

1.(b) CRISPR offers tremendous potential for treating diseases but with ethical concerns.

This option accurately captures the passage's focus on the potential of CRISPR technology in treating diseases while highlighting the ethical issues associated with its use.

2.Ans: (d) Antibiotics should only be used to treat diseases.

The passage highlights the dangers of using antibiotics as growth promoters in animals and suggests that using antibiotics strictly for treating diseases (rather than for growth promotion) can help reduce the risk of creating antibiotic-resistant superbugs.

3.(c) 2, 3 and 5 only

- **Statement 2:** The passage indicates that modern technologies like driverless cars and AI are increasingly blurring economic and regulatory borders, as different countries may have different rules and standards.
- **Statement 3:** The passage suggests that innovation and capital in technology are encroaching upon areas traditionally governed by state regulations (such as safety and legal responsibility).
- **Statement 5:** Geopolitical considerations must adapt to uncertainties posed by the global implementation of these new technologies, as different jurisdictions may respond differently to the ethical and regulatory issues raised.

4.Ans: (b) Politicians should be selected from those trained in administration.

The author emphasizes the importance of specific training and competence for those responsible for governing a state, comparing it to the qualifications required for other skilled professions.

5.(b) Competitive funding fosters innovation and efficiency but risks widening urban inequalities.

This option captures the main points of the passage, which discusses both the potential benefits of innovation and efficiency from competitive funding as well as the risk of increased urban inequality due to disparities in socio-economic conditions across cities.

6.(c) The workshop signifies a crucial step in MoHUA's strategy to empower ULBs for effective service delivery and sustainable urban growth.

This option reflects the primary goal of the workshop as described in the passage: to empower Urban Local Bodies (ULBs) through capacity building for enhanced urban governance, service delivery, and sustainable development.

7.

8.(b) While potential benefits exist, regulatory complexities and long-term implications demand cautious implementation of direct listing.

This option captures the passage's balanced view, recognizing the potential benefits of direct foreign listing while emphasizing the importance of cautious implementation due to regulatory and long-term considerations.

9. (c) Investing in universal childcare and education, alongside targeted policy interventions, are crucial to overcome structural challenges and close the FLFP gender gap.

This option aligns with the passage's emphasis on addressing structural barriers, like childcare burdens and unequal access to education, through policy interventions to improve female labor force participation and promote gender equality.

10.(c) Wealth provides the security which enables transcendence beyond material pursuit.

This statement reflects the passage's idea that wealth, or "artha," when pursued in balance, can provide freedom and security to pursue higher aspirations and spiritual fulfillment, rather than being an end in itself.

11.(d) Concerns about transparency and corporate influence have led to increased scrutiny of electoral bond funding.

This option captures the essence of the passage, which discusses the Supreme Court's directive for the Election Commission to provide detailed data on electoral bonds in response to concerns about transparency and potential misuse in election funding.

12.(b) bacteria in the Antarctic frost protect lichen from the residual cold after the rock absorbs water.

This option is not mentioned in the passage as a reason for the survival of lichens in Antarctica. The passage focuses on the protection provided by rocks and sunlight, not on the role of bacteria.

13.(a) India must rethink its strategic approach to adapt to the new reality of South Asia, taking into account China's influence, evolving regional dynamics, and a holistic engagement with all the key players.

This option encapsulates the need for India to adjust its strategy in light of the changing geopolitical landscape and acknowledges the complexities of dealing with both China and other emerging powers in the region.

14.(c) Despite global tensions, the summit revealed BRICS' focus on independent collaboration and engagement beyond the West, prioritising internal growth over direct confrontation with Western powers. This option captures the essence of the passage, emphasizing BRICS' approach to expanding its influence and collaboration independently, rather than positioning itself directly against the West.

15. Based on the above passage following assumptions have been made.

Assumption 1: All BRICS members will prioritise economic and political cooperation within the group over their individual relationships with Western nations.

Assumption 2: The expansion of BRICS by inviting new members signifies a rapid and imminent shift towards a full-fledged alternative global order challenging Western dominance.

Which of the following is/are correct?

