

Scientific Assistant in India Meteorological Department Examination 2022

|                |                                                                        |
|----------------|------------------------------------------------------------------------|
| Roll Number    |                                                                        |
| Candidate Name |                                                                        |
| Venue Name     |                                                                        |
| Exam Date      | 15/12/2022                                                             |
| Exam Time      | 5:00 PM - 7:00 PM                                                      |
| Subject        | IMD Scientific Assistant Electronics and Telecommunication Engineering |

Section : General Intelligence and Reasoning

Q.1 Select the combination of letters, which when sequentially placed in the blanks of the given series, will complete the series.  
AB \_ C \_ CD \_ \_ DEEE \_ EF \_ \_ FFF

- Ans
- ✗ 1. BCCDEFF
  - ✗ 2. BCCCDEF
  - ✓ 3. BCDDEFF
  - ✗ 4. BCDDDEF

Question ID : 26433067495  
Status : Answered  
Chosen Option : 3

Q.2 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.  
Statements:  
All creams are gels.  
Some creams are lotions.  
Conclusions:  
I. At least some lotions are gels.  
II. No gel is a lotion.

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

Question ID : 26433069604  
Status : Answered  
Chosen Option : 3

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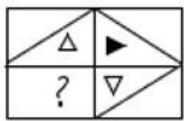
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Q.3 Select the figure from the options that can replace the question mark (?) and complete the pattern.



- Ans
- ☒ 1.
  - ☒ 2.
  - ☒ 3.
  - ☒ 4.

Question ID : 26433056603  
Status : Answered  
Chosen Option : 2

Q.4 If 'x' means '-', '+' means '÷', '-' means '+' and '÷' means 'x', what will be the value of the following expression?  
 $10 + [ \{ (15 - 5) \times (2 \div 3) \} + (12 \times 5) ]$

- Ans
- ☒ 1. 2
  - ☒ 2. 10
  - ☒ 3. 1
  - ☒ 4. 5

Question ID : 26433069600  
Status : Answered  
Chosen Option : 4

Q.5 Which option represents the correct order of the given words as they would appear in an English dictionary?

1. WIRED
2. WEIRD
3. WEED
4. WIDER
5. WEARED

- Ans
- ☒ 1. 3, 5, 2, 4, 1
  - ☒ 2. 3, 5, 4, 2, 1
  - ☒ 3. 5, 3, 2, 4, 1
  - ☒ 4. 5, 2, 3, 4, 1

Question ID : 26433095006  
Status : Answered  
Chosen Option : 3

Q.6 Select the option that is related to the third word in the same way as the second word is related to the first word.  
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/ number of consonants / vowels in the word)  
Nephew : Niece :: Tutor : ?

- Ans
- ☒ 1. Mister
  - ☒ 2. Heifer
  - ☒ 3. Governess
  - ☒ 4. Vixen

Question ID : 26433068058  
Status : Marked For Review  
Chosen Option : 3

Q.7 F has two children: R and Q.  
Z is married to B and has a son, H.  
Q's mother is K and Q's daughter is B.  
How is K related to H?

- Ans
- ☒ 1. Mother's grandmother
  - ☒ 2. Mother-in-law
  - ☒ 3. Grandmother
  - ☒ 4. Mother

Question ID : 264330106638  
Status : Answered  
Chosen Option : 1

Q.8 Three of the following four letter-clusters are alike in a certain way and one is different.  
Pick the odd one out.

- Ans
- ☒ 1. HTL
  - ☒ 2. JQN
  - ☒ 3. LOP
  - ☒ 4. CXG

Question ID : 26433082263  
Status : Answered  
Chosen Option : 1

Q.9 Seven people J, C, R, H, Y, E, and D are sitting in a straight row, facing north. Y sits at the extreme right of the row. Only three people sit to the left of H. R sits between E and Y. H sits between E and J. C sits to the immediate left of J. Who sits at the extreme left of the row?

- Ans
- ☒ 1. D
  - ☒ 2. R
  - ☒ 3. C
  - ☒ 4. H

Question ID : 26433082641  
Status : Answered  
Chosen Option : 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <p><b>Q.10</b> Which of the following options will replace the question mark (?) in the given series?<br/>64, 57, 62, ? , 60, 53, 58</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. 59<br/>          <input checked="" type="checkbox"/> 2. 55<br/>          <input checked="" type="checkbox"/> 3. 61<br/>          <input checked="" type="checkbox"/> 4. 67</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <div>Question ID : 26433089431<br/>Status : Answered<br/>Chosen Option : 2</div>  |
| <p><b>Q.11</b> Three statements are given, followed by three conclusions numbered I, II and III.<br/>Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.<br/>Statements:<br/>Some pens are pencils.<br/>All pencils are wood.<br/>Some wood are doors.<br/>Conclusions:<br/>I. Some doors are wood.<br/>II. Some pencils are wood.<br/>III. Some pencils are pens.</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. Only conclusions II and III follow<br/>          <input checked="" type="checkbox"/> 2. Only conclusions I and II follow<br/>          <input checked="" type="checkbox"/> 3. Only conclusions I and III follow<br/>          <input checked="" type="checkbox"/> 4. All the conclusions follow</p> | <div>Question ID : 26433092653<br/>Status : Answered<br/>Chosen Option : 3</div>  |
| <p><b>Q.12</b> Which of the following options will replace the question mark (?) in the given series?<br/>13, 38, 58, 83, ? , 128, 148</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. 103<br/>          <input checked="" type="checkbox"/> 2. 106<br/>          <input checked="" type="checkbox"/> 3. 113<br/>          <input checked="" type="checkbox"/> 4. 108</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <div>Question ID : 26433089427<br/>Status : Answered<br/>Chosen Option : 4</div>  |
| <p><b>Q.13</b> Select the letter-cluster pair that best represents a similar relationship to the one expressed in the pair of letter-clusters given below.<br/>OPEN : RNHL</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. PORE : SMUC<br/>          <input checked="" type="checkbox"/> 2. PLAN : RJCL<br/>          <input checked="" type="checkbox"/> 3. ROAM : TLCJ<br/>          <input checked="" type="checkbox"/> 4. DRAW : GTDY</p>                                                                                                                                                                                                                                                                                                                                                                                                  | <div>Question ID : 264330103848<br/>Status : Answered<br/>Chosen Option : 1</div> |

Q.14 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.  
EJO, TYD, INS, XCH, \_ \_ \_

- Ans
- ☒ 1. NRW
  - ☒ 2. NRV
  - ☒ 3. MRW
  - ☒ 4. MRV

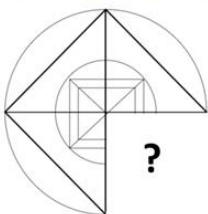
Question ID : 26433081973  
Status : Answered  
Chosen Option : 3

Q.15 Select the correct combination of mathematical signs to sequentially replace the \* signs and balance the given equation.  
 $28 * 19 * 28 * 19 * 28 * 10$

- Ans
- ☒ 1. +, -, +, -, =
  - ☒ 2. +, x, +, -, =
  - ☒ 3. +, +, +, -, =
  - ☒ 4. x, -, +, -, =

Question ID : 26433079349  
Status : Answered  
Chosen Option : 1

Q.16 Select the option figure that will replace the question mark (?) in the given figure to complete the pattern.



Ans

- ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 26433068861  
Status : Answered  
Chosen Option : 1

Q.17 F, G, H, I, J, K, L and M are sitting around a square table facing the centre. Some of them are sitting at the corners while some are sitting at the exact centre of the sides. I is sitting at one of the corners of the square table. F is sitting to the immediate right of I and immediate left of H. L is sitting to the immediate right of H and immediate left of M. G is sitting to the immediate right of M and immediate left of J. K is sitting to the immediate right of J and immediate left of I. Who is sitting second to the right of G?

- Ans
- ☒ 1. F
  - ☒ 2. J
  - ☒ 3. K
  - ☒ 4. I

Question ID : 26433074614  
Status : Answered  
Chosen Option : 3

Q.18 There are seven family members E,F,G,H,I,J and K.Each are of different ages. F is elder than only four other members. E is elder than K. G is elder than H. H is elder than two other members only. J is the youngest among all. F is elder than G but younger than K. Who is the eldest among all?

- Ans
- ☒ 1. G
  - ☒ 2. F
  - ☒ 3. E
  - ☒ 4. K

Question ID : 26433068877  
Status : Answered  
Chosen Option : 3

Q.19 Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.  
6 : 32 :: 9 : ? :: 5 : 21

- Ans
- ☒ 1. 66
  - ☒ 2. 34
  - ☒ 3. 67
  - ☒ 4. 77

Question ID : 26433079410  
Status : Answered  
Chosen Option : 4

Q.20 In a certain code language, 'HAPPY' is written as 'SZKKB' and 'LAUGH' is written as 'OZFTS'. How will 'SMILE' be written in that language?

- Ans
- ☒ 1. HNROV
  - ☒ 2. IOSPW
  - ☒ 3. NHVOR
  - ☒ 4. GMQNU

Question ID : 26433067796  
Status : Answered  
Chosen Option : 1

**Q.21** Select the figure from the options that can replace the question mark (?) and complete the given pattern.

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| Z | P | O | ☆ | ☆ | O | □ | 8 |   |
| 8 | □ | Z | P | P | Z | ☆ | O | ? |
| O | ☆ | 8 | □ | □ | 8 | P | Z |   |

Ans

✗ 1.

|   |   |
|---|---|
| Z | P |
| 8 | □ |
| O | ☆ |

✓ 2.

|   |   |
|---|---|
| 8 | □ |
| O | ☆ |
| Z | P |

✗ 3.

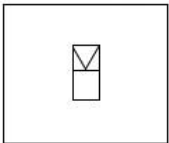
|   |   |
|---|---|
| P | Z |
| □ | 8 |
| ☆ | O |

✗ 4.

|   |   |
|---|---|
| P | Z |
| O | ☆ |
| □ | 8 |

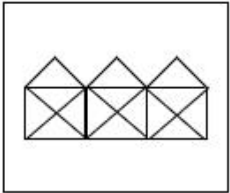
Question ID : 26433085807  
Status : Answered  
Chosen Option : 3

Q.22 Select the option in which the given figure is embedded (rotation is NOT allowed).

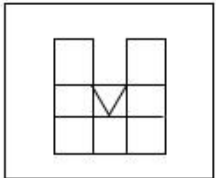


Ans

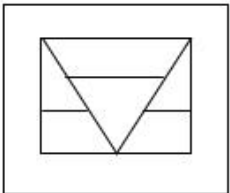
✗ 1.



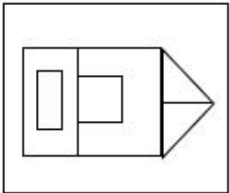
✓ 2.



