

# SSC MTS 5th August 2019 Shift-1

## English

### Instructions

For the following questions answer them individually

### Question 1

Select the most appropriate option to fill in the blank.

The students are in great \_\_\_\_\_ of their teachers.

- A praise
- B awe
- C respect
- D gusto

**Answer:** B

### Question 2

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

The servant was beaten through his master with a stick. /No error

- A No error
- B with a stick
- C through his master
- D The servant was beaten

**Answer:** C

### Question 3

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

Many accidents at the factory are caused of workers who don't read warning signs.

- A are caused because of
- B is the cause of
- C is caused by
- D No Improvement

**Answer:** A

### Question 4

Select the most appropriate option to fill in the blank.

The origin of ice-cream dates back \_\_\_\_\_ nearly half-a-century.

- A to
- B at

C from

D into

**Answer: A**

### Question 5

**In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.**

**Birds of the same feather**

A People with a generous heart

B To get into trouble together

C To be in a totally helpless condition

D People with similar character

**Answer: D**

### Question 6

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

**For her, money is only the means to an end.**

A the means for an end

B means to end

C No Improvement

D a means to the end

**Answer: C**

### Question 7

**Select the most appropriate antonym of the given word.**

**Gloomy**

A Cloudy

B Bright

C Dull

D Greedy

**Answer: B**

### Question 8

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

The wound on her hand is now heal completely.

- A has now healing
- B No Improvement
- C is now healed
- D is healing now

**Answer:** C

### Question 9

Select the most appropriate synonym of the given word.

**Immense**

- A Insignificant
- B Dull
- C Minute
- D Massive

**Answer:** D

### Question 10

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

Unless you prepare well, you will not get a first class. /No error

- A No error
- B a first class
- C Unless you prepare well
- D you will not get

**Answer:** A

### Instructions

Choose the word that can substitute the given sentence.

### Question 11

**An internal or external framework of bones**

- A Spine
- B Skull
- C Skeleton
- D Skin

**Answer: C**

**Question 12**

**An area of grassland where animals graze**

- A** Forest
- B** Park
- C** Meadow
- D** Garden

**Answer: C**

**Instructions**

For the following questions answer them individually

**Question 13**

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
The child always goes for sleep with his teddy bear. /No error**

- A** with his teddy bear
- B** goes for sleep
- C** No error
- D** The child always

**Answer: B**

**Question 14**

**Choose the correctly spelt word.**

- A** Exhausted
- B** Intelligent
- C** Equaly
- D** Amigrate

**Answer: B**

**Question 15**

**In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.**

**Cat's whiskers**

- A** A very easy matter
- B** To be highly impressive
- C** To be very determined

**D** Difficult to understand

**Answer:** B

### Question 16

Select the most appropriate option to fill in the blank.

I \_\_\_\_\_ very busy lately.

**A** would be

**B** have been

**C** will be

**D** should be

**Answer:** B

### 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:

Mr. Oliver was taking a shortcut 1.\_\_\_\_ the pine forest which was making sad, 2.\_\_\_\_ sounds because of strong winds. He 3.\_\_\_\_ a lonely boy sitting on a rock. 4.\_\_\_\_ boy was weeping soundlessly. There seemed to be 5.\_\_\_\_ terribly wrong with the boy.

### Question 17

Select the most appropriate option for blank No. 1.

**A** through

**B** by

**C** along

**D** of

**Answer:** A

### Question 18

Select the most appropriate option for blank No. 2.

**A** awesome

**B** eerie

**C** banging

**D** aloud

**Answer:** B

### Question 19

Select the most appropriate option for blank No. 3.

- A recorded
- B noticed
- C pointed
- D remarked

**Answer:** B

#### **Question 20**

**Select the most appropriate option for blank No. 4.**

- A One
- B Each
- C A
- D The

**Answer:** D

#### **Question 21**

**Select the most appropriate option for blank No. 5.**

- A anything
- B nothing
- C everything
- D something

**Answer:** D

#### **Instructions**

For the following questions answer them individually

#### **Question 22**

**Select the most appropriate synonym of the given word.**

**Former**

- A Inferior
- B Superior
- C Regular
- D Previous

**Answer:** D

**Question 23**

Select the most appropriate antonym of the given word.

**Impartial**

- A Biased
- B Judicious
- C Involved
- D Impractical

**Answer:** A

**Question 24**

Choose the correctly spelt word.

- A Genuine
- B Geniune
- C Ganuine
- D Jenuine

**Answer:** A

**Question 25**

Select the most appropriate option to fill in the blank.

Sarthak \_\_\_\_\_ everything that a leader should be.

- A epitomizes
- B adores
- C worships
- D clones

**Answer:** A

## Reasoning

**Instructions**

For the following questions answer them individually

**Question 26**

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

**Salary : Job :: Profit : ?**

- A Loss
- B Business
- C Huge

D Seller

Answer: B

**Explanation:**

Salary is given in job and Profits are made in business.

**Question 27**

Five boys, G, K, P, R and T, are sitting around a circular table facing towards the centre (not necessarily in the same order). R is third to the left of K. P and G are the immediate neighbours of K. T is to the immediate left of P. Who is sitting second to the right of P?

A G

B K

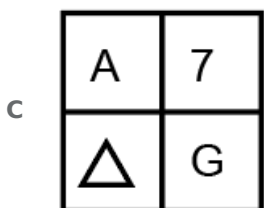
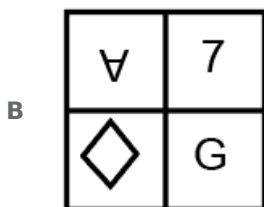
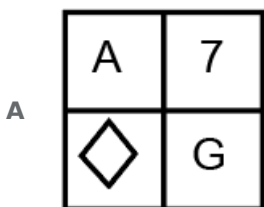
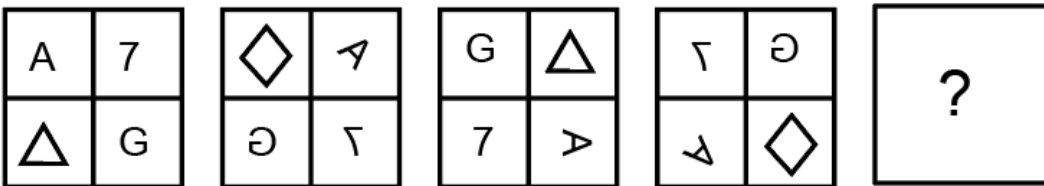
C T

D R

Answer: A

**Question 28**

Select the figure that will come next in the following series.





D

∇	7
△	G

Answer: D

**Question 29**

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:**

**I. No A is B.**

**II. All C are B.**

**Conclusions:**

**I. No C is A.**

**II. Some A are C.**

- A Only conclusion I follows.
- B Both conclusions I and II follow.
- C None of the conclusions follows.
- D Only conclusion II follows.

Answer: A

**Question 30**

In a certain code language, 'MANGO' is written as '93425' and 'GREAT' is written as '28631'. What will be the code for 'GREEN' in that code language?

- A 28664
- B 28994
- C 28661
- D 28665

Answer: A

**Question 31**

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

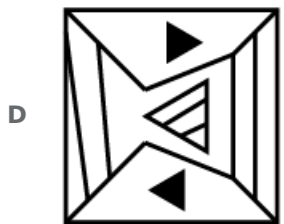
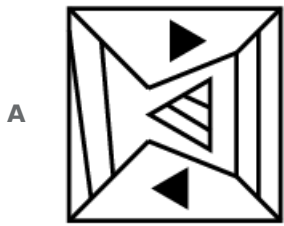
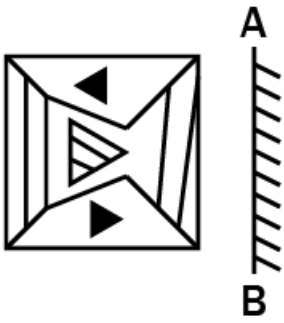
**Water : Drink :: Bread : ?**

- A Hard
- B Eat
- C Milk
- D White

Answer: B

Question 32

Select the correct mirror image of the given figure when the mirror is placed at line AB.



Answer: D

Question 33

Study the given pattern carefully and select the number that can replace the question mark (?) in it.

7	7	1	48
11	5	1	?
9	5	0	45

- A 36
- B 72
- C 48
- D 54

Answer: D

#### Question 34

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

325 : 18 :: 226 : ?

- A 14
- B 17
- C 15
- D 16

Answer: C

#### Question 35

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:

- I. Some red are cars.
- II. All yellow are cars.

Conclusions:

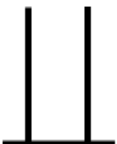
- I. Some cars are red.
- II. Some yellow are red.
- III. Some cars are yellow.

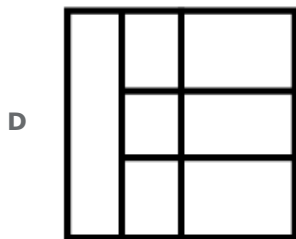
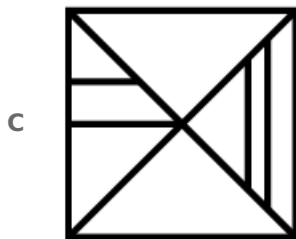
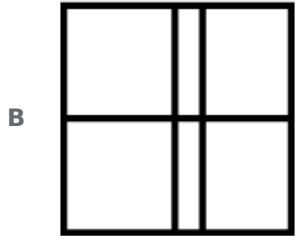
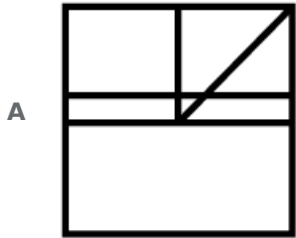
- A Both conclusions I and II follow.
- B Both conclusions I and III follow.
- C Both conclusions II and III follow.
- D Only conclusion II follows.

Answer: B

#### Question 36

Select the option in which the given figure is embedded.





Answer: D

**Question 37**

Select the number that can replace the question mark (?) in the following series.  
13, 17, 19, 23, 29, ?

A 41

B 43

C 37

D 31

Answer: D

**Question 38**

In a certain code language, 'CAP' is written as '20' and 'ROM' is written as '46'. What will be the code for 'RUB' in that code language?

A 47

B 41

C 53

Answer: B

Question 39

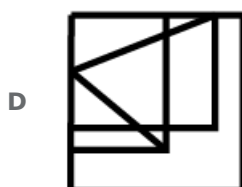
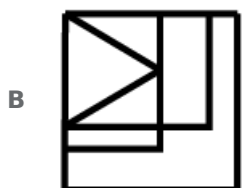
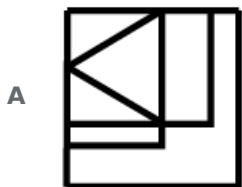
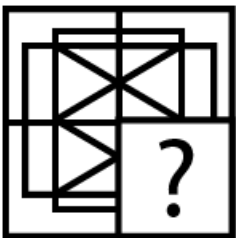
In a certain code language, 'RIMPY' is written as 'OFJMV'. What will be the code for 'CORPSE' in that code language?

- A BNQORD
- B ZLOMPB
- C ZLONPB
- D AMPNQC

Answer: B

Question 40

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.



Answer: A

**Question 41**

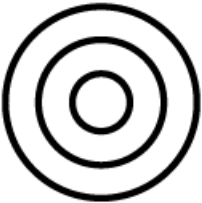



In a certain code language, 'COMFORTS' is written as 'FJPARMWN'. What will be the code for 'HINDWARE' in that code language?

- A KDRYZVUZ
- B LERZAWVA
- C KDQYZVUZ
- D MFSABXWB

Answer: C

**Question 42**

Identify the Venn diagram that best represents the relationship between the given classes. Venus, Planet, Sun

- A 
- B 
- C 
- D 

Answer: B

**Question 43**

Which two signs need to be interchanged to make the following equation correct?

$$7 - 9 \times 3 \div 9 + 5 = 5$$

- A  $-$  and  $\times$
- B  $\div$  and  $\times$

**C** + and -

**D** + and ÷

**Answer: C**

#### Question 44

Select the numbers that can replace the question marks (?) in the following series.  
36, 49, 51, 39, 53, 54, 42, 57, 57, 45, ?, ?

**A** 71, 60

**B** 60, 63

**C** 60, 61

**D** 61, 60

**Answer: D**

#### Question 45

Select the option that is related to the third letter-pair in the same way as the second letterpair is related to the first letter-pair.

RG : QE :: LB : ?

**A** KY

**B** KZ

**C** JZ

**D** JY

**Answer: B**

#### Question 46

Five phones, H, M, R, T and V, are kept one above the other (not necessarily in the same order). The number of phones above T is same as the number of phones below V. R is just above H. V is at the bottom. There are two phones between M and V. Which of the following phones are above R?

**A** M and T

**B** H and T

**C** M and V

**D** M and H

**Answer: A**

#### Question 47

Six tables labelled C, D, L, N, P and X are placed in a row facing towards the south (not necessarily in the same order). D is placed second to the left of L. X is placed second to the right of P. N is placed third to the left of D. How many tables are placed between C and X?

**A** 3

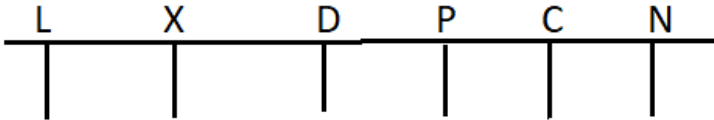
**B** 1

**C** 2

**D** 4

**Answer:** C

**Explanation:**



Given, N is placed third to the left of D and D is placed second to the left of L. So, we will have L who will be sitting at the extreme right corner when facing south and N sitting at the extreme left corner.

Then we have X is placed second to the right of P.

The only possibility that we have is P is sitting to the immediate left of D. So, we will have X and P as the neighbours of D.

The final arrangement is as shown above.

Here two tables are there in between C and X - they are P and D.

#### **Question 48**

**Select the letter-cluster that can replace the question mark (?) in the following series.**

**MRT, TYA, AFH, HMO, ?**

**A** PUV

**B** PUU

**C** OTV

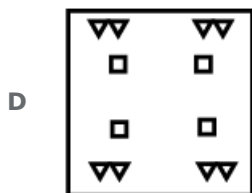
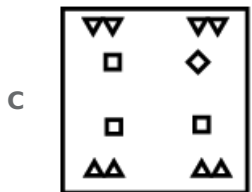
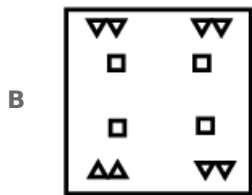
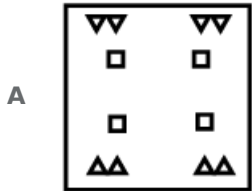
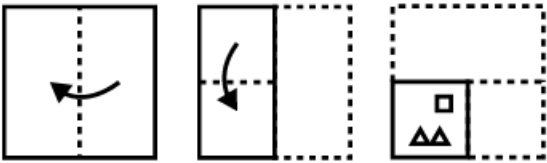
**D** OTU

**Answer:** C



**Question 49**

A paper is folded and cut as shown below. How will it appear when unfolded?



