



# Pabitra Sir Classes

Dream, Aim, Achieve

Personal guidance center for CAT, GMAT preparation

## CMAT 2018 SLOT 1

**Contact**



[www.pabitrasirclasses.com](http://www.pabitrasirclasses.com)

9851078349

[www.test.pabitrasirclasses.com](http://www.test.pabitrasirclasses.com)

7003948466

# Quant

## Instructions

For the following questions answer them individually Question 1 How many iron balls, each of radius 1 cm, can be made from a sphere whose radius is 8 cm?

- A 64
- B 256
- C 512
- D 124

Answer: C

Explanation:

Volume (V) of the sphere with radius R=8 cm is given by  $V = \frac{4}{3}\pi R^3 = \frac{4}{3}\pi 8^3 = \frac{4}{3}\pi(512)cm^3$

and Volume (v) of each iron ball with radius r= 1cm is given by  $V = \frac{4}{3}\pi r^3 = V = \frac{4}{3}\pi(1^3) = \frac{4}{3}\pi cm^3$

Let say 'n' iron balls each of volume 'v' are required to form a sphere of volume 'V'.

=> Total volume of 'n' iron balls = Volume of the sphere

$$n \times v = V \rightarrow n = V \div v = \frac{4}{3}\pi(512) \div \frac{4}{3}\pi = 512cm^3$$

Hence 512 iron balls are required in total to form the sphere.

## Question 2

If a is between 0 and 1, which of the following statements is (are) true?

- (i)  $a^2 - 1 > 0$
- (ii)  $a^2 + 1 > 0$
- (iii)  $a^2 - a > 0$

- A only (ii)
- B (i) & (ii)
- C (iii) only
- D All three

Answer: A

Explanation:

Given  $0 < a < 1$ .....(1)

Let us go with the verification of options

Option (i):

Squaring on both sides of (1), we get

$$0 < a^2 < 1$$

Subtracting '1' in the above equation,

$$\text{we get } -1 < a^2 - 1 < 0 \dots\dots\dots(2)$$

$$\Rightarrow a^2 - 1 < 0,$$

Hence, option 1 is false.

Option (ii):

Squaring on both sides of (1),

$$\text{we get } 0 < a^2 < 1$$

Adding '1' on both sides of above equation, we get

$$1 < a^2 + 1 < 2 \dots\dots\dots(3)$$

$$\Rightarrow a^2 + 1 > 0, \text{ Hence Option (ii) is true.}$$

Option (iii):

$$\text{As } 0 < a < 1, a^2 < a \dots\dots\dots(4)$$

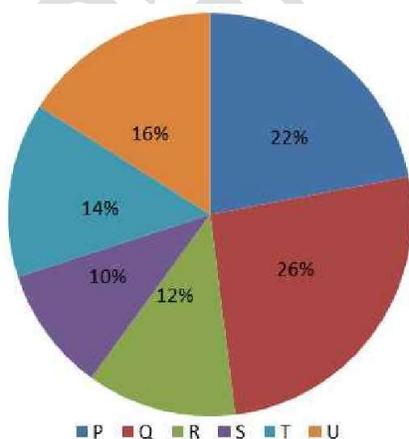
Subtracting 'a' on both sides of (4), we get

$$a^2 - a < 0, \text{ Hence option (iii) is also false.}$$

### Question 3

The following pie chart provides information about the revenue share of six companies P, Q, R, S, T, U as a percentage of the total car market (in Rs.) in the year 2010. These are the only six companies producing car in the market.

Revenue share



If the revenue share of company T increases by 20% in the year 2011, then find the percentage increase in the revenue share of these six companies in the year 2011 assuming that all the other companies except T generated the same revenue as they did in the year 2010.

- A 2.8%
- B 3.2%
- C 1.8%
- D 2.6%

Answer: A

Explanation:

Let, us assume the total revenue for 2010 as 100.

Since, all the companies except T have generated the same revenue in 2011, the percentage increase in revenue for all companies will be only due to the increase in revenue of T.

Increase in revenue of T(2011) = 20% \* 14 = 2.8

Total revenue(2011) = 102.8

% increase in revenue =  $\frac{102.8-100}{100} \times 100\% = 2.8\%$

Hence, option A.

Question 4 In how many years will Rs. 2 lakh double itself at 11.5% per annum simple interest?

- A Less than 8
  - B Between 8 and 9
  - C 9.3
  - D 10.5
- Answer: B

Explanation:

Let say after a Time period (T) 'x' years the amount Rs. 2 lakh gets doubled at a rate of interest (R) = 11.5% per annum

Initial principle amount (P) = 2,00,000 Rs.

Simple Interest (I) for 'x' years is given by  $I = PTR \div 100 = 200000 \times x \times 11.5 \div 100 \Rightarrow 23000 \times x$

Final Principle amount (P') = P + I = (2 × P) as given

$$I = 2 \times P - P = P$$

$$23000 \times x = 200000$$

$$x = 200000 \div 23000$$

$$x = 8.695 = \text{between } 8 \text{ and } 9$$

Question 5

If  $AB + C = D$ , find A and C given that when  $B = 6$ ,  $D = 30$  and when  $B = 8$ ,  $D = 36$ .

- A  $A = 2, C = 6$
- B  $A = 3, C = 12$
- C  $A = 6, C = 3$
- D  $A = 4, C = 3$

Answer: B

Explanation:

$$\text{Given } AB + C = D \dots \dots \dots (1)$$

If  $B = 6$  and  $D = 30$ ,

$$\text{then from (1), } 6A + C = 30 \dots \dots \dots (2)$$

$$\text{and If } B = 8 \text{ and } D = 36, 8A + C = 36 \dots \dots \dots (3)$$

$$(3)-(2) \Rightarrow 2A = 6$$

$$\Rightarrow A = 3$$

Substituting the value of A in equation (2) we get,

$$18 + C = 30$$

$$\Rightarrow C = 12.$$

Question 6

If  $y^2 + 3y - 18 \geq 0$ , which of the following is true?

- A  $y \leq 3$  or  $y \geq 0$
- B  $y > -6$  or  $y < 3$
- C  $-6 \leq y \leq 3$
- D  $y \geq 3$  or  $y \leq -6$

Answer: D

Explanation:

$$\begin{aligned} y^2 + 3y - 18 &\geq 0 \\ \Rightarrow y^2 + 6y - 3y - 18 &\geq 0 \\ \Rightarrow y(y + 6) - 3(y + 6) &\geq 0 \end{aligned}$$

$$\Rightarrow (y - 3)(y + 6) \geq 0$$

$$\Rightarrow y \geq 3 \text{ and } y \leq -6$$

#### Question 7

In how many different ways can 3 red balls, 2 blue balls and 4 yellow balls be arranged so that the balls of the same color come together?

- A 1742
- B 1732
- C 1728
- D 1750

Answer: C

Explanation: Since balls of same color should come together, let us consider 3 red balls as one unit and 2 blue balls as one unit and 4 yellow balls as another unit.

So, we have a total of 3 different units which can be arranged in '3!' ways.

These 3 red balls can internally be arranged in '3!' ways.

Similarly the blue balls and yellow balls can be arranged internally in '2!' and '4!' ways respectively.

So, total number ways =  $3! \times 3! \times 2! \times 4! = 6 \times 6 \times 2 \times 24 = 1728$  ways.

#### Question 8

The following table shows the courier charges (in Rs.) for sending 1 kg parcel from one city to another.

Cities	Ahmedabad	Mumbai	Kolkata	Bangalore	Jaipur
Ahmedabad		10	5	15	10
Mumbai	10		7	25	10
Kolkata	5	7		20	15
Bangalore	15	25	20		10
Jaipur	10	20	15	10	

Among the following the charges will be the least for sending a parcel from:-

- A Ahmedabad to Jaipur
- B Mumbai to Bangalore
- C Jaipur to Bangalore
- D Kolkata to Mumbai

Answer: D

Explanation:

By carefully observing the given data and by observing the given options,

The charges will be least for the parcel from Kolkata to Mumbai which is Rs. 7,

Hence option (D) is the answer.

