

## SBI Clerk Mains 2024-25 Memory Based Paper- 10.04.2025- 1st shift

**Directions (1-6):** In the following passage, several blanks have been provided, each followed by a set of options. Choose the word that is *not suitable* to fill the given blank.

Hate is not an \_\_\_\_\_ (A) emotion—it is cultivated through adverse experiences. Often, a single painful incident can ignite a feeling of betrayal, injustice, or humiliation, which, if left unresolved, transforms into \_\_\_\_\_ (B) and eventually, hatred. For instance, a person who faces public ridicule or emotional abandonment may begin to foster deep hostility not only toward the offender but also toward similar individuals or situations.

This emotion, although reactive, is \_\_\_\_\_ (C). Hatred distorts perception, clouds judgment, and disrupts emotional stability. It narrows our capacity to trust, to empathize, and even to hope. Over time, it can evolve into a \_\_\_\_\_ (D) state of negativity, affecting relationships, productivity, and mental well-being.

However, it is essential to recognize that hate often masks \_\_\_\_\_ (E) pain. Rather than suppressing it or allowing it to fester, individuals must confront its origin. Reflection, honest self-inquiry, and emotional articulation are necessary steps toward healing. Forgiveness—though often misunderstood—is not about excusing the wrong, but about releasing the emotional grip it holds over us.

Understanding hate requires emotional maturity. It is a signal, not a solution. While it may arise naturally, choosing to live with it is \_\_\_\_\_ (F). The real strength lies in transforming that pain into insight, and using it to cultivate resilience and compassion. Hate may expose our wounds, but it is through acceptance and understanding that we begin to heal and reclaim our emotional freedom.

**Q1. Which of the following words is not suitable for filling the blank (A)?**

- (a) inherent
- (b) pandemic
- (c) immanent
- (d) essential
- (e) all are suitable

**Q2. Which of the following words is not suitable for filling the blank (B)?**

- (a) all are suitable
- (b) grievance
- (c) resentment
- (d) endeavor
- (e) ire

**Q3. Which of the following words is not suitable for filling the blank (C)?**

- (a) destructive
- (b) all are suitable
- (c) corrosive
- (d) incisive
- (e) perceptive



**Q4. Which of the following words is not suitable for filling the blank (D)?**

- (a) longing
- (b) all are suitable
- (c) resolute
- (d) persistent
- (e) obstinate

**Q5. Which of the following words is not suitable for filling the blank (E)?**

- (a) deferred
- (b) unaddressed
- (c) deliberate
- (d) untreated
- (e) all are suitable

**Q6. Which of the following words is not suitable for filling the blank (F)?**

- (a) detrimental
- (b) noxious
- (c) all are suitable
- (d) altruistic
- (e) obstructive

**Q7. In the question below, few sentences have been given. Find out which of the following sentence is error-free.**

- A. Not only did the manager approve the changes hastily, but he also neglected to inform the board, causing unrest among stakeholders.
- B. Were she to arrive earlier, she would had seen the presentation from the beginning.
- C. No sooner had the news of the policy leaked than investors began pulling out their capital in haste.
- (a) both B and C
- (b) Both C and A
- (c) Both A and B
- (d) only C
- (e) None is correct

**Q8. In the question below, few sentences have been given. Find out which of the following sentence is error-free.**

- A. The committee insisted that he leaves immediately, citing breaches of confidentiality and decorum.
- B. Each of the dancers and singers was given an opportunity for showcasing their unique talent during the gala.
- C. It was neither her qualifications nor her connections that were questioned during the rigorous interview process.
- (a) both B and C
- (b) Both C and A
- (c) Both A and B
- (d) only C
- (e) None is correct

**Directions (9-13): Rearrange the following sentences to form a logically coherent and meaningful paragraph. Note: Sentence (G) is fixed in its position.**

- A.** Sucrose, the last among the three, possesses the most complex chemical structure and is slightly harder to digest, although it remains relatively easy to process.
- B.** These three types of sugars can be distinguished based on their content and chemical composition. Glucose, which has the simplest structure, can be directly extracted from corn and is rapidly digested by the human body.
- C.** Honey contains varying amounts of fructose and sucrose depending on its botanical source; however, it also includes unique elements that set it apart from other sugars.
- D.** The enzymes present in honey originate either from the plants it is derived from or are secreted by bees during the production process.
- E.** Fructose, the second type, features a slightly more complex chemical structure than glucose and occurs naturally in fruits.
- F.** Glucose, fructose, and sucrose are three primary types of sugars, all of which offer nearly the same caloric value per gram.
- G. What sets it apart are the beneficial enzymes it contains, which aid in breaking down the two sugars into glucose.**

**Q9.** Which of the following is the first sentence in the sequence after the rearrangement?

- (a) A
- (b) H
- (c) E
- (d) F
- (e) D

**Q10.** Which of the following is the second sentence in the sequence after the rearrangement?

- (a) B
- (b) H
- (c) E
- (d) F
- (e) D

**Q11.** Which of the following is the third sentence in the sequence after the rearrangement?

- (a) A
- (b) H
- (c) E
- (d) F
- (e) D

**Q12.** Which of the following is the sixth sentence in the sequence after the rearrangement?

- (a) B
- (b) H
- (c) E
- (d) F
- (e) D

**Q13.** Which of the following is the fifth sentence in the sequence after the rearrangement?

- (a) A
- (b) H
- (c) E
- (d) F
- (e) C

**Directions (14-14):** In the question below, few sentences have been given. Find out which of the following sentence is grammatically and contextually correct.

**Q14.A.** Light-headedness can sometimes indicative an underlying medical condition, which can lead to a higher chance of experiencing a fall.

**B.** The tickets for the movie will be available three weeks prior to its release.

**C.** People were demanding an independent probe and the suspense of several high-level officials.

- (a) Only A
- (b) Only A and B
- (c) Only B
- (d) Only B and C
- (e) Only A and C

**Directions (15-17):** Complete the sentence meaningfully using the best possible starter. Choose the option that most effectively conveys the sequence and impact described in the original passage.

**Q15. (I)** The president issued a statement yesterday.

**(II)** Almost immediately following his announcement, the office was filled with a flurry of activity.

**(III)** The statement highlighted that the pressures of the job were beginning to significantly affect the employees' mental well-being.

- (A) As soon as...
- (B) Not much time has passed...
- (C) Reading the statements regarding...
- (a) Only A
- (b) Both A and C
- (c) Only C
- (d) Both A and B
- (e) All A, B and C

**Q16. (I)** The business deal was finalised quite late, bringing in looming deadlines.

**(II)** The office atmosphere was tense due to the looming deadlines.

**(III)** The stress of the deadlines was causing employees to become irritable and exhausted.

- A. As looming deadlines...
- B. The stressed atmosphere of the deadlines...
- C. The atmosphere among employees...

- (a) Only A
- (b) Both A and C
- (c) Only C
- (d) Both A and B
- (e) All A, B and C

- Q17.** (I) The team received critical feedback during the quarterly performance review.  
(II) The feedback pointed out inefficiencies in workflow and communication gaps.  
(III) As a result, the team initiated several internal reforms to improve coordination and productivity.  
(A) Despite the feedback clearly...  
(B) The internal reforms implemented...  
(C) After receiving strong feedback...  
(a) Only A  
(b) Both A and C  
(c) Only C  
(d) Both A and B  
(e) All A, B and C

**Directions (18-19):** In the questions below, a sentence is divided into several parts. Select the most appropriate sequence to rearrange the parts into a grammatically correct and contextually coherent sentence.

- Q18.** (A) hit its smooth, shiny surface,  
(B) bouncing back light rays that  
(C) allowing your eyes to see an image that  
(D) appears reversed from left to right  
(E) a mirror creates your reflection by  
(a) DCBAE  
(b) DBCEA  
(c) EBADC  
(d) EBACD  
(e) No rearrangement required

- Q19.** (A) detox become the new luxury  
(B) unhurried mornings, and digital  
(C) the art of rest lies in choosing  
(D) holidays that truly rejuvenate the  
(E) sleep-deprived—where quiet landscapes,  
(a) CDEBA  
(b) BDECA  
(c) BCEDA  
(d) CBDEA  
(e) No rearrangement required

**Q20.** In the question below, few sentences have been given. Find out which of the following sentence is error-free.

- A. The government website provide accurate information about policies and regulations.
- B. All attendees were mandated to adhere to the official dress code.
- C. It is important to analyse market trends before making any decisions.