**Answer:** A

**Question 50**

Which two numbers need to be interchanged to make the following equation correct?

$$3 + 4 - 6 \div 2 = 7$$

**A** 6 and 2

**B** 3 and 6

**C** 2 and 3

**D** 6 and 4

**Answer:** D

**Explanation:**

If we interchange 6 and 4 then-

$$3 + 6 - 4 \div 2$$

$$= 3 + 6 - 2$$

=7

## Quant

### Instructions

For the following questions answer them individually

### Question 51

Marked price and cost price of an article are in ratio 5 : 4. If the profit earned by selling the article is 12.5%, then what is the discount percentage?

A 12.5

B 15

C 8

D 10

Answer: D

### Explanation:

M.p:c.p = 5 : 4

Profit % = 12.5%

let cost price = 100

$$\begin{aligned}\text{Profit of 1st article} &= \frac{12.5}{100} \times 100 \\ &= 12.5\end{aligned}$$

Here

profit = 12.5

c.p = 100

S.p = 100 + 12.5

$$= 112.5$$

Given that c.p = 4x

Assumed c.p = 100

4x = 100

$$x = \frac{100}{4}$$

$$= 25$$

so m.p = 5 × 25 = 125

Discount = *markedprice* – *sellingprice*

$$= 125 - 112.5 = 12.5$$

Discount percentage =  $\frac{\text{discount}}{\text{markedprice}} \times 100$

$$= \frac{12.5}{125} \times 100$$

$$= 10$$

### Question 52

The length, breadth and height of a cuboid are 5 cm, 2 cm and 4 cm respectively. What is the total surface area of the cuboid?

- A  $84 \text{ cm}^2$
- B  $152 \text{ cm}^2$
- C  $38 \text{ cm}^2$
- D  $76 \text{ cm}^2$

**Answer:** D

#### **Explanation:**

TSA =  $2 (\text{length} \times \text{width} + \text{width} \times \text{height} + \text{height} \times \text{length})$

$$\text{TSA} = 2 (5 \times 2 + 2 \times 4 + 4 \times 5)$$

$$= 2 (10 + 8 + 20)$$

$$= 2 (38)$$

$$= 76 \text{ cm}^2$$

### Question 53

A train leaves P at 9 am with speed of 30 km/h. Another train leaves Q at 11 am with speed of 45 km/h. The trains are travelling towards each other on parallel tracks. Distance between P and Q is 300 km. When they meet, what is the ratio of the distances covered by them?

- A 8 : 5
- B 13 : 12
- C 17 : 14
- D 11 : 9

**Answer:** B

### Question 54

70 sticks each of unit length are combined to form a right angle triangle without breaking any stick. What is the area (in square units) of the triangle?

- A 210
- B 180
- C 240
- D 350

**Answer:** A

#### **Explanation:**

right angle triangle follows the pythagores theorem

lets consider the side be 20,21,29 which is equal to 70

$$\sqrt{\text{hypotenuse}^2} = \sqrt{\text{length}^2 + \text{base}^2}$$

$$\sqrt{29^2} = \sqrt{20^2 + 21^2}$$

$$841 = 400 + 441$$

$$\begin{aligned} \text{so the area of triangle} &= \frac{1}{2} \times \text{base} \times \text{height} \\ &= \frac{1}{2} \times 20 \times 21 \\ &= 210 \text{ cm}^2 \end{aligned}$$

### Question 55

A, B and C, working alone can do a piece of work in 15, 30 and 75 days respectively. They work together and get ₹ 1615 for completing the work. What is the difference in shares of A and C?

A ₹ 760

B ₹ 620

C ₹ 680

D ₹ 540

**Answer:** A

### Explanation:

A = 15 days

B = 30 days

C = 75 days

Total work = lcm (15,30,75)

$$= 150$$

A's efficiency = 10

B's efficiency = 5

C's efficiency = 2

Shares ratio = efficiency ratio

Difference in shares Of A and C = 8

$$= \frac{\text{difference in share}}{\text{total shares}} \times 1615$$

$$\frac{8}{17} \times 1615$$

$$= \text{Rs } 760$$

### Question 56

What is the value of  $90 \times 3 \div 9 + 4 \div 2 \times 3$  of  $4 \times 8 \div (18 \times 2 - 4)$ ?

A 48

B 40

C 36

D 42

**Answer:** C

**Explanation:**

$$90 \times 3 \div 9 + 4 \div 2 \times 3 \text{ of } 4 \times 8 \div (18 \times 2 - 4)$$

$$30 + 4 \div 2 \times 12 \times 8 \div 32$$

$$30 + 2 \times 12 \times 8 \div 32$$

$$30 + 2 \times 12 \div 4$$

$$30 + 2 \times 3$$

$$=36$$

**Question 57**

The ratio of milk and water in a mixture is 4 : 3. If we add 2 litres of water, the ratio of milk and water becomes 8 : 7. What is the quantity of the final mixture?

- A 18 litres
- B 30 litres
- C 24 litres
- D 28 litres

**Answer:** B

**Explanation:**

Initially mixture is 4:3

After adding 2 lit water it becomes 8:7

It means quantity of milk is remain unchanged and water is changed in mixture

$$4:3 \times 2 \text{ (to equal the milk quantity )}$$

$$= 8:6$$

Now milk ratio is same and water is changed after adding water (8:7)-(8:6)

1 -> 2lit

Given that final mix. Ratio =8:7

$$\text{Milk} = 8 \times 2 = 16 \text{ litre}$$

$$\text{Water} = 7 \times 2 = 14 \text{ litre}$$

$$\text{Total} = 16 + 14 = 30 \text{ litre}$$

**Question 58**

What is the largest two digit number which when divided by 6 and 5 leaves remainder 1 in each case?

- A 61
- B 93
- C 91
- D 97

**Answer:** C

**Explanation:**

The LCM of 6,5 is 30

91 is divisible by 30 and leaves remainder 1

**Question 59**

The average age of 12 boys is 15 years and the average age of 18 girls is 12 years. What is the combined average age of the boys and girls, taken together?

A 15.4

B 13.2

C 16.6

D 14.8

**Answer: B**

**Explanation:**

$$\text{Avg1} = \frac{\text{sum of no.}}{\text{no. of term}}$$

$$15 = \frac{\text{sum of no.}}{12}$$

$$\text{Sum of no.} = 180$$

$$\text{Avg2} = \frac{\text{sum of no.}}{\text{no. of term}}$$

$$12 = \frac{\text{sum of no.}}{18}$$

$$\text{Sum of no.} = 216$$

Combined avg =

$$\frac{180+216}{\text{no. of term}}$$

$$\text{Combined avg} = \frac{396}{30}$$

$$= 13.2$$

**Question 60**

The Table given below presents the marks obtained by three students in five examinations.

Exams	S1	S2	S3
E1	80	84	85
E2	72	91	99
E3	99	80	82
E4	96	95	93
E5	87	86	84

The marks obtained by S1 in Exam E5 is how much percentage (correct up to two places of decimal) more than that obtained by S2 in Exam E3?

A 9.75

B 8.75

C 9.26

D 10.24

Answer: B

### Question 61

Given below is the data of the ages of various children.

Age (Years)	Number of children
6	17
7	16
8	16
9	17
10	19
11	15

What is the difference between the mean and mode of the ages?

A 1.5

B 1

C 2.5

D 2

Answer: A

### Question 62

The Table given below presents the marks obtained by three students in five examinations.

Exams	S1	S2	S3
E1	80	84	85
E2	72	91	99
E3	99	80	82
E4	96	95	93
E5	87	86	84

What is the average of marks obtained by S3 per exam?

A 84.6

B 88.6

C 82.6

D 86.6

Answer: B

### Question 63

An article is sold at  $14\frac{2}{7}\%$  profit. What is the ratio of the selling price to the cost price?

A 7 : 5

**B** 8 : 7

**C** 8 : 5

**D** 7 : 6

**Answer:** B

**Explanation:**

Let cost price = 100

$$\text{profit \%} = 14\frac{2}{7}\% = 14\frac{2}{7} \times \frac{1}{100} \times 100$$

$$\text{profit} = \frac{14 \times 2}{7} = 4$$

Selling price = profit + cost price

$$= \frac{100}{7} + 100$$

$$= \frac{800}{7}$$

the ratio of the selling price to the cost price

$$= \frac{\frac{800}{7}}{100}$$

$$= 8:7$$

**Question 64**

**An article is sold for ₹6500 so as to earn a profit of 4%. A second article whose cost price is ₹3750, is sold at a loss of 4%. What is the overall gain or loss percent in the whole transaction?**

**A** Gain 4%

**B** Loss 1%

**C** Loss 4%

**D** Gain 1%

**Answer:** D

**Explanation:**

selling price = 6500

Let cost price be 100.

So,

$$\text{Profit of 1st article} = \frac{4}{100} \times 100$$

$$= 4$$

$$S.p = C.p + \text{profit}$$

$$6500 = 100 + 4$$

$$= 104$$

$$1 = 62.5$$

So,

$$100 = 6250$$

So profit = s.p - c.p

$$= 6500 - 6250$$



$$= 250$$

In 2nd articleC

consider selling price 100

$$\begin{aligned}\text{Loss of 2nd article} &= \frac{4}{100} \times 100 \\ &= 4\end{aligned}$$

So .

$$\text{S.p-loss} = \text{c.p}$$

$$100-4 = 96$$

Which is equal to 3750

Here

1-> loss

25->c.p

S.p -> 24

$$25=3750$$

$$1= 150$$

so,loss = 150

$$\text{S.p} = 24 \times 150 = 3600$$

So total c.p=3750+6250

$$= 10,000$$

total s.p=3600+6500

$$= 10,100$$

$$= \frac{10100-10000}{10000} \times 100\%$$

$$= \frac{100}{10000} \times 100\%$$

$$= 1\%$$

Gain = 1%

### Question 65

**The diameter of a right circular cylinder is decreased to one third of its initial value. If the volume of the cylinder remains the same, then the height becomes how many times of the initial height?**

**A** 1

**B** 9

**C** 6

**D** 3

**Answer:** B

### Explanation:

Let for the initial cylinder

Height = H<sub>1</sub>

Volume =V<sub>1</sub>

Diameter =D<sub>1</sub>

$$\text{Volume of the cylinder} = \pi \times R^2 \times H$$

Let for the final cylinder

Height = H2

Volume = V2

Diameter = D2

ATQ

$$D2 = \frac{1}{3} \times D1$$

$$V1 = V2 = V$$

We know that,  $D = 2R$

$$\pi \times \left(\frac{D1}{2}\right)^2 \times H1 = \pi \times \left(\frac{D1}{6}\right)^2 \times H2$$

$$\pi \times D1 \times H1 = \pi \times \left(\frac{D1}{3}\right)^2 \times H2$$

$$H2 = 9 \times H1$$

### Question 66

The Table given below presents the marks obtained by three students in five examinations.

Exams	S1	S2	S3
E1	80	84	85
E2	72	91	99
E3	99	80	82
E4	96	95	93
E5	87	86	84

What is the sum of marks obtained by S1 in Exam E4, S2 in Exam E1, S3 in Exam E3 and E5?

- A 346
- B 326
- C 366
- D 306

Answer: A

### Question 67

If  $A = 40 \div 8 + 5 \times 2 - 4 + 4 + 5$  of  $3$  and  $B = 24 \div 4(4 + 2) + 19$  of  $2$ , then what is the value of  $A - B$ ?

- A -11
- B 11
- C 9
- D -9

**Answer:** D

**Explanation:**

Firstly solve bracket then apply bodmass

$$A = 40 \div 8 + 5 \times 2 - 4 + 4 + 5 \text{ of } 3$$

$$B = 24 \div 4(4 + 2) + 19 \text{ of } 2$$

$$A = 5 + 5 \times 2 - 4 + 4 + 15$$

$$A = 5 + 10 - 4 + 4 + 15$$

$$A = 30$$

$$B = 24 \div 4(6) + 19 \text{ of } 2$$

$$B = 1 + 38$$

$$= 39$$

$$A - B = 30 - 39 = -9$$

**Question 68**

In a bag, the ratio of the number of 2 rupee, 1 rupee and 50 paise coins is 3 : 4: 5. If the total amount in the bag is ₹250, then how many 1 rupee coins are there?

**A** 70

**B** 100

**C** 60

**D** 80

**Answer:** D

**Explanation:**

2 Rs

1 Rs

50 paise = 0.5 Rs

Given that

$$2 \times 3x + 1 \times 4x + 0.5 \times 5x = 250$$

$$12.5x = 250$$

$$x = 20$$

So 2 Rupee coins =  $4 \times 20$

$$= 80$$

**Question 69**

A sum invested at compound interest (compounded annual) amounts to ₹ 750 at the end of first year and ₹ 900 at the end of second year. What is the sum?

**A** ₹ 700

**B** ₹ 625

**C** ₹ 600

**D** ₹ 650

**Answer:** B

**Explanation:**

difference in the sum is  $900 - 750$  is 150

So interest =

$$\frac{150}{750} \times 100$$

$$= 20\%$$

Consider X as the initial amount .

Now

$$750 = 120\% X$$

$$X = 100\% X$$

$$X = \text{Rs } 625$$

**Question 70**

**What is the average of all the natural numbers from 49 to 125?**

**A** 85

**B** 87

**C** 88

**D** 86

**Answer:** B

**Explanation:**

let no. of terms be n

$$\text{Sum of no.} = \frac{\text{no. of term}}{2} \times (\text{first term} + \text{last term})$$

$$\frac{n}{2} \times (49 + 125)$$

$$\text{Avg} = \frac{\text{sum of no.}}{\text{no. Of term}}$$

$$\frac{\frac{n}{2} \times (49 + 125)}{n}$$

$$= \frac{49 + 125}{2}$$

$$= \frac{49 + 125}{2}$$

$$= 87$$

**Question 71**

**If A : B is 2 : 3 and B - A = 28, then what is the value of B + A?**

**A** 120

**B** 150

C 130

D 140

**Answer:** D

**Explanation:**

$$A : B = 2x : 3x$$

$$3x - 2x = 28$$

$$x = 28$$

$$B + A = 5x$$

$$= 5 \times 28$$

$$= 140$$

### Question 72

The simple interest on a principal for 6 months at an interest rate of 10% per annum is ₹ 100. What is the principal?

A ₹1000

B ₹2000

C ₹1500

D ₹2500

**Answer:** B

**Explanation:**

$$\text{amount} = \frac{P \times R \times T}{100}$$

$$\text{Time} = 6 \div 12$$

$$\text{amount} = \frac{P \times R \times T}{100}$$

$$100 = \frac{P \times 10 \times 6 \div 12}{100}$$

$$= \text{Rs } 2000$$

### Question 73

An inlet pipe A originating from a river can fill a reservoir in 30 days. And an outlet pipe B, which is capable of emptying the completely filled reservoir in 50 days, drains out the water from the reservoir to an irrigation canal. The pipes are opened on alternate days starting with A. On which day from the beginning will the reservoir get completely filled for the first time?

