

# IIFT 5th Dec 2021 Slot 1

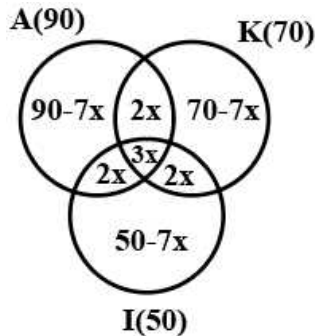
## Quantitative Analysis

1. The Star TV agency has conducted a survey in Green view residency to see how many people like these three serials: "Anupama" "Kalayani", and "Imlie" which hold first three positions of TRP. In a group of 150 people 90, 70, and 50 people like "Kalayani", "Imlie" and "Anupama" respectively. The number of people who like all the three serials is half the number of people who like exactly two serials. The number of people who like exactly any two out of the three serials is the same as those who like exactly any other two of the three serials. The number of people who like all the three serials are:

- A 12
- B 13
- C 14
- D 15

Answer: D

Explanation:



$$210 - 12x = 150$$

$$12x = 60$$

$$x = 5$$

The number of people who like all the three serials =  $3x = 3 \cdot 5 = 15$

Answer is option D.

2. Shanu and Ishu play a tossing game. They alternatively toss a coin. Whoever receives 'Head' first, wins the game. What is Ishu's chance of winning the game if Shanu gets a chance to toss coin first?

- A  $\frac{1}{3}$
- B  $\frac{2}{3}$
- C  $\frac{1}{2}$
- D  $\frac{1}{4}$

Answer: A

Explanation:

$$\text{Probability of Ishu winning in first round} = P(\text{Shanu tail})P(\text{Ishu head}) = \frac{1}{2} \cdot \frac{1}{2} = \left(\frac{1}{2}\right)^2$$

$$\text{Probability of Ishu winning in second round} = P(\text{Shanu tail})P(\text{Ishu tail})P(\text{Shanu tail})P(\text{Ishu head}) = \left(\frac{1}{2}\right)^4$$

Similarly, calculating for further rounds we get

$$\text{Probability} = \left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^4 + \left(\frac{1}{2}\right)^6 + \dots = \frac{1}{3}$$

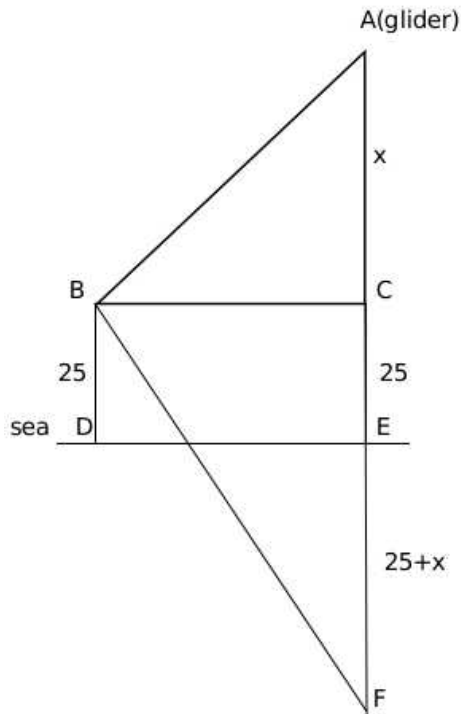
Answer is option A.

3. The angle of elevation of a glider from the deck of ship 25 meters above the sea surface is  $30^\circ$  and the angle of depression of the reflection of glider in the sea is  $75^\circ$ . Find the approximate height of the glider from the sea surface.  $\sqrt{3} = \frac{19}{11}$

- A 46
- B 34
- C 29
- D 52

Answer: B

Explanation:



It is given, angle ABC = 30 degrees and angle FBC = 75 degrees

$$\tan 30^\circ = \frac{x}{BC}$$

$$BC = x\sqrt{3}$$

$$\tan 75^\circ = \frac{50+x}{x\sqrt{3}}$$

$$2 + \sqrt{3} = \frac{50+x}{x\sqrt{3}}$$

Solving we get  $x = 9.1$

Height of glider from sea surface =  $25+x \approx 34$

Answer is option B.

4. A triangular park named ABC, is required to be protected by green fencing. The length of the side BC is 293. If the length of side AB is a perfect square, the length of the side AC is a power of two (2), and the length of side AC is twice the length of side AB. Determine how much fencing is required to cover the triangular park.

- A 1079
- B 1024

C 1096

D 1061

**Answer:** D

**Explanation:**

ABC is a triangle and BC = 293

Let the length of AB =  $x^2$

The length of AC =  $2^y$

AC = 2AB

$2^y = 2 \cdot x^2$

$2^y - 1 = x^2$

$2^y - 1$  is a perfect square when y is odd.

Sum of any two sides of a triangle should be larger than the third side. Therefore,

$2^y + x^2 > 293$ ,  $293 + 2^y > x^2$  and  $293 + x^2 > 2^y$

$y > 8$

If  $y = 9$ , AC = 512,  $x = 16$ ; satisfies above equations.

If  $y = 11$ , AC = 2048,  $x = 32$ ; doesn't satisfy above equations.

Therefore, AB = 256 and AC = 512

Fencing required =  $256 + 512 + 293 = 1061$

Answer is option D.

5. Care hospital has vaccination facility at different floors of the hospital i.e. Covishield at first floor, Covaxin at 2nd floor and Sputnik at 3rd floor. Daily quota of allotted vaccine is determined by the government. On a particular day, 35% of the patients got Covaxin, 45% of the patients got Covishield and 20% got Sputnik. After vaccination, the vaccinated people were instructed to take Paracetamol if they experienced fever. Among the vaccinated people, those who received Covaxin have 15% chance of getting fever, Covishield vaccinated people have 10% chance of getting fever, and Sputnik vaccinated people have 5% chance of getting fever. A vaccinated person was randomly picked up and it was found that he had a running temperature at 102F. What is the chance that he had been administered Covishield vaccine?

A 49%

B 42%

C 58%

D 45%

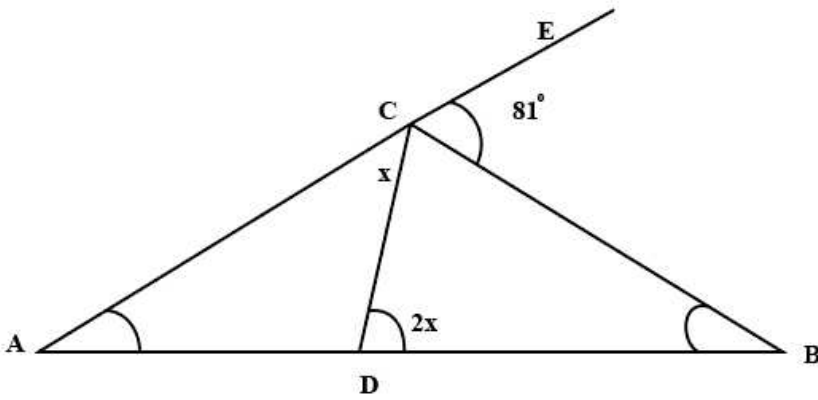
**Answer:** B

**Explanation:**

Required probability =  $\frac{(0.45)(0.1)}{(0.35)(0.15) + (0.45)(0.1) + (0.2)(0.05)} \times 100 = \frac{0.045}{0.1075} \times 100 = 41.86\% \approx 42\%$

Answer is option B.

6. In the figure (not drawn to scale) given below, if  $AD = CD = BC$  and angle  $BCE = 81^\circ$ , how much is the value of angle  $DBC$ ?



- A  $27^\circ$   
 B  $33^\circ$   
 C  $54^\circ$   
 D  $66^\circ$

**Answer: C**

**Explanation:**

Given,

$AD = DC$ , this implies angle  $ACD = \text{angle } DAC = x$

$DC = BC$ , this implies angle  $CDB = \text{angle } CBD = 2x$

$$\angle DCB = 180 - x - 81 = 99 - x$$

In triangle  $BCD$ , sum of the angles is 180 degrees

$$99 - x + 2x + 2x = 180$$

$$3x = 81$$

$$x = 27$$

$$\angle DBC = 2x = 54 \text{ degrees}$$

The answer is option C.

7. Determine the number of positive integer 'n' where  $1 \leq n \leq 100$  and 'n' is not divisible by 2, 3 or 5.

- A 23  
 B 25  
 C 26  
 D 29

**Answer: C**

**Explanation:**

The number of numbers divisible by 2 = 50

The number of numbers divisible by 3 = 33

The number of numbers divisible by 5 = 20

The number of numbers divisible by 2 and 3 = 16

The number of numbers divisible by 2 and 5 = 10

The number of numbers divisible by 3 and 5 = 6

The number of numbers divisible by 2, 3 and 5 = 3

$$\text{The number of numbers divisible by 2, 3 or 5} = 50 + 33 + 20 - 16 - 10 - 6 + 3 = 74$$

$$\text{The number of numbers not divisible by 2, 3 or 5} = 100 - 74 = 26$$

Answer is option C.

8. A granite stone has been purchased to build the kitchen platform and dining area of Mr. Kumar's bungalow. The cost of the stone varies directly with square of its weight. The stone broke into four parts whose weights are in the ratio of 2:4:7:11. If the granite stone had broken into four equal parts of weight then it would have led to a loss of Rs. 73600. What is the actual cost of the original granite stone (unbroken)?

- A 5,18,400
- B 2,30,400
- C 9,21,600
- D 4,66,560

**Answer:** C

**Explanation:**

It is given,

cost(c) is directly proportional to square of weight ( $w^2$ ), i.e.

$$c = k.w^2$$

Cost when block is divided into four parts whose weights are in ratio 2:4:7:11

Let the weights be 2x, 4x, 7x, 11x

$$\text{Cost} = k(4x^2 + 16x^2 + 49x^2 + 121x^2) = 190kx^2$$

Cost when block is divided into four equal parts

Let the weights be 6x, 6x, 6x, 6x

$$\text{Cost} = k(4 * 36x^2) = 144kx^2$$

It is given,

$$190kx^2 - 144kx^2 = 73600$$

$$kx^2 = 1600$$

Actual weight of granite = 24x

$$\text{Cost} = 576kx^2 = 576 * 1600 = 921600$$

The answer is option C.

9. Sui-Dhaga Company has to prepare two special designer dresses for Garba event. Their unique dress designs are always in demand by the young couples who participate in Garba event competitions. The profit contribution of male dress is \$75 per unit and the profit contribution of female dress is \$80 per unit. Total 7 hours are required to stitch a male-dress and 3 hours are required to stitch a female-dress. Silk required to prepare a male dress and a female dress is 4 meters and 5 meters respectively. To produce the dresses, total available labour hours are 59 and total availability of silk is 60 meters. They would like to produce male and female dresses as per the available resources in such a way so that the total profit gets maximized for the company. What will be total maximum profit earned by the Sui-Dhaga Company?

- A 775
- B 900
- C 1015
- D 1240

**Answer:** C

**Explanation:**

	Male	Female
Profit	75	80
Time	7	3
Silk	4	5

Let the number of male dresses and female dresses be x and y respectively.

It is given,

$$4x + 5y = 60$$

$$7x + 3y = 59$$

Solving, we get  $x = 5$  and  $y = 8$

$$\text{Profit} = 75(5) + 80(8) = 1015$$

Answer is option C.

10. Find the value of  $\sqrt{552 + \sqrt{552 + \sqrt{552 + \dots}}}$

- A 26
- B -24
- C 24
- D -26

**Answer: C**

**Explanation:**

$$x = \sqrt{552 + \sqrt{552 + \sqrt{552 + \dots}}}$$

$$x^2 - 552 = \sqrt{552 + \sqrt{552 + \sqrt{552 + \dots}}}$$

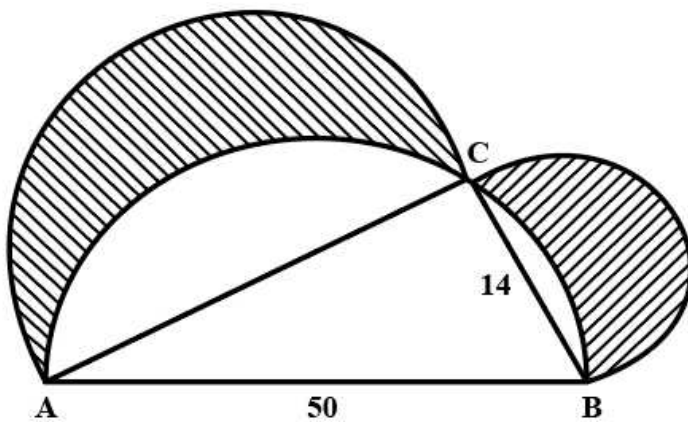
$$x^2 - x - 552 = 0$$

$$(x-24)(x+23) = 0$$

$x$  cannot be negative. Therefore,  $\sqrt{552 + \sqrt{552 + \sqrt{552 + \dots}}} = 24$

Answer is option C.

11. In a figure,  $\triangle ABC$  is a right angled triangle at  $C$ , semicircles are drawn on  $AC$ ,  $BC$  and  $AB$ 's diameter. Find the area of the shaded region.



Note: Figure not as per scale

- A 336
- B 676
- C 196
- D 556

**Answer: A**

**Explanation:**

Area of shaded region = area of semicircle on BC + area of semicircle of AC - area of unshaded semicircle regions

Area of unshaded semicircle regions = area of semicircle on AB - area of triangle ABC

Given,

$$AB = 50, BC = 14$$

In triangle ABC,  $AC^2 + BC^2 = AB^2$

Solving we get,

$$AC = 48$$

$$\text{Area of unshaded semicircle regions} = \pi (25)^2 - \frac{1}{2} \times 48 \times 14 = 625\pi - 336$$

$$\text{Area of shaded region} = 576\pi + 49\pi - 625\pi + 336 = 336$$

The answer is option A.

12. If both the roots of the equation  $x^2 - 4ax + 3 - 3a + 4a^2 = 0$  exceed 2, then the value of a:

**A**  $a < 2$

**B**  $a < \frac{3}{4}$

**C**  $a > \frac{5}{4}$

**D**  $a > \frac{7}{4}$

**Answer:** D

**Explanation:**

It is given that both the roots of given equation exceeds 2. Therefore, at  $x = 2$ , equation will be greater than zero.

$$4 - 8a + 3 - 3a + 4a^2 > 0$$

$$4a^2 - 11a + 7 > 0$$

$$(4a-7)(a-1) > 0$$

$$a < 1 \text{ and } a > 7/4$$

Answer is option D.

13. Shankar Fertilizer Limited and Shah Fertilizer Limited purchased one packet of Phosphorus each at the same price. Later on GreenP Company purchased both the packets at equal price from Shankar Fertilizer Limited and Shah Fertilizer Limited. But the profit percentage of Shankar Fertilizer Limited was  $X$  while that of Shah Fertilizer Limited was  $Y$ . Shah Fertilizer Limited calculated his profit on the selling price. Thus  $Y = 45\frac{9}{20}\%$ . If the GreenP 20 Company sells one of the packets to Mehrauli Nursery at  $X\%$  profit, then what is the cost price for Mehrauli Nursery. while GreenP Company purchased each of the Phosphorus packets at Rs. 330?

**A** 726

**B** 762

**C** 526

**D** 584

**Answer:** A

**Explanation:**

$$\text{Shankar's profit\%} = \frac{P}{C.P} \times 100 = X$$

$$\text{Shah's profit\%} = \frac{P}{S.P} \times 100 = Y$$

$$\frac{S.P}{C.P} = \frac{X}{Y}$$

It is given,

$$Y = \frac{909}{2000} X$$

$$X = \frac{2000}{909} Y$$

$$\frac{S.P}{C.P} = \frac{2000}{909}$$

$$\frac{P}{C.P} = \frac{1091}{909}$$

It is given,

$$C.P = \text{Rs } 330$$

$$\text{Profit } P = \frac{1091}{909} \times 330 \approx 396$$

$$\text{The cost price for Mehrauli Nursery} = 396 + 330 = \text{Rs } 726$$

Answer is option A.

of vertices B and D satisfy the line  $y = 2x + c$ , then what will be the coordinates of the mid-point of BC.

