

# English

## Instructions

For the following questions answer them individually

### Question 1

Select the most appropriate word to fill in the blank.

You have to do \_\_\_\_ intensive training to become a nurse.

- A the
- B a
- C an
- D one

Answer: C

### Question 2

Select the word which means the same as the group of words given.

A period of two weeks

- A Quarter
- B Decade
- C Fortnight
- D Weekend

Answer: C

### Question 3

Select the wrongly spelt word.

- A Rogue
- B Argue
- C Toungue
- D Vague

Answer: C

### Question 4

Select the meaning of the given idiom.

To run amok

- A To compete in a race
- B To participate in a marathon
- C To outrun someone

D To run about in a frenzy

Answer: D

#### Question 5

Identify the segment in the sentence which contains the grammatical error from the given options.

The government's proposal has been set alarm bells ringing for people with low incomes.

A with low incomes

B ringing for people

C The government's proposal

D has been set alarm bells

Answer: D

#### Question 6

Select the most appropriate word to fill in the blank.

She is highly skilled \_\_\_\_ dealing with difficult customers.

A of

B into

C at

D on

Answer: C

#### Question 7

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

This training has intended to give people the skills they need for a particular job.

A have intended to

B is intend towards

C No substitution required

D is intended to

Answer: D

#### Question 8

Identify the segment in the sentence which contains the grammatical error from the given options.

If children are treating with respect, they will behave accordingly.

A behave accordingly

- B treating with respect
- C If children are
- D they will

Answer: B

#### Question 9

Select the antonym of the given word.  
CREATE

- A Develop
- B Deploy
- C Derive
- D Destroy

Answer: D

#### Question 10

Identify the segment in the sentence which contains the grammatical error from the given options.  
We couldn't understand they because they were talking in Chinese.

- A We couldn't understand
- B they were talking
- C they because
- D in Chinese

Answer: C

#### Question 11

Select the meaning of the given idiom.  
To have a jaundiced eye

- A To be very pleased
- B To have yellowish eyes
- C To be prejudiced
- D To have sore eyes

Answer: C

#### Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

#### Comprehension:

Plants first appeared on earth 400 million years ago. Insects arrived 100 million years later. Ever (1)\_\_\_\_\_ a fierce war has raged between the two. At first it (2)\_\_\_\_\_ not seem likely that the plants would stand (3)\_\_\_\_\_ chance in the battle. Plants, unlike insects,

cannot move. Plants are (4)\_\_\_\_\_outnumbered by insects; an average oak tree will have tens of thousands of insects (5)\_\_\_\_\_on it.

Question 12

Select the most appropriate option to fill in blank No.1.

- A for
- B on
- C since
- D afterwards

Answer: C

Question 13

Select the most appropriate option to fill in blank No.2.

- A did
- B does
- C do
- D had

Answer: A

Question 14

Select the most appropriate option to fill in blank No.3.

- A none
- B any
- C some
- D not

Answer: B

Question 15

Select the most appropriate option to fill in blank No.4.

- A firmly
- B lightly
- C vastly
- D deeply

Answer: C

Question 16

Select the most appropriate option to fill in blank No.5

- A feeling
- B eating
- C fighting
- D feeding

Answer: D

#### Instructions

For the following questions answer them individually

#### Question 17

Select the synonym of the given word.

Enhance

- A Reduce
- B Frighten
- C Shrink
- D Improve

Answer: D

#### Question 18

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Vocational training should not be seen as less important than an academic education.

- A than a academic education
- B No substitution required
- C than an academic educate
- D then an academic education

Answer: B

#### Question 19

Select the most appropriate word to fill in the blank and make a meaningful sentence.

In some disputes face-to-face talk can \_\_\_\_\_ the issue.

- A restrict
- B refuse
- C resolve
- D reduce

Answer: C

Question 20

Select the wrongly spelt word.

- A Quote
- B Require
- C Queue
- D Acquire

Answer: D

Question 21

Select the antonym of the given word.

MODEST

- A Vain
- B Furious
- C Dishonest
- D Simple

Answer: A

Question 22

Select the synonym of the given word.

Hate

- A Deny
- B Defer
- C Detest
- D Defile

Answer: C

Question 23

Select the word which means the same as the group of words given.

Persons living at the same time

- A Colleagues
- B Contemporaries
- C Comrades
- D Companions

Answer: B

Question 24

Select the most appropriate word to fill in the blank and make a meaningful sentence.  
Twenty families were \_\_\_\_\_ from an old building before the monsoons.

- A erased
- B evacuated
- C emptied
- D expelled

Answer: B

Question 25

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

Passengers were asked to identify their suitcases before they were loaded on the plane.

