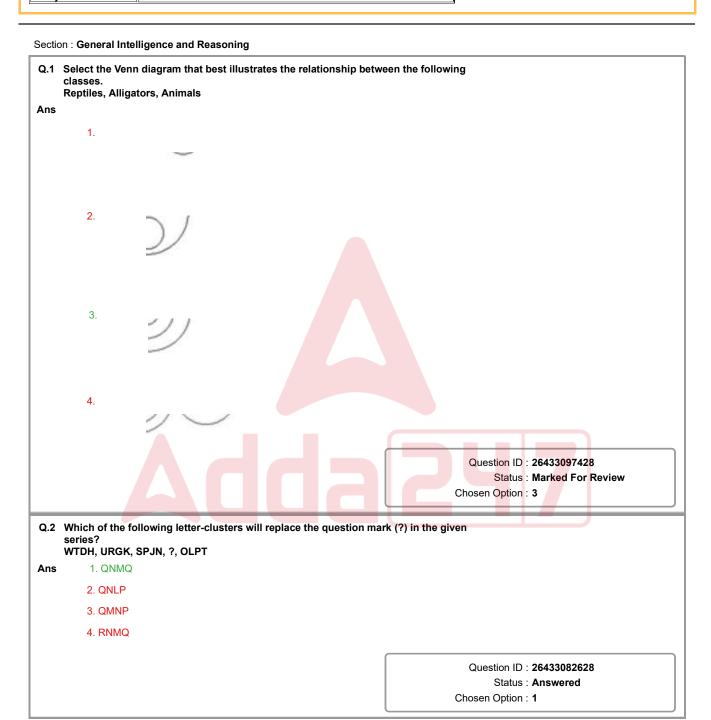
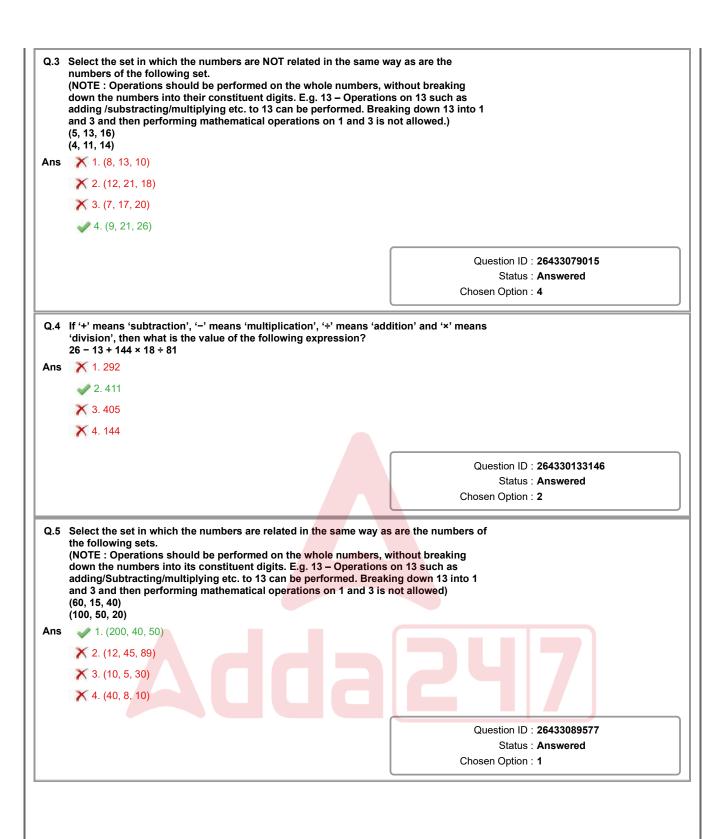
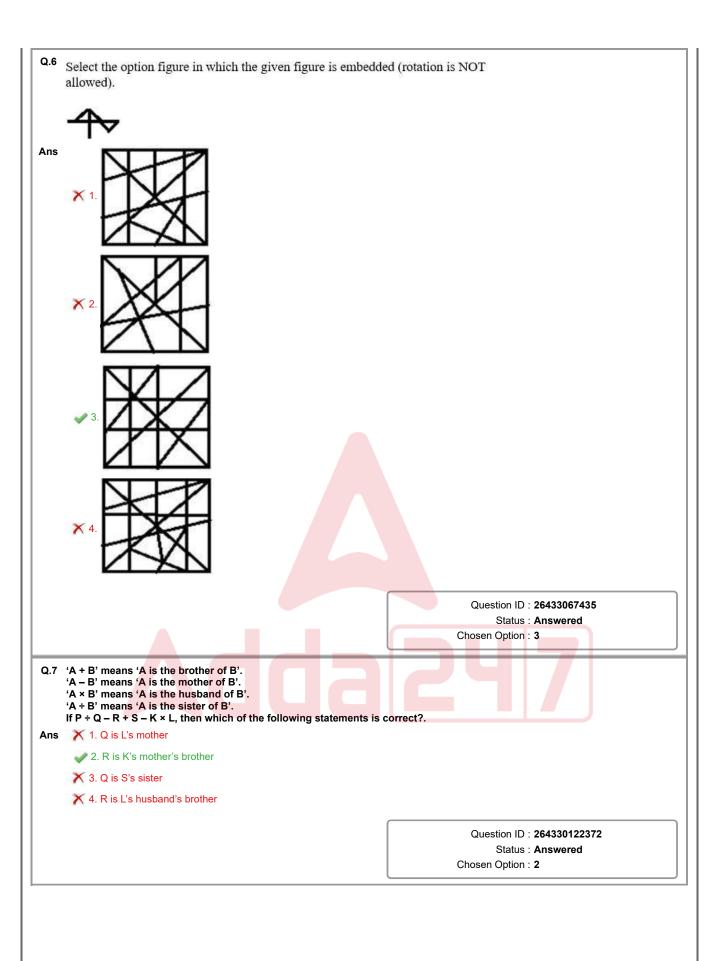


## **Combined Graduate level Examination 2023 Tier I**

| Roll Number    |   |
|----------------|---|
| Candidate Name |   |
| Venue Name     | i-Tech Zone                                     |
| Exam Date      | 26/07/2023                                      |
| Exam Time      | 5:15 PM - 6:15 PM                               |
| Subject        | Combined Graduate Level Examination Tier I 2023 |







Q.8 Select the number from among the given options that can replace the question mark (?) in the following series.

2, 6, 9, 27, 30, 90, ?

X 1. 85 Ans

**2**. 88

**X** 3. 90

**X** 4. 93

Question ID: 26433067511 Status: Answered

Chosen Option: 4

Q.9 The second number in the given number-pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) is/are followed in all the number-pairs except one. Find that odd number-pair.