Question 9

Three numbers X, Y and Z are in the ratio of 12: 15: 25. If the sum of twice of these numbers is 614, the ratio between the difference of Y and X and the difference of Z and Y is:

- A 3:7
- B 5:1
- C 3:10
- D 10:3

Answer: C

Explanation:

Given X, Y and Z are in the ratio 12: 15: 25

Let say  $X = 12k$ ,  $Y = 15k$  and  $Z = 25k$ , where k is any constant.

Difference between Y and X =  $15k - 12k = 3k$ .....(1)

and Difference between Z and Y =  $25k - 15k = 10k$ .....(2)

Ratio of (1) and (2) =  $3k \div 10k = 3: 10$

Question 10

Ankush and Babulal walk around circular track. They start at 9 a.m. from the same point in the opposite directions. Ankush and Babulal walk at a speed of 3 rounds per hour and 5 rounds per hour respectively. How many times shall they cross each other until 10.30 a.m.?

- A 9
- B 10
- C 12
- D 11

Answer: C

Explanation:

Given speed of Ankush = 3 rounds per hour = 1 round per 20 min

Whereas speed of Babulal = 5 rounds per hour = 1 round per 12 min.

Let us consider Ankush as stationary at the starting point.

The relative speed of Babulal with respect to Ankush = 3 rounds per hour + 5 rounds per hour = 8 rounds per hour

This implies, In one hour Babulal crosses Ankush 8 times.

So, starting from 9.00 am to 10.30 am

i.e., 1.5 hours or 90 min, Babulal crosses Ankush 12 times.

#### Question 11

The monthly incomes of Amit and Bharat are in the ratio of 5:4, their monthly expenses are in the ratio of 19:21, and their monthly savings are in the ratio of 37:18. If the total annual savings of Amit and Bharat is Rs.1,32,000, Amit's monthly income is:

- A Rs. 12,000
- B Rs. 15,000
- C Rs. 18,000
- D Rs. 16,000

Answer: B

Explanation:

Given monthly savings of Amit and Bharat are in the ration 37:18.

Let the savings of Amit and Bharat be 37k and 18k, where 'k' is a constant.

Total monthly savings of Amit and Bharat = 55k.

Given Total annual savings of Amit and Bharat = 1,32,000.

Total monthly savings = 11,000.  $55k = 11000$   $k = 200$ .

Hence monthly savings of Amit and Bharat are 7400 and 3600 respectively.

From the given data,

Let the monthly incomes of Amit and Bharat be 5x and 4x respectively, where 'x' is a constant.

Similarly, let the monthly expenditures of Amit and Bharat be 19y and 21y respectively,

where 'y' is a constant. Savings = Income - Expenditure

$$5x - 19y = 7400 \dots\dots\dots(1)$$

$$\text{and } 4x - 21y = 3600 \dots\dots\dots(2)$$

Solving both the equations we get  $x = 3000$  and  $y = 400$ .

Therefore, the monthly income of Amit is 5x i.e., 15000.

#### Question 12

In a circle of radius 6 cm, arc AB makes an angle of  $114^\circ$  with centre of the circle O. What is angle ABO?

- A  $23^\circ$
- B  $42^\circ$
- C  $38^\circ$
- D  $33^\circ$

Answer: D

Explanation:

*In  $\triangle AOB$ ,  $AO = OB$  (Equal radii)*

*$\therefore \triangle AOB$  is isosceles.*

$$\therefore \angle ABO = \angle BAO = \frac{180^\circ - 114^\circ}{2} = 33^\circ$$

Hence, option D.

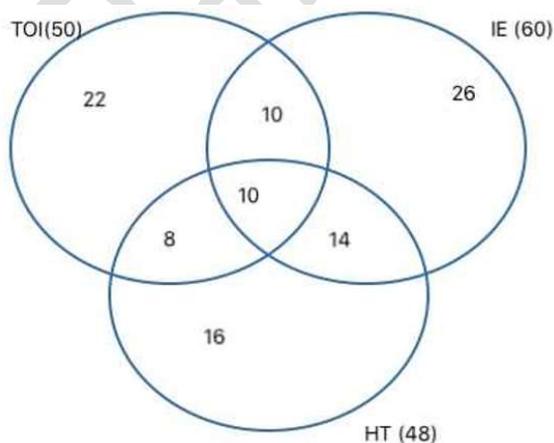
Question 13

In a survey conducted among 120 houses, it was found that 50 read Times of India, 60 read Indian Express and 48 read Hindustan Times; 20 read Times of India and Indian Express, 18 read Times of India and Hindustan Times and 24 read Indian Express and Hindustan Times. If 10 read all three, how many read only one newspaper?

- A 50
- B 32
- C 64
- D 84

Answer: C

Explanation:



As can be seen from the above venn diagram distribution

Number of households reading only one newspaper =  $22 + 26 + 16 = 64$ .

Hence, option C.

Question 14

The length of the minute of a watch is 42 mm. The area swept by it in 30 minutes (in  $\text{mm}^2$ ) by taking  $\pi$  as 3.14 is:

- A 2769.5
- B  $44\pi$
- C 728
- D  $1040\pi$  Answer: A

Explanation: 60 minutes = 360 degrees or  $2\pi$  radians.

1 minute = 60 degrees.

30 minutes = 180 degrees or  $\pi$  radians.

Therefore area (A) swept by minute hand of length 42 mm in 30 minutes = area of semi-circle of radius ( $r = 42$  mm) .

$$A = \pi r^2 \div 2 = 3.14 \times 42^2 \div 2 = 2769.5 \text{mm}^2$$

Question 15

If  $(x + 4)$  is a factor of  $x^3 + 2x^2 + bx + 68$ , what is the value of  $b$ ?

- A -9
- B 9
- C 8
- D -8

Answer: B

Explanation:

Let say  $f(x) = x^3 + 2x^2 + bx + 68$  and given  $(x+4)$  is a factor of  $f(x)$ .

$$f(x) = (x + 4) \times k \dots \dots \dots (1)$$

where 'k' is the quotient when  $f(x)$  is divided by  $(x+4)$ .

Substituting 'x= -4' in the equation (1), we get  $f(-4) = 0$

$$-4^3 + 2(-4)^2 + b(-4) + 68 = 0$$

$$-64 + 32 - 4b + 68 = 0$$

$$4b = 36$$

$$b = 9$$

Question 16

Rakesh covers 12 km at 6 km/hr, 36 km at 9 km/hr and then 32 km at 4 km/hr. Find the approximate average speed in covering the whole distance.

- A 4.2 km/hr
- B 5.52 km/hr
- C 5.71 km/hr
- D 5 km/hr

Answer: C

Explanation:

$$\text{Average speed} = \text{Total distance covered} \div \text{Total time taken}$$

$$\text{Total distance covered} = 12 + 36 + 32 = 80 \text{ km}$$

$$\text{Total time taken} = 12 \div 6 + 36 \div 9 + 32 \div 4 = 2 + 4 + 8 = 14 \text{ hrs}$$

$$\text{Average speed} = 80 \div 14 = 5.71 \text{ km/hr}$$

Question 17

Two pipes A and B can fill a cistern in 120 minutes and 150 minutes respectively. There is also an outlet C.

If all the three pipes are opened together, the cistern gets filled in 100 minutes. How much time will be taken by C to empty full tank?

- A 3 h 20 min
- B 2 h 40 min
- C 3 h
- D 3 h 40 min

Answer: A

Explanation:

Let the capacity of the cistern be 600 units.

From the given data, the efficiencies of pipes A and B are 5 units/ min and 4 units/min respectively.

Let the efficiency of outlet pipe C be 'k' units/min.

Given the time taken to fill the cistern when all the three pipes are open = 100 minutes

*Efficiency of pipe  $\times$  time taken = capacity of cistern*

$$(5 + 4 - k) \times 100 = 600$$

$$9 - k = 6 \Rightarrow k = 3$$

Therefore the time taken( $t$ ) by pipe C to empty the cistern = Capacity of the cistern  $\div$  efficiency of pipe C

$$t = 600 \div 3 = 200 \text{ minutes} = 3\text{hr } 20\text{min}$$

Question 18

Ramesh works A hours a day and rests B hours a day. This pattern continues for 1 week, with an exactly opposite pattern next week, and so on for four weeks. Every fifth week he adopts a new pattern which then continues for the next four weeks. When he works longer than he rests, his wage per hour is three times what he earns per hour when he rests longer than he works. The following table shows his daily working hours for the week numbered 1 to 13.