**A**  $\left(\frac{5}{2}, \frac{7}{2}\right)$

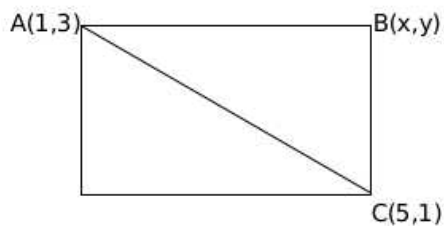
**B**  $\left(\frac{9}{2}, \frac{5}{2}\right)$

**C**  $\left(\frac{9}{5}, \frac{7}{2}\right)$

**D**  $(3, 2)$

**Answer: B**

**Explanation:**



Midpoint of AC passes through the line  $y = 2x + c$

Midpoint of AC =  $(3, 2)$

$$2 = 6 + c$$

$$c = -4$$

Line passing through B is  $y = 2x - 4$

(slope of AB)(slope of BC) = -1

$$\left(\frac{y-1}{x-5}\right)\left(\frac{y-3}{x-1}\right) = -1$$

Substituting  $y = 2x - 4$  and solving, we get

$$B(2, 0) \text{ or } B(4, 4)$$

B cannot lie on X-axis. Therefore, co-ordinates of B =  $(4, 4)$

$$\text{Midpoint of BC} = \left(\frac{9}{2}, \frac{5}{2}\right)$$

The answer is option B.

15.  $ABC$  is a triangle,  $\angle B = 60^\circ$ ,  $\angle C = 45^\circ$ ,  $BC$  is produced to / extended till D so that  $\angle ADB = 30^\circ$ , then given  $\sqrt{3} = \frac{19}{11}$  and  $BC \times CD = 3^4 \times 2^3 \times \frac{11}{19}$ , what will be the square of the altitude from A to BC?

**A** 144

**B** 324

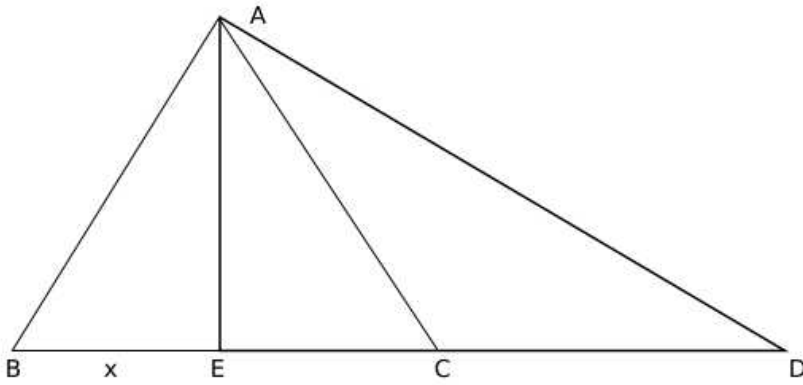
**C** 484

**D** 1254

**Answer: B**

**Explanation:**





AE is altitude from A on BC.  $\angle AEC = 90^\circ$

It is given,

$$\angle ABC = 60^\circ, \angle ACB = 45^\circ$$

In triangle ABE,

$$AE = \sqrt{3}x$$

$$\text{As } \angle EAC = \angle ECA, EC = \sqrt{3}x$$

In triangle AED,  $\angle EAD = 60^\circ$

$$\text{Therefore, } CD = 3x - \sqrt{3}x$$

It is given,

$$BC \cdot CD = \frac{3^4 \cdot 2^3 \cdot 11}{19}$$

$$x(\sqrt{3} + 1) \sqrt{3}(\sqrt{3} - 1)x = \frac{3^4 \cdot 2^3 \cdot 11}{19}$$

$$x = \frac{3^2 \cdot 2 \cdot 11}{19}$$

$$AE = 9 \cdot 2 = 18$$

$$AE^2 = 324$$

Answer is option B.

16. How many 4 letter words can be formed from the word "CORONAVIRUS".

- A 3148
- B 3058
- C 3702
- D 3086

**Answer: C**

**Explanation:**

"CORONAVIRUS" has 7 distinct alphabets and two pairs of repeated characters "O" and "R".

There are three possible cases for creating 4 letter words.

1. Two letters are "O" and the other two are "R".

$$\text{The total number of arrangements} = \frac{4!}{2! \times 2!} = 6$$

2. Two of the letters are either "O" or "R" and the others are distinct.

$$\text{The total number of arrangements} = {}^2C_1 \times {}^8C_2 \times \frac{4!}{2!} = 2 \times 28 \times 12 = 672$$

3. All four letters are distinct.

$$\text{The total number of arrangements} = {}^9C_4 \times 4! = 3024$$

Thus, the total number of four-letter words possible =  $6 + 672 + 3024 = 3702$ .

Hence, the answer is option C.

17. The mean of the 29 observations is 337. If the first term is increased by 1, second term by 2 and so on. The new mean will be:

- A 364
- B 435
- C 352
- D 772

**Answer: C**

**Explanation:**

It is given that,

The mean of 29 observations is 337

Therefore we can say :

$337 = \frac{S}{29}$  where S is sum of observations

$S = (337)(29)$  (1)

The first term is increased by 1

2nd by 2 .. and so on

New sum =  $S + \frac{29(30)}{2}$

Therefore, mean will be  $\left(\frac{S + \frac{29(30)}{2}}{29}\right)$

=  $337 + 15$

= 352

Answer is option C.

18. If  $\log_3 \frac{16^{x-3} + 14}{4^{x-3} + 2} = 243$ , then what will be the value of x:

- A  $x \in Q$  rational numbers
- B  $x \in N$  Natural numbers
- C  $x \in N$  even natural numbers
- D  $x \in Q$  rational numbers,  $x < 0$

**Answer: B**

19. The goods train between Bhilai to Lucknow without rakes can go upto the speed of 72km/hour, and the speed gets diminished by the quantity that varies as the square root of the number of wagons attached. If it is known that with 4 wagons the speed is 56 km/hour, the greatest number of wagons with which the engine can just move is:

- A 84
- B 144
- C 56
- D 80

**Answer: D**

**Explanation:**

It is given that,

v is proportional to  $\sqrt{w}$

$$v = k\sqrt{w+y}$$

It is given,

$$56 = 2k + y \quad (w = 4)$$

$$\text{and } y = 72 \quad (w = 0)$$

Solving we get

$$k = -8$$

$$-8\sqrt{w+y} = 0$$

$$w = 81$$

Therefore, maximum number of wagons with which engine can just move is 80.

Answer is option D.

20. Mr. Shyam invested a sum of Rs. 2000 through Kitocoin trading app available on his mobile. The invested amount appreciated after 3 years by 10% at the compound rate of appreciation. This appreciated amount is equal to the amount that is the result of 3 years depreciation by a certain compound rate of depreciation from Rs.3917. Find the difference between the compound rate of appreciation and depreciation:

- A 3.5%
- B 3.0%
- C 2.0%
- D 1.5%

**Answer: C**

**Explanation:**

It is given that,

$$2000 (1.1)^3 = 3917 \left(\frac{100-x}{100}\right)^3$$

$$(100 - x)^3 = 679601$$

$$88^3 = 681472$$

Solving we get,

$$x = 12.xx$$

Difference = 2%

Answer is option C.

21. Find the sum of following series:

$$\frac{3}{7} + \frac{4}{7^2} + \frac{5}{7^3} + \frac{3}{7^4} + \frac{4}{7^5} + \frac{5}{7^6} + \dots$$

- A 180  
342
- B 182  
342
- C 180  
343
- D 182  
343

**Answer: A**

**Explanation:**

$$S = 7^3 + 7^4 + 7^5 + 7^6 + \dots$$

Now here S is a summation of 3 distinct infinite geometric series

And we know that sum of an infinite geometric progression =  $\frac{a}{1-r}$  where a is the first term and r is the common ratio .

$$\text{Therefore we can say S will be : } \frac{7^3}{1-7^3} + \frac{7^4}{1-7^3} + \frac{7^5}{1-7^3}$$

$$\text{solving we get } S = \frac{180}{7^3-1} = \frac{180}{342}$$

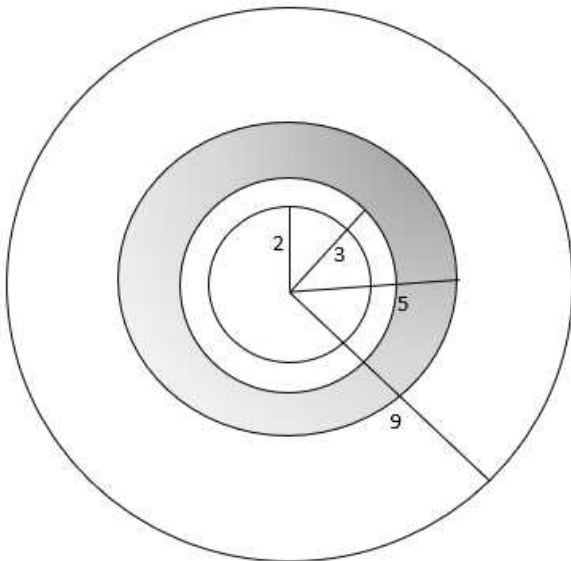
22. There is a shooting event organised by the SBT youth Club to select the best candidate who will qualify to participate in Eklavya championship. The shooting board is designed by using 4 concentric circles of radii 2 inch, 3 inch, 5 inch and 9 inch. What is the probability that the participant will shoot only in the second ring [from the outside] to qualify for Eklavya championship.

- A  $\frac{16}{25}$
- B  $\frac{20}{81}$
- C  $\frac{20}{56}$
- D  $\frac{16}{81}$

**Answer: D**

**Explanation:**

The board is as follows.



$$\text{The required probability} = \frac{\pi(5)^2 - \pi(3)^2}{\pi(9)^2} = \frac{25-9}{81} = \frac{16}{81}$$

Hence, the answer is option D.

23. One can use three different modes of transportation to reach from Dwarka to Ghaziabad. These mode of transportation have varying speeds 20 km/hour, 30km/hour, and 50 km/hour respectively. To reach Ghaziabad from Dwarka, Samiksha took each mode of transportation  $\frac{1}{5}$ th,  $\frac{2}{5}$ th and  $\frac{2}{5}$ th times of her total journey time, while Shrestha took each mode of transportation  $\frac{1}{6}$ th,  $\frac{1}{6}$ th, and  $\frac{4}{6}$ th of the total distance. The percentage by which Samiksha's travel time exceeds Shrestha travel time is nearest to:

- A 1%

- B** 2%
- C** 5%
- D** 7%

**Answer: B**

**Explanation:**

Let the total time taken by Samiksha be '5t'.

$$\text{Total distance} = t(20) + 2t(30) + 2t(50) = 180t$$

Shreshta travelled distances 30t, 30t and 120t at 20 km/hr, 30 km/hr and 50 km/hr.

$$\text{Time taken by Shreshta} = \frac{30t}{20} + \frac{30t}{30} + \frac{120t}{50} = 1.5t + t + 2.4t = 4.9t$$

$$\text{Required \%} = \frac{5t - 4.9t}{5t} \times 100 = 2\%$$

Answer is option B.

24. Find the value of following expression  $\log \sin 40^\circ \log \sin 41^\circ - - - \log \sin 99^\circ \log \sin 100^\circ$

- A**  $\frac{\sqrt{3ac+1}}{2}$
- B** 0
- C** 1
- D** 2

**Answer: B**

**Explanation:**

$$= \log \sin 40^\circ \log \sin 41^\circ \dots \log \sin 90^\circ \dots \log \sin 99^\circ \log \sin 100^\circ$$

$$= \log \sin 90^\circ$$

$$= \log 1$$

$$= 0$$

Answer is option B.

25. A mining work can be undertaken only between 9 AM to 6 PM. If A and B work entirely during these hours, they can complete the work alone in 18 days and 22 days respectively. If A and B both start together on 25th Nov at 12 noon, when should B stop doing the work so that the work will be completed exactly on 09th Dec at 12 noon?

- A** 30th Nov 12 Noon
- B** 01st Dec 12 Noon
- C** 30th Nov 11 AM
- D** 01st Dec 1 PM

**Answer: C**

**Explanation:**

Time taken by A alone to finish the work = 18\*9 hrs

Time taken by B alone to finish the work = 22\*9 hrs

Let the total work be LCM(18\*9, 22\*9) = 198\*9 units

Work done by A in 1 hour = 11 units

Work done by B in 1 hour = 9 units

Let the number of hours B worked be 'x'

work done by A + work done by B = Total work done

$$(6)(11) + (13)(9)(11) + (3)(11) + x(9) = 198 \times 9$$

x = 44 hours

Number of days B worked = 4 days 8 hours

Therefore, B stopped working on 30th Nov at 11 am.

Answer is option C.

## Reading Comprehension and Verbal Ability

26. For each of the sentences given below, identify which of the two underlined words/phrases is correct:

I Verna believes in giving her staff free rein / reign  
A B

II The patient complained that his head felt as if it were in a vice / wise  
C D

III Armand felt as if he'd been put through the wringer / ringer  
E F

IV Pupils in Mr Wigglesworth's class knew they had better tow / toe the line  
G H

A I - A, II - C, III - F, IV - G

B I - B, II - D, III - E, IV - H

C I - A, II - D, III - E, IV - H

D I - B, II - C, III - F, IV - G

**Answer: C**

### Explanation:

The correct use of the phrases are "free rein", "put through a wringer" and "toe the line".

Hence, the answer is option C.

27. From the options given below, identify correct antonym for the word given in CAPS:

**ARMISTICE**

A Truce

B Concord

C Skirmish

D Peace

**Answer: C**

### Explanation:

"Armistice" means a temporary suspension of hostilities or a truce. Thus, the antonym of "armistice" will be dispute or fight.

Among the options, C is the correct answer.

28. For each of the sentences given below, identify which of the two underlined words/phrases is correct:

- I Gordon's face occasionally twitched with a nervous tick / tic  
A B
- II The wording of her ad peaked / piqued his interest  
C D
- III Things did not appear to augur / auger well  
E F
- IV The villagers struggled to throw off the yoke / yolk of their invaders  
G H

A I - B, II - D, III - E, IV - G

B I - A, II - D, III - F, IV - G

C I - B, II - C, III - F, IV - H

D I - A, II - C, III - E, IV - H

**Answer: A**

**Explanation:**

- "tic" means a sudden twitch of a muscle, whereas "tick" is a small parasitic bug. For the given sentence, "tic" is the appropriate answer.
- "peaked" means to reach the highest level, and "piqued" means to arouse. From the context of the given sentence, "piqued" is the correct option.
- "augur" means bode, whereas "auger" is a device used to drill wood.
- the correct phrase is "to throw off yoke"

Thus, the answer is option A.

29. Identify the options with all correct spellings:

- A Assiduous, Acquaintance, Allegiance, Exaneration
- B Adolesence, Annihilation, Cassette, Octenial
- C Aquiantance, Adherent, Ignominous, Movability
- D Garrulous, Notoriety, Centenarian, Ignominious

**Answer: D**

**Explanation:**

Option A: Correct spellings are "Acquaintance" and "Exoneration".

Option B: Correct spellings are "Adolescence" and "Octennial"

Option C: Correct spellings are "Acquaintance" and "Ignominious"

Hence, the answer is option D.

30. There are four sentences A, B, C, D where the underlined word is used either correctly or incorrectly. Choose the option which lists all the sentences where the underlined word is used correctly in a sentence.

- A. A woman could not forbear declaring openly that her faith had saved her.
- B. Forbear to say more on a subject which is forbidden.
- C. Forbear to judge, for we are sinners all.
- D. He was a delicate child, in direct contrast to a strong race of forbears, and inherited from his mother a refined, retiring disposition and a love for books.

- A A,B,C
- B C,D
- C B,C,D
- D A,B

**Answer:** A

**Explanation:**

"forbear" means to "restrain an impulse" or "refrain from an action".

Considering the meaning of "forbear", it is used incorrectly only in sentence D.

Hence, the answer is option A.

**31. Identify the appropriate meaning for the given root word:**

**Root word: Quin (as in quintessence/ quintet)**

- A Summary
- B Cone
- C Fifth
- D Easy to understand

**Answer:** C

**Explanation:**

The root "Quin" means "fifth" or among a group of five.

For example, quintuplets means a set of five babies born in a single birth.

Hence, the answer is option C.

