

# IIFT 23rd Dec 2021 Slot 1

## Quantitative Analysis

1. Rahul takes 4 days to finish one third of a job, Sohan takes 3 days to finish one sixth of the same work and Ram takes 5 days to finish half the job. All 3 of them together work for 3 days after which Rahul and Ram leave the job. How long will it take for Sohan to complete the remaining work?

- A 6 days
- B 8.1 days
- C 5.1 days
- D 7 days

**Answer:** C

**Explanation:**

From the above information, we can say that Rahul, Sohan and Ram take 12, 18 and 10 days respectively to complete the work alone.

$$\text{LCM}(12, 18, 10) = 180$$

Let the total work be 180 units

So Work done by Rahul in 1 day = 15 units

Work done by Sohan in 1 day = 10 units

Work done by Ram in 1 day = 18 units

Let the time taken by Sohan to complete the remaining work be  $x$  days.

$$\text{Therefore, } 180 = 3 \times (15 + 10 + 18) + 10x$$

$$\text{or, } 180 = 129 + 10x$$

$$\text{or, } x = 5.1 \text{ days}$$

2. A shopkeeper marks up the price of the Toor dal by 20% and gives a discount of 10% to the customer. Besides, he also tricks 100 grams to his dealer and his customer respectively while buying or selling 1 kilogram of Toor dal. Find the profit percentage of the shopkeeper.

- A 22%
- B 20%
- C 32%
- D 27%

**Answer:** C

**Explanation:**

Let the cost of 1000 gm of dal be rupees 1000

Now the shopkeeper is buying 1100 gm of dal for rupees 1000

While selling 900 gm of dal the shopkeeper is charging the price of 1000 gm

$$\text{Therefore while selling 1100 gm of dal the shopkeeper will charge the price of } (1000/900) \times 1100 \text{ gm} = 11000/9 \text{ gm}$$

He has marked up the price by 20% and then given a discount of 10%

$$\text{So price charged by shopkeeper} = (11000/9) \times 1.2 \times 0.9 = 1320$$

So the shopkeeper is spending rupees 1000 to buy the dal and is selling the same quantity of dal at rupees 1320. Therefore, profit percentage is  $(320/1000)*100 = 32\%$

3. For maintaining social distancing due to covid situation, Rohan, Sohan and Rahul are sitting equidistantly, at a distance of 3 meter in a triangular formation. Priya came and sat in between Sohan and Rahul such that distance between Priya and Sohan is half the distance between Rahul and Priya. What will be the distance between Priya and Rohan in meter?

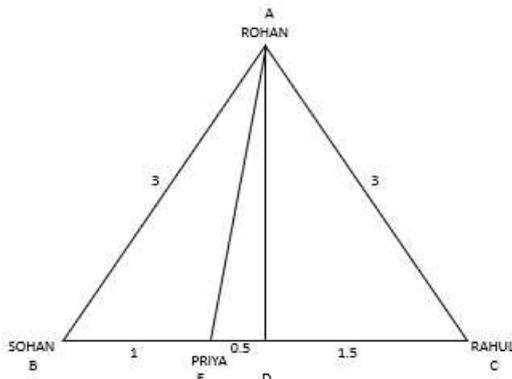
- A  $\sqrt{5}$   
 B  $\sqrt{6}$   
 C  $\sqrt{7}$   
 D  $\sqrt{8}$

**Answer: C**

**Explanation:**

Considering the data given, Rohan, Sohan, and Rahul are sitting in the shape of an equilateral triangle with sides 3m each.

Since Priya's distance from Sohan is half her distance from Rahul, she is sitting at a distance of 1 m from Sohan.



Draw a perpendicular AD on BC.

In  $\triangle ADC$ , using the Pythagoras theorem,

$$AC^2 = AD^2 + DC^2$$

$$3^2 = AD^2 + 1.5^2$$

$$AD = \frac{3\sqrt{3}}{2}$$

In  $\triangle ADE$ , using the Pythagoras theorem,

$$AE^2 = AD^2 + DE^2$$

$$AE^2 = \frac{27}{4} + \frac{1}{4} = 7$$

$$AE = \sqrt{7}$$

Hence, the answer is option C.

4. In a group of students, x number of students drink only Fruit Juice, 2x number of students drink only Coke.  $\frac{57}{x}$  students drink both Fruit Juice and Coke and the students who drink neither Fruit Juice nor Coke are  $\frac{57}{3x}$ . The number of students who drink Coke may be

- A 41 and 39  
 B 39 and 54  
 C 59 and 54  
 D 41 and 59

**Answer: D**

**Explanation:**

No of persons who drink coke =  $2x + 57/x$

As the no. of persons who drink coke will be an integer so  $57/x$  must be an integer so  $x$  can be 1, 3, 19 or 57.

No. of persons who drink neither fruit juice nor coke =  $57/3x = 19/x$  this also should be an integer, so  $x = 1$  or 19 only

When  $x=1$ , no. of persons who drink coke =  $2+57 = 59$

When  $x=19$ , no. of persons who drink coke =  $38 + 3 = 41$

5. **Ishika speaks truth in 60% of cases and Mishika in 85% of cases. Ishika and Mishika agree in a statement. Find the probability that the statement is true.**

**A**  $\frac{49}{57}$

**B**  $\frac{51}{100}$

**C**  $\frac{57}{100}$

**D**  $\frac{51}{57}$

**Answer: D**

**Explanation:**

For both Ishika and Mishika to agree on a statement either both have to speak the truth or both have to speak false.

Probability of both speaking truth =  $(60/100)*(85/100) = 204/400$

Probability of both speaking false =  $(40/100)*(15/100) = 24/400$

The probability that the statement is true when Ishika and Mishika both agree on a statement =  $(204/400)/\{(204/400)+(24/400)\} = 204/228 = 51/57$

6. **The last two digits of the expression  $1(1!)^{1!} + 2(2!)^{2!} + 3(3!)^{3!} + \dots + 121(121!)^{121!}$**

**A** 61

**B** 71

**C** 81

**D** 91

**Answer: C**

**Explanation:**

From the 5th term onwards the last two of all the terms will 00.

The last two digits of 24 to the power of an even number will be 76 always.

So, last two digits of the above expression will be the last two digits of  $1 + 2(2)^2 + 3(6)^6 + 4(76)$

$=1+8+139968+304= 140281$

So last two digits is 81

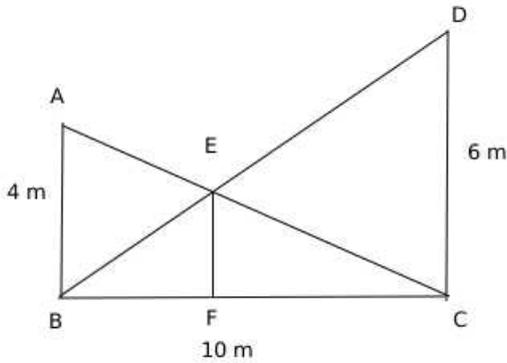
7. **Two towers 10 meters apart, are 4 m and 6 m high respectively. What will be the height of point of intersection of lines joining the top of each tower to the bottom of opposite tower?**

**A** 2.2 meters

- B** 1.5 meters
- C** 5.5 meters
- D** 2.4 meters

**Answer:** D

**Explanation:**



Let AB and CD be the towers of length 4m and 6m respectively.

Let the length of BF be  $x$  therefore, the length of FC will be  $10-x$ .

Triangle BEF is similar to triangle BDC

$$\text{So, } \frac{EF}{DC} = \frac{BF}{BC} = \frac{BE}{BD}$$

$$\text{or, } \frac{EF}{6} = \frac{x}{10} = \frac{BE}{BD}$$

$$\text{Therefore, } EF = \frac{3x}{5}$$

Similarly, triangle EFC is similar to triangle ABC

$$\text{So, } \frac{EF}{AB} = \frac{CF}{BC} = \frac{EC}{AC}$$

$$\text{or, } \frac{EF}{4} = \frac{10-x}{10} = \frac{EC}{AC}$$

$$\text{or, } EF = \frac{2(10-x)}{5}$$

$$\text{Therefore, } \frac{2(10-x)}{5} = \frac{3x}{5}$$

$$\text{or, } x = 4$$

$$EF = \frac{3x}{5} = 2.4 \text{ m}$$

8.  $f(x) = \frac{2x+2}{2x-2}$ , where  $y = f(x)$ . Find the ratio of  $x$  to  $f(y)$ .

- A**  $\sqrt{x} : \sqrt{y}$
- B**  $x^3 : y^3$
- C** 1 : 2
- D** 1 : 1

**Answer:** D

**Explanation:**

$$f(y) = f(f(x))$$

$$\text{or, } f(y) = f\left(\frac{2x+2}{2x-2}\right)$$

$$f(y) = 2\left(\frac{2x-2}{2x+2}\right)^{+2}$$

$$f(y) = 2\left(\frac{2x-2}{2x+2}\right)^{-2}$$

or,  $f(y) = \frac{8x}{8} = x$

Therefore x:f(y) = 1:1

9. During a marriage ceremony in Panipat, two shots from the air rifle are fired from the same place at an interval of 10 minutes 42 seconds. A man sitting in the train which is approaching the place where the ceremony is being held, hears the second sound after 10 minutes of hearing the first one. Assuming speed of sound to be 330 m/s, what could be the speed of the train?

- A 20.1 m/s
- B 12.4 m/s
- C 23.1 m/s
- D 30.1 m/s

**Answer: C**

**Explanation:**

Distance travelled by the train till the man hears the two shots =  $42 \times 330 = 13860\text{m}$

This distance was travelled by train in 10 minutes or 600 seconds

Speed of train =  $13860/600 = 23.1 \text{ m/s}$

10. If area of the adjacent faces of a cuboid is given as p, q and r respectively and the volume is given as 'V' then the square of the volume will be

- A  $pqr$
- B  $\frac{qr}{p^2}$
- C  $\frac{(pq)^2}{r^2}$
- D  $(pqr)^2$

**Answer: A**

**Explanation:**

Let the length, breadth and height of the cuboid be l, b and h respectively.

Therefore of adjacent faces will be lb, bh and hl.

If lb = p, then bh = q and hl = r.

Volume (V) = lbh

$$V^2 = (lbh)^2$$

or,  $V^2 = pqr$

11. If a principal P amounts to A in two years when compounded half yearly with r% interest. The same principal P amounts to A in two years when compounded annually with R% interest, then which of the following relationship is true?

- A  $r > R$
- B  $r = R$
- C  $r < R$

**D**  $r \leq R$

**Answer:** C

**Explanation:**

Since in first case we are compounding half-yearly and in second case we are compounding yearly and the amount received and the principal invested in both the cases is same so interest rate in the first case is lower than the interest rate in the second case.

12. In the galaxy "Andromeda", a planet named "Exo" has a city called "Azith". The city has an alphabet system that consists of 48 letters and an octo-decimal number system (base -18). The registration number on the number plate of a vehicle in the city has two parts. The first part is the alphabet part that consists of three letters and the second part is the number part that consists of 3 digits. The city administration issues all kinds of registration numbers with following restrictions:
- The letters in the alphabet part are in ascending order and all letters must be distinct.
  - In the number part, the first digit is three more than the third digit.
- Find the number of possible registration numbers available in the Azith city.

**A** 3353270

**B** 2557830

**C** 5339840

**D** 4669920

**Answer:** D

**Explanation:**

There are 48 alphabets out of which we need 3

So, no. of ways of selecting 3 alphabets from 48 alphabets is  ${}^{48}C_3$

Since we need to arrange these alphabets in ascending order so there is only one possible way for every three alphabets.

The first digit is 3 more than the third digit.

For a particular first digit there will be a particular third digit but the 2nd digit can be any of the numbers

So, no. of ways of selecting first digit = 15

No. of ways of selecting 2nd digit = 18

Therefore, total no. of ways =  ${}^{48}C_3 \times 15 \times 18 = 4669920$

13. The radius of circle is increased in a way such that its circumference increases by 8%. By how much percentage the area of the circle increases?

**A** 12.5%

**B** 16.64%

**C** 10.5%

**D** 6.4%

**Answer:** B

**Explanation:**

Increase in circumference is 8% which means that the increase in radius is also 8%

Increase in area =  $8+8+(8*8)/100 = 16+0.64 = 16.64\%$

14. A group of 78 people watch NDTV, Times Now and Republic. Out of these news channels, 36 watch NDTV, 48 watch Times Now and 32 watch Republic. 14 people watch both NDTV and Times Now, 20 people watch both Times Now and Republic, and 12 people watch both Republic and NDTV. Find the ratio of the number of people who watch only Times Now to the number of people who watch only Republic.

