

RAILWAY RECRUITMENT BOARDS रेलवे भर्ती बोर्ड

2nd Stage CBT for ALP & TECHNICIANS (CEN-01/2018)

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Test Center Name: iON Digital Zone iDZ Thigalarapalya Main F	Road
Test Date: 23/01/2019	
Test Time: 4:30 PM - 7:00 PM	
Subject: Part A and Exam Trade : Electrician	

- 1. Options shown in green color with a tick icon are correct
- 2. Chosen option on top right of the question indicates the option selected by the candidate

Section: Part A

Q.1 An object starts from rest at x = 0 m and moves with a constant acceleration of 1.6 m/s² along the x-axis. During its journey from x = 12.8 m to x = 20.0 m, its average velocity will be_

Ans 1. 7.2 m/s

X 2. 8.8 m/s

X 3. 2.4 m/s

X 4. 3.6 m/s

Question ID: 9623409663

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.2 If $5050 \times 0.5x = 25250$, then $2505 \div x^2 = ?$

Ans 1. 25.05

X 2. 2.505

X 3. 0.2505

X 4. 250.5

Question ID: 9623409678 Status: Answered

Chosen Option: 1

Q.3 A motorcycle travelled 1000 m at 36 km/hr. Find the time (in seconds) taken by the motorcycle to cover this distance.

Ans X 1. 200

X 2. 400

3. 100

X 4. 300

Question ID: 9623409670

Status: Answered

Chosen Option: 3

Q.4 What is the least number which when doubled is perfectly divisible by 7, 12 and 15?

X 1. 220

√ 2. 210

X 3. 214

X 4. 215

Question ID: 9623409682 Status: Answered

Chosen Option: 2

Q.5 What is the distance between the points (4, 3) and (3, -2)?

Ans X 1. 6

X 2. 5

X 3. √24

√ 4. √26

Question ID: 9623409689

Status: Answered

Chosen Option: 4

Q.6 If a machine overcomes a load 'L' and the distance travelled by the load is 'Ld', the work done by the load will be _

 χ 1. $\frac{1}{L \times Ld}$

✓ 2. L × Ld

 \times 3. $\frac{Ld}{L}$

 \times 4. $\frac{L}{Ld}$

Question ID: 9623409660

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.7 Given below is a question, followed by two arguments, I and II. You have to decide which of the given arguments, if any, is a strong argument, with respect to the question.

Question: Should advertisements be banned on television?

Argument I: Yes, advertisements are immoral.

Argument II: No, advertisements bring in revenue which helps reduce cost for viewers.

Ans X 1. Only argument I is strong.

✓ 2. Only argument II is strong.

X 3. Both I and II are strong.

X 4 Neither I nor II is strong.

Question ID: 9623409725

Status: Answered

Chosen Option: 2

Q.8 Given below are some letters, that each of these letters has a corresponding number. Select the combination of numbers from the options so that the jumbled letters arranged accordingly will form a meaningful English word.

Ans X 1. 2,1,5,3,4,6

2. 6,4,2,1,5,3

X 3. 3,4,5,2,1,6

×	4.	1	6	2	1	5	2
^	4.	.51	O,	.Ζ.	4	,O,	J

Question ID: 9623409711 Status: Answered Chosen Option: 2

Q.9 Given below are two statements, 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: No quadrilaterals are polygons. Statement 2: All polygons are rhombuses.

Conclusion I: Some rhombuses are quadrilaterals. Conclusion II: Some rhombuses are polygons.

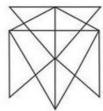
Ans

- X 1. Both I and II follow
- X 2. Neither I nor II follows
- 3. Only conclusion I follows
- 4. Only conclusion II follows

Question ID: 9623409710 Status: Not Answered

Chosen Option: --

Q.1 What is the minimum number of lines required to make the given image?



Ans X 1. 10

X 3. 12

Question ID: 9623409718

Status: Not Answered

Chosen Option: --

Q.1 Substances that are broken down by biological processes are said to be _____.

Ans X 1 non-reusable

√ 2. biodegradable

X 3. non-biodegradable

X 4. reusable

Question ID: 9623409639

Status: Marked For Review

Chosen Option: 2

Q.1 86°F is equal to _____.

Ans X 1. 34°C

X 2. 20°C



X 4. 10°C

Question ID: 9623409652 Status: Answered Chosen Option: 3

Q.1 A cylindrical wire of length L and radius r has a resistance of R. The resistance of another wire of the same material but thrice its length and one-third its radius will be

Ans

✓ 1. 27R

X 2. 9R

X 3. 3R

X 4. R

Question ID: 9623409667 Status: Answered Chosen Option: 1

Q.1 A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

00000X, 0000XX, 000XXX, 00XXXX, ?

Ans X 1. OOXXXX

X 2. XXXXXX

3. OXXXXX

X 4. OOXXXXX

Question ID: 9623409703 Status: Answered

Chosen Option: 3

Q.1 Two resistors of 2 Ω and 6 Ω are connected in series and this combination is connected across a 12 V battery. Find the

power supplied by the battery.

Ans X 1. 16 W

X 2. 10 W

✓ 3. 18 W

X 4. 14 W

Question ID: 9623409675 Status: Answered

Chosen Option: 3

Q.1 An airplane flies at the speed of 50 m/s. How much distance (in km) will it cover in a flight of 5 hours?

Ans X 1. 880

X 2. 895

3. 900

X 4. 850

Question ID: 9623409684 Status: Answered

Chosen Option: 3

Q.1 Name the scientist who discovered bacteria.

