

Parmar SSC Live Mock 17

<p>Q. 1</p> <p>Find the remainder when $49 \times 73 \times 75 \times 37 \times 111$ is divided by 36.</p> <p>a) 9 ✓ b) 6 ✗ c) 5 ✗ d) 15 ✗</p>	<p>Explanation:</p> <p>1. $\frac{49 \times 73 \times 75 \times 37 \times 111}{36}$ $\Rightarrow \frac{13 \times 1 \times 3 \times 1 \times 3}{36} \rightarrow$ Individual Remainders $\Rightarrow \frac{117}{36} \rightarrow R=9$</p>
<p>Q. 2</p> <p>A bank offers 10% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹5500 each on 1 January and 1 July of a year. At the end of the year, the amount he would have gained by way of interest is _____.</p> <p>a) 7363.6 ✗ b) 5637.5 ✗ c) 8387.5 ✓ d) 10123.5 ✗</p>	<p>2. From 1 Jan From 1 July. $T_1 = 2$ $T_2 = 1$ $R_1 = \frac{10}{2} = 5\%$ $R_2 = \frac{10}{2} = 5\%$ $CI_1 = A - P$ $CI_2 = A - P$ $= P \left(1 + \frac{R}{100}\right)^T - P$ $= P \left(1 + \frac{R}{100}\right)^T - P$ $= 55000 \left(1 + \frac{5}{100}\right)^2 - 55000$ $= 55000 \left(1 + \frac{5}{100}\right) - 55000$ $\therefore CI_1 + CI_2 = 55000 \left(1 + \frac{5}{100}\right)^2 + 55000 \left(1 + \frac{5}{100}\right) - 110,000$ $= 55000 \left(1 + \frac{5}{100}\right) \left(1 + \frac{5}{100} + 1\right) - 110,000$ $= 55000 \times \frac{21}{20} \times \frac{41}{20} - 110,000$ $= 8387.5$</p>

Q. 3

If $2\sin\theta + 2\sin^2\theta = 2$, then the value of $\cos^4\theta + \cos^2\theta$ is:

- a) 1 ✓
- b) 0 ✗
- c) 2 ✗
- d) -1 ✗

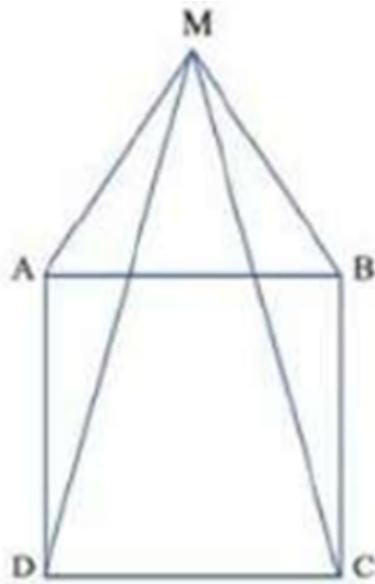
Explanation:

$$\begin{aligned}
 3. \quad & 2\sin\theta + 2\sin^2\theta = 2 \\
 \Rightarrow & \sin\theta + \sin^2\theta = 1 \\
 \Rightarrow & \sin\theta = 1 - \sin^2\theta \quad [\because 1 - \sin^2\theta = \cos^2\theta] \\
 \Rightarrow & \sin\theta = \cos^2\theta
 \end{aligned}$$

$$\begin{aligned}
 & \cos^4\theta + \cos^2\theta \\
 \Rightarrow & (\cos^2\theta)^2 + \cos^2\theta \\
 \Rightarrow & (\sin^2\theta) + \cos^2\theta = 1 \quad (\text{property})
 \end{aligned}$$

Q. 4

ABCD is a square and $\triangle MAB$ is an equilateral triangle. MC and MD are joined. What is the degree measure of $\angle MDC$?



- a) 65° X
- b) 75° ✓
- c) 60° X
- d) 90° X

Explanation:

4. ABCD is a square
 $\Rightarrow AB = AD = BC = CD \text{ --- (1)}$
 $\triangle MAB$ is an equilateral triangle
 $\Rightarrow MA = AB = MB \text{ --- (2)}$
Equating (1) and (2),
 $AB = AD = BC = CD = MA = MB$
In $\triangle MAD$,
 $MA = AD$
 $\Rightarrow \angle ADM = \angle AMD$ [Angles opposite to equal sides are equal]
 $\angle DAM = 90^\circ + 60^\circ = 150^\circ$
 $\Rightarrow \angle ADM = \angle AMD = \frac{1}{2}(180^\circ - 150^\circ) = 15^\circ$
 $\angle ADC = 90^\circ$
 $\Rightarrow \angle ADM + \angle MDC = 90^\circ$
 $\Rightarrow 15^\circ + \angle MDC = 90^\circ$
 $\Rightarrow \angle MDC = 75^\circ$

Q. 5

- In an election between two candidates, 85% of the voters cast their vote out of which 127 votes were declared invalid. The winner got 51% of all the voters in the list and he won by 7777 votes. The number of voters on the list was:
- 50000
 - 45000
 - 42000
 - 40000

Explanation:

5. Let total voters in list = $100x$
 votes cast = 85% = $85x$
 Invalid = 127
 Valid Votes = $85x - 127$
 Winner votes = $51x$

A/Q,
 $\text{Loser} + 7777 = 51x$
 $\Rightarrow \text{Loser votes} = 51x - 7777$
 $\therefore \text{Winner} + \text{Loser} = 85x - 127$
 $\Rightarrow 51x + 51x - 7777 = 85x - 127$
 $\Rightarrow 17x = 7650$
 $\Rightarrow 100x = \frac{7650}{17} \times 100$
 $= 45000$

Q. 6

If $\sin\theta + \cos\theta = \frac{\sqrt{3}}{2\sqrt{2}}$, then what is the value of $\sec\theta + \cosec\theta$:

- a) $\frac{4\sqrt{6}}{5}$ X
- b) $\frac{6\sqrt{4}}{5}$ X
- c) $-\frac{6\sqrt{4}}{5}$ X
- d) $-\frac{4\sqrt{6}}{5}$ ✓

Explanation:

$$6. \quad \sin\theta + \cos\theta = \frac{\sqrt{3}}{2\sqrt{2}}$$

$$\text{Squaring both sides,} \\ (\sin\theta + \cos\theta)^2 = \left(\frac{\sqrt{3}}{2\sqrt{2}}\right)^2$$

$$\Rightarrow \sin^2\theta + \cos^2\theta + 2\sin\theta \cdot \cos\theta = \frac{3}{8}$$

$$\Rightarrow 2\sin\theta \cdot \cos\theta = \frac{3}{8} - 1 = -\frac{5}{8} \quad [\because \sin^2\theta + \cos^2\theta = 1]$$

$$\therefore \sec\theta + \cosec\theta = \frac{1}{\cos\theta} + \frac{1}{\sin\theta} \\ = \frac{\sin\theta + \cos\theta}{\sin\theta \cdot \cos\theta} \\ = \frac{\frac{\sqrt{3}}{2\sqrt{2}}}{-\frac{5}{16}} \\ = \frac{-4\sqrt{6}}{5}$$

Q. 7

A man walks to a viewpoint and returns to the starting point by his car maintaining constant speed and thus takes a total time of 7 hours 30 minutes. He would have gained 6 hours 30 minutes by driving both ways. How long would it have taken for him to walk both ways with the same walking speed?

- a) 15 hours 30 minutes X
- b) 14 hours ✓
- c) 14 hours 30 minutes X
- d) 15 hours X

Explanation:

7. walking one way + driving one way = 7hr 30mins
Driving both ways, he gained 6hr 30min.

$$\Rightarrow \text{Total time taken} = 7\text{hr } 30\text{min} - 6\text{hr } 30\text{min} \\ = 1\text{hr}$$

$$\Rightarrow \text{Driving one way} = \frac{1\text{hr}}{2} = 30\text{ mins}$$

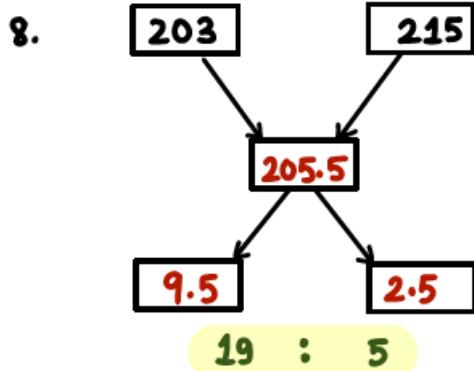
$$\Rightarrow \text{walking one way} = 7\text{hr } 30\text{min} - 30\text{ min} \\ = 7\text{hr}$$

$$\therefore \text{walking both ways} = 2 \times 7\text{hr} \\ = 14\text{hr.}$$

Q. 8

To obtain a mixture valued at ₹205.50 per kg, in what ratio should a grocer combine two types of pulses that cost ₹203 per kg and ₹215 per kg, respectively?

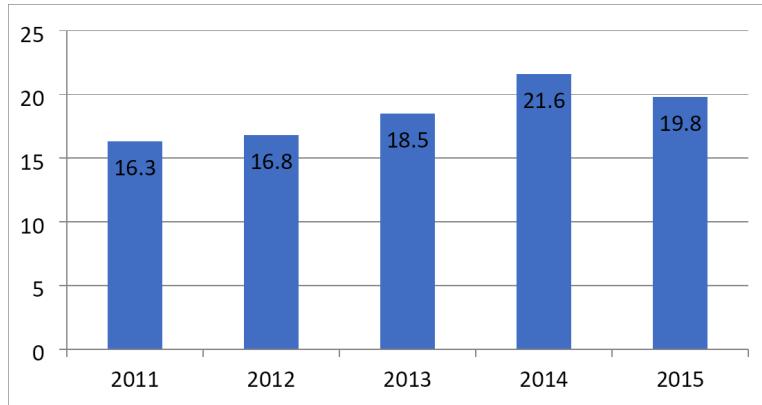
- a) 19:5 ✓
- b) 5:17 ✗
- c) 17:5 ✗
- d) 5:19 ✗



Explanation:

Q. 9

The following bar graph represents the export of sugarcane (in lakh ₹) during five years. Study the bar graph carefully and answer the question given below:



What is the approximate percent decrease in export in 2012 in comparison to the average export during these five years?

- a) 25.3%
- b) 23.1%
- c) 6.7%
- d) 20.375%

Explanation:

9. Average export in 5 years

$$= \frac{16.3 + 16.8 + 18.5 + 21.6 + 16.8}{5}$$

$$= 18$$

$$\% \text{ decrement} = \left(\frac{18 - 16.8}{18} \right) \times 100\%.$$

$$= 6.7\%$$

Q. 10

The difference between the smallest and the largest fractions among

$$\frac{35}{48}, \frac{5}{7}, \frac{23}{39}, \frac{11}{15}$$

a) $\frac{28}{195}$ ✓

b) $\frac{29}{208}$ ✗

c) $\frac{34}{273}$ ✗

d) $\frac{33}{265}$ ✗

$$10. \quad \frac{35}{48} = 0.729$$

$$\frac{5}{7} = 0.714$$

$$\frac{23}{39} = 0.598$$

$$\frac{11}{15} = 0.73$$

Explanation:

$$\therefore \text{Largest} = \frac{11}{15}$$

$$\therefore \text{Smallest} = \frac{23}{39}$$

$$\Rightarrow \frac{11}{15} - \frac{23}{39} = \frac{143 - 115}{3 \times 5 \times 13}$$

$$= \frac{28}{3 \times 5 \times 13}$$

$$= \frac{28}{195}$$

Q. 11

If $a + b + c = 7$, $a^3 + b^3 + c^3 = 119$ and $abc = 35$, then find the value of $a^2 + b^2 + c^2 - ab - bc - ca$:

a) 7 ✗

b) 2 ✓

c) 5 ✗

d) $2/7$ ✗

$$11. \quad a+b+c = 7$$

Cubing both the sides,

$$(a+b+c)^3 = (7)^3$$

$$\Rightarrow a^3 + b^3 + c^3 - 3abc = (a+b+c)(a^2 + b^2 + c^2 - ab - bc - ca)$$

$$\Rightarrow 119 - 3(35) = 7(a^2 + b^2 + c^2 - ab - bc - ca)$$

$$\Rightarrow 2 = a^2 + b^2 + c^2 - ab - bc - ca$$

Explanation:

Q. 12

If $21 \times 17 \times 760 \div \sqrt{1444} = T + 195$, then find the value of T:

- a) 6596 X
- b) 6945 ✓
- c) 7335 X
- d) 7569 X

$$12. \frac{21 \times 17 \times 760}{\sqrt{1444}} = T + 195$$

Explanation:

$$\Rightarrow \frac{21 \times 17 \times 760}{38} = T + 195$$

$$\Rightarrow 7140 = T + 195$$

$$\Rightarrow T = 6945$$

Q. 13

Raman covers 400 km in a boat in 48 hours against the stream and he takes 32 hours with the stream, then find the speed of the stream?