- (a) Only C
- (b) Both C and A
- (c) Both A and B
- (d) Both B and C
- (e) Only A

**Q21.** In the question below, few sentences have been given. Find out which of the following sentence is grammatically and contextually incorrect.

- A. The implementation of this application has simplified multiple work processes, thus save us a significant amount of time.
- B. Neither the team leader not his colleagues managed to complete the project within the deadline.
- C. Drinking warm water after waking up in the morning helps strengthen your immune system.

- (a) both B and C
- (b) both A and B
- (c) only C
- (d) only A
- (e) None is incorrect

**Q22.** In the question below, few sentences have been given. Find out which of the following sentence is incorrect.

- A. A day after experiencing moderate rainfall, the city encountered intense downpours that lasted to the weekend.
- B. Several universities strive to ensure that scientists are rewarded based on the quality of their work and the number of new insights they generation.
- C. Many people are experimenting with chatbots in the hope let artificial intelligence (AI) can enhance their daily lives.

- (a) both B and C
- (b) only C
- (c) both A and B
- (d) only A
- (e) All are incorrect

**Directions (23-30): Read the following passage and answer the given questions.**

India's electric vehicle (EV) industry is undergoing a profound transformation. Once marred by scepticism, financial constraints, and infrastructural shortcomings, the sector is now accelerating toward a cleaner, technology-driven future. The most notable momentum is observed in the electric two-wheeler (E2W) segment, where sales have reached a significant 18 million units. This surge is fuelled by a combination of factors: evolving consumer preferences, cost-efficiency, and concerted policy interventions aimed at mainstreaming e-mobility.

The industry's initial journey was **fraught** with economic setbacks. High battery costs, limited product availability, and nascent infrastructure impeded early adoption. Traditional automotive giants exercised caution, while start-ups and new entrants struggled with scalability and profitability. However, technological breakthroughs, particularly in battery design, have **ushered** in a phase of renewed optimism. Enhanced energy density, reduction in dependency on expensive raw materials such as cobalt, and advances in battery recycling have significantly curtailed production costs.

Parallely, the incorporation of artificial intelligence (AI) and machine learning (ML) is revolutionising vehicle intelligence. Features like adaptive cruise control, predictive maintenance, and advanced driver assistance systems (ADAS) are redefining user experience, especially among Gen Z consumers who demand innovation, sustainability, and digital integration in mobility solutions.

Government initiatives like FAME-II, EMPS 2024, and Battery-as-a-Service (BaaS) are playing a pivotal role in ecosystem development. With the rollout of over 74,000 EV chargers, including 48,400 fast chargers, India is rapidly addressing range anxiety and enhancing user confidence. These developments are not only catalysing EV adoption but also compelling legacy automakers to pivot, innovate, and invest in electrification.

The \_\_\_\_\_ are unmistakable. The traditional internal combustion engine (ICE) sector is being redefined as manufacturers embrace hybrid models, enter EV joint ventures, and realign long-term strategies. The discourse has shifted from "if and why" to "how and when," reflecting an irreversible momentum.

While challenges persist—especially in rural connectivity, component dependency, and grid readiness—the trajectory is promising. With E2W sales projected to reach 7–9 million by 2030, and electric three-wheelers expected to command up to 75% of market share, India is poised to become a global leader in sustainable mobility.

**Q23. Which of the following statements can be logically inferred from the passage?**

- (I) The Indian government's infrastructural and fiscal policies are not only supporting existing EV manufacturers but are also influencing traditional automobile companies to shift strategies.
  - (II) Technological innovations have not only made EVs cheaper to produce but have also contributed to features that align with changing consumer demands.
  - (III) The growth of electric vehicles in India has primarily been driven by rural demand and local manufacturing incentives.
- (a) Only (I)  
(b) Both (I) and (II)  
(c) Only (III)  
(d) Both (I) and (III)  
(e) All (I), (II), and (III)

**Q24. Identify the statement(s) that is/are factually and contextually CORRECT based on the passage.**

- (I) The EV industry in India initially faced setbacks due to cautious investment by established companies and the high cost of batteries.
  - (II) Artificial intelligence in EVs has been used primarily to enhance battery lifespan and reduce energy consumption during idle periods.
  - (III) Government policies like FAME-II and EMPS 2024 have been instrumental in overcoming consumer hesitation about switching to electric mobility.
- (a) Only (I)  
(b) Both (I) and (III)  
(c) Only (II)  
(d) Both (II) and (III)  
(e) All (I), (II), and (III)

**Q25. Which of the following statement(s) present an incorrect interpretation of the ideas conveyed in the passage?**

- (I) The integration of artificial intelligence in electric vehicles caters primarily to the operational needs of logistics and fleet companies rather than individual consumers.
- (II) The decline in dependency on materials like cobalt has completely eliminated supply chain issues in EV manufacturing.
- (III) The Indian EV market's rapid growth is largely a result of rural consumers adopting two- and three-wheelers for agricultural use.
- (a) Only (I)
- (b) Both (I) and (III)
- (c) Only (III)
- (d) Both (II) and (III)
- (e) Only (II)

**Q26. Identify the statement(s) that correctly infer the nature of challenges faced by India's EV sector according to the passage.**

- (I) The EV industry continues to be hindered primarily by a lack of technological advancement in vehicle software and battery chemistry.
- (II) Although much of the ecosystem has matured, rural infrastructure gaps and grid limitations remain significant barriers to full-scale adoption.
- (III) High initial costs of EVs and lack of market competition remain the biggest reasons for low consumer interest in electric vehicles.
- (a) Only (I)
- (b) Both (I) and (III)
- (c) Only (II)
- (d) Both (II) and (III)
- (e) Only (III)

**Q27. Which of the following statement(s) reflect an incorrect or skewed interpretation of the role of government policies in India's EV transition, based on the passage?**

- (I) The Indian government's initiatives are mainly focused on subsidising vehicle buyers and offer minimal support for infrastructure development or battery recycling.
- (II) Policies like EMPS 2024 are aimed at shifting consumer behaviour through digital education and awareness campaigns rather than providing any material infrastructure.
- (III) FAME-II and Battery-as-a-Service are part of an integrated policy framework aimed at increasing EV adoption through financial, infrastructural, and operational support.
- (a) Only (I)
- (b) Both (I) and (II)
- (c) Only (III)
- (d) Both (II) and (III)
- (e) Only (II)

**Q28.** Which of the following phrases is most suitable to fill the given blank?

- (a) technological criticisms
- (b) ripple effects
- (c) infrastructure failures
- (d) operational loopholes
- (e) manufacturing oversights

**Q29.** Which of the following words is most similar in meaning to “fraught” as used in the passage?

- (a) equipped
- (b) composed
- (c) neutral
- (d) aligned
- (e) burdened

**Q30.** Which of the following words is most similar in meaning to “ushered” as used in the passage?

- (a) obstructed
- (b) eliminated
- (c) initiated
- (d) delayed
- (e) dissolved

**Q31.** In each of the questions, two words are omitted, which are replaced by blanks. Choose the best combination of the words that can fit into the given blank in the same order so to make a grammatically and logically correct statement.

Although the diplomatic overtures appeared conciliatory on the surface, they barely managed to \_\_\_\_\_ the deep-seated mistrust between the two nations, making the entire engagement seem more like a performative gesture than a genuine attempt to \_\_\_\_\_ longstanding hostilities.

- (a) mask, perpetuate
- (b) address, rekindle
- (c) mitigate, dismantle
- (d) conceal, ignite
- (e) fabricate, intensify

**Q32.** In each of the questions, two words are omitted, which are replaced by blanks. Choose the best combination of the words that can fit into the given blank in the same order so to make a grammatically and logically correct statement.

The recent economic survey reveals a worrying trend in which rising urban consumption has failed to \_\_\_\_\_ corresponding gains in rural productivity, thereby risking a policy vacuum that could eventually \_\_\_\_\_ into a chronic structural imbalance in the national economy.

- (a) catalyse, escalates
- (b) justify, collapse
- (c) translate, ossify
- (d) induce, fade
- (e) inflect, evolve

**Q33.** In each of the questions, two words are omitted, which are replaced by blanks. Choose the best combination of the words that can fit into the given blank in the same order so to make a grammatically and logically correct statement.