**32. Each of the sentence below is written twice using an inappropriate and an appropriate word highlighted in black and italicized.**

**For each pair of sentences, identify the sentence with the appropriate word usage from the options given below:**

**I. There was concern that his legal victory could set a dangerous *precedence*.**

**II. There was concern that his legal victory could set a dangerous *precedent*.**

**III. Her ideas were *light-years* ahead of her time.**

**IV. Her ideas were *many years* ahead of her time.**

**V. The screaming kids and *blaring* radio made for a *noisy* evening.**

**VI. The screaming kids and *blaring* radio made for a *noisome* evening.**

- A The sentences with appropriate word usage are I, III, VI
- B The sentences with appropriate word usage are II, IV, V
- C The sentences with appropriate word usage are II, III, VI
- D The sentences with appropriate word usage are I, IV, V

**Answer:** B

**Explanation:**

"precedence" means to give priority, whereas "precedent" means to set an example. Thus, statement (II) is the correct one.

"noisy" means a lot of noise, whereas "noisome" means something foul or disgusting, especially in its smell. Thus, statement (V) is the correct one.

Thus, going through the options, B is the correct answer.



33. There are four sentences A, B, C, D where the underlined word is used either correctly or incorrectly. Choose the option which lists all the sentences where the underlined word is used correctly in a sentence.

A. He did not waver in unbelief about the promise of God but was strengthened in faith, giving glory to God.

B. Harry signed an insurance waver before surgery.

C. All these legends waver between the theory of creation, or rather of manufacture, and the theory of evolution.

D. Will this constitute a waver of such right?

A B,D

B A,C,D

C A,C

D A,B

**Answer: C**

**Explanation:**

"waver" means to become weak or to falter.

"waiver" means to relinquish a right.

Thus, the correct use of "waver" is done in A and C only and hence, the answer is option C.

Sentences B and D should have "waiver" instead of "waver".

34. In the sentences below are certain nouns/collective nouns that are used incorrectly as singular when they should be used as plural and vice-versa. Identify the correct sentence from the following:

A There is colony of mouses in my house.

B He gave me ten five rupees note.

C These five children are her offsprings.

D There are no gentry in this town.

**Answer: C**

**Explanation:**

Option A: The plural of "mouse" is "mice". Hence, this sentence is incorrect.

Option B: The correct sentence would be "He gave me ten five rupee notes". Hence, this sentence is incorrect.

Option C: This sentence is correct and is the answer.

Option D: The plural of "gentry" is "gentries". Hence, this option is incorrect/

Hence, the answer is option C.

35. In the sentences below are certain nouns/collective nouns that are used incorrectly as singular when they should be used as plural and vice-versa. Identify the correct sentence from the following:

A Whose are these cattles?

B The sceneries of Kashmir are very charming.

C No news is good news.

D He loves either your son or my.

**Answer: C**

**Explanation:**

Option A: "cattle" is already a plural word. Thus, using it as "cattles" is incorrect.

Option B: "scenery" is an uncountable noun and thus, cannot be used in a plural form. This sentence is also incorrect.

Option C: This sentence is correct and is the answer.

Option D: The correct sentence is "He loves either your son or mine".

Hence, the answer is option C.

36. Identify the appropriate meaning for the given root word:

Root word: Rhin/o (as in Rhinoceros)

A Huge

B Fire

C Wisdom

D Nose

**Answer:** D

**Explanation:**

The root word "Rhino" has a Greek origin which means "nose".

It is also used in medical terms like "Rhinoplasty" which is the name for the reconstruction surgery for the nose.

Hence, the answer is option D.

37. There are four sentences A, B, C, D where the underlined word is used either correctly or incorrectly. Choose the option which lists all the sentences where the underlined word is used correctly in a sentence.

A. The teacher asked the students to not elude to any online sources in their research papers.

B. Reyna used a tricky turnaround move to elude the only defender before firing from 8 yards into the empty goal.

C. Nick tried to elude the security men by sneaking through a back door.

D. The mafia boss ordered his men to not elude to any criminal activity during their telephone conversations.

A A,D

B C,D

C B,C

D A,B,D

**Answer:** C

**Explanation:**

"To elude" means "to avoid or escape".

Thus, elude does not fit with the sentences A and D.

Sentences B and C make the correct use of the word.

Hence, the answer is option C.

38. From the options given below, identify the sentences with correct usage of verbs underlined:

A. Drinking and driving is a crime.

B. One or the other of you have to compromise.

C. Neither the gloves nor the scarf need washing.

D. Each invoice and purchase order has to be approved by the manager.

A A, B are correct

- B** C, D are correct
- C** A, D are correct
- D** B, C are correct

**Answer:** C

**Explanation:**

Statement B: Since "or" is used between the two words, the auxiliary verb needs to be for a "singular" entity. Hence, this sentence is incorrect.

Statement C: Similarly, since "Neither\_nor" is used, the auxiliary verb should be for a singular entity. Hence, this sentence is also incorrect.

Statements A and D are grammatically correct.

Hence, the answer is option C.

39. **Each of the sentence below is written twice using an inappropriate and an appropriate word highlighted in black and italicized. For each pair of sentences, identify the sentence with the appropriate word usage from the options given below:**

- I. Temperatures this week are expected to be seasonal.**
- II. Temperatures this week are expected to be *seasonable***
- III. The only route was along a narrow *tortuous* road.**
- IV. The only route was along a narrow *torturous* road.**
- V. The idea was greeted with strong *ensor*.**
- VI. The idea was greeted with strong *censure*.**

- A** The sentences with appropriate word usage are I, III, V
- B** The sentences with appropriate words usage are II, IV, VI
- C** The sentences with appropriate words usage are I, IV, V
- D** The sentences with appropriate words usage are II, III, VI

**Answer:** D

**Explanation:**

"torturous" means "causing suffering", whereas "tortuous" means "with twists and turns". Thus, relating to roads, "tortuous" is the right choice.

"To censor" means to remove or block, whereas "to censure" means "to criticise". Thus, in the context of the sentence, "censure" is the right choice.

Hence, option D is the answer.

40. **Find the most appropriate word from the given options, which best describes the meaning provided in the question.**

**Meaning: The study of reptiles**

- A** Ecology
- B** Zoology
- C** Amphibology
- D** Herpetology

**Answer:** D

**Explanation:**

The study of reptiles is called "Herpetology". Hence, the answer is option D.

"Ecology" is the study of organisms and their interactions with the surrounding environments.

"Zoology" is the study of all types of animals.

"Amphibology" is a sentence or a phrase that can be interpreted in more than one way.

41. **Certain foreign words are frequently used in English language. Identify the origin of the given words:**

- I. faux pas
- II. en masse
- III. bandolero
- IV. versus

- A Only I and IV are French
- B Only II and III are Spanish
- C Only IV is Latin
- D Only I and II are Latin

**Answer:** C

**Explanation:**

1. "faux pa" has a French origin.
2. "en masse" also has a French origin.
3. "bandolero" has a Spanish origin.
4. "versus" has a Latin origin.

Hence, the answer is option C.

**Instructions [42 - 46 ]**

I am occasionally troubled by the disparate rumblings of dissatisfaction about the role of theory in management. As a profession, we seem to experience recurring bouts of doubt about what theory is, and is not, and whether we should have a single unifying theory or many.

While we agonize over the degree of theoretical abstraction needed to produce knowledge, arguing occasionally for a step back from highly abstract theorization to "middle-range" theories or the much less ambitious notion of "mechanisms", it is apparent that, as a community of scholars, we are deeply engaged with and passionate about the role of theory in our profession. There is, perhaps surprisingly, considerable consensus on what theory is: theory is simply a way of imposing conceptual order on the empirical complexity of the phenomenal world. As Bacharach (1989) astutely observed, theory offers "a statement of relations between concepts within a set of boundary assumptions and constraints". Ultimately, theories reflect, in highly abstract terms, the organization of a discipline's knowledge base.

However, theory does much more than simply abstract and organize knowledge. It also signals the values upon which that knowledge is built. And it is in this somewhat shadowy connection between and among theory, knowledge, and values that cracks in our consensus about theory begin to appear. Although we might agree, broadly, about the substantive elements that constitute theory, we appear to disagree as a profession about why we need theory and what role it should play in creating, maintaining, and shaping what type of knowledge we value in the field. Fundamentally, we disagree about the value of theory.

Some see theory as a means of knowledge accumulation. These are the empiricists, who clearly constitute the dominant contemporary view. Informed by positivism, empiricists view management as a science and theory as the cumulative product of the progressive acquisition of knowledge. Empiricists value theory for its ability to capture and summarize the phenomenal world. They have a Darwinian understanding of the relationship between theories, seeing an implicit competition between theories in their ability to capture reality. Over time, as theory progresses in its ability to proximate and predict reality, a single unified theory should emerge. When a single theory fails to emerge (as is inevitable), empiricists tend to reject the value of theory entirely and focus energy exclusively on the collection of data. Declaring a moratorium on theory—Alfred North Whitehead's "dustbowl empiricism"—is a recurring phenomenon in the history of social science. Dustbowl empiricism is characterized by what Feyerabend (1975) described as the rhetorical bullying that is implicit in appeals to rationality and evidence.

Dustbowl empiricism is, of course, doomed to fail. Knowledge accumulation simply cannot occur without a conceptual framework.

When explicit frameworks are pushed into the background, theory becomes implicit. Implicit theories are inherently dangerous because they discourage researchers from asking fundamental questions about the assumptions that underpin knowledge and the methods used to acquire knowledge. The random accumulation of evidence is also doomed because of the inherent tendency of humans to theorize. Theorization is an essential element of how we make sense of the world, and randomly accumulated data are, as Coase (1988) critically observed, nothing but “a mass of descriptive material, waiting for a theory, or a fire.”

Management researchers constituting an alternative subgroup value theory as a means of knowledge abstraction. These are the rationalists, and they serve as a useful and important counterbalance to the empiricists. Instead of seeing theory as the summation of empirical observation, rationalists see theory as occurring prior to empirical observation. That is, theory offers a perceptual lens that structures sensory experience. Without theoretically derived categories, rationalists argue, humans would be unable to cognitively organize or even recognize sensory experience. Rationalists value theory for its logic. Because they favor deduction over induction, rationalists often prefer theories that offer internal coherence or elegant explanations of the world. For these scholars new theory is more likely to come from the interpretation of past masters, through parsing canonical texts (i.e., literature reviews), than from empirical observation.

The ultimate danger of an overemphasis on rationalism is theoretical “fetishism,” where theory becomes an exercise in writing and interpretation but is detached from the empirical world. Taken to its extreme, rational theories tend to become self absorbed—more attentive to naval-gazing efforts of deconstructing prior theory than to challenges from contradictory phenomena. Elsewhere I have written about the emergent fetishism in theory and the concomitant danger of increasing scientism in management theory. However, rationalists offer a critically important counterbalance to empiricists, and it is the effective union of induction and deduction, or empiricism and rationalism, that tends to produce new knowledge.

A growing number of management scholars see a powerful normative value in theory. The highest and best use of theory, for this constituency, is not to represent the phenomenal world as it is but, rather, to fashion theoretical lenses that allow us to see the world as it might be. In contrast to both empiricists and rationalists, who see virtue in assuming an objective distance between research and practice and who believe that their research is largely free of political and moral assumptions, normative theorists embrace the notion that no theory is value free. They adopt McKenzie’s (2006) argument that management theories are less a camera that captures reality and more an engine that produces it.

Normative scholars, thus, value theory for its ability to create new reality. They construct theories that contradict the (often dismal) view of the world given to us by both empiricists and rationalists and, instead, articulate new possibilities for organizational behavior and managerial action. Rather than attending to the deconstruction of the causes of action, normative theorists tend to focus on the motives and ethics of actors and the process by which they make choices for action.

The question “why theory?” thus has several potential answers. In fact it is the tension between these different value propositions for theory that generates a series of observable and somewhat predictable dynamics in management scholarship.

42. **Based on the passage, which of the following provides gist of the 'theory':**

- A Theory is all about setting boundary conditions & assumptions within which relations among concepts may be studied.
- B Abstraction and knowledge mainly constitute the substantive elements of theory.
- C Theory represents a broad range of value propositions and which is what derives much of rumblings and dissatisfaction about theory in management as a profession.
- D To make sense, theory should include empirical adequacy, offer elegant explanations of the world using a deductive logic and be able to create a new reality.

**Answer: C**

**Explanation:**

The author says that there is a consensus about what theory is but disagreement about the value of theory. He then mentions various groups of thoughts regarding theory, like the empiricists and the rationalists. In the final paragraph, the author states that there is tension between different value propositions for theory.

Only option C includes all the points mentioned above and thus, is the answer.

43. **Based on the passage, which of the following HOLDS TRUE about 'empiricists/empiricism':**

- A Empiricists aim to produce and capture literally true stories about the phenomenal world.
- B Knowledge accumulation is an empirical activity rather than a cognitive activity or a sensory experience that aims to approximate and predict reality.

- C** For empiricists, knowledge accumulation happens through collection of data in the real world.
- D** Just because it is never possible to come up with a single unified theory, empiricists tend to reject the value of theory and focus energy exclusively on collection of data.

**Answer: C**

**Explanation:**

The author says, "Some see theory as a means of knowledge accumulation. These are the empiricists, who clearly constitute the dominant contemporary view."

Hence, option C is the answer.

A and B are not mentioned in the passage. D states a unified theory is impossible which is not mentioned in the passage. Hence, these options are rejected.

44. Which of the following is NOT TRUE about 'dustbowl empiricism' as explained in the passage:

- A** Implicit theories are arrived at by the researchers through random accumulation of evidence that lacks asking fundamental questions about the assumptions that underpin knowledge and the methods used to acquire knowledge, and hence, are dangerous
- B** Dustbowl empiricism is doomed to fail since knowledge accumulation is aimed at through using implicit theories in contrast to using conceptual frameworks that are pushed into the background.
- C** It is an approach to social sciences that focuses on accumulating knowledge through empirical observation and collecting data without any conceptual framework
- D** While knowledge accumulation through focusing exclusively on collection of data is suggested to appeal in its rationality and evidence and it appears to have a persuasive effect but such knowledge accumulation often lacks in sincerity or meaningfulness.

**Answer: B**

**Explanation:**

The author says, "Dustbowl empiricism is, of course, doomed to fail. Knowledge accumulation simply cannot occur without a conceptual framework."

Option B gives the wrong reason by saying that it is doomed to fail because of the use of implicit theories for knowledge accumulation.

Hence, the answer is option B.

45. Which of the following is NOT associated with rationalism or theoretical "fetishism" as described in the passage:

- A** Excessive belief in the power of scientific knowledge and techniques in management theory is dangerous.
- B** When rationalists indulge into excessive contemplation of deconstruction of a prior theory even at the expense of a wider view that might emerge from an opposed or conflicting phenomena, it is theoretical fetishism.
- C** Rationalists view theory as a source of knowledge abstraction and suggest that elegant explanations of the world require interpretation of past masters through parsing canonical texts to cognitively organize or even recognize sensory experience using a deductive logic.
- D** Theory occurs prior to empirical observation since without theoretically derived categories, humans would be unable to cognitively organize or even recognize sensory experience.

**Answer: A**

**Explanation:**

Options B, C and D are discussed in the 6th and 7th paragraphs.

The author never says that excessive belief in scientific knowledge is dangerous. Hence, the answer is option A.

46. Based on the passage, which of the following about normative theory/theorists is TRUE:

- A Normative value in theory is the best for articulating organizational behaviour and managerial action.
- B Theories given by empiricists and rationalists cannot be used for articulating new possibilities for organizational behaviour and managerial action since their research is largely free of political and moral assumptions
- C While rationalists and empiricists aim to represent the phenomenal world as it is, normative scholars fashion theoretical lenses in a way that allows to see the world as it might be.
- D Normative theorists do not assume distance between research and practice and tend to believe that their research is not free of political and moral assumptions.

**Answer:** D

**Explanation:**

The author never mentions that the normative theory is the best and hence, option A is rejected.

Option B has also not been mentioned in the passage and can be eliminated.

Option C is rejected as the part of "empiricists and rationalists seeing the world as it is" is not mentioned in the passage.

*"In contrast to both empiricists and rationalists, who see virtue in assuming an objective distance between research and practice and who believe that their research is largely free of political and moral assumptions, normative theorists embrace the notion that no theory is value free."*

This excerpt from the passage validates option D.

Hence, the answer is option D.

**Instructions [47 - 49 ]**

The contrasting styles of communication represented by the managers from Spain and say Japan are often referred to as low-context and high-context, respectively.

In order to understand the implications, suppose you are having a discussion with Sally, a business colleague, and you both come from a culture that prefers low-context communication. People from such cultures are conditioned from childhood to assume a low level of shared context—that is, few shared reference points and comparatively little implicit knowledge linking speaker and listener.

