

ANSWER KEYS

1	c	21	c	41	b	61	c
2	d	22	d	42	d	62	b
3	d	23	a	43	c	63	b
4	c	24	c	44	b	64	a
5	b	25	b	45	c	65	b
6	a	26	b	46	d	66	c
7	c	27	a	47	d	67	a
8	c	28	b	48	a	68	d
9	c	29	c	49	a	69	a
10	d	30	b	50	c	70	b
11	c	31	b	51	a	71	b
12	a	32	b	52	b	72	a
13	b	33	d	53	c	73	c
14	b	34	d	54	b	74	d
15	b	35	d	55	b	75	a
16	d	36	b	56	a	76	b
17	c	37	d	57	c	77	d
18	b	38	a	58	d	78	a
19	d	39	b	59	b	79	c
20	b	40	d	60	d	80	b

1.(c) To maintain and develop our cities we need to adopt sustainability related interventions.**Explanation:**

The passage highlights the challenges posed by climate change, increasing population densities, inadequate infrastructure, and the need for sustainable solutions in cities. It emphasizes the importance of addressing issues like air quality, transport, and citizen involvement in city planning to create a sustainable ecosystem. This aligns best with option (c), which suggests that adopting sustainability-related interventions is necessary to address these issues.

2.(d) Liberty**Explanation:**

The passage emphasizes that the purpose of the state is not to dominate or control people through fear but to ensure they live securely and exercise free reason. It focuses on freeing individuals from fear and enabling them to act with reason, avoiding hatred, anger, and unfairness. This aligns with the concept of **liberty**, where individuals are free to think, act, and live without oppression or restraint.

3.(d) Women's participation in lawmaking is crucial for holistic decision-making, effective governance, and equal representation.**Explanation:**

The passage highlights that women's inclusion in lawmaking is not only about representation or equality but is essential for well-rounded decision-making and effective governance. It mentions that women bring a unique perspective that enriches legislative debates and contributes to a thriving society by utilizing the talents of all members. This aligns well with option (d), which captures the holistic nature of women's role in governance, combining effectiveness, inclusivity, and equality.

4.(c) Countering terrorism effectively requires a comprehensive approach that prioritizes empowering women and dismantling systems of inequality as a fundamental preventative measure.**Explanation:**

The passage emphasizes that dismantling violent extremism requires addressing systems of inequality and exclusion, particularly those affecting women. It highlights that empowering women through education, economic opportunities, and political participation is key to creating resilient communities and reducing susceptibility to extremism. This aligns best with option (c), which captures the idea that empowering women and addressing inequality are fundamental preventative measures in countering terrorism.

5.(b) There is always a possibility of abuse of power by Legislature and Executive.**Explanation:**

The passage highlights that one of the judiciary's essential roles is to act as a check on the Legislature and Executive to prevent the abuse or failure of power. This role becomes crucial, particularly in a welfare state, where the exercise of broad discretionary powers by the other branches may lead to potential abuses or neglect of duties, which could harm social aspirations. Option (b) directly addresses this need for the judiciary to counterbalance and correct excesses by the other branches.

6.(a) 2 and 3 only**Explanation:**

1. **Statement 1:** The passage does describe judicial activism as a "pacemaker" that helps to maintain the rule of law in a welfare state. However, "pacemaker" here is used metaphorically and is not essential to the definition of judicial activism.
2. **Statement 2:** Judicial activism is indeed imperative to ensure the rule of law, as it allows the judiciary to uphold constitutional mandates and prevent the state from violating individual rights.
3. **Statement 3:** Judicial activism acts as a corrective measure against the abuse of power by state machinery (Executive and Legislature), as it ensures these branches do not overstep their authority or ignore their duties.
4. **Statement 4:** This statement is misleading. Judicial activism does not act *against* the Executive and Legislature but serves to check their actions to ensure they remain within constitutional limits.

7.(c) Balance between usage of administrative power and fulfilling the social demands of the people.**Explanation:**

The passage explains that, in a welfare state, the government has to engage in various political, social, and economic activities to meet its constitutional responsibilities. However, this extensive use of administrative power comes with the risk of abuse or failure to fulfill social aspirations, highlighting the need for a balance between using power responsibly and addressing the people's needs. Option (c) best captures this idea of balancing administrative power with the fulfillment of social demands, which is a core challenge in the administration of a welfare state.

8.(c) Both 1 and 2.**Explanation:**

The passage mentions that the judiciary is looked upon to remove the maladies in public life, with its role extending to correcting malfunctions and ensuring the proper functioning of state organs in line with constitutional mandates.

1. **Statement 1:** A State institution being ordered by the judiciary to properly carry out a development program is an example of the judiciary removing malfunctions in governance and ensuring that public functions are properly executed, as mentioned in the passage.
2. **Statement 2:** Judiciary taking suo-motu action to ensure the constitutional rights of certain sections of people is also an example of the judiciary playing a corrective role, as it acts to protect rights and prevent abuses by the government or other authorities.