A 75<sup>th</sup>

B 147<sup>th</sup>

C 150<sup>th</sup>

D 74<sup>th</sup>

**Answer:** B

**Explanation:**

$$A = 30 \text{ days}$$

B= 50 days

Total work = lcm (30,50)= 150 days

A's efficiency =  $\frac{150}{30} = 5$

B's efficiency =  $\frac{150}{50} = 3$

Work = efficiency  $\times$  day

Starting with A and followed by Virat

5- 3+ 5 -3.....= 150

Consider 5-3 as a 1 unit

2 n =150

n = 75

=  $75 \times 2$

= 150

Both take 150 days to fill the tank

but A filled the tank on 147<sup>th</sup> day

#### Question 74

Alok starts walking from P with speed of 6 km/h towards Q. Raman starts at same time from P towards Q with speed of 9 km/h. Raman reaches Q, turns back and starts walking towards P. He meets Alok at R. If PQ is 15 km, then what is PR ?

A 20 km

B 12 km

C 15 km

D 18 km

**Answer:** B

**Explanation:**

#### Question 75

A number is first increased by  $16\frac{2}{3}\%$  and then decreased by 15% to get 238. What is 37.5% of that number?

A 150

B 75

C 120

D 90

**Answer:** D

**Explanation:**

Consider number=100

First increased by  $16\frac{2}{3}\% = \frac{1}{6}$

$$100 + (100 \times \frac{1}{6})$$

$$= 100 + 16.66$$

$$= 116.66$$

Now decreased by 15%

$$= 116.66 - (116.66 \times 15\%)$$

$$= 99.4$$

99.4 parts -> 238 (Given)

$$1 \rightarrow 2.4$$

So, 100 (number assumed) = 240

So, the number = 240

We have to find 37.5 % of that number

$$= 240 \times \frac{37.5}{100}$$

$$= 240 \times \frac{3}{8}$$

$$= 90$$

## General knowledge

### Instructions

For the following questions answer them individually

### Question 76

**When was the Indian National Flag adopted?**

- A 12 July, 1947
- B 12 August, 1947
- C 22 August, 1947
- D 22 July, 1947

**Answer:** D

### Question 77

**Which of the following river falls in Arabian Sea?**

- A Indus
- B Godavari
- C Brahmaputra
- D Krishna

**Answer:** A

**Question 78**

**Which of the following cricketer was awarded Rajiv Gandhi Khel Ratna 2018?**

- A** Yuvraj Singh
- B** Virat Kohli
- C** M.S. Dhoni
- D** Rohit Sharma

**Answer: B**

**Question 79**

**Which of the following is a traditional painting of Odisha?**

- A** Warli
- B** Pattachitra
- C** Sanjhi
- D** Madhubani

**Answer: B**

**Question 80**

**Who among the following was NOT a Governor of Reserve Bank of India (RBI)?**

- A** Manmohan Singh
- B** Sunil Arora
- C** Urjit Patel
- D** Raghuram Rajan

**Answer: B**

**Question 81**

**Which of the following is an ancient book written by Banabhatta?**

- A** Kadambari
- B** Mrichchhakatika
- C** Meghadutam
- D** Gitagovinda

**Answer: A**

**Question 82**

**What is Parsi New year known as?**



- A** Ugadi
- B** Navroz
- C** Pateti
- D** Puthandu

**Answer:** B

**Question 83**

**The book 'War and Peace' is written by:**

- A** Leo Tolstoy
- B** Dalai Lama
- C** Maroof Raza
- D** H.G. Wells

**Answer:** A

**Question 84**

**How many digits are there on a debit card?**

- A** 15
- B** 16
- C** 14
- D** 17

**Answer:** B

**Question 85**

**To which of the following event Lord Curzon is related?**

- A** Partition of Bengal
- B** Setting up of Durand Commission
- C** Bhutan War
- D** Introduction to system of Budget

**Answer:** A

**Question 86**

**The term 'time trial' is associated with which of the following sport?**

- A Cycling
- B Hockey
- C Shooting
- D Swimming

**Answer:** A

**Question 87**

**Who is the 17th Lok Sabha Speaker?**

- A Meira Kumar
- B Somnath Chatterjee
- C Om Birla
- D Sumitra Mahajan

**Answer:** C

**Question 88**

**How many Schedules are there in the Indian Constitution?**

- A 14
- B 12
- C 11
- D 13

**Answer:** B

**Question 89**

**According to the Census 2011, what is the population density of India?**

- A 372 per sq. km
- B 382 per sq. km
- C 352 per sq. km
- D 362 per sq. km

**Answer:** B

**Question 90**

**Who discovered electron?**

- A J.J. Thomson
- B James Chadwick

**C** E. Rutherford

**D** E. Goldstein

**Answer:** A

**Question 91**

**Which of the following ministers is named in the '100 Most Influential in UK-India Relations: Celebrating Women' list?**

**A** Smriti Irani

**B** Nirmala Sitharaman

**C** Sushma Swaraj

**D** Maneka Gandhi

**Answer:** B

**Question 92**

**Which of the following Dynasty was founded by Qutb ud-din Aibak?**

**A** Chera Dynasty

**B** Nanda Dynasty

**C** Shunga Dynasty

**D** Slave Dynasty

**Answer:** D

**Question 93**

**Under which article of Indian Constitution Hindi is declared as the official language?**

**A** Article 273

**B** Article 343

**C** Article 360

**D** Article 370

**Answer:** B

**Question 94**

**Who was the fifth guru in Sikhism?**

**A** Guru Angad

**B** Guru Ram Das

**C** Guru Arjan Dev

**D** Guru Har Rai

**Answer: C**

**Question 95**

**Which of the following quantities have its SI unit named after Blaise Pascal?**

- A** Energy
- B** Pressure
- C** Work
- D** Power

**Answer: B**

**Question 96**

**Who among the following presented the Union budget of India for maximum times?**

- A** RK Shanmukham Chetty
- B** Pranab Mukherjee
- C** Morarji Desai
- D** P. Chidambaram

**Answer: C**

**Question 97**

**Which of the following cell organelle contains DNA apart from nucleus?**

- A** Cytoplasm
- B** Golgi Apparatus
- C** Mitochondria
- D** Ribosome

**Answer: C**

**Question 98**

**In which of the following states Marshy/ Peaty soil is NOT predominantly found?**

- A** Kerala
- B** Madhya Pradesh
- C** Odisha
- D** West Bengal

**Answer: B**

**Question 99**

**Which of the following element found in water is responsible for cancer?**

- A** Arsenic
- B** Iron
- C** Chlorine
- D** Fluorine

**Answer:** A

**Question 100**

**Which of the following disease is caused by severe deficiency of proteins?**

- A** Kwashiorkor
- B** Anaemia
- C** Osteoporosis
- D** Goiter

**Answer:** A

# SSC MTS 5th August 2019 Shift-2

## English

### Instructions

For the following questions answer them individually

### Question 1

Select the most appropriate synonym of the given word.

**Accountable**

- A Blameless
- B Answerable
- C Slack
- D Unreliable

**Answer:** B

### Question 2

Select the most appropriate option to fill in the blank.

The wonderful performance of the maestro left the audience \_\_\_\_\_.

- A puzzled
- B entranced
- C hungry
- D sleepy

**Answer:** B

### Question 3

Choose the most appropriate word that can substitute the given group of words.

**Full of criticism and mockery**

- A Praise
- B Satire
- C Cliche
- D Eulogy

**Answer:** B

### Question 4

Select the most appropriate synonym of the given word.

**Lavish**

- A Bountiful
- B Scarce
- C Austere

**D** Simple

**Answer:** A

### Question 5

Select the most appropriate option to fill in the blank.

The little puppy was \_\_\_\_\_ by a speeding car.

**A** run into

**B** run away

**C** run over

**D** run at

**Answer:** C

### Question 6

Choose the most appropriate word that can substitute the given group of words.

Group of singers

**A** Choir

**B** Jury

**C** Council

**D** Orchestra

**Answer:** A

### Question 7

Select the most appropriate antonym of the given word.

Goodwill

**A** Felicity

**B** Insanity

**C** Facility

**D** Hostility

**Answer:** D

### Question 8

Choose the correctly spelt word.

**A** Equipped

**B** Exceed

C Emphasize

D Allert

**Answer: A**

### Question 9

Select the most appropriate option to fill in the blank.  
I congratulated him \_\_\_\_\_ his promotion.

A to

B because of

C on

D due to

**Answer: C**

### Question 10

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

The terrorist was arrested for the first time in December, 2001.

A for first timing

B for one times

C No Improvement

D in the first time

**Answer: C**

### Question 11

Select the most appropriate meaning of the given idiom.  
Come to light

A To pry a secret

B To be known publicly

C To be well lit-up

D To be obscure

**Answer: B**

### Question 12

Select the most appropriate option to fill in the blank.  
Teachers would like \_\_\_\_\_ a long holiday.

A having been

B have



**C** having for

**D** to have

**Answer:** D

### Question 13

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

Applications are invite to eligible candidates for the post of Vice Principal in a reputed school.

**A** No Improvement

**B** invited by

**C** inviting from

**D** invited from

**Answer:** D

### 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:

Obesity is a condition where the body stores excess fat leading to a considerable 1.\_\_\_\_ in the body weight. It is increasing 2.\_\_\_\_ a fast pace in our country. It has 3.\_\_\_\_ adverse health effects and can even 4.\_\_\_\_ to pre-mature death. The basic cause of obesity is 5.\_\_\_\_ imbalance between energy intake and energy expenditure.

### Question 14

Select the most appropriate option for blank No. 1.

**A** decline

**B** raise

**C** decrease

**D** increase

**Answer:** D

### Question 15

Select the most appropriate option for blank No. 2.

**A** on

**B** by

**C** at

**D** with

**Answer:** C

**Question 16**

Select the most appropriate option for blank No. 3.

- A little
- B much
- C many
- D few

**Answer:** C

**Question 17**

Select the most appropriate option for blank No. 4.

- A lead
- B start
- C point
- D take

**Answer:** A

**Question 18**

Select the most appropriate option for blank No. 5.

- A a
- B the
- C one
- D no

**Answer:** B

**Instructions**

For the following questions answer them individually

**Question 19**

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
The do ctor with his interns are due to arrive here by noon. /No error

- A interns are due
- B to arrive here by noon
- C No error
- D The doctor with his

**Answer:** A

### Question 20

Choose the correctly spelt word.

- A Dilemma
- B Dilema
- C Dielema
- D Dillema

**Answer:** A

### Question 21

Select the most appropriate meaning of the given idiom.  
**Above one's head**

- A Overhead expenses
- B Intimate and personal
- C To be very tall
- D Beyond one's understanding

**Answer:** D

### Instructions

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

### Question 22

**Mukhe rjee is a famous politician who is love by most people. /No error**

- A Mukherjee is a
- B famous politician who
- C is love by most people
- D No error

**Answer:** C

### Question 23

**The pe ople in my office are smarter than other offices. /No error**

- A my office are
- B No error
- C The people in
- D smarter than other offices

**Answer:** D

**Instructions**

For the following questions answer them individually

**Question 24**

**Select the most appropriate antonym of the given word.**

**Hidden**

- A** Covered
- B** Apparent
- C** Veiled
- D** Concealed

**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 Improvement.**

**If he would tried he would have succeeded.**

- A** had tried
- B** is tried
- C** No Improvement
- D** was tried

**Answer:** A

## Reasoning

**Instructions**

For the following questions answer them individually

**Question 26**

**Study the given pattern carefully and select the number that can replace the question mark(?) in it.**

3	4	9	17
7	2	5	15
6	8	3	?

- A** 16
- B** 20
- C** 18
- D** 28

**Answer:** C

**Explanation:**

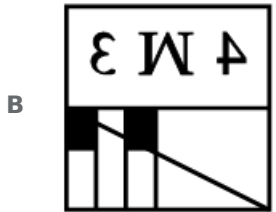
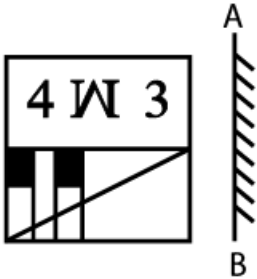
1st row :  $3 + 4 + 9 = 16 + 1 = 17$

2nd row :  $7 + 2 + 5 = 14 + 1 = 15$

3rd row :  $6 + 8 + 3 = 17 + 1 = 18$

**Question 27**

Select the correct mirror image of the given figure when the mirror is placed at line AB.



**Answer: A**

**Question 28**

In a certain code language, 'ROGER' is written as '5' and 'MOULDS' is written as '6'. What will be the code for 'PIN' in that code language?

A 2

B 8

**C** 3

**D** 4

**Answer:** C

**Explanation:**

'ROGER' is written as '5' there are 5 letters in the word thus it is coded as 5

'MOULDS' is written as '6' there are 6 letters in the word thus it is coded as 6.

Same way PIN coded as 3 there are 3 letters in the word

**Question 29**

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

**37, 33, 29, 25, ?**

**A** 22

**B** 20

**C** 19

**D** 21

**Answer:** D

**Explanation:**

37, 33, 29, 25, ?

$$37 - 4 = 33$$

$$33 - 4 = 29$$

$$29 - 4 = 25$$

$$25 - 4 = 21$$

37, 33, 29, 25, 21

**Question 30**

**Which two signs need to be interchanged to make the following equation correct?**

$$14 \times 16 \div 8 + 2 - 1 = 17$$

**A**  $-$  and  $\div$

**B**  $+$  and  $\times$

**C**  $+$  and  $\div$

**D**  $\times$  and  $-$

**Answer:** B

**Explanation:**

$$14 + 16 \div 8 \times 2 - 1 = 17$$

$$14 + 2 \times 2 - 1 = 17$$

$$18 - 1 = 17$$

**Question 31**

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:**

**I. All T are M.**

**II. No T is P.**

**Conclusions:**

**I. No P is M.**

**II. Some M are T.**

- A** None of the conclusions follows.
- B** Only conclusion I follows.
- C** Both conclusions I and II follow.
- D** Only conclusion II follows.

**Answer:** D

**Question 32**

Six chairs labelled J, K, P, R, S and T are kept one above the other (not necessarily in the same order). R is above only P and S. There are four chairs between J and S. K is three places above P. If we arrange these chairs in alphabetical order from top to bottom, then the position of how many chairs (excluding J) will be changed?

- A** 1
- B** 2
- C** 3
- D** 0

**Answer:** C

**Explanation:**

6	J	J
5	K	K
4	T	P
3	R	R
2	P	S
1	S	T

Position of 3 chairs changed

**Question 33**

Select the figure that will come next in the following series.

L R V J N T	V L T R J N	T V N L R J	N T J V L R	?
-------------------	-------------------	-------------------	-------------------	---

A

N J R T V L
-------------------

B

J N R T V L
-------------------

C

R J N T V L
-------------------

D

J R N T V L
-------------------

**Answer:** B

**Question 34**

Select the letter-cluster that can replace the question mark (?) in the following series.  
RAB, TDG, VGL, ?, ZMV

A XJQ

B YKR

C XKQ

D YLR

**Answer:** A

**Explanation:**

RAB, TDG, VGL, ?, ZMV

First letter of the each word + 2 gives the consequent first letter of the next term



Second letter of the each word + 3 gives the consequent second letter of the next term

Third letter of the each word + 5 gives the consequent third letter of the next term

RAB, TDG, VGL, XJQ , ZMV

### Question 35

In a certain code language, 'EMPTYD' is written as 'CJNQWA'. What will be the code for 'VACANT' in that code language?