✗ 3.



✗ 4.



Question ID : 26433068615  
Status : Answered  
Chosen Option : 2

Q.23 Looking at a picture of a girl Nidhi said, “She is the daughter of my mother’s only daughter in law.” How is Nidhi related to the girl in the picture?

- Ans
- ✗ 1. Husband’s brother’s wife
  - ✗ 2. Daughter
  - ✗ 3. Mother
  - ✓ 4. Father’s sister

Question ID : 26433092754  
Status : Answered  
Chosen Option : 4

**Q.24** Seven people Tanu, Rano, Beena, Shirin, Kanak, Aditya and Anshul are sitting in a straight row, facing north. Only two people sit to the left of Tanu. Only three people sit between Tanu and Rano. Beena sits second to the right of Shirin. Beena is an immediate neighbour of Rano. Kanak sits to the immediate right of Aditya. Who sits second to the left of Rano?

- Ans**
- ☒ 1. Shirin
  - ☒ 2. Kanak
  - ☒ 3. Tanu
  - ☒ 4. Anshul

Question ID : 26433082296  
Status : Answered  
Chosen Option : 4

**Q.25** In a certain code language, if MENIAL is coded as 54 and TAROT is coded as 74, then how will CANDID be coded?

- Ans**
- ☒ 1. 35
  - ☒ 2. 36
  - ☒ 3. 34
  - ☒ 4. 37

Question ID : 26433076690  
Status : Answered  
Chosen Option : 1

Section : Quantitative Aptitude

**Q.1** In an election between two contestants, the total votes cast is 1890 and all are valid. If the winning candidate received 60% of the total votes, then the number of votes received by the losing candidate is:

- Ans**
- ☒ 1. 765
  - ☒ 2. 856
  - ☒ 3. 756
  - ☒ 4. 865

Question ID : 26433090299  
Status : Answered  
Chosen Option : 3

**Q.2** A certain sum of money becomes 16 times of itself in 4 years compounded annually. The rate of interest per annum is:

- Ans**
- ☒ 1. 100%
  - ☒ 2. 90%
  - ☒ 3. 80%
  - ☒ 4. 60%

Question ID : 26433064918  
Status : Answered  
Chosen Option : 1

Q.3 Raghu's expenditures and savings are in the ratio 8 : 5. If his income and expenditures increase by 10% and 12%, respectively, then by what percentage will his savings increase?

- Ans ☒ 1. 6.8%  
☐ 2. 8.8%  
☐ 3. 12%  
☐ 4. 10%

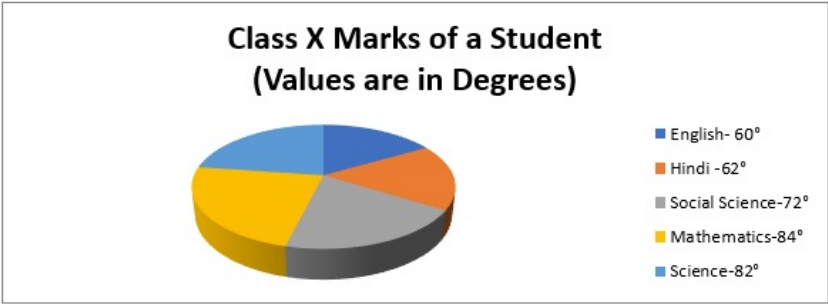
Question ID : 26433066256  
Status : Answered  
Chosen Option : 1

Q.4 If  $x + \frac{1}{x} = -11$  and  $x < -1$ , what is the value of  $(x^2 - \frac{1}{x^2})$ ?

- Ans ☐ 1.  $11\sqrt{119}$   
☐ 2.  $-33\sqrt{13}$   
☐ 3.  $-11\sqrt{119}$   
☒ 4.  $33\sqrt{13}$

Question ID : 264330106878  
Status : Answered  
Chosen Option : 2

Q.5 The given chart shows the marks scored by a class X student in different subjects where the total marks=1800.



In which subject did the student get 310 marks?

- Ans ☐ 1. Science  
☒ 2. Hindi  
☐ 3. Mathematics  
☐ 4. English

Question ID : 26433074346  
Status : Answered  
Chosen Option : 2

Q.6 Three signals are coming at an interval of 32, 60, 80 seconds, respectively. If all of them were received simultaneously at 5:30 a.m., at what time these signals will again be received simultaneously?

- Ans
- ✗ 1. 5:42 p.m.
  - ✗ 2. 5:38 p.m.
  - ✗ 3. 5:42 a.m.
  - ✓ 4. 5:38 a.m.

Question ID : 26433080262  
Status : Answered  
Chosen Option : 4

Q.7 Suppose the areas of two similar triangles  $\triangle SBA$  and  $\triangle TQN$  are  $81\text{ cm}^2$  and  $144\text{ cm}^2$ , respectively. If  $BA = 9\text{ cm}$ , then find  $QN$ .

- Ans
- ✓ 1. 12 cm
  - ✗ 2. 17 cm
  - ✗ 3. 9 cm
  - ✗ 4. 15 cm

Question ID : 264330106935  
Status : Answered  
Chosen Option : 1

Q.8 Study the following table and answer the question that follows.

A school has four sections A, B, C and D of Class IX students.

The results of Science and Mathematics examinations are shown in the following table.

| RESULT                                      | No. of Students |           |           |           |
|---------------------------------------------|-----------------|-----------|-----------|-----------|
|                                             | Section A       | Section B | Section C | Section D |
| Failed in both                              | 24              | 25        | 18        | 20        |
| Failed in Science but passed in Mathematics | 14              | 12        | 10        | 15        |
| Passed in Science but failed in Mathematics | 7               | 6         | 8         | 10        |
| Passed in both                              | 63              | 60        | 56        | 55        |

What percentage of students of section A failed in exactly one of the two subjects?

- Ans
- ✗ 1. 17.33%
  - ✗ 2. 20.22%
  - ✗ 3. 22.55%
  - ✓ 4. 19.44%

Question ID : 26433076239  
Status : Answered  
Chosen Option : 3

Q.9 There are 125 students in a hostel. Food is provided to them by the hostel mess. Due to new admissions, 60 new students join the mess, and the daily expenses of the mess increase by ₹1,650, while the average expenditure per head diminishes by ₹24. What was the original daily expenditure (in ₹, to the nearest tens) of the mess?

- Ans
- ✗ 1. 12980
  - ✗ 2. 16280
  - ✗ 3. 18290
  - ✓ 4. 12690

Question ID : 26433061884  
Status : Answered  
Chosen Option : 2

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <p><b>Q.10</b> The radii of two cones are in the ratio 1 : 3, whereas their volumes are in the ratio 1 : 9. Which of the following statements is correct?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Their heights will be in the ratio 1 : 3.</p> <p><input checked="" type="checkbox"/> 2. Their heights will be in the ratio 1 : 9.</p> <p><input checked="" type="checkbox"/> 3. Their heights will be in the ratio 1 : 2.</p> <p><input checked="" type="checkbox"/> 4. Their heights will be equal.</p> | <div><p>Question ID : <b>26433075993</b></p><p>Status : <b>Answered</b></p><p>Chosen Option : <b>4</b></p></div>  |
| <p><b>Q.11</b> If the ratio of speeds of doing work by three persons is 1 : 4 : 7, then what is the ratio of time taken by these people to do the same amount of work?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 4 : 28 : 7</p> <p><input checked="" type="checkbox"/> 2. 28 : 7 : 4</p> <p><input checked="" type="checkbox"/> 3. 4 : 7 : 28</p> <p><input checked="" type="checkbox"/> 4. 28 : 4 : 7</p>                                                                                                   | <div><p>Question ID : <b>26433081609</b></p><p>Status : <b>Answered</b></p><p>Chosen Option : <b>2</b></p></div>  |
| <p><b>Q.12</b> A vendor decided to sell his goods by setting the selling price of 10 mangoes which is same as the cost price of 12 mangoes.The profit percentage is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 10%</p> <p><input checked="" type="checkbox"/> 2. 20%</p> <p><input checked="" type="checkbox"/> 3. 30%</p> <p><input checked="" type="checkbox"/> 4. 40%</p>                                                                                                                           | <div><p>Question ID : <b>264330106915</b></p><p>Status : <b>Answered</b></p><p>Chosen Option : <b>2</b></p></div> |
| <p><b>Q.13</b> A single discount equivalent to two successive discounts of 20 percent and 25 percent is :</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 40 percent</p> <p><input checked="" type="checkbox"/> 2. 45 percent</p> <p><input checked="" type="checkbox"/> 3. 48 percent</p> <p><input checked="" type="checkbox"/> 4. 28 percent</p>                                                                                                                                                                | <div><p>Question ID : <b>26433079866</b></p><p>Status : <b>Answered</b></p><p>Chosen Option : <b>1</b></p></div>  |

Q.14 A can do a piece of work in 8 days of 5 hours each, and B can do it in 7 days of 9 hours each. How long will they take to complete the work, working together  $\frac{24}{5}$  hours a day?

- Ans
- ☐ 1. 455 days
  - ☒ 2.  $5\frac{10}{103}$  days
  - ☐ 3.  $7\frac{10}{103}$  days
  - ☐ 4. 525 days

Question ID : 264330106489  
Status : Marked For Review  
Chosen Option : 3

Q.15 Two right circular cylinders C1 and C2 of equal volume have their heights in the ratio of 2:3 respectively. What is the ratio of radii of C1 and C2 respectively?

- Ans
- ☐ 1.  $\sqrt{2} : \sqrt{3}$
  - ☐ 2.  $\sqrt{3} : \sqrt{5}$
  - ☒ 3.  $\sqrt{3} : \sqrt{2}$
  - ☐ 4.  $\sqrt{5} : \sqrt{3}$

Question ID : 26433076298  
Status : Answered  
Chosen Option : 3

Q.16 Ajay and Sujay start from a place P walking at speeds of 4 km and 3.5 km per hour, respectively, in the same direction. How many kilometres apart will they be at the end of 4 hours?

- Ans
- ☐ 1. 1
  - ☐ 2. 0.5
  - ☒ 3. 2
  - ☐ 4. 1.5

Question ID : 264330103827  
Status : Answered  
Chosen Option : 3

Q.17 Simplify  $3.87 - 2.05 + 4.12$  .

- Ans
- ☐ 1. 6.95
  - ☒ 2. 5.94
  - ☐ 3. 4.93
  - ☐ 4. 7.54

Question ID : 264330106486  
Status : Answered  
Chosen Option : 2

Q.18 The average weight of a class of 40 students is 54 kg. If we include the weight of the class teacher, then it becomes 54.6 kg. What is the weight of the class teacher?