Ans

1 AV Leeuwenhoek

2. Eugen Goldstein

https://rrbalp.digialm.com///per/g22/pub/1907/touchstone/AssessmentQPHTMLMode1//1907O193/1907O193S9D19071/155332565... X 3. James Chadwick X 4. Robert Koch Question ID: 9623409628 Status: Not Answered Chosen Option: --Q.1 It is mainly due to the gravitational effect of the _____ on the rotating earth that the level of water in the sea rises and falls. Ans 🗸 1. Moon X 2. Sun X 3. Venus X 4. Mercury Question ID: 9623409638 Status: Answered Chosen Option : 1 Q.1 The Ajanta Caves in Maharashtra feature paintings and sculptures that depict tales? Ans 🗸 1. Buddhist X 2. Islamic X 3. Maratha X 4. Arabic Question ID: 9623409630 Status: Not Attempted and Marked For Review Chosen Option: --Q.2 Identify the material having high coefficient of volume expansion. Ans X 1. Brass X 2. Glass 3. Alcohol X 4. Water Question ID: 9623409650 Status: Not Answered Chosen Option: --Q.2 A source of voltage V maintains a current i in a circuit. The energy supplied to the circuit by the source in time t is Ans X 1. Vi/t ✓ 2. Vit X 3. V/it X 4. 1/Vit Question ID: 9623409671 Status: Marked For Review Chosen Option: 2 Q.2 A sum of ₹2,000 was spent in buying a pair of trousers. The sum spent was 2/5th of the total money Shashi had with her.

2 How much was the total money she had?

Ans √ 1. ₹5,000 × 2. ₹4,250

× 3. ₹4,750

X 4. ₹4,000

Question ID: 9623409681 Status: Answered

Chosen Option: 1

Q.2 A body starts from rest. Its displacement is proportional to _____ when its acceleration is constant.

Ans X 1. time

× 2. velocity

X 3. work

4. time squared

Question ID: 9623409668

Status: Marked For Review

Chosen Option: 2

Q.2 A got ₹80 as his share of profit where the total profit was ₹240 and the ratio of profit distribution between A and B was x :
 4 2. What is the value of x?

Ans 💞 1. 1

X 2. 4

X 3. 2

X 4. 5

Question ID: 9623409694

Status: Answered

Chosen Option: 3

$$^{Q.2}_{5}$$
 sec 45° – tan 60° = ?

Ans
$$\sqrt{1.} -\sqrt{3} + \sqrt{2}$$

$$\times$$
 2. $\sqrt{3} + \sqrt{2}$

$$\times$$
 3. $\frac{\sqrt{3}}{2}$

$$\times$$
 4. $-\sqrt{3}-\sqrt{2}$

Question ID: 9623409690

Status: Answered

Chosen Option: 1

Q.2 If, '+' represents '×', '-' represents '+', 'x' represents '+' and '+' represents '-', then find the value of the following expression.
 6 × 3 + 6 ÷ 2 = ?

Ans X 1. 12

X 2. 20

X 3. 10

Question ID: 9623409706

Status: Answered

Chosen Option: 4

Q.2 A number is as much greater than 50 as it is lesser than 84. What is the number? Ans 🗸 1. 67 X 2. 66 X 3. 68 X 4. 65 Question ID: 9623409686 Status: Not Answered Chosen Option: --Q.2 How many medals did India win in Rio Olympics, 2016? Ans X 1. 5 X 2. 3 X 3. 4 **4**. 2 Question ID: 9623409626 Status: Not Answered Chosen Option: --Q.2 protection must be worn whenever noise levels exceed the noise exposure standard. Ans ✓ 1. Hearing X 2. Foot X 3. Head X 4. Eye Question ID: 9623409656 Status: Answered Chosen Option: 1 ^{Q.3} What is the unit's digit in $3^{66} \times 6^{41} \times 7^{53}$ Ans X 1. 3 **2**. 8 X 3. 6 X 4. 7 Question ID: 9623409677 Status: Answered Chosen Option: 3 Q.3 If C S D means C is daughter of D, C & D means C is mother of D and C % D means C is son of D, then what does W S X 1 & Y % Z mean? Ans V 1. Z is father of W X 2. Z is wife of W X 3. Z is mother of W X 4. Z is daughter of W Question ID: 9623409708 Status: Answered Chosen Option: 1

Q.3 2	Unscramble the letters in the words given bel	w and find the odd word out.				
Ans						
	× 2. ILNO					
	X 3. ERTIG					
	X 4. FLOW					
		Ouestion ID : 9623409712				
		Status : Not Attempted and Marked	For Review			
		Chosen Option :				
Q.3 3	Which Indian cricketer received the Pad	na Bhushan in 2018?				
Ans	✓ 1. MS Dhoni					
	× 2. Sachin Tendulkar					
	X 3. Virat Kohli					
	★ 4. Saurav Ganguly					
		Question ID : 9623409631				
		Status : Answered				
		Chosen Option : 1				
	A machine was bought for ₹1,500 and a repairing charge of ₹100 was pagain a profit of 25%?	afterwards. At what price should it be sold to				
4 Ans	✓ 1. ₹2,000					
	× 2. ₹1,920					
	Berlin Control					
	X 3. ₹2,040					
	× 4. ₹1,960					
		Question ID : 9623409680				
		Status : Answered Chosen Option : 1				
	ENERGIA WEE HENNOOSE ENERGY AND A CHEST					
5	What is 80% of 50% of 90?					
Ans	X 1. 30					
	√ 2. 36					
	X 3. 34					
	X 4. 32					
		Question ID : 9623409695				
		Status : Answered Chosen Option : 2				
6	Velocity ratio of simple machine is the ratio of distance travelled by the _ the machine.	to the distance travelled by the in				
Ans	X 1 effort; effort					
	× 2. load; effort					
	★ 4. load; load					
		Question ID : 9623409659				
		Status : Not Answere	ed			