A UYAMYR

B TXBXLQ

C UYBYMR

D TXAXLQ

**Answer:** D

### Explanation:

VACANT coded as TXAXLQ

Place value of V - 2 = 20 place value of T

Place value of A - 3 = 24 place value of X

Place value of C - 2 = 1 place value of A

Place value of A - 3 = 24 place value of X

Place value of N - 2 = 12 place value of L

Place value of T - 3 = 17 place value of Q

### Question 36

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

72, 69, 64, ?, 48

A 55

B 54

C 59

D 57

**Answer:** D

### Explanation:

72, 69, 64, ?, 48

$72 - 3 = 69$

$69 - 5 = 64$

$64 - 7 = 57$

$57 - 9 = 48$

### Question 37

If + is interchanged with −, then what will be the value of the following equation?

$72 - 91 \div 13 \times 12 + 6 = ?$

- A 150
- B 156
- C 144
- D 140

**Answer:** A

**Explanation:**

$$72 + 91 \div 13 \times 12 - 6$$

$$72 + 7 \times 12 - 6$$

$$72 + 84 - 6 = 150$$

**Question 38**

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.

**RAT : UXW :: TOG : ?**

- A XMD
- B XLC
- C WLJ
- D WLC

**Answer:** C

**Explanation:**

RAT : UXW

**R A T : U X W**  
**18 1 20 21 24 23**

Place value of R + 3 = 21 place value of U

Place value of A - 3 = 24 place value of X

Place value of T + 3 = 23 place value of W

Same way

TOG : WLG

**T O G : W L J**  
**20 15 7 23 12 10**

Place value of T + 3 = 23 place value of W

Place value of O - 3 = 12 place value of L

Place value of G + 3 = 10 place value of J

**Question 39**

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:**

- I. Some bikes are cars.
- II. Some cars are trucks.

**Conclusions:**

- I. Some trucks are bikes.
- II. No bike is a truck.

- A Only conclusion I follows.
- B Either conclusion I or II follows.
- C Only conclusion II follows.
- D Both conclusions I and II follow.

**Answer: B**

**Question 40**

Five girls, D, L, N, O and Q, are sitting in a row facing towards the south (not necessarily in the same order). L is second to the right of O. Q is to the immediate right of D. Two girls are between Q and N. How many girls are sitting to the right of D?

- A 4
- B 1
- C 3
- D 2

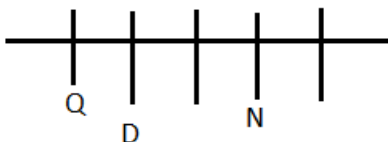
**Answer: B**

**Explanation:**

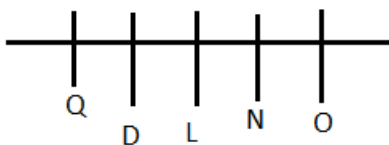
Step 1 : Two girls are between Q and N



Step 2 : Q is to the immediate right of D.



Step 3 : L is second to the right of O.



Only 1 girl is sitting to the right of D

**Question 41**

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

**Stale : Fresh**

- A** Create : Bat
- B** Hot : Sun
- C** Deep : Hard
- D** Final : Initial

**Answer:** D

**Explanation:**

Stale : Fresh

Stale means no longer fresh that is opposite of fresh

Same way Final : Initial

Final is the antonym of the word Initial

**Question 42**

Six persons, L, M, N, P, Q and R, are sitting in a row facing towards the north (not necessarily in the same order). There are three persons between P and M. P is not at any of the ends. There are three persons between L and Q. N is to the left of R. L is at one of the ends. M is to the right of P. How many person are sitting to the left of N?

- A** 4
- B** 1
- C** 2
- D** 3

**Answer:** C

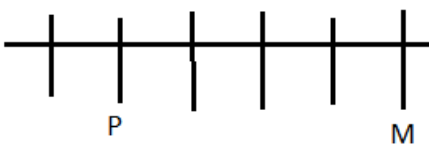
**Explanation:**

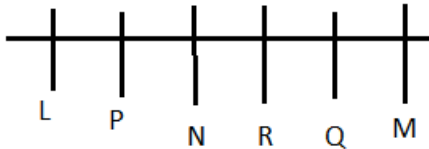
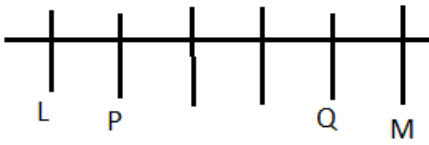
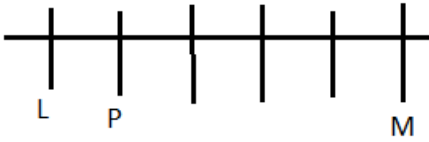
Step 1 : There are three persons between P and M. P is not at any of the ends.M is to the right of P.

Step 2 : L is at one of the ends.

Step 3 : There are three persons between L and Q

Step 4 : N is to the left of R.





Thus 2 persons are sitting to the left of N

**Question 43**

In a certain code language, 'ALERT' is written as '11251820' and 'HERD' is written as '85184'. What will be the code for 'CLOTH' in that code language?

- A 31512207
- B 31215218
- C 31215208
- D 38152014

**Answer:** C

**Explanation:**

Each word coded with its place value

ALERT coded as 11251820

Place value of A = 1

Place value of L = 12

Place value of E = 5

Place value of R = 18

Place value of T = 20

Same way CLOTH coded as 31215208

Place value of C = 3

Place value of L = 12

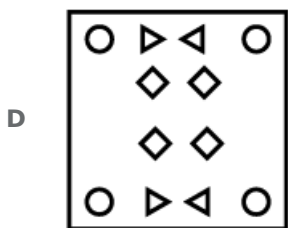
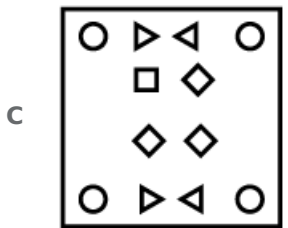
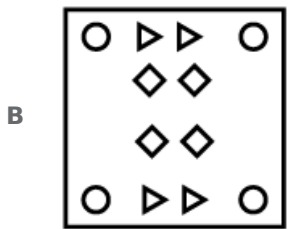
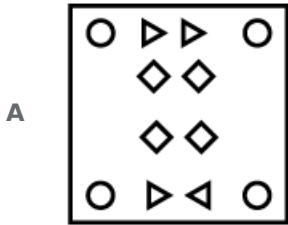
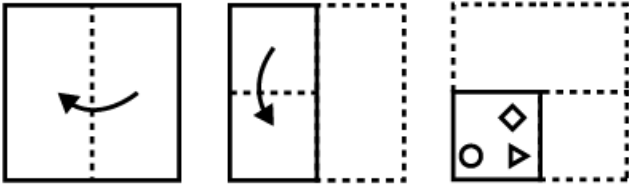
Place value of O = 15

Place value of T = 20

Place value of H = 8

Question 44

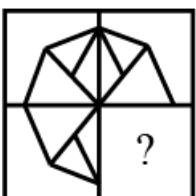
The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figure. How would this paper look when unfolded?

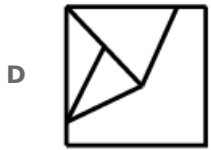
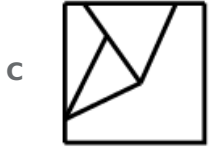
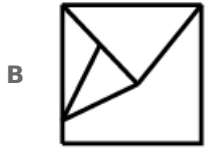


Answer: D

Question 45

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure?





Answer: D

**Question 46**

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

Touch : Push :: Speak : ?

- A Shout
- B Crime
- C Sad
- D Error

Answer: A

**Explanation:**

Touch : Push

Touch is gently tap something and push we applying a force both are related

Speak : ?

By speaking in a loud voice leds to shout

Thus

Touch : Push :: Speak : Loud

**Question 47**

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

101 : 10202 :: 107 : ?

- A 12449
- B 12550

C 11450

D 11447

**Answer: C**

**Explanation:**

101 : 10202

$$101^2 + 1 = 10201 + 1 = 10202$$

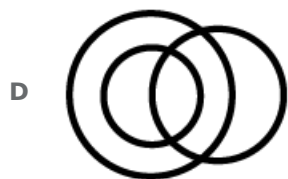
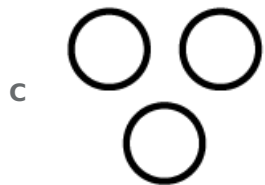
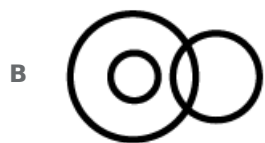
107 : ?

$$107^2 + 1 = 11449 + 1 = 11450$$

101 : 10202 :: 107 : 11450

**Question 48**

**Identify the diagram that best represents the relationship between the given classes.  
Cars, Bikes, Trucks**



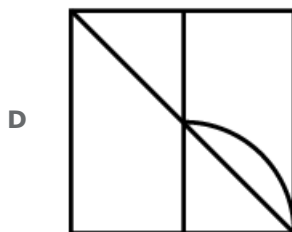
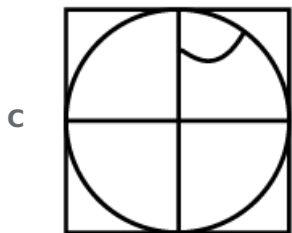
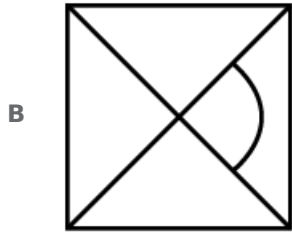
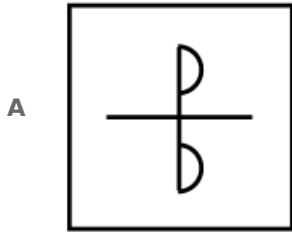
**Answer: C**

**Question 49**

**Select the option in which the given figure is embedded.**







**Answer:** A

**Question 50**

In a certain code language, 'PAPER' is written as 'UFUJW'. What will be the code for 'MOURN' in that code language?

- A SUBXT
- B RTAWS
- C RTZWS
- D SUAXT

**Answer:** C

**Explanation:**

Word PAPER coded in a way that place value of each letter of the word plus five gives the place value of corresponding letter of the coded word

16 1 16 5 18  
P A P E R

U F U J W

21 6 21 10 23

Same way MOURN can be coded as RTZWS

13 15 21 18 14  
M O U R N

R T Z W S  
18 20 26 23 19

## Quant

### Instructions

For the following questions answer them individually

### Question 51

The length of a cuboid is twice its breadth and its height is half of its breadth. If the height of the cuboid is 2 cm, then what is the edge of a cube having the same volume as that of the cuboid?

- A 8 cm
- B 4 cm
- C 6.4 cm
- D 7.2 cm

**Answer:** B

### Explanation:

Volume of cuboid =  $l b h$

$l$  = length

$b$  = breadth

$h$  = height

Volume of cube side  $a = a^3$

height of the cuboid = 2 cm

height is half of its breadth,  $h = \frac{b}{2}$

$$2 = \frac{b}{2}$$

$$b = 4 \text{ cm}$$

length of a cuboid is twice its breadth,  $l = 2b$

$$= 2 \times 4 = 8$$

Volume of cuboid =  $l b h = 8 \times 4 \times 2 = 64$

Volume of cuboid = volume of cube

$$64 = a^3$$

$$a = 4$$

### Question 52

The ratio of marketed price to selling price of an article is 12 : 7. What is the discount percentage?

- A 41.67
- B 37.5
- C 39.33
- D 42.33

**Answer:** A

**Explanation:**

Marked price (MP), Selling price (SP)

Assume that MP = 1200

$$SP = 700$$

$$\begin{aligned} \text{Discount\%} &= \frac{MP-SP}{MP} \times 100 \\ &= \frac{500}{1200} \times 100 \\ &= 41.67\% \end{aligned}$$

**Question 53**

**A is the smallest three digit number which when divided by 3, 4 and 5 leaves remainders 1, 2 and 3 respectively. What is the sum of the digits of A?**

- A 6
- B 11
- C 10
- D 8

**Answer:** C

**Question 54**

**The diameter of a solid hemisphere is 35 cm. What is its total surface area?**

**(Take  $\pi = \frac{22}{7}$ )**

- A  $3163 \text{ cm}^2$
- B  $2198.5 \text{ cm}^2$
- C  $2887.5 \text{ cm}^2$
- D  $2981 \text{ cm}^2$

**Answer:** C

**Explanation:**

Total surface area (TSA) of the hemisphere =  $3\pi r^2$

(Take  $\pi = \frac{22}{7}$ )

Diameter = 35

$$\text{Radius} = \frac{35}{2}$$

$$\begin{aligned} \text{TSA} &= 3 \times \frac{22}{7} \times \frac{35}{2} \times \frac{35}{2} \\ &= \frac{3 \times 11 \times 5 \times 35}{2} \end{aligned}$$

$$= 2887.5$$

### Question 55

A sum of money is invested at compound interest, which is compounded annually. The sum grows to ₹1000 after three years, and ₹1100 after four years. What is the rate of interest per annum?

- A 15%
- B 12.5%
- C 10%
- D 20%

**Answer:** C

### Question 56

There are 150 students in a school. If the ratio of number of boys to girls is 4 : 1, then what is the mean proportional between the number of boys and girls in the school?

- A 60
- B 30
- C 50
- D 40

**Answer:** A

### Explanation:

Total students = 150

Ratio of boys to girls = 4 : 1

that is  $4x = 150 - x$

$$5x = 150 \implies x = 30$$

Number of boys =  $30 \times 4 = 120$

Number of girls =  $30 \times 1 = 30$

Mean proportional between two numbers is the square root of the product of the two numbers

$$\text{Mean proportional of 120 and 30} = \sqrt{120 \times 30} = \sqrt{3600} = 60$$

### Question 57

If  $A = 7 \times 3 \div (2 + 4) + 4 - 2$ ,  $B = 3 \div 6 \times 4 + 2 - 2$  of 3 and  $C = 6 \div 2 + 4 \times 3 - 2$ . What is the value of  $(A + B - C)$ ?