- A 9 : 4
- B 13 : 21
- C 11 : 4
- D 17 : 4

**Answer:** C

**Explanation:**

$$P(A \cup B \cup C) = P(A) + P(B) + P(C) - \{P(A \cap B) + P(B \cap C) + P(C \cap A)\} + P(A \cap B \cap C)$$

Let the no. of people who watch all three be x

$$78 = 36 + 48 + 32 - (14 + 20 + 12) + x$$

$$\text{or } x = 8$$

$$\text{No. of people who watch times now only} = 48 - (14 + 20) + 8 = 22$$

$$\text{No. of people who watch republic only} = 32 - (20 + 12) + 8 = 8$$

$$\text{Ratio} = 22/8 = 11:4$$

15. Find the set S that denotes the set of all values of " $\alpha$ " for which the roots of the equation  $(1 - \alpha)x^2 - 6\alpha x + 8\alpha = 0$  is greater than 2.

- A  $(\frac{2}{5}, \frac{1}{2})$
- B  $(\frac{2}{5}, \frac{32}{68})$
- C  $(\frac{32}{68}, 1)$
- D  $(\frac{32}{68}, \frac{1}{2})$

**Answer:** D

**Explanation:**

$$f(x) = (1 - \alpha)x^2 - 6\alpha x + 8\alpha = 0$$

Now roots are greater than 2 therefore,

$$-\frac{b}{2a} > 2$$

$$f(2) > 0$$

$$D > 0$$

$$-\frac{b}{2a} > 0$$

$$2(1 - \alpha) > 0$$

$$\alpha - 1 < 0$$

$$\alpha \in (0, 1)$$

$$f(2) > 0$$

$$(1 - \alpha)4 - 12\alpha + 8\alpha > 0$$

$$4 - 8\alpha > 0$$

$$\alpha < \frac{1}{2}$$

$$D > 0$$

$$36\alpha^2 - 32\alpha(1 - \alpha) > 0$$

$$68\alpha^2 - 32\alpha > 0$$

$$\alpha(68\alpha - 32) > 0$$

$$\alpha \in (-\infty, 0) \cup \left(\frac{32}{68}, \infty\right)$$

Taking the intersection of all we get  $\alpha \in \left(\frac{32}{68}, \frac{1}{2}\right)$

$$16. \text{ Evaluate } \left[ \cos^2\left(\frac{\pi}{32}\right) + \cos^2\left(\frac{3\pi}{32}\right) + \cos^2\left(\frac{5\pi}{32}\right) + \dots + \cos^2\left(\frac{15\pi}{32}\right) \right] - \left[ \sin^2\left(\frac{\pi}{16}\right) + \sin^2\left(\frac{2\pi}{16}\right) + \dots + \sin^2\left(\frac{7\pi}{16}\right) \right]$$

**A** 1

**B**  $\frac{1}{2}$

**C**  $\frac{1}{3}$

**D** 2

**Answer: B**

**Explanation:**

$$\cos(A) = \sin\left(\frac{\pi}{2} - A\right)$$

$$\sin A = \cos\left(\frac{\pi}{2} - A\right)$$

$$\cos\left(\frac{\pi}{32}\right) = \sin\left(\frac{\pi}{2} - \frac{\pi}{32}\right) = \sin\left(\frac{15\pi}{32}\right)$$

$$\sin^2(A) + \cos^2(A) = 1$$

So the series simplifies to  $(1+1+1+1)-(1+1+1+1/2)$

therefore value of series is  $1/2$

17. Same item is sold for Rs. 600 and Rs. 175, respectively. The profit earned on the first sale is 20times the loss incurred on the second sale. To make an overall profit of 30% in the whole transaction, at what price the second sale should happen:

**A** Rs. 310 approx

**B** Rs. 238 approx

**C** Rs. 254 approx

**D** Rs. 357 approx

**Answer: C**

**Explanation:**

Let the CP be x

$$\text{Now as per question, } 600 - x = 20(x - 175)$$

$$21x = 4100$$

$$x = 195.24$$

Therefore, to make a profit of 30% selling price of second article should be =  $1.3 \times 195.24 = 253.81$

18. An unbiased dice is tossed seven times. Find the probability of getting a third six on the seventh throw.

**A**  $\left(\frac{6}{2}\right)_{6^7}^{5^2}$

**B**  $\left(\frac{6}{2}\right)_{6^7}^{5^4}$

**C**  $\left(\frac{6}{3}\right)_{6^7}^{5^3}$

**D**  $\left(\frac{7}{3}\right)_{6^7}^{5^4}$

**Answer: B**

**Explanation:**

We need a third 6 in the 7th throw which means that in the first 6 throws we should get 6 exactly twice.

No. of ways of getting 6 exactly twice in first 6 throws =  ${}^6C_2$

Probability of getting 6 for the third time in the seventh throw =  $\frac{{}^6C_2 \times 5^4}{6^7}$

19. There are 12 points in a two-dimensional plane with following coordinates: Points A, B, C, D, E, F, G have coordinates (1, 0), (2, 0), (3, 0), (4, 0), (5, 0), (6, 0) and (7, 0) respectively. Points H, I, J have coordinates (1, 1), (2, 2) and (3, 3) respectively. Points K, L have coordinates (4, -2) and (5, -3) respectively. The number of circles possible with these points are?

**A** 179

**B** 158

**C** 168

**D** 147

**Answer: A**

**Explanation:**

A, B, C, D, E, F, G all lie on a single line

H, I, J all lie on another single line

K, L lie on another single line

If we are given three points which are not collinear then we can draw a circle from these three points

20. "xyz" and "zyx" are three digit numbers where x, y, z are distinct digits from 0 to 9. Difference of xyz and zyx has a factor of 7. What is the maximum possible value of the LCM of x, y and z?

**A** 126

**B** 72

**C** 90

**D** 56

**Answer: A**

**Explanation:**

The difference between the numbers xyz and zyx will be a multiple of 99.

therefore,  $99(x-z) = 99 \cdot 7$

$$x-z = 7$$

No to maximise the LCM of  $x, y, z$  we can take  $x=9, y=7$  and  $z=2$

Therefore LCM=126

21. The value of  $\log_2 x$  which satisfy  $6 - 9 \log_8 \left(\frac{4}{x}\right)^{\frac{1}{3}} - 8(\log_{256} x)^{\frac{2}{3}} - (\log_2 x^8)^{\frac{1}{3}} = 0$  is

A 2

B  $\sqrt{2}$

C 4

D 8

Answer: D

Explanation:

$$6 - 9 \log_8 \left(\frac{4}{x}\right)^{\frac{1}{3}} - 8(\log_{256} x)^{\frac{2}{3}} - (\log_2 x^8)^{\frac{1}{3}} = 0$$

$$6 - \log_2 4 + \log_2 x - 2(\log_2 x)^{\frac{2}{3}} - 2(\log_2 x)^{\frac{1}{3}} = 0$$

Let  $(\log_2 x)^{\frac{1}{3}}$  be  $t$ .

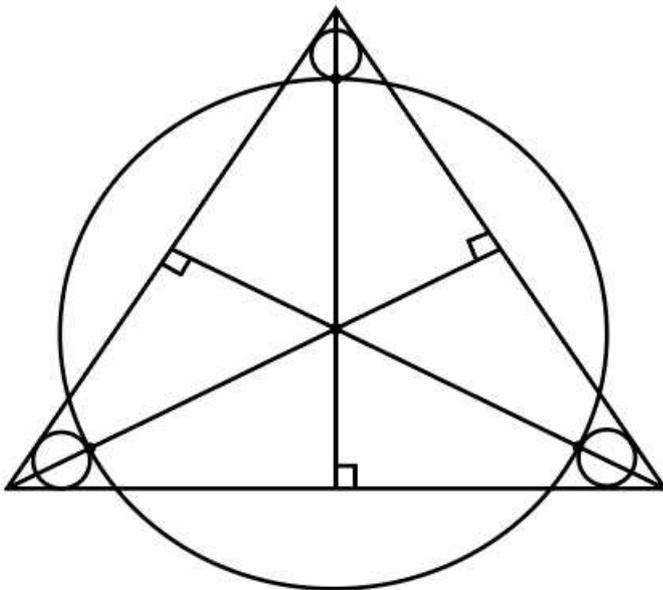
$$4 + t^3 - 2t^2 - 2t = 0$$

$$\text{or, } (t-2)(t^2-2) = 0$$

so,  $t = 2$  or

$$\log_2 x = 8$$

22. Three small identical circles are inscribed inside an equilateral triangle with length  $10\sqrt{3}$  cm as shown in the figure. The radius of each small circle is 2 cm. A big circle touches these three circles as shown in the figure. Find the ratio of the area of the big circle with that of the area of the small circle. (figure not as per scale)



A 4:1

B 2:1

C 3:1

D 5:1

**Answer: A**

**Explanation:**

$$\text{Height of triangle} = (10\sqrt{3}) \times \left(\frac{\sqrt{3}}{2}\right) = 15$$

$$\text{Distance between the centroid of the triangle and the vertex} = 15 \times \frac{2}{3} = 10$$

Since in-radius is one-third of the height of the triangle

therefore, length of the line from vertex to the point where small circle and big circle touch each other =  $2 \times 3 = 6$

$$\text{Radius of the bigger circle} = 10 - 6 = 4\text{cm}$$

Ratio of areas will be square of the ration of radius which is 4:1.

23. **Abdul can go from his home to his favourite basketball ground by taking any of the two roads represented by  $y - x = 10$  and  $2x + 2y = 15$ . The ground is located at a distance of 200 units from each of the roads. What is the possible location of the basketball ground?**

**A**  $(-1.25 + 200\sqrt{2}, 8.75)$

**B**  $\left(-125 + \frac{200}{\sqrt{2}}, 8.75 + \frac{200}{\sqrt{2}}\right)$

**C**  $(-1.25 + 100, 8.75 + 100\sqrt{3})$

**D**  $(-1.25 + 100\sqrt{3}, 8.75 + 100)$

**Answer: A**

**Explanation:**

Distance of point  $(-1.25 + 200\sqrt{2}, 8.75)$  from lines  $y-x=10$  and  $x+y=15/2$

$$\text{Distance from } y-x=10 \text{ is } \frac{|1.25 - 200\sqrt{2} + 8.75 - 10|}{\sqrt{1+1}} = 200$$

$$\text{Distance from } x+y=15/2 \text{ is } \frac{|-1.25 + 200\sqrt{2} + 8.75 - 7.5|}{\sqrt{1+1}} = 200$$

24. **The rate at which coal is consumed by a RORO train, which is operated by Konkan Railways, fluctuates as the square of the speed. It is given that coal consumption of this train is 1200 kg/hour when the speed is 40 km/hour. Konkan Railway bears the cost of coal at the rate Rs. 16/100kg and all other expenses of running the RORO train costs Konkan Railways Rs. 13/hour. Find the total cost in paise/km, for operating the RORO train when it is running at the speed of  $V$  km/hour.**

**A**  $1300 + 5V^2$

**B**  $1300 + 12V^2$

**C**  $1300 + 75V$

**D**  $1300 + 16V^2$

**Answer: B**

**Explanation:**

Let rate of consumption per hour be  $R$

$$\text{Therefore, } R = k(V^2)$$

When speed = 40 km/hr  $R = 1200$  kg/hr

So, When speed =  $V$

$$R = \left(\frac{1200}{1600}\right) \times V^2$$

$$\text{Cost of coal consumed per hour} = \left(\frac{1200}{1600}\right) \times V^2 \times \frac{16}{100} = \frac{12}{100} V^2$$

All other expenses = Rs 13/ hr

$$\text{Therefore operating cost per hour} = \text{Rs.} \left(13 + \frac{12}{100} V^2\right)$$

$$\text{Operation cost in paise per hour} = 1300 + 12V^2$$

25. **A can was full of olive oil. Lata draws each time 20% of the volume from the can and replaces with groundnut oil. Usha draws 10% of the volume and replaces with mustard oil. Starting with Lata, both repeat the procedure alternatively two times each. What is the ratio of olive oil, groundnut oil and mustard oil in the end?**

- A** 7200 : 1800 : 1000  
**B** 5184 : 3096 : 1720  
**C** 5760 : 3440 : 800  
**D** 5436 : 3284 : 1280

**Answer: B**

**Explanation:**

$$\text{Percentage of olive oil in the mixture} = 100 \times \left(\frac{8}{10}\right) \times \left(\frac{9}{10}\right) \times \left(\frac{8}{10}\right) \times \left(\frac{9}{10}\right) = 51.84\%$$

## Reading Comprehension and Verbal Ability

26. **From the sentences below, identify where comma(s) is/are missing and/or inappropriately used grammatically:**
- A. Don't guess. Use a timer or watch.**  
**B. Don't guess, use a timer or watch.**  
**C. The driver managed to escape from the vehicle before it sank and swam to the river-bank.**  
**D. The driver managed to escape from the vehicle before it sank, and swam to the river-bank.**

- A** B, C are incorrect  
**B** B, D are incorrect  
**C** A, C are incorrect  
**D** Only B is incorrect

**Answer: A**

**Explanation:**

Option B: Don't guess is in itself a full sentence and should be followed by a full stop. Thus, this is grammatically incorrect.

