402
3. ✔ 555
4. ✘ 7805

Question Number : 147 Question Id : 2134099072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The waveform in a DSO is stored in _____ form.

Options :

1. ✘ Analog
2. ✘ Mixed
3. ✔ Digital
4. ✘ Expanded

Question Number : 148 Question Id : 2134099073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The frequency of the rotor current in an induction motor is equal to:

Options :

1. ✔ slip \times input frequency
2. ✘ slip \times stator current

3. ✘ the stator current
4. ✘ half of the input frequency

Question Number : 149 Question Id : 2134099074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

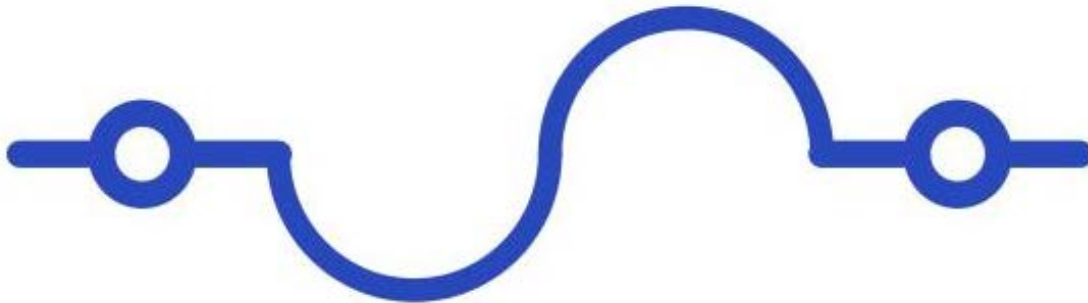
The motor used in household refrigerators is

Options :

1. ✘ Reluctance motor
2. ✘ Hysteresis motor
3. ✘ dc series motor
4. ✔ single phase induction motor

Question Number : 150 Question Id : 2134099075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The following figure represents a/an _____.



Options :

1. ✘ MCB
2. ✘ SWITCH
3. ✔ FUSE
4. ✘ HEATER

Question Number : 151 Question Id : 2134099076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the frequency band of shortwave radio transmission?

Options :

1. ✘ 1.7 to 30 Hz

2. ✘ 1.7 to 30 GHz

3. ✘ 1.7 to 30 kHz

4. ✔ 1.7 to 30 MHz

Question Number : 152 Question Id : 2134099077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

How many counter/timer does the 8051 microcontroller have?

Options :

1. ✘ 8

2. ✘ 4

3. ✔ 2

4. ✘ 1

Question Number : 153 Question Id : 2134099078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In 8051 microcontroller the resultant of two numbers added is _____.

Options :

1. ✘ Erased

2. ✘ stored in the register

3. ✘ not stored anywhere

4. ✔ stored in the accumulator

Question Number : 154 Question Id : 2134099079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the use of an RTD?

Options :

1. ✔ Measuring temperature

2. ✘ Measuring pressure

3. ✘ Measuring humidity

4. ✘ Measuring position

Question Number : 155 Question Id : 2134099080 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

An LVDT is used for measuring _____.

Options :

1. ✘ speed
2. ✘ frequency
3. ✔ displacement
4. ✘ temperature

Question Number : 156 Question Id : 2134099081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the material used for the manufacture of fibre optic cables?

Options :

1. ✘ Steel
2. ✘ Wood
3. ✘ Plastic
4. ✔ Glass

Question Number : 157 Question Id : 2134099082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following is used as a receiver for fibre optic communication?

Options :

1. ✘ LDR
2. ✔ Photo diode
3. ✘ IR diode
4. ✘ LED

Question Number : 158 Question Id : 2134099083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which component of a digital panel meter converts analogue signals into a digital format?

Options :

1. ✘ comparator

2. ✘ magnetic field sensor

3. ✘ hall sensor

4. ✔ ADC

Question Number : 159 Question Id : 2134099084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The device used for converting continuous DC to discontinuous DC is known as a/an _____.