Under these circumstances, it's highly likely that, while speaking with Sally, you will explicitly spell out your ideas, providing all the background knowledge and details necessary to understand your message. The United States is the lowest-context culture in the world, followed by Canada and Australia, the Netherlands and Germany, and the United Kingdom.

Though cultural norms are transmitted from one generation to the next through means that are generally indirect and subliminal, you may remember receiving some deliberate lessons concerning appropriate ways to communicate. I certainly received such lessons as a child growing up in the United States. My third-grade teacher, Mary Jane, a tall, thin woman with tightly curled hair, used to coach us during our Monday morning circle meetings using the motto, "Say what you mean and mean what you say." When I was sixteen, I took an elective class at Minneapolis South High School on giving effective presentations. This is where I learned the traditional American rule for successfully transferring a powerful message to an audience: "Tell them what you are going to tell them, then tell them, then tell them what you've told them." This is the philosophy of low-context communication in a nutshell. The communication technique is designed to help people quickly identify and correct misunderstandings, thereby reducing (if not eliminating) one common cause of needless, pointless debate.

Childhood lessons like these imbued me with the assumption that being explicit is simply good communication. But, as Takaki explained, good communication in a high context culture like Japan is very different. In Japan as in India, China, and many other countries, people learn a very different style of communication as children—one that depends on unconscious assumptions about common reference points and shared knowledge.

For example, let's say that you and a business colleague named Maryam both come from a high-context culture like Iran. Imagine that Maryam has travelled to your home for a visit and arrived via a late-evening train at 10:00 p.m. If you ask Maryam whether she would like to eat something before going to bed, when Maryam responds with a polite "No, thank you," your response will be to ask her two more times. Only if she responds "No, thank you" three times will you accept "No" as her real answer.

In a high-context culture like Iran, it's not necessary—indeed, it's often inappropriate—to spell out certain messages too explicitly. If Maryam replied to your first offer of food, "Yes, please serve me a big portion of whatever you have, because I am dying of hunger!" this response would be considered inelegant and perhaps quite rude. Fortunately, shared assumptions learned from childhood make such bluntness unnecessary. You and Maryam both know that "No, thank you" likely means, "Please ask me again because I am famished."

If you're from a low-context culture, you may perceive a high-context communicator as secretive, lacking transparency, or unable to

communicate effectively. On the other hand, if you're from a high-context culture, you might perceive a low-context communicator as inappropriately stating the obvious, or even as condescending and patronizing.

When I had first arrived at my hotel in New Delhi, I was hot and, more important, hungry. Although I would have spent that week conducting classes for a group of Indian executives at the swank five-star Oberoi hotel, the Indian business school hosting me put me up in a more modest and much smaller residence several miles away. Staying in a simple hotel just steps from the bustle of workaday New Delhi, I thought, would make it that much easier for me to get the flavour of the city.

Lunch was at the top of my agenda. The very friendly young man behind the concierge desk jumped to attention when he saw me approaching. I asked about a good place to eat. "There is a great restaurant just to the left of the hotel. I recommend it highly," he told me. "It is called Swagat. You can't miss it."

It sounded perfect. I walked out to the road and looked to the left. The street was a whirlwind of colors, smells, and activities. I saw a grocery store, a cloth vendor, a family of five all piled onto one motor scooter, and a bunch of brown-speckled chickens pecking in the dust next to the sidewalk. No restaurant.

"You didn't find it?" the kind concierge asked in a puzzled tone as I re-entered the hotel. This time the young man explained, "Just walk out of the hotel, cross the street, and the restaurant will be on your left. It's next to the market. There is a sign. You can't miss it," he said again.

Remembering my confusing encounter with the concierge in New Delhi, if I had been an Indian from Delhi with the shared cultural understanding of how to interpret implicit messages, I would have been better able to interpret the concierge's directions. Lacking those assumptions left me bewildered and unable to find my way to the restaurant.

47. **According to the author, low-context communication cultures:**

- A Can be characterised as indirect in nature
- B Can be characterized as not speaking to the point
- C Are characterised by the use of overt messages
- D Are characterised by the use of covert messages

**Answer:** C

**Explanation:**

The author states that "low-context" communication cultures spell out all the details explicitly and provide all the required information. Hence, the answer is option C.

48. **Which of the following can be inferred from passage:**

- A Low-context communication is based on as much shared knowledge/assumption as the High-context communication.
- B Low-context communication is not based on as much shared knowledge/assumption as the High-context communication
- C High-context communication is not based on as much shared knowledge/assumption as the Low-context communication
- D Neither Low-context, nor High-context communication is based on shared knowledge/assumption

**Answer:** B

**Explanation:**

The author says that in high-context cultures, "people learn a very different style of communication as children—one that depends on unconscious assumptions about common reference points and shared knowledge.", whereas it is the opposite for low-context cultures. Hence, the answer is option B.

49. **Which of the following best explains 'you might perceive a low-context communicator as inappropriately "stating the obvious" (8th para) from the passage:**



- A You didn't have to say it! We all understood!
- B You should not be talking to us like that!
- C You talk to us like we're children!
- D You kindly speak to us as clearly as you can!

**Answer: A**

**Explanation:**

"Stating the obvious" would mean that the information is already known to everyone, i.e., it is common knowledge and thus, doesn't need to be told.

From the above context, option A is the correct answer.

Option D is eliminated, as it is the case for high-context communicators.

Options B and C do not mention the obvious part and hence, can be eliminated.

**Instructions [50 - 52 ]**

Read the following passage:

Of course the cosmic mystery doesn't help us at all in maintaining the social order. People often argue that we must believe in a god that gave some very concrete laws to humans, or else morality will disappear and society will collapse into primeval chaos.

It is certainly true that belief in gods was vital for various social orders, and that it sometimes had positive consequences. Indeed, the very same religions that inspire hate and bigotry in some people inspire love and compassion in others. Yet though gods can inspire us to act compassionately, religious faith is not a necessary condition for moral behaviour. The idea that we need a supernatural being to make us act morally assumes that there is something unnatural about morality. But why? Morality of some kind is natural. All social mammals from chimpanzees to rats have ethical codes that limit things such as theft and murder.

Among humans, morality is present in all societies, even though not all of them believe in the same god, or in any god. Christians act with charity even without believing in the Hindu pantheon, Muslims value honesty despite rejecting the divinity of Christ, and secular countries such as Denmark and the Czech Republic aren't more violent than some devout countries.

Morality doesn't mean 'following divine commands'. It means 'reducing suffering'. You just need to develop a deep appreciation of suffering. If you really understand how an action causes unnecessary suffering to yourself or to others, you will naturally abstain from it. People nevertheless murder, rape and steal because they have only a superficial appreciation of the misery this causes. They are fixated on satisfying their immediate lust or greed, without concern for the impact on others - or even for the long-term impact on themselves. Even inquisitors who deliberately inflict as much pain as possible on their victim, usually use various desensitising and dehumanising techniques in order to distance themselves from what they are doing.

Many thinkers have constructed elaborate social theories, explaining why in the long run such behaviour is counterproductive. You would not like to live in a society where strangers are routinely robbed and murdered. Not only would you be in constant danger, but you would lack the benefit of things like commerce, which depends on trust between strangers. Merchants don't usually visit dens of thieves. That's how secular theoreticians from ancient China to modern Europe have justified the golden rule of 'don't do to others what you would not like them to do to you'.

Yet we do not really need such complex long-term theories to find a natural basis for universal compassion. Forget about commerce for a moment. On a much more immediate level, hurting others always hurts me too. Every violent act in the world begins with a violent desire in somebody's mind, which disturbs that person's own peace and happiness before it disturbs the peace and happiness of anyone else. Thus people seldom steal unless they first develop a lot of greed and envy in their minds. People don't usually murder unless they first generate anger and hatred. Emotions such as greed, envy, anger and hatred are very unpleasant. You cannot experience joy and harmony when you are boiling with anger or envy. Hence long before you murder anyone, your anger has already killed your own peace of mind.

For some people, a strong belief in a compassionate god that commands us to turn the other cheek may help in curbing anger. That's been an enormous contribution of religious belief to the peace and harmony of the world.

Unfortunately, for other people religious belief actually stokes and justifies their anger, especially if someone dares to insult their god or ignore his wishes. So the value of the lawgiver god ultimately depends on the behaviour of his devotees. If they act well, they can believe anything they like. Similarly, the value of religious rites and sacred places depends on the type of feelings and behaviours they inspire. If visiting a temple makes people experience peace and harmony - that's wonderful. But if a particular sacred place causes violence and conflicts, what do we need it for? It is clearly dysfunctional. Not visiting any place of worship and not believing in any god is also a viable option. As the last few centuries have proved, we don't need to invoke God's name in order to live a moral life. Secularism can provide us with all the values we need.

50. Which of the following is correct:

- A Moral behaviour naturally follows the religious teachings
- B Morality is antipodean to religious teachings
- C In order to act morally, you don't need to believe in any myth or story
- D People follow societal order because they alienate themselves from their doings

**Answer:** C

**Explanation:**

The author in the passage argues that for someone to act morally, they don't necessarily need to follow a religion. He says that we have immoral and moral people in both categories: religious and non-religious. They also mention some examples to further elaborate on this point.

Only option C is true according to the passage and is hence, the answer.

51. Which of the following is an incorrect statement:

- A Religion is not a pre-condition for moral behaviour
- B Having a violent desire in mind is the source of all the violence
- C Morality always starts with having faith in God
- D Trade and business depends on trust

**Answer:** C

**Explanation:**

The author mentions throughout the passage that belief in God is not a necessary condition for a person to be moral. He elaborates this point by giving some scenarios and examples of secular countries. Thus, option C is incorrect.

Hence, the answer is option C.

52. Which of the following is the correct central theme of the passage?

- A Believing in God prevents the society from collapsing into the primeval chaos
- B Morality is a supernatural phenomenon
- C Emotions like anger, envy or happiness determine morality
- D Morality may or may not be associated with religion

**Answer:** D

**Explanation:**

The author, through the passage, argues that belief in a God and religion is not the necessary condition for a person to be moral. They give examples to further elaborate on this point. They also mention religion is the source of morality in some cases and not in others. The only thing required for a person to be moral is their understanding of others' sufferings.

Options A, B and C do not represent the above-mentioned point and are invalid.

Hence, the answer is option D.

**Instructions [53 - 57 ]**

Read the following passage:

I teach undergraduate psychology courses at the University of Maryland, and my classes draw students with diverse interests. But every

one of them perks up when I pose this question: Do you want two extra-credit points on your term paper, or six points?

I tell my students that the extra-credit offer is part of an exercise illustrating the interconnectedness of choices individuals make in communities. I explain that the exercise was inspired by an ecologist named Garrett Hardin and an address that he delivered 50 years ago this summer, describing what he called “the tragedy of the commons.” Hardin said that when many individuals act in their own self-interest without regard for society, the effects can be catastrophic. Hardin used the 19th century convention of “the commons”—a cattle-grazing pasture that villagers shared— to warn against the overexploitation of communal resources.

I’m hoping that my students will grasp the connections between the classroom exercise, Hardin’s ideas, and our planet’s most pressing problems (including climate change). I allow them to choose between two points or six points of extra credit—but there’s a catch. I stipulate that if more than 10 percent of the class members choose six points, no one gets any points. The extra-credit points are analogous to water, fuel, grazing pasture (from Hardin’s analysis), or any natural resource. According to some free market economic theories, if everyone strives for maximum personal benefit, then societies will thrive. By this logic the student’s rational choice would be to pick six points, just as the shepherd’s rational choice would be to use as much grazing pasture as possible. And those who maximize personal consumption aren’t greedy—they’re strategic.

But when everyone chooses this path, the common resource is overtaxed, and societies end up with overharvesting, water shortages, or climate change. A possible solution seems simple: If everyone just moderated their consumption, we’d have sustainability. As many of my students say, “If everyone chooses two points, we’ll all get the points.” And yet, for the first eight years I used this exercise, only one class— of the dozens I taught—stayed under the 10 percent threshold. All the other classes failed.

This exercise was developed more than 25 years ago. Professor Steve Drigotas of Johns Hopkins University had been using it for some time when he administered it to me and my classmates in 2005. My class failed too—and I, who had chosen two points, was incredibly frustrated with my peers who had chosen six. In 2015 one of my students tweeted about the exercise—“WHAT KIND OF PROFESSOR DOES THIS”—and his lament went viral. People around the globe weighed in: Does so many people choosing six points mean it’s human nature to be greedy and selfish?

Actually most people aren’t. But it’s very tricky to get people to cooperate, especially in large groups of complete strangers. After all, if someone else is taking more for themselves (running more water or choosing six points), why shouldn’t I? But if we all think this way, eventually we’ll all lose.

Hardin suggested that education might make a difference—that if we teach people about the consequences of taking too much, they might not. I’ve been skeptical about this idea. When my student’s tweet went viral, some colleagues said that I wouldn’t be able to use the exercise again (because students would already know how it works). I laughed. If it were only that easy! My suspicion was justified. Even after the exercise got wide exposure, my students still failed the challenge to get the extra-credit points.

Despite this I remain optimistic. After all, most of my students, about 80 percent, choose two points—just as most people choose to cooperate in real-world situations. Most of us want to do what’s right. But that alone won’t solve our problems, so we need to think creatively and use behavioral science to find solutions.

In 2016 I decided to change things up. In hopes of finding a way to increase cooperation, I drew from the scientific literature on social groups and introduced a third option: Students could choose two points, six points—or zero points. That’s right. Zero. Why would anyone do that? Well, for each student who chose zero points, one of the six-point choosers (selected randomly) would lose everything, reducing the total number of six-point choosers by one.

The zero-point option is self-sacrificial; students forgo points for themselves in order to help the group by restraining those who take too much. In behavioral experiments this type of action is called altruistic punishment, a term coined by economists Ernst Fehr and Simon Gächter. Their research documented people willingly giving up some of their own resources in order to punish those who behave selfishly in a group context—and doing so in the belief that every individual profits from increased cooperation.

Usually a few of my students each semester choose the zero-point option, and sometimes that’s all it takes. Just a handful of people can make a huge difference— that is, a few self-sacrificing students can bring down the total number of six-point choosers to below the 10 percent threshold. This additional element has dramatically increased cooperation in my courses. Now roughly half my classes receive the extra credit points. In my opinion this is a remarkable turnaround. And some of my classes have done this without anyone actually choosing the zero-point option; simply knowing it was available was enough to increase cooperation.

Though this type of solution may work on the small scale of a classroom, won’t we need much larger action to curb global problems like climate change? Yes, but the principle is the same—it’s about collective action and reducing overconsumption. For example, recently I started volunteering with Citizens’ Climate Lobby (CCL), an organization that advocates for a policy known as carbon fee and dividend. This plan would put a steadily rising fee on fossil fuels and distribute the money raised back to American households (to protect families against rising costs). Ultimately this would reduce fossil fuel consumption by making this type of energy more expensive to use— so reducing consumption would be better for both our wallets and the environment. At CCL, volunteers meet with lawmakers and conduct outreach to the community. Through our efforts—again, collective action—we gain allies in Congress and the public. By early this year the House’s bipartisan Climate Solutions Caucus had 70 members (half Democrats and half Republicans) from states across the country. The challenge that Garrett Hardin described 50 years ago remains today: Our survival depends on each of us and all of us conserving the commons. I choose to remind myself of that with these wise and hopeful lines from the Beatles: “All the world is birthday cake / so take a piece / but not too much.”

53. **Central theme of the passage is about:**

- A** Free market economic theories are antithetical to the idea of societal harmony.
- B** Interconnectedness of choices individuals make in communities.
- C** Viewing our neighbors as equal partners in classroom behavior.
- D** Exploring ways to build common ground between greedy and selfless people.

**Answer: B**

**Explanation:**

The author talks about the choices people make and how they can affect them and the people around them. In the experiment done by the author, the choice made by every student affects the grades of the entire class. The author then compares the situation to the choices that all the people will have to make regarding climate change.

Thus, the author wants to convey the interconnectedness of choices made by people.

Hence, the answer is option B.

54. **Identify the CORRECT statement:**

- A** Professor Garrett Hardin conducted the experiment on author to demonstrate about the tragedy of the commons
- B** Author undoubtedly believed that educating people to cooperate will generate positive result.
- C** Author was optimistic that by adding six-points, his students will pass the test
- D** Taking only 2 or even lesser bonus points is the option suggested for sustainability.

**Answer: D**

**Explanation:**

Prof. Hardin did not conduct the experiment on the author. Hence, option A is eliminated.