Ans X 1. 15:34

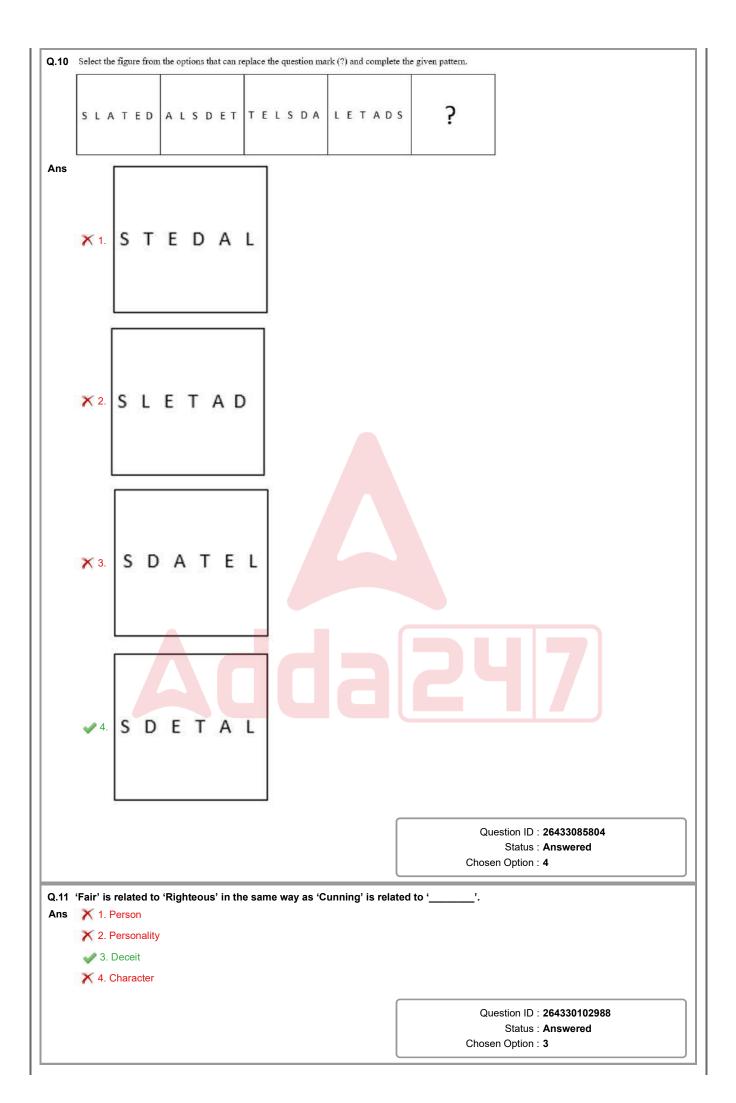
X 2.1:6

**X** 3. 7 : 18

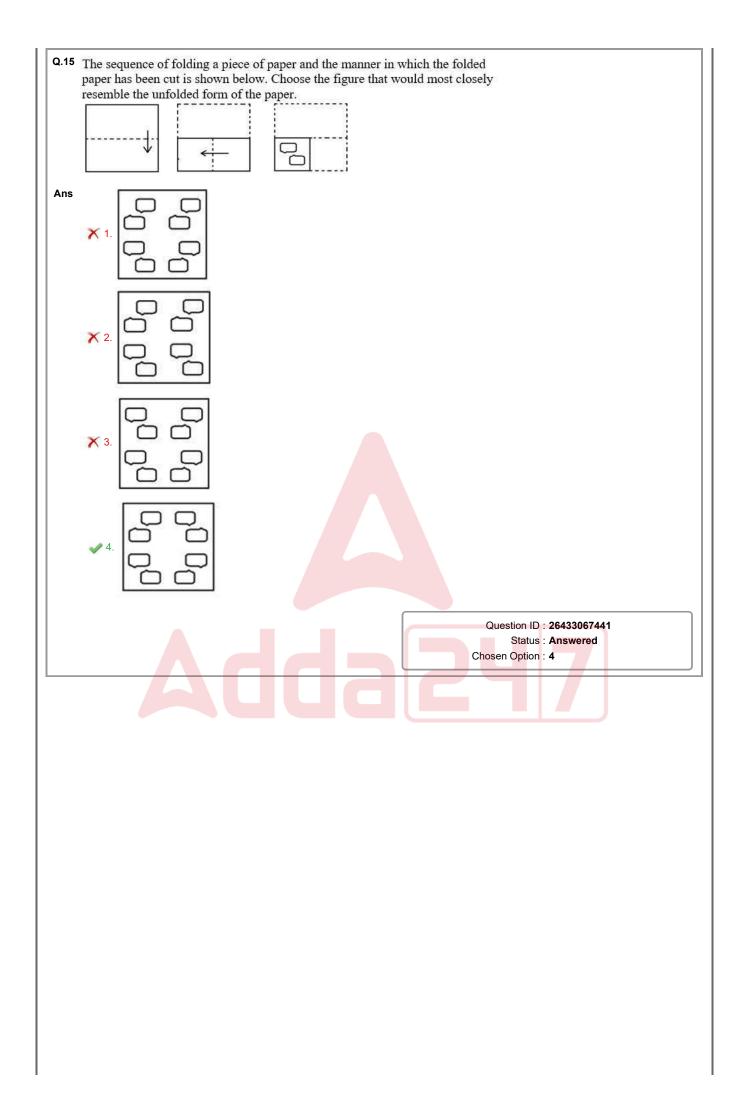
**4**. 18 : 42

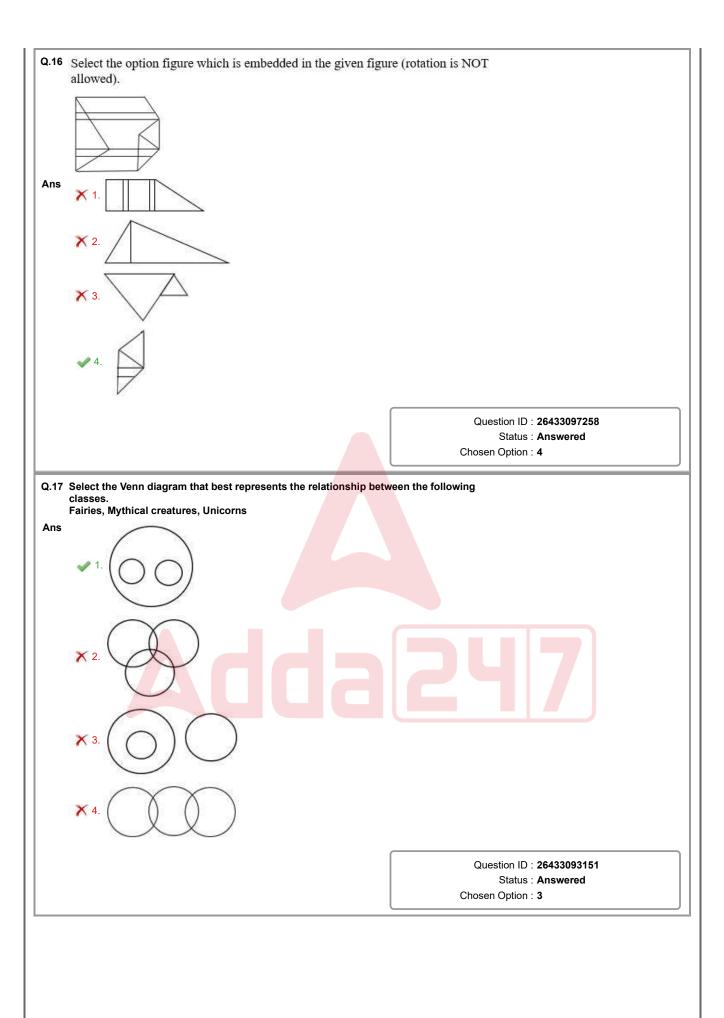
Question ID: 264330143703 Status: Answered