- a) $9/4$ km/h X
- b) $13/6$ km/h X
- c) $29/12$ km/h X
- d) $25/12$ km/h ✓

13. let speed of stream 's' km/hr
let speed of boat 'b' km/hr

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

A/q,

$$(b-s) = \frac{400}{48} = \frac{50}{6} = \frac{25}{3} \quad \text{--- ①}$$

$$(b+s) = \frac{400}{32} = \frac{25}{2} \quad \text{--- ②}$$

Subtracting eqⁿ(1) from eqⁿ(2) -

$$b+s - (b-s) = \frac{25}{2} - \frac{25}{3}$$

$$2s = \frac{75-50}{6}$$

$$2s = \frac{25}{6}$$

$$s = \frac{25}{12} \text{ km/hr}$$

Explanation:

Q. 14

For a positive integer $b > 2$, if the product of two numbers 4544 and 38b8 is divisible by 12, then find the least value of b.

- a) 2 X
- b) 5 ✓
- c) 6 X
- d) 3 X

Explanation:

14. for divisibility by $12 = 2^2 \times 3$, the no.
Should be divisible by 4 and 3.

Product of 4544 and 38b8 is
divisible by 12.

Divisibility by 3 \Rightarrow sum of digits
should be divisible by 3.

$$\begin{aligned}\therefore 4544 &\Rightarrow 4+5+4+4 = 17 \text{ (Not divisible by 3)} \\ &\Rightarrow 38b8 \text{ Should be divisible by 3} \\ &\Rightarrow 3+8+b+8 = 19+b \\ &\Rightarrow b = 2, 5, 8 \quad (b>2)\end{aligned}$$

Divisibility by 4 \Rightarrow The last 2 digits
should be divisible by 4

$\therefore 4544 \Rightarrow 44$ is divisible by 4, so no
need to check other no.

\Rightarrow The least possible value of b is 5.

Q. 15

A hollow spherical shell is made of a metal of density 8 g/cm³. Its internal and external radius is 3 cm and 6 cm, respectively. What is the weight (in kg) of the shell ?

- a) 6.33 ✓
- b) 2.25 ✗
- c) 4.36 ✗
- d) 3.35 ✗

Explanation:

15. let $R \rightarrow$ ext. radius
 $r \rightarrow$ int. radius
 Volume of spherical shell
 $= \frac{4}{3} \pi (R^3 - r^3)$
 $= \frac{4}{3} \times \frac{22}{7} [6^3 - 3^3]$
 $= \frac{4}{3} \times \frac{22}{7} \times 189$
 $= 792 \text{ cm}^3$

Density = $\frac{\text{weight}}{\text{volume}}$
 $\Rightarrow \text{weight} = \text{Density} \times \text{volume}$
 $= \frac{8 \times 792}{1000} \text{ Kg}$
 $= 6.336 \text{ Kg.}$

Q. 16

A man sold an article for ₹1512 by first giving a d% discount on its marked price, and then another discount having the same nominal value (in ₹). If the marked price of the article is ₹5400, then what is the value of d?

- a) 38 ✗
- b) 36 ✓
- c) 42 ✗
- d) 31 ✗

Explanation:

$$\begin{aligned}
 \text{16. value of } d\% \text{ discount on MP} &= \frac{d}{100} \times MP \\
 &= \frac{d}{100} \times 5400 \\
 &= 54d \\
 \text{A/q,} \\
 MP - (d\% \text{ discount + same nominal value discount}) &= SP \\
 \Rightarrow 5400 - 54d - 54d &= 1512 \\
 \Rightarrow d &= 36
 \end{aligned}$$

Q. 17

If $abc = 5$, what is the value of $\left(\frac{1}{1+a+b^{-1}} + \frac{1}{1+b+5c^{-1}} + \frac{1}{1+\frac{c}{5}+a^{-1}} \right)$?

- a) $a+b+c$ X
- b) 1 ✓
- c) 5 X
- d) 0 X

17. $abc = 5$

$$\frac{1}{1+a+b^{-1}} + \frac{1}{1+b+5c^{-1}} + \frac{1}{1+\frac{c}{5}+a^{-1}}$$

$$\frac{1}{1+a+\frac{1}{b}} + \frac{1}{1+b+\frac{5}{c}} + \frac{1}{1+\frac{c}{5}+\frac{1}{a}}$$

$$\frac{1}{1+a+\frac{ac}{5}} + \frac{1}{1+\frac{5}{ac}+\frac{5}{c}} + \frac{1}{1+\frac{c}{5}+\frac{1}{a}}$$

Explanation:

$$\left[\frac{1}{b} = \frac{ac}{5}, b = \frac{5}{ac}, \frac{c}{5} = \frac{1}{ab} \right]$$

$$\frac{5}{5+5a+ac} + \frac{ac}{ac+5+5a} + \frac{5a}{5a+ac+5}$$

$$\frac{5+ac+5a}{5+5a+ac} = 1$$

PTS WAY-

Assume $a=5, b=c=1$.

Q. 18

Jatin invested a sum of ₹12000 at 35% per annum compound interest, compounded annually. If she received an amount of ₹29524.5 after n years, the value of n is:

- a) 2 X
- b) 5 X
- c) 4 X
- d) 3 ✓

Explanation:

$$\begin{aligned}
 18. \quad A &= P \left(1 + \frac{R}{100}\right)^n \quad \text{no. of years} \\
 \Rightarrow 29524.5 &= 12000 \left(1 + \frac{R}{100}\right)^n \\
 \Rightarrow \frac{29524.5}{12000} &= \left(1 + \frac{R}{100}\right)^n \\
 \Rightarrow \frac{5904.9}{2400} &= \left(1 + \frac{35}{100}\right)^n \\
 \Rightarrow \frac{5904.9}{2400} &= \left(1 + \frac{35}{20}\right)^n \\
 \Rightarrow \frac{1968.3}{800} &= \left(\frac{27}{20}\right)^n \\
 \Rightarrow n &= 3
 \end{aligned}$$

Q. 19

Rajesh's average earning per month in the first three months of a year was ₹4800. In April, his earning was 50% more than the average earning in the first three months. If his average earning per month for the whole year is ₹16000, then what will be Rajesh's average earning (in ₹) per month from May to December?

- a) 18800 X
- b) 23600 X
- c) 19600 X
- d) 21300 ✓

Explanation:

$$\begin{aligned}
 19. \quad \text{Rajesh avg. Earning in 1st 3-months} &= ₹4800 \\
 \text{April earning} &= 150\% \text{ of Avg of 1st 3-months} \\
 &= \frac{150}{100} \times 4800 = ₹7200 \\
 \text{Total salary for whole year} &= 16000 \times 12 \\
 &= ₹192000 \\
 \text{Salary from May to December} &= \text{Total} - (\text{Salary from Jan to April}) \\
 &= 192000 - 14400 - 7200 \\
 &= ₹170400 \\
 \text{Avg. earning from May to Dec.} &= \frac{170400}{8} = ₹21300
 \end{aligned}$$

Q. 20	<p>20 men begin to do work. But after some days, 10 of them left the job. As a result, the job that could have been completed in 40 days is completed in 50 days. How many days after the commencement of the work did the 10 men leave?</p> <p>a) 20 X</p> <p>b) 25 X</p> <p>c) 30 ✓</p> <p>d) 18 X</p>
Explanation:	<p>20. 20 men were supposed to complete the job in 40 days \therefore Total work = $20 \times 40 = 800$ man-days Let 10 men left the work after 'x' days $\Rightarrow 20x + 10(50-x) = 800$ Actual time taken $\Rightarrow 2x + 50 - x = 80$ $\Rightarrow x = 30$ days</p>

Q. 21	<p>If the radius of the base of a right circular cylinder is decreased by 16% and its height is increased by 150%, then what is the percentage increase (closest integer) in its volume?</p> <p>a) 23% X</p> <p>b) 123% X</p> <p>c) 84% X</p> <p>d) 76% ✓</p>
Explanation:	<p>21. Volume of Cylinder = $\pi r^2 h$ Radius of Base decrease by 16%. = $(1-0.16)r$ $= 0.84r$ Height increased by 150%. = $(1+1.5)h$ $= 2.5h$ New Volume = $\pi(r)^2 h$ $= \pi(0.84r)^2(2.5h)$ $= \pi(0.84)^2(2.5)r^2 h$ $\% \text{ Increase in Volume} = \frac{[(0.84)^2(2.5)-1]\pi r^2 h}{\pi r^2 h} \times 100\%$ $= 76.4\%$</p>

Q. 22

A dishonest vendor claims that he is selling goods at their cost price. But he is weighing 762 grams for 950 grams. What is his profit percentage (rounded off to 2 decimal places)?

- a) 31.23% X
- b) 24.67% ✓
- c) 27.26% X
- d) 19.78% X

Explanation:

22. let CP and SP be 'x'
 [since both are same in the question]

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

$$= \frac{\frac{x}{762} - \frac{x}{950}}{\frac{x}{950}} \times 100\%$$

$$= \frac{(950-762)950}{762 \times 950} \times 100\%$$

$$= \frac{188}{762} \times 100\%$$

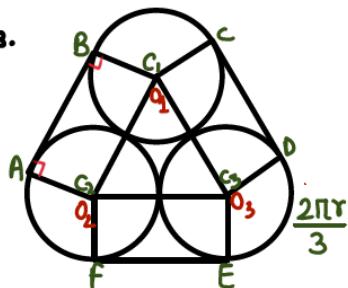
$$= 24.67\%$$

Q. 23

Three circles of radius 14 cm are kept touching each other. The string is tightly tied around these three circles. What is the length of the sting?

- a) $84 + 28\pi$ ✓
- b) $42 + 28\pi$ ✗
- c) $84 + 14\pi$ ✗
- d) $42 + 14\pi$ ✗

23.



Explanation:

Total length of Sting

$$= AB + BC + CD + DE + EF + AF$$

$$= O_1O_2 + \frac{2\pi r}{3} + O_1O_3 + \frac{2\pi r}{3} + O_2O_3 + \frac{2\pi r}{3}$$

$$= 28 + 28 + 28 + \frac{2\pi r}{3} \times 3$$

$$[\because O_1O_2 = O_1O_3 = O_2O_3 = 14 + 14 = 28 \text{ cm}]$$

$$= 84 + 2\pi(14)$$

$$= 84 + 28\pi$$

Q. 24

Reena and Amit together invested ₹89600 in a business. At the end of the year, out of a total profit of ₹9000, Reena's share was ₹3645. What was the investment of Amit?

- a) 48326 X
- b) 53312 ✓
- c) 36288 X
- d) 44586 X

Explanation:

$$24. \text{ Reena + Amit} = 89600$$

$$\frac{\text{Reena}}{\text{Total}} = \frac{3645}{9000} = \frac{81}{200}$$

$$\text{Amit's Investment} = \frac{(200-81)}{200} \text{ of total}$$

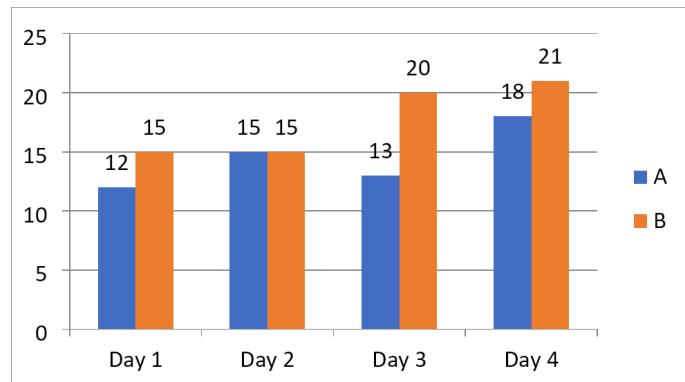
$$= \frac{119}{200} \text{ of total}$$

$$= \frac{119}{200} \times 89600$$

$$= 53312$$

Q. 25

Time taken (in hr) by two trains X and Y to travel the distance from Jaipur to Delhi via the same route on four different days is given in the following bar graph. Study the graph carefully and answer the question given below:



(X-axis= Day, Y-axis= Time(in hrs.)

If the distance between Jaipur to Delhi is 630 km, then what is the difference between the average speed (in km/hr) of the trains A and B on Day 4?

- a) 5 ✓
- b) 8 ✗
- c) 7 ✗
- d) 9 ✗

Explanation:

$$25. \quad \text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Avg. speed of Train 'A'} = \frac{630}{18} = 35 \text{ km/hr}$$

$$\text{Avg. speed of Train 'B'} = \frac{630}{21} = 30 \text{ km/hr}$$

$$\text{Difference} = 35 - 30 = 5 \text{ km/hr}$$

Q. 26

Select the option that expresses the given sentence in direct speech.

Mother asked Rubani if she was sorry for what she had done.

a) Mother said to Rubani, "Are you sorry for what she did?"

b) Mother said to Rubani, "Were you sorry for what you have done?"

c) Mother said to Rubani, "Are you sorry for what you have done?"

d) Mother said to Rubani, "Do you feel sorry for what you are doing?"

Explanation:

Correct answer option: 3. Mother said to Rubani, "Are you sorry for what you have done?"