The author says, "*Hardin suggested that education might make a difference—that if we teach people about the consequences of taking too much, they might not. I've been skeptical about this idea.*" Thus, option B is also rejected.

Option C is contradictory to the main idea of the passage and hence, is rejected.

Option D is the main idea behind the experiment. Hence, the answer is option D.

55. **Identify the INCORRECT statement(s):**

- A. Our survival depends on the choices that each one of us makes.**
- B. Beatles seem to be suggesting that "the world has enough for everyone's needs, but not everyone's greed."**
- C. Almost half of the students failed in the tests that were conducted by author in his classes.**
- D. When the tweet became viral, author's colleagues were convinced that the exercise will still generate the same result because its human nature to be greedy and selfish.**

- A** Only A and B
- B** A, B and C
- C** Only C and D
- D** A, B, C and D

**Answer: C**

**Explanation:**

Statement A is the main theme of the passage and is hence, true.

Statement B can be inferred from the last line of the passage, " I choose to remind myself of that with these wise and hopeful lines from the Beatles: "All the world is birthday cake / so take a piece / but not too much.""

Statement C is not true according to the passage.

Statement D is incorrect as the author says, "When my student's tweet went viral, some colleagues said that I wouldn't be able to use the exercise again (because students would already know how it works)."

Hence, the answer is option C.

56. Which of the following can be inferred from the passage?

- A A few people who recycle or compost can have an inverse effect on others' lifestyles.
- B A few students can help an entire class gain a leg up in the course.
- C Each one's individual choice is vital for determining the end result.
- D Even with the sacrifice of few, society will not gain much.

**Answer: B**

**Explanation:**

Option A goes against the main idea of the passage and can be eliminated.

Option B is the main idea behind the passage. Hence, it is the answer.

Option C is true but too general to be the answer.

Option D goes against the main purpose of the passage.

57. "But every one of them perks up when I pose this question". The appropriate meaning of this sentence would be:

- A Students are baffled
- B Students are cheerful.
- C Students fret upon hearing this.
- D Students become inquisitive.

**Answer: A**

**Explanation:**

"To perk up" means to become lively or happy.

Hence, the answer is option A.

58. Complete the following Idioms by matching List I with List II

List I	List II
A. Upset the ----- cart	I. Lemon
B. All Lombard street to a China	II. Cherry
C. A bite at the -----	III. Orange
D. The answer's a -----	IV. Apple

Choose the correct answer from the options given below:

- A A - III, B - I, C - II, D - IV

**B** A - IV, B - III, C - II, D - I

**C** A - III, B - II, C - I, D - IV

**D** A - III, B - II, C - IV, D - I

**Answer:** B

**Explanation:**

The first idiom is "Upset the apple cart".

Only option B matches A with 4.

Hence, the answer is option B.

59. **Certain foreign words are frequently used in English language. Identify the origin of the given words:**

**I. coup d'etat**

**II. fait accompli**

**III. tete-e-tete**

**IV. elite**

**A** All are Spanish

**B** All are French

**C** All are Latin

**D** All are Anglo-Indian

**Answer:** B

**Explanation:**

All the mentioned words have a French origin.

Hence, the answer is option B.

60. **Find the most appropriate word from the given options, which best describes the meaning provided in the question.**

**Meaning: The study of inscriptions**

**A** Cacography

**B** Calligraphy

**C** Epigraphy

**D** Pantography

**Answer:** C

**Explanation:**

The study of written matter/inscriptions is called "Epigraphy". Hence, the answer is option C.

"Cacography" means bad handwriting.

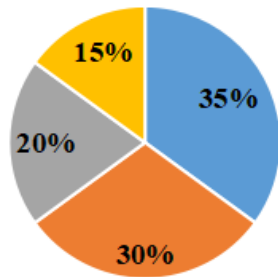
"Calligraphy" means the art of writing beautifully.

"Pantography" means to copy something.

**Instructions [61 - 64 ]**

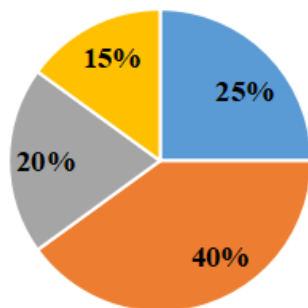
The pie charts given below depict the percentage production breakup of 4 crops viz maize, corn, soyabean and wheat in the world and USA respectively. Assume that the total world production of these crops in a given year is 160 million tonnes.

**Total World Production = 160 Million tonnes**



■ Soyabean ■ Maize ■ Corn ■ Wheat

**Food Crops Production in USA**



■ Soyabean ■ Maize ■ Corn ■ Wheat

In all the questions, 'ROW' means rest of the world other than USA.

61. Given that USA accounts for 20 percent of the total production of soyabean in the world then what percentage of the total food crops production of the world is accounted by USA?

- A 12 percent
- B 24 percent
- C 28 percent
- D 30 percent

**Answer: C**

**Explanation:**

Given: 20% of total soyabean production of the world is from USA

Thus, Let the total world production of crops be P.

Thus, USA's production of soyabean =  $0.2 \times 0.35 \times P = 0.07P = 7\%$  of the total productions of crops.

Soyabean productions constitutes 25% of the total crop production in the USA.

Thus, percentage of total crop production accounted by the USA =  $\frac{7\%}{0.25} = 28\%$

Hence, the answer is option C.

62. Assume that the total production of maize in the USA is 3 million tonnes. Calculate the percentage (approximately) of the total production of food crops in the world accounted by the USA?

- A 3.55 percent
- B 4.68 percent
- C 5.75 percent
- D 7.82 percent

**Answer: B**

**Explanation:**

The total production of maize in the USA is 3 million tonnes and maize constitutes 40% of the total production of the USA.

Thus, total crop production in the USA =  $\frac{3}{0.4} = 7.5$  million tonnes.

Thus, the percentage of the total production of crops in the world accounted for by the USA =  $\frac{7.5 \times 100}{160} = 4.68\%$

Hence, the answer is option B.

63. **If the ratio of production of wheat in USA and ROW is 1:6, then (approximately) what percentage of total food crop production of the ROW is accounted for by wheat?**

- A 5 percent
- B 8 percent
- C 12 percent
- D 15 percent

**Answer: D**

**Explanation:**

Total wheat production of the world = 15% of the total crop production of the world

= 15% (Crop production of the USA + Crop production of ROW)

= 15%(USA production) + 15%(ROW crop production) ... (1)

To find the percentage of crop production of ROW accounted for by wheat, we have to remove the wheat production of the USA.

Wheat production of the USA = 15% (USA production) ... (2)

Thus, the total wheat production of the ROW = 15%(ROW crop production)

Thus, wheat accounts for 15% of the total crop production of the ROW.

Hence, the answer is option D.

Alternately,

Since the wheat accounts for 15% of the total production of the World and the USA, it will also account for the 15% of the total crop production of the ROW.

64. **USA produces 20 percent lesser corn than ROW, find the production of soyabean in USA?**

- A 14.35 million tonnes
- B 8.75 million tonnes
- C 12.25 million tonnes
- D 17.75 million tonnes

**Answer: D**

**Explanation:**

Let the total production of crops in the USA, World and ROW be denoted by U, W and R, respectively.



Thus,  $0.2(U) = 0.8[0.2W - 0.2U]$

$$0.36U = 0.16W$$

$$U = \frac{4}{9}W$$

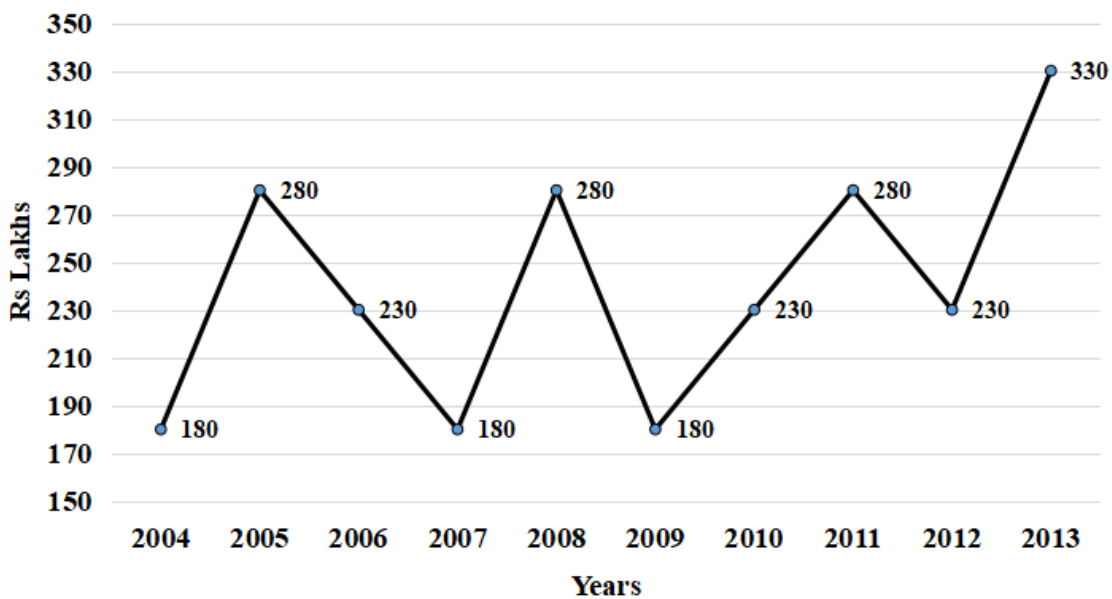
Thus, production of soybean in the USA =  $0.25U = 0.25 \times \frac{4}{9}W = 0.25 \times \frac{4}{9} \times 160 = 17.75$  million tonnes.

Hence, the answer is option D.

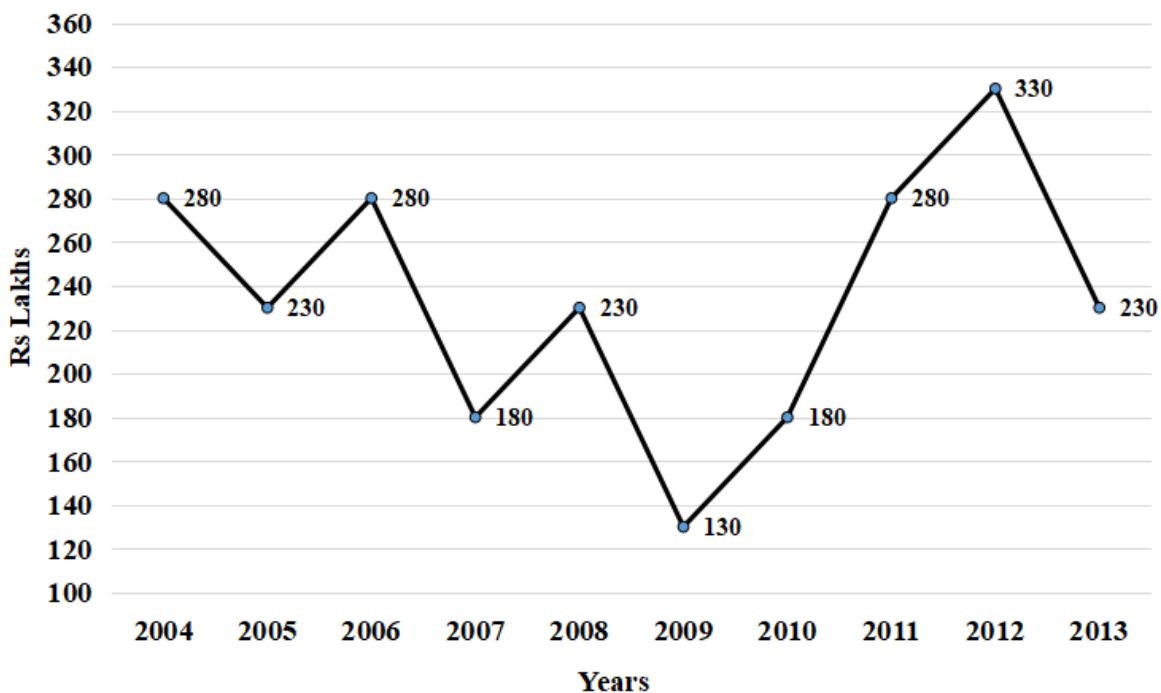
### Instructions [65 - 68 ]

Refer to the following line charts and solve the questions based on them. The line charts given below give the expenditure and income of ABC Ltd. Which produces and sells only two variants of its rice - Basmati rice and Parmal rice.

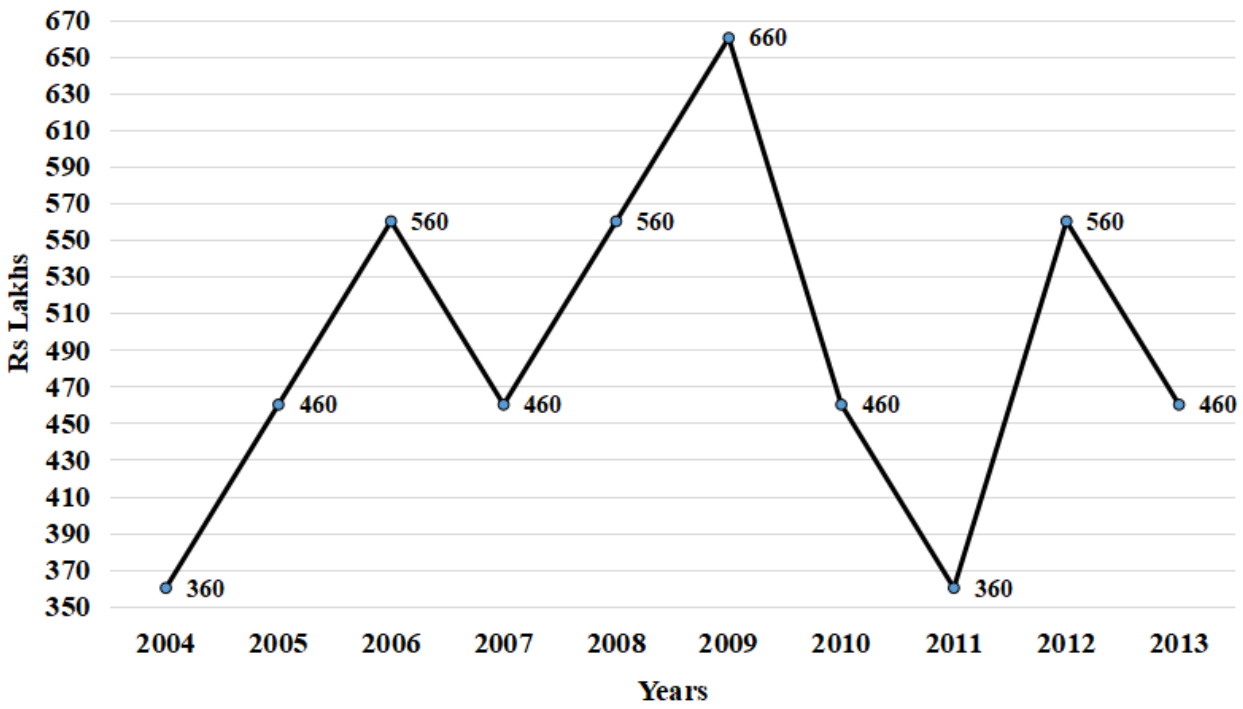
#### Expenditure on Basmati Rice



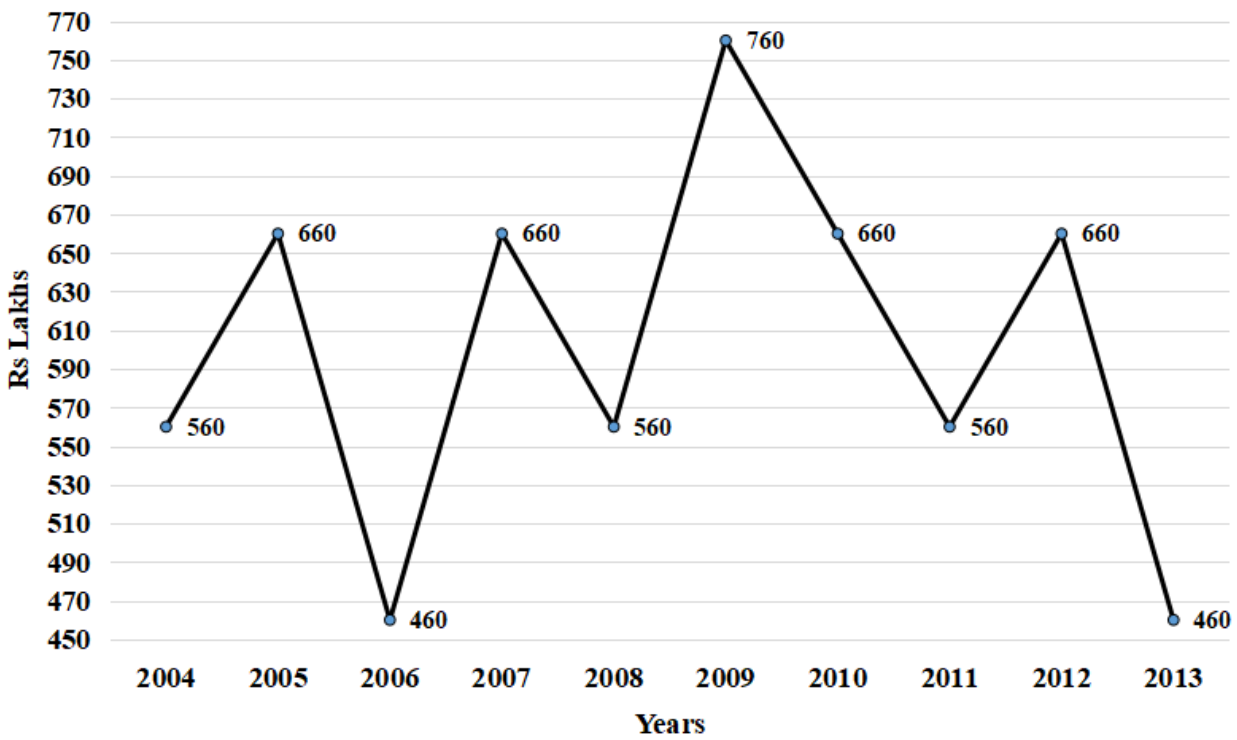
#### Expenditure on Parmal Rice



**Income from Parmal Rice**



**Income from Basmati Rice**



65. The total profit of ABC Ltd. is highest in which of the following years?

- A 2007
- B 2009
- C 2012
- D 2004

**Answer: B**

**Explanation:**

Option A: Profits for 2007 = 1120 - 360 = 760

Option B: Profits for 2009 = 1420 - 310 = 1110

Option C: Profits for 2012 = 1220 - 560 = 660

Option D: Profits for 2004 = 920 - 460 = 460

Thus, the maximum profit is in the year 2009.