Option C: Since comma should follow sank, this is also grammatically incorrect.

Options A and D are grammatically correct sentences.

Thus, the correct option is A.

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

List I	List II
A. A procrustean -----	I. Scrape
B. Paper is more patient than -----	II. Bed
C. ----- acquaintance with	III. Bodkin
D. Bare -----	IV. Man

Choose the correct answer from the options given below:

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

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

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

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

**Answer:** D

**Explanation:**

A procrustean **bed**: a scheme or pattern into which someone or something is arbitrarily forced.

Paper is more patient than **Man**: it easier to be honest in writing than to speak openly with other people.

**Scrape** acquaintance with: Make an effort to become familiar with someone, especially for one's own benefit.

Bare **Bodkin**: a mere dagger.

Thus, the correct combination is given in option D.

The correct option is D.

28. From the sentences below, identify where comma(s) is/are missing and/or inappropriately used grammatically:

**A.** The convict said the judge "is mad".

**B.** The convict, said the judge, is mad.

**C.** Leonara walked on her head, a little higher than usual.

**D.** Leonara walked on, her head a little higher than usual.

**A** B, D are incorrect

**B** A, C are incorrect

**C** A, D are incorrect

**D** Only A is incorrect

**Answer:** B

**Explanation:**

Options A and C have sentences with wrong punctuation, and hence,

The correct option is B.

29. Match List-I with List-II

List I	List II
A. A small area of ground that is slightly higher than the ground around it	I. Archipelago
B. A waterbody separated from a large waterbody by a reef	II. Straits
C. A narrow waterbody that connects 2 large waterbodies	III. Isthmus
D. Small island	IV. Hummock
E. Ring shaped coral reef or island	V. Islet
F. A land bridge that connects 2 larger landmasses	VI. Skerry
G. A group of islands	VII. Atoll
H. Rocky islands	VIII. Ait
I. River island	IX. Lagoon

Choose the correct answer from the options given below:

- A I-V, B-VI, H-VII, C-VIII
- B E-VI, H-VII, D-VIII, B-IX
- C I-V, H-VII, E-VIII, F-IX
- D H-VI, E-VII, I-VIII, B-IX

**Answer:** D

**Explanation:**

- A. A small area of ground that is slightly higher than the ground around it: Hummock
- B. A waterbody separated from a large water body by a reef: Lagoon
- C. A narrow water body that connects 2 large water bodies: Straits
- D. Small island: Islet
- E. Ring-shaped coral reef or island: Atoll
- F. A land bridge that connects two larger land masses: Isthmus
- G. A group of islands: Archipelago
- H. Rocky islands: Skerry
- I. River island: Ait

Since only option D has the right sequence,

The correct option is D.

30. Match List-I with List-II

List I	List II
A. A small area of ground that is slightly higher than the ground around it	I. Archipelago
B. A waterbody separated from a large waterbody by a reef	II. Straits
C. A narrow waterbody that connects 2 large waterbodies	III. Isthmus
D. Small island	IV. Hummock
E. Ring shaped coral reef or island	V. Islet
F. A land bridge that connects 2 larger landmasses	VI. Skerry
G. A group of islands	VII. Atoll
H. Rocky islands	VIII. Ait
I. River island	IX. Lagoon

Choose the correct answer from the options given below:

- A H-I, F-II, B-III, C-IV
- B C-II, F-III, A-IV, D-V
- C B-III, A-IV, E-V, C-VI
- D G-I, C-II, F-III, E-IV

**Answer:** B

**Explanation:**

- A. A small area of ground that is slightly higher than the ground around it: Hummock
- B. A waterbody separated from a large water body by a reef: Lagoon
- C. A narrow water body that connects 2 large water bodies: Straits
- D. Small island: Islet
- E. Ring-shaped coral reef or island: Atoll
- F. A land bridge that connects two larger land masses: Isthmus
- G. A group of islands: Archipelago
- H. Rocky islands: Skerry
- I. River island: Ait

Since only B has the correct sequence,

The correct option is B.

31. 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. This person needs the counsel of a psychiatrist.
- B. I'm a scientist and if I don't know an answer, I seek counsel from sharper brains.
- C. Each of the brothers on the counsel was gifted in some way.
- D. A similar counsel of moderation was given to the Canadian press in connexion with the Manitoba school question in December 1897.

- A Only A and C are correct
- B A, B and D are correct
- C Only C and D are correct
- D Only B and D are correct

**Answer:** B

**Explanation:**

Only option C is incorrect in the highlighted part. The correct word will be council.

Since A, B and D are correct,

The correct answer is B.

32. **A little change or alteration in usage of the article/helping verb may change meaning of a sentence. Below given are the sentences along with their meanings; identify the expressions with the correct meaning and choose the right option:**

**I. The jury was - the members of the jury taken individually**

**II. The jury were - the members of the jury taken as a whole**

**III. Dead in sin - great sinner**

**IV. Dead to sin - free from sin**

**A** Only I and II are correct

**B** Only II and III are correct

**C** Only I and IV are correct

**D** Only III and IV are correct

**Answer: D**

**Explanation:**

Since Jury is a group noun, the usage of the helping verb will be plural and will represent the group identity rather than its members.

Thus, statements A and B are incorrect.

Since dead to sin means free from sin and dead in sin refers to a great sinner, statements C and D are correct.

Thus, the correct answer is D.

33. **Select the option with the incorrect spelling:**

**A** Chicanery

**B** Modicum

**C** Exculpate

**D** Faxcile

**Answer: D**

**Explanation:**

Option D has the misspelt representation of 'facile', which refers to something superficial.

Thus, the correct answer is D.

34. **Identify the option with the Incorrect usage of an apostrophe:**

**A** It's got very cold outside

**B** Who's book is this?

**C** Jesus' disciples

**D** It needn't be a pane

**Answer: B**

**Explanation:**

*Who's* is a contraction linking the words *who is* or *who has*, and *whose* is the possessive form of *who*.

Thus, the correct option is B.

35. **Fill in the blank with appropriate preposition:**

The birds alight \_\_\_\_ the roof of a temple.

A with

B for

C at

D on

**Answer:** D

**Explanation:**

When talking about places, 'on' is *used* when we are speaking about a surface; **since** the bird descended on the temple roof, the correct option will be D.

36. **From the options given below, identify best SYNONYM for the word underlined:**

While automatic enrollment or "quick" enrollment makes the process of joining a retirement plan less daunting, expanding the number of funds available to participants can have the opposite effect.

A Trivial

B Inviting

C Heartening

D Consternate

**Answer:** D

**Explanation:**

'Daunting' refers to a difficult or intimidating prospect. Consternate means filling someone with anxiety.

Since the other options' connotation is opposite to 'Daunting',

Option D is the correct answer.

37. **Fill in the blank with appropriate preposition:**

I have a great antipathy \_\_\_\_ meat.

A against

B to

C on

D over

**Answer:** B

**Explanation:**

'To' is used to indicate the place, person, or thing that someone or something moves toward or the direction of something.

Out of the four options, only B can be used to indicate the antipathy toward meat.

Thus, the correct option is B.

38. **Select the option with the incorrect spelling:**

- A Caboose
- B Mercenary
- C Lugubrious
- D Puritanical

**Answer:** C

**Explanation:**

Option C is the misrepresentation of the word 'lugubrious', which indicates a sad feeling.

Thus, the correct option is C.

39. From the options given below, identify best SYNONYM for the word underlined:

According to Douglas Brinkley's *Wheels for the World*, Henry authorized \$1.5 million in company funds for an inquiry of Lee's professional and private life in 1975 to discredit him.

- A Calumniate
- B Ameliorate
- C Castigate
- D Delineate

**Answer:** A

**Explanation:**

'Calumniate' means to make false statements and accusations. Since 'discredit' represents a similar intention in the statement of the question,

Option A is the correct answer.

40. 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. Cassie drew her brows down to feign a stern expression.

B. Her heartbeat was feign and slow.

C. I wish you wouldn't feign illness on every first day of school.

D. My cousin would always feign excitement when we came to visit, but I knew she really didn't like sharing her room.

- A Only B and D are correct
- B Only A and D are correct
- C Only C and D are correct
- D A, C and D are correct

**Answer:** D

**Explanation:**

To 'feign' is to pretend.

Thus, it cannot be used with the heartbeat.

So, statement B is wrong.

Since the other statements have appropriately used the word 'feign',

Thus, the correct option is D.

### Instructions [41 - 45]

Read the passage and answer the questions.

Passage I

Qualitative research methods are often mischaracterized by advocates, users, and critics alike because too often the reflexive, iterative, and flexible methods are misunderstood as 'just making do.' There is a good pragmatic tradition of "making do," from Dewey to the present, that describes the necessities as well as virtues of using what situations provide in their immediacy as the grounds of social action. While qualitative research certainly shares some of this pragmatic bricolage, good research, qualitative as well as quantitative, is designed as well as improvised. One of the merits of qualitative research is its particular openness to serendipitous invention; one of its failures, however, has been an unwillingness, or inability, on the part of its practitioners, until recently, to specify how that openness to 'what situations make available' can be both systematic and creative.

Over the years I have probably reviewed hundreds of research proposals; too large a number of these claimed that because the researcher was doing a qualitative study, the kinds of data and forms of collection could not be specified in advance. I was always a bit embarrassed by this, feeling let down by my side. It sometimes seemed as if our teaching of qualitative research was creating a mystical religion, a set of our own unexamined fetishes just at the moment we set about to identify others' taken for granted assumptions and social meanings. In this vein, some years ago I heard a colleague advise a student going out to do field work for the first time "to be like a blank slate," "just tell me everything you see and hear, write it all down." The student was completely baffled and clearly at a loss about what to do, to do first, or second, or how to begin. What would constitute telling me all you see and hear. Importantly, the student had read a lot of sociology, and knew a lot about signs and signifiers, latent as well as manifest patterns in social relations. She knew that competent social actors are not blank slates. She felt incompetent but not entirely blank. She had a project, after all.

It seemed from the proposals I read and the conversations I observed that we, qualitative sociologists, believed that we could not specify what we were going to do (i.e. lay out a design and plan of the research), because that would mean that we would have -- by that naming -- necessarily circumscribed what we would do. Having supposedly controlled a priori what we would do, we would be unable to do something else along the way, as the situations and insights invited. We would have lost the distinctive virtues of qualitative research. Somehow, in this mysticism about qualitative methods, research designs seemed to be understood as enforceable contracts or sets of machine instructions; any deviation from the design was understood to be either impossible, a failure, or a mistake. Qualitative research was celebrated for its flexibility, the temporal coincidence of collection and analysis and thus prior design was, by definition, a threat to qualitative research.

Of course, I have overstated the issue but we were asked to provide fodder for discussion. And, to some extent, this overstatement puts the issue in a bold form. Why should qualitative research be any less well designed (or specified) than quantitative research? When I think about the steps in different methods, it occurs to me that most of what gets put into a research design, let us say for a survey project or quantitative research, could also be put in the design for an ethnography or a project of in-depth interviewing and narrative analysis. The major differences lie in the fact that qualitative projects (1) will not rely on statistical analyses and therefore do not need to produce probability samples and standardized collection instruments at the same temporal pace and placement in the research process. As a consequence of temporal pace and sequencing, qualitative projects (2) will be able to adjust the forms of data, modes and sites of collection in response to the ongoing processes of analysis and interpretation. This is certainly so. I suspect, however, that the resistance to detailed research qualitative research designs derives less, however, from emphasis on these key differences than from an overly idealized or reified view of how other forms of research proceed, whether quantitative sociology or chemistry or biology. That is, all research develops (is in the making and rethinking) throughout the stages of design, collection, and analysis. Almost all research produces much that was unanticipated and therefore had to be responded to with adjustments along the way. The central difference lies in the explicit weight of recognition of and preparation for this process of adjustment in most qualitative projects. Nothing precludes a preliminary design that sets the researcher on a path that is understood as a first approximation of the work process.

I should say before going much further that there are varieties of qualitative research and my remarks will not appropriately characterize all. For the moment, I am referring primarily to ethnographic fieldwork (i.e. research study looking at the social interaction of users in a given environment), participant observation, in-depth open ended interviewing, and other work involving interpretative qualitative analysis of documents of various sorts. Thus, the mode of analysis rather than the type of data more appropriately describes work as qualitative. (The content of documents and interviews can be analysed quantitatively or qualitatively. Observations can be systematically structured and quantified but much observation is not, nor would be productive.)

The goal of research is to produce results that can be falsifiable and in some way affirmable by rational processes of actors other than the author. Most important is that the researcher provide an account of how the conclusions were reached, why the reader should believe the claims and how one might go about trying to produce a similar account. What makes science morally, and rationally, compelling is that it is a public enterprise. I am not referring to the funding or organizational supports. Rather, science is distinguished by the claim to produce shared understanding/knowledge through modes that can be rationally and collectively apprehended. In short, we have an obligation not to "hide the ball." To the extent that we do "hide the ball," we transform our science into rhetorical performance.