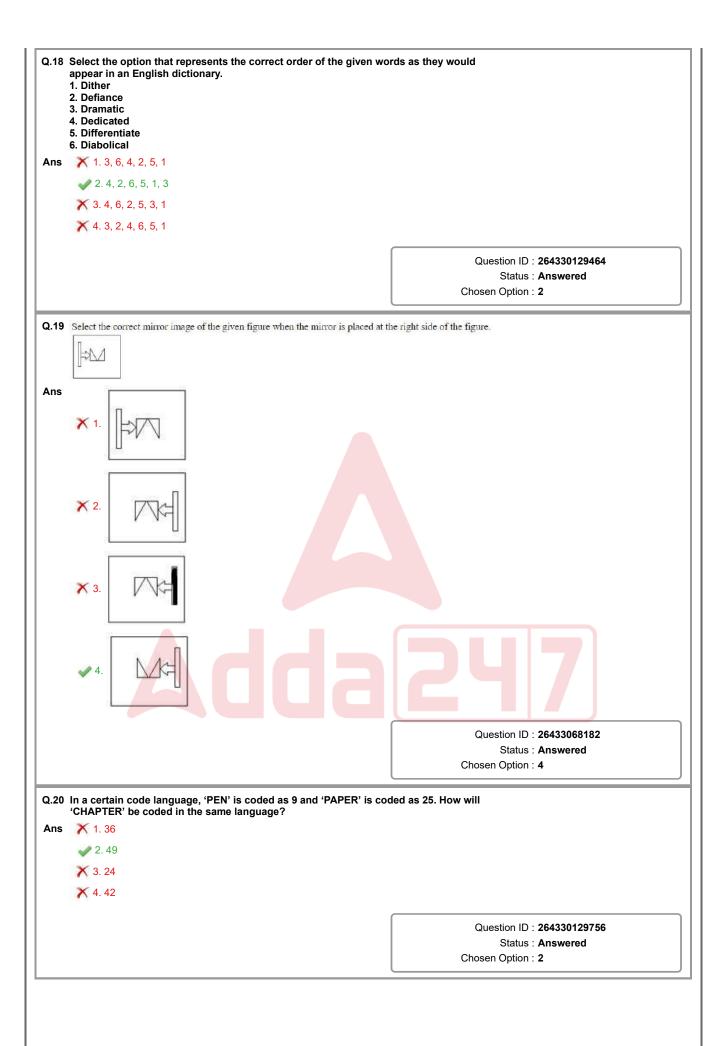


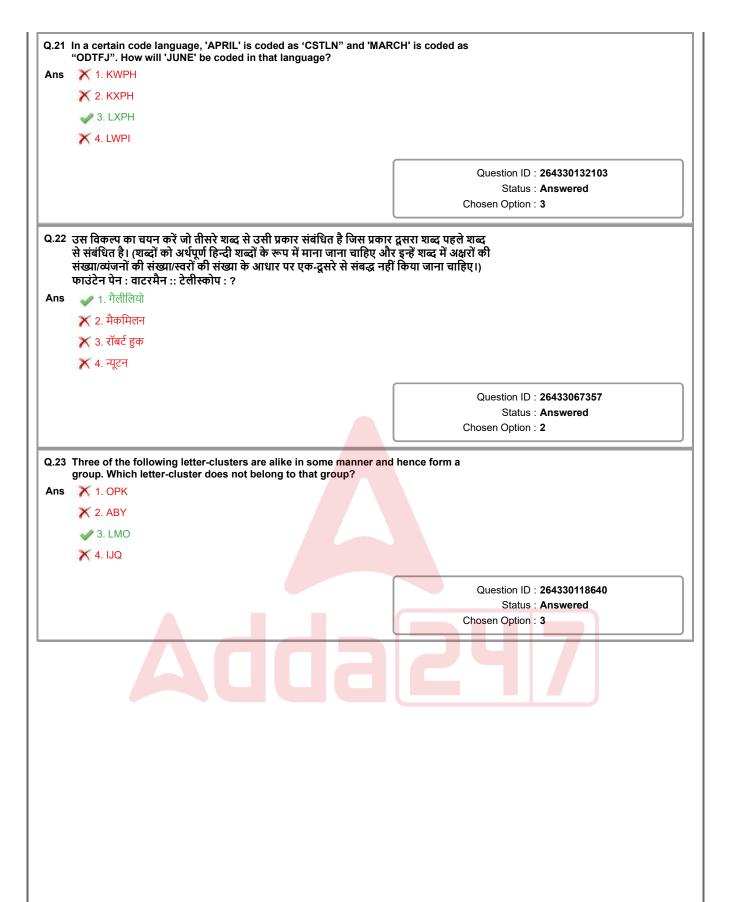


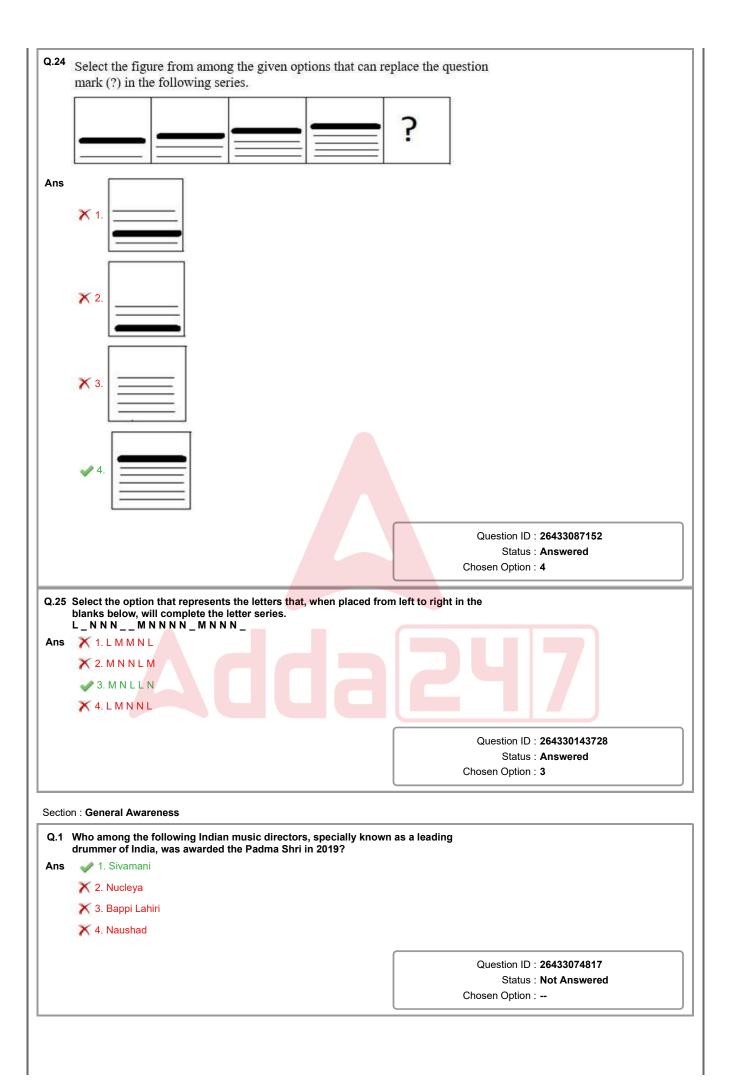
Q.12 Select the set in which the numbers are related in the same way as are the numbers of the given sets. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /Subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed) (15, 23, 31) (33, 41, 49) **X** 1. (21, 29, 43) Ans 2. (20, 28, 36) X 3. (20, 33, 28) **X** 4. (35, 43, 56) Question ID: 264330130205 Status: Answered Chosen Option: 2 Q.13 Select the set in which the numbers are related in the same way as are the numbers of the following sets. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /Subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed) (7, 65)(11, 145) Ans X 1. (15, 140) **2**. (8, 82) X 3. (12, 168) **X** 4. (9, 70) Question ID: 264330144430 Status: Answered Chosen Option: 2 Q.14 Which of the following interchanges of signs would make the given equation correct?  $50 - 25 \div 5 \times 3 + 6 = 59$ Ans X 1. + and × X 2. ÷ and + X 3. × and – 4. – and + Question ID: 264330114240 Status: Answered Chosen Option: 4