https://rrbalp.digialm.com///per/g22/pub/1907/touchstone/AssessmentQPHTMLMode1//1907O193/1907O193S9D19071/155332565... Chosen Option: --Q.3 A brass rod (thermal conductivity 109 J/s m K) has an area of cross section 0.04 m² and length 20 cm. If the two end of the 7 rod are maintained at a temperature difference of 200°C, the rate of heat flow through the rod is Ans X 1. 2.32 kJ/s × 2. 3.42 kJ/s √ 3. 4.36 kJ/s X 4. 5.80 kJ/s Question ID: 9623409665 Status: Not Attempted and Marked For Review Q.3 A car covers 400 m in 20 seconds. Find the average speed (in km/hr) of the car. Ans X 1. 108 X 2. 124 **3**. 72 X 4. 36 Question ID: 9623409669 Status: Answered Chosen Option: 3 Q.3 The ages of X and Y are in the ratio 4:7. Three years earlier, the ratio of their ages was 1:2. What is the difference 9 between their current ages (Y - X)? Ans 💢 1. 6 **2**. 9 X 3. 3 X 4. 7.5 Question ID: 9623409700 Status: Answered Chosen Option: 2 Old If $x = \sqrt{125} X \sqrt{30} X \sqrt{6}$, then x is equal to: Ans X 1. 125 √ 2. 150 X 3. 175 X 4. 136 Question ID: 9623409697 Status: Answered Chosen Option: 2 Q.4 A 4-digit number 1xy7 is divisible by 11. What is the value of x-y? Ans 💢 1. - 4 X 2. - 8 X 3. - 2 Question ID: 9623409676

Status: Answered

Q.4 A sum of ₹10,000 amounts to ₹11,449 in 2 years, when the interest is compounded annually. The interest rate percent per Ans X 1. 1% X 2. 6% 3. 7% X 4. 8% Question ID: 9623409685 Status: Answered Chosen Option: 3 Q.4 A salesperson starts from his office and drives 2 km east, then turns north and drives 7 km, then turns to his right and drives
 6 km, then turns south and drives 7 km. Where is he now with respect to his starting position? Ans X 1. 8 km west X 2. 4 km west X 3. 4 km east 4. 8 km east Question ID: 9623409722 Status: Answered Chosen Option: 4 Q.4 Find the odd group of letters from the given alternatives. Ans 🥒 1. HJL X 2. EFG X 3. PQR X 4. VWX Question ID: 9623409717 Status: Answered Chosen Option: 1 is a theoretical exact plane, axis or point location that GD & T or dimensional tolerances are referenced to. Q.4 A_ Ans X 1 section X 2. flange X 3. frame 4. datum Question ID: 9623409645 Status: Not Answered Chosen Option: --Q.4 RK Narayan is famous for his book _____. Ans X 1. The Toom on the Roof X 2. A Suitable Boy X 3. Two Lives 4. Malgudi Days Question ID: 9623409632

Status: Not Answered

Chosen Option: --

Q.4 Pipes A and B can fill a tank in 12 minutes and 16 minutes respectively. Both A and B are opened for 4 minutes and then A is closed. How much extra time will B take to fill the tank completely?

Ans

- \times 1. $\frac{21}{4}$ minutes
- X 2. 6 minutes
- \checkmark 3. $\frac{20}{3}$ minutes
- X 4. 7 minutes

Question ID: 9623409692 Status: Answered

Chosen Option: 3

Q.4 A and B can do a work in 15 days, B and C can do the work in 20 days and A and C can do the work in 10 days. In how many days will they together complete the work?

Ans

- √ 1. 9.23 days
- X 2. 10.91 days
- X 3. 10.71 days
- X 4. 10.67 days

Question ID: 9623409698 Status: Answered

Chosen Option: 1

Q.4 In a code language, 295 means 'water is liquid', 549 means 'oil is liquid' and 824 means 'oil on water'. Find the code for 'on'.

Ans X 1. 2

X 2. 4

3. 8

X 4. 5

Question ID: 9623409705

Status: Answered

Chosen Option: 3

Q.5 A software program that has been developed to harm other computers is called a/an

Ans X 1. server

X 2. LAN

X 3. operating system

4. malware

Question ID: 9623409657

Status: Answered

Chosen Option: 4

Q.5 Where is the Headquarters of UNESCO located?

Ans

- X 1. New York City
- 2. Paris

X 3. Washington DC X 4. Geneva

Question ID: 9623409633

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.5 A 200 g block of iron was heated from 30°C to 60°C How much heat was transferred to the block (specific heat of iron is

2 450 Jkg⁻¹K⁻¹)?

Ans X 1. 270 J

✓ 2. 2700 J

X 3. 6000 J

X 4. 27 J

Question ID: 9623409664 Status: Answered Chosen Option: 2

Q.5 You are given a question and two statements. Identify which of the statements is/are necessary/sufficient to answer the question.

Question: What was the discount percent offered on the soap by the store?

I) The store is giving 1 soap free on purchase of three.

II) ₹10 discount is offered on purchase of soap worth ₹36.

Ans X 1. I alone is sufficient while II alone is not sufficient

X 2. II alone is sufficient while I alone is not sufficient

X 3. Neither I nor II is sufficient

4 Either I or II is sufficient

Question ID: 9623409715 Status: Answered

Chosen Option: 4

Q.5 I, J, K and L are sitting in a row. L and I are sitting next to each other and I and K are at the ends. Who is sitting next to J?

Ans X 1. Only K

X 2. L and I

✓ 3. K and L

X 4. Only L

Question ID: 9623409719

Status: Answered

Chosen Option: 3

Q.5 The volume of a given amount of water _____ between 0° C to 4° C.

Ans 1 decreases

× 2. increases

X 3. remains constant

X 4. is zero

Question ID: 9623409641 Status: Answered

Chosen Option: 3

Q.5

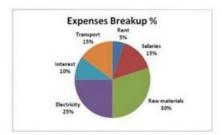
6 Which two signs should be interchanged to make the given equation correct?

$$9 \div 3 + 8 \times 2 - 15 = 2$$

- Ans \times 1. \times and -
 - ✓ 2. + and -
 - \times 3. + and \times
 - X 4. + and -

Question ID: 9623409707 Status: Answered Chosen Option: 2

Q.5 The pie chart shows the breakup in percentages of the various expenses of a Company. Study the diagram and answer the following question.