- A  $-\frac{16}{3}$
- B  $\frac{16}{3}$
- C  $\frac{19}{2}$
- D  $-\frac{19}{2}$

**Answer:** D

**Explanation:**

$$A = 7 \times 3 \div (2 + 4) + 4 - 2$$

$$= 7 \times 3 \div 6 + 4 - 2$$

$$= 7 \times \frac{1}{2} + 4 - 2$$

$$= \frac{7}{2} + 2$$

$$= \frac{11}{2}$$

$$B = 3 \div 6 \times 4 + 2 - 2 \text{ of } 3$$

$$= 3 \div 6 \times 4 + 2 - 6$$

$$= \frac{1}{2} \times 4 + 2 - 6$$

$$= -2$$

$$C = 6 \div 2 + 4 \times 3 - 2$$

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

$$= 3 + 12 - 2$$

$$= 13$$

$$(A + B - C) = \frac{11}{2} - 2 + 13 = \frac{-19}{2}$$

**Question 58**

**Pipe A can completely fill an empty tank in 11 hours. Pipe B can empty the same completely filled tank in 15 hours. If they are opened together, in how much time the empty tank will get filled?**

- A** 49 hours 45 minutes
- B** 41 hours 15 minutes
- C** 39 hours 15 minutes
- D** 47 hours 30 minutes

**Answer:** B

**Question 59**

**The radius of a sphere is equal to the radius of the base as well as the height of a right circular cylinder. What is the ratio of surface area of sphere and curved surface area of cylinder?**

- A** 2 : 3
- B** 1 : 2
- C** 1 : 1
- D** 2 : 1

**Answer:** D

**Explanation:**

$$\text{Value of } \pi = \frac{22}{7}$$

$$\text{Surface area of sphere} = 4 \times \frac{22}{7} \times r^2$$

$$\text{Curved surface area of cylinder} = 2 \times \frac{22}{7} \times r \times h$$

Radius of sphere =  $r$

Radius of base of cylinder =  $r$

Height of the cylinder =  $r$

ratio of surface area of sphere and curved surface area of cylinder,

$$= 4 \times \frac{22}{7} \times r^2 : 2 \times \frac{22}{7} \times r \times r$$

$$= 4 : 2$$

$$= 2:1$$

### Question 60

**Side of a square is first increased by 10% and then decreased by 20%. What is the overall percentage change in area?**

- A Increase by 18.24%
- B Decrease by 22.56%
- C Decrease by 18.24%
- D Increase by 22.56%

**Answer:** B

#### **Explanation:**

Let the side of the square be 100

side increased by 10%

$$\begin{aligned} \text{then } S1 &= 100 + \left(\frac{10}{100} \times 100\right) \\ &= 110 \end{aligned}$$

The resultant side then decreased by 20%

$$\begin{aligned} S2 &= 110 - \left(\frac{20}{100} \times 110\right) \\ &= 88 \end{aligned}$$

$$A1 = S1^2$$

$$= 12100$$

$$A2 = S2^2$$

$$= 7744$$

$$\text{overall percentage change in area} = \frac{12100 - 7744}{10000} \times 100$$

### Question 61

**A alone can do a piece of work in 10 days. A and B together can do the same piece of work in  $\frac{20}{3}$  days. A, B and C together can do the same piece of work in  $\frac{40}{7}$  days. In how many days can B and C together do the same piece of work?**

A  $\frac{44}{3}$

B  $\frac{40}{3}$

C  $\frac{44}{7}$

D  $\frac{20}{3}$

Answer: B

### Question 62

A train crosses a 900 metres long platform in 300 seconds. If the length of train is 600 metres. then in how much time does it cross a stationary pole?

A 2 minutes

B 5 minutes

C 4 minutes

D 3 minutes

Answer: A

### Explanation:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

train crosses a 900 metres long platform in 300 seconds.

length of train is 600 metres.

Total distance = length of the train + length of the platform

$$= 900 + 600 = 1500$$

$$\text{Speed} = \frac{1500}{300} = 5m/s$$

$$\text{To cross a stationary pole Time} = \frac{\text{Distance}}{\text{Speed}}$$

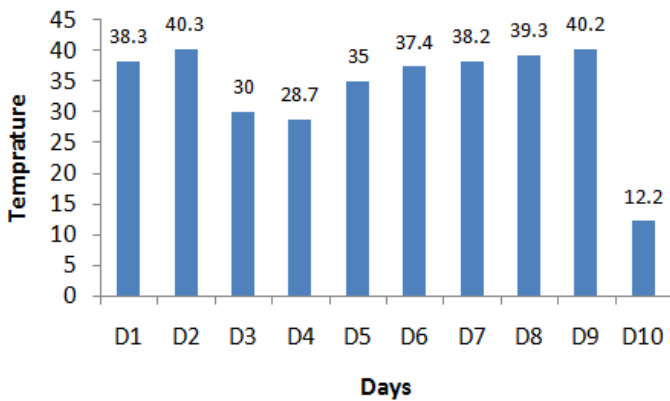
substituting,

$$\text{Time} = \frac{600}{5} = 120s$$

$$120 \text{ seconds} = \frac{120}{60} = 2 \text{ minutes}$$

### Question 63

The Bar graph given below presents the maximum temperature (in ° C) of a city for 10 different days spread over several months.



What is the average maximum temperature of the city per day for the given ten days?

A 44.96° C

B 32.96° C

C  $33.96^{\circ}\text{C}$

D  $35.96^{\circ}\text{C}$

**Answer: C**

**Explanation:**

average maximum temperature of the city per day for the given ten days =

$$\frac{38.3+40.3+30.0+28.7+35.0+37.4+38.2+39.3+40.2+12.2}{10}$$

$$= \frac{339.6}{10} = 33.96$$

**Question 64**

A travels a certain distance with three different speeds; first 3 km with a speed of 9 km/h, second 6 km with a speed of 15 km/h, and third 9 km with a speed of 18 km/h. What is the average speed of A for the whole journey?

A  $\frac{480}{37}$  km/h

B  $\frac{540}{37}$  km/h

C  $\frac{460}{37}$  km/h

D  $\frac{660}{37}$  km/h

**Answer: B**

**Explanation:**

A travels a certain distance with three different speeds  $S_1, S_2, S_3$  three different times  $T_1, T_2, T_3$  and covers different distance  $D_1, D_2, D_3$

$$\text{Average speed} = \frac{\text{Total distance}}{\text{Total time}}$$

$$T_1 = \frac{3}{9} = \frac{1}{3}$$

$$T_2 = \frac{6}{15} = \frac{2}{5}$$

$$T_3 = \frac{9}{18} = \frac{1}{2}$$

$$\text{Total time} = T_1 + T_2 + T_3 = \frac{37}{30}$$

$$\text{Total distance} = D_1 + D_2 + D_3 = 3 + 6 + 9 = 18$$

Substituting,

$$\text{Average speed} = \frac{18}{\frac{37}{30}}$$

$$= \frac{540}{37}$$

**Question 65**

In 60 litres mixture of milk and water the ratio of volumes of milk and water is 3 : 2. If we want the ratio of the volumes of milk and water to be 1 : 1, then how much water should be added to the mixture?

A 16 litres

B 14 litres

C 12 litres



D 10 litres

**Answer:** C

**Explanation:**

In 60 litres mixture of milk and water the ratio of volumes of milk and water is  $3x : 2x$

$$5x = 60$$

$$x = \frac{60}{5}$$

$$x = 12$$

$$\text{therefore milk} = 3 \times 12 = 36$$

$$\text{water} = 2 \times 12 = 24$$

If we want the ratio of the volumes of milk and water to be  $1 : 1$  then we have to add 12 lt water

that is,  $12 + 24 = 36$

volumes of milk and water =  $36 : 36$

$$= 1 : 1$$

**Question 66**

**A sold an article for ₹1495 at a profit of 15%. He purchased another article having cost price equal to the previous article. He sold this new article at a profit of 10%. How much total profit has A earned?**

A ₹450

B ₹375

C ₹425

D ₹325

**Answer:** D

**Explanation:**

Cost price(CP), Selling price(SP), Profit(P)

A sold an 1st article for ₹1495 at a profit of 15%.

SP of 1st article = 1495

$$P\% = 15\%$$

$$P\% = \frac{SP - CP}{CP} \times 100$$

Substituting,

$$\frac{15}{100} = \frac{1495 - CP}{CP}$$

On solving, CP = 1300

A purchased 2nd article having cost price equal to the 1st article.

CP = 1300

$$P\% = 10\%$$

$$P\% = \frac{SP - CP}{CP} \times 100$$

Substituting,

$$\frac{10}{100} = \frac{SP - 1300}{1300}$$

On solving, SP = 1430

Total CP =  $1300 + 1300 = 2600$

Total SP =  $1495 + 1430 = 2925$

$$\text{Total P} = 2925 - 2600 = 325$$

### Question 67

What is the mode of the given data?

4, 3, 4, 3, 2, 2, 2, 5, 5, 3, 4, 6, 4, 3, 3

- A 3
- B 2
- C 5
- D 4

**Answer:** A

### Explanation:

The mode of a data set is the number that occurs most frequent in the set

To find the mode :

Step 1: arrange numbers in ascending order

2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 4, 4, 5, 5, 6

Step 2 : count how many times each number occurs

2 three times

3 five times

4 four times

5 two times

6 one time

Step 3 : The number that occurs the most is the mode

3 is the mode

### Question 68

The average age of a group of 36 students is 23 years. Four students with average age 22 years leave the group. What is the average age in years (correct up to one decimal place) of the new group?

- A 24.5
- B 24.4
- C 23.8
- D 23.1

**Answer:** D

### Explanation:

$$\text{Total age of 36 students} = 36 \times 23 = 828$$

$$\text{Total age of 4 students} = 4 \times 22 = 88$$

When 4 students leave the group remaining 32 students

$$\text{average age of 32 students} = \frac{828-88}{32} = 23.1$$

**Question 69**

Average of a, b and c is 9. Average of b and c is 10. What is the value of a?

- A 8
- B 9
- C 7
- D 6

**Answer:** C

**Explanation:**

Average of a, b, c = 9

Average of b, c = 10

$$\frac{a+b+c}{3} = 9$$

$$a + b + c = 27$$

$$\frac{b+c}{2} = 10$$

$$b + c = 20$$

$$a + 20 = 27$$

$$a = 7$$

**Question 70**

What is the value of

$$36 \div 8 \times 4 + 2 \div 4 - 1 + 5 \text{ of } 3 \div (4 \times 2 - 3) - 3?$$

- A  $\frac{31}{2}$
- B 18
- C  $\frac{35}{2}$
- D 16

**Answer:** C

**Explanation:**

$$36 \div 8 \times 4 + 2 \div 4 - 1 + 5 \text{ of } 3 \div (4 \times 2 - 3) - 3$$

$$= 36 \div 8 \times 4 + 2 \div 4 - 1 + 5 \text{ of } 3 \div 5 - 3$$

$$= 36 \div 8 \times 4 + 2 \div 4 - 1 + 15 \div 5 - 3$$

$$= \frac{9}{2} \times 4 + \frac{1}{2} - 1 + 3 - 3$$

$$= 18 + \frac{1}{2} - 1 + 3 - 3$$

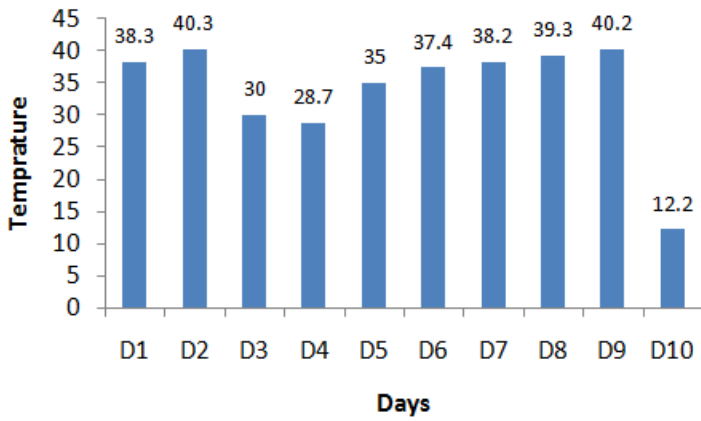
$$= 18 + \frac{1}{2} + 3 - 4$$

$$= \frac{35}{2}$$

**Instructions**

The Bar graph given below presents the maximum temperature (in °C) of a city for 10 different days spread over

several months.



**Question 71**

what is the difference (in degree Celsius) between the highest and the lowest recorded maximum temperatures from the data given for the ten days?

- A 28.1
- B 28.0
- C 26.1
- D 27.1

**Answer:** A

**Explanation:**

Highest temperature recorded on D2 = 40.3

Lowest temperature recorded on D10 = 12.2

Difference =  $40.3 - 12.2 = 28.1$

**Question 72**

The temprature on D5 is how much percentage more than the temprature on D3?

- A 16.67%
- B 23.01%
- C 21.07%
- D 24.57%

**Answer:** A

**Explanation:**

Temperature on D3 = 30

Temperature on D5 = 35

$$\begin{aligned} \text{\% Increase in temperature on D3} &= \frac{35-30}{30} \times 100 \\ &= 16.67\% \end{aligned}$$

**Instructions**

For the following questions answer them individually

**Question 73**

If  $x : y : z = 3 : 4 : 5$  and  $x + y + z = 96$ , then what is the value of  $z$ ?

A 32

B 42

C 36

D 40

**Answer:** D

**Explanation:**

$$x : y : z = 3 : 4 : 5$$

$$x = 3p$$

$$y = 4p$$

$$z = 5p$$

$$x + y + z = 12p$$

$$\text{Given } 12p = 96$$

$$\text{therefore, } p = \frac{96}{12}$$
$$= 8$$

$$z = 5 \times 8 = 40$$

**Question 74**

The sum of ₹500 becomes ₹600 in 2 years at certain rate of simple interest. If the rate of interest is halved, then what amount will ₹500 give in 2 years?

A ₹500

B ₹520

C ₹550

D ₹560

**Answer:** C

**Explanation:**

Sum of 500 becomes 600 in 2 years

$$\text{therefore simple interest} = 600 - 500 = 100$$

Formula for simple interest (SI)

$$I = \frac{PNR}{100}$$

$$P = \text{principle amount} = 500$$

$$N = \text{time period} = 2 \text{ years}$$

$$R = \text{rate of interest}$$

$$I = \text{simple interest} = 100$$

Substituting,

$$100 = \frac{500 \times 2 \times R}{100}$$

$$\text{solving } R = 10\%$$

If the rate of interest is halved then  $R = 5\%$

$$I = \frac{500 \times 2 \times 5}{100}$$

$$I = 50$$

Amount = Principle + Interest

$$= 500 + 50$$

$$= 550$$

### Question 75

The cost prices of articles A and B are ₹1200 and ₹1600 respectively. The selling price of article A is ₹1380 and the total profit on selling both the articles is 25%. What is the profit percentage on selling of article B?