- (a) Only 1 (b) Only 2 (c) Both 1 and 2 **(d) Neither 1 nor 2**

Passage

Socialism's core lies not in rigid blueprints or centralized mandates, but in a vision of shared human flourishing. It seeks to dismantle the structures that concentrate wealth and power in the hands of a few, replacing them with systems that prioritize collective well-being and equitable distribution of resources. This pursuit of equality doesn't equate to stifling individual initiative or homogenizing society. Instead, it aims to create a level playing field where everyone has the opportunity to contribute and thrive, their potential unbound by artificial constraints of birth or circumstance.

16. What is the most logical and crucial message conveyed by the passage?

- (a) Socialism advocates for centralized control and rigid economic planning, overlooking individual freedom.
(b) True socialism thrives on a delicate balance between economic redistribution, fostering individual potential, and maintaining a level of personal liberty.
 (c) While acknowledging the need for economic fairness, socialism ultimately prioritizes collective well-being.
 (d) Despite its diverse interpretations, socialism refers to a fixed set of principles and doctrines that offer a one-size-fits-all solution for all societies

17. Ans: (d) Explanation: Such open ended questions can be attempted via trial and error to save time.

Let the digit be 9 which is greater than 3, divisible by 3 but not divisible by 6.

Now solve it by options.

Option (a); $2 \times 9 = 18$, not divisible by 4.

Option (b); $3 \times 9 = 27$, not divisible by 4.

Option (c); $2 \times 9 + 4 = 22$, not divisible by 4.

Option (d); $3 \times 9 + 1 = 28$, divisible by 4.

18. An 8-digit number 4252746B leaves the remainder 0 when divided by 3. How many values of B are possible?

- (a) 2 (b) 3 **(c) 4** (d) 6

Ans: (c) Explanation: Given number = 4252746B

Sum of digits = $4 + 2 + 5 + 2 + 7 + 4 + 6 + B = 30 + B$

A number whose sum of digits is divisible by 3 is also divisible by 3.

Hence, the possible values of B can be 0, 3, 6 or 9.

So, there are four possible values of B.

19.(a) Explanation: In order to get a zero in the product there must be at least one pair of 2 and 5.

Since in the equation, all the numbers are odd there will not be a zero

20. Ans: (d) Explanation:

Given that, Sita and Gita go swimming after a gap of every 2 days and every 3 days intervals, respectively.

Thus, Sita swims every 3rd day while Geeta every 4th Day.

They will go together again at = LCM of (2 + 1) and (3 + 1) = LCM of 3 and 4 = 12 days

Hence, 12 days after 1st January or they will go together on 13th January.

21. (c) Explanation:

Let the numbers be 2x, 3x, 5x

Then, their LCM = 30x

So, $30x = 1500 \Rightarrow x = 50$

Therefore, the numbers are (2×50), (3×50), (5×50)

i.e., 100, 150, 250

Thus, required HCF = 50

22. Ans: (d) Explanation:

The smallest two-digit number = 10 According to the question,

The number of coins with D = 10

$$D = \left(\frac{C}{2}\right) + 2$$

$$\Rightarrow \frac{C}{2} = 10 - 2 = 8 \text{ or } C = 16$$

$$C = \left(\frac{B}{2}\right) + 2$$

$$\Rightarrow \frac{B}{2} = 16 - 2$$

$$\frac{B}{2} = 14 \text{ or } B = 28$$

$$B = \left(\frac{A}{2}\right) + 2$$

$$\frac{A}{2} = 28 - 2 = 26 \text{ or } A = 52$$

Therefore, A initially had 52 coins.

23. Ans: (d) Explanation:

Let the numbers be of the form $10x + y$, and its reverse is $10y + x$.

Then, $(10x + y) - (10y + x) = 9x - 9y = 9(x - y)$

Now, difference is 27, so $9(x - y) = 27 \Rightarrow x - y = 3$

So, required numbers are 41, 52, 63, 74, 85 and 96.

So, a total of 6 such 2-digit numbers would be there.

24. (b) Explanation:

9746100 is the multiple of: $9746100 = 2 \times 2 \times 3 \times 3 \times 5 \times 5 \times 7 \times 7 \times 13 \times 17$

Least number which should be multiplied to 9746100 to make it a perfect square

$= 13 \times 17 = 221$

25. Ans: (d) Explanation: Here, Number of teachers,

$n = 10$, Reduction in average age, $p = 3$

Thus, Age of new teacher = Age of retired teacher - $n \times p$

$\Rightarrow 25 = \text{Age of retired teacher} - 10 \times 3 \Rightarrow \text{Age of retired teacher} = 25 + 30 = 55 \text{ years}$

26. Ans: (b) Explanation:

Total marks of 100 students = $100 \times 40 = 4000$.