- A they loaded on
- B it was loaded on
- C they were loaded over
- D No substitution required

Answer: D

## Reasoning

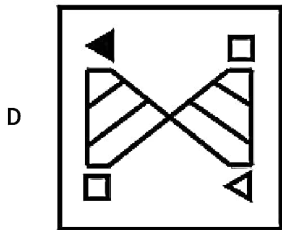
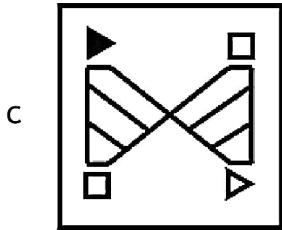
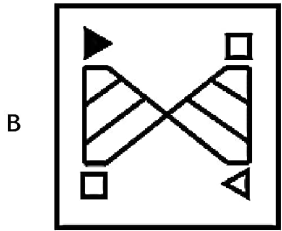
### Instructions

For the following questions answer them individually

### Question 26

If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?

A



Answer: B

Question 27

In a certain code language, 'RAM' is written as '31', 'FAN' is written as '20'. What is the code for 'COR' in that code language?

A 34

B 37

C 35

D 36

Answer: C

Explanation:

In the given code, A = 1, B = 2,...Z = 26.

RAM is coded as  $R + A + M - 1$ . i.e.  $18 + 1 + 13 - 1 = 31$

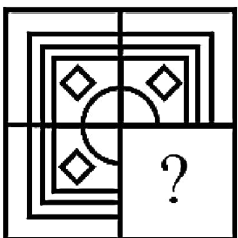
FAN is coded as  $F + A + N - 1$ . i.e.  $6 + 1 + 14 - 1 = 20$

COR:  $C + O + R - 1 = 3 + 15 + 18 - 1 = 35$

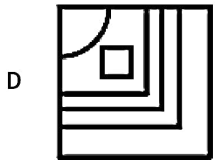
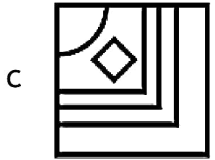
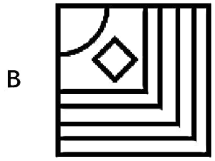
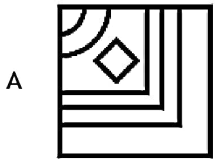
Therefore, Option C is correct.

Question 28

Which answer figure will complete the pattern in the question figure?



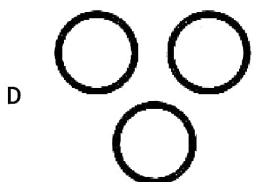
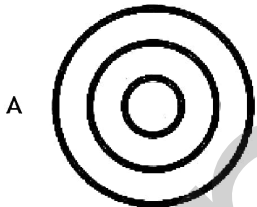




Answer: C

Question 29

Identify the Venn diagram that best represents the relationship between the given classes.  
Chair, Bench, Furniture



Answer: C

Question 30

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

|    |    |    |
|----|----|----|
| 6  | 12 | 7  |
| 9  | 4  | 11 |
| 11 | 6  | 2  |
| 13 | ?  | 10 |

- A 11
- B 22
- C 10
- D 13

Answer: A

Question 31

Six scientists R, L, T, S, N and P are standing in a row facing towards north (Not necessarily in the same order). N is standing to the immediate right of R. S is standing second to the right of P. Two scientists are standing between T and N. S is towards the left of L. Which of the following is correct about the position of L?

- A Between R and N
- B Third to the right of R
- C L is at one of the end
- D Towards the immediate left of N

Answer: C

Explanation:

S is second to the right of P and is towards the left of L. So, we will have

Case 1:

P \_ S \_ \_ \_

Case 2:

\_ P \_ S \_ \_

Case 3:

\_ \_ P \_ S L

N is standing to the immediate right of R. Two scientists are standing between T and N.

Case 1:

P T S R N \_

So, the only person left is L.

P T S R N L

Case 2:

N is standing to the immediate right of R. Two scientists are standing between T and N.

\_ P T S R N

So, the only person left is L.

L P T S R N

But S is to the left of L. Hence this case gets rejected.

Case 3:

N is standing to the immediate right of R. Two scientists are standing between T and N.

R N P \_ S L

Here only person left is T. So, we will get

R N P T S L

But as per the given condition two scientists are standing between T and N. Hence this case gets rejected.

Therefore the final arrangement is of Case I

P T S R N L

L is at the right end, Therefore,

Option C is correct. Question

32

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

18 : 323 :: 24 : ?

A 625

B 575

C 675

D 535

Answer: B

Explanation:

Let the fourth number be x.

$$323 = 18^2 - 1$$

Therefore,

$$x = 24^2 - 1 = 576 - 1 = 575$$

Option B is correct.

Question 33

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

I. All A are K.

II. Some J are K.

Conclusions:

I. Some A are J.

II. No K is J.

III. All K are J.

A Only conclusion I follows.

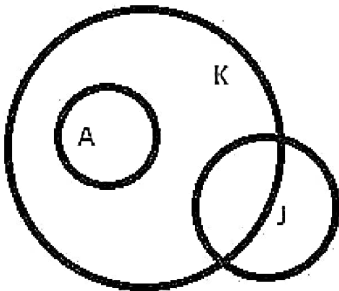
B Only conclusion III follows.

C Both conclusion II and III follows.

D Neither conclusion follow.

Answer: D

Explanation:



Conclusion 1: Some A are J - Not always true. Some A can be J but need not always be, as in above diagram.