Hence, the answer is option B.

66. Calculate the number of years during 2005 to 2013 for atleast one of the two rice when income and expenditure did not follow the same trend (i.e both income and expenditure did not increase or decrease simultaneously compared to the previous year)?

A 5

B 6

C 8

D 9

**Answer: C**

**Explanation:**

We have to count the years in which at least one of the rice's income and expenditure shows an opposite trend.

2005: Parmal rice has an opposite trend.

2006: None of the rice has opposite trends.

2007: Basmati rice has an opposite trend.

2008: Basmati rice has an opposite trend.

2009: Both the rice show an opposite trend.

2010: Both the rice show an opposite trend.

2011: Both the rice show an opposite trend.

2012: Basmati rice has an opposite trend.

2013: Basmati rice has an opposite trend.

Thus, all the years except 2008 have at least one rice showing an opposite trend in income and expenditure.

Thus, there are a total of 8 years.

Hence, the answer is option C.

67. The percentage annual increase in the income of Basmati rice is highest in which of the following years?

A 2005

B 2007

C 2009

D 2012

**Answer: B**

**Explanation:**

Option A: For 2005 =  $\frac{660-560}{560} \times 100 = \frac{10000}{560} = 17.85\%$

Option B: For 2007 =  $\frac{660-460}{460} \times 100 = \frac{20000}{460} = 43.47\%$

Option C: For 2009 =  $\frac{760-560}{560} \times 100 = \frac{20000}{560} = 35.71\%$

Option D: For 2012 =  $\frac{660-560}{560} \times 100 = \frac{10000}{560} = 17.85\%$

Hence, the answer is option B.

68. In which year the annual percentage decrease in the profit of parmal rice is maximum as compared to that of the previous year?

- A 2009
- B 2010
- C 2011
- D 2013

**Answer:** C

**Explanation:**

Profit for 2008 = 330

Profit for 2009 = 530

Profit for 2010 = 280

Profit for 2011 = 80

Profit for 2012 = 230

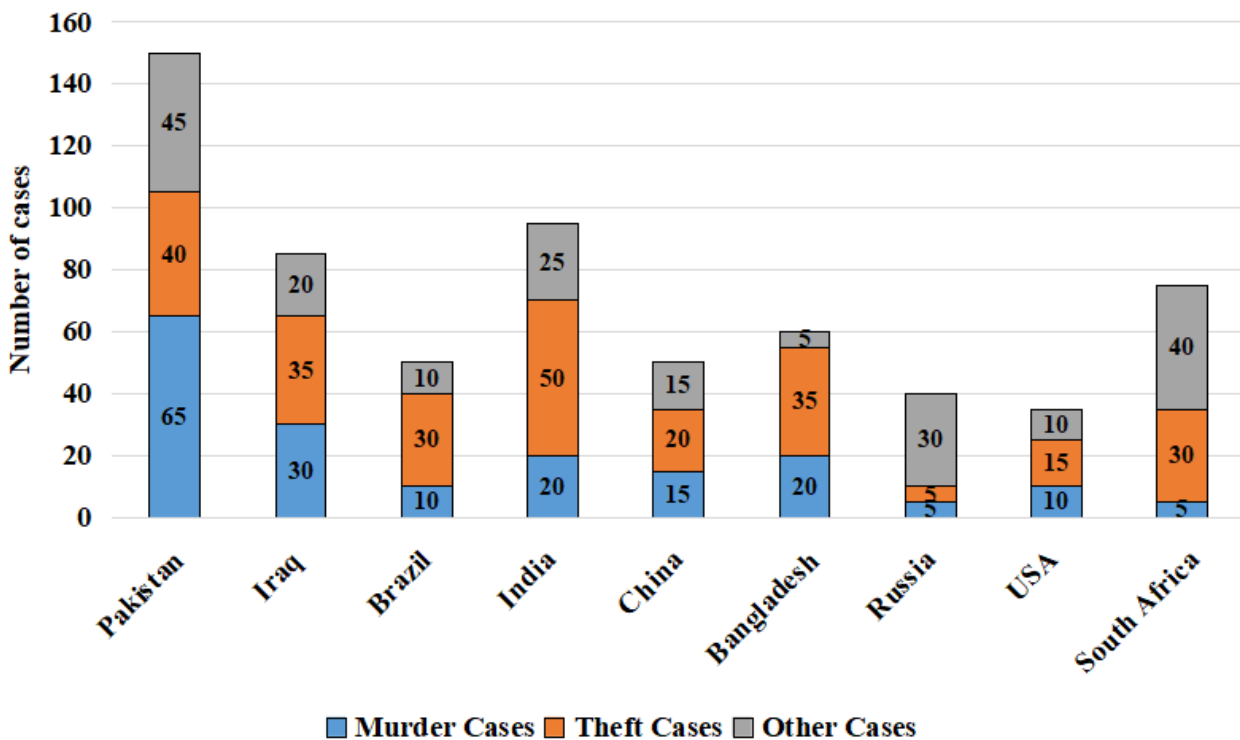
Profit for 2013 = 230

From the above trend, we can observe that the maximum decrease is in the year 2011.

Hence, the answer is option C.

**Instructions [69 - 72 ]**

The graph below depicts the crime cases registered against foreigners in different countries in a given year. The crime cases are classified into three categories: Murder cases, theft cases and other cases. The data for nine countries are shown in the figure below. These nine countries belong to the top ten countries in terms of the total number of cases registered. The tenth country is Malaysia, where only 523 theft cases were registered.



The table below shows the rank of the ten countries in terms of the number of cases registered in each of the three categories of crimes. If two countries are assigned rank 2nd, then for any given crime, 3rd rank cannot be assigned to any country.

Countries	Murder Cases	Theft Cases	Other Cases
Pakistan	*	*	*
Iraq	*	4	*
Brazil	6	6	*
India	3	2	*
China	*	8	*
Bangladesh	3	4	9
Russia	8	10	*
USA	6	9	*
South Africa	8	6	2
Malaysia	10	*	10

69. The rank of China in the murder cases category is?

- A 2<sup>nd</sup>
- B 5<sup>th</sup>
- C 7<sup>th</sup>
- D 8<sup>th</sup>

**Answer: B**

Explanation: br/>

	Murder cases	Theft cases	Other cases
Pakistan	1	3	1
Iraq	2	4	5
Brazil	6	6	7
India	3	2	4
China	5	8	6
Bangladesh	3	4	9
Russia	8	10	3
USA	6	9	7
SouthAfrica	8	6	2
Malaysia	10	1	10

The rank of China in murder cases is 5.

Answer is option B.

70. In the top two countries on the basis of total registered cases, the approximate ratio of total number of murder cases to total number of theft cases is

- A 1:6
- B 1:7
- C 1:9
- D 1:4

**Answer: C**

Explanation:

	Murder cases	Theft cases	Other cases
Pakistan	1	3	1
Iraq	2	4	5
Brazil	6	6	7
India	3	2	4
China	5	8	6
Bangladesh	3	4	9
Russia	8	10	3
USA	6	9	7
SouthAfrica	8	6	2
Malaysia	10	1	10

The sum of murder cases in top two countries = 0 + 65 = 65

The sum of theft cases in top two countries = 523 + 40 = 563

Ratio = 65:563 = 1 : 8.66  $\approx$  1 : 9

Answer is option C.

71. Which of the following is correct about the ranks of countries in the other crimes category?

i) USA: 7

ii) Russia: 3

- A Only (i) is correct
- B Only (ii) is correct
- C Both (i) and (ii) are correct
- D Both (i) and (ii) are incorrect

**Answer: C**

**Explanation:**

	Murder cases	Theft cases	Other cases
Pakistan	1	3	1
Iraq	2	4	5
Brazil	6	6	7
India	3	2	4
China	5	8	6
Bangladesh	3	4	9
Russia	8	10	3
USA	6	9	7
SouthAfrica	8	6	2
Malaysia	10	1	10

The rank of USA in other crimes is 7 and the rank of Russia in other crimes is 3. Therefore, both (i) and (ii) are correct.

Answer is option C.

72. The sum of the ranks of Pakistan in the three categories of crimes is?

- A 4
- B 7
- C 5
- D 10

**Answer: C**

**Explanation:**

	Murder cases	Theft cases	Other cases
Pakistan	1	3	1
Iraq	2	4	5
Brazil	6	6	7
India	3	2	4
China	5	8	6
Bangladesh	3	4	9
Russia	8	10	3
USA	6	9	7
SouthAfrica	8	6	2
Malaysia	10	1	10

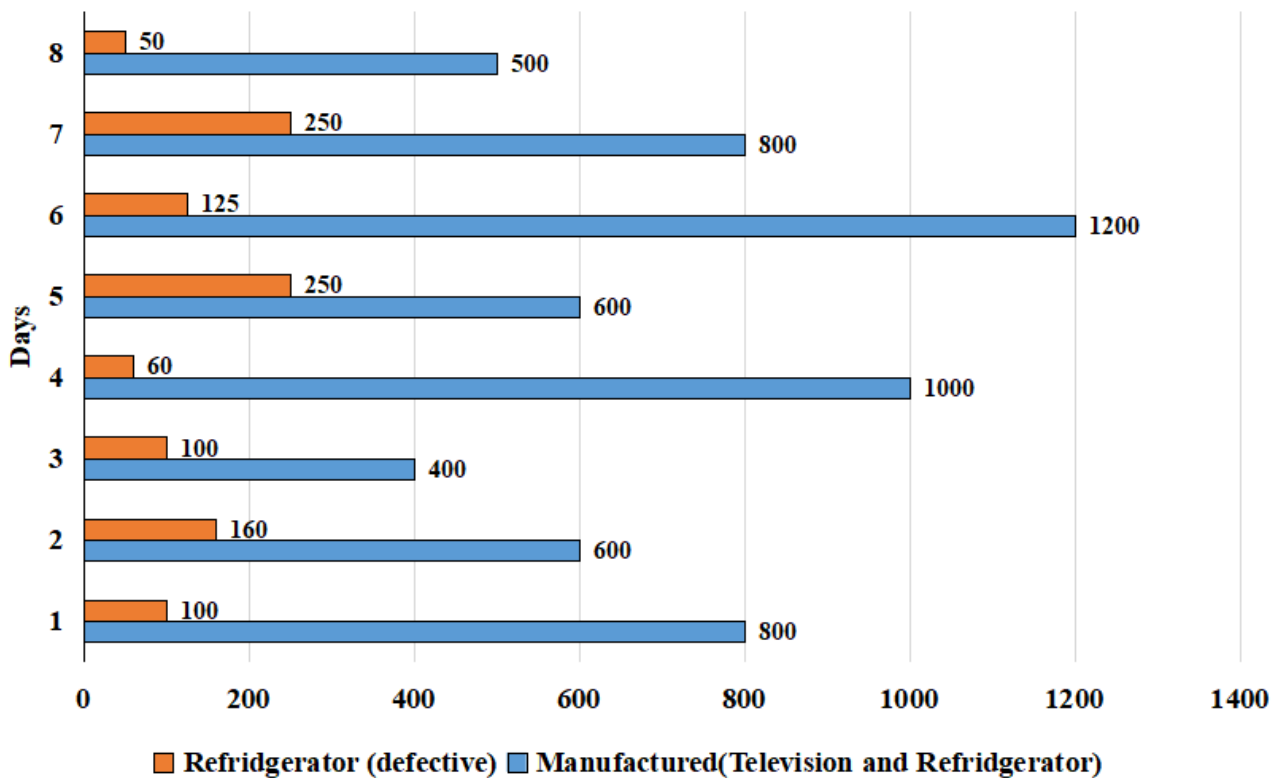
The sum of ranks of Pakistan in three categories =  $1 + 3 + 1 = 5$

Answer is option C.

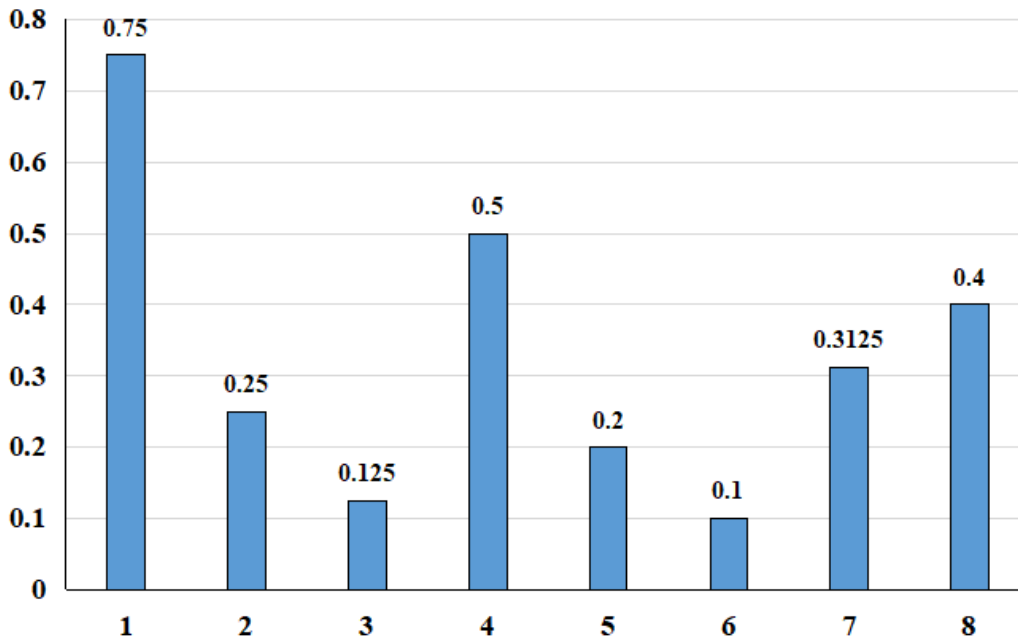
#### Instructions [73 - 76 ]

The following graph provides data about the refrigerators and television sets manufactured by XYZ company in 8 days - day1 to day8. However, on each day after quality check (QC) some products were found to be defective. The attached bar chart provides data about aggregate number of refrigerators and televisions manufactured by the company and the number of refrigerators found defective after QC on each day of the given eight days.

All the televisions and refrigerators which cleared the QC were packed for selling.