9.(c) A classic is a work exploring the new, going beyond the universal, the contemporary, and the notion of a unified human consciousness.**Explanation:**

In the passage, the author contrasts the traditional understanding of a "classic" as something that reflects a shared or universal human experience with the author's own view. The author argues that a classic is not about finding shared humanity or recognizing oneself in the past but rather about accessing radically different forms of human consciousness. The work of a classic challenges the notion of a unified human consciousness and instead expands the possibilities of what it means to be human.

10.(c) Balance between usage of administrative power and fulfilling the social demands of the people.**Explanation:**

The passage explains that, in a welfare state, the government has to engage in various political, social, and economic activities to meet its constitutional responsibilities. However, this extensive use of administrative power comes with the risk of abuse or failure to fulfill social aspirations, highlighting the need for a balance between using power responsibly and addressing the people's needs. Option (c) best captures this idea of balancing administrative power with the fulfillment of social demands, which is a core challenge in the administration of a welfare state.

11.(c) While IT presents immense potential, its successful integration demands a holistic approach addressing digital infrastructure, user-friendliness, and human resource preparedness.**Explanation:**

The passage emphasizes that **Information Technology (IT)** has significant potential to improve public service delivery by addressing shortcomings like manual processes and bureaucratic delays. However, the report stresses that **successful integration** of IT requires a **multi-pronged approach**. This includes:

- **Prioritizing e-governance initiatives,**
- **Investing in digital infrastructure,**
- **Developing user-friendly interfaces,**
- **Ensuring data security, and**
- **Building capacity** (particularly **digital literacy** for government officials).

12.(a) The UN, through its human rights framework, offers a comprehensive set of internationally recognized rights, aiming to tackle historical discrimination and protect vulnerable groups.**Explanation:**

The passage emphasizes the role of the **United Nations (UN)** in establishing a **universal body of human rights law** aimed at **protecting and promoting human rights and freedoms**. It highlights how the UN has defined these rights and **expanded standards** to address the needs of **vulnerable groups** to rectify **historical discrimination**.

13.(b) Vulnerable sections, due to their illiteracy, are disproportionately impacted during disasters.**Explanation:**

The passage highlights how **illiteracy created barriers** for vulnerable sections of society, particularly in accessing digital resources and engaging in online education during the pandemic. It emphasizes that **illiteracy and lack of digital literacy** contributed to the **disproportionate impact** on marginalized groups, indicating that these groups are more adversely affected during crises due to their **educational disadvantages**.

14.(b) Elephants are the keystone species and they benefit the biodiversity.**Explanation:**

The passage emphasizes the **vital role of elephants** in maintaining and supporting biodiversity through various actions, such as creating forest clearings, spreading seeds, enriching the soil with their dung, and

digging water holes. These actions significantly benefit the ecosystem and other species, making elephants **keystone species** whose presence and activities positively impact biodiversity.

- 15.(b) While offering promising initial gains, the program's effectiveness hinges on a shift towards market-driven solutions and capacity building to avoid dependence on freebies.**

Explanation: The passage acknowledges that the "Millets Giveaway" program has potential benefits, such as increasing farmer incomes and dietary diversity. However, it also highlights concerns about long-term sustainability, particularly regarding reliance on free giveaways, which may not encourage enduring market engagement. Experts recommend complementing freebies with market development, capacity building, and value-added processing to make the program sustainable. Thus, option (b) captures the balanced view presented in the passage.

- 16.(d) has the right to individual freedom as much as anyone else**

Explanation: The passage emphasizes that a scientist should be free to follow his conscience and make personal choices, just like any other citizen. It argues that while the scientist does not have authority over society, society should not dictate his personal life or moral decisions, reinforcing the scientist's right to individual freedom. This aligns with option (d).

17. Ans: (c) The integers between 1 and 100 which have 4 as a digit are:

4, 14, 24, 34, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 54, 64, 74, 84 and 94

So, there are a total 19 such integers.

Out of these, the integers which are divisible by 4 are

: 4, 24, 40, 44, 48, 64 and 84

So, the number of integers not divisible by 4 = $19 - 7 = 12$ integers

18. Ans: (b) For assigning an identification number to a student who play both cricket as well as football = The number must be divisible by '4' and '6' i.e. LCM of (4 and 6) i.e. 12 There are 8 numbers between '1' and '100' which are divisible by '12' those numbers are: 12, 24, 36, 48, 60, 72, 84 and 96.

19. Ans: (d) Let the weights of Children, Mother and Father as 'C1' kg, 'C2' kg, 'M' kg and 'F' kg, respectively.

Since, the average weight of two children and their mother (i.e. total 3 members) = 50

So, the sum of the weights of two children and their mother

$$= C1 + C2 + M = 50 \times 3 = 150 \dots(i)$$

Since, the average weight of two children and their father (i.e. total 3 members) = 52

So, the sum of the weights of two children and their father

$$= C1 + C2 + F = 52 \times 3 = 156 \dots(ii)$$

Now it is given that the weight of the father = 'F' = 60.