- Ans
- ☒ 1. 73.5 kg
  - ☒ 2. 62.8 kg
  - ☒ 3. 78.6 kg
  - ☒ 4. 81.2 kg

Question ID : 26433091525  
Status : Answered  
Chosen Option : 3

Q.19 In a street there are 12 dogs and cats. If the ratio of the dogs to cats is 3 : 2, then the number of cats is\_\_\_\_\_.

- Ans
- ☒ 1. 8
  - ☒ 2. 12
  - ☒ 3. 6
  - ☒ 4. 14

Question ID : 26433061208  
Status : Answered  
Chosen Option : 1

Q.20 If  $x + y = 10$  and  $x - y = 8$ , then the value of  $x^2 y^2$  is:

- Ans
- ☒ 1. 81
  - ☒ 2. 24
  - ☒ 3. 64
  - ☒ 4. 36

Question ID : 26433083017  
Status : Answered  
Chosen Option : 1

Q.21 A thief seeing a policeman from a distance of 540 metres starts running at a speed of 9 km/h. The policeman started chasing him immediately at a speed of 10 km/h. Find the distance covered by the thief before he was caught?

- Ans
- ☒ 1. 5120 metres
  - ☒ 2. 4920 metres
  - ☒ 3. 4860 metres
  - ☒ 4. 4750 metres

Question ID : 26433082408  
Status : Answered  
Chosen Option : 3

Q.22 If y varies directly as x and y = 273 when x = 39, which of the following equations relates x and y?

- Ans
- ☒ 1.  $7y = 2x$
  - ☒ 2.  $7x = 2y$
  - ☒ 3.  $7y = x$
  - ☒ 4.  $7x = y$

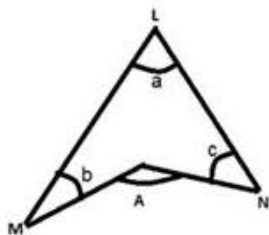
Question ID : 264330106910  
Status : Answered  
Chosen Option : 4

Q.23 In a circular race on a 1000 m long track, P and Q started at the same time from the same place with speeds 27 km/h and 36 km/h respectively. How much time after start will they meet next at the starting point when running in opposite directions?

- Ans
- ☒ 1. 480 sec
  - ☒ 2. 400 sec
  - ☒ 3. 100 sec
  - ☒ 4. 650 sec

Question ID : 26433081603  
Status : Answered  
Chosen Option : 2

Q.24 In the given figure, the angle of A is:



- Ans
- ☒ 1.  $A = a + b + c$
  - ☒ 2.  $A = a - b - c$
  - ☒ 3.  $A = a - b + c$
  - ☒ 4.  $A = a + b - c$

Question ID : 264330106938  
Status : Answered  
Chosen Option : 1

Q.25 The greatest number by which numbers 257 and 146 are divided, it leaves remainders 7 and 6 respectively, is:

- Ans
- ☒ 1. 5
  - ☒ 2. 10
  - ☒ 3. 2
  - ☒ 4. 14

Question ID : 26433082340  
Status : Answered  
Chosen Option : 2

Section : English Language & Comprehension

Q.1 The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

Plants lose / waters within leaves / and this process / is called transpiration.

- Ans
- ☒ 1. waters within leaves
  - ☒ 2. and this process
  - ☒ 3. is called transpiration.
  - ☒ 4. Plants lose

Question ID : 26433096141  
Status : Answered  
Chosen Option : 4

Q.2 Select the most appropriate meaning of the given idiom.  
Turn tail

- Ans
- ☒ 1. To change the path
  - ☒ 2. To change the outcome
  - ☒ 3. To run away from difficulty
  - ☒ 4. To hit harder

Question ID : 26433084898  
Status : Answered  
Chosen Option : 2

Q.3 Select the option that can be used as a one-word substitute for the given group of words.

One who is the in-charge of a museum

- Ans
- ☒ 1. Sculptor
  - ☒ 2. Curator
  - ☒ 3. Anchor
  - ☒ 4. Chauffeur

Question ID : 26433074036  
Status : Answered  
Chosen Option : 3

Q.4 Select the sentence that contains the MISSPELT word from the given options.

- Ans
- ☒ 1. The election campaigns are going on in full swing.
  - ☒ 2. He decided to maintain a discreet silence till the results are out.
  - ☒ 3. That young man was born with a silver spuun in his mouth.
  - ☒ 4. She denied the fact that she had a finger in the pie.

Question ID : 26433073881  
Status : Answered  
Chosen Option : 3

Q.5 Select the most appropriate option that can substitute the underlined segment in the given sentence.  
The guard forbidding them not to pluck the flowers from plants.

- Ans
- ☒ 1. forbidden them pluck
  - ☒ 2. forbade them to pluck
  - ☒ 3. forbade them for to pluck
  - ☒ 4. forbidden those to pluck

Question ID : 26433099869  
Status : Answered  
Chosen Option : 2

Q.6 Select the INCORRECTLY spelt word in the options given below.

- Ans
- ☒ 1. Concerned
  - ☒ 2. Comparable
  - ☒ 3. Calander
  - ☒ 4. Controversial

Question ID : 26433088231  
Status : Answered  
Chosen Option : 3

Q.7 Select the option that expresses the given sentence in passive voice.

The people will make him the leader.

- Ans
- ☒ 1. He had been make the leader by people.
  - ☒ 2. He was made leader by the people.
  - ☒ 3. He will be made the leader by the people.
  - ☒ 4. People made him the leader.

Question ID : 26433093187  
Status : Answered  
Chosen Option : 3

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

Silent

- Ans
- ☒ 1. Dumbstruck
  - ☒ 2. Sullen
  - ☒ 3. Mute
  - ☒ 4. Sulky

Question ID : 26433090455  
Status : Answered  
Chosen Option : 3

Q.9 Select the most appropriate option to fill in the blanks.  
It's just impossible to\_\_\_\_\_the responsibilities of a father and husband when you have these kind of demands.

- Ans
- ☒ 1. carry out
  - ☒ 2. carry over
  - ☒ 3. carry on
  - ☒ 4. carry away

Question ID : 264330106699  
Status : Answered  
Chosen Option : 1

Q.10 Select the most appropriate ANTONYM of the given word.  
Intentional

- Ans
- ☒ 1. Calculated
  - ☒ 2. Planned
  - ☒ 3. Accidental
  - ☒ 4. Sudden

Question ID : 264330102465  
Status : Answered  
Chosen Option : 3

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <p><b>Q.11</b> Select the option that expresses the given sentence in passive voice.</p> <p><b>A teacher teaches Spanish at the Coaching Centre.</b></p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Spanish is being taught at the Coaching Centre.</p> <p><input checked="" type="checkbox"/> 2. Spanish was taught by a teacher at the Coaching Centre.</p> <p><input checked="" type="checkbox"/> 3. Spanish is taught at the Coaching Centre.</p> <p><input checked="" type="checkbox"/> 4. Spanish have been taught at the Coaching Centre by a teacher.</p> | <div><div>Question ID : 26433090507</div><div>Status : Answered</div><div>Chosen Option : 3</div></div> |
| <p><b>Q.12</b> Select the most appropriate synonym of the given word.</p> <p><b>Agreeable</b></p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Acceptable</p> <p><input checked="" type="checkbox"/> 2. Aggressive</p> <p><input checked="" type="checkbox"/> 3. Assertive</p> <p><input checked="" type="checkbox"/> 4. Pardonable</p>                                                                                                                                                                                                                             | <div><div>Question ID : 26433073186</div><div>Status : Answered</div><div>Chosen Option : 1</div></div> |
| <p><b>Q.13</b> Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.<br/>She was telling me how good her daughter was <u>in tennis</u>.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. on tennis</p> <p><input checked="" type="checkbox"/> 2. over tennis</p> <p><input checked="" type="checkbox"/> 3. at tennis</p> <p><input checked="" type="checkbox"/> 4. No substitution required</p>                                             | <div><div>Question ID : 26433070605</div><div>Status : Answered</div><div>Chosen Option : 3</div></div> |
| <p><b>Q.14</b> Select the option that can be used as a one-word substitute for the given group of words.</p> <p><b>A place for ammunition and weapons</b></p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Arena</p> <p><input checked="" type="checkbox"/> 2. Arsenal</p> <p><input checked="" type="checkbox"/> 3. Aviary</p> <p><input checked="" type="checkbox"/> 4. Archery</p>                                                                                                                                                                               | <div><div>Question ID : 26433072549</div><div>Status : Answered</div><div>Chosen Option : 2</div></div> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <p><b>Q.15</b> Select the option that can be used as a one-word substitute for the underlined group of words.</p> <p>Why on earth would you use a <u>word or a name that is inappropriate in such situation!</u></p> <p>Ans <input checked="" type="checkbox"/> 1. Impeach</p> <p><input checked="" type="checkbox"/> 2. Filicide</p> <p><input checked="" type="checkbox"/> 3. Misnomer</p> <p><input checked="" type="checkbox"/> 4. Alias</p> | <div>Question ID : 26433088619</div> <div>Status : Answered</div> <div>Chosen Option : 1</div> |
| <p><b>Q.16</b> Select the most appropriate ANTONYM of the given word.</p> <p>Vagabond</p> <p>Ans <input checked="" type="checkbox"/> 1. Nomad</p> <p><input checked="" type="checkbox"/> 2. Tourist</p> <p><input checked="" type="checkbox"/> 3. Dweller</p> <p><input checked="" type="checkbox"/> 4. Pilgrim</p>                                                                                                                              | <div>Question ID : 26433084753</div> <div>Status : Answered</div> <div>Chosen Option : 2</div> |
| <p><b>Q.17</b> Select the most appropriate ANTONYM of the given word.</p> <p>Flat</p> <p>Ans <input checked="" type="checkbox"/> 1. Bumpy</p> <p><input checked="" type="checkbox"/> 2. Round</p> <p><input checked="" type="checkbox"/> 3. Low</p> <p><input checked="" type="checkbox"/> 4. Little</p>                                                                                                                                         | <div>Question ID : 26433096215</div> <div>Status : Answered</div> <div>Chosen Option : 1</div> |
| <p><b>Q.18</b> Select the most appropriate meaning of the given idiom.</p> <p>Jump on the bandwagon</p> <p>Ans <input checked="" type="checkbox"/> 1. Follow a trend</p> <p><input checked="" type="checkbox"/> 2. Feel low</p> <p><input checked="" type="checkbox"/> 3. Hope for the best</p> <p><input checked="" type="checkbox"/> 4. Discontinue following a practice</p>                                                                   | <div>Question ID : 26433088773</div> <div>Status : Answered</div> <div>Chosen Option : 1</div> |
| <p><b>Q.19</b> Select the most appropriate collocation to fill in the blank.</p> <p>Gopinath is _____ of himself.</p> <p>Ans <input checked="" type="checkbox"/> 1. making a fool</p> <p><input checked="" type="checkbox"/> 2. keeping fool</p> <p><input checked="" type="checkbox"/> 3. doing fool</p> <p><input checked="" type="checkbox"/> 4. a fool</p>                                                                                   | <div>Question ID : 26433055478</div> <div>Status : Answered</div> <div>Chosen Option : 1</div> |

Q.20 Select the most appropriate option to fill in the blank.