The opposition leader's fiery rhetoric, though electrifying to the base, failed to \_\_\_\_\_ the broader electorate that the party could govern effectively and, according to analysts, may have even begun to \_\_\_\_\_ the party's appeal among centrist voters seeking stability.

- (a) persuade, erode
- (b) distract, amplify
- (c) mitigate, dismantle
- (d) dissuade, bolster
- (e) impress, enshrine

**Q34.** In the following question, a sentence with a highlighted phrase is given which may or may not be correct. Choose the correct option to replace the highlighted phrase.

**No Sooner have employees**, burdened by unrealistic expectations and deprived of support, thrived in environments where empathy is neither practiced nor prioritized.

- (I) Rarely have employees
  - (II) Employees have rarely
  - (III) Employees have been scarcely
- (a) Only (I)
  - (b) Both (I) and (III)
  - (c) Only (II)
  - (d) Both (I) and (II)
  - (e) No replacement required

**Q35.** Read the following sentences carefully and identify which of them use the word "**sprig**" correctly in context.

**A.** She tucked a **sprig** of rosemary behind her ear before stepping into the kitchen to prepare the festive roast.

**B.** The officer handed over a **sprig** of medals to the soldier during the ceremonial parade.

**C.** As the first rays of sunlight touched the soil, a delicate **sprig** emerged from the ground, promising the arrival of spring.

- (a) Only A
- (b) Both A & B
- (c) Both A & C
- (d) All A, B & C
- (e) None are correct

**Q36.** In the following question, a sentence with a highlighted phrase is given which may or may not be correct. Choose the correct option to replace the highlighted phrase.

**If the team would have submitted** the proposal on time, they could have secured the funding for the project.

- (I) If the team had submitted
- (II) Had the team submitted
- (III) If the team have submitted

- (a) Only (I)
- (b) Both (I) and (II)
- (c) Only (III)
- (d) Both (II) and (III)
- (e) No replacement required

**Directions (37-40): Read the following passage and answer the given questions.**

The traditional interview process often relies on the candidate's ability to describe their prior experiences, qualifications, past work duties, and skillsets — an approach that creates a larger barrier to recruitment and selection for most non-native speakers. Managers should consider whether candidates should be tested on their ability to talk or write about their skills, or on their ability to demonstrate these skills in practice. To this end, rather than testing oral or written communication aptitude, companies can adopt innovative ways to test practical and technical on-the-job skills, in which candidates are asked to perform a task and are \_\_\_\_\_ on their proficiency in execution rather than language fluency.

For example, specific skills assessments such as coding tasks in IT, computational challenges in finance, or portfolio reviews in creative professions or construction would allow candidates to demonstrate their potential contribution to the role. Additionally, some employers work with bilingual managers and assigned mentors who can support refugees in their work transition when needed. Others rely on technology, using language apps designed specifically to teach workers the technical vocabulary required for a given job. In the long term, the investment in language development could allow companies to capitalize on the skills of their multicultural and multilingual workforce, who can better serve their increasingly diverse customer base.

**Q37.** Which of the following best summarizes the central argument presented in the passage?

- (a) Traditional interviews are universally effective in assessing a candidate's communication and job performance skills, especially for native speakers.
- (b) The interview process should continue to prioritize oral and written communication to maintain professional standards across industries.
- (c) Recruitment strategies must evolve to emphasize candidates' practical demonstration of skills over their verbal articulation, especially to support non-native speakers and promote inclusivity.
- (d) All organizations must adopt a single standardized skill assessment model that eliminates interviews altogether to ensure fairness in selection.
- (e) Language proficiency tests should be made more rigorous in interviews to ensure only well-spoken professionals are recruited.

**Q38.** What assumption does the author make about the relationship between language skills and job performance?

- (a) High language proficiency always results in high job productivity, particularly in technical roles.
- (b) Language skills are irrelevant in all professional fields and should not be a consideration in recruitment.
- (c) Fluency in communication may not accurately reflect a candidate's job capabilities, and overemphasis on it can limit access for capable non-native speakers.
- (d) Multilingual individuals automatically outperform monolingual individuals due to broader vocabulary and cultural awareness.
- (e) Employees with poor communication skills will struggle regardless of their technical competency.

**Q39.** According to the passage, which of the above statements is/are **correct**?

- (I) The traditional interview process disadvantages non-native speakers by emphasizing language proficiency over job-related capabilities.
- (II) Companies that invest in developing the language skills of non-native employees may be better equipped to serve a diverse clientele in the future.
- (III) Replacing traditional interviews with standardized language tests is the most effective method to promote inclusivity in hiring.
- (a) Only (I) is correct
- (b) Only (II) is correct
- (c) Both (I) and (III) are correct
- (d) Both (I) and (II) are correct
- (e) All (I), (II), and (III) are correct

**Q40.** Choose the appropriate word to fill the given blank.

- (a) commanded
- (b) regulated
- (c) fostered
- (d) declined
- (e) evaluated

**Directions (41-44):** The table given below show total number of fruits (Apples & Mangoes) sold by three shops and the ratio of apples to mangoes sold by these three shops. Read the data carefully and answer the questions given below.

Shops	Total fruits (Apples & Mangoes) sold	Ratio of apples to mangoes sold (Apples : Mangoes)
<b>A</b>	80	$p : p+1$
<b>B</b>	50	3 : 7
<b>C</b>	120	0.5 : 2

**Note:** The difference between mangoes and apples sold by shops A is 16.

**Q41.** Find the difference between total number of mangoes sold by shops A & C together and total number of apples sold by shops A & B together?

- (a) 56
- (b) 89
- (c) 68
- (d) 87
- (e) 97

**Q42.** The average number of apples sold by A, C and D is 32. If the ratio of total number of apples to mangoes sold by D is  $p : q$  and total mangoes sold by D are  $\frac{5}{8}$  of total mangoes sold by C, then find the value of 'q'?

- (a) 0.5
- (b) 3
- (c) 1.5
- (d) 2
- (e) 1

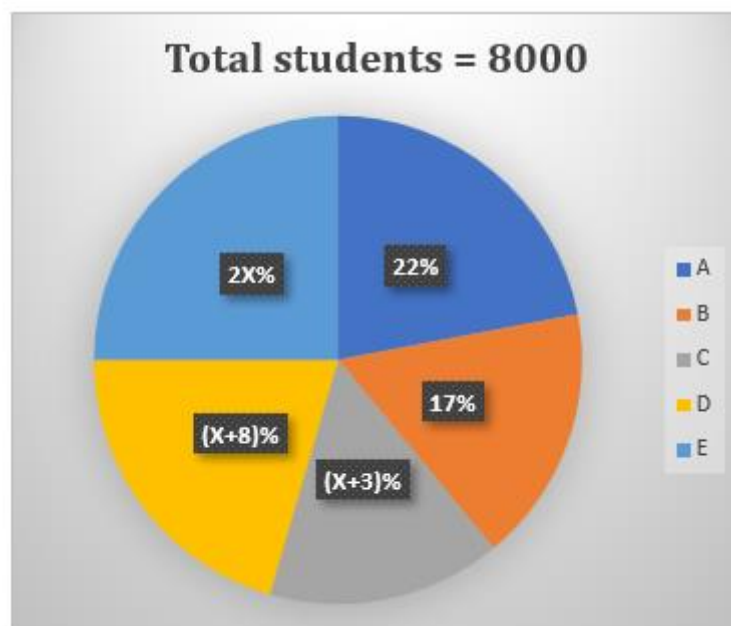
**Q43.** Shop C sold 40% of total available fruits (Apples & Mangoes) and the ratio of total unsold mangoes to sold mangoes by shop C is  $5 : p+2$ , then find the total unsold apples by shop C is what percent of more than total sold mangoes by shop A?

- (a) 40%
- (b) 30%
- (c) 20%
- (d) 15%
- (e) 25%

**Q44.** Shops C purchased each apple and mango at Rs 10 & Rs. 15, and he sold all fruits at profit of 40%. Find the total profit of received by C (C sold all purchased fruits)?

- (a) 612 Rs.
- (b) 556 Rs.
- (c) 672 Rs.
- (d) 652 Rs.
- (e) 692 Rs.

**Directions (45-49):** Read the following pie chart carefully and answer the questions given below. The pie chart shows the percentage distribution of total students (boys and girls) in five different schools.