By putting this value in equation (ii),

$$\text{we have; } C1 + C2 = 156 - 60 = 96.$$

Again by using equation (i) we have;

$$M = 150 - 96 = 54 \text{ kg.}$$

20. Ans: (b) Let the initial price of the item be Rs. '100x'.

After 25% increase in price, the new price of the item will be = $100x + 25\% \text{ of } 100x = \text{Rs. '125x'}$

Thereafter in case of 20% decrease in price, the new price of the item will be = $125x - 20\% \text{ of } 125x = \text{Rs. '100x'}$

Again after increase in price by 10%, the new price of the item will be = $100x + 10\% \text{ of } 100x = \text{Rs. '110x'}$

21. Ans: (c) Let the cost of each ball is Rs. 'X',

then cost of each racket will be Rs. '3X'.

Cost of 10 balls = Rs. '10X'

And cost of 10 rackets = Rs. '30X'.

So, total cost of 10 balls and 10 rackets = $10X + 30X = \text{Rs. '40X'}$.

By the condition given in question, $40X = 1300 + 1500$

$$\text{Or, } 40X = 2800$$

$$\text{Or, } X = 70.$$

So, price of each racket = $3X = 3 \times 70 = \text{Rs. 210}$

22. Ans: (d) Given, Principal = Rs. 22,800 and Interest rate = 12.5%

After first year, Interest = 12.5% of Rs. 22,800 = Rs. 2,850

Amount paid after first-year = 8650

So, New principal = $22800 + 2850 - 8650 = \text{Rs. 17,000}$

After second year, Interest = 12.5% of Rs. 17,000 = Rs. 2,125

Amount paid after second-year = 9,125

So, principal will be = $17000 + 2125 - 9125 = \text{Rs. 10,000}$

After third year, Interest = 12.5% of Rs.10,000 = Rs.1,250

To clear the debt, amount required to be paid = 10000 + 1250 = Rs. 11,250

23. Ans: (a) It is given that 4-digit numbers less than 2000 formed by the digits 1, 2, 3 and 4, where none of the digits is repeated.

Here first digit is always occupied by '1' because 4-digit number is < 2000.

So, the required numbers are: 1234, 1243, 1324, 1342, 1423, 1432

Required sum = 1234 + 1243 + 1324 + 1342 + 1423 + 1432 = 7998

24. Ans: (c) Consider 1 to 100:

5 at one's place are: 5, 15, 25, 35, 45, 55, 65, 75, 85, 95 = 10 times

5 at ten's place are: 50, 51, 52, 53, 54, 55, 56, 57, 58, 59 = 10 times

Total number of '5' from 1 to 100 = 20 times

Same pattern will follow for every set : 200 to 300, 300 to 400,.....900 to 1000.

Total '5' digit will be = 20 × 10 = 200 times ... (i)

But we have to include number of '5' at thousand's place from 500 - 599 Total such '5' = 100 ... (ii)

From equation (i) and (ii),

we get Total number of times digit '5' appear from 1 to 1000 = 200 + 100 = 300

25. Ans: (b)

26. Ans: (b) Explanation: This question can be solved by options easily.

Option (a): Take, @ = 2. So, 2 + 12 + 52 + 22 + 21 ≠ 122 129 ≠ 122

Option (b): Take, @ = 3. So, 3 + 13 + 53 + 33 + 31 = 133 133 = 133

Option (c): Take, @ = 4. So, 4 + 14 + 54 + 44 + 41 ≠ 144 157 ≠ 144

Option (d): Take @ = 5. So, 5 + 15 + 55 + 55 + 51 ≠ 155 181 ≠ 155

27. Ans: (a) Explanation: . (a) **13, 26, 39**

The multiples of 13 are 13, 26, 39, 52, 65, 78,...

$13 \times 1 = 13$

$13 \times 2 = 26$

$13 \times 3 = 39$

$13 \times 4 = 52$

$13 \times 5 = 65$, and so on

28. Ans: (b) Explanation: Given three-digit numbers is XYZ.

Since, (X + Y + Z) is not a multiple of 3.

Taking an individual case,

let's assume X = 1 Y = 3 Z = 4 X + Y + Z = 8,

which is not a multiple of 3.

$XYZ + YZX + ZXY = 134 + 341 + 413 = 888$

On checking by options, we get 888 is not divisible by 9.