Each type of labour, be it manual or mental, should have a \_\_\_\_\_ of its own.

- Ans    ☒ 1. dignity  
         ☐ 2. exile  
         ☐ 3. capacity  
         ☐ 4. create

Question ID : 26433072412  
Status : Answered  
Chosen Option : 1

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

You may have heard that tomatoes and processed tomato products like tomato sauce and canned tomatoes (1)\_\_\_\_\_ against some types of cancer. The cancer-preventing properties of tomato products have been attributed to lycopene. It is a bright red pigment found in tomatoes and other red fruits and is the cause of their red colour. Unlike other fruits and vegetables, (2)\_\_\_\_\_ nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of lycopene. Lycopene in tomato paste is four times more than in fresh tomatoes. This is because lycopene is insoluble in water and is tightly bound to vegetable fibre. (3)\_\_\_\_\_, processed tomato products such as pasteurised tomato juice, sauce, and ketchup contain the highest concentrations of lycopene. Cooking and crushing tomatoes as in the canning process and (4)\_\_\_\_\_ in oil-rich dishes such as spaghetti sauce or pizza greatly increase assimilation from the digestive tract into the bloodstream. Lycopene is a fat-soluble substance, so the oil is said to help (5)\_\_\_\_\_ to a great extent.

SubQuestion No : 21

Q.21 Select the most appropriate option to fill in blank 1.

- Ans    ☐ 1. increase  
         ☐ 2. select  
         ☐ 3. make  
         ☒ 4. protect

Question ID : 26433099128  
Status : Answered  
Chosen Option : 4

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

You may have heard that tomatoes and processed tomato products like tomato sauce and canned tomatoes (1)\_\_\_\_\_ against some types of cancer. The cancer-preventing properties of tomato products have been attributed to lycopene. It is a bright red pigment found in tomatoes and other red fruits and is the cause of their red colour. Unlike other fruits and vegetables, (2)\_\_\_\_\_ nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of lycopene. Lycopene in tomato paste is four times more than in fresh tomatoes. This is because lycopene is insoluble in water and is tightly bound to vegetable fibre. (3)\_\_\_\_\_, processed tomato products such as pasteurised tomato juice, sauce, and ketchup contain the highest concentrations of lycopene. Cooking and crushing tomatoes as in the canning process and (4)\_\_\_\_\_ in oil-rich dishes such as spaghetti sauce or pizza greatly increase assimilation from the digestive tract into the bloodstream. Lycopene is a fat-soluble substance, so the oil is said to help (5)\_\_\_\_\_ to a great extent.

SubQuestion No : 22

Q.22 Select the most appropriate option to fill in blank 2.

- Ans    ☒ 1. where  
         ☐ 2. when  
         ☐ 3. so that  
         ☐ 4. which

Question ID : 26433099129  
Status : Answered  
Chosen Option : 1

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

You may have heard that tomatoes and processed tomato products like tomato sauce and canned tomatoes (1)\_\_\_\_\_ against some types of cancer. The cancer-preventing properties of tomato products have been attributed to lycopene. It is a bright red pigment found in tomatoes and other red fruits and is the cause of their red colour. Unlike other fruits and vegetables, (2)\_\_\_\_\_ nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of lycopene. Lycopene in tomato paste is four times more than in fresh tomatoes. This is because lycopene is insoluble in water and is tightly bound to vegetable fibre. (3)\_\_\_\_\_, processed tomato products such as pasteurised tomato juice, sauce, and ketchup contain the highest concentrations of lycopene. Cooking and crushing tomatoes as in the canning process and (4)\_\_\_\_\_ in oil-rich dishes such as spaghetti sauce or pizza greatly increase assimilation from the digestive tract into the bloodstream. Lycopene is a fat-soluble substance, so the oil is said to help (5)\_\_\_\_\_ to a great extent.

SubQuestion No : 23

Q.23 Select the most appropriate option to fill in blank 3.

- Ans    ☐ 1. Likewise  
         ☐ 2. Besides  
         ☐ 3. However  
         ☒ 4. Thus

Question ID : 26433099130  
Status : Answered  
Chosen Option : 1

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

You may have heard that tomatoes and processed tomato products like tomato sauce and canned tomatoes (1)\_\_\_\_\_ against some types of cancer. The cancer-preventing properties of tomato products have been attributed to lycopene. It is a bright red pigment found in tomatoes and other red fruits and is the cause of their red colour. Unlike other fruits and vegetables, (2)\_\_\_\_\_ nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of lycopene. Lycopene in tomato paste is four times more than in fresh tomatoes. This is because lycopene is insoluble in water and is tightly bound to vegetable fibre. (3)\_\_\_\_\_, processed tomato products such as pasteurised tomato juice, sauce, and ketchup contain the highest concentrations of lycopene. Cooking and crushing tomatoes as in the canning process and (4)\_\_\_\_\_ in oil-rich dishes such as spaghetti sauce or pizza greatly increase assimilation from the digestive tract into the bloodstream. Lycopene is a fat-soluble substance, so the oil is said to help (5)\_\_\_\_\_ to a great extent.

SubQuestion No : 24

Q.24 Select the most appropriate option to fill in blank 4.

- Ans    ☒ 1. serving  
         ☐ 2. served  
         ☐ 3. serve  
         ☐ 4. serves

Question ID : 26433099131  
Status : Answered  
Chosen Option : 1

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

You may have heard that tomatoes and processed tomato products like tomato sauce and canned tomatoes (1)\_\_\_\_\_ against some types of cancer. The cancer-preventing properties of tomato products have been attributed to lycopene. It is a bright red pigment found in tomatoes and other red fruits and is the cause of their red colour. Unlike other fruits and vegetables, (2)\_\_\_\_\_ nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of lycopene. Lycopene in tomato paste is four times more than in fresh tomatoes. This is because lycopene is insoluble in water and is tightly bound to vegetable fibre. (3)\_\_\_\_\_, processed tomato products such as pasteurised tomato juice, sauce, and ketchup contain the highest concentrations of lycopene. Cooking and crushing tomatoes as in the canning process and (4)\_\_\_\_\_ in oil-rich dishes such as spaghetti sauce or pizza greatly increase assimilation from the digestive tract into the bloodstream. Lycopene is a fat-soluble substance, so the oil is said to help (5)\_\_\_\_\_ to a great extent.

SubQuestion No : 25

Q.25 Select the most appropriate option to fill in blank 5.

- Ans    ☐ 1. observation  
         ☐ 2. reservation  
         ☒ 3. absorption  
         ☐ 4. information

Question ID : 26433099132  
Status : Answered  
Chosen Option : 3

Section : General Awareness

Q.1 Which of the following Acts has been replaced or repealed?

- Ans ☒ 1. Industrial Development Regulation Act, 1951
- ☒ 2. Monopolies and Restrictive Trade Practices (MRTP) Act, 1969
- ☒ 3. Competition Act, 2002
- ☒ 4. Geographical Indication of Goods (Registration and Protection) Act, 1999

Question ID : 26433064574  
Status : Answered  
Chosen Option : 2

Q.2 Ranjumoni Saikia is an exponent of which of the following Indian classical dance forms?

- Ans ☒ 1. Odissi
- ☒ 2. Sattriya
- ☒ 3. Manipuri
- ☒ 4. Kathak

Question ID : 26433064659  
Status : Not Answered  
Chosen Option : --

Q.3 Correctly match the following.

| Season    | Crop       |
|-----------|------------|
| 1. Kharif | a. Fodder  |
| 2. Rabi   | b. Mustard |
| 3. Zaid   | c. Cotton  |

- Ans ☒ 1. 1-c, 2-b, 3-a
- ☒ 2. 1-b, 2-c, 3-a
- ☒ 3. 1-a, 2-b, 3-c
- ☒ 4. 1-c, 2-a, 3-b

Question ID : 264330101308  
Status : Answered  
Chosen Option : 1

Q.4 Dhyan Chand Award – 2021 for lifetime achievement in sports was given to who among the following?

- Ans ☒ 1. Lekha KC
- ☒ 2. Sandhya Gurung
- ☒ 3. Sarkar Talwar
- ☒ 4. Pritam Shivaji

Question ID : 264330106741  
Status : Not Answered  
Chosen Option : --

Q.5 What type of shadow does a small source of light casts of an opaque object?

- Ans ☒ 1. Bent  
☒ 2. Distorted  
☒ 3. Blur  
☒ 4. Sharp

Question ID : 264330106764  
Status : Answered  
Chosen Option : 3

Q.6 Which Constitutional Amendment Bill was passed in Parliament in August 2021?

- Ans ☒ 1. 124  
☒ 2. 126  
☒ 3. 128  
☒ 4. 127

Question ID : 264330106711  
Status : Not Answered  
Chosen Option : --

Q.7 In which layer of the atmosphere do we spend the most of our lives?

- Ans ☒ 1. Stratosphere  
☒ 2. Troposphere  
☒ 3. Exosphere  
☒ 4. Thermosphere

Question ID : 264330106754  
Status : Not Answered  
Chosen Option : --

Q.8 How much cash assistance is being provided to BPL families for LPG connection in Ujjwala 2.0 scheme?

- Ans ☒ 1. ₹1,500  
☒ 2. ₹1,800  
☒ 3. ₹1,000  
☒ 4. ₹1,600

Question ID : 264330106722  
Status : Answered  
Chosen Option : 3

Q.9 The Chauri Chaura incident occurred on \_\_\_\_\_, 1922.