Conclusion 2: No K is J - Since some J are K, converse is also true. i.e. some K are also J. Therefore the conclusion is false.

Conclusion 3: All K are J - As per the condition and as represented in the diagram, all K need not be J.

Thus, neither conclusion follows.

Option D is correct.

Question 34

Select the number that can replace the question mark (?) in the following series.

23, 29, 31, 37, 41, ?

A 53

B 44

C 59

D 43

Answer: D

Explanation:

The given numbers are part of series of consecutive prime numbers.

Therefore, the series will be 23, 29, 31, 37, 41, 43.

i.e. the next number in the series is 43.

Option D is correct.

Question 35

By interchanging which two signs the equation will be correct?

$$9 \times 11 \div 31 + 62 - 13 = 18$$

A  $\times$  and  $\div$

B  $-$  and  $\times$

C  $\div$  and  $+$

D  $+$  and  $\times$

Answer: D

Question 36

After interchanging the given two numbers, what will be the value of  $3 + 2 \div 1 \times 4 - 7$ ?  
4 and 7

- A 10
- B 12
- C 13
- D 11

Answer: C

Explanation:

given  $3 + 2 \div 1 \times 4 - 7$

on interchanging 4 and 7

BODMAS rule { brackets > of > division > multiplication > addition > subtraction }

we get  $3 + 2 \div 1 \times 7 - 4$  ( using BODMAS rule)

$$3 + 1 \times 7 - 4 = 3 + 2 \times 7 - 4 = 3 + 14 - 4 = 13$$

Question 37

In a certain code language, 'SHOES' is written as '19815519', 'SEED' is written as '19554'. What is the code for 'CHAIR' in that code language?

- A 389111
- B 371918
- C 381918
- D 381917

Answer: C

Explanation:

number corresponding to the letter of the alphabet

[S] → (19)

[H] → (8)

[O] → (15)

[E] → (5)

[S] → (19)

"SHOES" → "19815519"

similarly

[S] → (19)

[E] → (5)

[E] → (5)

[D] → (4)

"SEED" → "19554"

similarly "CHAIR" → "381918"

Question 38

In a certain code language, 'BRICK' is written as 'WMDXF'. What is the code for 'GOLDS' in that code language?

A BJGYM

B BJGYN

C BKGYM

D BKGYN

Answer: B

Explanation:

[B] → [W] (difference - 5)

[R] → [M] (difference - 5)

[I] → [D] (difference - 5)

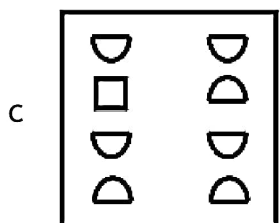
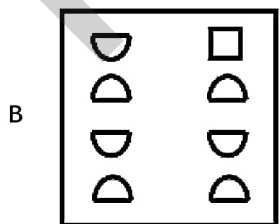
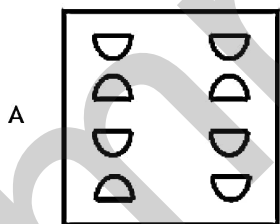
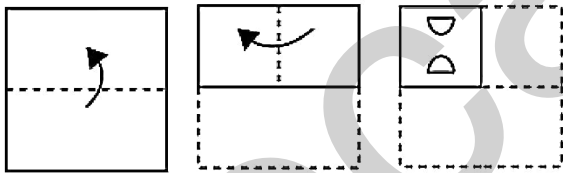
[C] → [X] (difference - 5)

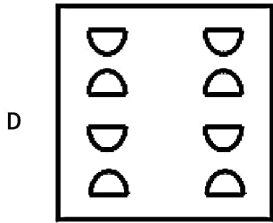
[K] → [F] (difference - 5)

similarly "GOLDS" → "BJGYN"

Question 39

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?





Answer: D

Question 40

Select the option that is related to the third term in the same way as the second term is related to the first term.  
Leather : Shoes :: Asphalt : ?

- A Car
- B Air
- C Water
- D Road

Answer: D

Explanation:

leather:shoes → leather is used for making shoes in the same way Asphalt is a bituminous mixture used for making roads.

hence option d

Question 41

Select the number that can replace the question mark (?) in the following series.  
37, 43, 51, 61, 73, ?

- A 85
- B 89
- C 87
- D 83

Answer: C

Explanation:

Arithmetic progression with common difference 2

$$43 - 37 = 6$$

$$51 - 43 = 8$$

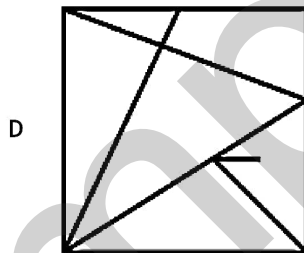
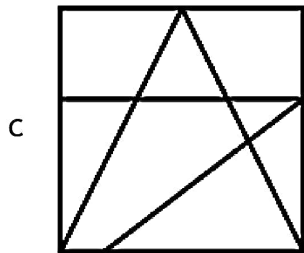
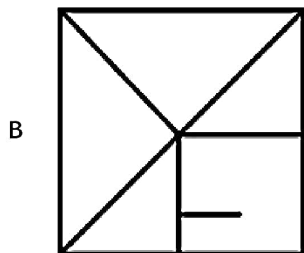
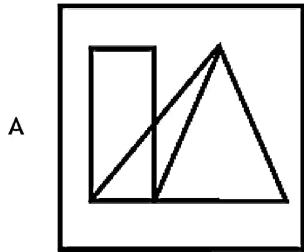
$$61 - 51 = 10$$

$$73 - 61 = 12$$

$$\text{hence } 73 + 14 = 87$$

Question 42

From the given answer figures, select the one in which the question figure is hidden/embedded.