	1st Week	5th Week	9th Week	13th Week
Rest	3	4	5	
Work	6	8	9	8

A week consists of six days and a month consists of four weeks. If Ramesh is paid Rs. 60 per working hour in the 1<sup>st</sup> week, what is his salary for the 1<sup>st</sup> month? (Assume that he is paid half his wages for his resting hours on duty)

- A Rs. 6840
- B Rs. 11400
- C Rs. 7240
- D None of these

Answer: A

Explanation:

As per the given conditions, weeks 1 and 3 will have similar pay structure and weeks 2 and 4 will have similar pay structure.

For weeks 1 and 3

wage/hr for working = 60

wage/hr during rest = 30

Total payment per day =  $(60 \times 6) + (30 \times 3) = 450$

Total payment for weeks 1 and 3 =  $450 \times 12 = 5400$

For weeks 2 and 4

wage/hr for working = 20

wage/hr during rest = 10

Total payment per day =  $(20 \times 3) + (10 \times 6) = 120$

Total payment for weeks 2 and 4 =  $120 \times 12 = 1440$

Total monthly salary =  $5400 + 1440 = 6840$

Hence, option A.

Question 19

In a box, there are eight yellow and four black balls. If three balls are drawn at random, what is the probability that two are yellow and one black?

- A  $1/16$
- B  $28/55$
- C  $3/8$
- D  $8C2 / 4C1$

Answer: B

Explanation:

Probability = *Expected number of outcomes*  $\div$  *total number of outcomes*.

Total number of outcomes = Total number of ways to draw randomly 3 balls out of 12 balls =  $12C3$  ways.  
Expected number of outcomes = Number of ways to draw 2 yellow balls out of 8 and 1 black ball out of 4  
=  $8C2 \times 4C1$

$$\text{Hence Probability} = 8C2 \times 4C1 \div 12C3 = 28 \times 4 \div 220 = \frac{28}{55}$$

Question 20

If  $\tan A + \cot A = \sqrt{5}$ , what is the value of  $\tan^3 A + \cot^3 A$ ?

- A  $\sqrt{5}$
- B 3
- C  $2\sqrt{5}$
- D  $\frac{2}{\sqrt{5}}$

Answer: C

Explanation:

$$\cot A = \frac{1}{\tan A}$$

$$\text{Let, } \tan A = x, \text{ then } \cot A = \frac{1}{x}$$

$$\text{Given, } x + \frac{1}{x} = \sqrt{5} \dots \dots \dots 1$$

Cubing on both sides, we get

$$\left(x + \frac{1}{x}\right)^3 = \sqrt{5}^3$$

$$\Rightarrow x^3 + \left(\frac{1}{x}\right)^3 + 3 \times x \times \frac{1}{x} \times \left(x + \frac{1}{x}\right) = 5\sqrt{5}$$

$$\Rightarrow x^3 + \left(\frac{1}{x}\right)^3 + 3 \times \sqrt{5} = 5\sqrt{5}$$

$$\Rightarrow x^3 + \left(\frac{1}{x}\right)^3 = 2\sqrt{5}$$

$$\Rightarrow \tan^3 A + \cot^3 A = 2\sqrt{5}.$$

#### Question 21

Two balls were bought for Rs. 37.40 at a discount of 15%. What must be the marked price of each of the ball?

- A Rs. 11
- B Rs. 22
- C Rs. 33
- D Rs. 44

Answer: B

Explanation:

Let the marked price of two balls be X Given that they were bought at 37.40 rupees at 15% discount.

$$\Rightarrow X \times \frac{85}{100} = 37.40$$

$$X = 44$$

We have considered that the marked price of two balls is X i.e.: 44 rupees.

The question is asking to find marked price of each ball so, answer is 22 rupees

Option B

#### Question 22

Find the value of a, if:

$$\text{Modulus}(2a-3)=3a+2$$

- A 1/5
- B 0
- C -5
- D -1/5

Answer: A

Explanation:

$$\text{Modulus}(2a-3) = 3a+2, \text{ which can also be written as } |2a-3| = 3a+2.$$

Modulus function  $f(x) = |x|$  is defined as  $|x| = x$ , for  $x > 0$ ,  $|x| = -x$ , for  $x < 0$

So, we get two cases here,

Case (1):

$$2a-3 > 0$$

$$\Rightarrow a > \frac{3}{2} \dots \dots \dots 1$$

$$|2a - 3| = 2a - 3 = 3a + 2$$

$$\Rightarrow a = -5$$

But from equation (1), The above value of  $a = -5$  is not a possible case.

Case (2):

$$2a-3 < 0$$

$$\Rightarrow a < \frac{3}{2} \dots \dots \dots 2$$

$$|2a - 3| = -(2a - 3) = 3a + 2$$

$$\Rightarrow a = \frac{1}{5}$$

This is a possible case, hence the value of

$$\Rightarrow a = \frac{1}{5}$$

### Question 23

From a jar of wine containing 32 litres, 4 litres is drawn out, and the jar is filled up with water. If the same proportion of wine is further drawn out two more times, what proportion of wine to water will be there in the resulting mixture?

- A 245:166

B 343:169

C 363:173

D 323:189

Answer: B

Explanation:

From 32 litres, 4 litres is drawn out and is replaced with water.

Proportion of wine drawn =  $4/32 = 1/8$ th of the total volume of the wine in the mixture.

When wine is drawn out for the second time,  $(1/8) \times (28) = 3.5$  litres of wine will be drawn out.

Wine remaining in the jar =  $28 - 3.5 = 24.5$  litres

When wine is drawn out for the third time,  $(1/8) \times (24.5) = 3.0625$  litres of wine will be drawn out.

Wine remaining in the jar =  $24.5 - 3.0625 = 21.4375$  litres

Water in the jar = 10.5625 litres

Ratio of wine remaining in the jar to water remaining in the jar = 343:169

Question 24

The geometric mean proportion between  $30 + \sqrt{200}$  and  $54 - \sqrt{648}$  is

A  $6\sqrt{2}$

B  $4\sqrt{5}$

C  $6\sqrt{35}$

D  $5\sqrt{6}$

Answer: C

Explanation: The geometric mean proportion between two numbers 'a' and 'b' is given by  $\sqrt{a \times b}$

The given two numbers are  $30 + \sqrt{200}$  and  $54 - \sqrt{648}$

which are also equal to  $10(3 + \sqrt{2})$  and  $18(3 - \sqrt{2})$ .

Hence the geometric mean proportion =  $\sqrt{10(3 + \sqrt{2}) \times 18(3 - \sqrt{2})} = \sqrt{180 \times (3^2 - (\sqrt{2})^2)}$

$$\sqrt{1280} = 6 \times \sqrt{35}.$$

Question 25 Anil is twice as good a student as Bharat and is able to finish a work in 30 minutes less than Bharat's time. Find the time in which both of them can finish the same work together?

A 45 min

B 30 min

C 25 min

D 20 min

Answer: D

Explanation:

Given Anil is twice as good a student as Bharat

Efficiency of Anil : Efficiency of Bharat = 2:1

And also, Efficiency is inversely proportional to Time taken,

Time taken by Anil : Time taken by Bharat = 1:2.....(1)

Given that Time taken by Anil is 30 min less than Bharat's time.

Let say, Time taken by Bharat be 't' minutes.

Then the time taken by Anil = t-30 minutes Substituting these in equation (1), we get

$$\frac{t - 30}{t} = \frac{1}{2}$$

t = 60 minutes.

Therefore the time taken by Anil and Bharat are 30 minutes and 60 minutes respectively.

Let Efficiency of Bharat be 'x', then Efficiency of Anil will be '2x'

Total Work = Efficiency \times Time taken = (2x) \times 30 (or) (x) \times 60 = 60x units.