- Ans ☒ 1. 12 February  
☒ 2. 4 February  
☒ 3. 10 February  
☒ 4. 6 February

Question ID : 264330106822  
Status : Answered  
Chosen Option : 4

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <p><b>Q.10</b> Who among the following is associated with the founding of the Grameen Bank of Bangladesh and won the Nobel Peace Prize for the same?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Muhammad Yunus</p> <p><input checked="" type="checkbox"/> 2. Muhammad Wasim</p> <p><input checked="" type="checkbox"/> 3. Muhammad Yasir</p> <p><input checked="" type="checkbox"/> 4. Muhammad Wahed</p>                                                                                     | <div><div>Question ID : 264330106776</div><div>Status : Not Answered</div><div>Chosen Option : --</div></div> |
| <p><b>Q.11</b> The population of India according to their economic status is divided into:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. cultivators, main workers, marginal workers</p> <p><input checked="" type="checkbox"/> 2. marginal workers, household industrial workers, non-workers</p> <p><input checked="" type="checkbox"/> 3. non workers, agricultural labourers, marginal workers</p> <p><input checked="" type="checkbox"/> 4. main workers, marginal workers, non-workers</p> | <div><div>Question ID : 264330106795</div><div>Status : Answered</div><div>Chosen Option : 2</div></div>      |
| <p><b>Q.12</b> Who among the following personalities is an exponent of Odissi dance?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Sinam Basu Singh</p> <p><input checked="" type="checkbox"/> 2. Rajendra Kumar Gangani</p> <p><input checked="" type="checkbox"/> 3. Mayadhar Raut</p> <p><input checked="" type="checkbox"/> 4. Guru Bipin Singh</p>                                                                                                                                          | <div><div>Question ID : 26433064658</div><div>Status : Not Answered</div><div>Chosen Option : --</div></div>  |
| <p><b>Q.13</b> As per Industrial Policy Resolution, 1956, the first category includes industries, the future development of which will be the responsibility of the _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. private sector only</p> <p><input checked="" type="checkbox"/> 2. cooperative sector only</p> <p><input checked="" type="checkbox"/> 3. Foreign Government</p> <p><input checked="" type="checkbox"/> 4. state only</p>                                                 | <div><div>Question ID : 26433064528</div><div>Status : Answered</div><div>Chosen Option : 1</div></div>       |
| <p><b>Q.14</b> Balban was the slave of which of the following Delhi Sultans?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Qutbuddin Aibak</p> <p><input checked="" type="checkbox"/> 2. Aram Shah</p> <p><input checked="" type="checkbox"/> 3. Nasiruddin Mahmud</p> <p><input checked="" type="checkbox"/> 4. Iltutmish</p>                                                                                                                                                                   | <div><div>Question ID : 264330106829</div><div>Status : Not Answered</div><div>Chosen Option : --</div></div> |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <p>Q.15 _____ is India's initiative to assist countries in the Indian Ocean Littoral states during COVID-19 pandemic.</p> <p>Ans <input checked="" type="checkbox"/> 1. Mission Ganga</p> <p><input checked="" type="checkbox"/> 2. Mission Pani</p> <p><input checked="" type="checkbox"/> 3. Mission Sagar</p> <p><input checked="" type="checkbox"/> 4. Mission Sagarmala</p>                            | <div>Question ID : 26433092440</div> <div>Status : Answered</div> <div>Chosen Option : 4</div>  |
| <p>Q.16 Which Indian cricketer, who bowled a hat-trick in test cricket, announced his decision in December 2021 to retire from all forms of cricket?</p> <p>Ans <input checked="" type="checkbox"/> 1. Irfan Pathan</p> <p><input checked="" type="checkbox"/> 2. Harbhajan Singh</p> <p><input checked="" type="checkbox"/> 3. Sudeep Tyagi</p> <p><input checked="" type="checkbox"/> 4. Pragyan Ojha</p> | <div>Question ID : 26433074214</div> <div>Status : Answered</div> <div>Chosen Option : 1</div>  |
| <p>Q.17 Losoong festival is a celebration of harvesting of _____.</p> <p>Ans <input checked="" type="checkbox"/> 1. Bengali</p> <p><input checked="" type="checkbox"/> 2. Gujarati</p> <p><input checked="" type="checkbox"/> 3. Sikkimese</p> <p><input checked="" type="checkbox"/> 4. Assamese</p>                                                                                                       | <div>Question ID : 26433086591</div> <div>Status : Answered</div> <div>Chosen Option : 3</div>  |
| <p>Q.18 Which is NOT a feature of the Constitution of India?</p> <p>Ans <input checked="" type="checkbox"/> 1. A written contitution</p> <p><input checked="" type="checkbox"/> 2. Integrated Judicial System</p> <p><input checked="" type="checkbox"/> 3. Single Citizenship</p> <p><input checked="" type="checkbox"/> 4. Dictatorship</p>                                                               | <div>Question ID : 264330106862</div> <div>Status : Answered</div> <div>Chosen Option : 4</div> |
| <p>Q.19 At present India is in _____ Industrial Revolution.</p> <p>Ans <input checked="" type="checkbox"/> 1. 3<sup>rd</sup></p> <p><input checked="" type="checkbox"/> 2. 2<sup>nd</sup></p> <p><input checked="" type="checkbox"/> 3. 4<sup>th</sup></p> <p><input checked="" type="checkbox"/> 4. 1<sup>st</sup></p>                                                                                     | <div>Question ID : 26433064549</div> <div>Status : Answered</div> <div>Chosen Option : 3</div>  |

|                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <p><b>Q.20</b> Who among the following was the chairman of the committee that recommended including a new part of Fundamental Duties in the Constitution of India?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. DS Kothari</p> <p><input checked="" type="checkbox"/> 2. Swaran Singh</p> <p><input checked="" type="checkbox"/> 3. BP Mandal</p> <p><input checked="" type="checkbox"/> 4. RS Sarkaria</p> | <div>Question ID : 264330106846</div> <div>Status : Not Answered</div> <div>Chosen Option : --</div> |
| <p><b>Q.21</b> Which of the following Brahmanas is associated with the Atharvaveda?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Taittiriya Brahmana</p> <p><input checked="" type="checkbox"/> 2. Shatapatha Brahmana</p> <p><input checked="" type="checkbox"/> 3. Gopatha Brahman</p> <p><input checked="" type="checkbox"/> 4. Chandogya Brahmana</p>                                                   | <div>Question ID : 264330106811</div> <div>Status : Answered</div> <div>Chosen Option : 1</div>      |
| <p><b>Q.22</b> The Credit Enhancement Guarantee Scheme encourages and promotes _____ among the scheduled castes.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. education</p> <p><input checked="" type="checkbox"/> 2. entrepreneurships</p> <p><input checked="" type="checkbox"/> 3. housing</p> <p><input checked="" type="checkbox"/> 4. employment</p>                                                  | <div>Question ID : 26433061853</div> <div>Status : Answered</div> <div>Chosen Option : 2</div>       |
| <p><b>Q.23</b> A decision was taken to set up a Disinvestment Commission initially for how many years, in the Union Budget of 1996-97?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Five</p> <p><input checked="" type="checkbox"/> 2. Two</p> <p><input checked="" type="checkbox"/> 3. Four</p> <p><input checked="" type="checkbox"/> 4. Three</p>                                                       | <div>Question ID : 26433059341</div> <div>Status : Not Answered</div> <div>Chosen Option : --</div>  |
| <p><b>Q.24</b> Which Indian athlete was bestowed with the Woman of the Year Award by the World Athletics (WA) in December 2021?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Sania Mirza</p> <p><input checked="" type="checkbox"/> 2. Mary Kom</p> <p><input checked="" type="checkbox"/> 3. Anju Bobby George</p> <p><input checked="" type="checkbox"/> 4. Deepika Kumari</p>                            | <div>Question ID : 26433074195</div> <div>Status : Answered</div> <div>Chosen Option : 3</div>       |

Q.25 Which of the following 'subjects' does NOT belong to the State List?

- Ans ☒ 1. Intoxicating liquor  
☒ 2. Population control and family  
☒ 3. Police  
☒ 4. Water supply

Question ID : 264330106871  
Status : Answered  
Chosen Option : 1

Section : Electronics & Telecommunication Engineering

Q.1 Which of the following is a function of a shift register?

- Ans ☒ 1. To convert digital information into analog signals.  
☒ 2. To store bits and bytes of binary data temporarily.  
☒ 3. To convert serial digital information into parallel or parallel digital information into serial.  
☒ 4. To control voltage levels according to clock pulses.

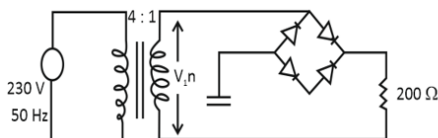
Question ID : 264330107203  
Status : Answered  
Chosen Option : 2

Q.2 The bandwidth requirement is high in \_\_\_\_\_.

- Ans ☒ 1. Pulse amplitude modulation  
☒ 2. Pulse position modulation  
☒ 3. Pulse width modulation  
☒ 4. Both pulse position modulation and pulse width modulation

Question ID : 264330107334  
Status : Answered  
Chosen Option : 3

Q.3 In the bridge type circuit shown below, the diodes are assumed to be ideal. Ratio of primary to secondary turns is 4:1. What is the output frequency?



- Ans ☒ 1. 25 Hz  
☒ 2. 100 Hz  
☒ 3. 50 Hz  
☒ 4. 75 Hz

Question ID : 264330107164  
Status : Answered  
Chosen Option : 3

Q.4 What is the advantage of a radio frequency amplifier?

- Ans
- ☐ 1. Good selectivity
  - ☐ 2. Good sensitivity
  - ☒ 3. Good sensitivity and good selectivity both
  - ☐ 4. Good SNR

Question ID : 264330107027  
Status : Answered  
Chosen Option : 3

Q.5 NBFM bandwidth is \_\_\_\_\_.

- Ans
- ☐ 1.  $f_m$
  - ☒ 2.  $2 f_m$
  - ☐ 3.  $2f_m (\beta+1)$
  - ☐ 4.  $f_m (\beta+1)$

Question ID : 264330107129  
Status : Answered  
Chosen Option : 2

Q.6 0.01  $\mu$ F capacitor equals how many picofarads?

- Ans
- ☐ 1. 100,000 PF
  - ☐ 2. 1,000 PF
  - ☐ 3. 100 PF
  - ☒ 4. 10,000 PF

Question ID : 264330107163  
Status : Answered  
Chosen Option : 3

Q.7 Which of the following is stored by inductors?

- Ans
- ☐ 1. Charge
  - ☐ 2. Potential energy
  - ☐ 3. Heat energy
  - ☒ 4. Magnetic energy

Question ID : 264330107073  
Status : Answered  
Chosen Option : 1

Q.8 The formula of energy produced from the body is given as \_\_\_\_\_.

- Ans
- ☒ 1.  $Q = (h + c)/\lambda$
  - ☒ 2.  $Q = (h \cdot c)/\lambda$
  - ☒ 3.  $Q = h \cdot c \cdot \lambda$
  - ☒ 4.  $Q = (h - c)/\lambda$

Question ID : 264330107413  
Status : Answered  
Chosen Option : 2

Q.9 Which is the instrument used for detecting electric current?

- Ans
- ☒ 1. Galvanometer
  - ☒ 2. Fathometer
  - ☒ 3. Tube tester
  - ☒ 4. Altimeter

Question ID : 264330107172  
Status : Answered  
Chosen Option : 1

Q.10 How many types of counters exist?