What is the interest expense if total expenses are ₹25,000 approximately?

- Ans X 1. ₹5,000
 - × 2. ₹9,000
 - √ 3. ₹2,500
 - X 4. ₹1.800

Question ID: 9623409716 Status: Answered

Chosen Option: 3

Q.5 Greater the value of _____ of a material, the more rapidly it will conduct heat.

- Ans X 1 melting point
 - X 2. latent heat
 - X 3. regelation
 - 4 thermal conductivity

Question ID: 9623409654 Status: Answered Chosen Option: 4

Q.5 Name the painter of the famous painting, 'Mahishasura'.

- Ans X 1. Amrita Sher-Gil
 - ✓ 2. Tyeb Mehta
 - X 3. MF Hussain
 - X 4 Raja Ravi Verma

Question ID: 9623409629

Status: Not Answered

Chosen Option: --

 $_{0}^{Q.6}$ If $\sin \Theta = 15/17$, then $\cot \Theta = ?$

Ans

- × 1. $\frac{17}{15}$
- \times 3. $\frac{8}{17}$
- \times 4. $\frac{15}{8}$

Question ID: 9623409691 Status: Answered

Chosen Option: 2

Q.6 What is the work that needs to be done to increase the speed of a 1 kg ball from 2 m/s to 4 m/s?

- Ans 🗸 1. 6 J
 - X 2. 10 J
 - X 3. 8 J
 - X 4. 12 J

Question ID: 9623409640 Status: Answered

Chosen Option: 1

Q.6 Safety boots or shoes must be worn in designated areas to protect your _____ from falling objects.

- Ans X 1. eye
 - X 2. head
 - X 3. ear
 - √ 4. feet

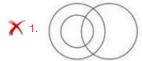
Question ID: 9623409655

Status: Answered

Chosen Option: 4

Q.6 Which of the following Venn diagrams best represents the relationship between Indians, doctors and women?

Ans







Question ID: 9623409714 Status: Answered Chosen Option: 3

Q.6 Which of the following options does not have an SI base unit?

Ans X 1. Amount of substance

X 2. Electric current

√ 3. Frequency

X 4. Luminous intensity

Question ID: 9623409636 Status: Answered

Chosen Option : 1

Q.6 If the width of a standard engineering drawing sheet is 841 mm, then its length would be _____ mm.

Ans X 1. 1216

X 2. 1250

X 3. 1000

√ 4. 1189

Question ID: 9623409648

Status: Answered

Chosen Option: 4

Q.6 Reflection of point (-2, -6) on the Y-axis is:

Ans 🗸 1. (2, -6)

X 2. (2, 6)

X 3. (-2, 6)

X 4. (-6, -2)

Question ID: 9623409688

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.6 In angular measurements, one radian is equivalent to ______ degrees (approximately).

Ans X 1. 180

X 2. 90

√ 3. **57.27**

X 4. 65.27

Question ID: 9623409637

Status: Not Answered

Chosen Option: --

Q.6

8	8 Choose the figure that is different from the rest.	
Ans	Ans	
	X 1.	
	×2.	
	× 4.	
	Que	estion ID : 9623409720 Status : Answered
	Chose	n Option : 3
0.6	Q.6 Two planes E and F start flying from the same point. E flies 7 km west, then turns to its left and flies 15 km. Meanwhile F	
9	g flies 11 km east and turns right and flies 15 km. Where is F with respect to E?	
Alis	Ans 1. F is 18 km east of E	
	 X 2 F is 4 km west of E X 3 F is 18 km west of E 	
	× 4. F is 4 km east of E	
	T is than east of B	
	Que	estion ID : 9623409723 Status : Answered
	Chose	n Option : 1
	Q.7 Two resistors of 2 Ω and 6 Ω are connected in series and this combination is connected across a 12 V battery. Find the	
0 Ans	o current in the 6 Ω resistor. Ans \times 1. 2.5 A	
	✓ 2. 1.5 A	
	X 3. 0.5 A	
	X 4. 3.5 A	
	Que	estion ID : 9623409674
	Chasa	Status : Answered
	Criose	n Option : 2
Q.7 1	Q.7 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: The human body produces Vitamin D when exposed to sunlight.	
	Assumption I: The human body will have Vitamin D even if it is not consumed via food. Assumption II: A large portion of the global population suffers from Vitamin D deficiency.	
Ans	Ans X 1. Neither I nor II is implicit	
	✓ 2. Only assumption I is implicit	
	X 3. Both I and II are implicit	

X 4. Only assumption II is implicit

Question ID: 9623409724 Status: Not Answered

Chosen Option: --

Q.7 Select the option that is related to the third number in the same way as the second number is related to the first number.

-9/11:11/9::13/2:?

Ans X 1. 3/7

X 2. 2/13

X 3. -7/3

√ 4. -2/13

Question ID: 9623409702 Status: Answered

Chosen Option: 4

Q.7 Kuchipudi has its roots in which Indian State?

Ans 🗸 1. Andhra Pradesh

X 2. Kerala

X 3. Arunachal Pradesh

X 4. Himachal Pradesh

Question ID: 9623409635

Status: Marked For Review

Chosen Option: 2

Q.7 Tap M and N can together fill a cistern in 48/13 minutes. N alone can fill it in 6 minutes. How much time will M alone take

to fill the cistern?

Ans X 1. 9.4 minutes

√ 2. 9.6 minutes

X 3. 9 minutes

X 4. 8.6 minutes

Question ID: 9623409693

Status: Answered

Chosen Option: 2

Q.7 In an examination, the highest score and the lowest score differed by 55 and the higher one was 9/4 times the lower one.

What is the lowest score?