Answer: A

Question 43

There are five classes class 1, class 2, class 3, class 4 and class 5 in a school. They are one above the other. Class 1 is at the bottom, then class 2 above it and so on. Five videos M1, M2, M3, M4 and M5 are displayed in these given classes. Only one video is displayed in a particular class. Each video is displayed only one time. Video M5 is displayed at a even numbered class. Video M2 is displayed at class 1. Video M1 is displayed at the class just below M5. Video M4 is not displayed at even numbered class. Which of the following statement is not correct?

- A Only one video is displayed after M3
- B Only two videos are displayed above M1
- C Only one video is displayed between M2 and M5
- D M1 is displayed between M3 and M5



Answer: C

Explanation:

|          |         |         |
|----------|---------|---------|
|          | [case1] | [case2] |
| [class5] | [M4]    |         |
| [class4] | [M5]    |         |
| [class3] | [M1]    |         |
| [class2] | [M3]    | [M5]    |
| [class1] | [M2]    | [M2]    |

since M1 is just below M5 therefor case 2 is ruled out

option A only one video is displayed after M3 is correct

option B only 2 videos are displayed above M1 is correct

option C only one video is displayed between M2 and M5 is incorrect

option D M1 is displayed between M3 and M5 is correct

Question 44

A series is given with one Letter Cluster missing. Select the correct alternative from the given ones that will complete the series.  
POND, UVSK, ZCXR, EJCY, ?

A JQHF

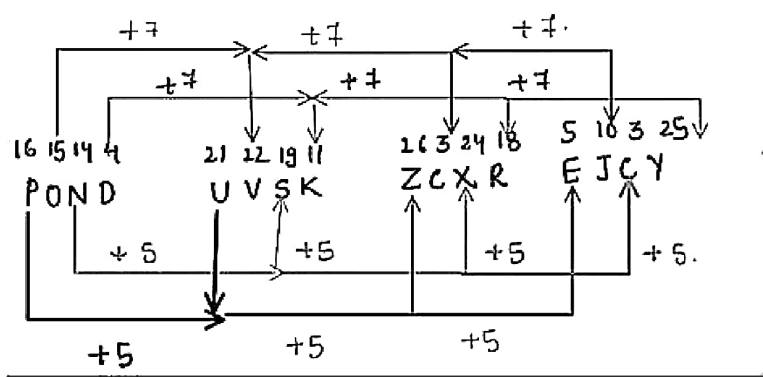
B KQHF

C JQHE

D KQHE

Answer: A

Explanation:



adding +5 to "E" gives "J", adding +7 to gives "Q", adding +5 to "C" gives "H" and adding +7 to "Y" gives "F"  
 hence "JQHF"

Question 45

In a certain code language, 'BLADE' is written as 'LBAED'. What is the code for 'TABLE' in that code language?

- A ATLBE
- B ATBEL
- C ATLEB
- D ATBLE

Answer: B

Explanation:

"BLADE" → "LBAED" the position of "A" remains the same where as "B" and "L" interchange their positions and "D" and "E" interchange their positions. Similarly "TABLE" →

keep "B" as it is, interchange "T" and "A" and "L" and "E" which would form "ATBEL". Hence OPTION B is the answer

Question 46

Select the word pair in which the two words are related in the same way as the two words in the following word-pair.

Web : Spider :: ?

- A Nest : Bird
- B Palace : Rat

C Convict : Prison

D Den : Eskimo

Answer: A

Explanation:

Web is build by spider. In the same way nest is build by bird and all other options are represented wrongly.

therefore the answer is Nest : Bird

Question 47

Five persons H1, H2, H3, H4 and H5 are sitting around a circular table facing towards the centre (Not necessarily in the same order). H4 is third to the left of H2. H3 and H1 are the immediate neighbours of H2. H5 is to the immediate left of H3. Who is sitting third to the right of H1?

A H2

B H4

C H5

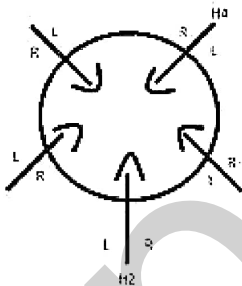
D H3

Answer: D

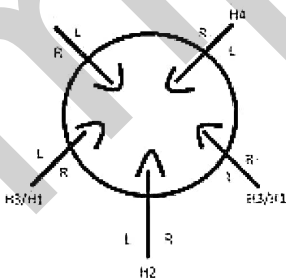
Explanation:

H3 and H1 are the immediate neighbours of H2. Given,

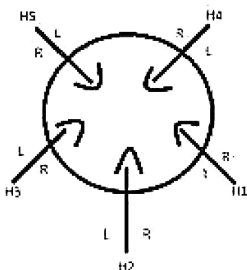
Five persons H1, H2, H3, H4 and H5 are sitting around a circular table facing towards the centre and H4 is third to the left of H2.