New corrected total marks = $4000 - 83 + 53 = 3970$

So, corrected mean = $3970/100 = 39.7$

27. (c) Explanation:

Given, $p + q + r = 15 \times 3 = 45 \dots(i)$

$r + s + t = 21 \times 3 = 63$

$t + u = 26 \times 2 = 52 \dots(iii)$

$t + r = 19 \times 2 = 38 \dots(iv)$

From Eqs. (ii) and (iv), we get $38 + s = 63 \Rightarrow s = 25 \dots(v)$

Now adding Eqs. (i),(iii), (v),

we get $p + q + r + s + t + u = 45 + 25 + 52 = 122$

Average of p, q, r, s, t and u = $12 \frac{2}{6} \% = 20.33$

28. In the adult population of a city, 40% men and 30% women are married. What is the percentage of the married adult population if no man marries more than one woman and no woman marries more than one man; and there are no widows and widowers?

Ans(c)

(a) $31 \frac{1}{7} \%$ (b) 34% (c) $34 \frac{2}{7} \%$ (d) 35%

Q29. Ans: (a) Explanation:

Let the total number of voters in the voter list be a. Number of casted votes = 80% of a = 0.8a

X got 56% of the casted votes.

Thus percentage of votes gained by Y = 44%

(as there were no invalid or NOTA) Winning percentage of X = (56 – 44)%,
i.e. 12% of the casted votes. Now as per given statement 12% of 0.8a = 1440

$$2\% \text{ of } 0.8a = 1440$$

$$\text{or } a = \left(\frac{144 \times 100}{0.8 \times 12} \right) = 15000$$

Accordingly, the total number of voters in the voter

list = 15000 voters.

30. (d) Explanation: Population after 1st year = 120% of 15000

Population after 2nd year = 80% of Population

after 1st year Population after 3rd year = 120% of Population after 2nd year Population after 4th year = 80% of Population after 3rd year

$$\text{i.e., } 1.2 \times 0.8 \times 1.2 \times 0.8 \times 15000 = 13824$$

31. (b) Explanation:

Let the cost of books be 1

⇒ Cost of tuition fee = 0.7

Total expenses = 1.7

New cost of books = 0.85 (15% decrease);

Percentage increase in expenses

$$= \frac{1.725 - 1.7}{1.7} \times 100 \approx 1.5\%$$

(a)

New cost of tuition fee = 125% of 0.7 = 0.875

New expenses = 1.725

32.

Explanation:

From the above statement

$$\frac{(40 + x + y + 60)}{3} = 200$$

$$\Rightarrow x + y = 500$$

Again from first statement

$$(x - 20) = \frac{y}{2}$$

$$2x - y = 40$$

Solving Equation (i) and (ii),

We get

$$x = 180 \quad y = 320$$

$$x : y \Rightarrow 9:16$$

33. Ans: (a) Explanation: Let the monthly income of Peter and Paul is 4x and 3x respectively

And their expenses are 3y and 2y respectively

Then according to question, $4x - 3y = 6000$ and $3x - 2y = 6000$

By solving linear equation we get $x = y = 6000$

So, income of Peter = $4x = 24000$ and

income of Paul = $3x = 18000$

34. (c) Explanation: Let the cost price be CP = 100x

He marks his goods 20% above CP

MRP (Marked Price) = 120% of CP = $1.2 \times 100x = 120x$

He allows a discount of 25% Selling price = 75% of MRP = $0.75 \times 120x = 90x$

Loss = CP – SP = $100x - 90x = 10x$

Loss percentage = $100/10 = 10\%$

35. (c) Explanation: Let the cost price of the article be 'x' It was sold at 10% loss,

Selling price = 90% of CP = $0.9x$

If it was sold at Rs 56 more it would have been a gain of 4%,

Selling price = 104% of CP = $1.04x$

$$1.04x = 0.9x + 56$$

$$0.14x = 56$$

$$x =$$

$$\frac{56}{0.14} = 400$$

Selling price of the article = $0.9x = 0.9 \times 400 = 360$

36.

anation:

$$\therefore P = 4000, R_1 = 5\%, R_2 = 15\%$$

$$\text{Amount after 2 years} = P \left(1 + \frac{R_1}{100}\right) \left(1 + \frac{R_2}{100}\right)$$

$$1000 \times \left(1 + \frac{5}{100}\right) \left(1 + \frac{15}{100}\right)$$

$$1000 \times \frac{105}{100} \times \frac{115}{100}$$

$$1000 \times \frac{21}{20} \times \frac{23}{20} = ₹ 4830$$

\therefore , the bicycle will cost ₹ 4830 to Shyam.