Efficiency when Anil and Bharat are working together = x+2x = 3x

Total Work = 60x units

Time taken(T) by Anil and Bharat together to complete the work = Total work/ Efficiency when Anil and Bharat work together

$$T = \frac{60x}{3x} \rightarrow T = 20 \text{ minutes.}$$

## Reasoning

Instructions For the following questions answer them individually

### Question 26

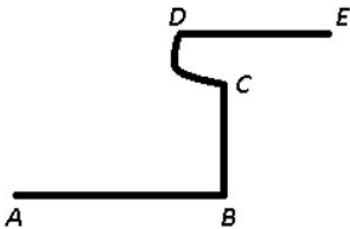
The river flows from west to east and on the way then turns left. After going some distance it encounters a hill. It goes around the hill counter-clockwise in a quarter circle, and then turns right. In which direction is the river finally following?

- A North
- B South
- C East
- D West

Answer: C

Explanation:

Let the river start from point A and flows towards B, then turns left and reach at hill C. It goes around the hill counter-clockwise in a quarter circle to reach D, and then turns right finally to reach E.



Thus, river is flowing in east direction.

=> Ans - (C)

### Question 27

Based on the statement given below which of the following option is correct: Whenever Preeti's father is in town, she abstains from school and goes to her aunt's house.

- A a) If Preeti has not abstained from school or she has not gone to her aunt's house, it means that her father is not in town.
- B b) If Preeti has not abstained from school but her father is in town, then she will definitely go to her aunt's house.
- C c) If Preeti has abstained from school but she has not gone to her aunt's house, it means that her father is not in town.
- D d) Both (a) and (c)

Answer: D

Explanation:

We are given that :Whenever Preeti's father is in town, she abstains from school and goes to her aunt's house. Now option A says If Preeti has not abstained from school or she has not gone to her aunt's house, it means that her father is not in town. Now this can be inferred Option B says If Preeti has not abstained from school but her father is in town, then she will definitely go to her aunt's house. This cannot be inferred as we cannot say she will surely go to her aunt's house option C says If Preeti has abstained from school but she has not gone to her aunt's house, it means that her father is not in town. this can also be inferred as she has not gone to her aunt's house So A and C both can be inferred

Question 28

Four friends, namely, Liyaqat, Lillian, Lima and Lalit are sitting on a horizontally placed wooden bench, all looking towards the same direction. If: There is at least one person sitting between Lillian and Lima; Liyaqat is towards the right of Lima but not towards the right of Lalit; Lalit is seated immediately next to Lillian; & Lima is seated at one of the extreme corners of the bench. Which of the following is definitely true?

- A Lillian and Liyaqat are seated immediately next to one another.
- B Liyaqat is seated at one of the extreme corners of the bench.
- C There is at least one person seated between Lalit and Liyaqat.
- D There is at least one person seated between Lalit and Lima.

Answer: D

Explanation:

Lima is seated at one of the extreme corners of the bench. Liyaqat is towards the right of Lima  
=> Lima is at left end of row.

There is at least one person sitting between Lillian and Lima, => Now there are two cases, when there is 1 person between them and when there are 2.

Liyaqat is towards the right of Lima but not towards the right of Lalit.

Case I :

Lima	Liyaqat	Lalit	Lillian
------	---------	-------	---------

Case II :

Lima	Liyaqat	Lillian	Lalit
------	---------	---------	-------

Thus, only statement which is definitely true is that there is at least one person between Lalit and Lima.

=> Ans - (D)

Question 29

Ali, Benu, Cutty and Dolly play four different games among Basketball, Cricket, Kabaddi and Hockey. Ali does not play Basketball or Cricket. Benu does not play Kabaddi or Hockey. Cutty plays Hockey and Dolly plays either Basketball or Hockey. Who plays cricket?

- A Ali
- B Benu
- C Cutty
- D Dolly

Answer: B

Explanation:

It is given that Cutty plays Hockey.

Dolly plays either Basketball or Hockey,

=> Dolly plays Basketball. Ali does not play Basketball or Cricket,

=> Ali plays Kabaddi. Thus, only one left now is Benu plays Cricket.

=> Ans - (B)

Question 30

A National Highway road network has parallel and perpendicular roads running north south or east west only. Junctions/Intersections on this road network are marked as R1, R2, R3, R4... All roads are at exactly half a kilometer distance from each other. The following is known about junctions R1, R2, R3, R4, R8 and R24. "R1' is east of 'R2' and west of 'R3'; 'R8' is southwest of 'R3' and southwest of R2. 'R2' is southeast of 'R24'. Which junctions are the farthest south and the farthest east?

- A R1, R2
- B R8, R3
- C R3, R8
- D R2, R8

Answer: B

Explanation:

On reading the Roads can be placed as :

R24					
	R2		R1		R3
R8					

We can say R8 R3 are the farthest south and farthest east .

Question 31

125 small but identical cubes have been put together to form a large cube. How many such small cubes will be required to cover this large cube completely?

- A 208
- B 212
- C 254
- D 218

Answer: D

Explanation:

125 small cubes have been together, so we have a  $5 \times 5 \times 5$  cube.

So, if we want to cover it completely we've need to cover all the sides of it completely, we will just put same cubes over the one of the sides of it and then from both the sides we've to spread it just by one row and so it will cover it properly, and do it for all the other sides.

So, now we will have a  $7 \times 7 \times 7$  cube.

Thus, number of cubes required to cover it  $= (7 \times 7 \times 7) - (5 \times 5 \times 5) = 218$

=> Ans - (D)

In short, to cover it completely, cubes required  $= (n + 2)^3 - (n)^3$

and to make it hollow, cubes removed  $= (n)^3 - (n - 2)^3$

Question 32

Five boys Ganesh, Hitesh, Ishan, Jaiknee and Kailash always compete with one another. Ishan gets more marks than Kailash and Jaiknee gets less marks than Ganesh. Hitesh gets more marks than Jaiknee and Kailash. Whose marks among the following could be the lowest?

- A Ganesh
- B Hitesh
- C Ishan
- D Jaiknee

Answer: D

Explanation:

Hitesh gets more marks than Jaiknee and Kailash, :  $H > J, K$

Ishan gets more marks than Kailash and Jaiknee gets less marks than Ganesh, :  $I > K$  and  $G > J$

From above statements, we can conclude that one of either Jaikie or Kailash could be the lowest.

=> Ans - (D)

### Question 33

Below given question has a main statement followed by four statements labeled A, B, C and D. Choose the ordered pair of statements, where the first statement implies the second and the two statements is logically consistent with the main statement.

All cubes are round in shape.

(A) Figure A is not round in shape.

(B) Figure A is a cube.

(C) Figure A is not a cube.

(D) Figure A is round in shape.

A CA

B DB

C AC

D AB

Answer: C

Explanation:

Given, All cubes are round in shape

From the above statement, it can be inferred that

If a figure is round implies it may or may not be cube because there will be other figures which are round.

If the figure is not cube implies it may or may not be round.

If the figure is not round in shape implies it should not be cube.

If the figure is cube implies it should be round.

Hence, AC and BD will be logically consistent statements with the main statement.

### Question 34

If  $a + b$  means a is sister of b,  $a - b$  means a is brother of b,  $a \times b$  means a is daughter of b,  $a \div b$  means a is mother of b, Which of the following relationship shows that p and r are wife and husband?

A  $p \div q \times r$

B  $p - q \times r$

C  $p + q \times r$

D  $p + q - r$

Answer: A

Explanation:

Let us verify the options.

Option (A):  $p \div q$ , means p is mother of q.  $q \times r$ , means q is daughter of r. The above two statements together tells us that, p is the wife of r. Hence wife and husband relationship exists between p and r. Therefore option (A) is the answer.

Option (B):  $p - q$ , means p is the brother of q.  $q \times r$ , means q is daughter of r. The above two statements together doesn't tell us that p and r are related as wife and husband. Hence, Option (B) is not the answer.

Option (C):  $p + q$ , means p is the sister of q.  $q \times r$ , means q is daughter of r. The above two statements together doesn't tell us that p and r are related as wife and husband. Hence, Option (C) is not the answer.

Option (D):  $p + q$ , means p is the sister of q.  $q - r$ , means q is the brother of r. The above two statements together doesn't tell us that p and r are related as wife and husband. Hence, Option (D) is not the answer.

Question 35

In a code language FRIGHTENS is written as 106; SIMILARLY is written as 118; How would DEMONITISATION be written in the same language?