H3 and H1 are the immediate neighbours of H2.



H5 is to the immediate left of H3.



Question 48

In the following question, select the figure which can be placed at the sign of question mark (?) from the given alternatives.

|                   |                   |                   |                   |   |
|-------------------|-------------------|-------------------|-------------------|---|
| A M R<br>J<br>K T | M Я<br>A L<br>U X | R T<br>M K<br>A J | L X<br>Я<br>M A U | ? |
|-------------------|-------------------|-------------------|-------------------|---|

A 

|   |     |
|---|-----|
| L | K   |
|   | J   |
| Я | M A |

B 

|   |     |
|---|-----|
| T | K   |
|   | U   |
| R | M A |

C 

|   |     |
|---|-----|
| T | K   |
|   | J   |
| R | M A |

D 

|   |     |
|---|-----|
| L | K   |
|   | U   |
| Я | M A |

Answer: C

Explanation:

Each letter in the square moves one position ahead in clockwise direction. So the next move should contain letters as in option C.

|   |     |
|---|-----|
| T | K   |
|   | J   |
| R | M A |

Question 49

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

- I. Some red are phone.
- II. No phone is car.

Conclusions:

- I. Some car are red.
- II. Some phone are red.

A Only conclusion II follows.

B Only conclusion I follows.

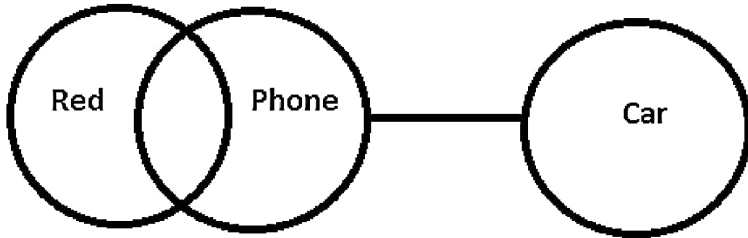
C Both conclusion I and II follows.

D Neither conclusion follow.

Answer: A

Explanation:

Venn diagram for the given statement is as follows,



Conclusions:

I. Some car are red ----> from the diagram, some car are not red, hence false.

II. Some phone are red ----> Clearly, some phone are red, hence true.

Question 50

Select the option that is related to the third Letter Cluster in the same way as the second Letter Cluster is related to the first Letter Cluster.

TOK : SNJ :: LAP : ?

A KAN

B KAO

C KZO

D LAN

Answer: C

Explanation:

Each letter of the first word is preceded by each letter of the second word.

hence LAP should be written as KZO.

## Quant

Instructions

For the following questions answer them individually

Question 51

Three successive discounts of 20%, 20% and 30% are offered on an article. If the marked price of the article is ₹750, then what will be selling price?

A ₹326

B ₹375

C ₹348

D ₹336

Answer: D

Explanation:

Given,

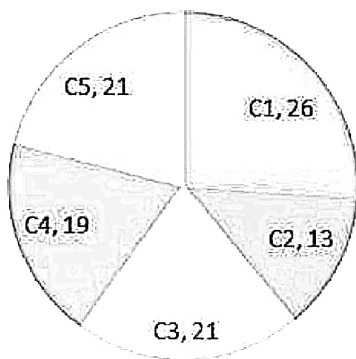
marked price = 750 and the discounts are 20%, 20% and 30%

Take 20%, 20% and 30% as  $\frac{80}{100}$ ,  $\frac{80}{100}$ ,  $\frac{70}{100}$

therefore, selling price =  $750 \times \frac{80}{100} \times \frac{80}{100} \times \frac{70}{100}$   
= 336

Question 52

The given Pie Chart (central angles are not as per any chosen scale) presents the percentage of the number of refrigerators of five different companies (with reference to the total number of refrigerators) in a hotel.



What is the difference in number of refrigerators supplied to the hotel by companies C1 and C5?

- A 481
- B 259
- C 222
- D 185

Answer: D

Explanation:

Given,

Total number of refrigerators in the hotel = 3700

Percentage of refrigerators from C1 = 26%

Percentage of refrigerators from C5 = 21%

Therefore the difference in number of refrigerators supplied to the hotel by companies C1 and C5 is

$$\left(\frac{26}{100} \times 3700\right) - \left(\frac{21}{100} \times 3700\right)$$

$$(26 \times 37) - (21 \times 37)$$

$$(962) - (777)$$

185

Question 53

The sum of the present ages of a father and his son is 78 years. After five years, the ratio of their ages becomes 7 : 4. What is the present age (in years) of the father?