Ans 🗙 1. 48

X 2. 40

X 3. 36

Question ID: 9623409687

Status: Answered

Chosen Option: 4

Q.7 In engineering drawing, the letters LH signifies _____.

Ans

✓ 1. Left Hand

X 2. Level Hide

X 1 ₹10,200

× 2. ₹10,800

X 3. ₹11,000

√ 4. ₹10,000

Question ID: 9623409679

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.8 What is the median of 8, 5, 7, 9, 11, 6, 10?

Ans 🗸 1. 8

X 2. 10

X 3. 9

X 4. 7

Question ID: 9623409696 Status: Answered

Chosen Option: 1

Q.8 If straight lines are drawn from various points on the contour of an object to meet a plane, the figure obtained on the plane is called the

Ans X 1. development

X 2. dimensioning

X 3. animation

√ 4. projection

Question ID: 9623409646

Status: Not Answered

Chosen Option: --

Q.8 A series is given, with one number missing. Choose the correct alternative from the given ones that will complete the series.

1.14, 1.28, 1.42, ?, 1.70, 1.84

Ans X 1. 1.54

2. 1.56

X 3. 1.68

X 4. 1.62

Question ID: 9623409704

Status: Answered

Chosen Option: 2

Q.8 A wire of length 1 and radius r has a resistance R. The resistance of another wire made of the same material but having half

its length and half its radius will be

Ans 🗸 1. 2R

X 2. 4R

X 3. R

X 4. R/2

Question ID: 9623409672

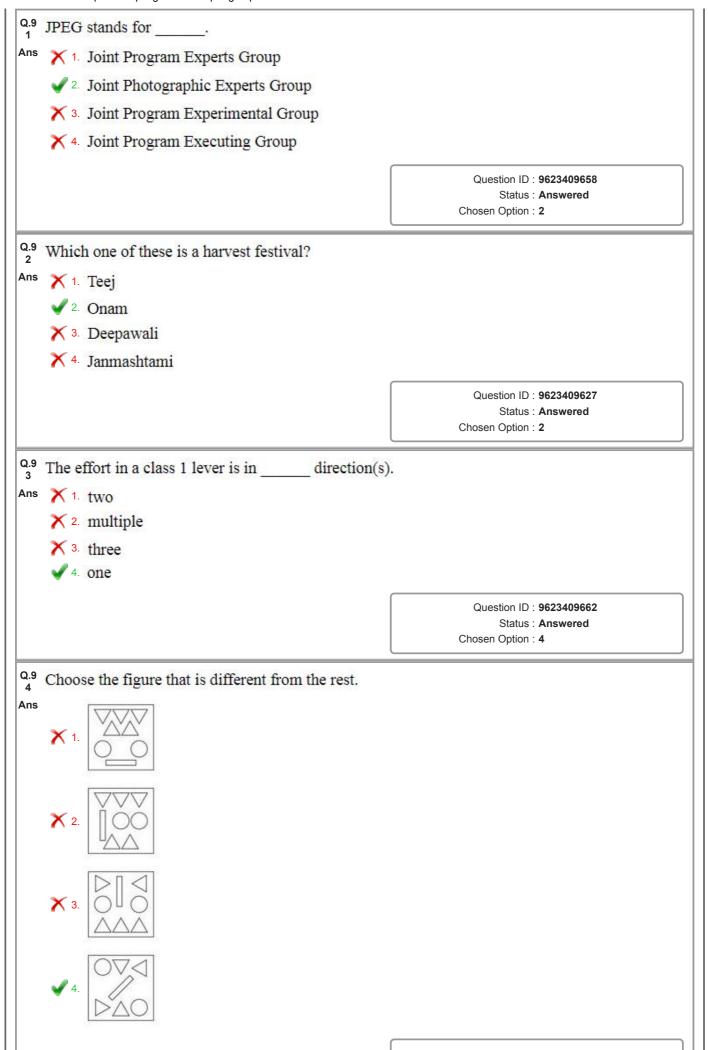
Status: Answered

Chosen Option: 1

Q.8 What is the curved surface area of a hemisphere whose radius is 7 cm? (take $\pi = 22/7$)

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Chosen Option: 4



Status: Answered

Chosen Option: 4

Q.9 The effort applied to move a load is 15 units and the machine advantage is observed to be 3. Find the load.

- Ans X 1. 3 units
 - X 2. 5 units
 - X 3. 15 units
 - 4. 45 units

Question ID: 9623409661 Status: Answered

Chosen Option: 2

Q.9 If G+H means G is daughter of H, G-H means G is sister H and G*H means G is husband of H, which of the following

6 shows that I is the daughter of H?

- Ans \times 1. I + J F * H
 - X 2. I * J F + H
 - \times 3. I J * F + H
 - √ 4. I J + F * H

Question ID: 9623409709

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.9 Select the option that is related to the third term in the same way as the second term is related to the first term.

Tall: Short:: Glad:?

- Ans 🗸 1. Sad
 - X 2. Happy
 - X 3. Emotion
 - X 4. Smile

Question ID: 9623409701

Status: Not Answered

Chosen Option: --

Q.9 Who was the first governor of the Reserve Bank of India?

- Ans X 1. Sir James Braid Taylor
 - ✓ 2. Sir Osborne A Smith
 - X 3. KR Puri
 - X 4. HVR Iyengar

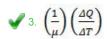
Question ID: 9623409634

Status: Not Answered

Chosen Option: --

Q.9 Molar specific heat capacity of a substance is _____.

- \times 1. $\left(\frac{1}{\mu}\right)\left(\frac{\Delta T}{\Delta Q}\right)$
- \times 2. $\mu\left(\frac{\Delta T}{\Delta O}\right)$

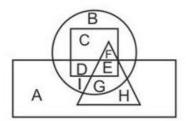




Question ID: 9623409653 Status: Not Answered

Chosen Option: --

Q.1 In the following figure, square represents Chinese, 00 triangle represents dancers, circle represents male and rectangle represents architects. Which set of letters represents dancers who are male?