- Ans
- ☒ 1. Two
  - ☒ 2. Four
  - ☒ 3. Three
  - ☒ 4. Five

Question ID : 264330107402  
Status : Answered  
Chosen Option : 2

Q.11 Calculate the baud rate of ASK signal having a bit rate of 200 bps.

- Ans
- ☒ 1. 250
  - ☒ 2. 400
  - ☒ 3. 200
  - ☒ 4. 100

Question ID : 264330107243  
Status : Answered  
Chosen Option : 3

Q.12 A 6-bit D/A converter has a step-size of 20mV. The full-scale output voltage is \_\_\_\_\_.

- Ans
- ☒ 1. 1.34 V
  - ☒ 2. 1.26 V
  - ☒ 3. 1.56 V
  - ☒ 4. 1.12 V

Question ID : 264330107194  
Status : Answered  
Chosen Option : 4

Q.13 In digital communication, the sampling is classified into how many types?

- Ans
- ☐ 1. 4
  - ☐ 2. 2
  - ☐ 3. 1
  - ☒ 4. 3

Question ID : 264330107033  
Status : Answered  
Chosen Option : 2

Q.14 The refractive indices of core and cladding of an optical fiber are 1.40 and 1.14 respectively. What is the value of numerical aperture?

- Ans
- ☐ 1. 0.312
  - ☒ 2. 0.812
  - ☐ 3. 0.646
  - ☐ 4. 0.552

Question ID : 264330107444  
Status : Answered  
Chosen Option : 2

Q.15 In combinational circuits output depends on \_\_\_\_\_.

- Ans
- ☐ 1. Previous output
  - ☐ 2. Both Previous output and Present inputs
  - ☒ 3. Present inputs
  - ☐ 4. Previous inputs

Question ID : 264330107001  
Status : Answered  
Chosen Option : 2

Q.16 The maximum power dissipation in a resistance from a battery of emf 'E' and internal resistance 'R' will be \_\_\_\_\_.

- Ans
- ☐ 1.  $E^2 / 2R$
  - ☐ 2.  $E^2 / R$
  - ☐ 3.  $E^2 / 8R$
  - ☒ 4.  $E^2 / 4R$

Question ID : 264330107371  
Status : Answered  
Chosen Option : 4

Q.17 Which of the following is a pentavalent impurity?

I. Arsenic

II. Antimony

- Ans ☒ 1. Both I and II  
☐ 2. Neither I nor II  
☐ 3. Only I  
☐ 4. Only II

Question ID : 264330107149  
Status : Answered  
Chosen Option : 3

Q.18 In time domain Y axis represent \_\_\_\_\_.

- Ans ☐ 1. Speed  
☒ 2. Amplitude  
☐ 3. Frequency  
☐ 4. Time

Question ID : 264330107124  
Status : Answered  
Chosen Option : 2

Q.19 In Frequency modulation when modulation index increases, the transmitted power \_\_\_\_\_.

- Ans ☐ 1. increases  
☐ 2. increases then decreases  
☒ 3. remains unchanged  
☐ 4. decreases

Question ID : 264330107128  
Status : Answered  
Chosen Option : 1

Q.20 Which junction of a transistor is lightly doped?

- Ans ☒ 1. Base  
☐ 2. Collector  
☐ 3. Both emitter and base  
☐ 4. Emitter

Question ID : 264330107362  
Status : Answered  
Chosen Option : 1

Q.21 Calculate the baud rate of ASK signal having a bit rate of 400 bps.

- Ans
- ☐ 1. 800 baud/s
  - ☐ 2. 300 baud/s
  - ☒ 3. 400 baud/s
  - ☐ 4. 200 baud/s

Question ID : 264330107343  
Status : Answered  
Chosen Option : 3

Q.22 In a coherent binary FSK transmission, the mark and space frequencies are separated by 40kHz. The maximum allowed value of bit rate such that the orthogonality condition will prevail is \_\_\_\_\_.

- Ans
- ☐ 1. 50 kbps
  - ☐ 2. 60 kbps
  - ☒ 3. 80 kbps
  - ☐ 4. 70 kbps

Question ID : 264330107339  
Status : Answered  
Chosen Option : 3

Q.23 Boolean algebra can be used as \_\_\_\_\_.

- Ans
- ☐ 1. In building logic symbols
  - ☐ 2. Building algebraic functions
  - ☒ 3. For designing of the digital computers
  - ☐ 4. Circuit theory

Question ID : 264330107390  
Status : Answered  
Chosen Option : 3

Q.24 Which of the following is used to produce amplitude modulation?

- Ans
- ☐ 1. Receiver
  - ☒ 2. Modulator
  - ☐ 3. Duplexer
  - ☐ 4. Transmitter

Question ID : 264330107024  
Status : Answered  
Chosen Option : 2

**Q.25** Kirchhoff's current law is based upon which of the following fact?

- Ans**
- ☒ 1. Charge accumulation is possible at node.
  - ☒ 2. There is a possibility for a node to store energy.
  - ☒ 3. Charge accumulation may or may not be possible.
  - ☒ 4. There cannot be an accumulation of charge at a node.

Question ID : 264330107168  
Status : Answered  
Chosen Option : 1

**Q.26** A counter timer has a basic clock of 15 MHz. The count value displayed is in error by 1 count. If the error in the displayed value is the same for frequency mode of operation or period mode of operation, then the frequency is \_\_\_\_\_.

- Ans**
- ☒ 1. 16 MHz
  - ☒ 2. 10 MHz
  - ☒ 3. 15 MHz
  - ☒ 4. 4 MHz

Question ID : 264330107095  
Status : Answered  
Chosen Option : 3

**Q.27** DSBSC stands for \_\_\_\_\_.

- Ans**
- ☒ 1. Double sideband suppressed carrier
  - ☒ 2. Double sideband stationary carrier
  - ☒ 3. Double sideband super carrier
  - ☒ 4. Double sideband spinor carrier

Question ID : 264330107020  
Status : Answered  
Chosen Option : 1

**Q.28** What is approximate distance between directors for a yagi-Uda antenna operating at frequency 150 MHz?

- Ans**
- ☒ 1. 0.4 m
  - ☒ 2. 1.6 m
  - ☒ 3. 2 m
  - ☒ 4. 4.8 m

Question ID : 264330107220  
Status : Answered  
Chosen Option : 2

Q.29 Which of the following is NOT a type of energy source?

- Ans
- ☒ 1. Solar cell
  - ☐ 2. Rheostat
  - ☐ 3. Battery
  - ☐ 4. Generator

Question ID : 264330107072  
Status : Answered  
Chosen Option : 2

Q.30 The line current in a three-phase, delta-connected synchronous generator is 15 A. Determine the current in each phase of synchronous generator.

- Ans
- ☒ 1. 8.66 A
  - ☐ 2. 7.08 A
  - ☐ 3. 86.7 A
  - ☐ 4. 5.25 A

Question ID : 264330107183  
Status : Answered  
Chosen Option : 4

Q.31 Positive terminal of a diode is connected with which terminal for forward biasing?

- Ans
- ☐ 1. ground
  - ☐ 2. Negative
  - ☒ 3. Positive
  - ☐ 4. Either positive or negative

Question ID : 264330107158  
Status : Answered  
Chosen Option : 3

Q.32 The one's complement of 11001011 is \_\_\_\_\_.

- Ans
- ☒ 1. 00110100
  - ☐ 2. 0011010
  - ☐ 3. 00110000
  - ☐ 4. 00110101

Question ID : 264330107306  
Status : Answered  
Chosen Option : 1

Q.33 Modulation index in Frequency modulation is proportional to \_\_\_\_\_.

- Ans ☒ 1. Both Modulating frequency and Modulating signal  
☐ 2. Amplitude  
☐ 3. Modulating frequency  
☐ 4. Modulating signal

Question ID : 264330107428  
Status : Answered  
Chosen Option : 1

Q.34 0.00022 F capacitor equals how many microfarads?

- Ans ☐ 1. 22,200  $\mu$ F  
☐ 2. 2,200  $\mu$ F  
☐ 3. 22  $\mu$ F  
☒ 4. 220  $\mu$ F

Question ID : 264330107366  
Status : Answered  
Chosen Option : 1

Q.35 The line current in a three-phase, delta-connected synchronous generator is 20 A. Determine the current in each phase of synchronous generator.

- Ans ☐ 1. 10.25 A  
☐ 2. 12.36 A  
☐ 3. 8.76 A  
☒ 4. 11.54 A

Question ID : 264330107083  
Status : Not Answered  
Chosen Option : --

Q.36 Ground wave propagation is used for signal up to frequency of \_\_\_\_\_.

- Ans ☐ 1. 2 GHz  
☐ 2. 30 GHz  
☐ 3. 30 MHz  
☒ 4. 2 MHz

Question ID : 264330107310  
Status : Answered  
Chosen Option : 2

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <p><b>Q.37</b> A dc circuit is Thevenized and found to have parameters as <math>10\Omega</math> and <math>14V</math>. What will be the maximum power transferred to the load?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 7.28 watts<br/><input checked="" type="checkbox"/> 2. 4.9 watts<br/><input checked="" type="checkbox"/> 3. 3.6 watts<br/><input checked="" type="checkbox"/> 4. 5.51 watts</p>                                                                        | <div>Question ID : 264330107080<br/>Status : Answered<br/>Chosen Option : 2</div>      |
| <p><b>Q.38</b> If the modulation frequency is doubled, the modulation index is halved while the modulation voltage remains constant. Which type of modulation is this?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Phase Modulation<br/><input checked="" type="checkbox"/> 2. Amplitude Modulation<br/><input checked="" type="checkbox"/> 3. Frequency Modulation<br/><input checked="" type="checkbox"/> 4. Pulse Modulation</p>                                             | <div>Question ID : 264330107011<br/>Status : Answered<br/>Chosen Option : 1</div>      |
| <p><b>Q.39</b> A crystal diode having internal resistance <math>20\Omega</math> is used in a half wave rectifier. Applied voltage = <math>50 \sin \omega t</math> and load resistance = <math>800\Omega</math>. What will be the value of <math>I_{dc}</math>?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 19.4 mA<br/><input checked="" type="checkbox"/> 2. 20.4 mA<br/><input checked="" type="checkbox"/> 3. 67.2 mA<br/><input checked="" type="checkbox"/> 4. 69.3 mA</p> | <div>Question ID : 264330107357<br/>Status : Not Answered<br/>Chosen Option : --</div> |
| <p><b>Q.40</b> Calculate the baud rate of ASK signal having a bit rate of 300 bps.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 75<br/><input checked="" type="checkbox"/> 2. 100<br/><input checked="" type="checkbox"/> 3. 250<br/><input checked="" type="checkbox"/> 4. 300</p>                                                                                                                                                                                              | <div>Question ID : 264330107043<br/>Status : Answered<br/>Chosen Option : 4</div>      |
| <p><b>Q.41</b> If output frequency is 30 Hz, then the input frequency of bridge type rectifier is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 15 Hz<br/><input checked="" type="checkbox"/> 2. 30 Hz<br/><input checked="" type="checkbox"/> 3. 60 Hz<br/><input checked="" type="checkbox"/> 4. 45 Hz</p>                                                                                                                                                               | <div>Question ID : 264330107267<br/>Status : Answered<br/>Chosen Option : 2</div>      |

Q.42 To encode the information in the carrier signal by altering the wave frequency instantaneously is known as \_\_\_\_\_.