A 159

B 169

C 167

D 166

Answer: C

Explanation:

If we add the numbers denoted by each alphabet, when we number them as A=1, B=2, C=3.....Z=26

$$FRIGHTENS : 6 + 18 + 9 + 7 + 8 + 20 + 5 + 14 + 19 = 106$$

$$SIMILARLY : 19 + 9 + 13 + 9 + 12 + 1 + 18 + 12 + 25$$

*DEMONITISATION*

$$: 4 + 5 + 13 + 15 + 14 + 9 + 20 + 9 + 19 + 1 + 20 + 9 + 19 + 1 + 20 + 9 + 15 + 14 = 167$$

=> Ans - (C)

Question 36

Four packets P, Q, R and S, three wallets A, B and C are kept on a table one after the other in a row from left to right. Wallet C has as many items to its left as to its right. No packet is at any extreme end of the row. Packet P is kept to the immediate left of packet R. Packet P is to the immediate right of wallet A. What is kept third from left end of the row on the table?

- A C
- B S
- C R
- D A

Answer: C

Explanation:

Wallet C has as many items to its left as to its right,

=> Wallet C is in middle. No packet is at any extreme end of the row,

=> A and B are at ends. Packet P is to the immediate right of wallet A,

=> A is at extreme left end.

A	P		C			
Wlt	Pkt	Pkt	Wlt	Pkt	Pkt	Wlt

Packet P is kept to the immediate left of packet R.

Thus, B is at extreme right end.

A	P	R	C	Q/S	S/Q	B
Wlt	Pkt	Pkt	Wlt	Pkt	Pkt	Wlt

∴ Packet R is third from left end.

=> Ans - (C)

Question 37

A green grocer sells five types of fruits- Apple, Black berry, Banana, Cherry and Peach. Black berry is more fresh and heavier than Peach. Apple is heavier than Banana and more fresh than Cherry. Cherry is heavier than Black berry, but less fresh than Peach. Banana is heavier than Black berry, but less fresh than it. Which of the following is the lightest of all the fruits?

- A Peach
- B Black berry
- C Apple

D Banana

Answer: A

Explanation:

We need to find the lightest fruit, so we will take the weight scale only.

Cherry is heavier than Black berry and Black berry is heavier than Peach, :  $C > BB > P$

Apple is heavier than Banana, :  $A > B$

Banana is heavier than Black berry, :  $B > BB$

Combining above statements, we get :  $A > B > BB > P$  and  $C > P$

Thus, we can conclude that Peach is the lightest.

=> Ans - (A)

Question 38

2 3 7 4 3 2 1 5 7 3 2 7 1 0 9 8 7 5 4 7 2 3 Find the number of 7 in the given series that are followed by an even number but are not preceded by a prime number?

A 1

B 2

C 3

D 4

Answer: A

Explanation:

Number of 7 in the given series that are followed by an even number but are not preceded by a prime number = (not a prime number) (7) (even number) 2 3 7 4 3 2 1 5 7 3 2 7 1 0 9 8 7 5 4 7 2 3

Thus, there is only one such 7.

=> Ans - (A)

Question 39 Each of the three kids gets at least one color box out of 6 color boxes, at least one tiffin box out of 6 tiffin box and at least one chocolate box out of 6 chocolate boxes so that the total number of the items that each of them gets is the same. No one gets the same number of tiffin boxes, color boxes and chocolate boxes. Then which of the following can be TRUE?

A Each Kid gets 2 tiffin boxes, 2 color boxes and 2 chocolate boxes.

B Each Kid gets 2 tiffin boxes and 2 color boxes.

C Each Kid gets 1 color box, 2 chocolate boxes and 3 tiffin boxes.

D The number of tiffin boxes, color boxes and chocolate boxes that each Kid gets is 1, 2 and 3 not necessarily in that order.

Answer: D

Explanation:

Each of the three kids gets at least one color box out of 6 color boxes, at least one tiffin box out of 6 tiffin box and at least one chocolate box out of 6 chocolate boxes so that the total number of the items that each of them gets is the same. No one gets the same number of tiffin boxes, color boxes and chocolate boxes.

It is given that the total number of the items that each of them gets is the same.

Total number of items=6+6+6=18 So each one will get  $18/3=6$  items.

If no one gets the same number of tiffin boxes, color boxes and chocolate boxes

Then the number of items with each must be 1,2,3.

tiffin boxes	color boxes	chocolate boxes.
1	2	3
2	3	1
3	1	2.

Only option D is correct.

Question 40

A, B, C, D, E, F and G are seven members in a family, out of which there are three females and four males. There are two architects, two travel agents, one teacher, one engineer and one doctor. No lady is either a teacher or an engineer. C is a travel agent and is married to A, who is a teacher. F, the engineer, is married to D, who is neither a travel agent nor a doctor. No two ladies have the same profession. B is the sister of G who is an architect. What is E's profession?

- A Architect
- B Travel agent
- C Engineer
- D Doctor

Answer: B

Explanation:

No lady is either a teacher or an engineer.

No two ladies have the same profession.

=> The three females will be doctor, architect and travel agent each.

C is a travel agent and is married to A, who is a teacher, => A is male and C is female.

F, the engineer, is married to D, => F is male (because no females are engineer) and thus D is female.

D is neither a travel agent nor a doctor, => D is architect.

B is the sister of G who is an architect, => B the last remaining female is doctor, and thus G and E are the remaining males.

m	A	Teacher
f	B	Doctor
f	C	Travel Agent
f	D	Architect
m	E	Travel Agent
m	F	Engineer
m	G	Architect

Thus, E is a travel agent. => Ans - (B)

#### Question 41

There are six members - Pills, Qills, Rills, Sills, Tills and Uills in a family.

There are two married couples. Qills is Bengali and is the father of Tills. Uills is the grandfather of Rills. Uills is from Tamil Nadu. Sills is the grandmother of Tills and Sills is from Punjab. There is one Bengali, one Tamilian, one Punjabi, one Telegu and two Haryanvis in the family. The Telegu person is a female and married. Nobody who is a grandchild is married. Which of the following two are married couples?

- A Pills Qills, Uills Sills
- B Pills Sills, Qills Uills
- C Pills Rills, Qills Sills
- D Pills Uills, Qills Rills

Answer: A

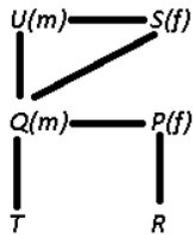
Explanation:

Qills is Bengali and is the father of Tills. Sills is the grandmother of Tills and Sills is from Punjab => Sills is mother of Qills. Uills is the grandfather of Rills., => Uills is husband of Sills. Also, Rills and Tills are grandchildren and siblings. The Telegu person is a female and married, => Pills is wife of Qills. The remaining two Rills and Uills are Haryanvis.

f	P	Telegu
m	Q	Bengali
m/f	R	Haryanvi
f	S	Punjabi

m/f	T	Tamilian
m	U	Haryanvi

The married couples are:



=> Ans - (A)

Question 42

Complete the below given series:0, 6, 6, 20, 20, \_\_\_\_\_.

- A 42
- B 40
- C 26
- D 32

Answer: A

Explanation:

$$0 = 1^2 - 1$$

$$6 = 2^2 + 2$$

$$6 = 3^2 - 3$$

$$20 = 4^2 + 4$$

$$20 = 5^2 - 5$$

$$42 = 6^2 + 6$$

Option A is correct

Question 43

Looking at Samir, Rahul said, "Your only brother is the father of my daughter's father". How is Samir related to Rahul?

- A Father
- B Grandfather
- C Brother-in-laws

D Uncle

Answer: D

Explanation:

Father of Rahul's daughter's father = Rahuls' father

Now, Samir's only brother = Rahul's father => Samir is Rahul's uncle. => Ans - (D)

Question 44

Kapila, Meenal, Rishi, Pradeep and Lalita have five flats in different buildings of five different colours- Blue, White, Red, Orange and Green. The Green building is the shortest of all the buildings and Pradeep's flat is in it. The building in which Lalita's flat is located, is neither Blue nor White in colour and is taller than the building in which Meenal's and Rishi's flats are located. One person's name starts with the same letter as the first letter of the building's colour in which he resides and it is the second tallest of all. Which of the following can be TRUE about the resident of the building, its colour and its height?