A 29.5

B 27.5

C 35.5

D 32.5

**Answer:** D

### Explanation:

cost price (CP) , selling price(SP) , profit(P)

$$\text{CP of A} = 1200$$

$$\text{CP of B} = 1600$$

$$\text{Total CP} = 1200 + 1600 = 2800$$

$$\text{SP of A} = 1380$$

SP of B assume as 'x'

$$\text{Total SP} = 1380 + x$$

$$\text{Total profit on selling both the articles is } 25\% = \frac{25}{100} = \frac{1}{4}$$

$$p\% = \frac{SP-CP}{CP} \times 100$$

Substituting values,

$$\frac{1}{4} = \frac{1380+x-2800}{2800}$$

On solving we get  $x = 2120$

$$\text{SP of B} = 2120$$

$$\begin{aligned} \text{Therefore P\% on selling article B} &= \frac{2120-1600}{1600} \times 100 \\ &= \frac{520}{1600} \times 100 \\ &= 32.5 \end{aligned}$$

## General knowledge

### Instructions

For the following questions answer them individually

### Question 76

The SI unit of power of lens is:

- A Diopre
- B kWh
- C Joule
- D Watt

**Answer:** A

#### **Question 77**

**R. Pragganandhaa relates to which game?**

- A Tennis
- B Golf
- C Chess
- D Badminton

**Answer:** C

#### **Question 78**

**According to 2011 census which of the following state has the largest rural population?**

- A Madhya Pradesh
- B Punjab
- C Uttar Pradesh
- D Maharashtra

**Answer:** C

#### **Question 79**

**Which of the following was the first fort by English East India Company in India?**

- A Fort William
- B Fort St.George
- C Sewri Fort
- D Masulipatnam

**Answer:** B

#### **Question 80**

**Which of the following is a secondary pollutant?**

- A Carbon monoxide
- B Carbon dioxide
- C Smog
- D Fly Ash

**Answer:** C

**Question 81**

**Autotrophic mode of nutrition requires:**

- A Carbon dioxide, Water, Chlorophyll and Sunlight
- B Carbon monoxide and Water
- C Chlorophyll and Oxygen
- D Methane

**Answer:** A

**Question 82**

**Which of the following newspapers was edited by Dadabhai Naoroji?**

- A Samvad Kaumudi
- B Shom Prakash
- C Rast Goftar
- D Mahratta

**Answer:** C

**Question 83**

**The launch vehicle of Mars Orbiter Mission was:**

- A PSLV C-46
- B PSLV C-45
- C PSLV C-25
- D PSLV C-42

**Answer:** C

**Question 84**

**Which of the following is NOT matched correctly?**

- A Mohiniattam - Odisha
- B Garba - Gujarat



- C Yakshagana - Karnataka
- D Kuchipudi - Andhra Pradesh

**Answer:** A

**Question 85**

**Which of the following is NOT a factor of production?**

- A Tax
- B Land
- C Labour
- D Capital

**Answer:** A

**Question 86**

**The \_\_\_\_\_ is vested with the responsibility of conducting monetary policy.**

- A Central Government
- B SEBI
- C Different Banks
- D Reserve Bank of India

**Answer:** D

**Question 87**

**Who won men's singles title at the 2019 Australian Open?**

- A Roger Federar
- B Andy Murray
- C Rafael Nadal
- D Novak Djokovic

**Answer:** D

**Question 88**

**The book 'Every child matters' is written by:**

- A Arun Shauri
- B Kailash Satyarthi
- C Chetan Bhagat
- D Jawaharlal Nehru

**Answer: B**

**Question 89**

**Who is the Slovakia's first female President?**

- A** Betty Miller
- B** Valentina Tereshkova
- C** Zuzana Caputova
- D** Jerrie Mock

**Answer: C**

**Question 90**

**Congregational Singing of 'Shabad' is related to:**

- A** Buddha Purnima
- B** Muharram
- C** Mahavir Jayanti
- D** Guru Purab

**Answer: D**

**Question 91**

**Who is the Femina Miss India 2019?**

- A** Suman Rao
- B** Anukrati Vas
- C** Shreya Shankar
- D** Manushi Chhillar

**Answer: A**

**Question 92**

**As of June 2019, who is the Minister of Jal Shakti?**

- A** Gajendra Singh Shekhawat
- B** Mahendra Nath Pandey
- C** Mukhtar Abbas Naqvi
- D** Prakash Javadekar

**Answer: A**

**Question 93**

**Maand folk music related to which state?**

- A** Uttar Pradesh
- B** Madhya Pradesh
- C** Rajasthan
- D** Manipur

**Answer:** C

**Question 94**

**How many times President has declared National emergency in India?**

- A** Two times
- B** Three times
- C** Only once
- D** Four times

**Answer:** B

**Question 95**

**The invention of crescograph is associated to which of the following scientists of India?**

- A** Meghnad Saha
- B** Jagdishchandra Bose
- C** Homi J Bhabha
- D** Satyendranath Bose

**Answer:** B

**Question 96**

**Which of the following state of India has the longest coastline?**

- A** Gujarat
- B** Maharashtra
- C** Kerala
- D** Odisha

**Answer:** A

**Question 97**

**The National Diamond Institute is located at:**

- A** Gandhinagar
- B** Vadodara
- C** Vapi
- D** Surat

**Answer:** D

#### **Question 98**

**With reference to the National movement in India, when was the Poona Pact signed?**

- A** 1933
- B** 1922
- C** 1923
- D** 1932

**Answer:** D

#### **Question 99**

**Which of the following rivers is NOT an east flowing river?**

- A** Vamsadhara
- B** Subarnarekha
- C** Vaigai
- D** Mahi

**Answer:** D

#### **Question 100**

**Which of the following statements about the Lok Sabha is NOT correct?**

- A** The Union Council of Ministers is collectively responsible to the Lok Sabha
- B** If the question arises whether a bill is a money bill or not, the decision of the leader of the opposition shall be final
- C** No-confidence motion against the Council of Ministers can only be moved in Lok Sabha
- D** A money bill can be introduced only in the Lok Sabha

**Answer:** B

# SSC MTS 5th August 2019 Shift-3

## English

### Instructions

For the following questions answer them individually

#### Question 1

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
He did not have few hopes when he contested the election. /No error**

- A He did not have
- B contested the election
- C No error
- D few hopes when he

**Answer: D**

### Instructions

Select the most appropriate option to fill in the blank.

#### Question 2

**I \_\_\_\_\_ blood in the hospital tomorrow.**

- A have donated
- B had donated
- C was donating
- D will donate

**Answer: D**

#### Question 3

**I am always \_\_\_\_ for good books.**

- A looking into
- B looking out
- C looking down
- D looking after

**Answer: B**

### Instructions

For the following questions answer them individually

#### Question 4

**Select the most appropriate synonym of the given word.**

**Infuriate**

- A Enrage

- B** Enhance
- C** Engage
- D** Endow

**Answer:** A

#### **Question 5**

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
Sterling is only twenty four but have achieved so much in his professional football career.**

- A** Sterling is only twenty four
- B** in his professional football career
- C** No error
- D** but have achieved so much

**Answer:** D

#### **Question 6**

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

**The housing problem in Mumbai becomes more serious day by day.**

- A** No Improvement
- B** had become
- C** become
- D** is becoming

**Answer:** D

#### **Question 7**

**Select the most appropriate antonym of the given word.**

**Familiar**

- A** Usual
- B** Strange
- C** Common
- D** Known

**Answer:** B

**Question 8**

**Choose the most appropriate word that can substitute the given group of words.**

**A violent windstorm**

- A Temperate
- B Drought
- C Tempest
- D Draught

**Answer: C**

**Question 9**

**Choose the correctly spelt word.**

- A Extravagant
- B Extravagent
- C Extrevagant
- D Extrawagant

**Answer: A**

**Question 10**

**Select the most appropriate option to fill in the blank.**

**Young people from disadvantaged homes look for \_\_\_\_ in government jobs.**

- A capability
- B stability
- C utility
- D ability

**Answer: B**

**Question 11**

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

**The train pass over the long dark tunnel.**

- A pass across
- B No Improvement
- C passes into
- D passed through

**Answer: D**

**Question 12**

Select the most appropriate meaning of the given idiom.  
**To feel at home**

- A To feel comfortable
- B To miss one's home
- C To feel out of place
- D To be rarely at home

**Answer:** A

**Question 13**

Choose the most appropriate word that can substitute the given group of words.  
**The art of creating and arranging dances**

- A Calligraphy
- B Choreography
- C Seismology
- D Geology

**Answer:** B

**Question 14**

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

**Not only the parents but also the children were sad at leaving the house.**

- A as also
- B so even
- C and also
- D No Improvement

**Answer:** D

**Question 15**

Select the most appropriate meaning of the given idiom.  
**Go getter**

- A One who does the right thing
- B A greedy person
- C One who runs away
- D A real achiever

**Answer:** D



**Question 16**

**Choose the correctly spelt word.**

- A Forward
- B Eddition
- C Foreign
- D Enfluence

**Answer: C**

**Question 17**

**Select the most appropriate antonym of the given word.**

**Current**

- A General
- B Present
- C Modern
- D Past

**Answer: D**

**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:**

Education makes a person self-reliant. An (1)\_\_\_ person is well equipped to take important decisions (2)\_\_\_ life. He is the master of his (3)\_\_\_ and fortune. On the other hand an illiterate person (4)\_\_\_ help and guidance at every step. He feels helpless (5)\_\_\_ is at the mercy of others.

**Question 18**

**Select the most appropriate option for blank No. 1.**

- A educated
- B wise
- C illiterate
- D learned

**Answer: A**

**Question 19**

**Select the most appropriate option for blank No. 2.**

- A in
- B to

**C** on

**D** at

**Answer:** A

**Question 20**

**Select the most appropriate option for blank No. 3.**

**A** chance

**B** lot

**C** fate

**D** luck

**Answer:** C

**Question 21**

**Select the most appropriate option for blank No. 4.**

**A** need

**B** has needed

**C** needs

**D** is needing

**Answer:** C

**Question 22**

**Select the most appropriate option for blank No. 5.**

**A** but

**B** unless

**C** though

**D** and

**Answer:** D

**Instructions**

For the following questions answer them individually

**Question 23**

**Select the most appropriate synonym of the given word.**

**Courteous**

**A** Optional

- B** Meritorious
- C** Polite
- D** Arrogant

**Answer:** C

#### Question 24

**Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
It is easier to preach then to follow. /No error**

- A** No error
- B** then to follow
- C** to preach
- D** It is easier

**Answer:** B

#### Question 25

**Select the most appropriate option to fill in the blank.  
My mother is the \_\_\_ inspiration in my life.**

- A** most biggest
- B** biggest
- C** big
- D** bigger

**Answer:** B

## Reasoning

#### Instructions

For the following questions answer them individually

#### Question 26

**In a certain code language, 'BOTANY' is written as 'CQWBPB'. What will be the code for 'INSECT' in that code language?**

- A** KQWGFX
- B** JPVFEW
- C** KRWGFX
- D** JPUFEW

**Answer:** B

### Question 27

Select the option in which the letters share the same relationship as that shared by the given pair of letters.

**GOM : JSR :: ?**

- A** MOP : PSV
- B** RAT : UFY
- C** COB : FSG
- D** LAP : OFU

**Answer:** C

### Question 28

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

**Cloth : Mill :: Crop : ?**

- A** Press
- B** Maize
- C** Field
- D** Factory

**Answer:** C

### Explanation:

Cloths are produced in mill similarly, crops are produced in field.

### Question 29

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:**

- I. Some wood are chairs.**
- II. All chairs are mats.**

**Conclusions:**

- I. Some mats are wood.**
- II. Some chairs are wood.**
- III. All wood are mats.**

- A** Both conclusions I and II follow.
- B** Both conclusions II and III follow.
- C** Only conclusion I follows.
- D** None of the conclusions follows.

**Answer:** A

### Question 30

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

17 : 289 :: 31 : ?

- A 961
- B 1021
- C 1089
- D 941

**Answer:** A

### Explanation:

Here, square of 17 is 289.. Similarly, square of 31 is 961.

### Question 31

Six cars labelled D, F, H, J, L and N are parked around a circular path facing towards the centre (not necessarily in the same order). H is third to the right of N. J is to the immediate left of D. F is second to the left of N. D is second to the left of F. Which car is parked second to the right of H?

- A J
- B L
- C N
- D F

**Answer:** B

### Question 32

Study the given pattern carefully and select the number that can replace the question mark(?) in it.

<b>3</b>	<b>4</b>	<b>7</b>
<b>6</b>	<b>4</b>	<b>2</b>
<b>3</b>	<b>2</b>	<b>5</b>
<b>15</b>	<b>12</b>	<b>?</b>

- A 41
- B 43
- C 37
- D 31

**Answer:** C

### Explanation:

Here,  $3 \times 3 + 6$

$= 9 + 6$

$= 15$

Similarly,

$5 \times 7 + 2$

$$=35+2$$

$$=37$$

### Question 33

Select the number that can replace the question mark (?) in the following series.  
279, 277, 273, 267, ?

A 257

B 263

C 261

D 259

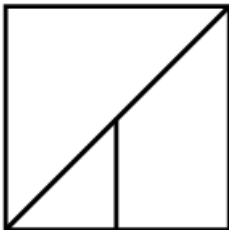
Answer: D

### Question 34

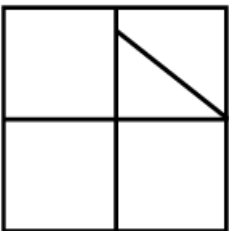
Select the option in which the given figure is embedded. (Rotation not allowed)



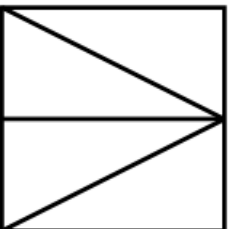
A



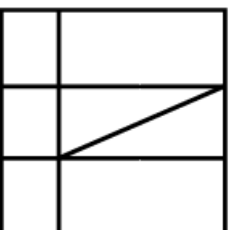
B



C



D





- B** Only conclusion II follows.
- C** None of the conclusions follow.
- D** Only conclusion I follows.

**Answer:** C

### Question 37

Select the letter-pair that can replace the question mark (?) in the following series.  
MR, NU, OX, PA, ?

- A** RE
- B** QC
- C** RC
- D** QD

**Answer:** D

### Question 38

Five subjects, R, T, V, X and Z, are taught from Monday to Friday (not necessarily in the same order). One subject is taught on one day. Only Z is taught before R. T is taught before X. T is not taught on Wednesday. How many subjects are taught before V?

- A** 2
- B** 3
- C** 0
- D** 1

**Answer:** A

### Question 39

Six actors, C, E, G, I, K and M, are sitting around a circular table facing towards the centre (not necessarily in the same order). M is second to the left of G. E is second to the right of C. K is to the immediate left of M. Who is sitting to the immediate right of E?

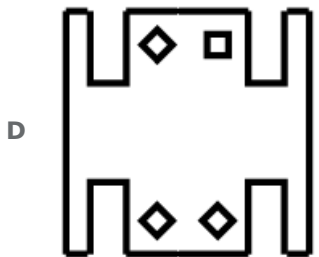
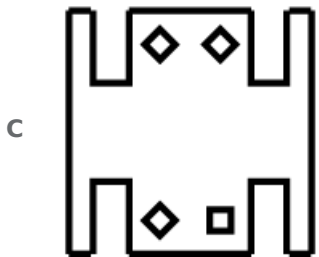
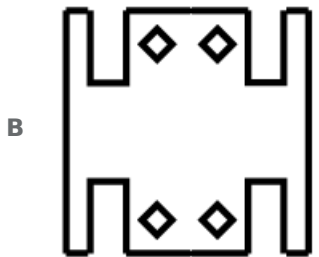
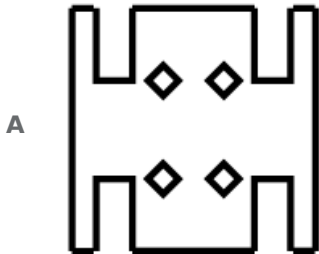
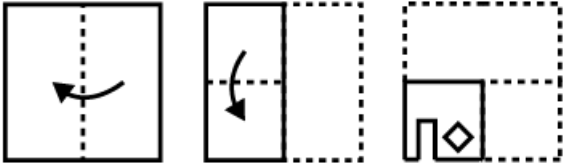
- A** I
- B** G
- C** M
- D** K

**Answer:** A



Question 40

The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



Answer: B

Question 41

Select the number that can replace the question mark (?) in the following series.  
8, 8, 16, 48, ?