- Ans
- ☒ 1. Amplitude Modulation
  - ☒ 2. Pulse Modulation
  - ☒ 3. Phase Modulation
  - ☒ 4. Frequency Modulation

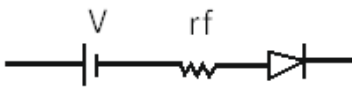
Question ID : 264330107029  
Status : Answered  
Chosen Option : 4

Q.43 When both set and reset are disabled in S-R flip flop then the output will \_\_\_\_\_.

- Ans
- ☒ 1. Will have no change
  - ☒ 2. Be Indeterminate
  - ☒ 3. Be Set
  - ☒ 4. Be Reset

Question ID : 264330107393  
Status : Answered  
Chosen Option : 4

Q.44 Which model is shown by the diagram given below?



- Ans
- ☒ 1. Approx. model
  - ☒ 2. Normal model
  - ☒ 3. Simpered model
  - ☒ 4. Ideal model

Question ID : 264330106955  
Status : Answered  
Chosen Option : 4

Q.45 Which of the following cannot be done in high frequency zones?

- Ans
- ☒ 1. Phase comparison
  - ☒ 2. Distance measurement
  - ☒ 3. Wavelength measurement
  - ☒ 4. Superimposition of waves

Question ID : 264330107213  
Status : Answered  
Chosen Option : 3

Q.46 Compute the average transmitted power of frequency modulated wave with carrier signal  $5\cos(2\pi \cdot 1000t)$ .

- Ans ☒ 1. 12.5 watt  
☐ 2. 20 watt  
☐ 3. 12 watt  
☐ 4. 25 watt

Question ID : 264330107438  
Status : Answered  
Chosen Option : 2

Q.47 How many amplifying stages does an astable multivibrator has?

- Ans ☐ 1. 1  
☒ 2. 2  
☐ 3. 3  
☐ 4. 4

Question ID : 264330107392  
Status : Answered  
Chosen Option : 3

Q.48 The quantization error is categorized into \_\_\_\_\_ types.

- Ans ☐ 1. 3  
☒ 2. 2  
☐ 3. 1  
☐ 4. 4

Question ID : 264330107036  
Status : Answered  
Chosen Option : 2

Q.49 Which of the following is the correct relation between speed of light (c) in air, frequency (f) and wavelength ( $\lambda$ )?

- Ans ☐ 1.  $c = f^2\lambda$   
☒ 2.  $c = f\lambda$   
☐ 3.  $c = f\lambda^2$   
☐ 4.  $c = f/\lambda$

Question ID : 264330107208  
Status : Answered  
Chosen Option : 2

Q.50 Which of the following is an example of distributive law in Boolean algebra?

- Ans ☐ 1.  $a+(b+c)=(a+b)+c$   
☐ 2.  $1+a=a+1=1$   
☐ 3.  $a+0=0+a=a$   
☒ 4.  $a+bc=(a+b)(a+c)$

Question ID : 264330107391  
Status : Answered  
Chosen Option : 1

Q.51 The opposition of an inductor when AC Sine Wave is supplied to the input is called \_\_\_\_\_.

- Ans
- ☒ 1. Inductive reactance
  - ☐ 2. Resistance
  - ☐ 3. Capacitive reactance
  - ☐ 4. transformer

Question ID : 264330107274  
Status : Answered  
Chosen Option : 3

Q.52 The resistance of a semiconductor \_\_\_\_\_ with the \_\_\_\_\_ in temperature.

- Ans
- ☐ 1. Decreases, decrease
  - ☐ 2. Remains same, increase
  - ☒ 3. Decreases, increase
  - ☐ 4. Remains same, decrease

Question ID : 264330107150  
Status : Answered  
Chosen Option : 3

Q.53 If in a Y-connected ac generator, each phase voltage has a magnitude of 120 V<sub>RMS</sub>, what is the magnitude of each line voltage?

- Ans
- ☐ 1. 180 V
  - ☒ 2. 207 V
  - ☐ 3. 220 V
  - ☐ 4. 0 V

Question ID : 264330107087  
Status : Answered  
Chosen Option : 1

Q.54 In S-R flip flop, what does S-R signify?

- Ans
- ☐ 1. Simple Reset
  - ☒ 2. Set Reset
  - ☐ 3. Standard Reset
  - ☐ 4. Single Reset

Question ID : 264330107093  
Status : Answered  
Chosen Option : 2

**Q.55** The magnetic potential energy stored in a certain inductor is 15 mJ, when the current in that inductor is 40 mA. What is the inductance of this inductor?

- Ans**    ☒ 1. 18.75 Henry  
          ☐ 2. 22 Henry  
          ☐ 3. 16.55 Henry  
          ☐ 4. 20 Henry

Question ID : 264330106981  
Status : Answered  
Chosen Option : 1

**Q.56** The refractive indices of core and cladding of an optical fiber are 1.60 and 1.5 respectively. What is the numerical aperture?

- Ans**    ☒ 1. 0.556  
          ☐ 2. 0.112  
          ☐ 3. 0.082  
          ☐ 4. 0.993

Question ID : 264330107244  
Status : Answered  
Chosen Option : 4

**Q.57** In a balanced three-phase load, each phase has power equal to the \_\_\_\_\_.

- Ans**    ☒ 1. one-third of total power  
          ☐ 2. two-thirds of total power  
          ☐ 3. half of total power  
          ☐ 4. one-fourth of total power

Question ID : 264330106977  
Status : Answered  
Chosen Option : 1

**Q.58** 1000 V power supply would use which capacitor for filter \_\_\_\_\_.

- Ans**    ☒ 1. paper  
          ☐ 2. electrolytic  
          ☐ 3. air  
          ☐ 4. mica

Question ID : 264330107262  
Status : Answered  
Chosen Option : 1

Q.59 How many states are there in a decimal counter?

- Ans ☒ 1. 10  
☐ 2. 20  
☐ 3. 5  
☐ 4. 15

Question ID : 264330107305  
Status : Answered  
Chosen Option : 1

Q.60 In amplitude modulation, if  $V_{\max} = 10V$  and  $V_{\min} = 2V$  then modulation factor is \_\_\_\_\_.

- Ans ☒ 1. 0.66  
☐ 2. 0.2  
☐ 3. 1.5  
☐ 4. 5

Question ID : 264330107008  
Status : Answered  
Chosen Option : 1

Q.61 Multi mode step index fiber has \_\_\_\_\_.

- Ans ☐ 1. Large core diameter and small numerical aperture  
☐ 2. Small core diameter and small numerical aperture  
☐ 3. Small core diameter and large numerical aperture  
☒ 4. Large core diameter and large numerical aperture

Question ID : 264330107034  
Status : Not Answered  
Chosen Option : --

Q.62 Which of the following has the highest wavelength?

- Ans ☒ 1. Radio waves  
☐ 2. Cosmic waves  
☐ 3. Gamma rays  
☐ 4. X-rays

Question ID : 264330107417  
Status : Answered  
Chosen Option : 2

**Q.63** The refractive indices of core and cladding of an optical fiber are 1.30 and 1.23 respectively. What is the numerical aperture?

- Ans** ☒ 1. 0.42  
☐ 2. 0.13  
☐ 3. 0.79  
☐ 4. 0.83

Question ID : 264330107344  
Status : Answered  
Chosen Option : 4

**Q.64** Which of the following is NOT a component of 555 timer?

- Ans** ☐ 1. Resistor  
☒ 2. Transducer  
☐ 3. Diode  
☐ 4. Transistor

Question ID : 264330107007  
Status : Answered  
Chosen Option : 2

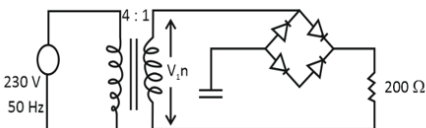
**Q.65** Simplify:

$$Y = AB' + (A' + B)C$$

- Ans** ☐ 1.  $AB + AC$   
☐ 2.  $AB + A$   
☒ 3.  $AB' + C$   
☐ 4.  $A'B + AC'$

Question ID : 264330107190  
Status : Answered  
Chosen Option : 3

**Q.66** In the bridge type circuit shown below, the diodes are assumed to be ideal. Ratio of primary to secondary turns is 4:1. What is the dc output voltage?



- Ans** ☒ 1. 52 V  
☐ 2. 25 V  
☐ 3. 100 V  
☐ 4. 75 V

Question ID : 264330107063  
Status : Answered  
Chosen Option : 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Q.67</div><div>If the input impedance of half wave dipole Yagi-Uda is <math>73\Omega</math>, then input impedance of a half wave folded dipole as driven element is _____.</div></div> <div><div>Ans</div><div><div><div><div></div></div><div>1.</div><div><math>73\Omega</math></div></div><div><div></div></div><div><div><div></div></div><div>2.</div><div><math>146\Omega</math></div></div><div><div></div></div><div><div><div></div></div><div>3.</div><div><math>292\Omega</math></div></div><div><div></div></div><div><div><div></div></div><div>4.</div><div><math>36.5\Omega</math></div></div></div></div> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Question ID : 264330107322

Status : Answered

Chosen Option : 2

Q.71 Which of the following is a passive device?

- Ans
- ☐ 1. Transistor
  - ☐ 2. Silicon controlled rectifier
  - ☒ 3. Capacitor
  - ☐ 4. Rectifier

Question ID : 264330107351  
Status : Answered  
Chosen Option : 2

Q.72 What is the full form of SNR?

- Ans
- ☐ 1. Signal to noise radio
  - ☒ 2. Signal to noise ratio
  - ☐ 3. Standard N turn radio
  - ☐ 4. Standard noise transmission radio

Question ID : 264330107119  
Status : Answered  
Chosen Option : 2

Q.73 What does ferrite antenna do?

- Ans
- ☐ 1. Reduce loss
  - ☐ 2. Reduce noise
  - ☒ 3. Increases Q factor
  - ☐ 4. Reduce capacitance

Question ID : 264330107110  
Status : Answered  
Chosen Option : 3

Q.74 Which is constant in case of amplitude modulation?