41. Which of the following is incorrect:

- A** Participant observation and in-depth open ended interviewing can be analysed both qualitatively and quantitatively but analysing observations using quantitative techniques wouldn't be as much productive.
- B** The varieties of research that require interpretative qualitative analysis of data is what qualifies the work to be classified as qualitative.
- C** Due to their reflexive, iterative, and flexible nature, the qualitative research methods should not be specified in advance.
- D** Controlling a priori what the researcher would do does not cause the distinctive virtues associated with qualitative research to be lost.

**Answer: C**

**Explanation:**

Option A: This can be understood from the penultimate paragraph of the passage.

Option B: This can also be inferred from the penultimate paragraph of the passage.

Option C: The author is against the notion of not providing explicit information about the qualitative methods of research. Thus, this is against the author's position and hence is the correct option.

Option D: This can be inferred from the third paragraph of the passage.

Thus, the correct option is C.

42. **According to the passage, which of the following is incorrect about qualitative research design:**

- A** The only difference between qualitative and quantitative research is that the latter relies on statistical analyses and therefore needs to produce probability samples and standardized collection instruments.
- B** Because qualitative analysis does not rely on statistical analyses, it does not need to produce probability samples and standardized collection instruments at the same temporal pace and placement in the research process as quantitative research.
- C** All research, including quantitative sociology or chemistry or biology develops throughout the stages of design, collection, and analysis and produces much that was unanticipated and therefore has to be responded to with adjustments along the way, however, qualitative research requires explicit weight of recognition of and preparation for this process of adjustment.
- D** While qualitative projects require a preliminary design similar to the other forms of research, however, the former requires an explicit weight of recognition of and preparation for this process of adjustment.

**Answer: A**

**Explanation:**

*"As a consequence of temporal pace and sequencing, qualitative projects (2) will be able to adjust the forms of data, modes and sites of collection in response to the ongoing processes of analysis and interpretation."*

Option A: Since this option included the keyword 'only', it puts the underlined difference out of its scope. Thus, as the option is too general and far-fetched, this would be the correct option.

Option B: This is an inference drawn from the second difference between qualitative and quantitative analysis. Thus, this is not the correct option.

Option C: This can also be inferred from the fourth paragraph of the passage and hence is not the correct option.

Option D: This option is a restatement of option C in a more concise manner and hence is not the correct option.

Thus, the correct option is A.

43. **"The goal of research is ..... other than the author" (last para) from the passage can be best explained as:**

- A** The goal of research is to produce results that are able to be proved to be false.
- The goal of research is to produce outcomes that are able to be contradicted by evidence, and that it is there for others to approve or disapprove that researcher's conclusions follow from the collected/empirical data/observations.
- B**
- C** Researchers should produce results that can be contradicted if the experimental observations come to light that disprove the outcomes.
- D** The goal of research is to arrive at the conclusions and make claims to knowledge through the application of science, i.e. the collection of facts.

**Answer: B**

**Explanation:**

Option A: Since this option does not include the reaffirmation of the research by a rational process part, this is not the correct option.

Option B: This option most accurately captures the essence of the aforementioned lines and hence is the correct option.

Option C: This option is also incomplete as it is void of the same reason for which option A is discarded. Thus, this is not the correct option.

Option D: This is too general of a definition and far-fetched to be the explanation of the given lines. Thus, this is not the correct option.

Thus, the correct option is B.

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

- A** Qualitative research that specifies a priori the design and plan of research can be both systematic and creative and requires application of science for producing a shared understanding.
- B** Kinds of data and forms of collection for qualitative research could be very much specified in advance.
- C** Deviations from the design already laid out for qualitative research would be considered either impossible, or a failure, or mistake because research designs once specified are understood as enforceable contracts.
- D** Scientific qualitative research should make visible to others how researcher knows what he or she is claiming to know.

**Answer: A**

45. **Match List I with List II**

<b>List I</b>	<b>List II</b>
A. Reified	i. manage with the limited or inadequate means available
B. Bricolage	ii. an inanimate object worshipped for its supposed magical powers
C. Making Do	iii. construction or certain from a diverse range of available things
D. Fetish	iv. make (something abstract) more concrete or real

Choose the correct answer from the options given below:

- A** A - iv, B - iii, C - i, D - ii
- B** A - iii, B - ii, C - iv, D - i
- C** A - ii, B - i, C - iii, D - iv
- D** A - i, B - iv, C - ii, D - iii

**Answer: A**

**Explanation:**

'Reified' means to materialize something or to make something (abstract) concrete.

'Bricolage' refers to something constructed or created from a diverse range of things.

'Making do' means managing with the limited or inadequate means available.

'Fetish' refers to an inanimate object worshipped for its supposed magical powers or because it is considered to be inhabited by a spirit.

Since option A rightly matches all the meanings to the respective words,

The correct option is A.

**Instructions [46 - 48 ]**

Read the passage and answer the questions.

Passage II

Sociologist Matthews writes that Let's say someone writes an academic paper quoting fifty people who have worked on the subject and provided background materials for his study; assume, for the sake of simplicity, that all fifty are of equal merit. Another researcher working on the exact same subject will randomly cite three of those fifty in his bibliography. Merton showed that many academics cite references without having read the original work; rather, they'll read a paper and draw their own citations from among its sources. So a third researcher reading the second article selects three of the previously referenced authors for his citations. These three authors will receive cumulatively more and more attention as their names become associated more tightly with the subject at hand. The difference between the winning three and the other members of the original cohort is mostly luck: they were initially chosen not for their greater skill, but simply for the way their names appeared in the prior bibliography. Thanks to their reputations, these successful academics will go on writing papers and their work will be easily accepted for publication. It is easier for the rich to get richer, for the famous to become more famous. This theory can easily apply to companies, businessmen, actors, writers, and anyone else who benefits from past success.

During the 1940s, a Harvard linguist, George Zipf, examined the properties of language and came up with an empirical regularity now known as Zipf's law, which, of course, is not a law (and if it were, it would not be Zipf's). It is just another way to think about the process of inequality. The mechanisms he described were as follows: the more you use a word, the less effortful you will find it to use that word again, so you borrow words from your private dictionary in proportion to their past use. This explains why out of the sixty thousand main words in English, only a few hundred constitute the bulk of what is used in writings, and even fewer appear regularly in conversation. Likewise, the more people aggregate in a particular city, the more likely a stranger will be to pick that city as his destination. The big get bigger and the small stays small, or get relatively smaller. A great illustration of preferential attachment can be seen in the mushrooming use of English as a lingua franca—though not for its intrinsic qualities, but because people need to use one single language, or stick to one as much as possible, when they are having a conversation. So whatever language appears to have the upper hand will suddenly draw people in droves; its usage will spread like an epidemic, and other languages will be rapidly dislodged. I am often amazed to listen to conversations between people from two neighboring countries, say, between a Turk and an Iranian, or a Lebanese and a Cypriot, communicating in bad English, moving their hands for emphasis, searching for these words that come out of their throats at the cost of great physical effort. Even members of the Swiss Army use English (not French) as a lingua franca (it would be fun to listen). Consider that a very small minority of Americans of northern European descent is from England; traditionally the preponderant ethnic groups are of German, Irish, Dutch, French, and other northern European extraction. Yet because all these groups now use English as their main tongue, they have to study the roots of their adoptive tongue and develop a cultural association with parts of a particular wet island, along with its history, its traditions, and its customs!

46. What is the appropriate meaning of 'lingua franca'?

- A Foreign language unable to dislodge other languages.
- B Common language among people of diverse speech.
- C Language used in scientific writings.
- D Language spoken in France.

**Answer: B**

**Explanation:**

Lingua franca refers to a language that is adopted as a common language between speakers whose native languages are different.

Thus, the correct option is B.

47. Which of the following statement is TRUE?

- A** Matthews talked about randomness but Zipf talked about careful choice.
- B** Zipf had presented Matthews' work parsimoniously.
- C** Both Matthews and Zipf have discussed about ubiquitous application of scientific language.
- D** Both Matthews and Zipf have discussed about preferential attachment.

**Answer:** D

**Explanation:**

Both Matthews and Zipf gave their perspective on how inequality is exacerbated by more preference given to the ones who are at the higher end.

Options A and C are distorted inferences drawn from the passage.

Parsimonious refers to stingy behaviour. Since it is not referred to anywhere in the passage, Option B can also be discarded.

Option D: This option aptly captures the essence of Matthews and Zipf's discussion; this is the correct option.

Thus, the correct option is D.

**48. Which of the following statement is CORRECT?**

- A** The passage deals with mnemonics.
- B** The passage deals with contradiction in ideas suggested by the two linguists.
- C** The passage illustrates how initial advantage follows throughout the life.
- D** The passage establishes the idea of supremacy of English over other languages.

**Answer:** C

**Explanation:**

The main idea of the passage is how it is easier for something of a higher value to increase its value than the contrary.

Option A: Mnemonics means the study and development of systems for improving and assisting memory. Since this is not in the passage's scope, it is not the right answer.

Option B: This is totally the opposite of the viewpoints of the authors discussed in the passage and hence is not the right answer.

Option C: Since this option aptly captures the main idea of the passage, this is the correct answer.

Option D: Although the English language's example is used as an illustration, it is not the main idea of the passage.

Thus, the correct option is D.

**Instructions [49 - 52 ]**

Read the passage and answer the questions.

Passage

How is it that people come to use certain nonverbal behaviours in specific settings, or associate a particular behaviour (e.g., smiling) with a particular meaning (e.g., happiness)? A sociocultural approach to answering these questions focuses on the ways in which behaviours and their meanings are prescribed at social or cultural levels and on the ways in which people come to acquire them. Encompassing a number of models and theories, the sociocultural paradigm emphasizes the influence of human interaction in creating and transmitting understanding; thus, it highlights the effects of culture, class, religion, sexuality, power, or other socially maintained factors on the enactment and meaning of behaviour.

The fundamental assumption underlying the sociocultural paradigm is that interpersonal behaviour and its meanings are learned through the diffusion of social or cultural knowledge and are, therefore, malleable. Because interpersonal behaviours are learned rather than innate, both behaviours and their meanings can be altered by changing the knowledge that is conveyed. This can explain, for instance, not only why cultures vary one from another in both their behaviours and the meanings of those behaviours, but also why, without access to another culture's knowledge, people often find cross-cultural communication so challenging.

Central to the sociocultural paradigm, then, are two ideas: i) Most nonverbal communication is learned, rather than innate, and, ii) Most non-verbal behaviours do not have inherent meanings, but rather, their meanings are products of social consensus. These principles have found widespread acceptance within the field of human communication, perhaps, in part, because of their considerable intuitive appeal. It is easy to identify examples of behavioural learning simply by considering the apparent influence of parents, teachers, gender roles, cultural norms, and the media on children's behaviours. Consequently, the paradigm seems to have face validity as an approach that is isomorphic with people's everyday experiences.

A related strength of the sociocultural paradigm is found in the magnitude of the empirical evidence that has been marshalled in support of it. Perhaps as a result of its intuitive appeal, many researchers have applied the tenets of the paradigm to their own work and have found support for the influence of learning, or for the social embeddedness of meaning, across a wide range of topics, ranging from personality development and child discipline, to gender role acquisition, doctor-patient communication, and the relational messages of nonverbal behaviours.

One potential criticism of the sociocultural paradigm is that its emphasis on the social influences on learning behaviour and creating meaning obscures what may be substantial non-social influences on the same outcomes, including the influence of genetics. Certainly, any paradigm will lead its proponents to attend to particular variables more than others; the problem lies in the potential to misinterpret genetic effects, for instance, as the effects of learning or socialization. An important example derives from the study of parental influence on child personality development. As Harris (1998) noted in her detailed review, there is no shortage of social science research showing that children are more likely than not to grow up with personalities similar to those of their parents. That is, pleasant, affectionate parents tend to rear pleasant, affectionate children, whereas aggressive, violent parents tend to rear children who are likewise aggressive and violent. Working from the framework of the sociocultural paradigm, one would find little difficulty explaining these robust patterns as products of socialization: children observe their parents behaving in a pleasant, affectionate manner and come to adopt the same disposition themselves. However, as Harris (1995) pointed out, much of the research examining parental-offspring congruence in disposition has failed to control for an important alternative hypothesis: children are similar to their parents because of their genetic relatedness to the parents, not because of how they were socialized. To the extent that researchers in this area have failed to entertain (and, consequently, to control for) such an alternative, therefore, they may run the risk of misattributing—or at least, overattributing—the observed similarity between parents and children to a social influence, when a non-social influence is also operative.

49. Find out the incorrect statement:

- A Human interaction is responsible for the enactment and meaning of behaviour through creating and transmitting understanding.
- B Culture, class, religion, sexuality, power, or other socially maintained factors influence human interactions.
- C Nonverbal behaviours do not have inherent meanings but, instead, acquire their meanings through social consensus.
- D Because nonverbal communication is learned rather than innate, both behaviours and their meanings can be altered by changing the knowledge that is conveyed.