37. (a) Explanation:

Here, Principal = Rs.20000

Rate of interest = 8%

The interest for 2 year = $20000 \times 8 \times 2 / 100$

= Rs. 3200

Assume that he paid Rs.x at the end of the second year.

\therefore Interest will be calculated on Rs. (20000 - x + 3200)

Interest for 3 year

$$= (20000 - x + 3200) \times 8 \times 3 / 100 = 6(23200 - x) \times 25 / 100$$

= - Amount = P + SI

$$\Rightarrow 6 \times 25 (23200 - x) / 100 + 23200 - x = 17980$$

$$\Rightarrow 6(23200 - x) + 25(23200 - x) = 449500$$

$$\Rightarrow 31(23200 - x) = 449500$$

$$\Rightarrow x = 8700$$

Therefore, Aman paid Rs.8700 after the second year.

38. (a) Explanation: The initial distance between Cheetah and Deer = 300 meters

Speed of Deer = 27 kmph = $27 \times 1000/60 = 450$ meters/min.

Speed of Cheetah = 36 kmph = $36 \times 1000/60 = 600$ meters/min.

Distance covered by deer in 2 minutes = $2 \times 450 = 900$ meters

Relative speed = $600 - 450 = 150$ meters/min.

Time required by Cheetah to catch the deer = distance/time = $(300 + 900) / 150 = 8$ minutes

Distance traveled by cheetah = $8 \times 600 = 4800$ meters. = 4.8 Km.

39.

anation:

$$\text{Part filled by pipe A in 1 min} = \frac{1}{12}$$

$$\text{Part emptied by pipe B in 1 min} = \frac{1}{8}$$

Part filled by both pipe operating together in 1 minute

$$\therefore \frac{1}{12} - \frac{1}{24}$$

$$\text{Total time taken} = \frac{1}{\frac{1}{12} - \frac{1}{24}} = 24 \text{ minute}$$

40. (a) Explanation: Let time taken by P and Q working together be 'x' days Time taken by P alone will be 'x + 16' days

Time taken by Q alone will be 'x + 4' days

Let the Total work be "(x + 16) (x + 4)" units

Work done by P in 1 day will be = (x + 16) (x + 4)/(x + 16) = (x + 4) units

Work done by Q in 1 day will be = (x + 16) (x + 4)/(x + 4) = (x + 16) units

Work done by P and Q working together in one day = (x + 16) + (x + 4) = (2x + 20) units

Time taken by P and Q working together = Total work /work done in one day

$$x = \frac{(x+16)(x+4)}{(2x+20)}$$

$$2x^2 + 20x = x^2 + 20x + 64$$

$$x^2 = 64 \Rightarrow x = 8$$

Passage

The paradox of choice is illustrated by the story of Buridan's ass. Jean Buridan, the 14th century philosopher, wrote about free will and the inability to choose due to numerous choices and uncertainties. In the story, a donkey stands between two equally appealing stacks of hay. Unable to decide which to eat, it starves to death. Changes in technology and innovations such as smart phones and tablets only exacerbate our glut of choices. Constant connectivity and overconsumption of realtime data and social media can leave little room for self reflection and rest, making decisions more difficult. Life is about choices. Many people are overwhelmed with attractive life choices, yet find themselves unhappy and anxious.

41. Which one of the following statements best reflects the most logical message implied by the above passage?

(a) Modern technology enfeebles societal structure and makes life difficult.

(b) Modern life is full of uncertainties and endless difficult choices.

(c) We are influenced by the opinion of others and have no courage to follow our own convictions.