Ans X 1. IGH

X 2. DEIG

X 3. DEF

✓ 4. GEF

Question ID: 9623409713

Status: Answered

Chosen Option: 4

Section: Electrician

Q.1 In the _____ region, a transistor act as a closed switch.

Ans 🗸 1 saturation

X 2. active region

X 3. inverse active region

X 4. cut-off region

Question ID: 9623409733

Status: Not Answered

Chosen Option: --

Q.2 Iron loss of a transformer can be measured by:

Ans X 1 unity power factor watt meter

× 2. any type of watt meter

√ 3. low power factor watt meter

X 4. frequency meter

Question ID: 9623409741

Status: Answered

Q.3 Hysteresis loss can be minimized by selecting a material for the core that has:

- √ 1 low hysteresis coefficient
- × 2. unit hysteresis coefficient
- 3 high hysteresis coefficient
- X 4. low transmission coefficient

Question ID: 9623409738 Status: Answered

Chosen Option: 1

Q.4 The ripple factor for a full-wave rectifier with capacitor is given by:

$$r = \frac{1}{4\sqrt{3}fR_L}$$

$$ightharpoonup$$
 3. $r = \frac{1}{\sqrt{3fR_LC}}$

$$\checkmark 4. r = \frac{1}{4\sqrt{3}fR_LC}$$

Question ID: 9623409729

Status: Answered

Chosen Option: 2

Q.5 In an induction motor, as the air gap increases:

- Ans 1. power factor will decrease
 - X 2. speed of motor will decrease
 - X 3. windage losses will increase
 - X 4. speed of motor will increase

Question ID: 9623409776

Status: Answered

Chosen Option: 1

Q.6 In a current transformer, the number of primary turns is always:

- Ans 🗸 1. less than the number of secondary turns
 - × 2 equals the number of secondary turns
 - X 3. greater than the number of secondary turns
 - X 4. zero

Question ID: 9623409769

Status: Answered

Chosen Option: 1

Q.7 For transmission and distribution of electric power, which one of the following material is NOT used?

X 2. Copper

X 3. Steel

X 4. Aluminium

Question ID : 9623409747 Status : Answered

Chosen Option : 1

Q.8 Among the following, which feature is best suited for insulating materials?

Ans X 1. Low melting point

√ 2. High dielectric strength

X 3. Low mechanical strength

X 4. Good current conductivity

Question ID : 9623409780

Status: Answered

Chosen Option : 2

Q.9 Among the following, which material is a good conductor of electricity?

Ans X 1. Rubber

X 2. Bakelite

√ 3. Silver

X 4. Glass

Question ID: 9623409781

Status: Answered

Chosen Option: 3

Q.1 The input power of an electric heater that draws 10 A at 230 V supply source is:

Ans X 1. 0 W

✓ 2. 2300 W

X 3. 23 W

X 4. 230 W

Question ID: 9623409785

Status: Answered

Chosen Option: 2

Q.1 Which of the following is NOT a trivalent impurity?

Ans X 1. Gallium

X 2. Boron

3. Phosphorus

X 4. Indium

Question ID: 9623409759

Status : Answered

Chosen Option: 3

Q.1 From the following parameters, which parameter's variation will not affect the capacitance of the capacitor?

Ans

✓ 1. Thickness of the plates

X 2. Distance between the plates

X 3. Area of the plates

X 4. Nature of the dielectric

Question ID: 9623409760 Status: Answered

Chosen Option: 1

Q.1 The average power dissipated in a pure inductor is:

Ans X 1. infinite

× 2. proportional to value of inductance

3. proportional to applied voltage

4. zero

Question ID: 9623409800 Status: Answered Chosen Option: 1

Q.1 In the case of direct current:

Ans

✓ 1 magnitude and direction of current remains constant

× 2 magnitude of current changes with time

X 3. magnitude and direction of current changes with time

X 4 magnitude of current remains constant

Question ID: 9623409762 Status: Answered

Chosen Option: 1

Q.1 In portable drills, which of the following motor is used?

Ans X 1. Repulsion motor

✓ 2. Universal motor.

X 3. Hysteresis motor

X 4. Capacitor run motor

Question ID: 9623409746

Status: Answered

Chosen Option: 2

Q.1 If a resistance of 10 ohms and a capacitance of 1 µF is connected across a 230 V, 50 Hz AC supply, the capacitive

6 reactance of the circuit is:

√ 1 3183Ω

× 2. 3.183Ω

× 3. 31.83Ω

× 4. 0.0318Ω

Question ID: 9623409787 Status: Answered

Chosen Option: 1

Q.1 Copper loss is negligible at ...

- Ans X 1. 1/4 load
 - X 2. half load
 - √ 3. no load
 - X 4. full load

Question ID: 9623409736 Status: Answered Chosen Option: 1

Q.1 Which of the following two losses are together called core loss?

- Ans 🗸 1. Eddy current loss and hysteresis loss
 - × 2. Copper loss and hysteresis loss
 - X 3. Primary copper loss and secondary copper loss
 - X 4. Connector loss and transmission loss

Question ID: 9623409737 Status: Answered Chosen Option: 1

For an ideal transformer, if $I_2/I_1 = 2$ and $E_2 = 100$, E_1 will be:

- Ans 🗸 1. 200
 - X 2. 25
 - X 3. 100
 - X 4. 50

Question ID: 9623409764 Status: Answered Chosen Option: 1

Q.2 Power consumed in a series RLC circuit can be calculated using:

- Ans \times 1. P = VI
 - \times 2. P = IR cos ϕ
 - √ 3. P = VI cos Φ
 - \times 4. P = IR

Question ID: 9623409788 Status: Answered Chosen Option: 1

Q.2 In the _____ region, a transistor act as an open switch.