**Answer: B**

**Explanation:**

Option A: This can be inferred from the first paragraph of the passage and hence is not the correct option.

Option B: It is rather human behaviour which is influenced by culture, class, religion, sexuality, power, or other socially maintained factors. As this option is a distorted inference from the passage, this is the correct option.

Option C: This is the second central idea of the sociocultural paradigm and hence, is not the correct option.

Option D: This can be inferred as the main point of the second paragraph and hence is not the correct option.

50. Which of the following cannot be implied from "This can explain, for instance, not only .....people often find cross-cultural communication so challenging" (2nd para) in the passage:

- A The same behaviour can vary in meaning from one social or cultural group to another.
- B There are consensually recognized meanings for nonverbal behaviour within a given cultural community.
- C All receivers and observers of a specified behaviour within a community attribute fairly consistent meanings to that behaviour making cross-cultural communication challenging.

- D Meanings of behaviours are located within the particular individuals and interactions from whence they originate, making the cross cultural communication challenging.

**Answer: D**

**Explanation:**

"This can explain, for instance, not only why cultures vary one from another in both their behaviours and the meanings of those behaviours, but also why, without access to another culture's knowledge, people often find cross-cultural communication challenging."

Option A: This can be inferred from the underlined portion of the lines from the second paragraph. Thus, this is not the correct option.

Option B: This option can also be inferred from the same part that option A was inferred from. Thus, this is not the correct option.

Option C: From the last part of the underlined portion, this option can again be inferred. Thus, this is also not the correct option.

Option D: According to this option, one has an inbuilt meaning for some of the behaviours, and some are understood from the interaction within their community. Although the second part can be inferred, since the first part is refuted in the passage, this is the correct option.

Thus, the correct option is D.

**51. Which of the following is not true about the criticisms of sociocultural paradigm explained in passage:**

- A Learning behaviour and creating meaning can be attributed to certain variables other than the social influences.
- B The research examining parental-offspring congruence in dispositions over attributes the similarity to social influences.
- C Researchers in the socio-cultural paradigm should consider entertaining and controlling for non-social influences else the former may run the risk of misattributing-or at least, overattributing-the observed similarity between parents and children to a social influence.
- D Rather than the social influences, non-social influences such as genetics can also help explain why children are more likely to grow up with personalities similar to those of their parents.

**Answer: B**

**Explanation:**

"To the extent that researchers in this area have failed to entertain (and, consequently, to control for) such an alternative, therefore, they may run the risk of misattributing—or at least, overattributing—the observed similarity between parents and children to a social influence, when a non-social influence is also operative."

Options A and D can be directly inferred from the last paragraph of the passage.

Option C: This can be inferred from the underlined portion of the last lines of the passage. Thus A, C, and D can be inferred from the passage and are not the correct answer.

Option B: Since the author expressed their disapproval of over attribution of one influence over another, this option contradicts the position of the author.

Thus, the correct option is B.

**52. Identify the most suitable title for this passage:**

- A The Sociocultural Paradigm, Genetics and the Non-verbal Behaviours
- B The Sociocultural Paradigm: A Summary
- C The Sociocultural Paradigm and Non-social Influences
- D The Sociocultural Paradigm: An Explanation and Critique

**Answer: D**

**Explanation:**

Since the passage starts with the explanation of the Sociocultural Paradigm and ends with the critique of its rejection of the genetic theory, the aptest title would be option D.

Thus, the correct option is D.

### Instructions [53 - 56 ]

Read the following passage:

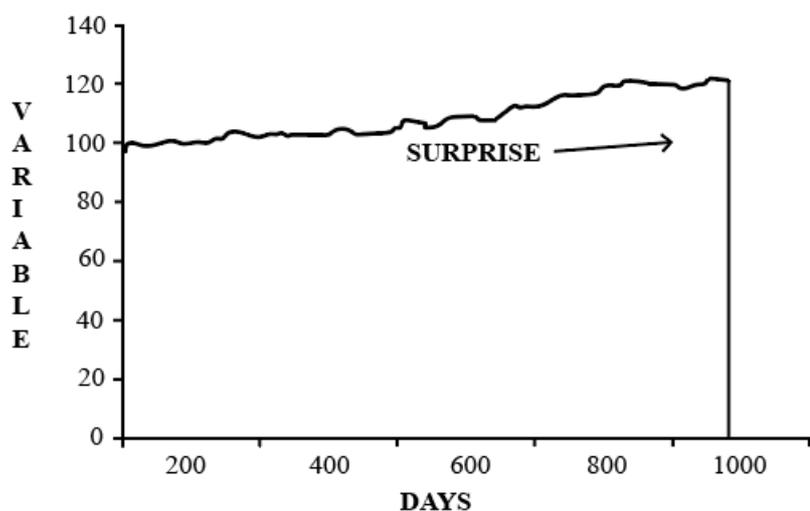
The über philosopher Bertrand Russell presents a particularly toxic variant of my surprise jolt in his illustration of what people in his line of business call the Problem of Induction or Problem of Inductive Knowledge—certainly the mother of all problems in life.

Consider a turkey that is fed every day. Every single feeding will firm up the bird's belief that it is the general rule of life to be fed every day by friendly members of the human race "looking out for its best interests," as a politician would say. On the afternoon of the Wednesday before Thanksgiving, something unexpected will happen to the turkey. It will incur a revision of belief.

What can a turkey learn about what is in store for it tomorrow from the events of yesterday? A lot, perhaps, but certainly a little less than it thinks, and it is just that "little less" that may make all the difference. The turkey problem can be generalized to any situation where the same hand that feeds you can be the one that wrings your neck.

Let us go one step further and consider induction's most worrisome aspect: learning backward. Consider that the turkey's experience may have, rather than no value, a negative value. It learned from observation, as we are all advised to do (hey, after all, this is what is believed to be the scientific method). Its confidence increased as the number of friendly feedings grew, and it felt increasingly safe even though the slaughter was more and more imminent. Consider that the feeling of safety reached its maximum when the risk was at the highest! But the problem is even more general than that; it strikes at the nature of empirical knowledge itself. Something has worked in the past, until—well, it unexpectedly no longer does, and what we have learned from the past turns out to be at best irrelevant or false, at worst viciously misleading.

FIGURE 1: ONE THOUSAND AND ONE DAYS OF HISTORY



A turkey before and after Thanksgiving.

It would appear to a quoting dilettante—i.e., one of those writers and scholars who fill up their texts with phrases from some dead authority—that, as phrased by Hobbes, "from like antecedents flow like consequents." Those who believe in the unconditional benefits of past experience should consider this pearl of wisdom allegedly voiced by a famous ship's captain:

But in all my experience, I have never been in any accident. . . of any sort worth speaking about. I have seen but one vessel in distress in all my years at sea. I never saw a wreck and never have been wrecked nor was I ever in any predicament that threatened to end in disaster of any sort.

E. J. Smith, 1907, Captain, RMS

Titanic

Captain Smith's ship sank in 1912 in what became the most talked-about shipwreck in history.

53. What is the central idea of the passage?

- A Foible scientific ideas / frameworks must be discarded in case of human/animal behavior.
- B Unpredictability is embedded in human nature.
- C Cognitive dissonance makes us blind towards objective reality.
- D A big change takes place that is completely unprepared for by the past.

Answer: D

**Explanation:**

The main argument of the passage is about the unpredictability of future events even with sufficient past observations.

Since the passage is not specifically dealing with human behaviour, options A and B can be discarded.

Cognitive dissonance is the state of having inconsistent thoughts, beliefs, or attitudes, especially relating to behavioural decisions and attitude change. Since it is not the main argument of the passage, option C can also be eliminated.

Option D captures the essence of the passage in the most appropriate manner, and hence is the correct option.

Thus, the correct answer is D.

**54. What does the figure convey?**

- A** Finite conclusions maybe drawn from infinite observations.
- B** Infinite conclusions maybe drawn from finite observations.
- C** Naive projection of the future from the past tells nothing about future.
- D** Subterfuge knowledge based on observations.

**Answer: C**

**Explanation:**

The main argument of the passage is about the unpredictability of future events even with sufficient past observations. The figure is an illustration of the main argument presenting the case of the turkey.

Options A and B are totally irrelevant in the context of the passage.

Option D: 'Subterfuge' means deceit used in order to achieve one's goal. Since this is not relevant to the context of the passage, this option can also be eliminated.

Option C: This option is an apt description of the essence of the figure and hence is the correct option.

Thus, the correct option is C.

**55. Identify the INCORRECT idiom:**

- A** Like a dying turkey in a thunderstorm.
- B** Go cold turkey.
- C** Talk turkey.
- D** Like turkey's voting for Christmas.

**Answer: A**

**Explanation:**

Option A is a misrepresentation of the idiom "Like dying duck in a thunderstorm", which means having a hopeless expression.

Thus, option A is the correct option.

**56. Which of the following is a CORRECT statement?**

- A** The passage deals with the issue of trust in politics.
- B** The passage deals with the importance of counterintuitive evidence.
- C** The passage deals with the issues of animal psychology.
- D** The passage deals with popcorning issues at animal farm.

**Answer: B**

**Explanation:**

The main argument of the passage is about the unpredictability of future events even with sufficient past observations.

Options A and C are incongruous to the main point and hence can be easily eliminated.

Popcorning means a series of accidental explosions of anything. Since this is not what the passage is dealing with, this option can also be eliminated.

Option B is a correct inference as it is suggesting the importance of counterintuitive evidence or, in other words, discouraging the overreliance on past experiences.

Thus, the correct answer is C.

57. **Select the option with the incorrect spelling:**

**A** Insuinate

**B** Sombre

**C** Interloper

**D** Gaffe

**Answer: A**

**Explanation:**

Option A is the wrong representation of the word 'insinuate', which means to suggest or hint.

Thus, the correct option is A.

58. **Fill in the blank with appropriate preposition:**

**The short story has great affinity \_\_\_\_\_ the novel.**

**A** with

**B** between

**C** over

**D** on

**Answer: A**

**Explanation:**

The only preposition among the four which fits suitably with 'affinity' is 'with'.

Thus, the correct option is A.

59. **A little change or alteration in usage of the article/helping verb may change meaning of a sentence. Below given are the sentences along with their meanings; identify the expressions with the correct meaning and choose the right option:**

**I. Little hope of success - no hope**

**II. A little hope of success - some hope at least**

**III. A neighbor to one - living near one**

**IV. Neighbor to one - kind to one**

**A** Only I and II are correct

**B** Only III and IV are correct

**C** Only II and III are correct

**D** All I, II, III and IV are correct

**Answer:** D

**Explanation:**

Since all the statements are grammatically correct, the correct option is D.

60. A little change or alteration in usage of the article/helping verb may change meaning of a sentence. Below given are the sentences along with their meanings; identify the expressions with the correct meaning and choose the right option:

I. Go to sea - become a sailor

II. Go to the sea - go on a voyage

III. Go to bed - go to the place where the bed is

IV. Go to the bed - go to sleep

**A** Only I and III are correct

**B** Only II and IV are correct

**C** Only I and II are correct

**D** Only II and III are correct

**Answer:** C

**Explanation:**

Since Statement III and IV have the meanings interchanged for their respective phrases and I and II, have the correct meaning of the phrases,

Statement I and II are correct.

Thus, the correct answer is C.

## Data Interpretation and Logical Reasoning

### Instructions [61 - 64]

The Table gives the data for the Currency exchange rates and Stock market Indexes. Any person in any country can invest in any market or currency. For investing in a country one has to use home currency of that country. One can either invest or withdraw on 1st of each month only.

Date	INR per USD	INR per GBP	Indian Stock Market Index	USA Stock Market Index	UK Stock Market Index
01-Jan-19	72.0	93.0	109	250	375
01-Feb-19	73.0	94.0	108	261	369
01-Mar-19	70.0	90.0	117	260	377
01-Apr-19	71.0	91.0	117	256	391
01-May-19	69.0	88.0	119	249	381
01-Jun-19	69.0	87.0	118	267	403
01-Jul-19	68.0	84.0	112	270	368
01-Aug-19	72.0	87.0	110	265	359
01-Sep-19	71.0	86.0	116	269	385
01-Oct-19	68.0	92.0	120	256	383
01-Nov-19	72.0	93.0	121	281	408
01-Dec-19	73.0	95.0	122	285	385
01-Jan-20	73.0	96.0	119	283	402

Note: The closing price of currency and Index of a month is same as opening price of the first day of the next month

61. If an Indian has invested Rs.93,000 in UK Stock Market in January 2019 then in which month his/her portfolio has declined by maximum percentage in rupee terms?

- A April 2019
- B May 2019
- C June 2019
- D July 2019

**Answer:** D

**Explanation:**

From the table, we can see that the % decline in the rupee was maximum in the month of July among the options and also the stock index of UK was lowest in July among the given months so the maximum decline in the portfolio was in July.