- A 45

B 51

C 56

D 50

Answer: B

Explanation:

Given,

Sum of present ages of father and son is 78 and their ratio after 5 years is 7:4

let the age of father and son after 5 years be  $7x$  and  $4x$

sum of the present ages can be written as,

$$(7x-5) + (4x-5) = 78$$

$$7x + 4x - 10 = 78$$

$$11x - 10 = 78$$

$$11x = 88$$

$$x = 8$$

The age of father after 5 years is  $7 \times 8 = 56$

therefore the present age of father is  $56 - 5 = 51$

Question 54

Three positive numbers are in the proportion 3 : 4 : 6. If the sum of their squares is 244, then what is the largest number?

A 16

B 8

C 12

D 6

Answer: C

Explanation:

Given,

Ratio of three numbers is 3:4:6 and the sum of squares of three numbers is 244

let the three numbers be  $3x, 4x$  and  $6x$

therefore,  $(3x)^2 + (4x)^2 + (6x)^2 = 244$

$$9x^2 + 16x^2 + 36x^2 = 244$$

$$61x^2 = 244$$

$$x^2 = \frac{244}{61}$$

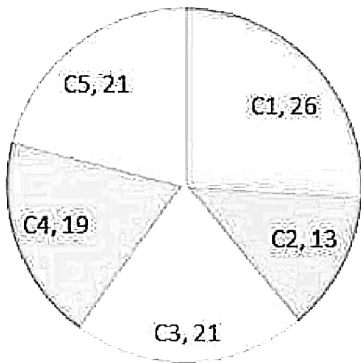
$$x^2 = 4$$

$$x = 2$$

hence the largest number is  $6 \times 2 = 12$

Question 55

The given Pie Chart (central angles are not as per any chosen scale) presents the percentage of the number of refrigerators of five different companies (with reference to the total number of refrigerators) in a hotel.



If the total number of refrigerators in the hotel is 3700, then what is the number of refrigerators of company C5?

- A 962
- B 777
- C 481
- D 703

Answer: B

Explanation:

Given,

The total number of refrigerators in the hotel is 3700.

Percentage of refrigerators of C5 = 21%

Therefore number of refrigerators of C5 is  $100 \times \frac{21}{100} \times 3700$

$21 \times 37$

777

Question 56

What is the value of:  $\frac{12 \div 3 \div 6 + 12 \times 2 - (2 \times 4 - 5)}{12 \div 3 \times 4 + (2 \times 4 - 5)}$  ?

- A  $\frac{27}{22}$
- B  $\frac{23}{17}$
- C  $\frac{27}{19}$
- D  $\frac{21}{9}$

Answer: C

Question 57

A man travels from P to Q at the speed of 60 km/h and travels from Q to P at the speed of 90 km/h. What is the average speed of the man for the whole journey?

- A 75 km/h
- B 78 km/h



C 70 km/h

D 72 km/h

Answer: D

Question 58

A bag contains one rupee, 50 paise and 25 paise coins in the proportion 5 : 7 : 9. If the total amount in the bag is ₹430, then how many 25 paise coins are there?

A 400

B 360

C 380

D 340

Answer: B

Question 59

train crosses two platforms of length 1000 m and 600 m in 80 seconds and 60 seconds respectively. What is the length of the train?

A 720 m

B 600 m

C 540 m

D 400 m

Answer: B

Question 60

The data given below presents number of households corresponding to the number of children residing there in.

| Number of Children | Number of Household |
|--------------------|---------------------|
| 0                  | 8                   |
| 1                  | 7                   |
| 2                  | 3                   |
| 3                  | 8                   |
| 4                  | 4                   |

What is the difference (correct up to two decimal places) between the mean and the median of the number of the children?

A 0.26

B 0.28

C 0.27

D 0.25

Answer: C

Question 61

Anil can make 20 bags in 4 days and Manoj can make 10 bags in 5 days. How many bags both Anil and Manoj together can make in one day?

- A 11 bags
- B 7 bags
- C 9 bags
- D 5 bags

Answer: B

Question 62

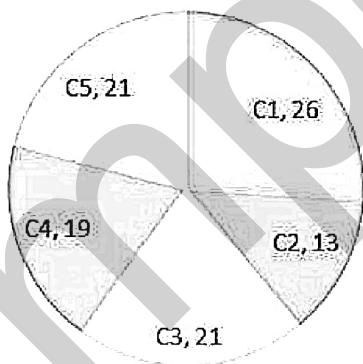
₹20000 is invested on compound interest (compounded half yearly) at the rate of 20% per annum, then what will be the interest after two years?

- A ₹8800
- B ₹8824
- C ₹9282
- D ₹9428

Answer: C

Question 63

The given Pie Chart (central angles are not as per any chosen scale) presents the percentage of the number of refrigerators of five different companies (with reference to the total number of refrigerators) in a hotel.



What is the difference between the central angles (to the nearest 0.1 degree) subtended by the sectors for C2 and C4?