29. Ans: (c) The pattern followed is as follows:

Number + Consecutive even numbers starting with '6'

$7 + 6 = 13 = X$

$13 + 8 = 21$

$21 + 10 = 31$

$31 + 12 = 43$

30. Ans: (b) Now it is given that '256' = red colour chalk ... (i)

'589' = green colour flower (ii)

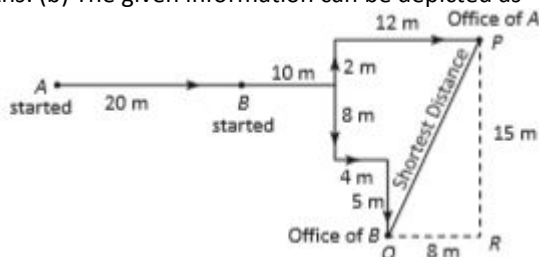
'254' = white colour chalk ... (iii)

In (i) and (ii) 'colour' and '5' is common So,

5 = colour In (i) and (iii) 'chalk' and '2' is common So, 2 = chalk From (iii), we have 5 = colour 2 = chalk

Therefore, '4' indicates white

31. Ans: (b) The given information can be depicted as



We need to find the distance between 'P' and 'Q' Using the Pythagorean theorem, we have In right triangle PRQ

$$(QP)^2 = (QR)^2 + (RP)^2 = 8^2 + 15^2 = 64 + 225 = 289$$

So, $QP = 17$

Thus, the shortest distance between offices of 'A' and 'B' is 17 km.

32. Ans: (b) The path taken by the woman can be depicted as



Since, the angle opposite to greater side is larger and that of smaller side is smaller.

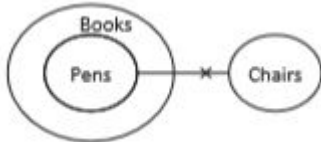
Here, ABC is a right angle triangle which is right angled at 'B'

Thus, angle BAC > angle BCA

So, angle BAC > 45°

Thus, the required angle < 45°

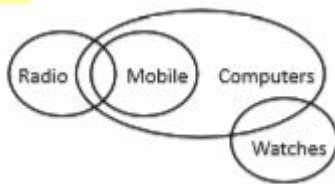
33. Ans: (d) The given Statements can be depicted in Venn diagram



Conclusion I, II and III are false as the relation between chairs and books is not given.

Conclusion II is false as it is given that No chair is a Pen.

34. Ans: (d) The given statements can be depicted in Venn Diagram as below



From the above diagram we can say that Neither Conclusion I nor Conclusion II follow.

35. Ans: (d) From the given information,

we have $P = 4$ Now,

difference between P and T = 5

$$\Rightarrow T - P = 5$$

$$\Rightarrow T - 4 = 5$$

$$\Rightarrow T = 9$$

Now, again difference between N and T = 3

$$\Rightarrow T - N = 3$$

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

$$\Rightarrow N = 6$$

36. Ans: (b) All (6 faces) black – 1 way

One face white (5 faces black) – 1 way

Two faces white (4 faces black) – 2 ways [either adjacent or opposite]

Three faces white (3 faces black) – 2 ways [corner or adjacent]

Four faces white (2 faces black) – 2 ways

Five faces white (1 face black) – 1 way

All (6 faces) white – 1 way

Total number of ways to paint a cube = $1 + 1 + 2 + 2 + 2 + 1 + 1 = 10$ ways

37. (d) Explanation: Let the distance for the first half of the journey as "x" and

the speed during the first half be "a" = 60 km/h

distance for the second half as "x" and

speed during the second half be "b".

Average speed = Total distance / Total time

$$70 \text{ km/h} = 2x / [(x/a) + (x/b)]$$

$$70 \text{ km/h} = 2ab / (a + b)$$

$$70 \times (60 + b) = 2(60)b \quad 7 \times (60 + b) = 12b$$

$$5b = 420$$

$$b = 84$$

The speed of the car during the second half of the journey is 84 km/h.

38. (a) **160.8 cm**

Explanation: Average height of 50 students was recorded as 160 cm.

The sum of heights = $50 \times 160 = 8000 \text{ cm}$

One student's height was misread as 130 cm when it should have been 170 cm.

Difference in height = Correct height – Misread height = $170 \text{ cm} - 130 \text{ cm} = 40 \text{ cm}$

Now, we can correct the sum of heights:

Corrected sum of heights = Sum of heights + Difference in height = $8000 \text{ cm} + 40 \text{ cm} = 8040 \text{ cm}$

Corrected average height

Corrected sum of heights/ Number of students = $8040 / 50 = 160.8 \text{ cm}$

39. (b) **It will foster erosion of public trust and break in social fabric, potentially sparking unrest and instability.**

Explanation: The passage emphasizes that unchecked inequality leads to despair, fuels social unrest, and erodes the social fabric, making option (b) the best answer. The focus is on the potential for instability and the threat to society's cohesion, which aligns directly with this option. Other choices touch on relevant issues but are not the central consequence described.