- Reporting Verb: "asked" in the indirect speech becomes "said to" in the direct speech for a question.
- The conjunction "if" used to introduce the reported question is removed.
- "she" (referring to Rubani in the indirect speech) becomes "you" (as Mother is speaking directly to Rubani).
- The past tense "was" in "if she was sorry" becomes the present tense "Are" in the direct question. The past perfect tense "had done" becomes the present perfect tense "have done" as we move back to the original time frame of the direct quote.

Q. 27

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select No Error.

You should (1)/ be always greatful (2)/ to your mentor. (3)/No error (4)

a) You should

b) be always greatful

c) to your mentor

d) No error

Explanation:

Correct answer option 2: "be always greatful".

- "greatful" is the incorrect spelling.
- The correct spelling is "grateful" (meaning: feeling or showing thanks).

Correct sentence: You should always be grateful to your mentor.

Q. 28	<p>Select the INCORRECTLY spelt word.</p> <p>a) Instinctual X</p> <p>b) Intuition X</p> <p>c) Impulsive ✓</p> <p>d) Initiative X</p>
Explanation:	<p>Correct answer option: 3. Impulsive</p> <p>Correct spelling: <i>Impulsive</i> (meaning: acting without thought or planning).</p>

Q. 29	<p>Select the most appropriate option to fill in the blank.</p> <p>She meticulously followed the intricate instructions; _____, the delicate balance of the experiment would have been irreversibly disrupted.</p> <p>a) in case X</p> <p>b) otherwise ✓</p> <p>c) so that X</p> <p>d) moreover X</p>
Explanation:	<p>Correct answer option: 2. otherwise</p> <p>The sentence indicates a cause-and-effect relationship with a conditional outcome. She carefully followed the instructions, and if she hadn't, a negative consequence would have occurred. "Otherwise" correctly conveys this meaning of "if not" or "or else."</p> <p>Other options:</p> <ul style="list-style-type: none"> • In case: Introduces a condition under which something might happen. • So that: Expresses purpose or reason. It would be used if the second part of the sentence explained why she followed the instructions. • Moreover: Adds additional information.

Q. 30	<p>Select the most appropriate synonym of the underlined word in the given sentence.</p> <p>Huxley was an <u>exponent</u> of Darwin's theory of evolution.</p> <p>a) Proponent ✓</p> <p>b) Cease ✗</p> <p>c) Terminate ✗</p> <p>d) Conclude ✗</p>
Explanation:	<p>Correct answer option: 1. Proponent</p> <ul style="list-style-type: none"> • Exponent means a person who supports or advocates a theory, cause, or belief, which is similar in meaning to proponent. • A proponent is a person who advocates a theory, proposal, or project. <p>Other options:</p> <ul style="list-style-type: none"> • Cease means to stop. • Terminate means to bring something to an end. • Conclude means to finish or end something.
Q. 31	<p>In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select No Error.</p> <p>He was present (1)/ in the court (2)/ to give witness. (3)/ No error (4)</p> <p>a) in the court ✗</p> <p>b) He was present ✗</p> <p>c) No error ✗</p> <p>d) to give witness ✓</p>
Explanation:	<p>Correct answer option 4. to give witness</p> <p>Replace the word 'witness' with 'evidence'</p>

Q. 32	<p>Select the option that expresses the given sentence in indirect speech. "I love the way you have decorated the room," she said, smiling warmly.</p> <p>a) Smiling warmly, she said that she had loved the way I had decorated the room. </p> <p>b) Smiling warmly, she said that I love the way you decorated the room. </p> <p>c) Smiling warmly, she said that she loves the way I decorated the room. </p> <p>d) Smiling warmly she said that she loved the way I had decorated the room. </p>
Explanation:	<p>Correct answer option: 4. Smiling warmly she said that she loved the way I had decorated the room.</p> <ul style="list-style-type: none"> Reporting Verb: "said" remains the same as it is in the past tense. "that" is used to introduce the reported clause. "you" (referring to the listener) changes to "I" (from the speaker's perspective in the reported speech). The present simple tense "love" changes to the past simple tense "loved" in indirect speech. The present perfect tense "have decorated" changes to the past perfect tense "had decorated" in indirect speech.
Q. 33	<p>The following sentence has been divided into parts. Select the part that contains a grammatical error from the given options. If you don't find any error, mark 'No error' as your answer.</p> <p>Isaac Newton, a name that may still be seen / today, cut into the wood of a window-sill at / the king's school, where he study Grammar and Latin.</p> <p>a) today, cut into the wood of a window-sill at </p> <p>b) the King's school, where he study Grammar and Latin. </p> <p>c) No error </p> <p>d) Isaac Newton, a name that may still be seen </p>
Explanation:	<p>Correct answer: 2. the King's school, where he study Grammar and Latin.</p> <ul style="list-style-type: none"> The verb "study" should be in the past tense because it's referring to what Isaac Newton did in the past. Correct form: "where he studied Grammar and Latin."

Q. 34	<p>Select the most appropriate synonym of the underlined word. She was <u>overstrung</u> before her dance performance.</p> <p>a) Cheerful </p> <p>b) Placid </p> <p>c) Nervous </p> <p>d) Calm </p>
Explanation:	<p>Correct answer option 3. Nervous</p> <ul style="list-style-type: none">• Overstrung means extremely tense or nervous, especially due to anxiety or pressure. <p>Other options:</p> <ul style="list-style-type: none">• Cheerful – feeling happy.• Placid – calm and peaceful.• Calm – relaxed and not nervous.
Q. 35	<p>Select the option that can be used as a one-word substitute for the given phrase. An important person who represents his/her country in a foreign country</p> <p>a) Amateur </p> <p>b) Ambassador </p> <p>c) Altruist </p> <p>d) Anonymous </p>
Explanation:	<p>Correct answer option 2: Ambassador</p> <ul style="list-style-type: none">• Ambassador – An important official who represents their country in a foreign land (राजदूत)• Amateur – A person who engages in something as a pastime, not professionally• Altruist – A person who is selflessly concerned for the welfare of others• Anonymous – Someone whose name is unknown or withheld

Q. 36	<p>Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.</p> <p>a. People come from divergent families, nations, faiths, political structures and ethnicities. b. Their beliefs constitute distinct moral frameworks. c. Respect for these ideals or for human dignity will define society's functioning. d. Respect and compromise are essential components of human dignity among the diverse members of any community.</p> <p>a) cbad X b) badc X c) dabc ✓ d) bcda X</p>
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Explanation:	<p>Correct Answer: C)dabc</p> <ul style="list-style-type: none"> Start with "d": It introduces the theme – the importance of respect and compromise in a diverse community. Then "a": It elaborates on the diversity mentioned in "d". Then "b": It explains that this diversity leads to different moral frameworks. Finally "c": It concludes the thought by stating the importance of respecting these beliefs.
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Q. 37	<p>Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No improvement required'.</p> <p><u>It had been a serious offence, but he was let out with a warning.</u></p> <p>a) is let out X b) had been let off X c) was let off ✓ d) No improvement required X</p>
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Explanation:	<p>Correct answer: 3) was let off</p> <p>The sentence uses the passive voice "was let out." Which is grammatically incorrect here, the phrasal verb "let off" is more idiomatic and commonly used in this context to mean to release someone without punishment or with a mild punishment like a warning.</p>
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Q. 38	<p>Select the most appropriate ANTONYM for the underlined word in the given sentence.</p> <p>Despite his <u>annoyance</u>, Rahul knew that rushing the delicate process would only lead to mistakes.</p> <p>a) Susceptibility </p> <p>b) Absurdity </p> <p>c) Gnawer </p> <p>d) Serenity </p>
Explanation:	<p>Correct Answer: D) Serenity</p> <ul style="list-style-type: none"> • "annoyance" means a feeling of being irritated or disturbed. • Serenity – a state of being calm and peaceful (शांति, मानसिक शांति). <p>Other options:</p> <ul style="list-style-type: none"> • A) Susceptibility – the state of being easily affected or influenced (प्रभावित होने की प्रवृत्ति). • B) Absurdity – something ridiculous or illogical (बेतुकापन). • C) Gnawer – an animal that gnaws, like a rat (चबाने वाला जानवर).

Q. 39	<p>Select the option that can be used as a one-word substitute for the underlined group of words in the following sentence.</p> <p>Despite recent superficial moves toward political reconciliation, Libya remains in the grip of a bloodstained corrupt military <u>exclusive circle of people with a common purpose</u>.</p> <p>a) oblique </p> <p>b) pique </p> <p>c) clique </p> <p>d) antique </p>
Explanation:	<p>Correct Answer: C) Clique</p> <p>A) Oblique – indirect or not straightforward (अस्पष्ट)</p> <p>B) Pique – a feeling of irritation or resentment (आहत भावना)</p> <p>C) Clique – a small exclusive group of people, often with shared interests and not open to others (गुट, गिरोह)</p> <p>D) Antique – something old and valuable (पुराना और कीमती)</p>

Q. 40	<p>Select the most appropriate ANTONYM of the given word.</p> <p>Everlasting</p> <p>a) Tampered </p> <p>b) Momentary </p> <p>c) Calibrating </p> <p>d) Fantabulous </p>
Explanation:	<p>Correct answer: 2. Momentary.</p> <ul style="list-style-type: none"> • Everlasting means lasting forever or for a very long time. • Momentary means lasting for a very short time — opposite in meaning. <p>Other options:</p> <ul style="list-style-type: none"> • Tampered means interfered with or altered. • Calibrating means adjusting or measuring precisely. • Fantabulous (slang) means fantastic and fabulous.
Q. 41	<p>Select the option that expresses the given sentence in active voice.</p> <p>Will the Lohri function be organised in your lawns this year?</p> <p>a) Will you be organising the Lohri function in your lawns this year? </p> <p>b) Will you have organised the Lohri function in your lawns this year? </p> <p>c) Will you organise your lawns in the Lohri function this year? </p> <p>d) Will you organise the Lohri function in your lawns this year? </p>
Explanation:	<p>Correct Answer: D) Will you organise the Lohri function in your lawns this year?</p> <ul style="list-style-type: none"> • In passive voice, the focus is on the action or the object (the "Lohri function"), not the doer of the action. The sentence is asking if the event (the function) will be organised in your lawns, but it doesn't mention who will organise it. • Now, to convert it into active voice, we need to focus on the doer of the action, i.e., who will organise the Lohri function. This would make the person performing the action (you) the subject of the sentence. <p>So, we change the sentence to: "Will you organise the Lohri function in your lawns this year?"</p> <ul style="list-style-type: none"> • "You" (the doer of the action) is now the subject. • "Organise" (the action) is performed by "you".

Q. 42	<p>Select the most appropriate meaning of the given idiom.</p> <p>Break the ice</p> <p>a) Nervousness before a performance </p> <p>b) Ill-feeling carried by a person over a period of time </p> <p>c) Respect for someone's achievements </p> <p>d) To say or do something that makes people feel more relaxed, especially at the beginning of a meeting, party </p>
Explanation:	<p><i>Correct answer: To say or do something that makes people feel more relaxed, especially at the beginning of a meeting, party</i></p> <p>Example Sentence: "PSP Sir always starts the class with a light joke or a fun question to break the ice and make every student feel comfortable."</p>

Q. 43	<p>Read the sentence carefully and select the most suitable idiom to fill in the blank. The renowned publisher decided to withdraw a book from the market.</p> <p>No one was interested in the book as the arguments presented were _____.</p> <p>a) high and mighty </p> <p>b) out of the woods </p> <p>c) beside the mark </p> <p>d) under the rose </p>
Explanation:	<p>Correct answer: 3. beside the mark</p> <p>The sentence talks about a book being withdrawn because the arguments were not relevant or accurate. The idiom "beside the mark" means irrelevant or not to the point.</p> <ul style="list-style-type: none"> ● High and mighty – arrogant or proud ● Out of the woods – out of danger ● Under the rose – in secret

Q. 44	<p>Select the most appropriate option to fill in the blanks.</p> <p>_____ silver bangle was discovered in _____ ancient temple complex where the archaeologists were carrying out excavations.</p> <p>a) No word required; the X</p> <p>b) A; an ✓</p> <p>c) The; a X</p> <p>d) A; no word required X</p>
Explanation:	<p>Answer: 2) A; an</p> <p>The sentence requires an article before the nouns "silver bangle" and "ancient temple complex."</p> <ul style="list-style-type: none">• "silver bangle" starts with a consonant sound, so "a" is needed.• "ancient temple complex" starts with a vowel sound, so "an" is needed.

Q. 45

Sentences of a paragraph are given below. While the first and the last sentences (A and F) are in the correct order, the sentences in between are jumbled up. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

- A. On this evening we set out before it was dark, but soon had to rue our haste, for crossing a slope, we found ourselves in the presence of a number of peasants planting rice.
B. They were wading half-naked in the muddy water and stared in astonishment at the sight of two men carrying packs on their backs.
C. After hours of climbing and descending, we at last reached the river Jumna.
D. They pointed to the slope high up on which one could see a village, which seemed to mean that this was the only way out of the ravine.
E. To avoid awkward questions, we walked straight on, as fast as possible in the direction indicated.
F. Meanwhile, night had fallen.
- a) ECDB
- b) CBED
- c) BDEC
- d) BCED

Correct Answer: Option C. BDEC

Explanation:

- A introduces the journey, mentioning they set out before dark and encountered peasants planting rice.
- B describes the peasants' reaction to the two men carrying packs.
- C talks about reaching the river after climbing and descending.
- D explains the peasants pointing to a village, indicating the way out.
- E shows their decision to walk on without engaging with the peasants.
- F concludes with night having fallen.