(d) In our lives, having too few choices may not be a good thing, but having too many can be equally as difficult

. Ans: (d) Explanation:

Passage

The Microfinance Industry Network's (MFIN) latest "Micro Matters Macro View" report paints a complex picture of India's microfinance sector. While loan portfolios saw impressive growth, reaching Rs. 3.5 Lakh crore, concerns linger about portfolio quality and client activation. Despite a dip in the Portfolio at Risk (PAR) ratio, it remains above pre-pandemic levels, prompting calls for cautious lending practices. On the positive side, client activation is nearing pre-pandemic levels, hinting at renewed confidence in the sector. While challenges remain, the report underlines the sector's continued relevance in promoting financial inclusion and empowering low-income communities.

42. Which of the following statements are correct based on the passage?

1. Microfinance loan disbursement in India has stagnated due to growing portfolio quality concerns.

2. Increased client activation suggests successful post-pandemic recovery and improved risk management within the sector.

Choose the most appropriate answer:

(a) Only 1 (b) Only 2 (c) Both 1 and 2 **(d) Neither 1 nor 2**

Passage

The completion of the Eastern Dedicated Freight Corridor (EDFC) sparks debate regarding its impact on India's ambitious \$5 trillion economic vision. Proponents argue the improved logistics and reduced costs will fuel industrial activity and unlock the potential of eastern states. Skeptics, however, highlight concerns about uneven regional development, potential job losses in existing logistics hubs, and the long-term viability of dedicated corridors amidst evolving transportation technologies. They advocate for a balanced approach, emphasizing investments in diverse infrastructure and human capital development alongside freight corridors.

43. On the basis of the passage, consider the following assumptions:

1. The EDFC's primary impact on India's \$5 trillion vision will be through facilitating regional specialization and niche industrial clusters in eastern states.

2. The passage implicitly warns against focusing solely on the EDFC and suggests the need for a holistic infrastructure development strategy with emphasis on intermodal connectivity and technological integration.

Choose the most appropriate answer:

(a) Only 1 (b) Only 2 (c) Both 1 and 2 (d) Neither 1 nor 2

44. Ans: (b) Explanation: Here,

1st term = 32

2nd term = $32 \times 1.5 = 48$

3rd term = $48 \times 2.5 = 120$

4th term = X (lets say)

5th term = $180 \times 2.5 = 450$

6th term = $450 \times 1.5 = 675$

Observe that the terms of series are 1.5 and 2.5 times multiple of previous term alternatively.

Hence, the 4th term should be $120 \times 1.5 = 180$.

45. Ans: (c) Explanation: By observing the following series,

$2000 - 976 = 1024 = 45$

$976 - 720 = 256 = 44$

$720 - 656 = 64 = 43$

$656 - 640 = 16 = 42$

Similarly, the next term should be

$640 - 41 = 640 - 4 = 636$ and

not 637 $636 - 635 = 1 = 40$

So, the wrong term in the series is 637.

46. Ans: (b) Explanation:

Given sequence: 5 1 4 7 3 9 8 5 7 2 6 3 1 5 8 6 3 8 5 2 2 4 3 4 9 6

The odd numbers followed by another odd number are: 5, 7, 3, 5, 3, and 1 (as shown by bold and underlined numbers)

So, required number of odd numbers = 6

47. Ans: (a) Explanation:

Given series is: K 4 M P H & T * 6 8 7# B 9 K L @ 6% U & * 2

We need to check numbers in the above series which are immediately followed by symbols and immediately preceded by alphabets.

Number 4 is eliminated because it is followed and preceded by letters.

Similarly, 6, 8 and 7 are eliminated because these are either preceded or followed by a number.

9 is followed and preceded by letters hence eliminated.

6 is surrounded by symbols hence eliminated.

Hence, there is no number that is immediately followed by symbols and immediately preceded by alphabets.

48.

Ans: (d) Explanation: Except option (d) the difference between 1st and 2nd letter is 2,

2nd and 3rd letter is 3,

3rd and 4th letter is 4 and

4th and 5th letter is 5.

But in option (d) the difference between 3rd and 4th letter is 3.

49. (b) Explanation:

Relationship followed: Individual and group Robbers: a group of robbers is called a gang.

Option A: Band is a group of musicians

Option B: Team is a Group of Players.

Option C: Crowd is a group of people.

Option D: Crew is a group of Sailors.

50. (a) Explanation: Relationship followed: Constitutional Form and Country Republic: India

Option A: Canada is having Constitutional Monarchy.

Option B: USA is a Republic.

Option C: Ukraine is a Republic.

Option D: Russia is a Republic.

51.. Ans: (d) Explanation: The given series is _b_a_ba_b_abab_aab.