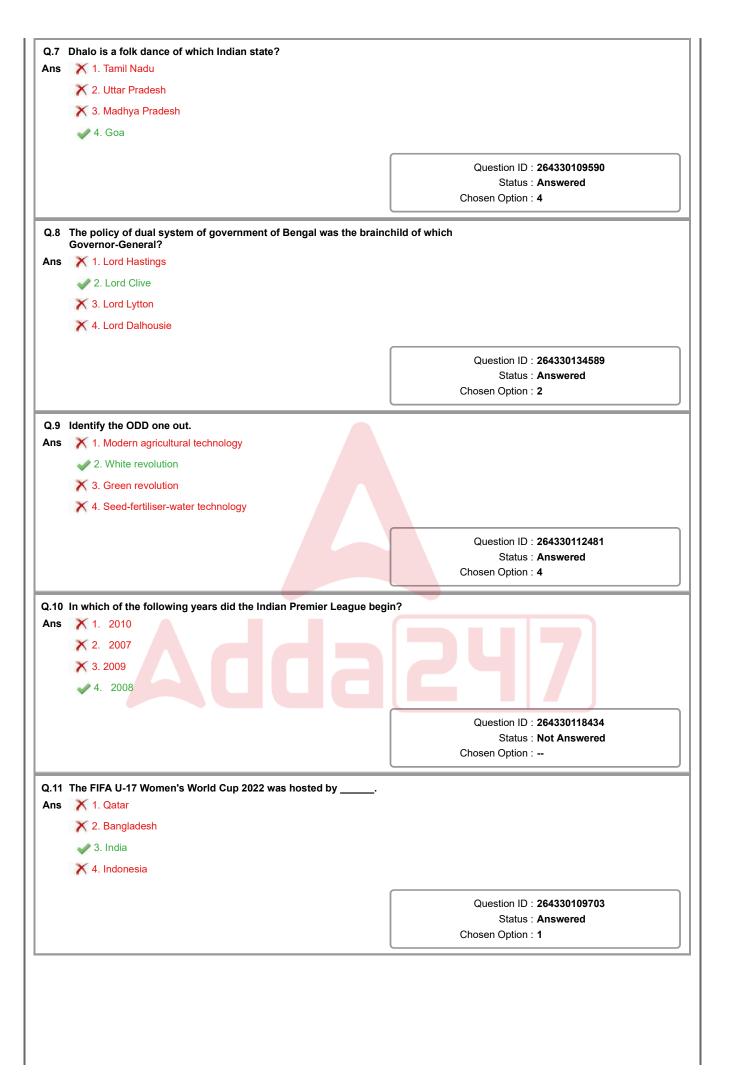


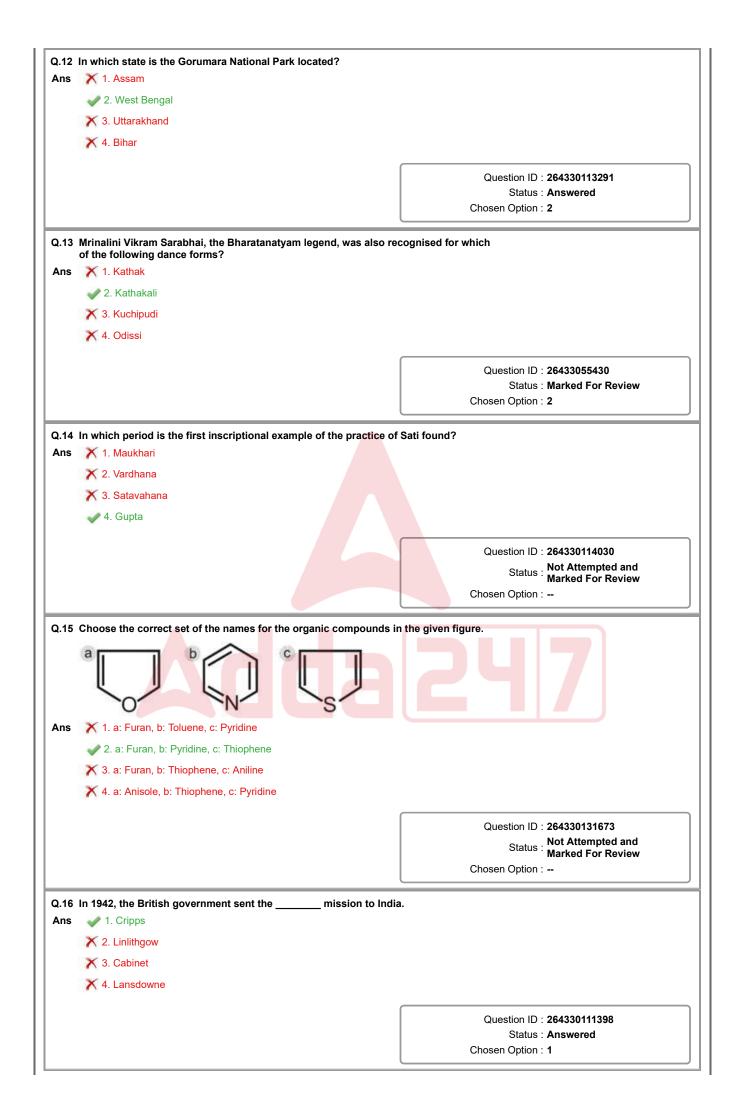




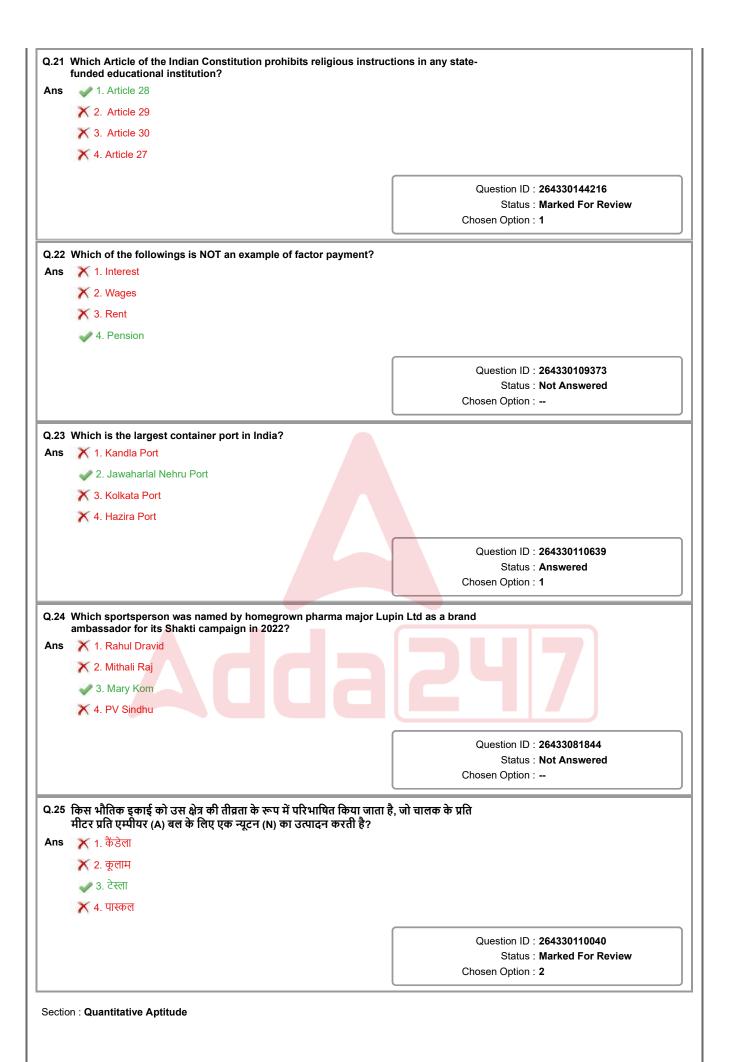


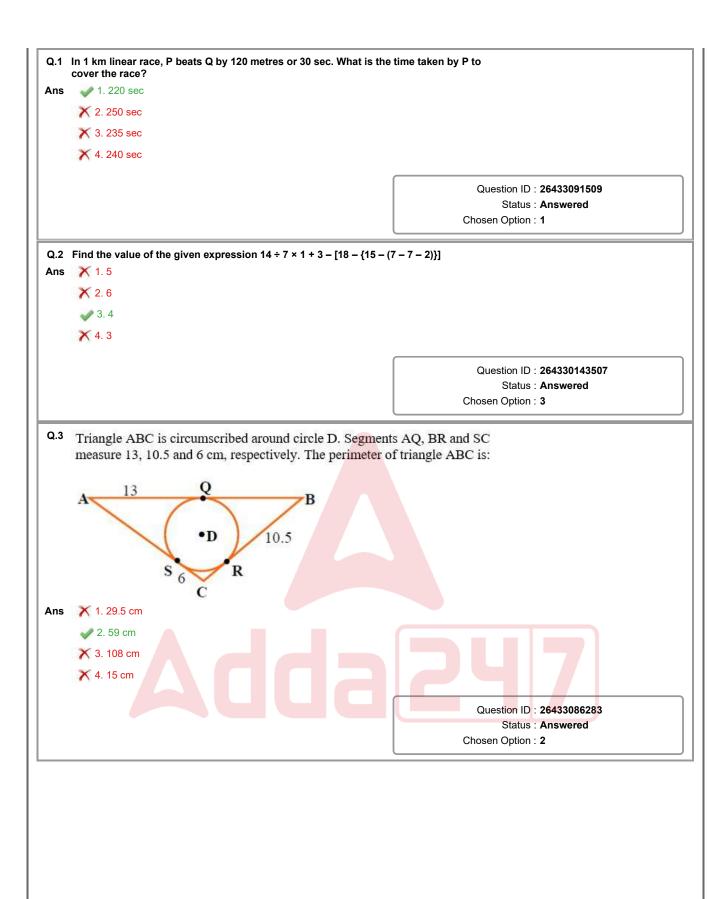
| Q.3   | <ul><li>1. Afghanistan</li><li>2. Bhutan</li><li>3. Sri Lanka</li><li>4. Bangladesh</li></ul>  |  |
|-------|--|--|
| Q.3   | X 3. Sri Lanka   |  |
| Q.3   |  |  |
| Q.3   | X 4. Bangladesh  |  |
| Q.3   |  |  |
| Q.3   |  |  |
| Q.3   |  | Question ID : 264330113309                                       |
| Q.3   |  | Status : <b>Not Answered</b> Chosen Option :                     |
| Q.3   |  | Glioscii Gpaoii .  |
| (     | Following an order of 16 July 2021, the Supreme Court of India in electronic system named, in November 2021, through decisions can be communicated electronically to prison authorit agencies.   | ugh which its crucial  |
| Ans   | X 1. INSTANT   |  |
|       | √ 2. FASTER  |  |
|       | X 3. RAPID   |  |
|       | X 4. QUICKER   |  |
|       |  |  |
|       |  | Question ID : 26433081854  |
|       |  | Status : Not Answered  |
|       |  | Chosen Option :  |
| Ans   | <ol> <li>There is very little temperature difference between day and ni of Kerala.</li> <li>There is very little temperature difference between day and ni of the control of the c</li></ol> | ght in Rajasthan.  |
|       |  | Question ID : 26433064180 Status : Answered Chosen Option : 4    |
|       | By what name did Allauddin Khilji build his capital?  1. Khijrabad  2. Siri  3. Dinpanah   | 247  |
|       | X 4. Rajpithora  |  |
|       |  |  |
|       |  | Question ID : 264330114035                                       |
|       |  | Status : Marked For Review Chosen Option : 3                     |
|       |  | Choschi Option : 3   |
| Q.6 I | Narali Poornima marks the end of monsoon season in which Indi  | an state?  |
|       | X 2. West Bengal   |  |
|       |  |  |
|       | X 4. Tamil Nadu  |  |
|       |  | Question ID : 264330109606 Status : Not Answered Chosen Option : |



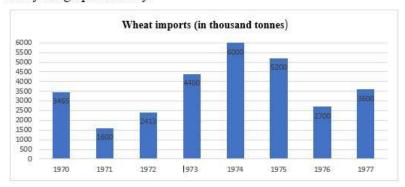