A 196

B 192

C 190

D 216

**Answer: B**

**Question 42**

**Which two numbers need to be interchanged to make the following equation correct?**

$$5 \times 8 + 7 - 3 = 14$$

- A** 8 and 3
- B** 8 and 5
- C** 3 and 7
- D** 7 and 8

**Answer: A**

**Explanation:**

If we interchange 8 and 3 then-

$$\begin{aligned} 5 \times 3 + 7 - 8 \\ = 15 + 7 - 8 \\ = 14 \end{aligned}$$

**Question 43**

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

**Eraser : Pencil :: Chair : ?**

- A** Sit
- B** Plastic
- C** Wood
- D** Table

**Answer: D**



**Explanation:**

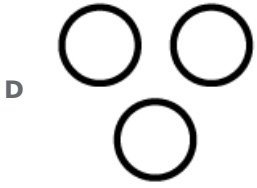
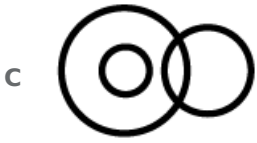
Eraser and Pencil are quite complementary and similarly Chair and Table are also quite complementary item.

**Question 44**

**Identify the diagram that best represents the relationship between the given classes.**

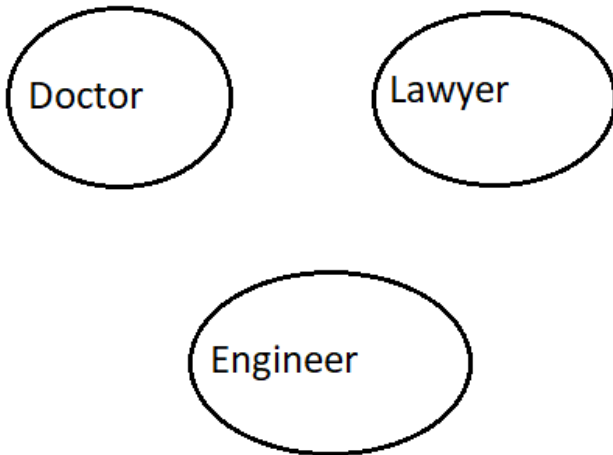
**Lawyer, Engineer, Doctor**

- A** 
- B** 



Answer: D

Explanation:



#### Question 45

If the given two numbers are interchanged, which of the following equations will become correct?  
3 and 5

A  $6 + 5 \times 2 - 3 = 7$

B  $3 + 4 - 1 \times 5 = 2$

C  $3 + 5 - 4 \times 2 = -1$

D  $1 + 9 \div 3 + 5 = 9$

Answer: A

Explanation:

if we interchange 3 and 5 then-

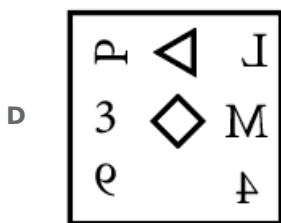
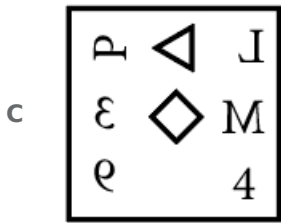
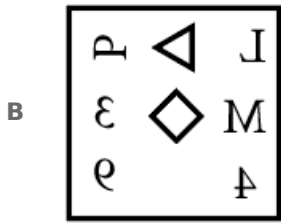
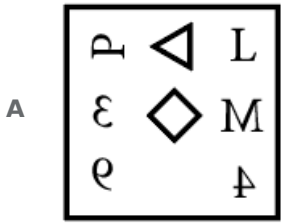
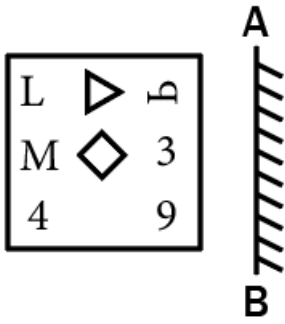
$6 + 3 \times 2 - 5$

= 6+6-5

=7

**Question 46**

Select the correct mirror image of the given figure when the mirror is placed at line AB.



**Answer: B**

**Question 47**

In a certain code language, 'RIP' is written as '42' and 'MOL' is written as '39'. What will be the code for 'GAN' in that code language?

A 21

B 23

C 20

D 22

Answer: A

**Explanation:**

Here place values of given words are-

R=18, I=9, P=16

So, RIP=(18+9+16)-1 =42

Similarly, M=13, O=15, L=12

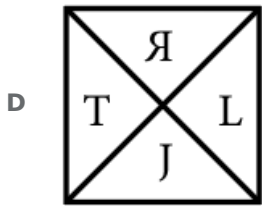
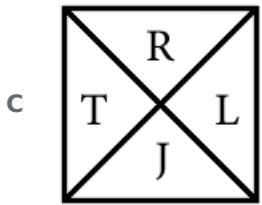
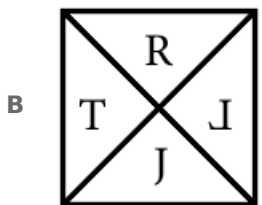
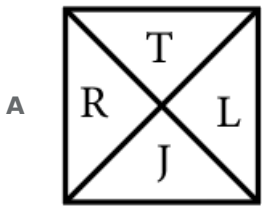
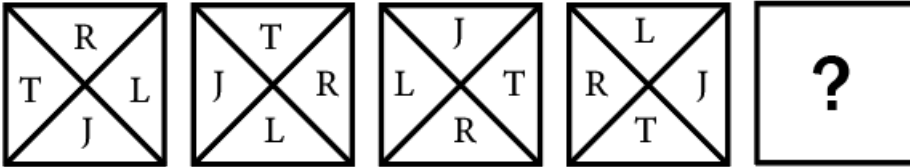
So, (13+15+12)-1 = 39

G=7, A=1, N=14

So, (7+1+14)-1 = 21

**Question 48**

Select the figure that will come next in the following series.



Answer: C

**Explanation:**

Here the letters are moving 90 degree clockwise direction so, the answer figure will be option C.

### Question 49

In a certain code language, 'PLANTS' is written as 'QNBPUU'. What will be the code for 'KIDNEY' in that code language?

- A MLFQGB
- B MLEQGE
- C LKFPFA
- D LKEPFA

**Answer:** D

### Question 50

In a certain code language, 'POLE' is written as '48' and 'ROG' is written as '40'. What will be the code for 'TIP' in that code language?

- A 48
- B 35
- C 45
- D 44

**Answer:** C

#### **Explanation:**

Place values of letters of POLE are-

P=16, O=15, L=12, E=5

So,  $(16+15+12+5)=48$

Similarly, R=18, O=15, G=7

$(18+15+7)=40$

Now, T=20, I=9, P=16

So,  $(20+9+16)=45$

## Quant

### **Instructions**

For the following questions answer them individually

### **Question 51**

The average speed of a car is 600 metres/minute. How much slower (in metres/second) does the car run than a sprinter who covers 100 metres in 9.6 seconds?

- A  $\frac{7}{12}$
- B  $\frac{5}{12}$
- C  $\frac{1}{2}$

D  $\frac{5}{24}$

**Answer:** B

### Question 52

An article is sold at 22.5% profit. What is the ratio of the cost price to the selling price?

A 39 : 69

B 31 : 57

C 34 : 63

D 40 : 49

**Answer:** D

#### Explanation:

22.5% = profit%

Let us consider 100 as cost price

profit

$$= \frac{22.5}{100} \times 100$$

$$= 22.5$$

Selling price will be ,

$$\text{Cost price} + \text{profit} = 100 + 22.5$$

$$\text{S.p} = 122.5$$

the ratio of the cost price to the selling price

$$= \frac{100}{122.5}$$

$$= \frac{1000}{1225}$$

$$= \frac{40}{49}$$

### Question 53

A bag contains coins of 1 rupee, 50 paise and 25 paise in the ratio of 1 : 2 : 4. If the total money in the bag is ₹ 225, then how many 50 paise coins are there?

A 150

B 175

C 125

D 200

**Answer:** A

#### Explanation:

1 Rs

50 paise = 0.5 Rs

25 paise = 0.25 Rs

Given that

$$1 \times 1x + 0.5 \times 2x + 0.25 \times 4x = 225$$

$$3x = 225$$

$$x = 75$$

$$\text{So 50 paise coins} = 2 \times 75$$

$$= 150$$

#### Question 54

What is the median of the given data?

6, 2, 3, 5, 9, 4, 8, 7

A 6.5

B 5

C 6

D 5.5

**Answer:** D

#### Explanation:

Firstly arrange the given no. in ascending order

6, 2, 3, 5, 9, 4, 8, 7

2, 3, 4, 5, 6, 7, 8, 9

Now find middle term

That is 5, 6

Now take avg of it

$$\frac{5+6}{2}$$

$$= 5.5$$

#### Question 55

A mixture contains milk and water in the ratio 4 : 3 (by volume). If 4 litres water is added to it, then the ratio becomes 1: 1. What is the quantity of milk in the initial mixture?

A 16 litres

B 20 litres

C 18 litres

D 12 litres

**Answer:** A

#### Explanation:



Initially mixture is 4:3

After adding 4 lit water it becomes 1:1

It means quantity of milk is remain unchanged and water is changed in mixture

4:3

1:1  $\times 4$  (to equal the milk quantity )

= 4:4

Now milk ratio is same and water is changed after adding water (4-3)

1 -> 4 lit

So in 4:3 ratio

Milk =  $4 \times 4 = 16$  litre

Water =  $3 \times 4 = 12$  litre

### Question 56

**An article is sold at two successive discounts of 10% and 20%.If the selling price is ₹1080, then what is the marked price?**

**A** ₹1400

**B** ₹1600

**C** ₹1500

**D** ₹1300

**Answer: C**

### Explanation:

formula of successive discount =  $d1 + d2 - d1 \times d2 \div 100$

= 10

= 28%

Let us consider 100 as marked price and

discount is count on marked price so discount

=  $\frac{28}{100} \times 100$

Discount = 28

Selling price =  $100 - 28 = 72$  which is equal to 1080

$72 = 1080$

$1 = 1080 \div 72$

$1 = 15$

So

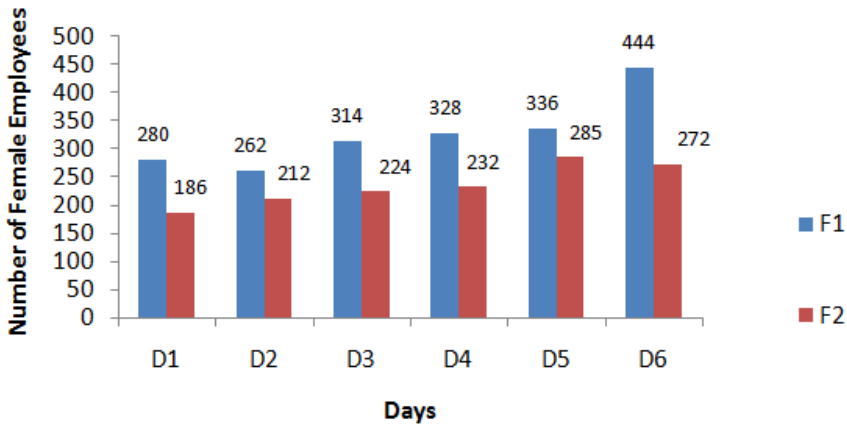
$100 = 15 \times 100$

= 1500

So marked price is Rs 1500

**Question 57**

The Bar graph given below presents the number of female employees working in two factories on six different days of a week.



On which day the number of female workers in the factories F1 and F2, taken together, is the second highest?

- A D5
- B D3
- C D4
- D D6

**Answer:** A

**Question 58**

A train takes 1 minute to cross a stationary pole. How much time (in seconds) will it take to cross a bridge whose length is twice that of the train?

- A 120
- B 90
- C 150
- D 180

**Answer:** D

**Explanation:**

As we know that

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

Given

Let train length = D

$$\text{Speed} = \frac{D}{60}$$

Now

Given that

Bridge length = 2D

$$\text{Time} = \frac{\text{bridgelenh+train}}{\text{speed}}$$

$$\text{Time} = \frac{2D+D}{60}$$

$$\text{Time} = 180$$

### Question 59

Article 1 is sold for ₹180. Article 2 is sold for ₹240. The profit on article 1 is 20% and loss on article 2 is 20%, What is the sum of cost prices of the two articles?

A ₹480

B ₹520

C ₹450

D ₹400

**Answer: C**

### Explanation:

$$20\% = \frac{1}{5}$$

In case 1 there is profit

$$\begin{aligned} \text{C.p 1} &= \frac{5}{6} \times 180 \\ &= 150 \end{aligned}$$

In case 2 there is loss

$$\begin{aligned} \text{C.p2} &= \frac{5}{4} \times 240 \\ &= 300 \end{aligned}$$

$$\text{CP1} + \text{CP2} = 450$$

### Question 60

What is the value of  $\frac{3 \text{ of } 24 \div 8 \times 3 + 4 \div 2 - 4 \times 5}{36 \div 12 \times 4 \div 2 + 5 \times (6 - 4)}$  ?

A  $\frac{3}{10}$

B  $\frac{9}{16}$

C  $\frac{3}{4}$

D  $\frac{8}{15}$

**Answer: B**

### Explanation:

$$\begin{aligned} & \frac{72 \div 8 \times 3 + 4 \div 2 - 4 \times 5}{36 \div 12 \times 4 \div 2 + 5 \times 2} \end{aligned}$$

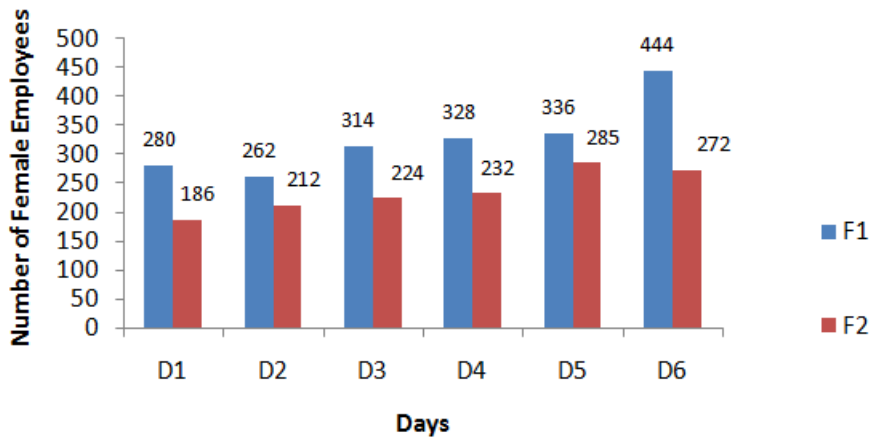
$$= \frac{9 \times 3 + 2 - 20}{3 \times 2 + 5 \times 2}$$

$$= \frac{27 + 2 - 20}{6 + 10}$$

$$= \frac{9}{16}$$

**Question 61**

The Bar graph given below presents the number of female employees working in two factories on six different days of a week.