- A 19.2
- B 21.6
- C 24.0
- D 22.5

Answer: B

Question 64

The length and the breadth of a rectangle are 15 cm and 12 cm respectively. If the rectangle is given one full rotation about its breadth as the axis, what is the volume(in  $\text{cm}^3$ ) through which the rectangle moves?

- A  $2160 \pi$
- B  $1440 \pi$
- C  $1800 \pi$
- D  $2700 \pi$

Answer: D

Question 65

The cost price of an article is  $\frac{6}{7}$  of its selling price. What will be the profit or loss percentage?

- A 16.67% loss
- B 14.28% profit
- C 16.67% profit
- D 14.28% loss

Answer: C

Question 66

What is the value of:  $5 \div 5 \div 5 \div 5 + 5 - 6 \div 3 \times 4 + 2 + (3 \div 6 \times 2)$ ?

- A 21
- B 25
- C 28
- D 19

Answer: B

Explanation:

Latek

convert the numeric value of latek into base7

Therefore, Latek = 25

Question 67

What is the Highest Common Factor of 42, 168 and 210?

- A 14
- B 21

C 42

D 7

Answer: C

Explanation:

HCF OF 42 =  $3 \times 7 \times 2$

HCF OF 168 =  $2 \times 2 \times 2 \times 3 \times 7$

HCF OF 210 =  $2 \times 3 \times 5 \times 7$

HCF = 42

Question 68

Pipe V1 can fill an empty tank in 8 hours. Pipe V2 can fill the same tank in 16 hours. Pipe V3 can empty the same, completely filled, tank in 12 hours. If three pipes are opened simultaneously, then in how much time will the tank get completely filled?

A  $\frac{41}{3}$  hours

B  $\frac{42}{11}$  hours

C  $\frac{38}{5}$  hours

D  $\frac{48}{5}$  hours

Answer: D

Explanation:

Pipe V1 = 8 hours (empty)

Pipe V2 = 16 hours (fill)

Pipe V3 = 12 hours (empty)

Therefore, total time for the tank to get filled =  $(1/16) - ((1/8) + (1/12)) = 48/5 = 9.6$  hours

Question 69

What is the average of the first 15 even numbers starting from 2?

A 16

B 15

C 17

D 14

Answer: A

Explanation:

The first 15 even numbers be = 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30

Average = (Sum of all values) / number of values

Average =  $(2+4+6+8+10+12+14+16+18+20+22+24+26+28+30)/15 = 16$

OR

Sum of first n natural numbers =  $(n(n+1))/2$

=  $2[1+2+\dots+15]$

=  $[(15(15+1))/2] \times 2 = (15 \times 16)$

Average = Sum of natural numbers / number of values =  $(15 \times 16)/15 = 16$

Question 70

30 kg of rice costing ₹50 per kg is mixed with 20 kg of rice costing ₹60 per kg. What is the average cost of the mixture per kg?

- A ₹54
- B ₹56
- C ₹52
- D ₹55

Answer: A

Explanation:

Total cost of 30 kg rice =  $30 * 50 = 1500$

Total cost of 20 kg rice =  $20 * 60 = 1200$

Average cost of mixture = (total cost of 30 kg of rice + total cost of 20 kg rice) / total weight of rice =  $(1500 + 1200) / (30 + 20) = 2700 / 50 =$  Rs 54/kg

Question 71

The profit earned on an article is 25%. If profit is calculated on the selling price, then what will be the profit percentage?

- A 30
- B 10
- C 20
- D 50

Answer: C

Explanation:

Let CP = 100 Rs

Then SP = 125 Rs

%Profit =  $((SP - CP) / SP) * 100 = ((125 - 100) / 125) * 100 = 20\%$

Question 72

Manish's salary is half of Ravi's salary. Ravi's salary is how much percentage more than Manish's Salary?

- A 100%
- B 25%
- C 50%
- D 75%

Answer: A

Explanation:

Lets Ravi salary = x

And , Manish salary =  $x/2$

Therefore,

$$\left(\frac{x-(x/2)}{(x/2)}\right)*100 = \left(\frac{(x/2)}{(x/2)}\right)*100 = 100\%$$

### Question 73

A sum of ₹800 invested on simple interest becomes ₹1200 in 8 years. What will be simple interest for 6 years on the sum at the same rate of interest?

- A ₹240
- B ₹210
- C ₹250
- D ₹300

Answer: D

Explanation:

$$SI = \frac{P * R * T}{100}$$

Given, P = 800 RS

T = 8 years

$$SI = \text{Amount} - P = 1200 - 800 = 400 \text{ Rs}$$

$$SI = \frac{400 * R * 8}{100}$$

$$R = \frac{25}{4} \text{ or } 6.25$$

Now, given, T = 6 Years, P = 800 Rs, R = 6.25%

$$SI = \frac{800 * 6 * 6.25}{100} = ₹300$$

### Question 74

The volume of a cube is  $216 \text{ cm}^3$ . What is the area of one face of the cube?