- Ans
- ☐ 1. Modulation
  - ☐ 2. Amplitude
  - ☐ 3. Wavelength
  - ☒ 4. Frequency

Question ID : 264330107316  
Status : Answered  
Chosen Option : 4

Q.75 When  $S=0$ ,  $R=0$ ,  $CLK=X$ , then the output will be \_\_\_\_\_.

- Ans
- ☐ 1. Set
  - ☐ 2. Reset
  - ☐ 3. Invalid
  - ☒ 4. No change

Question ID : 264330107297  
Status : Answered  
Chosen Option : 3

Q.76 In n-bit binary counter consisting of 'n' number of flip-flops, what is the maximum possible range of bit-count?

- Ans
- ☐ 1. 0 to  $2^n + 1$
  - ☒ 2. 0 to  $2^n - 1$
  - ☐ 3. 0 to  $2^n$
  - ☐ 4. 0 to  $(2^n + 1)/2$

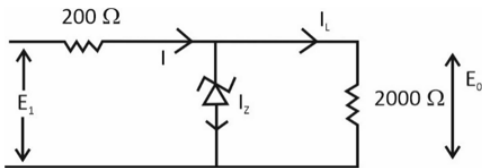
Question ID : 264330107202  
Status : Answered  
Chosen Option : 2

Q.77 ROM uses which processes for code conversions?

- Ans
- ☐ 1. Transcribing
  - ☐ 2. Decoding
  - ☒ 3. Both Decoding and Encoding
  - ☐ 4. Encoding

Question ID : 264330107105  
Status : Answered  
Chosen Option : 3

Q.78 Consider the circuit given below. When  $I_Z = 0$ , then what will be the minimum input voltage required?



- Ans
- ☐ 1. 40 V
  - ☒ 2. 33 V
  - ☐ 3. 36 V
  - ☐ 4. 38 V

Question ID : 264330107064  
Status : Answered  
Chosen Option : 1

Q.79 In which of the following feed there is no impedance mismatch?

- Ans
- ☒ 1. Front feed
  - ☐ 2. Offset feed
  - ☐ 3. kissogram feed
  - ☐ 4. Gregorian feed

Question ID : 264330107326  
Status : Answered  
Chosen Option : 4

Q.80 A carrier wave of 400 W has been modulated to depth of 75 percent. What is total power?

- Ans
- ☐ 1. 300 W
  - ☒ 2. 512.5 W
  - ☐ 3. 480 W
  - ☐ 4. 450 W

Question ID : 264330107009  
Status : Answered  
Chosen Option : 1

Q.81 In which mode can we provide data to all the flip-flops simultaneously?

- Ans
- ☐ 1. Parallel output mode
  - ☐ 2. Serial input mode
  - ☐ 3. Loopback mode
  - ☒ 4. Parallel input mode

Question ID : 264330107098  
Status : Answered  
Chosen Option : 4

Q.82 Which of the following diode can be used as a voltage regulator?

- Ans
- ☒ 1. Zener
  - ☐ 2. KIN
  - ☐ 3. PIN
  - ☐ 4. LED

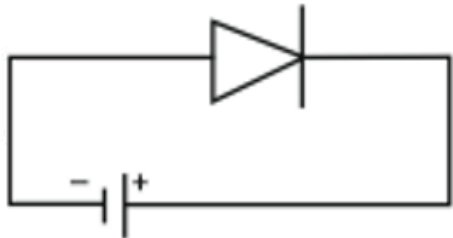
Question ID : 264330106959  
Status : Answered  
Chosen Option : 1

Q.83 At which angles does the front to back ratio specify an antenna gain?

- Ans ☒ 1. 180 and 360 degree  
☐ 2. 180 and 270 degree  
☐ 3. 0 and 90 degree  
☐ 4. 90 and 180 degree

Question ID : 264330107420  
Status : Not Answered  
Chosen Option : --

Q.84



Above diode is connected in \_\_\_\_\_.

- Ans ☐ 1. Contact bias  
☐ 2. Forward bias  
☒ 3. Reverse bias  
☐ 4. No bias

Question ID : 264330107255  
Status : Answered  
Chosen Option : 3

Q.85 A signal  $m(t)$  varies from  $-6$  volt to  $6$  volt with an average power of  $5W$ . The signal is quantized using a mid-tread type quantizer and subsequently binary encoded. With codeword of length  $2$ , the signal to quantization noise ratio in dB is \_\_\_\_\_.

(Take  $\log(15/4) = 0.574$ )

- Ans ☐ 1. 4.5  
☐ 2. 6.5  
☒ 3. 5.8  
☐ 4. 7.5

Question ID : 264330107445  
Status : Not Answered  
Chosen Option : --

Q.86 What will be the change in bandwidth of the FM signal as the frequency of modulation tends to increase from  $15$  kHz to  $20$  kHz?

- Ans ☐ 1. 40 KHz  
☒ 2. 10 KHz  
☐ 3. Bandwidth remains unaffected  
☐ 4. 30 KHz

Question ID : 264330107331  
Status : Answered  
Chosen Option : 2

**Q.87** Two capacitors each of value  $4\ \mu\text{F}$  are connected in series and this combination is in parallel with a capacitor of  $12\ \mu\text{F}$ . What is the equivalent capacitance of the system?

- Ans**
- ☒ 1.  $14\ \mu\text{F}$
  - ☐ 2.  $8\ \mu\text{F}$
  - ☐ 3.  $20\ \mu\text{F}$
  - ☐ 4.  $16\ \mu\text{F}$

Question ID : **264330107281**  
Status : **Answered**  
Chosen Option : **1**

**Q.88** Which of the following is NOT a necessary component in a clamper circuit?

- Ans**
- ☐ 1. Resistor
  - ☒ 2. DC supply
  - ☐ 3. Diode
  - ☐ 4. Capacitor

Question ID : **264330107353**  
Status : **Answered**  
Chosen Option : **1**

**Q.89** For a feeder length of  $0.5\lambda$ , which of the following would be the reflector length?

- Ans**
- ☐ 1.  $0.35\lambda$
  - ☒ 2.  $0.525\lambda$
  - ☐ 3.  $0.23\lambda$
  - ☐ 4.  $0.425\lambda$

Question ID : **264330107418**  
Status : **Answered**  
Chosen Option : **2**

**Q.90** A certain pulse measures 10 millisecond and has a period of 50 millisecond. The duty cycle is \_\_\_\_\_.

- Ans**
- ☐ 1. 50 percent
  - ☐ 2. 10 percent
  - ☐ 3. 5 percent
  - ☒ 4. 20 percent

Question ID : **264330106996**  
Status : **Answered**  
Chosen Option : **4**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <p><b>Q.91</b> The energy gap between valence band and conduction band in insulator is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 0.5 eV<br/><input checked="" type="checkbox"/> 2. 15 eV<br/><input checked="" type="checkbox"/> 3. 1.5 eV<br/><input checked="" type="checkbox"/> 4. 0.05 eV</p>                                                                                                                                                                                                                           | <div><p>Question ID : 264330107148</p><p>Status : Answered</p><p>Chosen Option : 2</p></div> |
| <p><b>Q.92</b> In the analysis of a vacuum tube circuit, which theorem is generally used?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Thevenin's theorem<br/><input checked="" type="checkbox"/> 2. Norton's theorem<br/><input checked="" type="checkbox"/> 3. Reciprocity theorem<br/><input checked="" type="checkbox"/> 4. Millman's theorem</p>                                                                                                                                                                                 | <div><p>Question ID : 264330107370</p><p>Status : Answered</p><p>Chosen Option : 2</p></div> |
| <p><b>Q.93</b> If 100 J of energy is available for every 5 C of charge, then what is the voltage?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 75 V<br/><input checked="" type="checkbox"/> 2. 25 V<br/><input checked="" type="checkbox"/> 3. 95 V<br/><input checked="" type="checkbox"/> 4. 20 V</p>                                                                                                                                                                                                                               | <div><p>Question ID : 264330107385</p><p>Status : Answered</p><p>Chosen Option : 4</p></div> |
| <p><b>Q.94</b> A DC voltage source has a source resistance variable from 15 <math>\Omega</math> to 50 <math>\Omega</math> and it is connected to a load of 15 <math>\Omega</math>. For maximum power transfer, what should be the source resistance?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 25 <math>\Omega</math><br/><input checked="" type="checkbox"/> 2. 100 <math>\Omega</math><br/><input checked="" type="checkbox"/> 3. 12.5 <math>\Omega</math><br/><input checked="" type="checkbox"/> 4. 50 <math>\Omega</math></p> | <div><p>Question ID : 264330107085</p><p>Status : Answered</p><p>Chosen Option : 4</p></div> |
| <p><b>Q.95</b> Barrier potential for Si is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 0.7 V<br/><input checked="" type="checkbox"/> 2. 0.3 V<br/><input checked="" type="checkbox"/> 3. 0.03 V<br/><input checked="" type="checkbox"/> 4. 0.1 V</p>                                                                                                                                                                                                                                                                          | <div><p>Question ID : 264330106953</p><p>Status : Answered</p><p>Chosen Option : 2</p></div> |

**Q.96** A dc circuit is Thevenized and found to have parameters as  $12\Omega$  and  $22V$ . What will be the maximum power transferred to the load?

- Ans
- ☒ 1. 20 watt
  - ☐ 2. 10 watt
  - ☐ 3. 14 watt
  - ☐ 4. 16 watt

Question ID : 264330107280  
Status : Answered  
Chosen Option : 2

**Q.97** The heating effect produced by the current is due to which of the following?

- Ans
- ☒ 1. Collision of electrons
  - ☐ 2. Movement of neutron without collision
  - ☐ 3. Loss of energy
  - ☐ 4. Movement of electrons without collision

Question ID : 264330106972  
Status : Answered  
Chosen Option : 4

**Q.98** If 60 J of energy is available for every 15 C of charge, what is the voltage?

- Ans
- ☐ 1. 10 V
  - ☐ 2. 12 V
  - ☐ 3. 8 V
  - ☒ 4. 4 V

Question ID : 264330107285  
Status : Answered  
Chosen Option : 4

**Q.99** What is the standard form of T flip flop?

- Ans
- ☐ 1. Both trigger and toggle
  - ☒ 2. Toggle
  - ☐ 3. Trigger
  - ☐ 4. Either trigger or toggle

Question ID : 264330107198  
Status : Answered  
Chosen Option : 2

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**Q.100** In a coherent binary FSK transmission, the mark and space frequencies are separated by 50kHz. The maximum allowed value of bit rate such that the orthogonality condition will prevail is \_\_\_\_\_.

- Ans**
- ✓ 1. 100 kbps
  - ✗ 2. 120 kbps
  - ✗ 3. 110 kbps
  - ✗ 4. 90 kbps

Question ID : **264330107439**  
Status : **Answered**  
Chosen Option : **1**