The bar chart given below provides information about the fraction of the number of televisions found defective to number of televisions which cleared the QC.



73. If the number of televisions which cleared the quality check (QC) on each of the given eight days is same, then at least how many refrigerators cleared the QC on day 3?

- A 20
- B 30
- C 25
- D 40

**Answer:** B

**Explanation:** T-QC is same for all the days, then they should be in the form of  $80k$ .  $LCM(4,8,2,5,10,16,5)$

T-total on day 3 =  $90k$

T-total should be maximum to find the minimum value of refrigerators cleared QC.

T-total maximum = 270

Number of refrigerators =  $400 - 270 = 130$

R-QC = R-total - R-defective =  $130 - 100 = 30$

Answer is option B.

74. On how many of the given 8 days the number of refrigerators which cleared the quality check can be zero?

- A 1
- B 2
- C 3
- D 5

**Answer:** B

**Explanation:** e number of refrigerators which cleared the quality check is zero, then the total number of refrigerators is equal to the total number of defective refrigerators.

Televisions = Total manufactured - refrigerators

Day 1:  $800 - 100 = 700$  is multiple of 7a

Day 2:  $600 - 160 = 440$  is multiple of 5c



Similarly, calculating for the remaining days, you will get that it is only possible on day 1 and day 2.  
The answer is option B.

75. Which of the following can be the ratio of number of televisions and refrigerators which cleared the quality check on day1?

- A 1:4
- B 1:5
- C 1:6
- D 1:7

**Answer:** D

**Explanation:** e number of televisions which cleared quality check on day 1 =  $4a$

The number of refrigerators which cleared quality check on day 1 =  $800 - 7a - 100 = 700 - 7a$

$$\text{Ratio} = \frac{4a}{700-7a}$$

Only option D satisfies the above equation.

The answer is option D.

76. Given that the number of televisions which cleared the quality check on each of the eight days is equal to 'X', then how many distinct values of X are possible?

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

**Answer:** B

**Explanation:** >

$X = 80k$  which can take only 3 values, i.e. 80, 160 and 240

Answer is option B.

### Instructions [77 - 79 ]

Read the following passage:

Ten teams have submitted their nominations for a reputed Hackathon. They were first divided in two groups of 5 teams each: Ghost Riders to The Capitalists (group 1); and Team Intelligence to Dr Bigbull (group 2). In the competition, each team from one group had to pitch their idea against the each team from another group. For example Ghost Riders will have to pitch their idea against each team in group 2. The following table gives partial information about the final scoresheet at the end of the competition:

Group 1 Vs. Group 2		Group 2					
		Vs. Team Intelligence	Vs. Evil Masterminds	Vs. Golden Hawks	Vs. Screaming Eagles	Vs. Dr Bigbull	Points
Group 1	Ghost Riders				Tie		7
	Tech Pirates		Lost*		Lost		9
	Super Sellers						15
	The Think Tank					Won	17
	The Capitalists			Won		Won	14
	Points	12	10	14	9	12	

Note: \* To be read as "Tech Pirates" lost the idea presentation round against "Evil Masterminds".

For group 1 - The total points earned by each teams have been given in the last column e.g. Ghost Rider has scored 7 points overall.

For group 2 - The total points earned by each teams have been given in the last row e.g. Team Intelligence has scored 12 points overall.

In addition to this, the golden Hawks did not lose the presentation round against The Think Tank.

Point rule:

- (i) If a team Wins, the winning team will get 5 points;
- (ii) If there is a tie, both teams will get 2 points each; and
- (iii) If a team lost the match, the losing team will get 0 points.

77. What was the result of presentation round between The Think Tank and Evil Masterminds?

- A The Think Tank Lost
- B Evil Masterminds Lost
- C A tie
- D Insufficient information provided

**Answer:** B

**Explanation:**

The given table is as follows.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR				T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS						15	5, 5, 5, 0, 0
TTT					W	17	5, 5, 5, 2, 0
TC			W		W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Consider TC's points breakup. It won against GH and DB. It has two ties. Looking at the points breakups of the Teams in group 2, we can see that only TI and SE could have tied against TC. Thus, TC lost against EM.

Now, since SE has ties against TC and GR and won against TP, it must have lost its remaining matches.

EM won against TP and TC. Thus, it must have lost against GR, SS and TTT.

The table now becomes as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR		W		T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS		W		W		15	5, 5, 5, 0, 0
TTT		W		W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

GR must have lost against TI, GH and DB.

TTT could have only tied against GH. Thus, it lost against TI.

TI won against GR and TTT and tied against TC. Thus, it must have lost against TP and SS.

Thus, TP must have tied against GH and DB

SS lost against GH and DB.

Thus, the final table looks as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR	L	W	L	T	L	7	5, 2, 0, 0, 0
TP	W	L	T	L	T	9	5, 2, 2, 0, 0
SS	W	W	L	W	L	15	5, 5, 5, 0, 0
TTT	L	W	T	W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Thus, Evil Masterminds lost against The Think Tank.

Hence, the answer is option B.

78. Tech Pirates had a tie against which of the following team(s)?

I. Team Intelligence

II. Screaming Eagles

III. Dr Bigbull

IV. Golden Hawks

Choose the correct option?

- A Only I
- B Both II and III
- C Only III
- D Both III and IV

**Answer:** D

**Explanation:**

The given table is as follows.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR				T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS						15	5, 5, 5, 0, 0
TTT					W	17	5, 5, 5, 2, 0
TC			W		W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Consider TC's points breakup. It won against GH and DB. It has two ties. Looking at the points breakups of the Teams in group 2, we can see that only TI and SE could have tied against TC. Thus, TC lost against EM.

Now, since SE has ties against TC and GR and won against TP, it must have lost its remaining matches.

EM won against TP and TC. Thus, it must have lost against GR, SS and TTT.

The table now becomes as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR		W		T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS		W		W		15	5, 5, 5, 0, 0
TTT		W		W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

GR must have lost against TI, GH and DB.

TTT could have only tied against GH. Thus, it lost against TI.

TI won against GR and TTT and tied against TC. Thus, it must have lost against TP and SS.

Thus, TP must have tied against GH and DB

SS lost against GH and DB.

Thus, the final table looks as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR	L	W	L	T	L	7	5, 2, 0, 0, 0
TP	W	L	T	L	T	9	5, 2, 2, 0, 0
SS	W	W	L	W	L	15	5, 5, 5, 0, 0
TTT	L	W	T	W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Thus, TP had a tie against GH and DB.

Hence, the answer is option D.

79. Following are four statements:

- I. Golden Hawks won the presentation round against Super Sellers.
  - II. Evil Masterminds won the presentation round against Ghost Riders.
  - III. Screaming Eagles won the presentation round against The Think Tank.
  - IV. The presentation round between The Capitalist and Team Intelligence resulted in a tie.
- Choose the correct option:

- A Statement I is true, and Statement II is false.
- B Both statement II and Statement IV are true.
- C Only statement I is true.
- D Only statement III is false.

**Answer: A**

**Explanation:**

The given table is as follows.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR				T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS						15	5, 5, 5, 0, 0
TTT					W	17	5, 5, 5, 2, 0
TC			W		W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Consider TC's points breakup. It won against GH and DB. It has two ties. Looking at the points breakups of the Teams in group 2, we can see that only TI and SE could have tied against TC. Thus, TC lost against EM.

Now, since SE has ties against TC and GR and won against TP, it must have lost its remaining matches.

EM won against TP and TC. Thus, it must have lost against GR, SS and TTT.

The table now becomes as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR		W		T		7	5, 2, 0, 0, 0
TP		L		L		9	5, 2, 2, 0, 0
SS		W		W		15	5, 5, 5, 0, 0
TTT		W		W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

GR must have lost against TI, GH and DB.

TTT could have only tied against GH. Thus, it lost against TI.

TI won against GR and TTT and tied against TC. Thus, it must have lost against TP and SS.

Thus, TP must have tied against GH and DB

SS lost against GH and DB.

Thus, the final table looks as given below.

	TI	EM	GH	SE	DB	Points	Points Breakup
GR	L	W	L	T	L	7	5, 2, 0, 0, 0
TP	W	L	T	L	T	9	5, 2, 2, 0, 0
SS	W	W	L	W	L	15	5, 5, 5, 0, 0
TTT	L	W	T	W	W	17	5, 5, 5, 2, 0
TC	T	L	W	T	W	14	5, 5, 2, 2, 0
Points	12	10	14	9	12		
Points breakup	5, 5, 2, 0, 0	5, 5, 0, 0, 0	5, 5, 2, 2, 0	5, 2, 2, 0, 0	5, 5, 2, 0, 0		

Hence, the answer is option A.

### Instructions [80 - 82 ]

Read the following passage:

In 2021, IIFT has announced the "Student of the year" competition which has twosteps: - the preliminary stage and the final stage. The preliminary stage comprised of overall academic excellence in the five trimesters of the coursework. When the results of the preliminary stage were announced, it was found that only five students -Aavanya, Aarav, Saanvi, Vagisha, and Raghav qualified to compete in the final stage of "Student of the year 2021" competition. In the final stage there were five rounds of extra-curricular activities wherein the students could score from 1 to 10 points in each round. These five extra-curricular activity rounds were Debate, Extempore, Business quiz, B-plan competition, and Case Study analysis. The student with maximum points across these five rounds would be considered as winner and would take the prestigious trophy of "Student of the year 2021".

So at the end of these five rounds of competitions, when the Jury asked for the scorecard to find out the final winner, the scorer informed them that due to some technical glitches several entries have been deleted and jury was presented with following table:

	Debate round	Extempore round	Business quiz round	B-plan competition round	Case study analysis round	Total
Aavanya	10		7		9	35
Aarav	7					
Saanvi			5		6	
Vagisha				8		33
Raghav		3	10			29

However, the scorer has made the following observations too:

- No two students have scored equal points in the same round.
- Vagisha has scored an odd number point in case study analysis round.
- Aarav's total score point was in the multiple of 8, and it was the least among all.
- There was no tie between any two students in the overall/total points.
- Vagisha has scored same points in the following rounds: Debate round, and Extempore round.
- None of the missing scores were less than 4 in any round.
- Aavanya won the competition and won the prestigious trophy of "Student of the year 2021".

80. Choose the correct pair of possibilities:

Possibility I: Raghav scored 8 points in debate round.

Possibility II: Vagisha's score in extempore round is twice of Aarav in the same round.

Possibility III: Vagisha scored 6 points in the debate round.

Possibility IV: Vagisha scores more points than Aavanya in the business quiz round.

- A Possibility I and possibility II are true.
- B Possibility II and possibility III are true.
- C Only Possibility III is true.
- D Possibility I and possibility IV are true.

**Answer:** C

**Explanation:** no two students have scored equal points in the same round.

Let Vagisha's score in the Debate and Extempore rounds be  $x$ . Thus, the table becomes as shown below.

Student	Debate	Extempore	BQ	BP	CP	Total
Aavanya	10	5/4	7	4/5	9	35
Aarav	7	4/5	4	5/4	4	24
Saanvi			5		6	
Vagisha	$x$	$x$		8		33
Raghav		3	10			29

Possibility (I): Raghav scored 8 points in the debate round.

The total value of the blanks will be =  $29 - 8 - 3 - 10 = 7$ . Since each of the blanks has at least 4 points, this case is not possible.

Possibility (II): Vagisha's score in the extempore round is twice of Aarav's in the same round.

Thus,  $x = 8$  or  $10$

If  $x = 8$ , the total of remaining blanks =  $33 - 8 - 8 - 8 = 9$ . The only possible values for the blanks are 4 and 5. Since, Both BP and CP already have 4 points, Vagisha cannot get 4 points. Thus, this case is not possible.

If  $x = 10$ , the total of remaining blanks =  $33 - 8 - 10 - 10 = 5$ . Thus, this case is also not possible.

Possibility (III): Vagisha scored 6 points in the debate round.

If  $x = 6$ , the total of remaining blanks =  $33 - 8 - 6 - 6 = 13$ . In this case, the remaining scores can be 6 and 7, respectively, such that it satisfies the condition in statement 2. Thus, this case is possible.

Possibility (IV): Vagisha scores more points than Aavanya in the business quiz round.

Let Vagisha scores 8 points in BQ and  $x = 4$ . Thus, Vagisha's points in the CP round =  $33 - 4 - 4 - 8 - 8 = 9$ . Since Aavanya already scored 9 points in CP, this is not possible.

Let Vagisha scores 8 points in BQ and  $x = 6$ . Thus, Vagisha's points in the CP round =  $33 - 8 - 6 - 6 - 8 = 5$ . This looks plausible but in this case, Raghav's possible points do not fit the conditions.

Similarly, for other cases, this possibility is found to be invalid.

Hence, the answer is option C.

81. If Aavanya scores 5 points in the B-plan competition round, and sum of two of the three missing values for Raghav is a prime number, then which possibility is incorrect?

Possibility I: Raghav has scored 5 points in Case-study analysis round.

Possibility II: Raghav has scored 5 points in Debate round.

Possibility III: Raghav has scored 4 points in Debate round.

- A Possibility I alone is definitely false.
- B Possibility II alone is definitely true
- C Possibility III alone is definitely true.

D All possibilities are true.

**Answer:** D

**Explanation:** 1, no two students have scored equal points in the same round.

Let Vagisha's score in the Debate and Extempore rounds be  $x$ . Thus, the table becomes as shown below.

Student	Debate	Extempore	BQ	BP	CP	Total
Aavanya	10	5/4	7	4/5	9	35
Aarav	7	4/5	4	5/4	4	24
Saanvi			5		6	
Vagisha	$x$	$x$		8		33
Raghav		3	10			29

Possibility I:

In the previous question, we have seen that Vagisha cannot score 8 in BQ. Thus, the only possibility for her score is as given in the table below.

c	Debate	Extempore	BQ	BP	CP	Total
Aavanya	10	4	7	5	9	35
Aarav	7	5	4	4	4	24
Saanvi			5		6	
Vagisha	6	6	6	8	7	33
Raghav		3	10		5	29

Thus, the sum of Raghav's points in the remaining two rounds =  $29 - 3 - 10 - 5 = 11$  which is a prime number. Hence, statement 1 is a possibility.

Possibility II:

c	Debate	Extempore	BQ	BP	CP	Total
Aavanya	10	4	7	5	9	35
Aarav	7	5	4	4	4	24
Saanvi			5		6	
Vagisha	6	6	6	8	7	33
Raghav	5	3	10	6	5	29

The sum of scores of BP and CP is 11, i.e. a prime number.

Thus, statement 2 is also a valid possibility.

Possibility III:

c	Debate	Extempore	BQ	BP	CP	Total
Aavanya	10	4	7	5	9	35
Aarav	7	5	4	4	4	24
Saanvi			5		6	
Vagisha	6	6	6	8	7	33
Raghav	4	3	10	7	5	29

The sum of scores of BP and Debate is 11, i.e. a prime number.

Thus, statement 3 is also a valid possibility.

Hence, the answer is option D.

82. Suppose, if Saanvi scores 5 points in Debate round, still wins the "Student of the Year" trophy by scoring one more point than "Aavanya" in total score; and Raghav has been given opportunity to re-appear for any two rounds, how many combinations Raghav can choose to win prestigious "Student of the Year" trophy:

A 3

B 4

C 5

D 6

**Answer:** B

### Instructions [83 - 86 ]

Read the following passage:

In an intra B-school competition, five students have participated. To facilitate a fair and blind evaluation, each student has been assigned a secret project name (i.e., Redwings, Green forest, Purple umbrella, Blue ocean, and Orange candy) randomly; and were given two awards: one for being the best in the particular management discipline (i.e., Marketing, Finance, Operations, Human Resources, and Information Technology); and one for being ranked from 1st to 5th. Only one student can be declared as winner under each category. The secret project name, management discipline, and ranking information provided above need not to be in the same order. Determine who has been assigned which secret project name, and which two awards, they received. Following set of information are also available:

- (i) The winner under marketing category was ranked just above Babita's project (which was not Purple umbrella).
- (ii) The project coded as Blue Ocean was ranked just above Babita's project (which was not winner under information technology discipline).
- (iii) The Green forest project ranked just above the winner of project under human resource discipline, and just below Chandan's project.
- (iv) The Red wings project was placed just higher than the winner of Information Technology discipline, and just below the Amar's project.
- (v) The Orange candy project ranked just above Dolly's (which wasn't the Purple umbrella) and just below the winner of project under Finance discipline.
- (vi) The winner under information technology was neither coded as Green forest, nor was it won by Eshan.