Q. 46

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

As a result of Covid-19, the quick (1) _____ to digital training has exposed the hazards of student disengagement and the resulting consequences of lower student performance across (2) _____ courses. The latest (3) _____ has altered the education of millions of people around the world. New approaches and improvements in the school system are urgently required. Considering the increasing digital divide, the strategy may exacerbate existing inequality disparities. More than 500 million students, at various levels, around the world were forced to (4) _____ their studies. These changes have caused and will continue to cause some inconvenience, but they will also foster innovation and future reforms inside this education system.

During a global Covid-19 pandemic, the 'pile-on effect' of the coronavirus can have long-term consequences for schooling, notably for the most vulnerable. Children, (5) _____ basic, core learning (reading, math, languages, etc.) was weak to begin with, face a significant risk of regression. During Covid-19, millions of children whose right to education has already been violated, particularly girls, are exposed to greater health and well-being hazards (both psychosocial and physical).

Select the most appropriate option to fill in blank number 1.

- a) end
- b) transition
- c) set
- d) stagnation

Correct answer option 2. transition

The sentence talks about the shift from traditional learning methods to digital training due to Covid-19. "Transition" accurately describes this rapid change.

Explanation:

Other options:

- End: Implies a complete cessation.
- Set: Usually refers to establishing or fixing something.
- Stagnation: Means a lack of activity or progress.

Q. 47

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

As a result of Covid-19, the quick (1) _____ to digital training has exposed the hazards of student disengagement and the resulting consequences of lower student performance across (2) _____ courses. The latest (3) _____ has altered the education of millions of people around the world. New approaches and improvements in the school system are urgently required. Considering the increasing digital divide, the strategy may exacerbate existing inequality disparities. More than 500 million students, at various levels, around the world were forced to (4) _____ their studies. These changes have caused and will continue to cause some inconvenience, but they will also foster innovation and future reforms inside this education system.

During a global Covid-19 pandemic, the 'pile-on effect' of the coronavirus can have long-term consequences for schooling, notably for the most vulnerable. Children, (5) _____ basic, core learning (reading, math, languages, etc.) was weak to begin with, face a significant risk of regression. During Covid-19, millions of children whose right to education has already been violated, particularly girls, are exposed to greater health and well-being hazards (both psychosocial and physical).

Select the most appropriate option to fill in blank number 2.

- a) numerous ✓
- b) fewer ✗
- c) particular ✗
- d) limit ✗

Correct answer option 1. numerous

The sentence mentions the consequences of lower student performance "across (2) _____ courses." This implies that the impact was widespread and affected many courses. "Numerous" means many or a large number.

Explanation:

Other options:

- **Fewer:** Indicates a smaller number.
- **Particular:** Refers to a specific or individual course.
- **Limit:** Suggests a restriction on the number of courses.

Q. 48

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

As a result of Covid-19, the quick (1) _____ to digital training has exposed the hazards of student disengagement and the resulting consequences of lower student performance across (2) _____ courses. The latest (3) _____ has altered the education of millions of people around the world. New approaches and improvements in the school system are urgently required. Considering the increasing digital divide, the strategy may exacerbate existing inequality disparities. More than 500 million students, at various levels, around the world were forced to (4) _____ their studies. These changes have caused and will continue to cause some inconvenience, but they will also foster innovation and future reforms inside this education system.

During a global Covid-19 pandemic, the 'pile-on effect' of the coronavirus can have long-term consequences for schooling, notably for the most vulnerable. Children, (5) _____ basic, core learning (reading, math, languages, etc.) was weak to begin with, face a significant risk of regression. During Covid-19, millions of children whose right to education has already been violated, particularly girls, are exposed to greater health and well-being hazards (both psychosocial and physical).

Select the most appropriate option to fill in blank number 3.

- a) local
- b) endemic
- c) epidemic
- d) pandemic

Correct answer option 4. pandemic

The passage is discussing the impact of Covid-19 on education globally. The word that describes the worldwide spread of this disease is "pandemic."

Explanation:

Other options:

- **Local:** Refers to a specific area or region.
- **Endemic:** Describes a disease that is regularly found among particular people or in a certain area.
- **Epidemic:** Refers to a widespread occurrence of an infectious disease in a community at a particular time.

Q. 49

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

As a result of Covid-19, the quick (1) _____ to digital training has exposed the hazards of student disengagement and the resulting consequences of lower student performance across (2) _____ courses. The latest (3) _____ has altered the education of millions of people around the world. New approaches and improvements in the school system are urgently required. Considering the increasing digital divide, the strategy may exacerbate existing inequality disparities. More than 500 million students, at various levels, around the world were forced to (4) _____ their studies. These changes have caused and will continue to cause some inconvenience, but they will also foster innovation and future reforms inside this education system.

During a global Covid-19 pandemic, the 'pile-on effect' of the coronavirus can have long-term consequences for schooling, notably for the most vulnerable. Children, (5) _____ basic, core learning (reading, math, languages, etc.) was weak to begin with, face a significant risk of regression. During Covid-19, millions of children whose right to education has already been violated, particularly girls, are exposed to greater health and well-being hazards (both psychosocial and physical).

Select the most appropriate option to fill in blank number 4.

- a) suspend ✓
- b) resume ✗
- c) reopened ✗
- d) carry on ✗

Correct answer option 1. suspend

Explanation:

The sentence indicates a temporary cessation of their education. "Suspend" means to temporarily prevent from continuing or being in force or effect.

Q. 50

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

As a result of Covid-19, the quick (1) _____ to digital training has exposed the hazards of student disengagement and the resulting consequences of lower student performance across (2) _____ courses. The latest (3) _____ has altered the education of millions of people around the world. New approaches and improvements in the school system are urgently required. Considering the increasing digital divide, the strategy may exacerbate existing inequality disparities. More than 500 million students, at various levels, around the world were forced to (4) _____ their studies. These changes have caused and will continue to cause some inconvenience, but they will also foster innovation and future reforms inside this education system.

During a global Covid-19 pandemic, the 'pile-on effect' of the coronavirus can have long-term consequences for schooling, notably for the most vulnerable. Children, (5) _____ basic, core learning (reading, math, languages, etc.) was weak to begin with, face a significant risk of regression. During Covid-19, millions of children whose right to education has already been violated, particularly girls, are exposed to greater health and well-being hazards (both psychosocial and physical).

Select the most appropriate option to fill in blank number 5.

- a) which X
- b) whose ✓
- c) whom X
- d) who X

Correct answer option 2. whose

The sentence is describing children for whom basic, core learning was already weak. The possessive pronoun "whose" indicates this relationship of belonging or association. It connects the children to the state of their basic learning.

Explanation:

Other options:

- **Which:** Is typically used to refer to things.
- **Whom:** Is used as the object of a verb or preposition.
- **Who:** Is used as the subject of a verb.

Q. 51	<p>Which number will replace the question mark (?) in the following series?</p> <p>19, 47.5, ?, 237.5, 475, 1187.5, 2375</p> <p>a) 94.5 </p> <p>b) 55 </p> <p>c) 85.5 </p> <p>d) 95 </p>
Explanation:	<p>Correct answer is option 4.</p> <p>$19 \times 2.5 = 47.5$</p> <p>$47.5 \times 2 = 95$</p> <p>$95 \times 2.5 = 237.5$</p> <p>$237.5 \times 2 = 475$</p> <p>$475 \times 2.5 = 1187.5$</p> <p>$1187.5 \times 2 = 2375$</p>

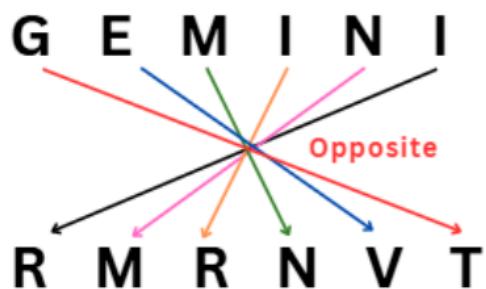
Q. 52

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

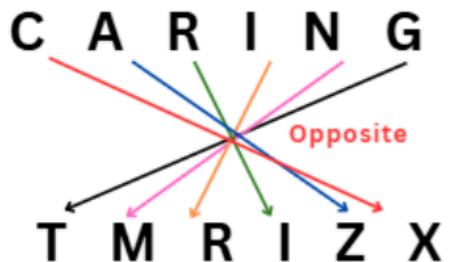
GEMINI : RMRNVT :: CARING : ?

- a) TMIRZH X
- b) DBSJJOH X
- c) TMRIZX ✓
- d) DBSJOX X

Correct answer is option 3.



Explanation:



Q. 53	<p>Pointing toward a photograph a lady said, " His brother-in-law's son is nephew of my daughter-in-law's husband". How is the lady related to the person in the photograph ?</p> <p>a) Paternal Grandmother <input checked="" type="checkbox"/> X</p> <p>b) Mother <input checked="" type="checkbox"/> ✓</p> <p>c) Niece <input checked="" type="checkbox"/> X</p> <p>d) Aunt <input checked="" type="checkbox"/> X</p>
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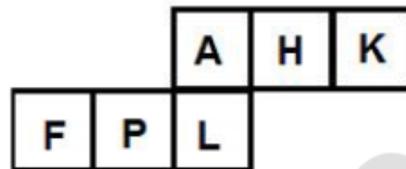
Explanation:	<p>Correct answer is option 2.</p> <p>Clearly, the person in the photograph is the son of the lady. Therefore, the lady is the mother of the person in the photograph.</p>
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Q. 54	<p>Unscramble the given latter clusters to find a meaningful word and choose an odd one out.</p> <p>a) RDAEDV <input checked="" type="checkbox"/> X</p> <p>b) SCSYEPR <input checked="" type="checkbox"/> X</p> <p>c) AKAHOS <input checked="" type="checkbox"/> X</p> <p>d) MOABOB <input checked="" type="checkbox"/> ✓</p>
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Explanation:	<p>Correct answer is option 4.</p> <p>Option 1 : DEV DAR Option 2 : CYPRESS Option 3 : ASHOKA Option 4 : BAMBOO</p> <p>Except option 4 all are trees while Bamboo is considered as a grass.</p>
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Q. 55

A cube is made by folding the given sheet. In the cube so formed, which letter will be on the face opposing to the one showing 'P'?



a) H ✓

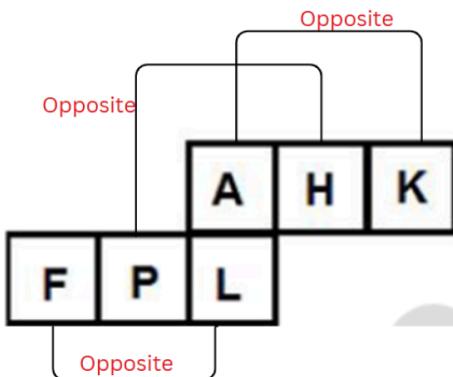
b) L ✗

c) K ✗

d) A ✗

Correct answer is option 1.

Explanation:



Q. 56

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

19	9	140
17	9	130
?	5	120

a) 47 ✗

b) 28 ✗

c) 24 ✗

d) 19 ✓

Correct answer is option 4.

Explanation:

$$1^{\text{st}} \text{ row} = 19 \times 5 + 9 \times 5 = 140$$

$$2^{\text{nd}} \text{ row} = 17 \times 5 + 9 \times 5 = 130$$

$$3^{\text{rd}} \text{ row} = 19 \times 5 + 5 \times 5 = 120$$

Q. 57

In a certain code language, 'SUCCESS' is written as '21235572121', 'ENERGY' is written as '716720927', how will 'BLOCK' be written in that language?

- a) 41417413 X
- b) 41417513 ✓
- c) 14415473 X
- d) 41471513 X

Correct answer is option 2.

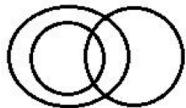
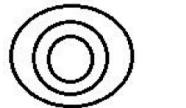
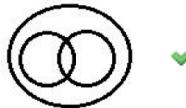
Explanation:

$\begin{array}{ccccccc} S & U & C & C & E & S & S \\ +2 & +2 & +2 & +2 & +2 & +2 & +2 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 21 & 23 & 5 & 5 & 7 & 21 & 21 \end{array}$	$\begin{array}{ccccccc} E & N & E & R & G & Y \\ +2 & +2 & +2 & +2 & +2 & +2 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 7 & 16 & 7 & 20 & 9 & 27 \end{array}$	$\begin{array}{ccccccc} B & L & O & C & K \\ +2 & +2 & +2 & +2 & +2 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 4 & 14 & 17 & 5 & 13 \end{array}$
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Q. 58

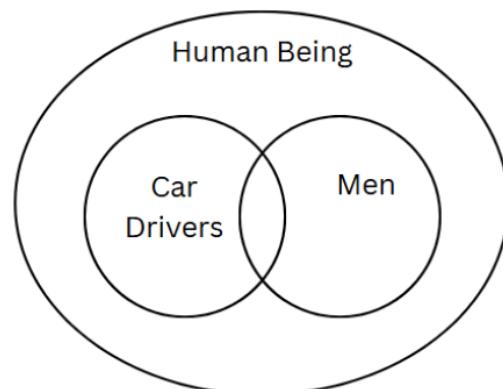
Select the Venn diagram that best illustrates the relationship between the following classes.