Q.17 Which state ranked first among the 18 large and mid-sized states (with population of over one crore each) in justice delivery in India as per the second edition of the India Justice Report? 1. Maharashtra Ans X 2. Tamil Nadu X 3. West Bengal X 4. Karnataka Question ID: 26433090642 Status : Not Attempted and Marked For Review Chosen Option: --Q.18 What is the duty of the Chief Minister, as mentioned under Article 167 of the Indian Constitution? 1. Communication of all decisions of the Council of Ministers to the Governor. 2. Appointment and removal of Council of the Ministers. 3. Appointment of the Speaker of the Legislative Assembly. X 4. Appointment of Advocate General of the state in consultation with Attorney general. Question ID: 264330137423 Status: Marked For Review Chosen Option: 4 Q.19 Which water-soluble pigment belonging to a phenolic group is present in pomegranate, eggplant, black carrots and red cabbage? Ans X 1. Phycoerythrin X 2. Phycobilins X 3. Betalains 4. Anthocyanins Question ID: 264330113487 Not Attempted and Status: **Marked For Review** Chosen Option: --Q.20 Match the columns. Column-A (Disorder) Column-B (Enzyme) a. Phenylalanine hydroxylase i. Gaucher disease ii. Hunter syndrome b. Hexosaminidase A iii. Tay-Sachs disease c. Iduronate-2-sulfatase iv. Phenylketonuria d. Glucocerebrosidase Ans X 1. i-a, ii-b, iii-c, iv-d X 2. i-b, ii-c, iii-a, iv-d 🥒 3. i-d, ii-c, iii-b, iv-a X 4. i-b, ii-a, iii-d, iv-c Question ID: 264330109924 Status: Not Answered Chosen Option: --





Study the graph carefully.



The decrease in imports in 1976 was what percent of the imports in 1975?

Ans

- √ 1. 48.07%
- × 2. 49%
- × 3. 48%
- × 4. 50%

Question ID: 26433096369 Status: Answered

Chosen Option: 1

If (a + b + c) = 14, and  $(a^3 + b^3 + c^3 - 3abc) = 98$ , find the value of (ab + bc + ca).

- Ans X 1.60
  - X 2. 64
  - X 3.65
  - **4**. 63

Question ID: 264330101360 Status: Answered

Chosen Option: 4

If A = 22.5°, what is the value of  $(10\sqrt{2} \sin 2A - 7\sqrt{2} \cos 2A + 9 \tan 2A)$ ?