40. (d) **Surrendering to the omnipotent is one tool to fight the sense of fear.**

Explanation: The passage explains that fear is a natural emotion and highlights Freud's view that religion provides comfort by offering a protective, fatherly figure, which can alleviate fear. Option (d) aligns with this idea, suggesting that surrendering to an omnipotent figure (as religion proposes) can help people cope with fear. Other options do not fully capture the passage's emphasis on religion's role in providing a sense of security against fear.

41. Ans: (b) Explanation:

$$10 : 4.5 :: x : 1.8$$

$$4.5 \times x = 10 \times 1.8$$

$$x = 4$$

42. (d) **160**

Explanation: Let "x" be the maximum marks in the examination.

The student must get 50% marks to pass.

Passing marks (50% of maximum marks) = $0.50x$

The student gets 60 marks and fails by 20 marks.

Marks obtained by the student = Passing marks – 20

$$60 = 0.50x - 20$$

$$0.50x = 60 + 20 = 80$$

$$x = 160$$

43. (c) **4.34%**

Explanation: CP = $1100 \times 200 = \text{Rs. } 2,20,000$

Transportation and storage cost = Rs. 10,000

Total CP = $2,20,000 + 10,000 = \text{Rs. } 2,30,000$

Total SP = $12 \times 200 \times 100 = \text{Rs. } 2,40,000$

∴ Now, since SP > CP, hence there will be profit.

Profit = SP – CP = Rs. $(2,40,000 - 2,30,000) = \text{Rs. } 10,000$

$$\text{Profit percentage} = \frac{\text{profit}}{\text{cost price}} \times 100$$

$$\Rightarrow \frac{10,000}{2,30,000} \times 100 = 4.34\%$$

44. (b) **20%**

Explanation: Let's assume the price of each mobile as 100 Rupees

Total amount needed to buy 8 mobiles = 800

But Rakesh got 10 mobiles for 800 itself,

Which means The actual price of 10 mobiles = 1000

but he got it for 800

So, the discount offered = $200/1000 = 20\%$

45. (c) **No gain no loss**

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

$$1.04x = 0.9x + 56$$

$$0.14x = 56$$

$$x = 56 / 0.14 = 400$$

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

46. (d) **Rs.1440**

Explanation

Let the sum be ₹100.

Case-I: Then, simple interest on ₹100 for 2 year

$$= \left(\frac{100 \times 25 \times 2}{100} \right) = ₹50$$

Case-II: Amount when ₹100 is borrowed for 2 years on compound interest

$$= 100 \left(1 + \frac{25}{100} \right)^2 \quad [\because A = P \left(1 + \frac{R}{100} \right)^n]$$

$$= 100 \times \frac{5}{4} \times \frac{5}{4} = ₹ \left(\frac{625}{4} \right)$$

$$\therefore \text{Compound interest for 2 yr} = \left(\frac{625}{4} - 100 \right)$$

$$= ₹ \left(\frac{225}{4} \right)$$

$$\text{Difference between CI and SI} = \left(\frac{225}{4} - 50 \right) = ₹ \left(\frac{25}{4} \right)$$

If the difference between CI and SI is ₹ $\left(\frac{25}{4} \right)$, then the sum = ₹ 100

If the difference between CI and SI is ₹ 90, then the

$$\text{sum} = ₹ \left(100 \times \frac{4}{25} \times 90 \right) = ₹ 1440$$

Here, the sum is ₹ 1440.

Shortcut method

Difference (D) between SI and CI for 2 years is given

$$\text{by } D = \frac{PR^2}{100^2}$$

47. (d) **9 kmph**

Explanation: Total distance covered by the car = 80+100 = 180 m

Time taken = 18 sec

Relative speed = Total distance/time = 180 / 18

= 10 m/s

= 10 * (18/5) km/h = 36 km/h

Relative speed = Speed of car – speed of bus

$$\Rightarrow 36 = 45 - \text{Speed of bus}$$

$$\Rightarrow \text{Speed of bus} = 45 - 36 = 9 \text{ km/h}$$

48. (a) **27 days**

Explanation: Ratio of efficiency of Mohan and Prakash = 150:100 = 3:2

Ratio of time of Mohan and Prakash = 2x : 3x

The difference in time = 3x – 2x = 15 days

x = 15 days.

Actual time taken by Mohan and Prakash = 30 and 45 days respectively.

Total work = 30 × 3 or 2 × 45 = 90 units

150% of total work = $1.5 \times 90 = 135$ units

Time required to complete 150% of the work when they work together = $135/(3 + 2) = 27$ days

49. (a) Explanation: When he picks 24 shoes, It is possible that all shoes might be of white color.

When he picks 54 shoes ,

he might have picked 24 white shoes ,30 gray shoes.

When he picks up the 55th shoe, it must be of black color.

On picking up the 56th shoe it must also be a black shoe but it is possible that both the black shoes are of the same foot.

So, in the same manner it is possible to have picked the next 10 shoes of the same foot(from 55th to 64th).