**Q45. The total number of students in schools B and D together is what percentage more or less than the total number of students in school E?**

- (a) 12.5%
- (b) 66.67%
- (c) 33.33%
- (d) 25%
- (e) 50%

**Q46. The difference between the total number of boys and girls in school C is 170 (boys < girls). If the total number of boys in school B is 230 more than that of school C, then find the ratio of boys to girls in school B.**

- (a) 7:8
- (b) 4:7
- (c) 7:9
- (d) 9:7
- (e) 8:3

**Q47. The total number of students in school F is 25% more than that in C. The ratio of the number of boys to the number of girls in school F is 19:12. If the number of girls in schools F and E together is 1935, then find the difference between the number of boys in schools E and F.**

- (a) 285
- (b) 305
- (c) 325
- (d) 270
- (e) 245

**Q48. 25% of the total number of students in school A who participated in dance, and the rest participated in chess. The number of students who participated in chess in school E is 40 more than half of the students who participated in chess in school A. Find the average number of students who participated in dance.**

- (a) 1200
- (b) 920
- (c) 510
- (d) 540
- (e) 870

**Q49. Find the central angle corresponding to the total number of students in B and D together (in degree)?**

- (a) 90
- (b) 108
- (c) 120
- (d) 135
- (e) 160

**Q50. Two roots of equation  $x^2 - Px + 84 = 0$  is 'a' and 'b', and  $a-b = 5$ .**

**Quantity I:** Value of  $2P$

**Quantity II:** Value of  $b^2 - a + 1$

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or no relation

**Q51. A bag contains x black marbles, x+10 white marbles and x+20 yellow marbles. The probability of drawing one white marble randomly is  $\frac{1}{6}$  more than probability of drawing one black marble randomly.**

**Quantity I:** Total number of yellow marbles in the bag.

**Quantity II:** 40

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or no relation

**Directions (52-54): There are two series I and II given below, and both series follows the same pattern. Find the missing terms of series II and answer the following questions.**

**I:** 386, 194, 98, 50, 26, 14, 8

**II:** 834, 418, P, Q, R, S, 15

**Q52. Which of the following statement/s is or are definitely true?**

I.  $9^2 + 1 = R + S$

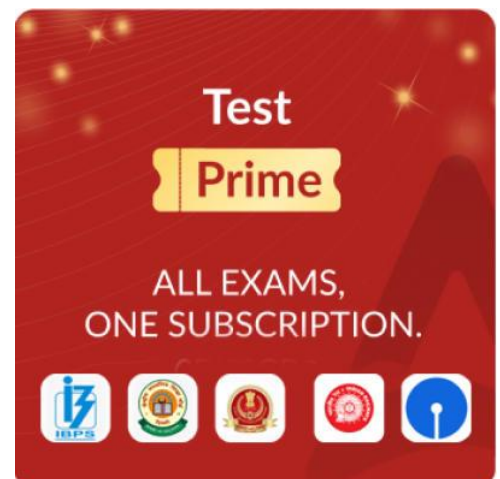
II.  $2Q = P + \frac{S}{4}$

III.  $\frac{2P}{15} = S$

- (a) Only I and II
- (b) Only I
- (c) Only II
- (d) All I, II and III
- (e) Only I and III

**Q53. Find the 50% of  $Q + R$ ?**

- (a) 80
- (b) 75
- (c) 60
- (d) 107
- (e) 100



**Q54. Which of the following statement/s is or are definitely true?**

- I. Sum of P and R is odd number
  - II. Sum of P and R is completely divisible by 4
  - III. Sum of R and S is less than 4<sup>th</sup> term of series I
- (a) Only II and III  
(b) Only I  
(c) Only II  
(d) All I, II and III  
(e) Only I and III

**Directions (55-57):** There are two series I and II given below, and both the series follow different patterns. A and B are missing terms of I & II respectively. Find the value of A and B, and answer the questions given below.

I: 16, A, 10, 21, 85, 681

II: 44, 52, 64, 80, B, 124

**Q55. Which of the following statement/s is or are correct?**

- (i) A is a perfect square
  - (ii)  $B = 10A$
  - (iii)  $B \div (A+1) = 10$
- (a) Only (ii) and (iii)  
(b) Only (i) and (ii)  
(c) Only (i)  
(d) All (i), (ii) and (iii)  
(e) Only (i) and (iii)

**Q56. Find the value of  $4A+2B$ ?**

- (a) 218  
(b) 418  
(c) 236  
(d) 136  
(e) 256

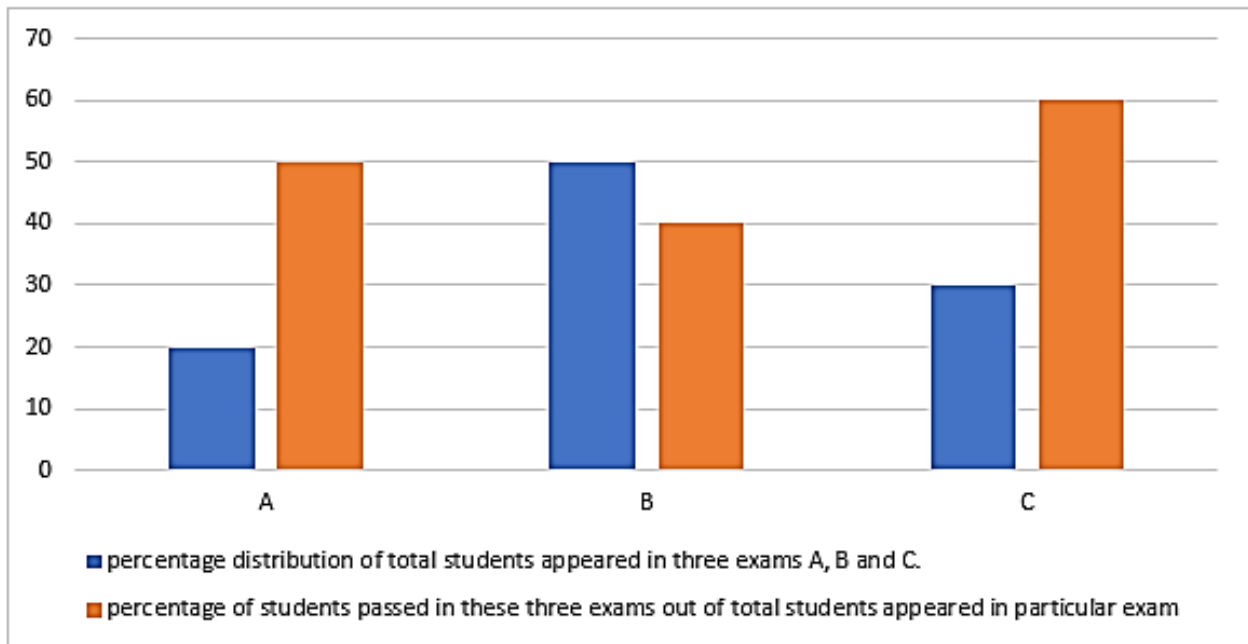
**Q57. Which of the following statement/s is or are true?**

- (i) When 69 added in B, then the resultant becomes perfect square
  - (ii) Value of A is a prime number
  - (iii) 25 is a factor of  $(B+25)$
- (a) Only (ii) and (iii)  
(b) Only (i) and (iii)  
(c) Only (i)  
(d) All (i), (ii) and (iii)  
(e) Only (i) and (ii)

**Directions (58-61):** The bar graph given below shows percentage distribution of total students (boys + girls) appeared in three exams A, B and C. The bar graph also shows percentage of students (boys + girls) passed in these three exams out of total students (boys + girls) appeared in particular exam. Read the data carefully and answer the questions given below.

**Note:** Total number of students appeared in three exams A, B and C = 900

Total number of students appeared in any exam = students passed + students did not pass.



**Q58. Find the average number of students who did not pass all three exams?**

- (a) 136
- (b) 156
- (c) 168
- (d) 148
- (e) 126

**Q59. Which of the following statement/s is or are correct?**

- I.** Total number of students who did not pass the exam B are multiple of 9.
  - II.** Total students who passed the exam A & B together > Total students who passed the exam B & C together
  - III.** 50% of students who did not pass the exam A are equal to  $\frac{1}{6}$ th of number of students who did not pass the exam B
- (a) Only III
  - (b) Only II
  - (c) Only I and III
  - (d) Only I and II
  - (e) All I, II and III

**Q60.** The average number of students passed in exam A, B and D is 150, and 70% of total students appeared in exam D are not pass the exam. If boys and girls who did not pass the exam D are equal and girls who passed the exam D are 40% of students who passed exam B, then find the total boys who appeared in exam D?