Ans

- **1.12**
- X 2. 15
- **X** 3. 10

**X** 4. 6

Question ID: 264330143620 Status: Answered

Chosen Option : 1

Q.7 The sum of the cubes of two given natural numbers is 9728, while the sum of the two given numbers is 32. What is the product of the two given numbers?

- Ans X 1. 160
  - X 2. 320
  - **3**. 240
  - X 4. 200

Question ID: 264330101350

Status: Answered

Q.8 The force (in pound-force) needed to keep a car from skidding on a curve varies directly with the weight of the car (in pounds) and the square of its speed (in miles per hour [mph]) and inversely with the radius (in feet) of the curve. Suppose 6125 pound-force is required to keep a 2750 pound car, travelling at a speed of 35 mph, from skidding on a curve of radius 550 feet. How much pound-force is then required to keep a 3600 pound car, travelling at a speed of 50 mph, from skidding on a curve of radius 750 feet?

Ans

X 1. 11960

X 2. 12150

X 3. 12240

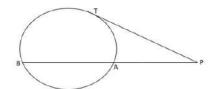
**4**. 12000

Question ID: 264330143469

Status : Not Attempted and Marked For Review

Chosen Option: --

Q.9 In the figure, PT is a tangent. If TP=12 cm, PB=x+7 cm and PA= x cm, then find the value of x.



Ans

**1.9** 

X 2.6

X 3. 7

**×** 4. 5

Status : Answered

Question ID: 264330143602

Chosen Option : 1

Q.10 Study the given table and answer the question that follows.

The table shows the marks distribution among the students in a class.

| Marks        | No. of<br>Students |
|--------------|--------------------|
| Less than 10 | 2                  |
| Less than 20 | 5                  |
| Less than 30 | 6                  |
| Less than 40 | 8                  |
| Less than 50 | 10                 |

How many students scored more than 40 marks?

Ans

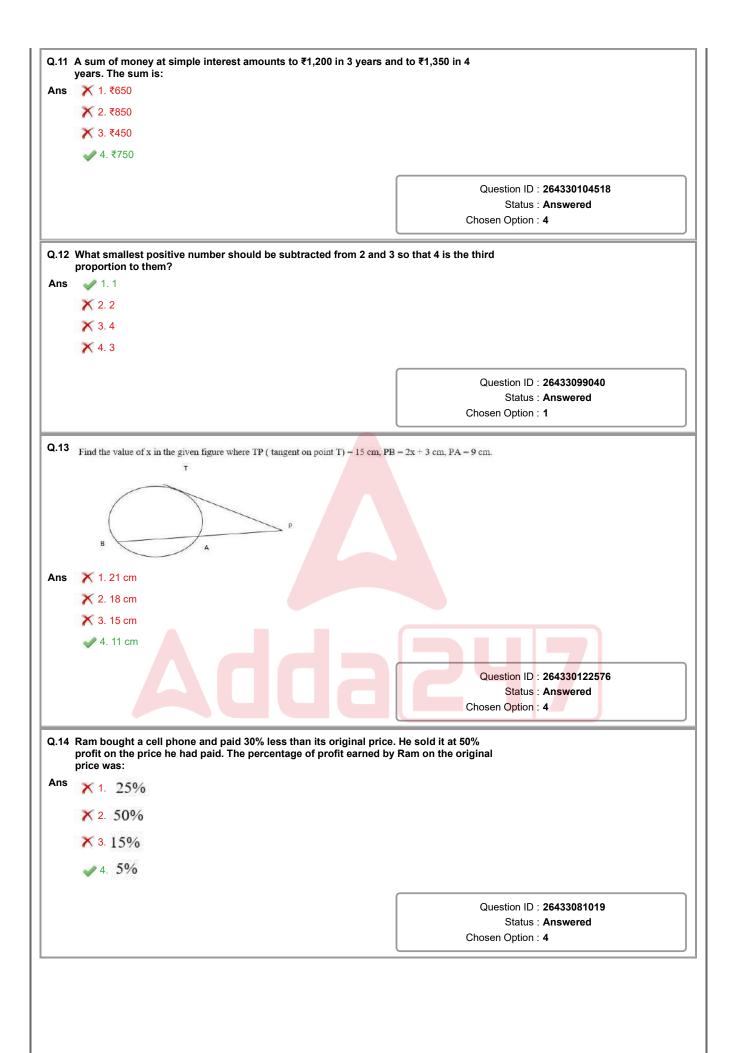
**1.2** 

X 2.4

X 3.5

X 4. 3

Question ID : 264330143450 Status : Answered



Q.15 In an examination of 7 papers of 100 marks each, there were 3 mathematics papers, 2 English papers and 2 Hindi papers. D gets average marks of 45, 55 and 60 in mathematics, English and Hindi, respectively. What are the average marks per paper?

Ans X 1. 56.5

**2.52.1** 

X 3. 55.6

X 4. 54.1

Question ID: 264330130167 Status: Answered

Chosen Option: 2

What is  $\tan \frac{\theta}{2}$ ?

 $\times$  1.  $\frac{\cos\theta}{1-\sin\theta}$ 

 $\times$  2.  $\frac{\sin\theta}{1-\cos\theta}$ 

 $\times$  3.  $\frac{\cos\theta}{1-\cos\theta}$ 

Question ID: 264330122107 Status: Answered

Chosen Option: 4

Q.17 If the volume of a cube is 4096 cm³, then what is the length of the side of the cube?

Ans X 1. 12 cm

X 2. 18 cm

X 4. 14 cm

Question ID: 26433075712

Status : Answered

Chosen Option: 3

Q.18 sin 600° cos 750° + sin 150° cos 240° = ?

X 2. 1

 $\times$  3.  $\frac{1}{2}$ 

√ 4. -1

Question ID: 26433075425 Status : Answered

Q.19 Expand and simplify the algebraic expression:

$$(x-5)^2 + (x+3)^2 + 4x$$

$$\checkmark$$
 2. 2(x<sup>2</sup> + 17)

$$\times$$
 3. (x<sup>2</sup> + 17)

 $\times$  4. 2(x<sup>2</sup> - 5x + 17)

Question ID: 264330145536

Status: Answered

Chosen Option: 2

Q.20 15 men complete a work in 10 days. 15 women complete the same work in 12 days. If all these men and women work together, then the number of days required to complete

Ans

**✓** 1. 5 
$$\frac{5}{11}$$

× 2. 
$$4\frac{3}{11}$$

× 3. 
$$7\frac{2}{11}$$

$$\times$$
 4.  $6\frac{4}{11}$ 

Question ID: 264330129451

Status: Answered

Chosen Option: 1

Q.21 Three successive discounts of 10% are available on the sale of a washing machine with a marked price of ₹55,000. Find the final selling price (in ₹) of the washing machine.

Ans

Question ID: 264330103962 Status: Answered

Chosen Option: 1

Q.22 Ramesh alone can complete a work in 24 days. Ramesh and Somesh can complete it in 8 days. How long will Somesh alone take to complete the work?

Question ID: 264330130120

Status: Answered

Q.23 Simplify the following expression. 120 ÷ 15 of 4 + [ 11 × 4 ÷ 4 of { 4 × 2 - (8 - 11 ) } ]

Ans

**3**. 3

**×** 4. −3

Question ID: 26433063187 Status: Answered

Chosen Option: 3

Q.24 A watch is purchased for ₹3,200 and sold for ₹2,700. Calculate the percentage loss up to two places of decimal.