But when he picks the 65th shoe, it would complete a pair

50. (c) Explanation: By the definition of mode:

“The value that has higher frequency in a given set of values.”

So, according to the question, Each weekday (Monday through Friday) they fetch 35 pails between them.

On weekends only fetching 26 pails on Saturday and only 12 on Sunday.

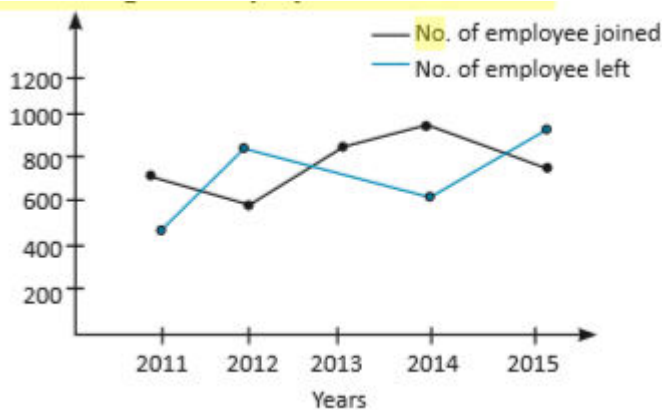
Dataset here will be: 35, 35, 35, 35, 35, 26, 12 for Monday to Sunday.

So, here 35 appears 5 times,

which is higher than frequency of 26 and 12;

they appear only once. Hence, 35 is the mode.

Directions (51-53): Study the following line graph which gives the number of employees who joined and left Infosys at the beginning of the year for five years, from 2011 to 2015. Initial Strength of employees in 2010 = 6000



51. (a) Explanation: Given that 6000 employees were working in 2010.

So, the number of employee In 2011

$$\Rightarrow 6000 + 700 - 500 = 6200,$$

In 2012 $\Rightarrow 6200 + 600 - 900 = 5900,$

In 2013 $\Rightarrow 5900 + 900 - 800 = 6000,$

In 2014 $\Rightarrow 6000 + 1000 - 700 = 6300,$

In 2015 $\Rightarrow 6300 + 800 - 900 = 6200,$

Therefore, the total number of employees working in the year 2015 is 6200.

52. (b) Explanation: The percentage rise/fall in the number of employees who left infosys (compared to the previous year) during various years are:

$$\text{For 2012} = \frac{900 - 500}{500} * 100 = 80\% \text{ (rise)}$$

$$\text{For 2013} = \frac{900 - 800}{900} * 100 = 11.11\% \text{ (fall)}$$

$$\text{For 2014} = \frac{800 - 700}{800} * 100 = 12.5\% \text{ (fall)}$$

$$\text{For 2015} = \frac{900 - 700}{700} * 100 = 28.57\% \text{ (rise)}$$

Therefore, the maximum percentage rise/fall is for 2012.

53. (c) Explanation: So, we know that the number of employee In 2011

$$\Rightarrow 6000 + 700 - 500 = 6200,$$

$$\text{In 2012} \Rightarrow 6200 + 600 - 900 = 5900,$$

In 2013 $\Rightarrow 5900 + 900 - 800 = 6000$,

In 2014 $\Rightarrow 6000 + 1000 - 700 = 6300$,

In 2015 $\Rightarrow 6300 + 800 - 900 = 6200$,

Now, percentage increase/decrease in the strength of the infosys from 2013 to 2014

$$\Rightarrow \frac{6300 - 6000}{6000} * 100 = 5\%$$

Therefore, the percentage increase/decrease in the strength of Infosys from 2013 to 2014 is 5%.

54. The correct answer is **(b)**. The passage supports the idea that while the "Millets Giveaway" program shows promise initially, its long-term success relies on shifting towards market-driven approaches, capacity building, and sustainable practices to reduce dependency on giveaways. This balanced approach is essential for achieving lasting impact.

55. answer is **(b)**

56. following matrix:

35	5	0
19	7	5
47	8	?

(a) Explanation: We observe the following pattern,

In Column 1, $35 = 5 \times 7 + 0$

When 35 is divided by 5,

the remainder is 0.

In Column 2, $19 = 7 \times 2 + 5$

When 19 is divided by 7, the remainder is 5.

In Column 3, $47 = 8 \times 5 + 7$

When 47 is divided by 8, then the remainder is 7.

So, the missing number is 7.

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

$$2000 - 976 = 1024 = 4^5,$$

$$976 - 720 = 256 = 4^4,$$

$$720 - 656 = 64 = 4^3,$$

$$656 - 640 = 16 = 4^2 \text{ Similarly,}$$

the next term should be

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

and not 638

$$636 - 635 = 1 = 4^0$$

So, the wrong term in the series is 638.

58. (d) Explanation: Given sequence is : ABC__AAB_CBA__CCB_A__CBA

We can observe that the given sequence is repetition of ABCCBA

So the complete sequence is ABCCBAABCCBAABCCBA.