Car drivers, Human beings, Men

- a)  X
- b)  X
- c)  ✓
- d)  X

Correct answer is option 3.

Explanation:



Some car drivers can be men and vice-versa, but both car drivers and men must be human beings.

Q. 59

Select the number-pair in which the two numbers are related in the same way as are the two numbers of the following number-pair.

7:198

- a) 9:162
- b) 5:240
- c) 6:72
- d) 8:228

Correct answer is option 4.

Logic is :

Explanation:

Square of 1st number $\times 2 + 100$ = second number

$$7:198 = 49 \times 2 + 100 = 198$$

Similarly,

$$8:228 = 64 \times 2 + 100 = 228$$

Q. 60

What was the day of the week on 26th November 1946?

- a) Wednesday
- b) Monday
- c) Tuesday
- d) Saturday

Correct answer is option 3.

Day Code												
Sun	Mon	Tue	Wed	Thru	Fri	Sat						
0	1	2	3	4	5	6						
Month Code												
Month	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Normal Year	0	3	3	6	1	4	6	2	5	0	3	5
Leap Year	6	2	3	6	1	4	6	2	5	0	3	5

Explanation:

Century Code	1600	1700	1800	1900	2000	2100	2200	2300
	6	4	2	0	6	4	2	0

$$\text{Date} + \text{Month Code} + \text{Century Code} + \text{Last 2 digits of year} + (\text{last two digits of year} + 4)$$

7

Century code for 1946 is "0".

Month Code for November is "3" (As 1946 was not a Leap Year)

Last two digit of the year / 4 = 11 (only quotient)

$$\text{Remainder} = (26 + 3 + 0 + 46 + 11) / 7$$

= 2 (Remainder)

2 is the code of Tuesday. So the day on 26 Nov 1946 was "Tuesday".

Q. 61

Select the option that represents the correct order of the given words as they would appear in reverse order of the English dictionary.

1. Lexicon

2. Lacuna

3. Lacerate

4. Lactation

5. Locust

a) 3, 4, 2, 1, 5

b) 3, 2, 4, 1, 5

c) 5, 1, 2, 4, 3

d) 5, 3, 2, 1, 4

Explanation:

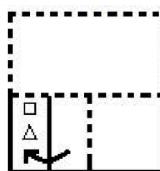
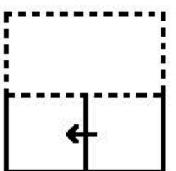
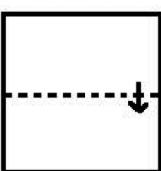
Correct answer is option 3.

The words that appear in reverse order of an English Dictionary are as follow :

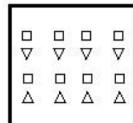
5.Locust > 1.Lexicon > 2.Lacuna > 4.Lactation > 3.Lacerate

Q. 62

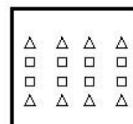
The paper is folded and cut as shown below. How will it appear when unfolded ?



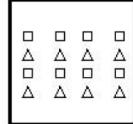
a)



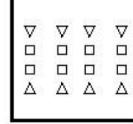
b)



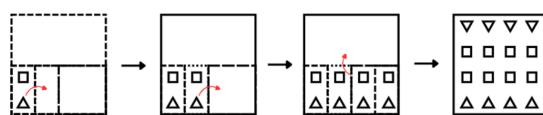
c)



d)

**Explanation:**

Correct answer is option 4.



Q. 63

Two statements are given, followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

Some mirrors are glasses.

No shadow is a mirror.

Conclusions:

I. No mirror is a shadow.

II. No glass is a mirror.

III. Some glasses are mirrors

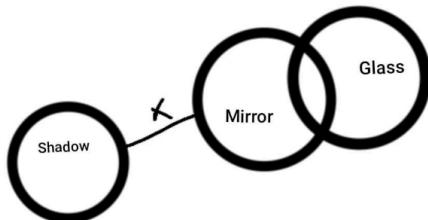
a) Only conclusions II and III follow X

b) Only conclusions I and II follow X

c) Only conclusions I and III follow ✓

d) All of the conclusions follow X

Correct answer is option 3.



Explanation:

Conclusion I: No mirror is a shadow – **Follows**

Because the statement says no shadow is a mirror, it's the same meaning.

Conclusion II : No glass is a mirror – Does not follow

Statement says some mirrors are glasses, so they can overlap. This contradicts the conclusion.

Conclusion III : Some glasses are mirrors – **Follows**

It's just a rewording of "some mirrors are glasses," so it logically follows.

Q. 64

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

YBC, SHI, ?, JQR, TGH

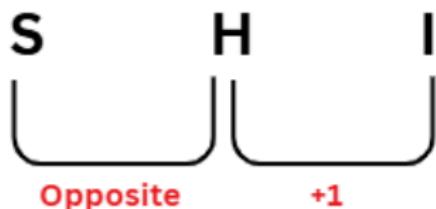
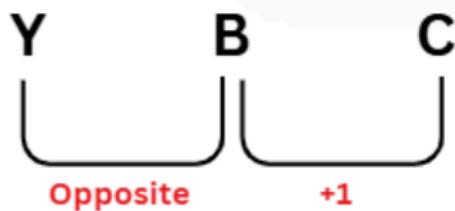
a) JRS X

b) IRS ✓

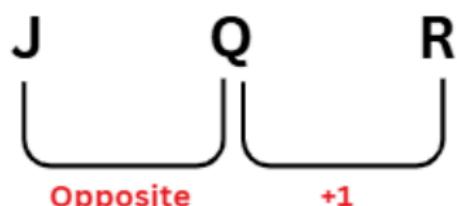
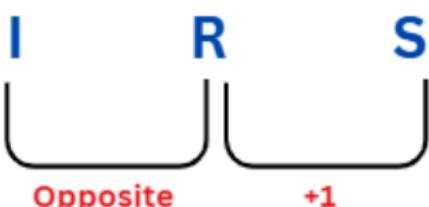
c) JQS X

d) IRV X

Correct answer is option 2.



Explanation:



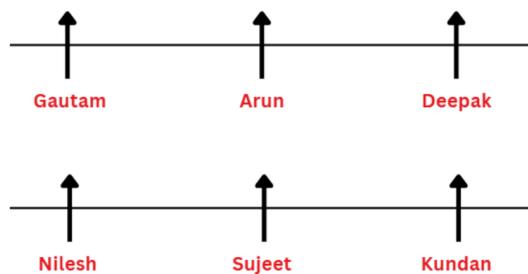
Q. 65

Six friends are sitting in two lines, one line behind the other line, and all the friends are facing north. Each line has three friends. Arun is sitting between Gautam and Deepak. Nilesh is sitting just behind Gautam. Kundan is to the immediate right of Sujeet. Which three persons are sitting in the same line?

- a) Arun, Gautam and Nilesh X
- b) Arun, Gautam and Deepak ✓
- c) Arun, Gautam and Kundan X
- d) Gautam, Nilesh and Kundan X

Correct answer is option 2.

The correct sitting arrangement is :



Explanation:

Q. 66

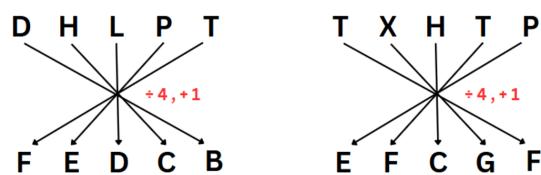
Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

DHLPT: FEDCB :: TXHTP:?

- a) UTJQO X
- b) EFCGF ✓
- c) OPJTU X
- d) UTJPN X

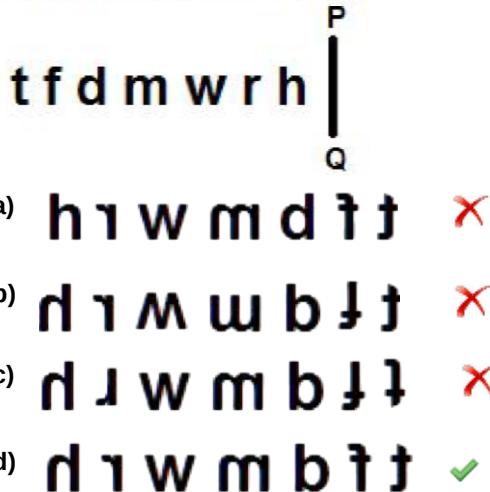
Correct answer is option 2.

Explanation:



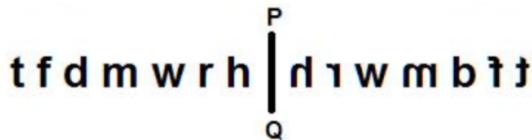
Q. 67

Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown below.



Correct answer is option 4.

Explanation:



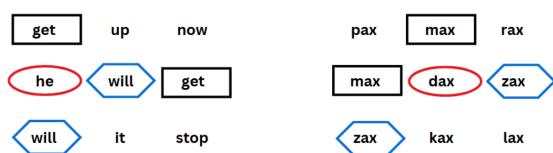
Q. 68

In a code language, if 'get up now' is written as 'pax max rax', 'he will get' is written as 'max dax zax', and 'will it stop' is written as 'zax kax lax', then for which word is the code 'dax' used in this language?

- a) get ✗
 b) it ✗
 c) he ✓
 d) will ✗

Correct answer is option 3.

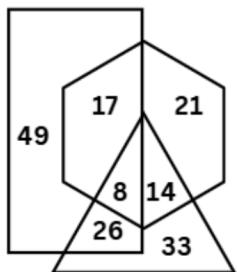
Explanation:



Q. 69	<p>Select the correct combination of mathematical signs that can sequentially replace the signs from left to right to balance the following equation.</p> <p>$17 * 35 * 5 * 15 * 5 * 85$</p> <p>a) -,x,+,÷,= X</p> <p>b) -,÷,+x,= ✓</p> <p>c) -,÷,x,x,= X</p> <p>d) -,+,+,x,= X</p>
Explanation:	<p>Correct answer is option 2.</p> <p>On applying signs we get,</p> $17 - 35 \div 5 + 15 \times 5$ $17 - 7 + 75$ $10 + 75 = 85$

Q. 70

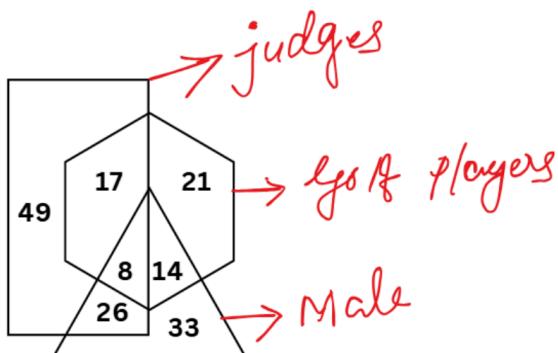
In the following Venn diagram, the 'Rectangle' stands for 'Judges', the 'Triangle' stands for 'Males', and the 'Hexagon' stands for 'Golf players'. The given numbers represent the number of persons in that particular category. How many male judges are there in total?



- a) 26
- b) 22
- c) 17
- d) 34

Correct answer is option 4.

Explanation:



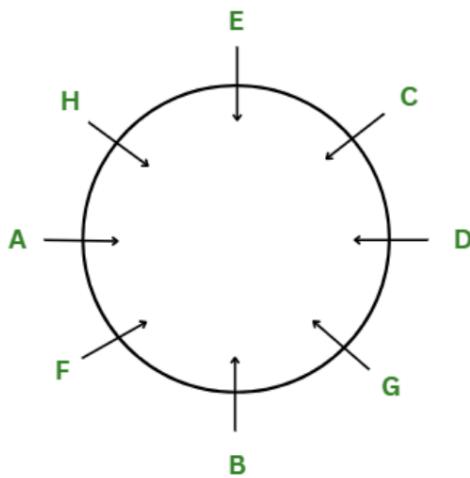
Total Male judges are $8 + 26 = 34$

Q. 71

Eight friends A, B, C, D, E, F, G and H are sitting in a circle, facing the center. A is second to the left of B. C is to the immediate right of D. E is third to the left of F. G is sitting between B and D. H is second to the right of C. Who is sitting to the immediate left of A ?

- a) B
- b) C
- c) H
- d) D

Correct answer is option 3.

Explanation:

Clearly, H is sitting to the immediate left of A.

Q. 72

Two statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

Some seahorses are fish.

Some fish are tadpoles.

Conclusions:

I. Some tadpoles are fish.

II. Some fish are seahorses.

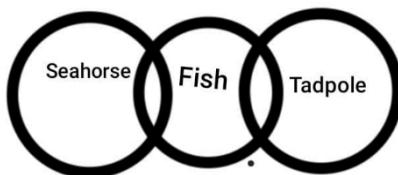
a) Only conclusion I follows

b) Either conclusion I or II follows.

c) Only conclusion II follows

d) Both conclusions follow

Correct answer is option 4.