- Ans 🗸 1. cut-off region
 - X 2. saturation
 - X 3. inverse active region
 - X 4. active region

Status: Marked For Review

Chosen Option: 4

Q.2 Which among the following, remains same in a series circuit?

Ans X 1. Resistance

2. Current

X 3. Power

X 4. Voltage

Question ID: 9623409779

Status: Answered Chosen Option: 2

Q.2 Which of the following protects a cable against mechanical injury?

Ans X 1. Core

X 2. Sheath

X 3. Bedding

4. Armouring

Question ID: 9623409774 Status: Not Answered

Chosen Option: --

Q.2 A circuit in which resistances are connected end to end so that there is only one path for current to flow is called a

Ans X 1. parallel circuit

× 2 neither series nor parallel circuit

3. series circuit

X 4. series-parallel circuit

Question ID: 9623409726

Status: Answered

Chosen Option: 3

Q.2 Three resistances of 2 ohms, 3 ohms and 6 ohms are connected in parallel. the total resistance of the combination is:

Ans X 1. 3 ohm

✓ 2. 1 ohm

X 3. 11 ohm

X 4. 36 ohm

Question ID: 9623409753

Status: Answered

Chosen Option: 2

Q.2 Three identical resistors are first connected in a star and then in a delta configuration. The ratio of power consumption

6 in the first combination to the second will be:

Ans 🗙 1. 1

2. 1/3

X 3. 3



Question ID: 9623409758 Status: Answered Chosen Option: 1

Q.2 Three-point starter can be used for:

- Ans 🗸 1. both shunt and compound motor
 - X 2. both series and compound motor
 - X 3 series motor only
 - X 4 shunt motor only

Question ID: 9623409743 Status: Answered

Chosen Option: 1

Q.2 Which of the following device is bidirectional?

- Ans X 1. SCR
 - X 2. BJT
 - ✓ 3. TRIAC

X 4. GTO

Question ID: 9623409793

Status: Answered

Chosen Option: 2

Q.2 PIV in a full-wave rectifier is:

- Ans X 1. V_m
 - √ 2. 2V_m
 - \times 3. $V_m/\sqrt{2}$
 - × 4. V_m/2

Question ID: 9623409766

Status: Marked For Review

Chosen Option: 2

Q.3 Hysteresis loss is given by:

- Ans X 1. $W_{cu} = (I_1^2 R_1) W$
 - $\sqrt{2} W_h = \eta B_{max}^{1.6} fV W$
 - X 3. $W_{cu} = (I_1^2 R_1 + I_2^2 R_2) W$
 - $X = KB_{max}^2 f^2 t^2 W$

Question ID: 9623409739 Status: Answered

Chosen Option: 2

 $^{Q.3}_{1}$ Overheating of DC motors is mainly due to:

Ans

Chosen Option: 2

Q.3 A feeder in a transmission system feeds power to:

- Ans X 1. generating station
 - X 2. generator and distributor
 - X 3. service main
 - 4. distributors

Question ID: 9623409749 Status: Answered

Chosen Option: 4

Q.3 Which one of the following motors is identical to an induction motor?

- Ans X 1. Synchronous motor
 - √ 2. Asynchronous motor
 - X 3. DC series motor
 - X 4. DC compound motor

Question ID: 9623409744

Status: Answered

Chosen Option: 3

- Q.3 If the voltage drop across individual resistors R1, R2 and R3 connected to a battery are 10 V, 20 V and 30 V respectively,
- then the total battery voltage is:

- Ans X 1. zero
 - X 2. 20 V
 - X 3. 30 V
 - 4. 60 V

Question ID: 9623409783 Status: Answered

Chosen Option: 4

Q.3 The most commonly used method for cooling power transformers is:

Ans X 1. natural air cooling

- X 2. air blast cooling
- X 3. gas cooling
- √ 4. oil cooling

Question ID: 9623409797

Status: Answered

Chosen Option: 1

Q.3 The expression for inductive reactance (XL) of an AC circuit is:

- Ans \times 1. $2\pi f$
 - × 2. 2πL
 - \times 3. $\frac{1}{2\pi fL}$
 - √ 4. 2πfL

Question ID: 9623409786

Status: Answered

Chosen Option: 4

Q.4 Choppers are converters.

- Ans X 1. AC to AC
 - ✓ 2. DC to DC
 - X 3. DC to AC
 - X 4. AC to DC

Question ID: 9623409734 Status: Answered Chosen Option: 4

Q.4 The function of inverter in an UPS is to:

- Ans X 1. convert DC to DC
 - ✓ 2. convert DC to AC
 - X 3. convert AC to AC
 - X 4. convert AC to DC

Question ID: 9623409794 Status: Answered

Chosen Option: 2

Q.4 What is the surge resistance of cable?

- Ans X 1. 10 Ω
 - X 2. 5 Ω
 - **√** 3. 50 Ω
 - X 4. 20 Ω

Question ID: 9623409748 Status: Not Answered

Chosen Option: --

Q.4 For the maximum efficiency of a transformer:

- Ans X 1. copper loss should be greater than iron loss
 - × 2. copper loss should be zero
 - 3. copper loss should be equal to iron loss
 - X 4. copper loss should be less than iron loss

Question ID: 9623409761

Status: Answered

Chosen Option: 3

Q.4 The resistance of an ideal voltmeter is:

- Ans X 1. very large
 - X 2. zero
 - √ 3. infinite
 - X 4. very low

Question ID: 9623409750 Status: Answered

Chosen Option: 1

Q.4 The ripple factor for a half-wave rectifier with capacitor is given by:

$$ightharpoonup$$
 1. $r = \frac{1}{4\sqrt{3}fR_LC}$

$$\checkmark 2. \ r = \frac{1}{2\sqrt{3}fR_LC}$$

$$imes$$
 3. $r = rac{1}{4\sqrt{3}fR_L}$

$$\star$$
 4. $r = \frac{1}{\sqrt{3fR_LC}}$

Question ID: 9623409730

Status: Not Answered

Chosen Option: --

Q.4 Which one of the following materials is usually used for the construction of transformer core?