X 1. 15.18%

2. 15.62%

× 3. 16.12%

× 4. 16.50%

Question ID: 26433085759 Status: Answered

Chosen Option: 2

Q.25 A circular running path is 1452 m in circumference. Two men start from the same point and walk in opposite direction at the speed of 7.5 km/h and 9 km/h, respectively. When will they meet for the first time?

Ans

X 1. 5.17 min

2. 5.28 min

X 3. 5.71 min

X 4. 5.82 min

Question ID: 26433075890

Status : Answered

Chosen Option: 2

Section: English Comprehension

Q.1 Select the option that expresses the given sentence in passive voice. The teacher is explaining the lesson.

Ans X 1. The lesson explained the teacher.

2. The teacher explained the lesson.

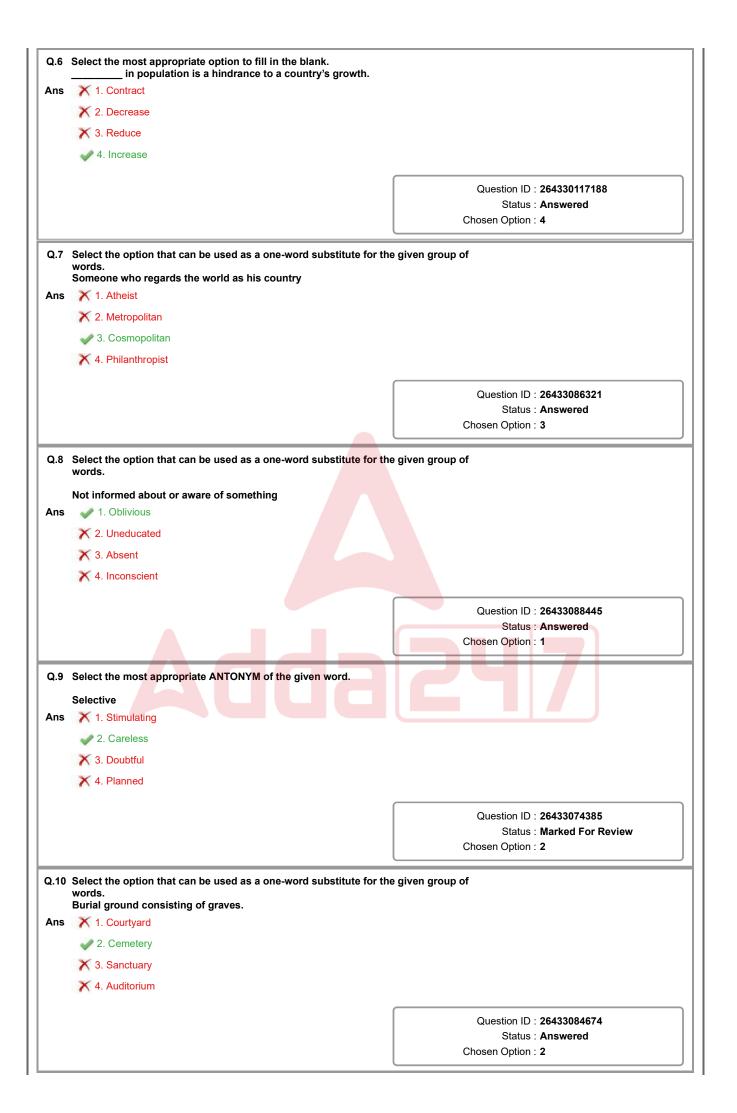
3. The lesson is being explained by the teacher.

4. The lesson was explained by the teacher.

Question ID: 264330137479

Status: Answered

| Q.2 | 2 Some words in the following sentence have been underlined and given as options. Select the option that contains a spelling error. |   |
|-----|---|---|
|     | He is an <u>audacious</u> <u>entrepreneur</u> who started his own <u>business</u> with t minimum.                                   | the <u>bear</u>                                   |
| Ans | X 1. business   |   |
|     | X 2. audacious  |   |
|     | X 3. entrepreneur   |   |
|     | ✓ 4. bear   |   |
|     |   |   |
|     |   | Question ID: 264330121274 Status: Answered        |
|     |   | Chosen Option : 4                                 |
|     |   |   |
| _   | Sentences with spelling errors are given. Select the sentence with NC   |   |
| Ans | cavities.   |   |
|     | X 2. The body produces more saliva under fluorescent illummination which helps prevent cavaties.                                    |   |
|     | X 3. The body produces more saliva under fluorescent illummination which helps prewent cavities.                                    |   |
|     | X 4. The body produces more saliva under fluorescent illumination whice cavaties.   | th helps prewent                                  |
|     |   | Question ID : 26433089740                         |
|     |   | Status : Answered                                 |
|     |   | Chosen Option : 1                                 |
| Q.4 | Select the most appropriate option to fill in the blank.  |   |
|     | The termites were just the tip of the, but the house was ne   | ar collapsing in                                  |
| A   | reality.  |   |
| Ans |   |   |
|     | 2. iceberg  |   |
|     | X 3. shoe   |   |
|     | X 4. heel  ✓ 4. heel  |   |
|     |   | Question ID : 26433088458                         |
|     |   | Status : Marked For Review Chosen Option : 1      |
|     |   |   |
| Q.5 | Parts of the following sentence have been underlined and given as option that contains an error.                                    | otions. Select the                                |
| Ans | I <u>love to read certain</u> stories from <u>a</u> Mahabharata.  X 1. certain  |   |
|     | × 2. to   |   |
|     | X 3. love   |   |
|     | <b>✓</b> 4. a   |   |
|     |   |   |
|     |   | Question ID : 26433089375                         |
|     |   | Status : <b>Answered</b> Chosen Option : <b>4</b> |
|     |   | Chooch Option: 4                                  |
|     |   |   |
|     |   |   |



Q.11 Select the most appropriate option that can substitute the underlined words in the given sentence. The heavy medications and strong drugs at the sanatorium will surely turn a patient completely lifeless and unresponsive. Ans X 1. tombic 2. cadaverous X 3. zonic X 4. wasted Question ID: 26433086504 Status: Not Answered Chosen Option: --Q.12 Select the most appropriate meaning of the underlined idiom in the following sentence. I really don't want to pour cold water on your theory but it cannot be applied to real life situations. Ans X 1. To destroy someone's written piece of work X 2. To take revenge on someone by destroying their lives' work under the pretext of bad quality 3. To be critical or doubtful of a plan that someone is excited about 4. To give goosebumps by showing a prospect Question ID: 26433088822 Status: Marked For Review Chosen Option: 1 Q.13 Select the most appropriate synonym of the italicised word in the given sentence. In most organisations there are predators who take advantage over the meek ones. Ans X 1. supporters X 2. philanthropists 3. benefactors 4. exploiters Question ID: 26433096204 Status: Answered Chosen Option: 4 Q.14 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph. A. Nostalgia helps us maintain a positive psychological status when counteracting the negative impact of difficult situations. B. Nostalgia is a sentimental longing for one's past. C. The adaptive functions of nostalgia are many, with one effect being pain relief. D. It is a self-conscious, perhaps bittersweet but predominantly positive social emotion. Ans X 1. CDBA 2. BDAC X 3. ABCD X 4. CADB Question ID: 264330143878 Status: Marked For Review Chosen Option: 2