- (a) 282
- (b) 308
- (c) 316
- (d) 318
- (e) None of these

**Q61.** 40% of total students who appeared in exam B are girls and 80 girls did not pass the exams out of total girls appeared in exam B. Find the difference between number of girls who passed the exam B and number of boys who did not passed the exam B?

- (a) 100
- (b) 90
- (c) 80
- (d) 60
- (e) 110

**Q62.** Four years ago, the ratio of ages of Sonam and Niharika was 5:7. 12 years hence, the ratio between the ratio of ages of Sonam and Niharika will be 9:11. The present age of Sonam and Niharika are X years and Y years respectively.

**Quantity I:**  $X - \frac{4Y}{8}$

**Quantity II:**  $0.2Y + 1.5X$

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or no relation

**Q63.** Given, 'a' and b are two distinct positive integers such that  $4b + 2a = 24$  and  $\frac{(6b - a)}{7} = 4$ .

**Quantity I:** value of 2a

**Quantity II:** value of b

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or no relation

**Q64.** The average of three numbers P, Q, and R is 16, and another number S is 9 more than the average of Q and R. Find the value of  $2S + P$ .

- (a) 58
- (b) 48
- (c) 66
- (d) 56
- (e) Can not be determined

**Q65. I:**  $3x^2 - 16x + 5 = 0$

**II:**  $2y^2 - 7y + 3 = 0$

- (a)  $x < y$
- (b)  $x > y$
- (c)  $x \leq y$
- (d)  $x \geq y$
- (e)  $x = y$  or relation cannot be determined

**Q66.** 50% of the solid sphere is melted to form cubes of sides  $(64/336)^{th}$  of the radius of the sphere. If the curved surface area of the sphere is 5544 sq. cm. Find the maximum number of cubes that can be formed.

- (a) 321
- (b) 278
- (c) 289
- (d) 309
- (e) 303

**Q67.**

**I:**  $0.5x^2 + \sqrt{144x^2} + \sqrt{169x^2} + 3.5x = \sqrt[3]{343} + 22$

**II:**  $9y^2 + 16y(0.5 \times \sqrt{36}) - \sqrt{289} = 0$

- (a)  $x < y$
- (b)  $x > y$
- (c)  $x \leq y$
- (d)  $x \geq y$
- (e)  $x = y$  or relation cannot be determined

**Q68. I:**  $3x^2 - 5x - 2 = 0$

**II:**  $2y^2 - 3y + 1 = 0$

- (a)  $x < y$
- (b)  $x > y$
- (c)  $x \leq y$
- (d)  $x \geq y$
- (e)  $x = y$  or relation cannot be determined

**Q69.** Vessel P contains 56 liters of a mixture of milk and water in the ratio of 3:1, and vessel Q contains 40% water and the rest milk. 25% of mixture Q and 60% of mixture P are taken out and poured into empty vessel R. If the ratio of water to milk in vessel R is 52:141, respectively, then find how much milk was taken out from vessel Q (in liters).

- (a) 3
- (b) 2
- (c) 1
- (d) 4
- (e) 5

**Q70.**  $a\frac{b}{c}$  is a mixed fraction and the whole number P is prime number. The denominator is Q, which is a multiple of 2. The product of the whole number and the denominator is 18. If the product of the denominator and numerator is 24, then find the value of b.

- (a) 3
- (b) 4
- (c) 2
- (d) 1
- (e) 5

**Q71.** P and Q can complete  $\frac{3}{2}$  times the work in 9 days. R (working twice of efficiency) and P together can complete the work in 5 days. Find the time (in days) taken by P, Q, and R (working twice of efficiency) together to complete 20% more of the work.

- (a) 12
- (b) 14
- (c) 18
- (d) 8
- (e) Can't be determined

**Q72.**

**I:**  $\frac{(5x)^2}{4} = 10x - \sqrt{9}$

**II:**  $169(y)^2 - \sqrt[3]{64} + 2(10)y = 144y^2 + 110y - 3^4$

**Quantity I:** Find the value of y.

**Quantity II:** Find the value of x.

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or no relation

**Q73.** A train can cross half of a platform with 0.4 of its initial speed in 30 seconds. If the length of the platform had been three times the length of the train, then the train could cross the whole platform with its initial speed in 24 seconds. Find the ratio of the original length of the platform (in meters) and the initial speed of the train (in m/sec).

- (a) 11:2
- (b) 12:1
- (c) 4:5
- (d) 5:9
- (e) 1:9

**Directions (74-78):** Read the following table carefully and answer the questions given below. The table shows the percentage or number of visas granted by country A out of the total number of visa applications received from P, Q, and R. The table also shows the percentage of visas granted to males out of the total number of visas granted.

**Note:** Total number of applications received = Number of applications granted + Number of applications rejected.

Country	Percentage or number of visas granted	Percentage of visas granted to males
P	60%	40%
Q	4000	75%
R	6000	80%

**Q74.** In Q, the total number of females rejected for visas is 66.67% more than that of males. If the difference between the males and females rejected visas from Q is 16.67% of the total number of visas granted from R, then find the applications received from Q.

- (a) 12500
- (b) 8000
- (c) 10000
- (d) 11000
- (e) 14500

**Q75.** In P, the total number of visas granted to females is 7200. Find the difference between the total number of visas rejected from P and the total number of visas granted to males from Q.

- (a) 6000
- (b) 3000
- (c) 5000
- (d) 7000
- (e) 4000

**Q76.** There are two types of visas granted from R, i.e., X and Y. The ratio of X to Y types of visas granted to males is 7:5, and the Y types of visas granted to females is one-fifth that of males. Find the ratio of the total X types to total Y types of visas granted from R.

- (a) 1:4
- (b) 2:1
- (c) 1:2
- (d) 2:3
- (e) 3:2

**Q77.** The total number of visas granted from S is 500 more than the average number of visas granted from Q and R. The number of visas granted to males from S is twice the difference between the number of visas granted to males and females from Q. Find the number of visas granted to females from S.

- (a) 1800
- (b) 1200
- (c) 1500
- (d) 2000
- (e) 1400

**Q78. The total number of visas granted from all three countries is 3.5 times the total number of visas granted to males from R. The total number of visas granted to females in P is how many more or less than Q?**

- (a) 3080
- (b) 2450
- (c) 3120
- (d) 2990
- (e) 2840

**Directions (79-83): Read the following information carefully and answer the questions given below.**

The total number of boys who played hockey and the total number of girls who played football are in the ratio of 5:3, and the total number of boys who played volleyball is twice the number of girls who played football. The number of girls who played volleyball is 30 less than that of boys. The total number of boys and girls who played hockey together is 160, and the total number of boys who played football is 25% more than the total number of girls who played hockey. The total number of boys who played all three sports is 295.

**Q79. The number of girls who played volleyball is what percentage more or less than the total number of boys played football?**

- (a) 20%
- (b) 12.5%
- (c) 16.67%
- (d) 18%
- (e) 10%

**Q80. Find the ratio of the total number of boys and girls together who played volleyball to the total number of boys who played hockey and football together.**

- (a) 5:7
- (b) 6:5
- (c) 7:4
- (d) 4:3
- (e) 4:9

**Q81. Find the difference between the total number of girls who played all three sport and the total number of boys and girls together who played football.**

- (a) 50
- (b) 80
- (c) 75
- (d) 60
- (e) 100

**Q82.** The total number of boys who played chess is 20% more than the total number of girls who played hockey. If the total number of girls who played chess is twice the number of boys who played football, then find the difference between the total number of boys and girls who played chess.

- (a) 92
- (b) 88
- (c) 78
- (d) 110
- (e) 75

**Q83.** The ratio of the total number of girls who played cricket to the total number of boys who played football is 11:15. If the total number of boys and girls together who played cricket is 60% of those who played volleyball, then find the number of boys who played cricket.