Total number of letters in this series = 18 Now,

we will break the series in 3 letters: _b_/a_b/a_b/_ab/ab_/aab

By trying options, we can find out the pattern being followed in this series i.e. abb/aab Using this pattern, fill the blanks: abb/aab/abb/aab/abb/aab

52. (c) Explanation: Given arrangement is: R E 5 D A P \$ 3 T I Q 7 9 B # 2 K % U 1 M W 4 * J 8 N Now observe the option carefully: In all other options except option (c), the first element moves 3 steps forward to give the second elements, which in turn moves 5 steps backward to give the third element. But this is not followed by option (c).

53. Ans: (a)

Explanation:

We observe that,

F	F+3	I
I	I+3	L
S	S+3	V
H	H+3	K

Similarly, ROAD will be written as URDG.

R	R+3	U
O	O+3	R
A	A+3	D
D	D+3	G

54. Ans: (c) Explanation: The numerical values of alphabets are (by using formula)

$$IHG = 987,$$

$$FED = 654,$$

$$CBA = 321$$

According to the question,

$$IHG = 987 \times 2 = 1974$$

$$FED = 654 \times 2 = 1308$$

So,

$$CBA = 321 \times 2 = 642$$

55. Ans: (a) Explanation: On another planet:

earth → food

tree → water

food → star

water → tree

stars → earth

We know that if a person is hungry, he eats food and food is called star there.

So, he eats star.

56. Ans: (d) Explanation:

$$\text{Angle traced by hour hand in 1 min} = (1/2)^\circ$$

$$\text{The angle traced by hour hand in 30 min} = 30 (1/2)^\circ = 15^\circ$$

57. Ans: (b) Explanation: $2048 = 2020 + 28$ (as we know that a leap year repeats itself after every 28 years.)

58. Ans: (c) Explanation:

Given that the 3rd day of the month is Monday.

$$\text{So } 3 + 7 = 10 \text{ and}$$

$$10 + 7 = 17 \text{ and}$$

$$17 + 7 = 24 \text{th day is Monday.}$$

So, 3, 10, 17 and 24 are Monday.

Now the 5th day from the 21st is the 26th.

Now the 24th is Monday and the 26th will be Wednesday

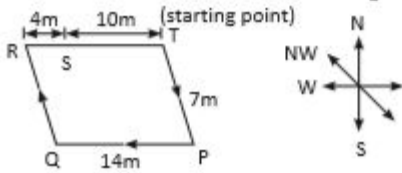
Q59. Nitish went 7m towards the south east direction, then he moved towards the West and covered a distance of 14 m. From there, he went North-West a distance of 7 m and finally he moved a distance of 4 m towards East and stood at point. How far is the starting point from where he is standing now?

(a) 10 m (b) 4 m (c) 14 m (d) 11 m

Ans: (a)

Explanation:

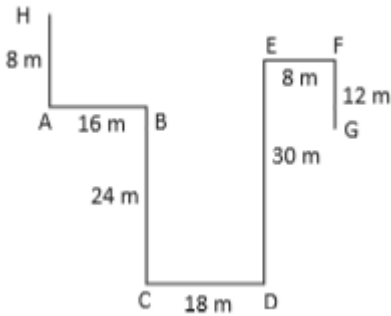
Movement of the Nitish is shown in the figure below:



Hence, the distance of Nitish from the starting point is $14 - 4 = 10\text{m}$

60. (d)

Explanation:



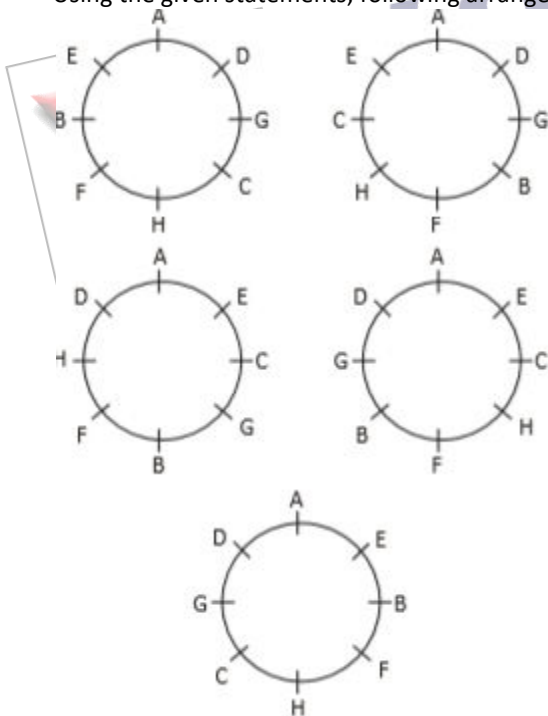
61Ans: (d) Explanation:

I. B and D sit neither adjacent to C nor opposite to C.

II. A sits in between E and D

III. F sits in between B and H.

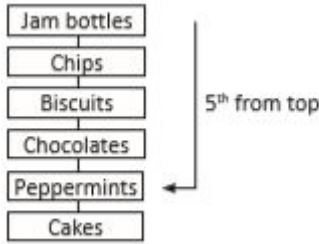
Using the given statements, following arrangements can be possible.



We can clearly see that none of the options is definitely correct.

62. Ans: (a) Explanation: Given that jambottles are at the top place.

We will find out the arrangements using given data step by step as we did in previous example and the arrangement of the stuff look like:



Hence we can say that peppermints are at 5th from the top.

63. (b) Explanation: From

Statement-III: T must be at left end because P is to the right of T T _ P _ _ _ _ _ _ _ From statement-II: Y is between Q and P since T is at the end Q cannot be at first place and it has to be on the right side of P.

Y is third to the left of V. T _ P Y Q _ V _ _ _ _ _

From statement-I: S is immediate right of W who is 3rd to the right of X Means there has to be 4 persons between S and X (S cannot be at the right end since S is sitting left of

U) T _ P Y Q X V _ W S _

From statement-IV: U is next right of S, R sits second to the left of S and the remaining one will be Z The arrangement will be T Z P Y Q X V R W S U Clearly, W S U are sitting to the right of R.

64. (a) Explanation: Based on the given information the following seating arrangement is derived:

T Z P Y Q X V R W S U

Clearly, immediate neighbors of Q are Y and X.

65. (a) Explanation:

Based on the given information the following seating arrangement is derived:

T Z P Y Q X V R W S U

Clearly, the center stage is occupied by X.

66. Ans: (b) Explanation: C



Total members in a family – 9

We can clearly see that E is the mother of H.

I is the daughter of H.

So, E is the Grandmother of I.

6. Ans: (c) Explanation: It is clear that E is the wife of B and A is the son of B.

So, A is the brother of H.

So, E is the Grandmother of I.

Q67. Ans: (c) Explanation: It is clear that E is the wife of B and A is the son of B.

So, A is the brother of H.

68. (a) Explanation: Let Kiran's present age be X Kiran's age 7 years ago = X – 7

Kiran's age after 20 years = X + 20

As per the question (X + 20) = 10 (X – 7) X + 20 = 10X – 70 ⇒ 9X = 90 ⇒ X = 10

Kiran's age after 5 years = X + 5 = 10 + 5 = 15 years

69.. Ans: (d) Explanation: Rama > Rani, (by statement-I)

Ratna > Rani, (by statement-II)

Ratna > Rama and (by statement-III)

Ratna > Padma > Rama (by statement-IV)

By combining all the statements:

⇒ Ratna > Padma > Rama > Rani

So, Ratna scored the highest

70. Ans: (d) Explanation: 5 subjects: Economics, History, Statistics, English and Mathematics.

5 days: Monday, Tuesday, Wednesday, Thursday and Friday.

Economics ≠ Tuesday

History = Tuesday

Mathematics lecture is scheduled immediately after Economics and English lecture is scheduled immediately before Economics.

So, the order is English, Economics and Mathematics.

So, they will hold on Wednesday, Thursday and Friday respectively.

Monday and Statistics lecture is left.

So they are combined together.