What is the ratio of the average number of females working in factory F2 per day during Days D1, D2, D3 to the average number of females working in factory F1 per day during days D4, D5, D6?

- A 1964 : 1411
- B 311 : 554
- C 1411 : 1964
- D 554: 311

Answer: B

**Question 62**

10 men working 8 hours day can do a work in 30 days. In how many days will 12 men working 4 hours a day take do the same work?

- A 50 days
- B 30 days
- C 60 days
- D 40 days

Answer: A

**Explanation:**

apply chain rule

$$M_1 D_1 H_1 = M_2 D_2 H_2$$

$$10 \times 8 \times 30 = 12 \times 4 \times D_2$$

$$= 50 \text{ days}$$

**Question 63**

What is the value of  $\frac{1}{2} \times \left( \frac{3}{8} - 2 \right) \div 9 + \left( \frac{1}{3} + 6 \right)$ ?

- A  $\frac{13}{2}$

**B**  $\frac{10}{3}$

**C**  $\frac{31}{2}$

**D**  $\frac{25}{2}$

**Answer: B**

**Explanation:**

Firstly solve bracket and then apply bodmass rule

$$\frac{1}{2} \times \left( \frac{3-9}{4} \div \frac{32+3 \times 3}{4} \right) \div \frac{4}{9} + \left( \frac{1}{3} + \frac{1}{6} \right)$$

$$\frac{1}{2} \times \left( \frac{-6}{4} \div \frac{32+9}{4} \right) \div \frac{4}{9} + \left( \frac{1}{3} + \frac{1}{6} \right)$$

$$\frac{1}{2} \times \left( \frac{-6}{4} \div \frac{41}{4} \right) \div \frac{4}{9} + \frac{2}{6}$$

$$\frac{1}{2} \times \left( \frac{-6}{4} \div \frac{41}{4} \right) \div \frac{4}{9} + \frac{1}{3}$$

$$\frac{1}{2} \times \left( \frac{-6}{4} \div \frac{41}{4} \right) \div \frac{4}{9} + \frac{1}{3}$$

**Question 64**

A ribbon of uniform width and length  $l$  is wound around a right circular cylinder to completely cover its curved surface. If the circumference of the base of the cylinder is  $c$ , then the number of turns of the ribbon around the cylinder is:

**A**  $\frac{l}{4c}$

**B**  $\frac{l}{c}$

**C**  $\frac{2l}{c}$

**D**  $\frac{l}{2c}$

**Answer: B**

**Explanation:**

circumference =  $c$

Length of wire =  $l$

$$\text{Turns} = \frac{\text{length of wire}}{\text{circumference}}$$

$$\text{Turns} = \frac{l}{c}$$

**Question 65**

Average age of mother and father is 28 years. Average age of mother, father and their child is 20 years. What is the age of child?

**A** 4 years

**B** 3 years

**C** 6 years

D 5 years

**Answer:** A

**Explanation:**

$$\text{age of mother and father} = \frac{m+f}{2} = 28$$

$$= m+f=56$$

$$= \frac{m+f+c}{2} = 20$$

$$= m+f+c = 60$$

$$= c = 60-56$$

$$= 4 \text{ years}$$

**Question 66**

The average of 4 numbers is 9. If another number 14 is included, then what is the new average?

A 10

B 10.5

C 9

D 9.5

**Answer:** A

**Explanation:**

let w,x,y,z be the 4 numbers

$$\text{Avg} = \frac{w+x+y+z}{4} = 9$$

$$w+x+y+z=36$$

$$\text{New no.} = 14$$

$$\text{Avg of 5 no is} = \frac{w+x+y+z+v}{5}$$

$$= \frac{36+14}{5}$$

$$= 10$$

**Question 67**

What is the largest four-digit number, which is divisible by 32, 40, 36 and 48?

A 8820

B 8640

C 9220

D 9120

**Answer:** B

**Explanation:**

The LCM of 32,40,36,48 is 1440

Only 8640 is divisible by 1440

**Question 68**

The side of an equilateral triangle is 4 cm. What is its area?

- A  $6\sqrt{3} \text{ cm}^2$
- B  $8\sqrt{3} \text{ cm}^2$
- C  $9\sqrt{3} \text{ cm}^2$
- D  $4\sqrt{3} \text{ cm}^2$

**Answer:** D

**Explanation:**

$$\begin{aligned}\text{formula} &= \frac{\sqrt{3}}{4} a^2 \\ &= \frac{\sqrt{3}}{4} 4^2 \\ &= 4\sqrt{3} \text{ cm}^2\end{aligned}$$

**Question 69**

A, B and C, working alone can do a piece of work in 12, 24 and 36 days respectively. They work together and get ₹3850 for completing the work. What is the difference in shares of B and C?

- A ₹700
- B ₹1050
- C ₹1400
- D ₹350

**Answer:** D

**Explanation:**

$$A = 12$$

$$B = 24$$

$$C = 36$$

$$\text{Lcm} = 12, 24, 36 = 72 = \text{total work}$$

$$\text{Efficiency} = \frac{12}{72}, \frac{24}{72}, \frac{36}{72}$$

$$= 6, 3, 2 \text{ respectively}$$

So shares is distributed in the ratio of efficiency

$$\text{B's share} = \frac{3}{11} \times 3850 = 1050$$

$$\text{Similarly C's share} = \frac{2}{11} \times 3850 = 700$$

$$\text{(B-C)'s shares} = 350$$

**Question 70**

A sum of ₹2000 is invested at compound interest (compounding annually). If the rate of interest is 10% per annum, then what will be the amount after 30 months?

- A ₹2524

B ₹2538

C ₹2541

D ₹2532

**Answer: C**

**Explanation:**

30 months = 30 divides 12

$$= 2 \frac{1}{2}$$

compound interest =  $P(1 + \frac{R}{100})^n$

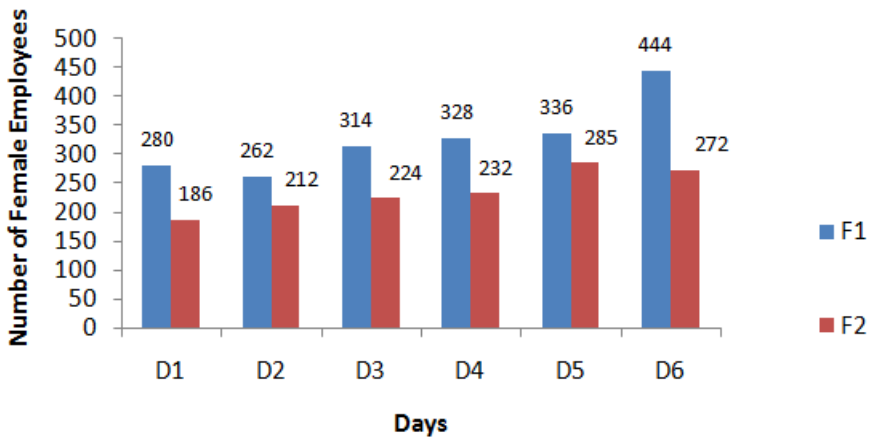
$$= P \left( \left(1 + \frac{R}{100}\right)^2 \times \left(1 + \frac{0.5 \times R}{100}\right)^1 \right)$$

$$2000 \left( \left(1 + \frac{10}{100}\right)^2 \times \left(1 + \frac{0.5 \times 10}{100}\right)^1 \right)$$

$$= 2541$$

**Question 71**

The Bar graph given below presents the number of female employees working in two factories on six different days of a week.



What is the difference (correct up to two decimal places) in the average number of females working per day in a factory F1 and the average number of females working per day in a factory F2?

A 125.33

B 96.25

C 92.17

D 87.33

**Answer: C**

**Question 72**

A is 20% more than B. B is 25% more than C. C is how much percent less than A?

A 37.5%

B 33.33%

C 50%



D 66.66%

**Answer:** B

**Explanation:**

Consider C=100

Given B=25% more than C =  $100 + (100 \times 25\%)$

$$= 100 + (100 \times 0.25)$$

$$= 100 + 25$$

$$= 125$$

A=20% more than B

$$= 150$$

To find C is how much percent less than A, we have C = 100 and A = 150.

Therefore, we get

$$= \frac{150-100}{150}$$

$$= \frac{50}{150}$$

$$= \frac{1}{3}$$

$$= 0.3333$$

$$= 33.33\%$$

**Question 73**

The volume of a right circular cone is  $1232 \text{ cm}^3$  and its height is 24 cm. What is its curved surface area?  
(Take  $\pi = \frac{22}{7}$ )

A  $430 \text{ cm}^2$

B  $550 \text{ cm}^2$

C  $354 \text{ cm}^2$

D  $604 \text{ cm}^2$

**Answer:** B

**Explanation:**

$$\text{volume of cone} = \frac{1}{3} \times \pi \times r^2 \times h$$

$$1232 = \frac{1}{3} \times \pi \times r^2 \times 24$$

$$r = 7 \text{ cm}$$

$$\text{Curved surface area of cone} = \pi \times r \times l$$

$$L = \sqrt{r^2 + h^2}$$

$$= 25 \text{ cm}$$

$$\text{Curved surface area of cone} = \pi \times 7 \times 25$$

$$= 550 \text{ cm}^2$$

#### Question 74

The simple interest on a certain sum for two years at the rate of 20% per annum is ₹250. What is the compound interest (compounded annually) on the same sum for the same period at the same rate of interest?

- A ₹275
- B ₹750
- C ₹550
- D ₹900

**Answer:** D

#### Explanation:

$$S.I = \frac{P \times R \times T}{100}$$
$$250 = \frac{P \times 20 \times 2}{100}$$
$$= 625$$

$$\text{compound interest} = P \left(1 + \frac{R}{100}\right)^n$$
$$= 625 \left(1 + \frac{20}{100}\right)^2$$
$$= \text{Rs}900$$

#### Question 75

The monthly incomes of A and B are in the ratio 3 : 4 and the ratio of their monthly expenditures is 2 : 3. If each saves ₹ 4000 per month, then what is the income of B?

- A ₹12000
- B ₹14000
- C ₹20000
- D ₹16000

**Answer:** D

#### Explanation:

profit = income - expenditure

Given that for B = 4 - 3 = 4000

$$1 = 4000$$
$$\text{Income} = 4 \times 4000$$
$$16000$$

# General knowledge

## Instructions

For the following questions answer them individually

### Question 76

Where is the headquarters of 'Bank of Baroda' situated?

- A Kolkata
- B Pune
- C Mumbai
- D Vadodara

Answer: D

### Question 77

As of 2018, the largest producer of cocoa bean is \_\_\_\_\_.

- A Ivory Coast
- B Brazil
- C Cuba
- D India

Answer: A

### Question 78

What was the name of India's lone female orangutan who died in the zoo of Odisha?

- A Ginny
- B Binny
- C Tinny
- D Pinny

Answer: B

### Question 79

Who among the following is a flute player?

- A Zakir Hussain
- B Shiv Kumar Sharma
- C Hariprasad Chaurasia
- D Ravi Shankar

Answer: C

**Question 80**

According to the Union Budget 2019, the Custom Duty on Gold and other precious metals hiked from 10% to \_\_\_\_\_.

- A 0.125
- B 0.12
- C 0.11
- D 0.105

**Answer: A**

**Question 81**

Which of the following plant is Bryophyte?

- A Cycas
- B Moss
- C Algae
- D Fern

**Answer: B**

**Question 82**

Which article of Indian Constitution constitutes Abolition of Untouchability?

- A Article 17
- B Article 16
- C Article 25
- D Article 21

**Answer: A**

**Question 83**

On which of the following river 'Nagarjuna Sagar Dam' is situated?

- A Godavari
- B Krishna
- C Cauvery
- D Mahanadi

**Answer: B**

**Question 84**

**The tagline of The UCO Bank is:**

- A** Honors Your Trust
- B** Good People to bank with
- C** Where every individual is committed
- D** Faithful And Friendly

**Answer:** A

**Question 85**

**In 15th century, who among the following was one of the leading proponents of Vaishnavism in Assam?**

- A** Jayadeva
- B** Raidas
- C** Shankaradeva
- D** Ghasidas

**Answer:** C

**Question 86**

**"Long walk to Freedom" is the autobiography of \_\_\_\_\_.**

- A** Abraham Lincoln
- B** John F Kennedy
- C** Nelson Mandela
- D** Kofi Annan

**Answer:** C

**Question 87**

**How many watts are there in one horsepower?**

- A** 756 Watt
- B** 746 Watt
- C** 736 Watt
- D** 766 Watt

**Answer:** B

**Question 88**

**Which of the following State Government approved an amendment to factories Act 1948 in June 2019?**

- A** Maharashtra
- B** Goa
- C** Gujarat
- D** Kerala

**Answer: B**

**Question 89**

**Which of the following Stupa is declared as 'protected area of national importance' in 2019?**

- A** Ramabhar Stupa
- B** Kesaria Stupa
- C** Chaukhandi Stupa
- D** Dhamekh Stupa

**Answer: C**

**Question 90**

**Who among the following is NOT a Bharat Ratana awardee?**

- A** Shyam Prasad Mukherjee
- B** M.G.Ramachandran
- C** Vinoba Bhave
- D** Morarji Desai

**Answer: A**

**Question 91**

**Which of the following is the highest peak of Eastern Ghats?**

- A** Anamudi
- B** Mahendragiri
- C** Kolaribetta
- D** Doddabetta

**Answer: B**

**Question 92**

**From which country the Indian Constitution borrowed the provision of Power of Judicial Review and independence of the judiciary?**

- A Germany
- B Japan
- C Australia
- D USA

**Answer:** D

**Question 93**

**Which gas is produced when metal reacts with dilute acids?**

- A Hydrogen
- B Nitrogen
- C Carbon Dioxide
- D Oxygen

**Answer:** A

**Question 94**

**In which of the following states of India is the Moatsu festival celebrated?**

- A West Bengal
- B Assam
- C Nagaland
- D Tripura

**Answer:** C

**Question 95**

**Which of the following eye part is 3D printed by Scientists in 2018?**

- A Iris
- B Lens
- C Retina
- D Cornea

**Answer:** D

**Question 96**

**Which of the following books is NOT written by Chetan Bhagat?**

- A Making India Awesome
- B Wise and Otherwise

- C One Indian Girl
- D Revolution 2020

**Answer: B**

**Question 97**

**During Mughal period, the Sanskrit Mahabharata was translated into Persian as:**

- A Sahanama
- B Badashahnama
- C Razmnama
- D Tutinama

**Answer: C**

**Question 98**

**In the context of medieval India, which of the following pairs is correct?**

- A Marco Polo - Morocco
- B Francois Bernier - Spain
- C Duarte Barbosa - Portugal
- D Al-Biruni -Turkey

**Answer: C**

**Question 99**

**Who among the following becomes the fastest batsman to reach 20,000 international runs?**

- A MS Dhoni
- B Shikhar Dhawan
- C Virat Kohli
- D Rohit Sharma

**Answer: C**

**Question 100**

**As of June 2019, who is the President of Indian Olympic Association?**

- A Narendra Batra
- B Rajeev Mehta
- C Narayan Ramachandran
- D Abhay Singh Chautala

**Answer: A**