62. If an Indian has invested Rs. 100,000 in 1st January 2019 till 1st January 2020, then which option is best for her?

- A Depositing in an Indian bank at 9% per annum
- B Investment in Indian Stock Market
- C Investment in USA Stock Market
- D Investment in UK Stock Market

**Answer:** C

**Explanation:**

The percentage increase in the USA market index is the maximum among the three markets in a year.

63. If a person from USA Invest \$1500 in Indian stock market in 1st February then, on which of the following date investment reaches a maximum value in Dollar terms?

- A 1st May 2019
- B 1st June 2019

- C** 1st October 2019  
**D** 1st December 2019

**Answer: C**

**Explanation:**

Since on 1st October, the value of the rupee has gotten stronger than its value on 1st February so the investor will be able to draw more dollars for a given amount of rupee and also the Indian stock market has reached the second-highest value among the options given so the value investment is maximum on 1st October in dollars term.

64. If a person from India invest Rs. 108,000 in US stock market in the month of January 2019 then, on which one of the following dates the investment reaches minimum value in rupee terms?

- A** 1st May 2019  
**B** 1st June 2019  
**C** 1st October 2019  
**D** 1st November 2019

**Answer: A**

**Explanation:**

Among the given options since the dollar got weak the most on 1st May 2019 and also the US market index fell below the value of the index on 1st January so therefore the minimum value reaches was in 1st May 2019.

**Instructions [65 - 68 ]**

Below tables give production and sales data for 4 different categories of vehicles, in last 6 years. In any category, if the production is less than domestic sales and exports then they are imported. If the production is in excess of domestic sales and exports then they are stocked up (inventory is created) to be used in the subsequent years. There was no inventory at the beginning of year 2014-15.

	<b>Category of Vehicles</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>
<b>Production</b>	Passenger Vehicles	3221	3465	3802	4020	4028	3434
	Commercial Vehicles	698	787	810	895	1112	752
	Three Wheelers	949	934	784	1022	1269	1134
	Two Wheelers	18489	18830	19934	23155	24500	21036
<b>Domestic Sales</b>  + <b>Exports</b>	<b>Category of Vehicles</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>
	Passenger Vehicles	3222	3442	3807	4037	4053	3451
	Commercial Vehicles	702	789	822	954	1107	779
	Three Wheelers	941	942	784	1017	1269	1139
	Two Wheelers	18433	18939	19930	23015	24461	20938

65. How many vehicles were imported in year 2017-18?

- A** 76  
**B** 59

C 0

D 64

**Answer: B**

**Explanation:**

In 2017-18 only the production of commercial vehicles is less than the domestic sales and exports, so only commercial vehicles are imported.

No. of commercial vehicles imported =  $954 - 895 = 59$

66. How many two wheelers were in Inventory by the end of 2019 -20?

A 98

B 0

C 198

D 281

**Answer: D**

**Explanation:**

The inventory of two-wheelers which was created in 2014-15 is used up in 2015-16. The production of two-wheelers was more than the domestic and sales of two-wheelers therefore,

No. of two-wheelers in inventory by the end of 2019-20 =  $(19934 - 19930) + (23155 - 23015) + (24500 - 244661) + (21036 - 20938) = 4+140+39+98= 281$

67. In which year import of number of vehicles is highest?

A 2015-16

B 2016-17

C 2017-18

D 2018-19

**Answer: C**

**Explanation:**

Total vehicles imported in 2015-16 =  $(789-787) + (942-934) = 2+8 = 10$

Total vehicles imported in 2016-17 =  $(3807-3802) + (822-810) = 5+12 = 17$

Total vehicles imported in 2017-18 =  $(4037-4020) + (954-895) = 17+59 = 76$

Total vehicles imported in 2018-19 =  $(4053-4028) = 25$

68. In which of the following year inventory has maximum number of different categories?

A 2014-15

B 2015-16

C 2016-17

D 2018-19

**Answer: D**

**Explanation:**

From the table, we can say the for the year 2018-19 the inventory contains commercial vehicles, three-wheelers and two-wheelers.

So there are three distinct types of vehicles which is the maximum number for any year.

**Instructions [69 - 72 ]**

Read the following passage:

ABC Ltd is a beverages company which markets and sells six products (Product 1 to Product 6) in Tier-I cities of India. The sales are managed by a team of five sales managers (Raj, Roy, Ravi, James and Rishab) who report to Assistant Vice President of Sales. Each sales manager manages a separate territory. They are given half yearly product-wise target and rewarded with gold points for good performance or penalized with red points for underperformance. They are assessed for each product separately. They earn one gold point if performance for a product is equal to or more than 100% but less than 150%. They earn one more gold point if performance is equal to or more than 150%. These points are considered for promotion. If they earn gold points in two or more products, they get one extra bonus gold point. In case they under perform in a product (i.e. less than 100%), one gold point is deducted provided they have earned through performance in any other product/products but in case they have not earned any gold point they are given a red point. Hence, at the end of assessment, each sales manager can have either gold points or red points, depending on their performance and penalties in six products.

$$\text{Performance of Manager for a Product (\%)} = \frac{\text{Achievement}}{\text{Target}} \times 100$$

Revenue targets and achievements for the period January - June 2020 are given below.

Target Jan - June 2020 (in million rupees)						
	Product 1	Product 2	Product 3	Product 4	Product 5	Product 6
Raj	50	73	47	83	57	99
Roy	85	90	47	91	45	38
Ravi	90	93	87	47	80	56
James	32	57	84	52	49	56
Rishab	66	97	33	82	69	85

Achievement Jan - June 2020 (in million rupees)						
	Product 1	Product 2	Product 3	Product 4	Product 5	Product 6
Raj	81	44	46	79	38	69
Roy	54	57	35	63	35	55
Ravi	87	61	42	43	94	57
James	87	75	99	79	37	35
Rishab	91	74	70	37	31	76

69. For which of the following manager -product combination, the performance is closest to 100% ?

- A Raj-Product 3
- B Raj - Product 4
- C Ravi- Product 1
- D Rishab- Product 2

**Answer:** A

**Explanation:**

For option A the target is 47 and achievement is 46, so Performance =  $\frac{46}{47} \times 100 = 97.87\%$

For option B the target is 83 and achievement is 79, so Performance =  $\frac{79}{83} \times 100 = 95.18\%$

For option C the target is 90 and achievement is 87, so Performance =  $\frac{87}{90} \times 100 = 96.66\%$

For option B the target is 97 and achievement is 84, so Performance =  $\frac{84}{97} \times 100 = 86.60\%$

70. Who among the following managers has overall average performance closest to 100%?

- A Raj
- B Roy
- C James
- D Rishab

**Answer: D**

**Explanation:**

$$\text{Overall performance} = \frac{\text{total achievement}}{\text{total target}} \times 100$$

$$\text{Overall performance of Raj} = \frac{357}{409} \times 100 = 87.29\%$$

$$\text{Overall performance of Roy} = \frac{299}{396} \times 100 = 75.51\%$$

$$\text{Overall performance of James} = \frac{412}{330} \times 100 = 124.85\%$$

$$\text{Overall performance of Rishab} = \frac{379}{432} \times 100 = 87.73\%$$

Rishab's performance is closest to 100.

71. How many managers have performance greater than 150 percent in one or more products?

- A 2
- B 3
- C 4
- D 6

**Answer: B**

**Explanation:**

From the table we can conclude that Raj, James and Rishab have performance greater than 150% for one or more product.

72. How many managers will finally get four red points?

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

**Answer: A**

**Explanation:**

For 4 red points a manger need to get one gold point in one of the products and 5 red points in the remaining products.

Only Roy got one gold point and 5 red points across the products so only 1 manager will have four red points.

**Instructions [73 - 76 ]**

Read the following passage:

D Techno, a small firm, has eight employees (Employee IDs 1001 to 1008) working in three departments(Department A, Department B and Department C) who are involved in various planning and execution processes of the firm. Department C has more employees than other two departments. Most of these employees are involved in both, planning and execution processes, whereas remaining

employees are involved in either planning or execution processes only. Employees are rated for their performance using six Key Performance Indicators (KPI), three indicators for performance in three planning processes (Planning KPI1 to Planning KPI3) and three indicators for performance in execution processes (Execution KPI1 to Execution KPI3). Rating varies from zero to ten where ten indicates best performance (Fig A and Fig B). Planning Average Rating is derived as average of all three Planning KPI Ratings and Execution Average Rating is average of all three Execution KPI Ratings (Fig C). Final Weighted Rating is weighted sum of Planning Average Rating and Execution Average Rating. Each department uses its own weightages for planning and execution KPIs to calculate Final Weighted Rating. One of the departments gives 40% weightage to Planning Average Rating & 60% to Execution Average Rating, second department gives 30% & 70% and third department gives 80% & 20%. Final Weighted Rating of all employees is shown in Fig.D