83. Dolly won the best project under which category?

- A Operations
- B Information Technology
- C Human Resource
- D Marketing

**Answer:** A

#### Explanation:

In statement 1 it is given that the winner under marketing category was ranked just above Babita's project (which was not Purple umbrella) and the project coded as Blue Ocean was ranked just above Babita's project (which was not winner under information technology discipline).

Name	Colour	Discipline
	Blue	Marketing
Babita		

In statement 3, it is given that the Green forest project ranked just above the winner of project under human resource discipline, and just below Chandan's project. Therefore, the order is Chandan-green-HR.

In statement 4, it is given that the Red wings project was placed just higher than the winner of Information Technology discipline, and just below the Amar's project. Therefore, the order is Amar-red-IT (not green, not Eshan).

In statement 5, it is given that the Orange candy project ranked just above Dolly's (which wasn't the Purple umbrella) and just below the winner of project under Finance discipline. Therefore, the order is Finance-orange-Dolly (not purple).

Only possible order is Aman-red-IT (chandan)-green-HR. Therefore,

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red		2
Chandan		IT	3
	Green		4
		HR	5

Implementing the condition given in statement 5, we will get the final arrangement.

**Final table:**



Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red	Finance	2
Chandan	Orange	IT	3
Dolly	Green	Operations	4
Eshan	Purple	HR	5

Dolly won the best project under Operations.

Answer is option A.

84. Who among the following got the award of the best project under Information Technology discipline?

- A Eshan
- B Dolly
- C Babita
- D Chandan

**Answer:** D

**Explanation:**

In statement 1 it is given that the winner under marketing category was ranked just above Babita's project(which was not Purple umbrella) and the project coded as Blue Ocean was ranked just above Babita's project (which was not winner under information technology discipline).

Name	Colour	Discipline
	Blue	Marketing
Babita		

In statement 3, it is given that the Green forest project ranked just above the winner of project under human resource discipline, and just below Chandan's project. Therefore, the order is Chandan-green-HR.

In statement 4, it is given that the Red wings project was placed just higher than the winner of Information Technology discipline, and just below the Amar's project. Therefore, the order is Amar-red-IT(not green, not Eshan).

In statement 5, it is given that the Orange candy project ranked just above Dolly's (which wasn't the Purple umbrella) and just below the winner of project under Finance discipline. Therefore, the order is Finance-orange-Dolly(not purple).

Only possible order is Aman-red-IT(chandan)-green-HR. Therefore,

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red		2
Chandan		IT	3
	Green		4
		HR	5

Implementing the condition given in statement 5, we will get the final arrangement.

**Final table:**

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red	Finance	2
Chandan	Orange	IT	3
Dolly	Green	Operations	4
Eshan	Purple	HR	5

Chandan received the award of the best project under Information Technology discipline.

Answer is option D.

85. Which of the following is the secret project name of the Eshan?

- A Blue ocean

- B** Red wings
- C** Orange candy
- D** Purple umbrella

**Answer:** D

**Explanation:**

In statement 1 it is given that the winner under marketing category was ranked just above Babita’s project(which was not Purple umbrella) and the project coded as Blue Ocean was ranked just above Babita’s project (which was not winner under information technology discipline).

Name	Colour	Discipline
	Blue	Marketing
Babita		

In statement 3, it is given that the Green forest project ranked just above the winner of project under human resource discipline, and just below Chandan’s project. Therefore, the order is Chandan-green-HR.

In statement 4, it is given that the Red wings project was placed just higher than the winner of Information Technology discipline, and just below the Amar’s project. Therefore, the order is Amar-red-IT(not green, not Eshan).

In statement 5, it is given that the Orange candy project ranked just above Dolly’s (which wasn’t the Purple umbrella) and just below the winner of project under Finance discipline. Therefore, the order is Finance-orange-Dolly(not purple).

Only possible order is Aman-red-IT(chandan)-green-HR. Therefore,

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red		2
Chandan		IT	3
	Green		4
		HR	5

Implementing the condition given in statement 5, we will get the final arrangement.

**Final table:**

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red	Finance	2
Chandan	Orange	IT	3
Dolly	Green	Operations	4
Eshan	Purple	HR	5

The secret project name of Eshan is The Purple Umbrella.

Answer is option D.

86. Which of the following are correctly matched?

	Secret Project Name	Discipline
I.	Orange Candy	Marketing
II.	Blue Ocean	Finance
III.	Red Wings	Information Technology
IV.	Green Forest	Operations
V.	Purple Umbrella	Human Resource

- A** Only II and III
- B** Only II and V
- C** Only IV and V

D Only I and II

**Answer: C**

**Explanation:**

In statement 1 it is given that the winner under marketing category was ranked just above Babita's project (which was not Purple umbrella) and the project coded as Blue Ocean was ranked just above Babita's project (which was not winner under information technology discipline).

Name	Colour	Discipline
	Blue	Marketing
Babita		

In statement 3, it is given that the Green forest project ranked just above the winner of project under human resource discipline, and just below Chandan's project. Therefore, the order is Chandan-green-HR.

In statement 4, it is given that the Red wings project was placed just higher than the winner of Information Technology discipline, and just below the Amar's project. Therefore, the order is Amar-red-IT(not green, not Eshan).

In statement 5, it is given that the Orange candy project ranked just above Dolly's (which wasn't the Purple umbrella) and just below the winner of project under Finance discipline. Therefore, the order is Finance-orange-Dolly(not purple).

Only possible order is Aman-red-IT(chandan)-green-HR. Therefore,

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red		2
Chandan		IT	3
	Green		4
		HR	5

Implementing the condition given in statement 5, we will get the final arrangement.

**Final table:**

Name	Colour	Discipline	Rank
Aman	Blue	Marketing	1
Babita	Red	Finance	2
Chandan	Orange	IT	3
Dolly	Green	Operations	4
Eshan	Purple	HR	5

Only IV and V are correct.

Answer is option C.

**Instructions [87 - 88 ]**

Read the following passage:

William and his wife Olivia have a family of three generations comprising of thirteen members. Some of Olivia's children are married, but none of her grandchildren is married.

- I. Olivia has a daughter-in-law named Victoria and two son-in-laws, one being Jack.
- II. James brother is Michael.
- III. Michael has two nephews and two nieces, one being Luna.
- IV. Victoria, who is sister-in-law to Michael, has four nephew and nieces. Victoria has no children.
- V. Parker, who is married to Charlotte in the family has a daughter Violet and a son.
- VI. John has a sister and two cousins, Dylan and Violet.

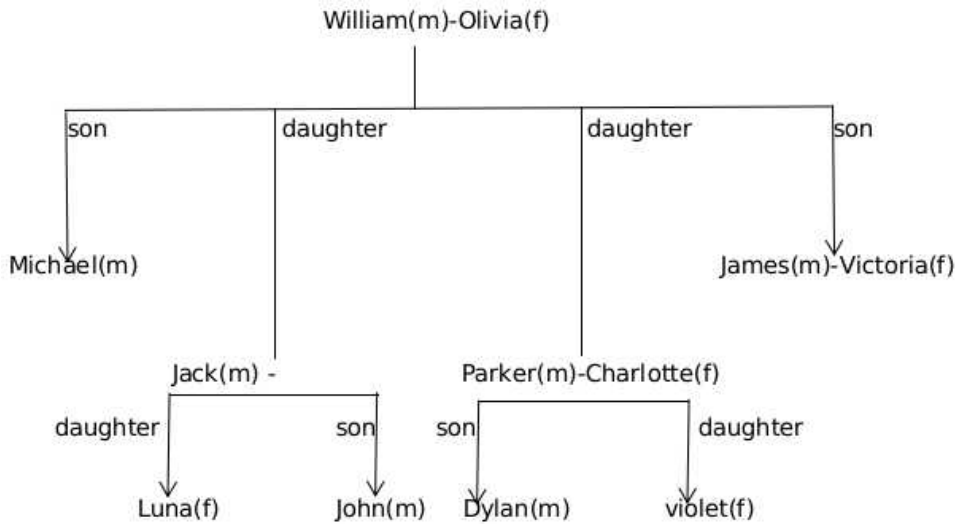
Answer the following based on above informations:

87. **Who is Charlottes son?**

- A John
- B Dylan
- C James
- D Michael

**Answer: B**

Explanation:



Charlotte's son is Dylan.

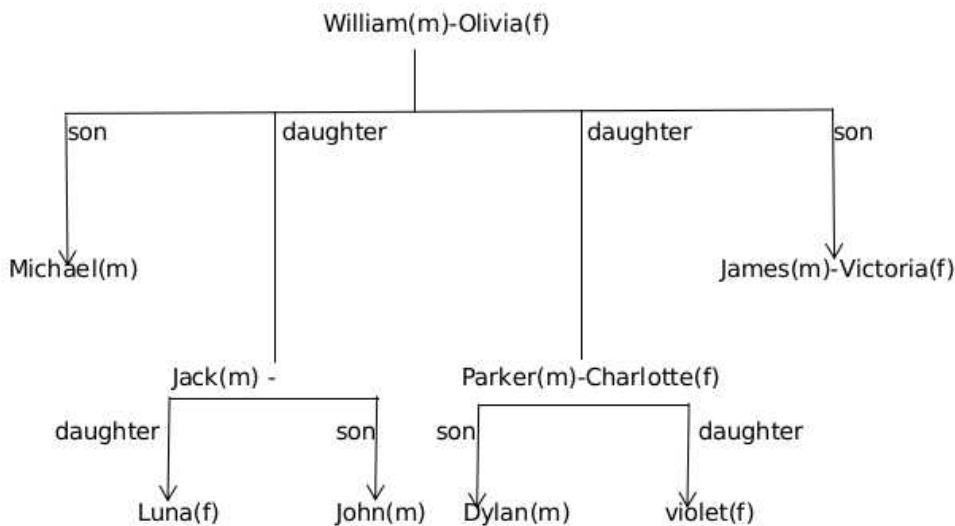
Answer is option B.

88. Who is Jack's daughter?

- A Charlotte
- B Victoria
- C Luna
- D Violet

Answer: C

Explanation:



Jack's daughter is Luna.

Answer is option C.

89. In a certain language, "ba tu qui zu" implies "zomato provides food delivery". In the same language "ra ni ma tu" implies "i love good food"; "ba te ma so" implies "love the delivery fresh"; and "so zu tu qui ba" implies "zomato delivery provides fresh food". What would be the code of "love the fresh" in this code language:

- A qu ra ni

- B** te so ma
- C** zu so ba
- D** tu te qui

**Answer:** B

**Explanation:**

It is given,

ba tu qui zu - zomato provides food delivery ..... (1)

ra ni ma tu - i love good food ..... (2)

ba te ma so - love the delivery fresh ..... (3)

so zu tu qui ba - zomato delivery provides fresh food ..... (4)

In (1), (3) and (4), code ba and word delivery is common. Therefore, code word for delivery is 'ba'.

We need to find the code for 'love the fresh'. Removing delivery from (3), we will get the required answer.

Therefore, code of 'love the fresh' includes 'te ma so'. Only option satisfying is option B.

The answer is option B.

90. **Based on the statement given below, identify which of the assumption/sis/are implicit:**

**Vikas says to Harry, "Refer to the Cambridge dictionary instead of Oxford dictionary to be good at English."**

**Assumption:**

**I. Harry wants to be good at English.**

**II. Vikas is a good advisor.**

- A** Only assumption I is implicit
- B** Only assumption II is implicit
- C** Both assumption I and II are implicit
- D** Neither assumption I nor II is implicit

**Answer:** A

**Explanation:**

Only assumption I is implicit. We cannot comment on assumption II.

Answer is option A.

## General Awareness

91. **Which of the following straits connect the Atlantic Ocean with theMediterranean Sea?**

- A** Strait of Gibraltar
- B** Strait of Makkassar
- C** Strait of Tatar
- D** Strait of Bosporous

**Answer:** A

92. **Which of the following ministries of Govt. of India has developed the"SACRED portal";**

- A** Ministry of Tribal Affairs
- B** Ministry of Women and Child Development
- C** Ministry of Social Justice and Empowerment
- D** Ministry of Skill Development and Entrepreneurship


**Answer:** C

93. Which of the following is not within the scope of privatization of General Insurance Business Amendment Bill, 2021:

- A** National Insurance Company Ltd
- B** New India Assurance Company Ltd
- C** Oriental Insurance Company Ltd
- D** Life Insurance Corporation of India

**Answer:** D

94. Match the logo with the corresponding airline:

Logo	Airline
A. 	i. Ryanair
B. 	ii. Egyptair
C. 	iii. Turkish Airlines
D. 	iv. Southwest Airlines
E. 	v. Thai Airways

Choose the correct answer from the options given below:

- A A - ii, B - iii, C - i, D - iv, E - v
- B A - iii, B - v, C - iv, D - ii, E - i
- C A - v, B - i, C - ii, D - iii, E - iv
- D A - iv, B - ii, C - iii, D - i, E - v

**Answer: C**

95. What is the name given to India's first ever satellite and nuclear missile tracking ship?

- A INS Tez
- B INS Parvat
- C INS Dhruv
- D INS Eklavya

**Answer:** C

96. Which among the following is not an indicator of Human Development Index?

- A Life expectancy
- B Years of schooling
- C Per capita income
- D National Income

**Answer:** D

97. Which of the following agencies/bodies helps to solve the balance of payment problems of member countries?

- A World Economic Forum
- B Asian Development Bank
- C International Monetary Fund
- D World Bank

**Answer:** C

98. Who sworn in as the 71st U.S. Secretary of the State on January 26, 2021:

- A Antony J. Blinken
- B Rex Wayne Tillerson
- C John Kerry
- D Michael R. Pompeo

**Answer:** A

99. Which one of the following countries hosted the 13th BRICS summit in 2021?

- A China
- B Russia
- C India
- D Brazil



**Answer: C**

100. Indian Institute of Heritage has been proposed to be set up in 2021 in which city by the Minister of Culture, Government of India?

- A Noida
- B Varanasi
- C Ahmedabad
- D Gandhi Nagar

**Answer: A**

101. Which country was officially admitted as the 9th full member of Shanghai Cooperation Organization (SCO) in 2021?

- A Iraq
- B Iran
- C Germany
- D China

**Answer: B**

102. Match the player with his/her respective sport

Player	Sport
A. Manika Batra	i. Tennis
B. Alexander Zverev	ii. Cricket
C. Ravi Kumar Dahiya	iii. Swimming
D. Caeleb Remel Dressel	iv. Wrestling
E. Mohammad Nabi Eisakhil	v. Table Tennis

Choose the correct answer from the options given below:

- A A - v, B - iv, C - i, D - ii, E - iii
- B A - v, B - i, C - iv, D - iii, E - ii
- C A - i, B - v, C - iv, D - ii, E - iii
- D A - iv, B - i, C - v, D - iii, E - ii

**Answer: B**

103. Which country announced the information technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021?

- A France
- B China
- C India
- D Australia

**Answer: C**

104. Which force has commissioned its first two women officers in combat for the first time in India?

- A CISF
- B CRPF
- C ITBP
- D BSF

**Answer: C**

105. Who directed the famous Italian comedy-drama movie "Life is Beautiful"?

- A Steven Spielberg
- B Martin Scorsese
- C Roberto Benigni
- D Peter Jackson

**Answer: C**

106. Shehroze Kashif, who has become the youngest person to reach the summit of K2 in 2021, belongs to which country?

- A India
- B Pakistan
- C Bangladesh
- D Indonesia

**Answer: B**

107. \_\_\_\_\_ is a car named after free-roaming horse breed of the American West that is also referred to as wild horses.

- A Impala
- B Stingray
- C Mustang
- D Barracuda

**Answer: C**

108. \_\_\_\_\_, a Central Sector Scheme of Ministry of Panchayati Raj, is a reformative step towards establishment of clear ownership of property in rural inhabited (Abadi) areas, by mapping of land parcels using drone technology and providing 'Record of Rights' to village household owners with issuance of legal ownership cards to the property owners.

- A HRIDAY Scheme

- B** Swamitva Scheme
- C** Pradhan Mantri Awas Yojna
- D** AMRUT

**Answer:** B

109. Which amongst the following is the country's cleanest city as per SwachhSarvekshan 2021?

- A** Surat
- B** Navi Mumbai
- C** Indore
- D** Ambikapur

**Answer:** C

110. Which continent has highest number of countries in the world?

- A** Europe
- B** Asia
- C** Africa
- D** North America

**Answer:** C