- A Lalita - Blue - Shortest
- B Meenal - Red - Tallest
- C Lalita - Orange - Tallest
- D Pradeep - Green - Tallest

Answer: C

Explanation:

The Green building is the shortest of all the buildings and Pradeep's flat is in it (5-shortest and 1-tallest) One person's name starts with the same letter as the first letter of the building's colour in which he resides and it is the second tallest of all.

=> There is only one such combination, Rishi and Red.

Height	Person	Color
	Kapila	
	Meenal	
2	Rishi	Red
5	Pradeep	Green
	Lalita	

The building in which Lalita's flat is located, is neither Blue nor White in colour, => Lalita's flat is Orange. Also, Lalita's building is taller than Rishi's building, => Its the tallest.

Height	Person	Color
	Kapila	
	Meenal	
2	Rishi	Red
5	Pradeep	Green

1	Lalita	Orange
---	--------	--------

Thus, only true combination is : Lalita-Orange-Tallest.

=> Ans - (C)

#### Question 45

Five theatres PVR, DT, Chanakya, Regal and Maratha Mandir screen two out of ten films based on Romance, Thriller, Horror, Adventure, Children, Drama, Documentary, History, Religion and Cartoon. Each theatre exhibits only two films and allots two different slots for them, wherein slot I is before slot II. Chanakya screens a Horror film in the first slot, while Maratha Mandir exhibits a Historical film in the second slot. DT exhibits a thriller film in the second slot and Regal exhibits a documentary film. Drama must be exhibited only in the second slot. The children's film and the Cartoon film are exhibited in the same theatre while the religious film is not in the first slot. If Chanakya screens a Religious film in its second slot, then which of the films can be screened by theatre Regal?

- A - Cartoon and History
- B - Documentary and Drama
- C - Documentary and History
- D - Horror and Documentary

Answer: B

Explanation:

Chanakya screens a Horror film in the first slot, while Maratha Mandir exhibits a Historical film in the second slot. DT exhibits a thriller film in the second slot and Regal exhibits a documentary film.

Theatre	Slot I	Slot II
PVR		
DT		Thriller
Chanakya	Horror	
Regal		
Maratha Mandir		Historical

(Documentary)

(Drama)

The children's film and the Cartoon film are exhibited in the same theatre, => Only theatre with two slots left is PVR.

Theatre	Slot I	Slot II
PVR	Children/ Cartoon	Cartoon/ Children
DT		Thriller
Chanakya	Horror	
Regal		
Maratha Mandir		Historical

(Documentary)

(Drama)

Religious film is not in the first slot, => Religious and Drama are in second slot, and thus Documentary is played in Regal in first slot.

Theatre	Slot I	Slot II
PVR	Children/ Cartoon	Cartoon/ Children
DT		Thriller
Chanakya	Horror	Religious/ Drama
Regal	Documentary	Drama/ Religious
Maratha Mandir		Historical

If Chanakya screens a Religious film in its second slot, then Documentary and Drama films can be screened by theatre Regal.

=> Ans - (B)

Question 46

Three girls K, L, M and three boys N, Z and P are sitting around a table facing inwards playing cards. K and L do not sit next to each other. Z and P are opposite each other. M is sitting to the immediate right of P. If K is not between Z and M, then N is not next to P. Which of the following is not an arrangement (in clockwise direction) satisfying the conditions given above?

- A NK Z LMP
- B PKN Z LM
- C LN Z KMP
- D KMPLN Z

Answer: A

Explanation:

The last condition i.e If K is not between Z and M, then N is not next to P which is not satisfied in option A. In Option A, N is next to P since it is a circular arrangement. Hence, the correct answer is Option A

Question 47

Ten candidates appear for an interview and six of them are selected. There are two M.Techs, two MBAs, two MBBS and four LLB among the candidates. At least one MBA candidate is selected, of the six selected candidates, exactly one must be an M.Tech candidate. If two MBBS candidates are selected, then which of the following statements can be TRUE?

- A One MBA and one LLB candidate are selected.
- B Three LLB candidate are selected.
- C Only one MBA and two LLB candidates are selected.
- D One M.Tech and three LLB Candidates are selected.

Answer: C

Explanation:

Course	M.tech	M.Ba	MBBS	LLB
Total (10)	2	2	2	4
Selected (6)	1		2	

3 candidates are already selected and now at least one MBA candidate is selected.

Case I : 1 MBA and 2 LLB candidates are selected.

Case II : 2 MBA and 1 LLB candidates are selected.

Case III : 1 each of M.tech, MBA and LLB candidate is selected. Thus, case I matches the third option.

=> Ans - (C)

Question 48

All students are young; some young are short; all short are stout; most stout are clever; all clever are courageous, then which of the following is most definitely false?

- A Some students are stout
- B Some young are courageous
- C Most stout are courageous
- D All stout are courageous

Answer: D

Explanation:

We have most stout are clever and all clever are courageous, however statement D says all stout are courageous which is definitely false as there will be stouts which will neither be clever and or be courageous so D is definitely false

Question 49

Arvind, Saurabh, Romy and Denu, have different qualifications. Their qualifications are MBA, B.Tech, M.Tech and LLB - not necessarily in that order. Arvind and Romy are not MBAs, whereas Saurabh and Romy are not LLB; Romy and Denu are not B.Tech, whereas Denu and Arvind are not M.Tech. If Saurabh is a B.Tech then which of the following should be an MBA?

- A Romy
- B Arvind
- C Denu
- D Either Romy or Denu

Answer: C

Explanation:

Data arranged as per the statements

	MBA	E.Tech	M.Tech	LLB
Arvind	X		X	
Saurabh				X
Romy	X	X		X
Denu		X	X	

Now if Saurabh is a B.Tech, then Denu should be an MBA.

=> Ans - (C)

Question 50

Five delegates P, Q, R, S and T are forwarding their files to one another. P sends his file to Q, S and T, T sends his files to R while P and R exchange their files with each other. Q sends his file to S who sends his files to T. If P has to forward his files to R, then in how many ways P can forward files to R?

- A Two
- B Three
- C Four
- D One

Answer: C

Explanation:

From the given data, we can compile the following table

Receiver \ Sender	P	Q	R	S	T
P		✓	✓	✓	✓
Q				✓	
R	✓				
S					✓
T			✓		

This table represents that Sender P will send files to Q R S and T

The various ways of transferring files from to PR is 1)PR 2)PQSTR 3)PSTR 4)PTR Hence 4 ways..

# Verbal

## Instructions

Read the passage carefully and answer the question that follows.

## Passage I

I once made a statement in a room full of college students that the most important thing a young person could acquire in college might be a sense of her own limitations. I realised when I said it that it was not a very fashionable thing to say. Popular books on how to therapy, stress the glorious potential of every human being and urge us to accept ourselves, finally, as being only a little lower than the angels. I heartily approve of any celebration of human potential, but I believe that we must acknowledge our potential for limitless evil as well. We must understand what we can do in the way of evil before we can even pretend to be good. This is the beginning of morality, the psychological or spiritual or, in a religious tradition, the mythical basis that makes morality possible. One of the most moral book of the past century is Joseph Conrad's Heart of Darkness, because Conrad faces the problem of evil in people. He tells us that we must recognize in ourselves the ability to put the head of our enemy on stick and dance around a fire with it, and only when we recognize that can we even begin to deal with any moral question at all. Students who have been nourished on pop psychology and told "I'm O.K." have some trouble dealing with Conrad, and some of them regard him as perverse. I am amazed at the number of educated people who believe that we are somehow better, more moral, than our ancestors were. I have seen otherwise intelligent people grow red in the face at the suggestion that human beings are not better now - less cruel, more considerate, less animalistic, more humane- than they were when Nero ruled Rome or when the Pharaohs ruled Egypt or, when the Druids at Stonehenge readied their sacrifices. In one way we are more likely to have become dull to our potential for evil (and so discover it suddenly and with disastrous consequences) today than we were a few centuries ago. This is because we actively suppress the kind of self-knowledge that makes intelligent moral decisions possible. Sin and guilt are such old-fashioned terms that most of us are embarrassed by the very words.