- A  $36 \text{ cm}^2$
- B  $12 \text{ cm}^2$
- C  $24 \text{ cm}^2$
- D  $30 \text{ cm}^2$

Answer: A

Explanation:

$$\text{Volume of cube} = a^3$$

$$\text{Therefore, volume of cube} = 216 \text{ cm}^3$$

$$\text{Therefore, } a = 6 \text{ cm}$$

$$\text{Area of cube} = a^2 = 6 * 6 = 36 \text{ cm}^2$$

### Question 75

What is the area of the largest circle which can be inscribed in a square of side 28 cm? (Take  $\pi = 7$ )

- A  $308 \text{ cm}^2$

B  $616 \text{ cm}^2$

C  $476 \text{ cm}^2$

D  $512 \text{ cm}^2$

Answer: B

Explanation:

Side of the square = 28 cm

Therefore, circle inscribed in it will have a radius of 14 cm

Area of circle =  $\pi * r * r = (22/7) * 14 * 14 = 616 \text{ cm}^2$

## General knowledge

Instructions

For the following questions answer them individually

Question 76

Red Panda is a state animal of which of the following state?

A Mizoram

B Manipur

C Meghalaya

D Sikkim

Answer: D

Question 77

Which of the following articles is related to Right to Freedom of Religion in the Indian Constitution?

A Article 20

B Article 30

C Article 15

D Article 25

Answer: D

Question 78

Which of the following game is originated in India?

A Tennis

B Chess

C Skating

D Snooker  
Answer: B

Question 79

As of June 2019 who is the President of Maldives?

- A Ashraf Ghani
- B Ibrahim Mohamed Solih
- C Abdul Hamid
- D Joko Widodo

Answer: B

Question 80

Who among the following calculated the value of 'pi' ( $\pi$ ) first?

- A Budhayana
- B Aryabhata
- C Bhaskaracharya
- D Sridharacharya

Answer: A

Question 81

Where is the head office of Syndicate Bank situated?

- A Bangalore
- B New Delhi
- C Manipal
- D Kolkata

Answer: C

Question 82

Which of the following musical instrument is a reed instrument?

- A Shehnai
- B Manjira
- C Tabla
- D Bansuri

Answer: A



Question 83

In which part of the alimentary canal, the complete digestion of fat takes place?

- A Large intestine
- B Small intestine
- C Stomach
- D Mouth

Answer: B

Question 84

Which of the following equations represents Pressure in Physics?

- A Mass / Acceleration
- B Force / Area
- C Mass  $\times$  Acceleration
- D Force  $\times$  Area

Answer: B

Question 85

Which of the following quantities is NOT a vector quantity?

- A Work
- B Velocity
- C Acceleration
- D Force

Answer: A

Question 86

Divya Kakran is associated to which of the following sport?

- A Swimming
- B Gymnastics
- C Wrestling
- D Weightlifting

Answer: C

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Question 87

Metals produce ringing sound when hit another metal because they are\_\_\_\_\_.

- A Malleable
- B Ductile
- C Sonorous
- D Lustrous

Answer: C

Question 88

Who is known as father of Surgery?

- A Charak
- B Patanjali
- C Hippocrates
- D Sushruta

Answer: D

Question 89

Which of the following puppet dance is performed in Orissa?

- A Pavakoothu
- B Kandhei
- C Kathputli
- D Putul Nautch

Answer: B

Question 90

Which of the following is a working capital?

- A Building
- B Money
- C Machine
- D Tool

Answer: B

Question 91

The "Gho" is the traditional and national dress for men in\_\_\_\_\_.

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- A Thailand
- B Cambodia
- C Bhutan
- D Vietnam

Answer: C

Question 92

On which of the following Island India's only active volcano is situated?

- A Sound Island
- B Barren Island
- C Smith Island
- D Belle Island

Answer: B

Question 93

\_\_\_\_\_ is the highest gallantry award for officers and other enlisted personnel of all military branches of India.

- A Param Vir Chakra
- B Shaurya Chakra
- C Mahavir Chakra
- D Kirti Chakra

Answer: A

Question 94

Which of the following rivers does NOT drain into a sea?

- A Ganga
- B Mahanadi
- C Luni
- D Godavari

Answer: C

Question 95

Which of the following religion is NOT originated in India?



- A Zoroastrianism
- B Buddhism
- C Sikhism
- D Jainism

Answer: A

**Question 96**

Which of the following novels is NOT written by Amish Tripathi?

- A The Secret of the Nagas
- B Sita-Warrior of Mithila
- C The Immortals of Meluha
- D One Indian Girl

Answer: D

**Question 97**

In the Indian Constitution, the Principle of Liberty is borrowed from which of the following countries?

- A UK
- B Japan
- C France
- D Germany

Answer: C

**Question 98**

In which of the following type of organism autotrophic nutrition is found?

- A Fungi
- B Virus
- C Protozoa
- D Bacteria

Answer: D

**Question 99**

On which of the following notes the motif of Sanchi Stupa is present?

- A 2000 Rupee Note

B 100 Rupee Note

C 500RupeeNote

D 200RupeeNote

Answer: D

Question 100

'Michael Madhusudan Dutt' was\_\_\_\_\_ by occupation.

A Sportsperson

B Politician

C Writer

D Actor

Answer: C

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