- (a) 72
- (b) 79
- (c) 74
- (d) 71
- (e) 77

**Directions (84-88):** What comes at the place of question (?) mark. You are not required to calculate the exact value.

**Q84.**  $39.87\% \text{ of } 120.09 + \frac{1}{5} \text{ of } 84.99 - ? = 42.08$

- (a) 12
- (b) 33
- (c) 42
- (d) 23
- (e) 52

**Q85.**  $14.01^2 - ?^2 + 7.98^2 = 5.01 \times 47.12$

- (a) 1
- (b) 7
- (c) 5
- (d) 11
- (e) 14

**Q86.**  $? \% \text{ of } 3199.95 - 1 \frac{1}{6.89} \text{ of } 41.99 = 20.02^2$

- (a) 14
- (b) 32
- (c) 20
- (d) 8
- (e) 42

**Q87.**  $832.03 \div 7.99 \times 5.01 \div ? = \sqrt{168.90}$

- (a) 35
- (b) 25
- (c) 20
- (d) 15
- (e) 40

**Q88.**  $\sqrt{?} + 24.987\% \text{ of } 96.10 \times 14.98 = 19.02^2$

- (a) 81
- (b) 1
- (c) 9
- (d) 25
- (e) 49

**Directions (89-90):** The following questions are accompanied by two statements (A) and (B). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

**Q89. What is the value of a two-digit number?**

A. The sum of its digits is 21 and product of its digits is 110.

B. The sum of its digits is 5 and on reversing the digits of the original number, new number obtained is 27 less than the original value.

- (a) Statement A alone is sufficient to answer the question but statement B alone is not sufficient to answer the questions.
- (b) Statement B alone is sufficient to answer the question but statement A alone is not sufficient to answer the question.
- (c) Both the statements taken together are necessary to answer the questions.
- (d) Either statement A or statement B by itself is sufficient to answer the question.
- (e) Statements A and B taken together are not sufficient to answer the question.

**Q90. What is the ratio of father's age to his son's age after 5 years.**

A. The ratio of present age of father to his son is 8:5 and 12 years before it was 5: 2.

B. Father is 24 years older than his son and the product of their ages is 256.

- (a) Statement A alone is sufficient to answer the question but statement B alone is not sufficient to answer the questions.
- (b) Statement B alone is sufficient to answer the question but statement A alone is not sufficient to answer the question.
- (c) Both the statements taken together are necessary to answer the questions.
- (d) Either statement A or statement B by itself is sufficient to answer the question.
- (e) Statements A and B taken together are not sufficient to answer the question.

**Q91. Statement:** In a recent national policy announcement, the government mandated that all private companies with over 100 employees must ensure at least 30% female representation in their leadership roles by 2027. This move is expected to reduce the gender gap in corporate governance. However, some critics argue that without structural support like affordable childcare and safe transportation, achieving this target may be difficult.

**Based on the above statement, which of the following can be inferred?**

- I. The government is taking measures to promote gender equality in corporate leadership.
  - II. Private companies are not currently required to ensure any female representation.
  - III. Supporting infrastructure is crucial for the success of gender-related policy goals.
- (a) Only I is correct
  - (b) Only III is correct
  - (c) Both I and III are correct
  - (d) Both II and III are correct
  - (e) All I, II, and III are correct

**Q92. The National Digital Strategy 2025 includes major investments in AI research and its ethical use. It supports transparent algorithms and AI applications in sectors like healthcare and education. Civil rights groups, however, worry about weak regulations against AI misuse. Which of the following statements can be inferred?**

- (a) AI integration has already led to widespread improvements in all public sectors across the country.
- (b) The strategy includes clear and strict regulations to address AI-related ethical concerns.
- (c) The public has fully accepted AI, and there are no major concerns about its misuse.
- (d) The government is expanding AI use, while concerns over regulations reflect awareness of risks.
- (e) The strategy promotes AI in services, ensures strong regulations, and reflects stakeholder concern.

**Directions (93-95): Here, a question is followed by two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both statements carefully and give answer:**

**Q93. Six persons F, K, M, N, O, P - sit in a row facing north. What is the position of F with respect to O?**

**Statement I:** Three persons sit between N and M. P sits second to the right of O. K sits immediate left of P.

**Statement II:** M sits second from an extreme end. One person sits between M and N. P sits adjacent to M but to the right of O. F sits third to the right of K.

- (a) Data given in both statements I and II together are not sufficient to answer.
- (b) Data given in statement I alone is sufficient to answer.
- (c) Data given in both statements I and II together are sufficient to answer.
- (d) Data given in statement II alone is sufficient to answer.
- (e) Data given in either statement I or statement II alone is sufficient to answer the question.

**Q94. Six persons A, B, C, D, E, F - sit around a circular table facing inside. Who sits immediate right of F?**

**Statement I:** C sits second to the right of B. D sits immediate left of B. E and F are immediate neighbors.

**Statement II:** A sits immediate left of C. D sits second to the left of A. Two persons sit between B and E.

- (a) Data given in both statements I and II together are not sufficient to answer.
- (b) Data given in statement I alone is sufficient to answer.
- (c) Data given in both statements I and II together are sufficient to answer.
- (d) Data given in statement II alone is sufficient to answer.
- (e) Data given in either statement I or statement II alone is sufficient to answer the question.

**Q95. Six persons K, L, M, N, O, P – live on different floors of a six-floor building where lowermost floor is numbered as 1, above it is 2 and so on. Who lives on 4<sup>th</sup> floor?**

**Statement I:** P lives just below M. L lives above M and O. M lives on odd numbered floor. Two persons live between K and L. N lives just below O.

**Statement II:** M lives three floors above L. Number of persons above M and below P are same. Two persons live between K and N.

- (a) Data given in both statements I and II together are not sufficient to answer.
- (b) Data given in statement I alone is sufficient to answer.
- (c) Data given in both statements I and II together are sufficient to answer.
- (d) Data given in statement II alone is sufficient to answer.
- (e) Data given in either statement I or statement II alone is sufficient to answer the question.

**Directions (96-100): Read the given information carefully and answer the related questions:**

Nine persons K, L, M, N, O, P, Q, R, S go to different cities on three different dates - 7, 14, 28 of three different months – January, April and October. The cities are – Delhi, Pune, Surat, Ambala, Patna, Shimla, Jaipur, Lucknow, Agra.

M goes on an even date in April. Three persons go between M and the one who goes to Jaipur. P goes just before the one who goes to Jaipur. Five persons go between P and K. Number of persons go before K is same as the number of persons go after the one who goes to Shimla. Four persons go between S and the one who goes to Shimla. K and R go in the same month. Q goes just after the one who goes to Surat. P does not go to Surat. Three persons go between Q and the one who goes to Lucknow. One person goes between O and the one who goes to Delhi. One person goes between the persons who go to Lucknow and Pune. The one who goes to Ambala goes just before the one who goes to Patna. L goes after O.

**Q96. Four of the following five are similar in a certain a certain way and belong to a group, which of the following is dissimilar to others?**

- (a) P - Shimla
- (b) L - Patna
- (c) S - Delhi
- (d) K - Lucknow
- (e) Q - Pune

**Q97. Which of the following is true about L?**

- (a) 7<sup>th</sup> April
- (b) 28<sup>th</sup> January
- (c) 28<sup>th</sup> April
- (d) 14<sup>th</sup> January
- (e) 7<sup>th</sup> October

**Q98. O goes to which of the following city?**

- (a) Ambala
- (b) Patna
- (c) Agra
- (d) Surat
- (e) Shimla

**Q99. Which of the following is correct?**

- I. K goes to Pune
- II. M goes before N
- III. S goes on 14<sup>th</sup> October
- (a) Only I
- (b) Only II
- (c) Only III
- (d) Only I and II
- (e) Only I and III

**Q100. How many persons go between N and R?**

- (a) Three
- (b) Four
- (c) Five
- (d) Six
- (e) None of the above

**Directions (101-105): Study the given information carefully and answer the related questions:  
In a certain code language**

"Are Base Boost Plant" is coded as "\$5T #6U \$7U \$6P"

"Light on Ease Stops" is coded as "\$6J #3Q #7U \$6R"

"Wisdom players shine high" is coded as "#8Q \$9T \$7P #5I"

"Time Think Learn Tech" is coded as "#6O \$6P \$7T #5E"

**Q101. What is the code of the word "Energetic"?**

- (a) \$7K
- (b) \$13R
- (c) #13K
- (d) #7K
- (e) \$13K

**Q102. What is the code for word pair "Brave Knight"?**

- (a) #7X #7J
- (b) \$8Y #8J
- (c) \$6X #7J
- (d) \$7X #7J
- (e) None of these

**Q103. Which among the following word can be coded as "\$6T"?**

- (a) Games
- (b) Grand
- (c) Glory
- (d) Gloves
- (e) None of these

**Q104. What is the code of the word "Guests"?**

- (a) #8V
- (b) \$7V
- (c) #8S
- (d) \$7X
- (e) None of these

**Q105. Which among the following statement is/are correct?**

- I. Playful is coded as "\$9W"
- II. "On place" is coded as "#3Q \$8E"
- III. "#8G" is the code of "Manner"

- (a) Only I
- (b) Both I and II
- (c) Both I and III
- (d) Only III
- (e) Only II

**Q106. If we pick the third letter from left end from each word of an option, and this is done for all options, then from which of the following options, a four-letter meaningful word can be formed?**

- (a) PLANT, BRAVE, STONE, QUICK
- (b) LIGHT, SHINE, SWEET, SPICE
- (c) CRANE, FRAME, GIANT, FLAME
- (d) SPINE, PAPER, EVERY, PARTY
- (e) TRACK, SPEAR, GLASS, WATER

**Q107. Statement:** A recent survey by the State Education Board revealed that students in rural areas showed a noticeable improvement in academic performance after the introduction of mobile learning vans equipped with digital content. These vans provided interactive lessons, subject-wise quizzes, and career guidance sessions in regions where schools lacked basic infrastructure.