## Question 51

The beginning of morality is based on:

- A A strong religious and ethical sense.
- B A knowledge of the possibilities of evil as well as good.
- C A profound sense of tradition.
- D An innate sense of good and evil.

Answer: B

## Question 52

One would assume from this passage that the author probably taught:

- A Music
- B Popular culture

- C French
- D Philosophy

Answer: D

Question 53

The author's attitude towards popular how to books could be described as:

- A Critical
- B Approving
- C Apathetic
- D Sympathetic

Answer: A

Instructions

Read the passage carefully and answer the question that follows.

Passage II

Science made some progress in the middle Ages but the spirit of modern science was born with the Renaissance. Science in the middle ages struggled against restrictions and there were many fetters to be destroyed before it could continue unhampered. Superstitions were common and to the masses were much more acceptable than were scientific explanations. The Renaissance brought about an interest in all things pertaining to men and the thirst for new achievements led to a critical observation of natural phenomena. The spirit of learning was manifested in science. Scientists of the 16th century made the first effective protest against the medieval scientific method of accepting theories before investigation had verified them. Francis Bacon pointed out that classical scientific conclusions did not represent mature knowledge and implored men to explore the realms of nature. Descartes brought out the necessity of questioning everything. He was the forerunner of science.

Question 54

Outlook towards science in the middle ages can be best describe as:

- A It was in the pre-Renaissance period that the spirit of learning was manifested in science.
- B Spirit of modern science was born in the middle ages.
- C Superstitions were common than scientific explanations.
- D Science in the middle ages blossomed unrestricted and without hindrances.

Answer: C

Question 55

Another word for FETTERS is:

- A Manacle
- B Hoop
- C Ornament
- D None of these

Answer: A

Question 56

How were the scientists of the 16th century different from those of the medieval times?

- A They accepted scientific theories only after investigation had verified them.
- B They struggled against restrictions protested.
- C They overlooked natural phenomena and accepted hearsay.
- D Insufficient information.

Answer: A

Instructions

Read the passage carefully and answer the question that follows.

Passage III

How can an organization's sales operations be improved? One of the keys to becoming more effective is to first determine the type of "selling process" which needs to be used. In other words, the role the salesperson must play has to be identified. There are three different processes sales staff can adopt: narrative, suggestive and consultative. The narrative approach depends on the salesperson moving quickly into a standardized presentation. Every buyer receives the same presentation. Emphasis is on highlighting benefits and how the product or service can help the buyer. This is an effective approach if the buying motive for all customers is the same. This process is well suited where there are a great number of prospectuses to be called on. The suggestive approach depends on the seller being in a position to offer alternative recommendations. This is quite different from the narrative approach as the presentation is tailored to the individual customer. Here, the salesperson must initiate some discussion in order to get the buyer in a positive frame of mind. An example of this process would be a restaurant wine steward who has checked with the waiter what food the customer has ordered and then opens by saying that either "this or that" particular wine would go best with the food ordered. This is an excellent approach where one doesn't have much time with the customer but is able to acquire some basic information and then offer a particular recommendation. This process is well suited for products and services. However, it does require the salesperson to acquire basic information from the customer before moving on to the presentation. The consultative approach requires the salesperson to have a thorough understanding of the customer and what the customer is trying to achieve. The role of the salesperson is to become an adviser or consultant and she must acquire a great deal of information from the customer. With this information, the salesperson can plan what to offer the customer. In this case, the salesperson must tailor the presentation to highlight how the salesperson's product or service

can be of help. This approach will usually require a number of sales calls as the buying process may be complex. The consultative approach requires a wide variety of skills, including probing, listening, analysis, creativity and persuasiveness. The other two approaches typically require fewer skills. Hiring, training, motivating and rewarding sales people needs to be linked to the type of sales process being used and this is where the problem starts. Many organizations, which should be using a consultative approach, use a narrative approach. They use standardized methods and do not tailor presentations to individual customers. You see this in many industries. When this is the case, price becomes a key criterion for the customer. A key issue in developing a professional sales organization is first establishing the sales process. When that decision has been made, all other sales decision, including hiring, training and rewards can be linked to it.

Question 57

How would you describe the writer's style?

- A Persuasive
- B Critical
- C Personal
- D Argumentative

Answer: A

Question 58

In paragraph 3, 'In order to' is used:

- A To describe an effect
- B To describe a cause
- C To describe a purpose
- D To describe an effort

Answer: C

Question 59

In paragraph 8, 'key criterion' is closest in meaning to:

- A Confusion
- B A contrary analysis
- C An important point
- D A minor issue

Answer: C

Question 60

According to the passage which of the approaches is the most complicated.

- A The narrative approach
- B The consultative approach
- C The suggestive approach
- D No significant difference

Answer: B

Question 61

The writer is probably:

- A An academic
- B A journalist
- C A businessman
- D A sales professional

Answer: D

Question 62

Which of the following selling approach may work best for a new technological product that is first of its kind?

- A The narrative approach
- B The consultative approach
- C The suggestive approach
- D Depends on the product

Answer: A

Instructions

Read the passage carefully and answer the question that follows.

Passage IV

Excerpt from Delhi Daily 'Delhi Belly' restaurant provides a dining experience like no other! A rustic atmosphere, along with delicious food, it provides an opportunity to soak up the local flavor. Recently relocated to the old market area, Delhi Belly is especially popular for lunch. At the counter, you can place your order for one of Delhi Belly's three daily lunch specials or one of several Delhi snacks, all at reasonable prices. Once you get your food, choose a seat at one of the four charming communal tables. By the time you are ready to carry your leaf plate to the trash bin, you have experienced some of the

best food and one of the most charming companies our city has to offer. Restaurant review Yesterday, I was exposed to what has been called “a dining experience like no other.” At lunchtime, Delhi Belly is so crowded; I wondered when the authorities had last visited the establishment. The line snaked out of the door to the corner, and by the time I reached the counter, I was freezing. I decided on the ‘Delhi Belly lunch special’. It turned out to be the blandest food I have ever eaten. At Delhi Belly, you sit at one of four long tables. The couple sitting across from me was having an argument. The truck driver next to me told me more than I wanted to know about highway taxes. After I had tasted all of the food on my plate, I rose to leave, whereupon one of the people working behind the counter yelled at me to clean up after myself. Throwing away that plate of food was the most enjoyable part of dining at Delhi Belly.

Question 63

If you go to lunch at Delhi Belly, you could expect to see:

- A a long line of customers
- B the authorities
- C the restaurant critic from the newspaper
- D well cooked snacks

Answer: A

Question 64

Which of the following illustrates the restaurant critic’s opinion of the food at Delhi Belly?

- A “At Delhi Belly’s, you sit at one of four long tables.”
- B “At lunchtime, Delhi Belly is so crowded, I wondered when the authorities had last visited the establishment.”
- C “After I had tasted all of the food on my plate, I rose to leave, whereupon one of the people working behind the counter yelled at me to clean up after myself.”
- D “Throwing away that plate of food was the most enjoyable part of dining at Delhi Belly.”

Answer: D

Question 65

The main purpose of the restaurant review is to:

- A tell people they probably don’t want to eat at Delhi Belly.
- B make fun of couples who argue in public.
- C recommend the lunch special.
- D warn people that Delhi Belly tends to be crowded.

Answer: A

Instructions

For the following questions answer them individually

Question 66

Choose the word or the phrase that has most nearly the same meaning for the word given below.

PERFIDY

- A Thrift
- B Loyalty
- C Sincerity
- D Betrayal

Answer: D

Question 67

Choose the word or the phrase that has most nearly the same meaning for the word given below.

SABOTAGE

- A Destructive action
- B Resistance
- C Deliberate subversion
- D Vandalism

Answer: C

Question 68

Choose the word or the phrase that has most nearly the opposite meaning for the word given below.

BASHFUL

- A Bawling
- B Arrogant
- C Impetuous
- D Kindly

Answer: B

Question 69

Complete the analogy. POSTURE : BEARING:: \_\_\_\_\_

- A Regimentation: uniformity
- B Deportment: behavior
- C Anarchy: street brawls

D Melodrama : exaggeration

Answer: B

Question 70

From the options given below, find the closest substitute for the underlined expression. He secured a job in the films because he was good at producing voice sounds.