| J.15               | Select the option that expresses the given sentence in passive They are hitting the ball.  | voice.   |  |  |
|--------------------|--|--|--|--|
| ns                 | X 1. The ball has been hit by them.  |  |  |  |
|                    | X 2. The ball is being hitten by them.   |  |  |  |
|                    | X 3. The ball is hit by them.  |  |  |  |
|                    | ✓ 4. The ball is being hit by them.  |  |  |  |
|                    |  |  |  |  |
|                    |  | Question ID : 264330121853                                 |  |  |
|                    |  | Status : <b>Answered</b> Chosen Option : <b>4</b>          |  |  |
|                    |  | Chosen Option . 4  |  |  |
| .16                | Select the most appropriate ANTONYM of the underlined word. The crowd gave an <u>exultant</u> cheer to the football team when the airport. |  |  |  |
| Ans X 1. rejoicing |  |  |  |  |
|                    | 2. disconsolate  |  |  |  |
|                    | X 3. jubilant  |  |  |  |
|                    | X 4. elated  |  |  |  |
|                    |  |  |  |  |
|                    |  | Question ID: 264330122968 Status: Answered                 |  |  |
|                    |  | Chosen Option: 2   |  |  |
|                    |  |  |  |  |
| .17                | Select the most appropriate option to fill in the blank.   |  |  |  |
|                    | The group of travellers were wonderstruck by the   | of the coin.   |  |  |
| ns                 | X 1. wait  |  |  |  |
|                    | × 2. white   |  |  |  |
|                    | ✓ 3. weight  |  |  |  |
|                    | X 4. wide  |  |  |  |
|                    |  |  |  |  |
|                    |  | Question ID : 264330145565                                 |  |  |
|                    |  | Status : Answered Chosen Option : 3                        |  |  |
|                    |  |  |  |  |
| ).18               | Select the most appropriate synonym of the given word.  Fragile  |  |  |  |
| ıns                | ✓ 1. Delicate  |  |  |  |
|                    | × 2. Firm  |  |  |  |
|                    | X 3. Composed  |  |  |  |
|                    | X 4. Fanatic   |  |  |  |
|                    |  | 0 1 10 0040000000  |  |  |
|                    |  | Question ID: 26433073700 Status: Answered                  |  |  |
|                    |  | Chosen Option: 1   |  |  |
|                    |  |  |  |  |
| .19                | Identify the option that rectifies the error in the given sentence<br>In 2023, she will has been working in the company for three year     |  |  |  |
|                    | 1. By 2023   | ai 5.  |  |  |
| ns                 |  |  |  |  |
| ns                 |  |  |  |  |
| ns                 | X 2. in company  |  |  |  |
| ns                 | 3. she will have been  |  |  |  |
| lns                |  |  |  |  |
| Ans                | 3. she will have been  | Question ID : <b>264330121285</b>                          |  |  |
| Ans                | 3. she will have been  | Question ID : <b>264330121285</b> Status : <b>Answered</b> |  |  |

| Q.20        | Select the option that can be used as a one-word substitute for the words.   | given group of   |  |
|-------------|--|--|--|
|             | Filled with fear or dread  |  |  |
| Ans         | X 1. Prudent   |  |  |
|             | × 2. Tremulous   |  |  |
|             | X 3. Corpulent   |  |  |
|             |  |  |  |
|             |  |  |  |
|             |  | Question ID : 26433088444  |  |
|             |  | Status : <b>Answered</b> Chosen Option : <b>2</b>  |  |
|             |  | опоситерните.  |  |
|             | Comprehension:   |  |  |
|             | In the following passage, some words have been deleted. Read the passelect the most appropriate option to fill in each blank.  Can we see (1) the earth is a globe? Yes, we can, when we wout to sea, if we watch closely, we see that the ship begins to (2) ship disappears first, and then the ship seems to sink lower and lower, (only see the top of the ship, and then we see nothing at all. What is hidi is the earth. Stick a pin most of the way into an orange, and (4) away from you. You will see the pin disappear, (5) a ship does | vatch a ship that sails The bottom of the [3] we can ng the ship from us? It                   |  |
| ١ ـ ـ .     | SubQuestion No : 21  |  |  |
| Q.21<br>Ans | 1 Select the most appropriate option to fill in blank no. 1.   |  |  |
| Alla        | 1. that  |  |  |
|             | X 2. clearly   |  |  |
|             | X 3. how   |  |  |
|             | X 4. where   |  |  |
|             |  | Question ID : 264330139829   |  |
|             |  | Status : Answered  |  |
|             |  | Chosen Option : 3  |  |
|             | Comprehension:   |  |  |
|             | In the following passage, some words have been deleted. Read the passelect the most appropriate option to fill in each blank.  Can we see (1) the earth is a globe? Yes, we can, when we wout to sea, if we watch closely, we see that the ship begins to (2) ship disappears first, and then the ship seems to sink lower and lower, only see the top of the ship, and then we see nothing at all. What is hid is the earth. Stick a pin most of the way into an orange, and (4) away from you. You will see the pin disappear, (5) a ship does   | vatch a ship that sails The bottom of the (3) we can ng the ship from us? It _ turn the orange |  |
|             | SubQuestion No: 22   |  |  |
| Q.22        | Select the most appropriate option to fill in blank no. 2.   |  |  |
| Ans         | X 1. being disappeared   |  |  |
|             | ✓ 2. disappear   |  |  |
|             | X 3. have disappeared  |  |  |
|             | X 4. having disappeared  |  |  |
|             |  | 2  |  |
|             |  | Question ID : 264330139830<br>Status : Answered  |  |
|             |  | Chosen Option : 2  |  |

| Q.23<br>Ans | 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.  Can we see (1) the earth is a globe? Yes, we can, when we watch a ship that sails out to sea, if we watch closely, we see that the ship begins to (2) The bottom of the ship disappears first, and then the ship seems to sink lower and lower, (3) we can only see the top of the ship, and then we see nothing at all. What is hiding the ship from us? It is the earth. Stick a pin most of the way into an orange, and (4) turn the orange away from you. You will see the pin disappear, (5) a ship does on the earth.  SubQuestion No: 23  Select the most appropriate option to fill in blank no. 3.  1. until  2. after  3. up to  4. since |   |
|-------------|---|---|
|             |   | Question ID : 264330139831  |
|             |   | Status : Marked For Review  |
|             |   | Chosen Option : 1   |
|             |   |   |
| Q.24<br>Ans | Comprehension:  In the following passage, some words have been deleted. Read the passelect the most appropriate option to fill in each blank.  Can we see (1) the earth is a globe? Yes, we can, when we wout to sea, if we watch closely, we see that the ship begins to (2) ship disappears first, and then the ship seems to sink lower and lower, (only see the top of the ship, and then we see nothing at all. What is hidi is the earth. Stick a pin most of the way into an orange, and (4)away from you. You will see the pin disappear, (5) a ship does  SubQuestion No: 24  Select the most appropriate option to fill in blank no. 4.  X 1. accidently  X 2. reluctantly  X 3. accordingly  4. slowly   | vatch a ship that sails The bottom of the 3) we can ng the ship from us? It turn the orange |
| Q.25<br>Ans | Comprehension:  In the following passage, some words have been deleted. Read the passelect the most appropriate option to fill in each blank.  Can we see (1) the earth is a globe? Yes, we can, when we wout to sea, if we watch closely, we see that the ship begins to (2) ship disappears first, and then the ship seems to sink lower and lower, (only see the top of the ship, and then we see nothing at all. What is hidi is the earth. Stick a pin most of the way into an orange, and (4) away from you. You will see the pin disappear, (5) a ship does  SubQuestion No: 25  Select the most appropriate option to fill in blank no. 5.  X 1. the same  X 2. alike  X 3. unlike  | vatch a ship that sails The bottom of the 3) we can ng the ship from us? It turn the orange |

Question ID : 264330139833 Status : Marked For Review