**What could be the possible reason for the improvement in students' performance?**

- (a) Students in rural areas were already performing better than urban students.
- (b) The mobile vans offered personalized coaching by reputed private tutors.
- (c) Interactive digital content made learning more accessible and engaging.
- (d) The State Board introduced new textbooks for the academic year.
- (e) None of these

**Q108. In the question below, two statements are provided. Examine these statements carefully and determine whether there is a cause-and-effect relationship between them. Choose your answer from the options provided.**

**Statements:**

- I. Global temperatures have risen sharply over the past few decades.
- II. Melting of polar ice caps and rising sea levels have been observed across the globe.

- (a) Statement I is the cause, and Statement II is its effect
- (b) Statement II is the cause, and Statement I is its effect
- (c) Both statements are independent causes
- (d) Both statements are effects of a common cause
- (e) None of these

**Directions (109-113): Read the given information carefully and answer the given questions:**

Eight persons A, B, C, D, E, F, G and H sit around a square table in a such a way that four persons sit at the corners of the table and four sit at the middle of each side of the table. The persons sit at the corners face inside and the persons sit at the sides face outside. They all related to each other as a family.

B's spouse sits third to the right of B. B faces inside. One person sits between B's spouse and C (from either side). A's only daughter sits immediate left of C. Three persons sit between A's only daughter and A's sister (from either side). G's father sits third to the left of A. A does not face inside. Both the immediate neighbors of G are married to each other. Two persons sit between G and E (from either side). G's brother sits third to the right of E. H is not father of G. D sits third to the left of G's sibling.

**Q109. Who among the following is sister-in-law of G?**

- I. The one who sits second to the left of F
- II. The one who sits opposite to E
- III. H's sister
- (a) Only III
- (b) Only I and II
- (c) Only I
- (d) Only II and III
- (e) None of the given

**Q110. Who among the following is daughter-in-law of F?**

- (a) B
- (b) A
- (c) H
- (d) E
- (e) D

**Q111. Four of the following five are similar in a certain group and related to a group, which of the following is not related to the group?**

- (a) F-C
- (b) B-A
- (c) E-D
- (d) G-H
- (e) C-A

**Q112. What is the relation of F with respect to the one who sits second to the right of B?**

- (a) Son-in-law
- (b) Brother-in-law
- (c) Sister
- (d) Daughter
- (e) Wife



**Q113. How many persons sit between D and B's sister (from either side)?**

- (a) One
- (b) Two
- (c) Three
- (d) Four
- (e) None

**Directions (114-115): In the following questions, the symbols @, #, \$, %, & are used with the following meaning as illustrated below:**

A@B means A is not greater than B

A#B means A is not smaller than B

A\$B means A is neither greater nor smaller than B

A%B means A is neither greater nor equal to B

A&B means A is neither smaller nor equal to B

**Now, assuming the given statements to be true, find which of the three conclusions I, II, and III is/are definitely true, and give your answer accordingly.**

**Q114. Statements:** P @ Q % M % R \$ G; T % R @ V % E @ S; V \$ C # B & N

**Conclusions:**

- I. S & Q
- II. E # B
- III. P % C
- (a) Only I and II
- (b) Only II and III
- (c) Only I
- (d) Only I and III
- (e) All I, II, III

**Q115. Statements:** A \$ O # W # H & B; B & Y # T \$ K # L; F % N @ C \$ L

**Conclusions:**

- I. F @ O
- II. C & H
- III. N @ L
- (a) Only I
- (b) Only II
- (c) Only III
- (d) Only I and II
- (e) Only II and III

**Q116. In the numbers '865499' and '761829', if even digits are decreased by 2 and odd digits are decreased by 1, then find the sum of non-repeated digits across the two numbers.**

- (a) 2
- (b) 4
- (c) 6
- (d) 0
- (e) 8

**Directions (117-121): Study the following information and answer the questions given below:**

In Edtech Adda247, Different YouTube classes scheduled viz. Two Banking, One SSC and Two UPSC with each session being for 1 hour. Also 2 hours of celebration scheduled on this day on completing 5m subscribers of SSCADDA. These sessions are scheduled from 9am to 6pm. Two breaks are there between these sessions with each of 1 hour. None of the same classes are scheduled consecutively including breaks like- If Banking class is scheduled at 11am then next banking class is neither scheduled at 10am or 12noon slot. Lunch break is held before Tea break. No breaks taken consecutively.

The numbers of slots are scheduled before Tea is same as the numbers of slots are scheduled after one of the UPSC classes. No breaks are scheduled at first and last hour slot. Sourav left the office in celebration hour at 3.15pm for few minutes. Banking class is scheduled just before lunch but after 2 slots of SSC class. None of the UPSC class is scheduled after Tea.

**Q117. How many slots are held between the both banking classes?**

- (a) Four
- (b) None
- (c) One
- (d) Three
- (e) Two

**Q118. Which of the following class is scheduled from 10am to 11am?**

- (a) Banking
- (b) SSC
- (c) UPSC
- (d) Either Banking or SSC
- (e) Either SSC or UPSC

**Q119. Which of the following class is scheduled just before Lunch?**

- (a) Either Banking or SSC
- (b) Banking
- (c) UPSC
- (d) SSC
- (e) Either SSC or UPSC

**Q120. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?**

- (a) 9am-10am – Banking
- (b) 11am-12pm – UPSC
- (c) 3pm-4pm – Tea
- (d) 12pm-1pm – Lunch
- (e) 3pm-5pm – Celebration

**Q121. How many hours gap between SSC class and UPSC class (from their starting time)?**

- (a) 2 hours
- (b) 3 hours
- (c) 4 hours
- (d) 5 hours
- (e) None of the above

**Directions (122-126):** A word arrangement machine when given an input line of Words, rearranges them following a particular rule in each step. The example of input and its rearrangement, is given below:

**Input:** AIR PIN HAT FAN GUN NET

**Step I:** AIR PIN HAT GUN NET FAN

**Step II:** HAT AIR PIN NET GUN FAN

**Step III:** PIN HAT AIR NET GUN FAN

**Step IV:** PINHAT AIRNET GUNFAN

**Step V:** AHINPT AEINRT AFGNNU

**Step VI:** BGJMQS BDJMSS BEHMOT

**Step VI is the last step of the given example. Illustrate the above input arrangement and obtain the steps for the asked input given below:**

**Input:** LEN DEN BAT CER JAM TIL

**Q122. Which of the following is fifth word from right end in step III?**

- (a) LEN
- (b) TIL
- (c) JAM
- (d) CAR
- (e) DEN

**Q123. Which of the following is fourth word from left end in step II?**

- (a) JAM
- (b) CAR
- (c) DEN
- (d) TIL
- (e) None of these

**Q124. In which of the following step, "EDFKOM BAJKUS" is found exactly in this order?**

- (a) Step III
- (b) Step II
- (c) Step VI
- (d) Step V
- (e) Step IV

**Q125. Which of the following is the penultimate step?**

- (a) DEELNN BCILTT ACEJMR
- (b) DEELNN ABILTT ACEJMR
- (c) CEDLNN ABILTT ACEJMR
- (d) DEELMN BBILTT ACEJMR
- (e) DEELNN NBILTT BCEJMR

**Q126. Which of the following element is second to the left of the word which is fifth from left end in first step?**

- (a) BAT
- (b) CER
- (c) LEN
- (d) DEN
- (e) TIL

**Directions (127-130): There are two/three rows given, and to find out the resultant of a particular row, follow the conditions mentioned:**

- I. If an even number is followed by another even number (not prime), the resultant will be the difference of both the numbers.
- II. If an even number is followed by an odd number (not prime), the resultant will be the difference of the both the numbers multiplied by 2.
- III. If an even number is followed by a prime number, the resultant will be the sum of both the numbers.
- IV. If an odd number is followed by another odd number (not a perfect square), the resultant will be the difference of both the numbers added by the greater number.
- V. If an odd number is followed by another even number (not a perfect square), the resultant will be the sum of both the numbers.
- VI. If an odd number is followed by perfect square number, the resultant will be the sum of both the numbers divided by 2.