- A Mono acting
- B Mimicry
- C Ventriloquism
- D

Caricature

Answer: C

Question 71 A word and its definition is given followed by four sentences. Choose the option that best fits with the definition. Maneuvering:

- A A family is making plans for the daughter's wedding.
- B A manager making his way to the top.
- C A captain giving order to his soldiers.
- D A child planning to stay away from school. Answer: B

Question 72 The following question has a set of three statements. Each statement can be classified as one of the following:

(i) Facts, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification (the answer option indicates such a statement with an 'F'). (ii) Inferences, which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I'). (iii) Judgements, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J'). Identify the Fact(F), Judgement(J) and Inference(I) from the given sentences. 1. God created the earth 2. God exists 3. Wine taste s better than beer

- A 1F,2J,3J
- B 1J,2J,3J
- C 1I,2F,3J
- D 1J,2J,3I

Answer: B

Question 73

The following question has a set of three statements. Each statement can be classified as one of the following:

- (i) Facts, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification (the answer option indicates such a statement with an 'F').
- (ii) Inferences, which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I').
- (iii) Judgements, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J'). Identify the Fact(F), Judgement(J) and Inference(I) from the given sentences.

1. Weather forecast says 80% chance of thunderstorms, It's a good idea to bring an umbrella.
2. My throat is sore and my nose is running, I have probably caught a cold.
3. There are over 40 million volumes in the university library, they probably have a copy of the famous book 'Savitri'.

- A 1I,2I,3J
- B 1I,2I,3I
- C 1F,2F,3J
- D 1J,2J,3F

Answer: B

Question 74

Which of the given figure of speech has been employed in the formation of the following sentence? "I am so tired that I can sleep for a year."

- A Hyperbole
- B Pun
- C Oxymoron
- D Understatement

Answer: A

Question 75

Fill in the blank using appropriate prepositions. "A plane flies \_\_\_\_\_ the clouds."

- A in
- B above
- C along
- D with

Answer: B

## General Awareness

### Instructions

For the following questions answer them individually

Question 76 \_\_\_\_\_ varies directly with vibrating body's amplitude.

- A Loudness of sound
- B Modulation of sound
- C Quality of sound
- D Tone of the sound

Answer: A

Question 77

Which of the following is true?

- A Saltwater freezes at the same temperature as fresh water
- B Saltwater freezes at a slightly higher temperature than fresh water
- C Saltwater freezes at a slightly lower temperature than fresh water
- D Seawater does not freeze

Answer: C

Question 78

Human eye is most sensitive to which color in the day light?

- A Yellow
- B Green
- C Yellowish Green
- D Red

Answer: C

Question 79

What is the Data Capacity of a standard size CD ROM?

- A 650 - 700 MB
- B 185 - 210 MB
- C 550 - 600 MB
- D 500 - 650 MB

Answer: A

Question 80

Indian Railways generates highest revenue from which of the following?

- A Passenger fare
- B Freight fare
- C Parcel
- D Sundry earnings

Answer: B

Question 81

A hash function guarantees integrity of a message. It guarantees that message has not been:

- A Exchanged
- B Over view
- C Changed
- D Violated

Answer: C

Question 82

Sections 299 to 377 of Indian Penal Code are:

- A Of Offences Against Property
- B Of Offences affecting the Human Body
- C Of Offences Relating to Marriage
- D Of Defamation

Answer: B

Question 83 which of the following is true about Stand Up India Loan Scheme?

- A To facilitate bank loans between 10 lakh and 1 Crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower per bank branch for setting up a Greenfield enterprise
- B To facilitate bank loans between 10 lakh and 1 Crore to at least one woman borrower per bank branch for setting up a Greenfield enterprise
- C This enterprise may be in manufacturing, services or the trading sector
- D All of these

Answer: D

Question 84

Google has introduced a unique feature that guides users through 'shortcuts' that are more easily accessible by:

- A Heavy vehicles
- B Two wheelers
- C Cars
- D Taxies

Answer: B

Question 85

Who of the following has launched an e-commerce startup for farm equipment rental?

- A Mahindra and Mahindra
- B Escorts Agri Machinery
- C Standard Tractors
- D John Deere

Answer: A

Question 86

India has met goal of elimination of which of the following disease (as specified by World Health Organization (WHO) under its GET2020)?

- A Trachoma
- B Tuberculosis
- C Ebola
- D Keratoconus

Answer: A

Question 87

The three languages included in the Eighth Schedule of the Constitution by the amendment are:

- A Konkani, English, Manipuri
- B Konkani, Nepali, Dogri
- C Konkani, Nepali, Maithili
- D Konkani, Manipuri, Nepali

Answer: D

Question 88

Which of the following gas/es is/are used to disinfect water in sewage treatment facilities?

- A Ozone
- B Chlorine
- C Nitrogen
- D Ozone and chlorine

Answer: D

Question 89

Which of the following is an election that is called earlier than expected?

- A Snap election
- B By-election
- C General election
- D Recall election

Answer: A

Question 90

After discovery of which of the following methods the date of the Harappan Civilization (2300-1750 BC) has been fixed?

- A Dendrochronology
- B Stratification
- C Carbon isotopes
- D Radio carbon dating

Answer: D

Question 91

Which of the following about plants is correct?

- A Respiration and photosynthesis proceed at the same rate
- B Photosynthesis proceeds at a much faster rate than respiration
- C Photosynthesis proceeds at a much slower rate than respiration
- D There is no connection between the respiration and photosynthesis

Answer: B

Question 92

With reference to BrahMos, which of the following statements is/are correct?

1. It is a ramjet supersonic cruise missile being developed by BrahMos Aerospace, a joint venture between ISRO of India and NPO Mashinostroeyenia (NPOM) of Russia.
2. It can be launched from submarines, ships, aircraft or land against ships and land-based targets.
3. India and Russia have agreed to double the range of the BrahMos supersonic cruise missile following India's entry into the Missile Technology Control Regime (MTCR). Select the correct answer using the code given below.

- A 1 only
- B 2 and 3 only
- C 1 and 3 only
- D 1, 2 and 3

Answer: B

Question 93

With reference to 'HIV and AIDS (Prevention and Control) Bill, 2017', consider which of the following statements is/are true? 1. It seeks to prevent and control the spread of HIV and AIDS, prohibits discrimination against persons with HIV and AIDS. 2. It makes anti-retroviral therapy a legal right of HIV/AIDS patient. 3. It has provisions to safeguard the property rights of HIV positive people. 4. Every HIV infected person below the age of 18 years has the right to reside in a shared household and enjoy the facilities of the household.

- A 1 and 2 only
- B 3 only
- C 2 and 3 only
- D 1, 2, 3 and 4

Answer: D

Question 94

How many angular bleed lines are present on the new Indian rupee 2000 bank note?

- A 7
- B 4
- C 6
- D 5

Answer: A

Question 95

Which of the following banned the 'manjha' used for flying kites?

- A Supreme Court of India
- B National Green Tribunal
- C Health Ministry
- D Environment Ministry

Answer: B

Question 96

Who said, The greater number of fortresses you hold the weaker will be your power. Let all our forces will be on the sea, because if we should not be powerful at the sea, everything at once be against us.....Let it be known for certain that as long as you may be powerful at the sea .....?'

- A Da Almeida
- B John Cabot
- C Christopher Columbus
- D Amerigo Vespucci

Answer: A

Question 97

'Vote on account' is dealt in which of the following articles of the Indian Constitution?

- A 121
- B 116
- C 171
- D 131

Answer: B

Question 98

The Taj Mahal is threatened due to:

- A Carbon dioxide
- B Carbon mono oxide
- C Sulphur dioxide
- D Calcium oxide

Answer: C

Question 99

The below given painting 'The Persistence of Memory' is one of the most recognizable pieces in art history. Who was the painter?



- A Leonardo da Vinci
- B Vincent van Gogh
- C Edvard Munch
- D Salvador Dali

Answer: D

Question 100

Who is the famous sports personality in the image below?



- A Syed Abdul Rahim
- B Farokh Engineer
- C Ashok Mankad
- D Dhyanchand

Answer: D