To complete the original sequence we need to fill CBCABABC in the blanks

59. Ans: (b) Explanation:

1st consider the number series:

15, 29, 56, 108 we can observe that

1st term = 15

$$2\text{nd term} = 15 \times 2 - 20 = 29$$

$$3\text{rd term} = 29 \times 2 - 21 = 56$$

$$4\text{th term} = 56 \times 2 - 22 = 108$$

Hence 5th term should be $108 \times 2 - 23 = 208$

Now observe the alphabetical series:

F is at 6th place in alphabets $6 = 1 + 5$

K is at 11th place in alphabets

$$11 = 5 + 6$$

Hence we can observe that sum of digits of no. associated with the alphabet is place value of alphabet.

Hence alphabet associated with 208 is J because $2 + 0 + 8 = 10$,

60. (d) Explanation: Relationship followed: value of the letter minus 4

9	14	20	15
I	N	T	O
-4	-4	-4	-4
5	10	16	11

then,

12	15	22	5
L	O	V	E
-4	-4	-4	-4
8	11	18	1

Therefore LOVE: 811181

61. Ans: (c) Explanation: The numerical value of O is 15.

O is coded as $30 = 15 \times 2$

The numerical value of each alphabet in CAT is

C = 3, A = 1 and T = 20

CAT is coded as $48 = (20 + 3 + 1) \times 2 = 24 \times 2$

Now, the numerical value of each alphabet in FOOTBALL is F = 6, O = 15, T = 20, B = 2, A = 1 and L = 12. So, FOOTBALL is coded as $(6 + 15 + 15 + 20 + 2 + 1 + 12 + 12) \times 2 = 83 \times 2 = 166$

62. Ans: (b) Explanation: According to the question,

First clock gains 3 min/h and

second clock gains 5 min/h

So, the difference in minutes between these two clocks in one hour = $(5 - 3)$ min = 2 min.

Total time from 9 pm to 7:30 pm on Monday is 10h 30 minutes.

Also, the second clock gains in 10h 30 minutes = $(10 \times 2) + (1/2 \times 2)$ minutes = 21 minutes

7:30pm + 21minutes and shows the time as 7:51pm.

63. (b) Explanation: Given that 3 minutes are lost every hour

i.e., 6 min are lost every 2 hours, 60 min (1hour) are lost every 20 hours

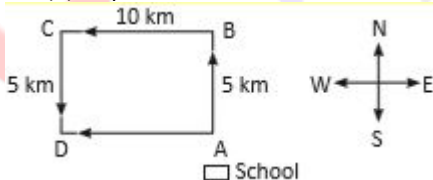
To show correct time

again it will have to lose 12 hrs.

Total time taken to loose 12 hrs = $12 \times (60/3) = 240$ hours $\Rightarrow 240/24 = 10$ days

i.e., after 10 days it will show correct time again, since it was set right on 9 AM Tuesday it will show correct time again on Friday 9AM

64. Ans: (a) Explanation: The movement of Neeraj is shown in the figure below:



From the figure it is very clear that Neeraj is 10km away in the west from the school.

65. Ans: (b) Total number of balls = Number of red balls + Number of black balls = $15 + 20 = 35$

Number of red balls which are numbered '1' = 20% of 15 = 3

Number of red balls which are numbered '3' = 40% of 15 = 6

Number of red balls which are numbered '2' = $15 - (3 + 6) = 6$

Number of black balls which are numbered '2' = 45% of 20 = 9

Number of black balls which are numbered '3' = 30% of 20 = 6

Number of black balls which are numbered '1' = $20 - (9 + 6) = 5$

Condition for winning: if the ball is red and numbered '3' or if it is black and numbered '1' or '2' So, total number of favourable outcomes =

Number of red balls which are numbered '3' + Number of black balls which are numbered '1' + Number of black balls which are numbered '2'

= $6 + 5 + 9 = 20$ Required probability = $20/35 = 4/7$

66. (c) Explanation: Based on the given information the following seating arrangement is derived:

W Q P R T S U V Clearly, S, U and V are sitting to the right of T.

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

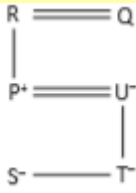
W Q P R T S U V

If W and V interchange their position,

the arrangement becomes: V Q P R T S U W

But the occupants of the center position are unaltered, therefore center position is occupied by R T.

68. Ans: (d) Explanation: Based on the information given, we can construct the family tree as shown below



As the Gender of R and Q is not given we can not say anything about options a, b and c. and we can conclusively say that T is the granddaughter of Q.

69. Ans: (a) Explanation: A % B means A is the son of B.

B & C means B is the husband of C.