### Planning KPI Ratings

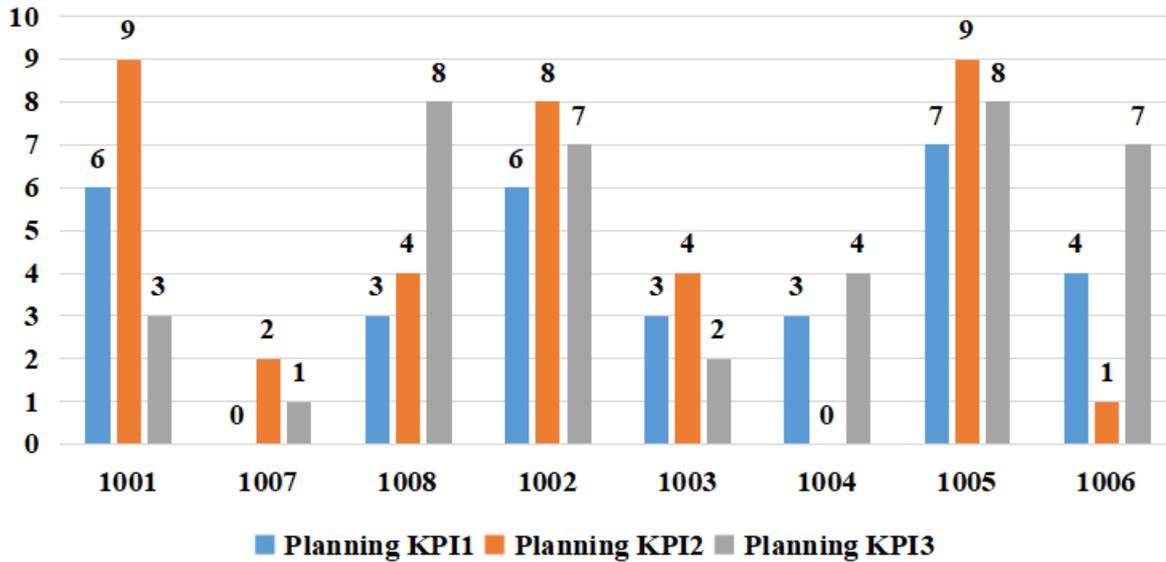


Figure A

### Execution KPI Rating



Figure B

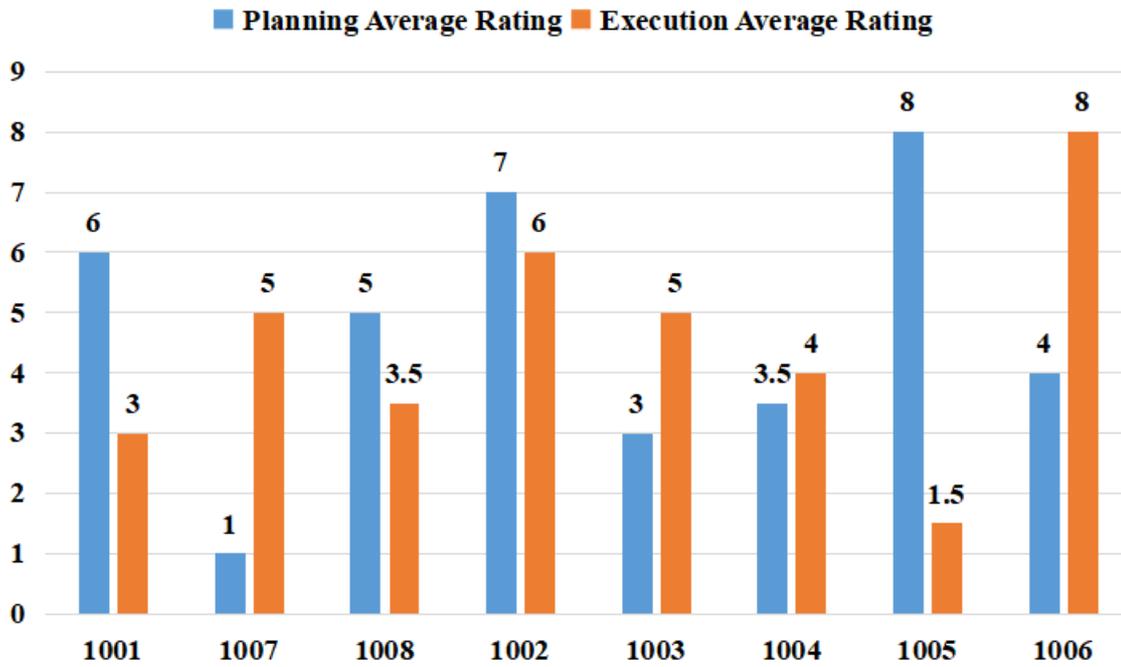


Figure C

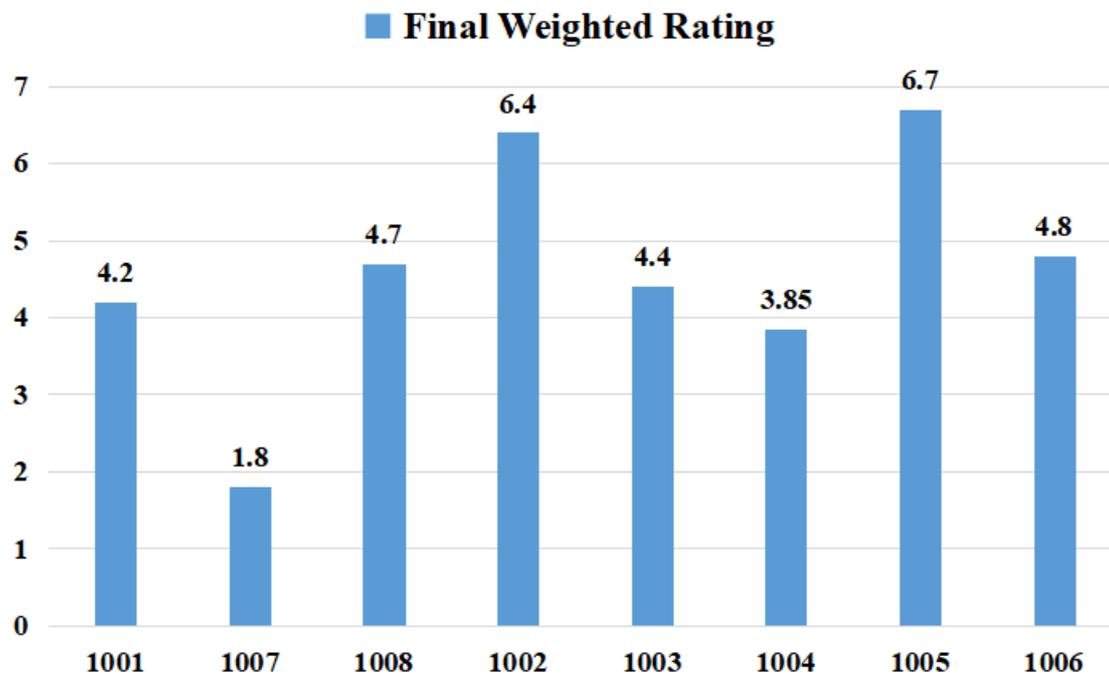


Figure D

73. How many employees have got zero rating in any of their six KPI Ratings?

- A 1
- B 3
- C 4
- D 6

**Answer: D**

**Explanation:**

We can count from the tables given that a total 6 employees have got a rating of 0 in atleast one of the KPI rating.

74. Who among the following employees is working in Department C?

- A 1001
- B 1003
- C 1004
- D 1005

**Answer:** D

**Explanation:**

From the final weighted rating, planning average rating and execution average rating we can calculate the departments to which they belong on the basis of weightage distribution.

Employee 1001 has a planning average rating of 9 and execution average rating of 3 and final rating is 4.2

Using weighted average method we can say that 20% weightage is given to planning and 80% weightage is given to execution average rating.

Similarly for other employees also we can calculate this

Employees in department which gives 40% weight to planning 60% weightage to execution are 1001, 1002

Employees in department which gives 30% weight to planning 70% weightage to execution are 1003, 1004

Employees in department which gives 20% weight to planning 80% weightage to execution are 1007, 1008, 1005, 1006

Department C has maximum employees so 1005, 1006, 1007, 1008 belong to department C.

75. How many employees are managing all the six process (three processes of Planning and three processes of Execution)? Hence, they have been rated for all six process KPIs.

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

**Answer:** A

**Explanation:**

From charts we can see that only employee 1001 and 1002 have been rated in all the six KPIs.

76. Who among the following are working in same department?

- A 1001 and 1007
- B 1002 and 1008
- C 1006 and 1008
- D 1004 and 1005

**Answer:** C

**Explanation:**

From the final weighted rating, planning average rating and execution average rating we can calculate the departments to which they belong on the basis of weightage distribution.

Employee 1001 has a planning average rating of 9 and execution average rating of 3 and final rating is 4.2

Using weighted average method we can say that 20% weightage is given to planning and 80% weightage is given to execution average rating.

Similarly for other employees also we can calculate this

Employees in department which gives 40% weight to planning 60% weightage to execution are 1001, 1002

Employees in department which gives 30% weight to planning 70% weightage to execution are 1003, 1004

Employees in department which gives 20% weight to planning 80% weightage to execution are 1007, 1008, 1005, 1006

### Instructions [77 - 80 ]

Based on the information answer the questions which follow.

In a toy shop, there are 5 toys, Doll, Teddy Bear, Remote Car, Board Game and an Airplane. The cost price and selling price are among ₹ 950, ₹ 1000, ₹ 1050, ₹ 1150 and ₹ 1200. The selling prices are different for all toys, and cost prices are different for all toys. The cost price of Remote Car is equal to the selling price of Airplane and on the sale of both the shop incurred a loss. On selling Teddy Bear the shop earned a profit. The profit earned by selling any article is more than ₹ 50 and the profit is not same for any product. Similarly, the loss incurred for any two products are not same. The toy shop earned a profit on only 2 products. It is also known that the Cost Price of the Board Game is lowest while the selling price of Teddy Bear is ₹ 1150. The Profit/Loss made on selling Doll and Teddy Bear are equal in absolute terms.

77. What is the selling price of Remote Car?

- A 1150
- B 950
- C 1200
- D 1000

**Answer:** B

78. What is the difference between the cost price and selling price of Board Game?

- A 250
- B 200
- C 100
- D 150

**Answer:** A

**Explanation:**

79. Which article has a selling price of ₹ 1050?

- A Teddy Bear
- B Doll
- C Airplane
- D Board Game

**Answer:** B

**Explanation:**

80. Which statement is true?

- A Selling Price of Board Game is ₹1050
- B Profit made by selling a doll is ₹100
- C The cost price of Airplane is equal to selling price of Board Game
- D The profit made by selling Board Game is equal to loss made by selling Airplane.

**Answer:** C

**Explanation:**

**Instructions [81 - 84 ]**

Read the following passage:

In a B-school admission, a candidate is selected based on an entrance exam score and weightage to graduation stream and gender. Selection is also based on interview. There are 6 graduation streams namely, MBBS, Law, Economics, Fashion Technology, CA and Engineering, which are given different weights with a difference of 5 each by the B-school. Silos were created for 10 candidates P, Q, R, S, T, U, V, W, X and Y to assess their scores and out of 10 candidates, 7 were selected for admission. In a silo not more than 2 candidates are from the same stream. No candidate was selected from Law stream and the final score of each candidate is same as the weightage for the graduation stream. Some more details provided are as follows:

- (i). In the silo there are 6 females and 4 males, out of which 4 females and 3 males were selected. One female and one male from the lowest weightage stream were selected with a score of 60.
- (ii). Fashion Technology is the stream with highest weightage with only one candidate who is also selected from this stream. R is a male, the only candidate from MBBS and not from the lowest scoring stream, while Q a female is from engineering and is selected.
- (iii). CA has a score of 70 in which 2 candidates appeared but only one female was selected.
- (iv). T is from Fashion Technology while P is an engineer. V is an unselected male while U scored 65 and is from Economics. 2 candidates from Economics were selected.
- (v). W is a selected CA and X and Y are not from the same stream. Y scores 80 while S scores 65.

81. In how many streams were both the appearing candidates selected?

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

**Answer:** B

**Explanation:** Fashion and MBBS have only 1 student. Thus, 2 students are law graduates.

Candidates	Gender	Silo	Status	Stream
P	Male			Engineer
Q	Female		Y	Engineer
R	Male			MBBS
S		65		Economics
T				Fashion
U		65	Y	Economics
V	Male			
W	Female	70		CA
X				
Y		80		

Also, since U and S scored a score of 65 and U is from economics, S will also be from economics.

Since 1 student each from law and CA are left, X and Y are from Law and CA.

Since W scored 70 and Y scored 80, X is a CA graduate, and Y is from the law.

Also, since MBBS does not have the lowest Silo, thus, engineering will have the lowest Silo.

The Silo of MBBS will be 75, and that of the engineer will be 60.

From statement 3, since W is selected, X will not be selected.

Now since 2 law students and 1 CA is not selected, all the other candidates will be selected(since only 3 people were rejected).

Candidates	Gender	Silo	Status	Stream
P	Male	60	Y	Engineer
Q	Female	60	Y	Engineer
R	Male	75	Y	MBBS
S		65	Y	Economics
T		85	Y	Fashion
U		65	Y	Economics
V	Male	80	N	Law
W	Female	70	Y	CA
X		70	N	CA
Y		80	N	Law

Since both the candidates from Engineering and Economics were selected, the correct answer will be 2.

Thus, B is the correct option.

82. Which statement is always true?

- A S is a selected female
- B U is a male candidate from Economics
- C X is an unselected female candidate from CA stream
- D P is a selected female with score 60

**Answer: C**

**Explanation:** Fashion and MBBS have only 1 student. Thus, 2 students are law graduates.

Candidates	Gender	Silo	Status	Stream
P	Male			Engineer
Q	Female		Y	Engineer
R	Male			MBBS
S		65		Economics
T				Fashion
U		65	Y	Economics
V	Male			
W	Female	70		CA
X				
Y		80		

Also, since U and S scored a score of 65 and U is from economics, S will also be from economics.

Since 1 student each from law and CA are left, X and Y are from Law and CA.

Since W scored 70 and Y scored 80, X is a CA graduate, and Y is from the law.

Also, since MBBS does not have the lowest Silo, thus, engineering will have the lowest Silo.

The Silo of MBBS will be 75, and that of the engineer will be 60.

From statement 3, since W is selected, X will not be selected.

Now since 2 law students and 1 CA is not selected, all the other candidates will be selected(since only 3 people were rejected).

Candidates	Gender	Silo	Status	Stream
P	Male	60	Y	Engineer
Q	Female	60	Y	Engineer
R	Male	75	Y	MBBS
S		65	Y	Economics
T		85	Y	Fashion
U		65	Y	Economics
V	Male	80	N	Law
W	Female	70	Y	CA
X		70	N	CA
Y		80	N	Law

Since 3 out of 4 males are getting selected and V is already rejected, all the other rejected candidates are female.

Thus, X is a female rejected candidate from CA.

The correct option is C.

83. What is the maximum possible difference in the scores of the highest scoring selected female candidate and lowest scoring male candidate?

- A 30
- B 20
- C 25
- D 35

**Answer:** C

**Explanation:** Fashion and MBBS have only 1 student. Thus, 2 students are law graduates.

Candidates	Gender	Silo	Status	Stream
P	Male			Engineer
Q	Female		Y	Engineer
R	Male			MBBS
S		65		Economics
T				Fashion
U		65	Y	Economics
V	Male			
W	Female	70		CA
X				
Y		80		

Also, since U and S scored a score of 65 and U is from economics, S will also be from economics.

Since 1 student each from law and CA are left, X and Y are from Law and CA.

Since W scored 70 and Y scored 80, X is a CA graduate, and Y is from the law.

Also, since MBBS does not have the lowest Silo, thus, engineering will have the lowest Silo.

The Silo of MBBS will be 75, and that of the engineer will be 60.

From statement 3, since W is selected, X will not be selected.

Now since 2 law students and 1 CA is not selected, all the other candidates will be selected (since only 3 people were rejected).

Candidates	Gender	Silo	Status	Stream
P	Male	60	Y	Engineer
Q	Female	60	Y	Engineer
R	Male	75	Y	MBBS
S		65	Y	Economics
T		85	Y	Fashion
U		65	Y	Economics
V	Male	80	N	Law
W	Female	70	Y	CA
X		70	N	CA
Y		80	N	Law

The maximum possible difference will be when T is female and U/S is male.

The difference in silos =  $85 - 60 = 25$ .

Thus, the correct option is C.

84. If out of 3 selected males, the highest scoring male withdraws admission, then a male from the waiting list is selected. In the present silo, from which stream will be a male candidate (from the waiting list) get selected?