Now, the order of lectures and days is given in the table as below:

Lectures	Statistics	History	English	Economics	Mathematics
Days	Monday	Tuesday	Wednesday	Thursday	Friday

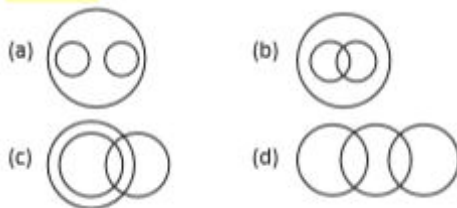
Lectures Statistics History English Economics Mathematics Days Monday Tuesday Wednesday Thursday Friday

71. (b) **History**

72. (c) **Mathematics**

73. Which of the following represent Human, Asian and Athletes?

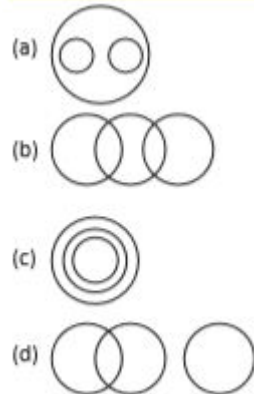
Ans: (b)



∴ (b)

Ans: (b) Explanation: Asian and Athletes are human and some Athletes are from Asia and some are from outside Asia.

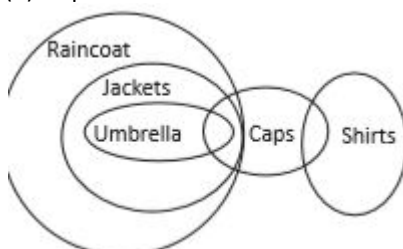
74. Choose from the given options which best shows the relationship amongst furniture, table and chair. **Ans: (a)**



a) Explanation: Table and chair are two different items of the class furniture.

75.

(b) Explanation: We can make the following Venn diagram using the given statements.



Conclusion – I: All umbrellas are shirts. There is a possibility that some umbrellas are not shirt. So, this conclusion is incorrect.

II. Some jackets are caps. It is certain that some jackets are caps. So, this conclusion is correct.

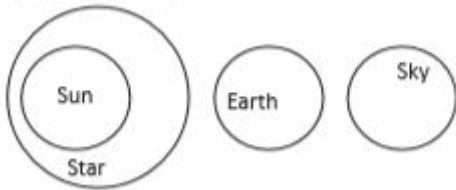
III. All umbrellas are raincoats. It is also certain that all umbrellas are raincoats.

So, this Conclusion is also correct.

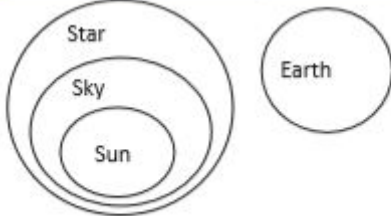
∴ Only Conclusion – II and III follows.

76.

(d) Explanation: We can make the following Venn diagram using the given statements.



We have given no earth is Sun and no sky is earth. So all sun can be sky and the given statements hold.



So, Conclusion – I is correct.

All star cannot be Earth because no earth is sun.

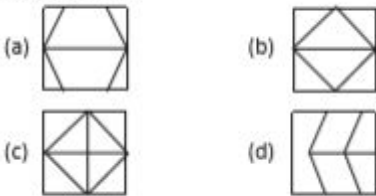
So, Conclusion – II is incorrect

. Ans: (a)

77. Question Image



Answer Image



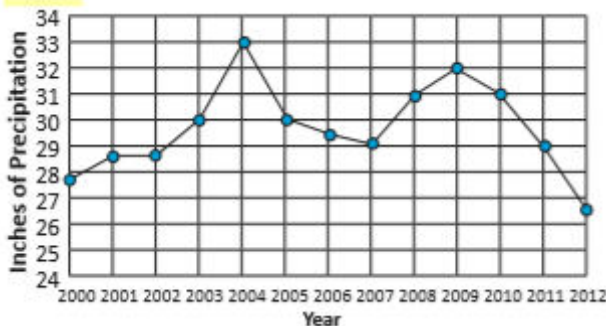
Ans: (a) Explanation: The figure in the question is clearly a part of the figure given as the answer in (a)

78. Ans: (c) Explanation: Firstly, put card numbered 1 in envelope 2. Now, card 2 can't be put correctly, so two cases arise.

Case1: If 'card 2' goes in 'envelope 1' then it is derangement of 4 things (cards other than 1 and 2) which can be done in $D_4 = 9$ ways

Case2: If 'card 2' doesn't go in 'envelope 1', it is Derangement of 5 things which can be done in $D_5 = 44$ ways.

Therefore, total ways = $9 + 44 = 53$.



79. (c) Explanation: Lowest precipitation = 26.5

inches Highest precipitation = 33 inches

Average = $\frac{26.5 + 33}{2} = 29.75 =$ inches

80. (b) Explanation: Average precipitation = 29.625