70. Ans: (b) Explanation: It is given that

A + B means $A > B$

A - B means $A \leq B$

A × B means $A \geq B$

A ÷ B means $A < B$

A ± B means $A = B$

It's given that,

$P \times Q, P - T, T \div R, R \pm S$ Or $P \geq Q, P \leq T, T < R, R = S$

Using this we get: $S = R > T \geq P \geq Q$

Conclusion-I: $Q \pm T$ or $Q = T$. This is not necessarily true.

Conclusion-II: $S + Q$ or $S > Q$. This is true.

71. (b) Explanation: Age of his wife when their son was born = 35 years.

Prakash's age when their son was born = $(40 + 4)$ years = 44 years.

Required difference = $(44 - 35)$ years = 9 years.

72. Ans: (a) Explanation: On shifting 4 places to the left, Manju is 10th from the left end of the row.

Thus, Manju's original position was 14th from the left end.

Neha is 3 places to the right of Manju's original position.

Clearly, Neha is 17th from the left end.

Neha's position from right = Total number of girls in the row - Neha's position from left + 1
 $= 50 - 17 + 1 = 34$

73.(c) Explanation: Using the given information, we can make the following arrangement.

1. Only two floors are between floor U and T.
2. Only one floor is between floor T and R.
3. Only two floors are between floor R and V.
4. Floor V is below floor R.
5. Three floors are in between S and Q floor
6. Both floor S and Q are above floor T.
7. Floor W is below floor V.
8. Not more than one floor is between floor S and P.

It means there can be 0 or 1 floor between floor S and P.

1	2	3 and 4	5	6	7	8	
U/T	T/R	R	S/Q	S/Q	V	S/P	S/P
				above	W	S/P	---
	T/R			T			S/P
U/T		V					
			S/Q				

So, the final arrangement is as follows:

S
P
U
R
Q
T
V
W

We can clearly see that floor R is immediately above

74. (d) Explanation: As the final arrangement is as follows:

S
P
U
R
Q
T
V
W

We can clearly see from the final arrangement that there are four floors between floor T and S. These are P, U, R and Q.

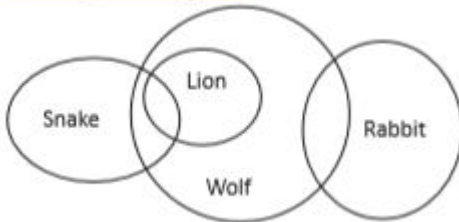
75. (a) Explanation: We can clearly see from the table that floor W is at the bottom.

76. (b) Explanation: As the final arrangement is as follows:

S
P
U
R
Q
T
V
W

We can clearly see that floor U is immediately below floor P.

77. (d) Explanation: Using the given statements, we can make the following Venn diagram.



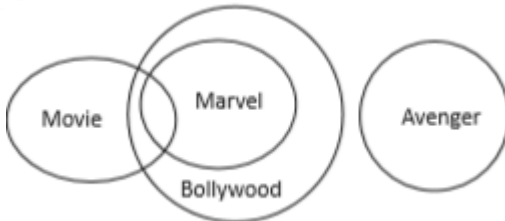
We can clearly see that there is a possibility that no snake is Rabbit.

So, Conclusion – I is not true.

But there is a possibility that some Lion can be Rabbit.

So, Conclusion – II is also not true.

78.(a) Explanation: Using the following statements, we can make the following Venn diagram.



It is given that No Avenger is Marvel but there is a possibility that some Avenger can be Movie.

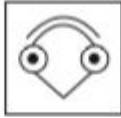
So, Conclusion – II is not true.

There is a possibility that All Movies are Bollywood.

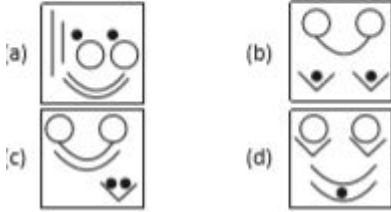
So, Conclusion – I is true.

79. Ans: (c) Explanation:

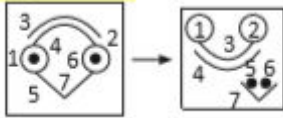
Question Image



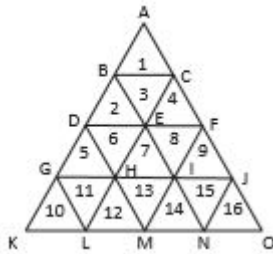
Answers image:



The figure shown in option (c) can be made by putting together the parts given in the question figure, as shown in figure below.



80. Ans: (d)



Total number of triangles in this figure is 27.

Small triangle 16 as shown in figure.

One big triangle.

Triangle with base parallel with side AO - KNB, KMD = 2.

Triangle with base parallel with side AK - OCL, OFM = 2.

Triangle with base parallel with side OK - AGJ, ADF = 2.

Triangle in middle of figure - FDM, IBG, HCJ, LNE = 4

Total $16 + 1 + 2 + 2 + 2 + 4 = 27$