Ans X 1. Brass

√ 2. Silicon steel

X 3. Aluminium

X 4. Copper

Question ID: 9623409740 Status: Answered

Chosen Option: 2

Q.4 Among the following, which method is NOT preferred to measure low resistances?

1 Megohm bridge

X 2 Potentiometer method

X 3. Ammeter-voltmeter method

X 4. Kelvin bridge method

Question ID: 9623409784

Status: Answered

Chosen Option: 4

Q.4 Which of the following material is NOT used as fuse wire?

Ans X 1. Silver

X 2. Aluminium

3. Paper

X 4. Copper

Question ID: 9623409772

Status: Answered

Chosen Option: 3

Q.4 For switching applications, a transistor needs to be biased to operate in which of the following regions?

Ans X 1. Active region

X 2. Active or inverse active region

3. Saturation or cut-off region

X 4. Inverse active region

Status: Not Answered

Chosen Option : --

Q.5 An SCR consists of:

- Ans X 1. no PN junction
 - ✓ 2. three PN junction
 - X 3. one PN junction
 - X 4. two PN junction

Question ID: 9623409767 Status: Not Answered

Chosen Option: --

 $_{1}^{Q.5}$ In a DC shunt motor, the torque produced is proportional to:

- X 1. (ampere-turn)²
- √ 2. armature current
- X 3. ampere-turn
- X 4. (armature current)²

Question ID: 9623409765

Status: Not Answered

Chosen Option: --

Q.5 For amplifier applications, a transistor needs to be biased to operate in which of the following regions?

- Ans X 1. Cut-off region
 - ✓ 2. Active region
 - X 3. Saturation region
 - X 4. Depletion region

Question ID: 9623409775

Status: Not Answered

Chosen Option: --

Q.5 UJT is used for which of the following applications?

- Ans X 1. Rectification
 - X 2. Amplification
 - √ 3. Sawtooth waveform generation
 - X 4. Attenuation

Question ID: 9623409792 Status: Not Answered

Chosen Option: --

Q.5 Conductance is defined as reciprocal of:

Ans

√ ¹ resistance

2. susceptance

Ans X 1. Class B

√ 2. Class A

X 3. Class AB

X 4. Class C

Question ID: 9623409796 Status: Not Answered

Chosen Option: --

Q.5 The order in which the voltages in the phases reach their maximum positive value is called the _____.

Ans X 1. phase current

× 2. line voltage

X 3. phase voltage

√ 4. phase sequence

Question ID: 9623409727

Status: Not Attempted and Marked For Review

Chosen Option: --

Q.5 Power transmission for long distance is carried out at:

Question ID : 9623409789 Status : Answered

Chosen Option: 1

Q.6 Which of the following is a valid grade for which electric cables are commercially manufactured? Ans X 1. 50/100V × 2. 100/200V X 3. 270/300V 4. 230/400V Question ID: 9623409782 Status: Not Answered Chosen Option: --Q.6 In lap winding, the number of parallel paths are always: Ans 🗸 1 same as the number of poles X 2. double the number of poles X 3. half the number of poles X 4. two Question ID: 9623409773 Status: Answered Chosen Option: 1 $^{Q.6}$ In actual practice, the rating of transformer is specified in: Ans X 1. KA X 2. KW √ 3. KVA X 4. KVAR Question ID: 9623409770 Status: Answered Chosen Option: 3 Q.6 The form factor of an AC wave is defined as the ratio of: Ans X 1. RMS value to instantaneous value X 2. peak value to average value 3. RMS value to average value X 4. peak value to instantaneous value Question ID: 9623409756 Status: Answered Chosen Option: 3 Q.6 If a 4-pole induction motor has a speed of 1800rpm, then the frequency at which the motor is operating is: Ans X 1. 50Hz ✓ 2. 60Hz X 3. 30Hz X 4. 40Hz Question ID: 9623409791 Status: Answered

Chosen Option: 2

Q.6 In a Fleming's right-hand rule, the thumb indicates the:

- Ans X 1 direction of induced voltage
 - X 2. direction of current flow
 - X 3. direction of magnetic field
 - √ 4 direction of motion of conductor

Question ID: 9623409763 Status: Answered

Chosen Option: 2

Q.7 The unit of sensitivity of an instrument is:

- Ans X 1. ampere/sec
 - ✓ 2. ohm/volt
 - X 3. volt/ohm
 - X 4. volt-amp

Question ID: 9623409795 Status: Not Answered

Chosen Option: --

Q.7 A transformer transfers which of the following parameters?

- Ans X 1. Current
 - 2. Power
 - X 3. Frequency
 - X 4. Voltage

Question ID: 9623409777

Status: Answered

Chosen Option: 2

Q.7 A 3-point starter is used to:

- Ans X 1 minimize back emf
 - X 2. maximize armature current
 - √ 3. minimize armature current
 - X 4. maximize back emf

Question ID: 9623409768 Status: Not Answered

Chosen Option: --

Q.7 The complement of (A.B) is:

- Ans X 1 complement of A . complement of B
 - × 2. A.B
 - \times 3. A + B
 - ✓ 4. complement of A + complement of B

Status: Not Answered

Chosen Option: --

Q.7 Which of the following motor is self-starting?

- Ans X 1 Single-phase induction motor
 - X 2. Low horse power motor
 - X 3. Variable speed motor
 - √ 4. Three-phase induction motor

Question ID: 9623409742 Status: Not Answered

Chosen Option: --

 $^{\mathrm{Q.7}}_{\mathrm{5}}$ In an electrical machine, the core is laminated to reduce:

- √ 1 eddy current loss
- × 2. hysteresis loss
- X 3. friction loss
- X 4. copper loss

Question ID: 9623409754

Status: Answered

Chosen Option: 1