- A Law
- B CA
- C Engineering
- D MBBS

**Answer:** A

**Explanation:** Fashion and MBBS have only 1 student. Thus, 2 students are law graduates.

Candidates	Gender	Silo	Status	Stream
P	Male			Engineer
Q	Female		Y	Engineer
R	Male			MBBS
S		65		Economics
T				Fashion
U		65	Y	Economics
V	Male			
W	Female	70		CA
X				
Y		80		

Also, since U and S scored a score of 65 and U is from economics, S will also be from economics.

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Since W scored 70 and Y scored 80, X is a CA graduate, and Y is from the law.

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Candidates	Gender	Silo	Status	Stream
P	Male	60	Y	Engineer
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S		65	Y	Economics
T		85	Y	Fashion
U		65	Y	Economics
V	Male	80	N	Law
W	Female	70	Y	CA
X		70	N	CA
Y		80	N	Law

Since only male V is not selected, he will move up the waiting list.

Thus, the correct option is A.

### Instructions [85 - 86 ]

Read the following passage:

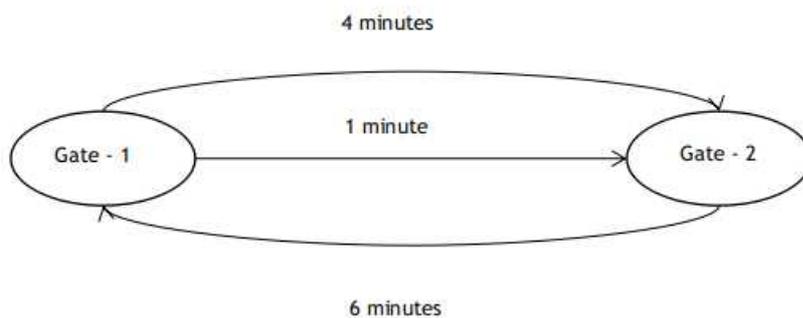
Four colleagues A,B,C and D during lunch time which is from 1:00 - 1:30 pm on a given day go for a walkthrough 2 different routes i.e. they exit from one gate and enter from the other one. A straight path, within the office, connects Gates 1 and 2. A and B exit from Gate 1 and enter from Gate 2, and again move towards Gate 1 using the straight path; while C and D exit from Gate 2 and enter from Gate 1, and again move towards Gate 2 using the straight path. The routes are in clockwise direction i.e. Gate1 to Gate 2 a person can only walk in clockwise direction and similarly from Gate 2 to Gate 1. It takes 4 minutes to walk from Gate 1 exit to Gate 2 entrance and 6 minutes to walk from Gate 2 exit to Gate 1 entrance. The time taken to walk from Gate 1 to Gate 2 and vice versa within the office is 1 minute. Initially, the colleagues leave at a gap of 2 minutes each in the order of B, A, C and D during lunch time. Each person starts the next round of walk immediately after completing the first round.

85. If A leaves from Gate 1 at 1:02 pm, when will A leave for his third round?

- A 1:16 pm
- B 1:12 pm
- C 1:18 pm
- D 1:24 pm

**Answer: B**

**Explanation:**



Since A is moving from Gate 1 to Gate 2 and then coming back to Gate 1, the total time for completion of one round will be 5 minutes.

After completion of 2 rounds, i.e., after 10 minutes, A will leave for the third round.

Thus, the correct answer is B.

86. If D leaves Gate 2 at 1:15 pm, following the same sequence as stated in the passage, then which of the two colleagues will meet at Gate 2 before 1:30 pm?

- A A and B

**B** C and A

**C** D and A

**D** B and D

**Answer:** B

**Instructions [87 - 88 ]**

Read the following passage:

On a picnic trip of a company, 3 hotels Trident, Hilton and Park were booked for 90 employees. 6 of the employees were willing to stay at any hotel. 12 wanted to stay in only Trident. 18 wanted to stay in only Park. Only Hilton had two times the employees as there were in Trident and Park only. Only Hilton and Park had three less than only Trident and Hilton. Also not more than 7 employees can stay in only Trident and Hilton.

87. **How many employees can stay in Hilton?**

**A** 47

**B** 44

**C** 45

**D** 46

**Answer:** C

**Explanation:** Now, total employees in Hilton =  $2X + 2Y + 9 = 36 + 9 = 45$

Thus, the correct option is C.

88. **How many employees can stay in Trident and Hilton only?**

**A** 4

**B** 6

**C** 7

**D** 5

**Answer:** B

**Explanation:** he number of employees in Trident and Hilton will be  $Y + 3 = 6$ .

Thus, the correct answer will be B.

89. **Complete the following sequence:**

5, 72, 412, 2658, \_\_\_\_\_?

**A** 12772

**B** 21264

**C** 21512

**D** 18876

**Answer:** C

**Explanation:**

The series is in the form of  $2na_n + 62(n - 1)$ ,  $n > 1$ , where  $a_1 = 5$

For  $n = 2$ ,  $a_2 = 5 \times 2 + 62 \times 1 = 72$

For  $n = 3$ ,  $a_3 = 72 \times 4 + 62 \times 2 = 412$

For  $n = 4$ ,  $a_4 = 412 \times 6 + 62 \times 3 = 2658$

For  $n = 5$ ,  $a_5 = 2658 \times 8 + 62 \times 4 = 21512$

Thus the correct option is C.

90. **A word arrangement, when rearranged by given input follow a particular rule/logic in each step. Following is an example of input and rearrangement. Study that rule/logic and apply on given problem.**

**INPUT: man's mood varies with time and environment**

**Steps/Results:**

**I. Varies with man's mood environment and time**

**II. And time environment mood man's varies with**

**III. Environment time and varies with mood man's**

**IV. And varies environment time man's mood with**

**If Step IV reads, 'everyone was aware about their beautiful friendship', what will be the three middle words of Step II?**

- A** their beautiful aware
- B** aware beautiful their
- C** everyone were friendship
- D** aware were beautiful

**Answer: B**

**Explanation:**

Since the question is only considering the 4th and 2nd lines,

Let us consider the third line of the illustration and arrange the 4th and 2nd lines accordingly.

III. Environment time and varies with mood man's

Let Environment - 1, time - 2, and - 3, varies - 4, with - 5, mood - 6, and man's - 7.

Now, the coded version of III will be 1234567.

From the illustration, the code IV will be 3412765 and II will be 3216745.

Now after applying a similar code pattern in Step IV of the asked question, step II will be

Everyone about aware beautiful their was friendship.

Thus, the correct answer is B.

## General Awareness

91. **'Lithium Triangle' countries are:**

- A** New Zealand, Australia and Solomon Islands
- B** US, Canada, Mexico
- C** Norway, Sweden, Finland
- D** Chile, Bolivia and Argentina

**Answer: D**

92. Match List I with List II

<b>List I</b>	<b>List II</b>
<b>Brand</b>	<b>Mission Statement</b>
A. Under Armour	i. To bring inspiration and innovation to every athlete in the world
B. Nike	ii. To be the best Cafe chain by offering a World class coffe experience at affordable prices.
C. Starbucks	iii. To make all athletes better through passion, design and the relentless pursuit of innovation
D. Cafe Coffe Day	iv. To inspire and nurture the human spirit - one person, one cup and one neighbourhood at a time

Choose the correct answer from the options given below:

- A** A - i, B - iii, C - ii, D - iv
- B** A - iii , B - i , C - iv, D - ii
- C** A - i , B - iii, C - iv, D - ii
- D** A - iii , B - i , C - ii , D - iv

**Answer:** B

93. Match the Company with its respective Headquarter Country:

<b>Company</b>	<b>Headquarters</b>
A. Zara	I. Germany
B. H & M	II. Italy
C. Louis Vuitton	III. Spain
D. SAP	IV. France
E. Ferrari	V. Sweden

Choose the correct answer from the options given below:

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

**Answer:** C

94. Match the prime ministers with their respective countries.

	<b>Prime Minister</b>		<b>Countries</b>
A.	A. Zara	I.	Magdalena Andersson
B.	B. H & M	II.	Fumio Kishida
C.	C. Louis Vuitton	III.	Jean Castex
D	D. SAP	IV	Jonas Gahr Store
E	E. Ferrari	V	Mirtha Vasquez

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

**Answer: C**

95. According to the Economist Intelligence Unit (EIU), World Wide Cost of Living survey, 2021,\_\_\_\_\_ is the most expensive city in the world to live in.

- A** Tel Aviv, Israel
- B** Zurich, Switzerland
- C** New York, USA
- D** Paris, France

**Answer: A**

96. Identify the nick names associated with the given players:

<b>Player</b>	<b>Nick Name</b>
A. Clive Lloyd	i. Moyna
B. Mark Waugh	ii. Super cat
C. Shakib Al Hasan	iii. Binga
D. Bret Lee	iv. Afghan

Choose the correct answer from the options given below:

- A** A - ii, B - iii, C - i, D - iv
- B** A - iii, B - iv, C - ii, D - i
- C** A - i, B - ii, C - iii, D - iv
- D** A - ii, B - iv, C - i, D - iii

**Answer: D**

97. 'Glow and Lovely' is a product of:

- A** Nestle
- B** Procter & Gamble Company
- C** Hindustan Unilever Ltd.
- D** Marico Limited

**Answer: C**

98. Which court is the oldest high court in India?

- A Calcutta High Court
- B Madras High Court
- C Bombay High Court
- D Delhi High Court

**Answer:** A

99. Match List I with List II

List I	List II
A. Bundal and Buddo Islands	I. South China Sea
B. Tigray	II. Ethiopia
C. Nine Dash Line	III. Iran
D. Kish Island	IV. Pakistan

Choose the correct answer from the options given below:

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

**Answer:** A

100. Which of the following is correct regarding eNAM?

- A eNAM is a direct benefit transfer schene for farmers
- B eNAM is an electronic trading portal for farmers
- C eNAM is a fertilizer distribution App
- D eNAM is a mobile app to link one's AADHAAR with Voter ID card

**Answer:** B

101. Which country holds the presidency of G20 in 2021?

- A Indonesia
- B Japan
- C Thailand
- D Italy

**Answer:** D

102. What is the name of India's operation of evacuating its citizens from war-torn Afghanistan?

- A Operation Safed Sagar
- B Operation Raahat
- C Operation Surya Hope
- D Operation Devi Shakti

**Answer:** D

103. The Kashi-Vishwanath corridor will connect:

- A Man Mandir and Darbhanga Ghat to Ramnagar Fort
- B Dashashwamedh and Kedar Ghat to the Sita Samahit Sthal
- C Panchganga and Scindia Ghat to Dhamekh Stupa
- D Manikarnika and Lalita Ghat to Kashi Vishwanath Jyotirlinga Temple

**Answer:** D

104. Which of the following countries unveiled a new commemorative coin to mark Diwali, 2021, celebrating the life and legacy of Indian independence leader Mahatma Gandhi?

- A Sri Lanka
- B South Africa
- C United Kingdom
- D USA

**Answer:** C

105. "Self-made", a limited series on Netflix is inspired by the life of:

- A Nina Simone
- B Betty White
- C Madam C J Walker
- D Dolly Parton

**Answer:** C

106. Where is North Atlantic Treaty Organization's (NATO) headquarters located?

- A France
- B Russia
- C USA

**D** Belgium

**Answer: D**

107. \_\_\_\_\_ won the 2021 Nobel Prize in Physiology or Medicine for their discoveries of receptors for temperature and touch.

- A** David Julius and Ardem Patapoutian
- B** Harvey J. Alter, Michael Houghton and Charles M. Rice
- C** William G. Kaelin Jr, Sir Peter J. Ratcliffe and Gregg L. Semenza
- D** James P. Allison and Tasuku Honjo

**Answer: A**

108. Identify the correct statement:

- I.** Barcelona, Spain is scheduled to host next summer Olympics in 2022.
- II.** Byjus has acquired Great Learning.
- III.** Mr Ajay Tyagi is the Chairman of SEBI.
- IV.** Mirabai Chanu won a Bronze Medal in Weightlifting at Tokyo Olympics.

- A** Only II & III are correct
- B** Only IV is correct
- C** Only I is correct
- D** Only I & III are correct

**Answer: A**

109. Given below are four statements about FELUDA:

- Statement I:** This is Jagdish Chandra Bose's fictional character.
  - Statement II:** A Covid test developed by CSIR
  - Statement III:** A fictional private investigator.
  - Statement IV:** A short form for FnCas9 elementary linked useful detecting assistant
- In light of the above statements, choose the correct answer from the options given below

- A** Statement I, II and IV are correct
- B** Statement I, II and III are correct
- C** Only Statement II and IV are correct
- D** Only Statement II and III are correct

**Answer: D**

110. Match the novels/books with their corresponding author:

Name of the Book/Novel	Authors
A. A Christmas Carol	i. L.M. Montgomery
B. Dracula	ii. Charles Dickens
C. War and Peace	iii. Leo Tolstoy
D. Frankenstein	iv. Bram Stoker
E. Anne of Green Gables	v. Mary Shelley

Choose the correct answer from the options given below

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

**Answer:** B