Options :

1. ✘ rectifier

2. ✔ chopper

3. ✘ amplifier

4. ✘ oscillator

Question Number : 160 Question Id : 2134099085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Input ripple of SMPS is _____.

Options :

1. ✘ low

2. ✔ high

3. ✘ nil

4. ✘ very low

Question Number : 161 Question Id : 2134099086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Which of the following devices requires a battery?

Options :

1. ✘ stabilizer

2. ✘ Step-up chopper

3. ✔ UPS

4. ✘ Step-down chopper

Question Number : 162 Question Id : 2134099087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

How can a higher voltage be obtained from a solar cell?

Options :

1. ✘ By increasing its thickness
2. ✘ By decreasing its thickness
3. ✔ By connecting multiple cells in series
4. ✘ By connecting multiple cells in parallel

Question Number : 163 Question Id : 2134099088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What will be the power required by a bulb load having a resistance of $50\ \Omega$ if the voltage applied is $220\ \text{V}$?

Options :

1. ✘ 200 W
2. ✘ 828 W
3. ✘ 1068 W
4. ✔ 968 W

Question Number : 164 Question Id : 2134099089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is the number of cycles completed by a 50-Hz line in 10 seconds?

Options :

1. ✘ 5
2. ✘ 50
3. ✔ 500
4. ✘ 5000

Question Number : 165 Question Id : 2134099090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What happens if a capacitor is placed in parallel with a DC source?

Options :

1. ✘ It amplifies the voltage.
2. ✘ It converts DC to AC.

3. ✓ The circuit acts as an open circuit.

4. ✗ The circuit acts as a short circuit.

Question Number : 166 Question Id : 2134099091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Cells are connected in series in order to

Options :

1. ✗ Increase the current

2. ✗ Decrease the voltage

3. ✓ Increase the Voltage

4. ✗ increase the cell life

Question Number : 167 Question Id : 2134099092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Impedance can be measured by using which of the following equipment?

Options :

1. ✗ DSO

2. ✗ Function generator

3. ✗ CRO

4. ✓ LCR meter

Question Number : 168 Question Id : 2134099093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What is unity gain amplifier also known as?

Options :

1. ✗ Comparator

2. ✗ Differential

3. ✗ Single sided

4. ✓ Voltage follower

Question Number : 169 Question Id : 2134099094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

In the context of cables, FRC stands for:

Options :

1. ✘ Fast Reeling Cable
2. ✘ Fat Ribbon Cable
3. ✔ Flat Ribbon Cable
4. ✘ Full Rolling Cable

Question Number : 170 Question Id : 2134099095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Identify the type of antenna shown in the following picture.



Options :

1. ✘ Bi-pole
2. ✔ Yagi
3. ✘ Circular
4. ✘ Monopole

Question Number : 171 Question Id : 2134099096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Most widely used solar cell material is

Options :

1. ✘ steel
2. ✘ mercury
3. ✔ silicon
4. ✘ Cast iron

Question Number : 172 Question Id : 2134099097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

What happens to the resistance of an RTD with an increase in temperature?

Options :

1. ✘ It remains the same.
2. ✘ It is uncertain.
3. ✔ It increases.
4. ✘ It decreases.

Question Number : 173 Question Id : 2134099098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Eddy current proximity sensors can detect _____.

Options :

1. ✔ metal
2. ✘ wood
3. ✘ epoxy
4. ✘ cotton

Question Number : 174 Question Id : 2134099099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

The source of light for optic fibre transmission is _____.

Options :

1. ✔ LED
2. ✘ incandescent lamp
3. ✘ ARC lamp
4. ✘ mercury lamp

Question Number : 175 Question Id : 2134099100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Fibre cables used for 'Fibre to Home' installations are _____.

Options :

1. ✘ multiaxis
2. ✘ multimode step

3. ✘ multimode graded

4. ✔ single mode