Explanation:

Conclusion I: Some tadpoles are fish

This is just the reverse of Statement 2.

"Some A are B" = "Some B are A" (Valid)

So, it follows.

Conclusion II: Some fish are seahorses

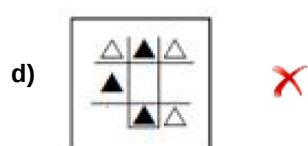
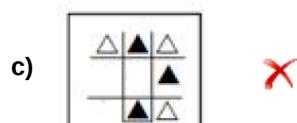
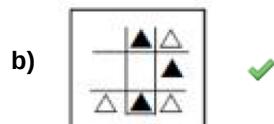
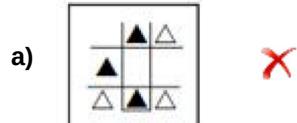
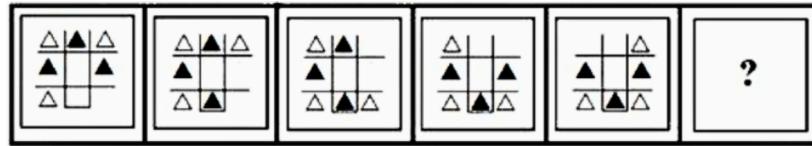
Reverse of Statement 1.

Also valid by the same rule.

So, it follows.

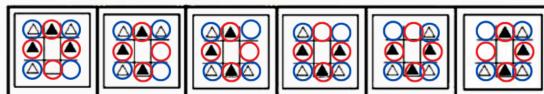
Q. 73

Which figure will replace the question mark (?) in the following figure series ?



Correct answer is option 2.

Explanation:



▲ Moving in clockwise direction within the red circle

△ Moving in clockwise direction within the Blue circle

Q. 74

In a certain code language, CHARGER is coded as 6162914109 and MOBILE is coded as 46418310.

How will be MODEM coded in that language?

a) 13154513 X

b) 468104 ✓

c) 51581013 X

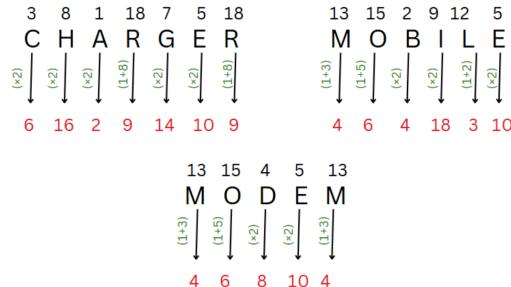
d) 469513 X

Correct answer is option 2.

Logic followed here is :

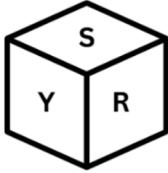
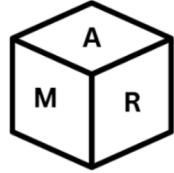
1. Single digit position value according to the English alphabetic series is doubled.
2. Double digit position values according to English alphabetic series are replaced by the sum of the digits within.

Explanation:



Q. 75

Six letters A, M, R, S, Y and Q are written on different faces of a dice. Two positions of this dice are shown in the figure below. Find the letter on the face opposite to R.



a) Q ✓

b) A ✗

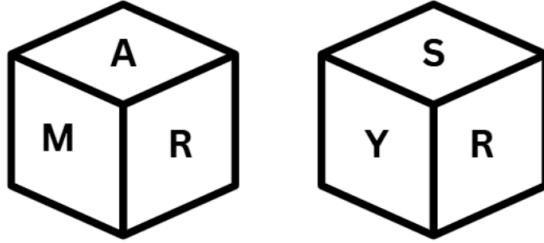
c) M ✗

d) Y ✗

Correct answer is option 1.

Adjacent Sides of R are A,M,S and Y . So the only remaining Side is Q.

Therefore the opposite of R is Q.

Explanation:

R	M	A
R	Y	S

Q. 76	<p>Equality before the law or equal protection of the laws within the territory of India is guaranteed under which one of the following Articles of the Constitution of India?</p> <p>a) Article 14 ✓</p> <p>b) Article 15 ✗</p> <p>c) Article 16 ✗</p> <p>d) Article 22 ✗</p>
Explanation:	<p>Correct answer = Option 1 (Article 14)</p> <ul style="list-style-type: none">• Article 14 = Ensures equality before the law and equal protection of the laws.• Article 15 = Prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.• Article 16 = Provides equality of opportunity in matters of public employment.• Article 22 = Protects rights related to arrest and detention in certain cases. <p>Fundamental Rights:</p> <ul style="list-style-type: none">• The Fundamental Rights in the Indian Constitution are taken from the USA.• Right to Equality (Articles 14–18) = Ensures equality before the law and prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.• Right to Freedom (Articles 19–22) = Guarantees freedoms such as speech and expression, assembly, association, movement, residence, and profession.• Right against Exploitation (Articles 23–24) = Prohibits human trafficking, forced labor, and child labor.• Right to Freedom of Religion (Articles 25–28) = Provides freedom of conscience and the right to freely profess, practice, and propagate religion.• Cultural and Educational Rights (Articles 29–30) = Protects the rights of minorities to conserve their culture, language, and script, and to establish and administer educational institutions.• Right to Constitutional Remedies (Article 32) = Allows individuals to approach the Supreme Court directly for the enforcement of Fundamental Rights.

Q. 77

Subduction zone with reference to plate tectonics is associated with which of the following plate boundaries?

1. Convergent boundaries.

2. Divergent boundaries.

Select the correct answer using the code given below.

a) 1 only ✓

b) 2 only ✗

c) Both 1 and 2 ✗

d) Neither 1 nor 2 ✗

Correct answer = Option 1 (1 only)

- **Plate Tectonics =**

- The scientific theory that describes the large-scale motion of Earth's lithosphere.
- These plates are constantly moving relative to each other at speeds of a few centimeters per year, driven by convection currents in the Earth's mantle.

- **Plate Boundaries =**

- The region where two or more tectonic plates meet.

- **Convergent Boundaries =**

- These occur where two plates are moving towards each other.
- When an oceanic plate collides with a continental plate, the denser oceanic plate subducts beneath the continental plate forming a **subduction zone**.
- When two continental plates collide, they can create mountain ranges due to the buckling and folding of the crust.
- Ex:- Himalayas, Andes Mountains

- **Divergent Boundaries =**

- A region where two tectonic plates move away from each other.
- As plates separate magma from the mantle rises to fill the gap to create a new crust.
- This process leads to the formation of mid-ocean ridges and rift valleys.
- Ex:- East African Rift, Mid-Atlantic Ridge

- **Subduction Zones =**

- A region at a convergent boundary where one tectonic plate is forced beneath another into the mantle.
- Subduction zones are characterized by intense geological activity like Earthquake, Volcanism, Ocean Trenches, Mountain Building.

Explanation:

Q. 78

Which of the following classical dance styles manifests the element of sky?

- a) Manipuri X
- b) Kathakali ✓
- c) Kuchipudi X
- d) Kathak X

Correct answer = Option 2 (Kathakali)

- **Kathakali (Kerala) =**
 - o This dance form is known for its dramatic and expressive nature, often symbolizing the vastness of the **Sky**.
 - o Dance styles manifest the element of **Sky**.
- **Kuchipudi (Andhra Pradesh) =**
 - o This dance form is characterized by its grounded and **earthy** movements.
 - o Dance styles manifest the element of **Earth**.
- **Bharatnatyam (Tamil Nadu) =**
 - o This dance is associated with the element of **fire** due to its energetic and passionate movements.
 - o Dance styles manifest the element of **Fire**.
- **Odissi (Odisha) =** The flowing tribhangi (three-bend pose) and graceful undulations of the torso strongly evoke the fluidity of **water**.

Explanation:

Q. 79	<p>Which of the following are recognised as final goods while estimating the gross domestic product in India?</p> <p>a. Wheat purchased for making roti in a house b. Wheat purchased for making roti in a hotel c. Tea bags used to make tea in a house d. Tea bags used to make tea in a university hostel canteen</p> <p>a) Only a and c ✓ b) Only b and c ✗ c) Only b and d ✗ d) Only a and b ✗</p>
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Explanation:	<p>Correct answer = Option 1 (Only a and c)</p> <p>Statement a is correct = The wheat is purchased by a household for final consumption (making and eating roti). It will not be used to produce other goods for sale. Therefore, this is considered a final good.</p> <p>Statement b is incorrect = The wheat is purchased by a hotel, which is a production unit. The hotel uses the wheat as an input to produce roti, which is then sold to customers. In this context, wheat is an intermediate good.</p> <p>Statement c is correct = When tea bags are purchased by a household to make tea for their own consumption, they are considered a final good.</p> <p>Statement d is incorrect = The university hostel canteen is a production unit. The tea bags are used as an input to produce tea, which is then sold to the students. Therefore, the tea bags are an intermediate good.</p> <ul style="list-style-type: none"> • GDP (Gross Domestic Product) = The total monetary or market value of all the final goods and services produced within the borders of a country in a specific time period (usually one year). • Final Goods = <ul style="list-style-type: none"> ◦ These are goods that are purchased for final consumption or for investment and are not used for further production in the current year. ◦ Their value is directly included in the GDP. • Intermediate Goods = <ul style="list-style-type: none"> ◦ These are goods used as raw materials or inputs for the production of other goods. ◦ Their value is not directly included in the GDP to avoid double counting.
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Q. 80	<p>Which of the following pairs is INCORRECT regarding the grade of organization and its example?</p> <p>a) Cellular grade organization - Sycon X</p> <p>b) Protoplasmic grade organization - Paramecium X</p> <p>c) Cell-tissue grade organization - Jellyfish X</p> <p>d) Tissue-organ grade organization - Euplectella ✓</p>
Explanation:	<p>Correct answer = option 4 (Tissue-organ grade organization – Euplectella)</p> <p>Euplectella</p> <ul style="list-style-type: none">• Venus' flower basket exhibits a cellular grade of organization.• It is a sponge, and sponges are characterized by having different types of cells that perform specific functions, but these cells are not organized into true tissues or organs. <p>Cellular grade organization - Sycon =</p> <ul style="list-style-type: none">• Sycon is a sponge, and as mentioned above, sponges have a cellular grade of organization. <p>Protoplasmic grade organization - Paramecium =</p> <ul style="list-style-type: none">• Paramecium is a unicellular organism where all life activities are performed by a single cell (protoplasm). <p>Cell-tissue grade organization - Jellyfish =</p> <ul style="list-style-type: none">• Jellyfish (belonging to the phylum Cnidaria/Coelenterata) have cells organized into tissues, such as the epidermis and gastrodermis, but they lack true organs.

Q. 81	<p>Who moved the Objective Resolution that was later adapted as the Preamble of the Constitution of India?</p> <p>a) Rajendra Prasad </p> <p>b) JB Kripalani </p> <p>c) Jawaharlal Nehru </p> <p>d) BR Ambedkar </p>
<p>Explanation:</p> <p>Correct answer = Option 3 (Jawaharlal Nehru)</p> <p>Objectives Resolution =</p> <ul style="list-style-type: none">Presented by Jawaharlal Nehru on 13 December 1946 in the Constituent Assembly.The Assembly accepted this resolution on January 22, 1947, after extensive discussions.Adopted by the Constituent Assembly on 26 November 1949.It is also called the introduction letter to the Constitution of India. <p>Key Principles =</p> <ul style="list-style-type: none">Sovereign RepublicDemocratic GovernanceUnity and IntegritySecular StateProtection of MinoritiesPromotion of World Peace <ul style="list-style-type: none">Jawaharlal Nehru called it the “soul of the Constitution”. <p>Keywords in Preamble =</p> <ul style="list-style-type: none">Sovereign, Socialist, Secular, Democratic, Republic, Justice, Liberty, Equality, Fraternity	

Q. 82

According to Census of India 2011, female adolescents in the age group of 10-19 years had a share of:

- a) 31.3%
- b) 47.3%
- c) 52.7%
- d) 20.9%

Correct answer = Option 2 (47.3%)

- According to the Census of India 2011, the adolescent population in the age group of 10–19 years accounted for approximately **20.9%** of the total population.
 - **Male adolescents:** 52.7%
 - **Female adolescents:** 47.3%
 - This indicates that nearly half of the adolescent population in India comprises females.
 - Uttar Pradesh – 24.5% (Highest)
 - Kerala (16.3%) (Lowest)
- 10-14 year olds made up **10.96%**
- 15-19 year olds accounted for **9.95%**
- Age (18-40 Years) = **38.31%**
- Age above 40 years = **24.64%**

Explanation:

Q. 83	<p>Rottela Panduga or the Roti Festival is celebrated in which Indian state?</p> <p>a) Karnataka </p> <p>b) Maharashtra </p> <p>c) Andhra Pradesh </p> <p>d) Tamil Nadu </p>
Explanation:	<p>Correct answer = Option 3 (Andhra Pradesh)</p> <ul style="list-style-type: none">• Rottela Panduga =<ul style="list-style-type: none">◦ Also known as "Rotiyaan Ki Eid," is celebrated in Nellore (Andhra Pradesh).◦ This annual three-day festival takes place at the Bara Shaheed Dargah during the Islamic month of Muharram, commemorating the 12 martyrs who are believed to have been martyred in a battle against the British in 1751. <p><u>States & their festivals:</u></p> <ul style="list-style-type: none">• Andhra Pradesh = Ugadi, Vinayaka Chaturthi, Bathukamma, Visakha Utsav, Gangamma Jatara, Pidakala War, Balotsav, Rayalaseema Food and Dance Festival• Karnataka = Mysore Dasara, Hampi Festival, Kambala Festival, Vairamundi Festival, Karaga Festival, Tula Sankramana, Gowri Festival, Pattadakal Dance Festival• Maharashtra = Pola, Narali Purnima, Gudi Padwa or Chaitra Pratipada, Banganga Festival, Bhaubeej, Elephanta Festival, Ellora Festival, Jivti Puja, Kalidas Festival, Kojagiri Pournima• Tamil Nadu = Pongal, Puthandu, Natyanjali Dance Festival, Thaipusam, Thiruvaiyaru Festival, Karthigai Deepam, Mahamaham Festival, Aadi Perukku• Kerala = Onam, Vishu, Thrissur Pooram, Makaravilakku, Attukal Pongala, Theyyam, Arattu, Theyyam, Arattu, Nehru Trophy Boat Race, Aluva Sivarathri Festival

Q. 84

- In which of the following Vedas was Dasarajna war (the war of ten kings) mentioned?
- a) Yajurveda
 - b) Samaveda
 - c) Rigveda
 - d) Atharvaveda

Correct answer =Option 3 (Rigveda)

- **Dasarajna War =**
 - o The war was fought between **King Sudas of the Bharata tribe** and a confederation of ten kings from various tribes.
 - o The battle took place near the Parushni River, known today as the Ravi River, in the Punjab region.
 - o King Sudas won the battle.
 - o Dasarajna War is mentioned in several hymns in **Mandala 7 of the Rigveda**.
- **Rigveda =**
 - o Meaning = "Knowledge of hymns of praise" or "Wisdom of verses."
 - o The oldest of the four Vedas, it is a collection of 1,028 hymns (suktas) organized into ten books (mandalas).
 - o God described = Indra (god of thunder and war), Agni (god of fire), Surya (sun god), Varuna (god of cosmic order).
- **Samaveda =**
 - o Meaning = "Knowledge of melodies" or "Wisdom of chants."
 - o It is a collection of melodies and chants, largely derived from the Rigveda. Most of its verses (around 1,549, with only about 75 original to it) are meant to be sung during Soma sacrifices and other rituals.
 - o Organized into two main parts:
 - Purvarcika (the first part containing melodies for specific deities)
 - Uttararcika (the second part containing melodies for longer rituals).
- **Yajurveda =**
 - o Meaning = "Knowledge of sacrificial formulas" or "Wisdom of prose mantras."
 - o This Veda is a collection of prose mantras (sacrificial formulas) used during various yajnas (sacrifices).
- **Atharvaveda =**
 - o Meaning = "Knowledge of Atharvan" (a sage or a group of priests) or "Wisdom of spells and charms."
 - o It also contains hymns related to cosmology and the nature of the universe.
 - o Provides valuable insights into the social and cultural life of the Vedic people, including their beliefs about disease, death, magic, and everyday concerns.

Explanation:

Q. 85	<p>Which of the following is also known as the 'White Mountain'?</p> <p>a) Cho Oyu </p> <p>b) Makalu </p> <p>c) Dhaulagiri </p> <p>d) Lhotse </p>
Explanation:	<p>Correct answer = Option 3 (Dhaulagiri)</p> <ul style="list-style-type: none">• Dhaulagiri (8,167 meters) =<ul style="list-style-type: none">◦ Located in the Himalayas of west-central Nepal.◦ It is the seventh-highest mountain in the world.◦ The name "Dhaulagiri" is derived from two Sanskrit words: "dhavala" meaning dazzling, white, or beautiful, and "giri" meaning mountain.◦ The Dhaulagiri massif exceeds 120 kilometers (75 miles) from the Kali Gandaki River in the east to the Bheri River in the west.• Cho Oyu (8,188 meters) = The sixth-highest mountain in the world, located on the border between Nepal and Tibet.• Makalu (8,485 meters) = The fifth-highest mountain in the world, located on the border between Nepal and Tibet, with an elevation of 8,485 meters (27,838 feet).• Lhotse (8,516 meters) = The fourth-highest mountain in the world, situated near Mount Everest.

Q. 86

Select the INCORRECT statement from among the following.

- a) 'Sanchi Stupa' is situated in Madhya Pradesh. X
- b) 'Bavikonda Stupa' is situated in Andhra Pradesh. X
- c) 'Dhamek Stupa' is situated in Uttar Pradesh. X
- d) 'Piprahwa Stupa' is situated in Sikkim ✓

Correct answer = Option 4 (Piprahwa Stupa is situated in Sikkim)

- **Stupa =**
 - o A dome-shaped structure that holds significant religious and architectural importance in Buddhism.
 - o They evolved into elaborate monuments enshrining relics of the Buddha or other important Buddhist figures and became central to Buddhist worship and practice.

- **Sanchi Stupa – Madhya Pradesh =**

- o Located = Sanchi, Raisen District, Madhya Pradesh
- o Commissioned by Emperor Ashoka in the 3rd century BCE.
- o It is renowned for its intricately carved gateways (toranas) depicting scenes from the life of the Buddha.

- **Bavikonda Stupa – Andhra Pradesh =**

- o Located = Bavikonda, near Visakhapatnam, Andhra Pradesh
- o Bavikonda is an ancient Buddhist site dating back to the 3rd century BCE.
- o The name "Bavikonda" translates to "hill of wells," referring to the numerous water cisterns found here.

- **Dhamek Stupa – Uttar Pradesh =**

- o Located = Sarnath, near Varanasi, Uttar Pradesh
- o The Dhamek Stupa marks the spot where Lord Buddha delivered his first sermon after attaining enlightenment.
- o It stands on the foundations of an earlier structure commissioned by Emperor Ashoka.

- **Piprahwa Stupa – Uttar Pradesh =**

- o Located = Piprahwa, near Birdpur, Siddharthnagar District, Uttar Pradesh'
- o Piprahwa is an important archaeological site believed to be the burial place of a portion of the Buddha's ashes, entrusted to his Shakya clan.

Explanation:

Q. 87	<p>What do you understand by 'dual citizenship' as in the case of the US?</p> <p>a) Citizenship of two states simultaneously with two countries X</p> <p>b) Citizenship of a country along with that of a constituent State, where one resides/born ✓</p> <p>c) Citizenship of two states along with two countries X</p> <p>d) Citizenship of two countries simultaneously X</p>
Explanation:	<p>Correct answer = Option 2 (Citizenship of a country along with that of a constituent State, where one resides/born)</p> <p>Dual Citizenship =</p> <ul style="list-style-type: none"> • In the United States, dual citizenship refers to the fact that individuals have citizenship at both the federal (country) level and the state level, where they reside or are born. • This reflects the federal structure of the US government, where the states have certain powers and responsibilities, and individuals are citizens of both the nation and their state. <p>Single Citizenship = Taken from UK</p> <ul style="list-style-type: none"> • A system where a person is recognized as a citizen of only one country. • India follows a system of single citizenship. • Key Principles: <ul style="list-style-type: none"> ◦ One National Identity ◦ Uniform Rights and Duties ◦ No Separate State Citizenship ◦ Promoting National Unity

Q. 88	<p>'Mein Kampf' of Adolf Hitler was originally written in which of the following languages?</p> <p>a) Japanese X</p> <p>b) English X</p> <p>c) German ✓</p> <p>d) French X</p>
Explanation:	<p>Correct answer = Option 3 (German)</p> <p>Autobiographies:</p> <ul style="list-style-type: none"> • Long Walk to Freedom – Nelson Mandela • The Story of My Experiments with Truth – Mahatma Gandhi • Becoming – Michelle Obama • My Country, My Life – Lal Krishna Advani • Wings of Fire – Dr. A.P.J. Abdul Kalam • I Am Malala – Malala Yousafzai • An Autobiography (1936) – Jawaharlal Nehru • The Story of My Life (1949) – Sardar Vallabhbhai Patel • The Turbulent Years: 1980–1996 (2016) – Pranab Mukherjee • Mein Kampf – Adolf Hitler

Q. 89

Who among the following wrote the novel 'Kitne Pakistan', which won the Sahitya Akademi Award ?

- a) Rajeshwar Singh 
- b) Kamleshwar 
- c) Shrilal Shukla 
- d) Amrita Pritam 

Correct answer = Option 2 (Kamleshwar)

- **Kamleshwar =**
 - **Sahitya Akademi Award (2003)** = For his novel **Kitne Pakistan** which delves into the aftermath of the 1947 Partition of India.
 - **Padma Bhushan (2005)** = India's third-highest civilian award recognizing his distinguished service in literature.
- **Shrilal Shukla =**
 - **Sahitya Akademi Award (1969)** = For his novel **Raag Darbari**, a satirical portrayal of rural politics.
 - **Vyas Samman (1999)** = For his novel **Bisrampur ka Sant**.
 - **Padma Bhushan (2008)** = India's third-highest civilian award, recognizing his contribution to literature.
 - **Jnanpith Award (2011)** = India's highest literary honor, awarded for his lifetime contribution to literature.
- **Amrita Pritam =**
 - **Sahitya Akademi Award (1956)** = For her long poem **Sunehade** making her the first woman to receive this honor in Punjabi.
 - **Padma Shri (1969)** = India's fourth-highest civilian award recognizing her contribution to literature.
 - **Bharatiya Jnanpith (1981)** = India's highest literary award for her work **Kagaz Te Canvas**.
 - **Padma Vibhushan (2004)** = India's second-highest civilian award recognizing her distinguished service in literature.
 - **Sahitya Akademi Fellowship (2004)** = India's highest literary honor awarded for lifetime achievement.
 - **Pinjar , Rasidi ticket**

Explanation:

Q. 90	<p>"Fatwa-i-Alamgiri", a digest of Muslim laws, was written during the period of which of the following kings?</p> <p>a) Nadir Shah </p> <p>b) Aurangzeb </p> <p>c) Tipu Sultan </p> <p>d) Feroz Shah Tughlaq </p>
<p>Explanation:</p> <p>Correct answer = Option 2 (Aurangzeb)</p> <p>Fatawa-i-Alamgiri:</p> <ul style="list-style-type: none">Also known as Fatawa-e-Alamgiri or Al-Fatawa al-Hindiyyah).One of the most comprehensive legal texts in Islamic history, particularly within the Hanafi school of thought.Aurangzeb assembled a council of 500 Islamic scholars from various regions.300 from South Asia, 100 from Iraq, and 100 from the Hejaz.The project was overseen by Shaikh Nizam Burhanpuri.The Vision Behind the Compilation<ul style="list-style-type: none">Personal law (marriage, divorce, inheritance)Criminal law (punishments, justice)Economic policies (taxation, transactions)Military matters and ethics of warInter-religious relationsRules concerning slavesEven aspects of statecraft and general ethicsThe Qur'an, Hadith collections such as Sahih al-Bukhari, Sahih Muslim, Sunan Abu Dawood, and Sunan at-Tirmidhi as well as earlier Hanafi legal texts .	

Q. 91

Which one among the following statements about matter is NOT correct?

- a) On increasing the temperature of solids, the kinetic energy of particles increases. X
- b) The maximum temperature at which a solid melts to become a liquid at atmospheric pressure is called its melting point. ✓
- c) Particles of steam have more energy than water at 100°C X
- d) Direct change of gas to solid is called deposition. X

Correct answer = Option 2 (The maximum temperature at which a solid melts to become a liquid at atmospheric pressure is called its melting point)

- **Kinetic Energy =**

- o The energy an object possesses due to its motion. For particles, it's related to their speed and mass ($KE=1/2mv^2$).
 - o In solids, particles (atoms, ions, or molecules) are closely packed and vibrate in fixed positions. As temperature increases, these vibrations become more intense, leading to an increase in the kinetic energy of the particles.

- **Potential Energy =**

- o Related to the forces between the particles and their relative positions.
 - o Steam particles have higher potential energy because they are much farther apart than water molecules, overcoming stronger intermolecular forces in the liquid state.

- **Latent Heat of Vaporization =**

- o Latent heat of vaporization refers to the amount of heat required to convert a unit mass of a liquid into a gas without changing its temperature.
 - o This energy is used to overcome intermolecular forces during the phase transition from liquid to gas.
 - o Ex:- when water boils at 100°C, it absorbs latent heat of vaporization to become steam.

- **Deposition =**

- o The phase transition in which a gas transforms directly into a solid without passing through the liquid phase.
 - o This process releases energy and is exothermic.
 - o Ex:- the formation of frost.

- **Sublimation =**

- o The transition of a substance directly from the solid to the gas state without passing through the liquid state.
 - o This occurs under specific conditions of temperature and pressure.
 - o Ex:- dry ice (solid carbon dioxide) at room temperature and atmospheric pressure

Explanation:

Q. 92

Which of the following statements is correct about the Five-Year Plan?

- a) All Five-Year Plans have equal rates of growth. 
- b) The Planning Commission was constituted in 1951. 
- c) The President was the ex-officio chairperson of the Planning Commission. 
- d) The first Five-Year Plan was started in 1951. 

Explanation:	<p>Correct answer =Option 4 (The first Five-Year Plan was started in 1951)</p> <ul style="list-style-type: none"> • The Planning Commission was constituted on March 15, 1950 through a Cabinet Resolution. <p>Five Year Plans:</p> <ul style="list-style-type: none"> • First Five-Year Plan (1951-1956) = <ul style="list-style-type: none"> ◦ Based on the Harrod-Domar model. ◦ Focus on Agriculture, irrigation, and power projects. • Second Five-Year Plan (1956-1961) = <ul style="list-style-type: none"> ◦ Based on the Mahalanobis model. ◦ Focus on Rapid industrialization, particularly heavy industries like steel, chemicals, and fertilizers. • Third Five-Year Plan (1961-1966) = <ul style="list-style-type: none"> ◦ This plan is also known as "Gadgil Yojana". ◦ Aiming for a self-reliant and self-generating economy with continued emphasis on both agriculture and industry.. • Plan Holiday (1966-1969) = A Period of Adjustment <ul style="list-style-type: none"> ◦ Due to the failures of the Third Plan, the government implemented annual plans instead of a Five-Year Plan. ◦ Focused on agriculture, export promotion, and consolidation of the industrial base. • Fourth Five-Year Plan (1969-1974) = <ul style="list-style-type: none"> ◦ Growth with stability and the progressive achievement of self-reliance. ◦ The nationalization of major banks occurred during this period. • Fifth Five-Year Plan (1974-1979) = <ul style="list-style-type: none"> ◦ Prioritized poverty reduction ("Garibi Hatao"). • Rolling Plan (1978-80) = <ul style="list-style-type: none"> ◦ A flexible plan concept with annual revisions, introduced by the Janata government but abandoned when the Congress returned to power. • Sixth Five-Year Plan (1980-1985) = <ul style="list-style-type: none"> ◦ Focused on poverty alleviation through economic growth and modernization, marking the beginning of some economic liberalization measures. • Seventh Five-Year Plan (1985-1990) = <ul style="list-style-type: none"> ◦ Emphasized food, work, and productivity, achieving a high growth rate and further propelling economic reforms. • Annual Plans (1990-92) = <ul style="list-style-type: none"> ◦ Two plans focused on managing an economic crisis and initiating structural reforms as a transition to the next five-year plan. • Eighth Five-Year Plan (1992-1997) = <ul style="list-style-type: none"> ◦ Prioritized human resource development and rapid economic growth through significant liberalization and globalization policies. • Ninth Five-Year Plan (1997-2002) = <ul style="list-style-type: none"> ◦ Focused on "growth with social justice and equality," aiming for inclusive development but faced challenges due to economic slowdowns. • Tenth Five-Year Plan (2002-2007) = <ul style="list-style-type: none"> ◦ Aimed for faster and more inclusive growth with specific targets for poverty reduction and improving social indicators, achieving high growth. • Eleventh Five-Year Plan (2007-2012) =
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- o Continued the focus on faster and more inclusive growth, emphasizing reducing disparities and improving access to essential services.
- **Twelfth Five-Year Plan (2012–2017) =**
- o The final plan aimed for faster, more inclusive, and sustainable growth, integrating environmental concerns before the Planning Commission was replaced.

Q. 93	<p>Which one of the following deserts is not located around 20°- 30° latitude North or South of the Equator?</p> <p>a) Atacama </p> <p>b) Kalahari </p> <p>c) Great Victoria </p> <p>d) Gobi </p>
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Explanation:	<p>Correct answer = Option 4 (Gobi)</p> <ul style="list-style-type: none">• Atacama Desert =<ul style="list-style-type: none">o Located between approximately 18°S and 30°S in northern Chile and southern Peru, making it situated in the southern hemisphere.o One of the driest places on Earth, with some areas receiving less than 1 mm of rain annually.• Kalahari Desert =<ul style="list-style-type: none">o Spans roughly 16°S to 26°S across Botswana, Namibia, and South Africa, also placing it in the southern hemisphere.o Semi-arid with seasonal rainfall, supporting diverse wildlife and vegetation.• Great Victoria Desert =<ul style="list-style-type: none">o Extends from about 26°S to 29°S in Australia, confirming its location in the southern hemisphere.o Arid with low and unreliable rainfall, characterized by sand dunes and salt lakes.• Gobi Desert =<ul style="list-style-type: none">o Situated between approximately 37°N and 42°N, placing it in the northern hemisphere.o Cold desert with harsh winters and hot summers, experiencing significant temperature fluctuations.

Q. 94

For which country did the former cricketer Roger Binny play cricket?

- a) India ✓
- b) Australia ✗
- c) England ✗
- d) New Zealand ✗

Correct answer = Option 1 (India)

1983 Cricket World Cup:

- Officially known as **the Prudential Cup '83**.
- **Host Countries** = England and Wales
- **Finals Venue** = Lord's (London)
- **Number of Teams** = 8 (India, West Indies, England, Pakistan, Australia, New Zealand, Sri Lanka, Zimbabwe)
- **Overs per Innings** = 60
- **Top Run-Scorer** = David Gower (England) – 384 runs
- **Top Wicket-Taker** = Roger Binny (India) – 18 wickets
- **Final Match** = India vs West Indies
- **Man of the Match in Finals** = Mohinder Amarnath (India)

Q. 95**In the context of ecology, what is symbiosis?**

- a) The process of photosynthesis
- b) Competition between organisms for resources
- c) Random movement of organisms in their habitat
- d) A close and long-term interaction between different species

Correct answer = Option 4 (A close and long-term interaction between different species)

Symbiosis =

- In ecology, symbiosis refers to a close, long-term interaction between two different species. These interactions can be beneficial, neutral, or harmful to the organisms involved.
- Symbiotic relationships are crucial for the balance and functioning of ecosystems.
- **Types of Symbiosis =**

o **Mutualism =**

- Association between organisms of two different species in which each benefits.
- Ex:- Clownfish and sea anemones

o **Commensalism =**

- A relationship between individuals of two species in which one species obtains food or other benefits from the other without either harming or benefiting the latter.
- Ex:- Remora that rides attached to sharks and other fishes.

o **Parasitism =**

- Relationship between two species of plants or animals in which one benefits at the expense of the other, sometimes without killing the host organism.
- Ex:- Ticks feeding on the blood of mammals.

Explanation:

Q. 96

Consider the following statements regarding the Swadeshi Movement-

1. It was initiated as a reaction to the Partition of Bengal by Lord Curzon.
2. A major aspect of the movement was the boycott of British goods.
3. It saw significant participation from women and students.

Which of the statements given above is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

Correct Answer = Option 4 (1, 2 and 3)

- **Statement 1 is correct** = The Swadeshi Movement began in 1905 in protest against the Partition of Bengal by Lord Curzon.
- **Statement 2 is correct** = A key feature of the movement was the boycott of British goods and promotion of Swadeshi (indigenous) products.
- **Statement 3 is correct** = The movement saw active participation by women, students, and members of all sections of Indian society.

Swadeshi Movement (1905–1911)

- **Started** as a reaction to the **Partition of Bengal** in **1905** by **Lord Curzon**.
- Officially launched on **7 August 1905** in **Calcutta Town Hall**.
- **Objectives-**
 - Opposed British '**divide and rule**' policy (linked to Bengal Partition).
 - Promoted indigenous (Swadeshi) goods, industries, and handlooms.
 - Called for the boycott of foreign goods, especially cloth.
 - Encouraged national education and self-reliance.
 - Featured significant participation from women and students.
- **Prominent Leaders-**
 - Bal Gangadhar Tilak, Bipin Chandra Pal, Lala Lajpat Rai, Aurobindo Ghosh, Rabindranath Tagore (wrote songs promoting unity, including Amar Shonar Bangla)

Explanation:

Q. 97

The pressure at a certain depth in a liquid at rest depends on which of the following factors?

1. The depth below the surface of the liquid.
2. The density of the liquid.
3. The acceleration due to gravity.
4. The shape of the containing vessel.

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 1, 2, and 3 only
- c) 1, 3, and 4 only
- d) 1, 2, 3, and 4

Correct Answer = Option 2 (1, 2, and 3 only)

The pressure (P) at a certain depth in a liquid at rest is given by the formula-

$$P = \rho gh$$

Where-

- ρ (rho) is the **density** of the liquid.
- g is the **acceleration due to gravity**.
- h is the **depth** below the surface of the liquid.

Explanation:

The hydrostatic pressure depends on-

Statement 1- The depth below the surface of the liquid (h): Pressure increases linearly with depth.

Statement 2- The density of the liquid (ρ): Denser liquids exert more pressure at the same depth.

Statement 3- The acceleration due to gravity (g): Pressure is directly proportional to the acceleration due to gravity.

Statement 4- The shape of the containing vessel does not affect the pressure at a given depth.

Q. 98	<p>Based on the National Panchayat Awards 2025, which of the following pairs is correctly matched?</p> <p>a) Climate Action Special Panchayat Award (CASPA) – Mall Gram Panchayat, Ranga Reddy District, Telangana X</p> <p>b) Atma Nirbhar Panchayat Special Award (ANPSA) – Dawwa S Gram Panchayat, Gondia District, Maharashtra X</p> <p>c) Panchayat Kshamta Nirman Sarvottam Sansthan Puraskar (PKNNSP) – Kerala Institute of Local Administration (KILA), Kerala ✓</p> <p>d) Climate Action Special Panchayat Award (CASPA) – Kerala Institute of Local Administration (KILA), Kerala X</p>
Explanation:	<p>Correct Answer = Option 3 (Panchayat Kshamta Nirman Sarvottam Sansthan Puraskar (PKNNSP) – Kerala Institute of Local Administration (KILA), Kerala)</p> <p>National Panchayat Awards 2025-</p> <ul style="list-style-type: none"> • Climate Action Special Panchayat Award (CASPA) = Dawwa S Gram Panchayat, Gondia District, Maharashtra • Atma Nirbhar Panchayat Special Award (ANPSA) = Mall Gram Panchayat, Ranga Reddy District, Telangana • Panchayat Kshamta Nirman Sarvottam Sansthan Puraskar (PKNNSP) = Kerala Institute of Local Administration (KILA), Kerala <p># National Panchayati Raj Day = 24 April</p>

Q. 99	<p>Atoms of the same element that have the same number of protons but a different number of neutrons are called-</p> <p>a) Isobars X</p> <p>b) Isotopes ✓</p> <p>c) Isomers X</p> <p>d) Allotropes X</p>
Explanation:	<p>Correct Answer = Option 2 (Isotopes)</p> <ul style="list-style-type: none"> • Isobars: Atoms of different elements that have the same mass number (sum of protons and neutrons) but different atomic numbers (number of protons). <ul style="list-style-type: none"> ○ For example, $^{18}\text{Ar}^{40}$ and $^{20}\text{Ca}^{40}$ are isobars. • Isotopes: Atoms of the same element. They have the same atomic number (number of protons) but different mass numbers due to a different number of neutrons. <ul style="list-style-type: none"> ○ For example, $^{12}\text{C}^{12}$, $^{13}\text{C}^{13}$, and $^{14}\text{C}^{14}$ are isotopes of Carbon. They all have 6 protons but have 6, 7, and 8 neutrons, respectively. • Isomers: Molecules that have the same molecular formula (same number and type of atoms) but different structural arrangements of those atoms. This term is used in organic chemistry. • Allotropes: Allotropes are different structural modifications of an element in the same physical state. <ul style="list-style-type: none"> ○ For example, diamond, graphite, and fullerenes are allotropes of Carbon.

<p>Q. 100</p> <p>Renowned legend and choreographer Kumudini Lakhia, who recently passed away, was a master of which Indian classical dance form?</p> <p>a) Bharatanatyam </p> <p>b) Odissi </p> <p>c) Kathak </p> <p>d) Kuchipudi </p>	<p>Correct Answer = Option 3 (Kathak)</p> <p>Kumudini Lakhia-</p> <ul style="list-style-type: none"> • Padma Shri (1987) • Sangeet Natak Akademi Award (1982) • Padma Bhushan (2010) • Kalidas Samman (2002-03) • Padma Vibhushan (2025) <p>Kathak Exponents-</p> <ul style="list-style-type: none"> • Pandit Birju Maharaj, Shambhu Maharaj, Lachhu Maharaj, Achhan Maharaj, Shovana Narayan, Sitara Devi, Kamini Asthana, Nalini Asthana, Narayan Prasad, Kalika Prasad, Ishwari Prasad, Vidya Gauri Adkar, Kumudini Lakhia, Aditi Mangal Das <p>#Trick- “अरे महाराज, नारायण और देवी में आस्था रखो, उनका प्रसाद खाओ विद्या मिलेगी, लखपति बनोगे और सब मंगल ही मंगल होगा”</p>
<p>Explanation:</p>	