**Q127. What will be the value of X, if the sum of resultant of both the rows is 53?**

R1: 4 3 25

R2: 8 7 X

- (a) 32
- (b) 24
- (c) 23
- (d) 22
- (e) 29

**Q128. What will be the value if the difference between the resultants of Row I and Row II, will be added by resultant of Row III?**

R1: 15 17 12

R2: 12 11 25

R3: 13 10 9

- (a) 12
- (b) 10
- (c) 23
- (d) 13
- (e) 14

**Q129. What will be the value of the sum of the resultants of all rows?**

R1: 21 49 15

R2: 14 9 4

R3: 11 5 8

(a) 87

(b) 84

(c) 80

(d) 82

(e) 86

**Q130. What will be the value, if the difference between the resultant of Row I and Row II is multiplied by the resultant of Row III?**

R1: 8 2 25

R2: 13 5 12

R3: 21 9 24

(a) 107

(b) 106

(c) 117

(d) 112

(e) 125

**Directions (131-135): Read the given information carefully and answer the questions based on it:**

Seven persons named T, G, H, Y, D, K and L deposit some amount of money (in rupees; integer value) (but not in the same order as given) on different days of the week from Monday to Sunday to their bank accounts. No person deposit same amount of money.

More than three persons deposit between K and D and one of them deposits the lowest money. Average of the highest and lowest sum of money is rupees 1625 which is rupees 25 more than the money deposited by T who deposits just after K. Equal number of persons deposited the money before and after T and G respectively and ratio between the money of T and G is 10:7. The money deposited on Friday is highest but not deposited by Y and H. Money deposited on Monday is thrice the difference between the money deposited on Wednesday and Saturday. The number of persons deposit money before H is less than the number of persons deposit money after H and his money is rupees 20 less than the money deposited on Tuesday. One of the persons deposits rupees 1050. Ratio between the money deposited on Thursday and Sunday is 6:5 respectively.

**Q131. What is the difference between the money deposited by Y and K?**

(a) Rupees 480

(b) Rupees 220

(c) Rupees 120

(d) Rupees 210

(e) None of these

**Q132. On which of the following day, the third highest amount of money is deposited?**

- (a) Tuesday
- (b) Thursday
- (c) Monday
- (d) Wednesday
- (e) None of these

**Q133. Which of the following persons deposited money just before H?**

- (a) T
- (b) G
- (c) The one who deposits four days before L
- (d) None of these
- (e) The one who deposited money on Thursday

**Q134. Four of the following five are similar in a certain manner and related to a group, which among the following does not belong to the group?**

- (a) K-H
- (b) Y-G
- (c) L-D
- (d) T-Y
- (e) K-Y

**Q135. Who among the following deposit the second highest money?**

- (a) T
- (b) H
- (c) G
- (d) L
- (e) D

**Q136. In the question below, two statements are provided. Examine these statements carefully and determine whether there is a cause-and-effect relationship between them. Choose your answer from the options provided.**

**Statements:**

I. Several government schools across rural India have adopted smart classrooms and digital learning tools.

II. The government launched a national program to enhance digital infrastructure in education.

- (a) Statement I is the cause, and Statement II is its effect
- (b) Statement II is the cause, and Statement I is its effect
- (c) Both statements are independent causes
- (d) Both statements are effects of a common cause
- (e) None of these

**Q137. Statement:** To tackle rising electronic waste, the government has enforced strict e-waste rules for mobile phone brands and retailers. These include mandatory recycling and penalties for non-compliance. The goal is to promote sustainable disposal of mobile devices.

**Which of the following are not in line with the given statement?**

- (I) A leading smartphone brand started a drive to collect used handsets for recycling.
- (II) A tech portal launched a tool to compare discounts on smartphones.
- (III) Several retailers were fined for not following the new e-waste guidelines.
- (a) Only I and II
- (b) Only II
- (c) Only III
- (d) Only I
- (e) None of them

**Q138.** India has committed to achieving net-zero carbon emissions by 2070 and is actively investing in clean energy solutions such as solar parks, green hydrogen, and electric mobility. The government is also promoting public-private partnerships to reduce dependence on fossil fuels.

**Which of the following statements is not in line with the above context?**

- (a) India is encouraging the use of electric vehicles by offering subsidies and developing charging infrastructure.
- (b) Solar power generation is being expanded to reduce the load on coal-based power plants.
- (c) The government is planning to increase coal production to ensure uninterrupted power supply till 2100.
- (d) Public sector companies are collaborating with private firms to explore clean hydrogen fuel.
- (e) India aims to reduce its carbon intensity and promote sustainable development.

**Q139. Statement:** Company X and Company Y are competitors in the smartphone market. Last year, Company Y overtook Company X in sales, despite Company X launching a highly rated flagship device. Analysts attribute Company Y's growth to rural expansion, attractive exchange offers, and effective customer loyalty programs.

**What could be the possible reason for Company Y's increase in market share over Company X?**

- (a) Company X's high-end model was unaffordable for most users.
- (b) Company Y offered targeted incentives and expanded its rural presence.
- (c) Company Y collaborated with global brands for premium devices.
- (d) Company X reduced production of budget phones to focus on innovation.
- (e) None of these

**Q140. With the rising air pollution levels in metro cities, many residents have started using air purifiers at home. Sales of indoor plants have also increased as people try to improve indoor air quality naturally.**

**Which of the following can be inferred from the given statement?**

- (a) People are becoming more health-conscious due to worsening air quality
- (b) The sale of air purifiers is declining due to the popularity of indoor plants
- (c) Metro cities are now free from air pollution due to these measures
- (d) Only natural ways are effective to fight air pollution
- (e) None of these

## Solutions

### S1. Ans.(b)

**Sol.** The sentence discusses hate as an emotion that is not naturally present but developed through negative experiences.

- **(a) inherent** – Meaning “existing as a natural part of something.” This fits well because the sentence is arguing that hate is not something we are born with—i.e., it is not inherent.
- **(b) pandemic** – Refers to a disease prevalent over a whole country or the world. This is **not suitable** for the blank, as it describes a widespread occurrence, usually of disease or social behavior, and not the **nature** of an emotion. Saying “hate is not a pandemic emotion” is contextually inappropriate and shifts the meaning.
- **(c) immanent** – Means “existing or operating within,” particularly in philosophical or spiritual contexts. It fits with the meaning of something internal or naturally present, which the sentence negates.
- **(d) essential** – Means “absolutely necessary or fundamental.” The idea that hate is not essential aligns well with the passage’s theme of hate being a learned or developed response.

Since **(b) pandemic** stands out as the only option that does **not** describe the **inherent nature or internal quality** of an emotion, it is the **least appropriate** for the blank.

### S2. Ans.(d)

**Sol.** The blank refers to an emotional progression toward hate.

- **(b) grievance** refers to a real or imagined cause for complaint, fitting well.
- **(c) resentment** is bitter indignation, perfectly apt.
- **(d) endeavor** means an attempt or effort, which is not an emotion and does not fit in the emotional progression described.
- **(e) ire** means anger, making sense here.
- Therefore, **(d) endeavor** is not suitable.

### S3. Ans.(e)

**Sol.** The sentence suggests that hatred has a damaging effect.

- **(a) destructive** directly conveys damage.
- **(c) corrosive** implies a gradual harmful impact—fitting metaphorically.
- **(d) incisive** may appear odd, but it can be used figuratively to mean sharp or acute in effect, and sometimes intense emotions are described this way.
- **(e) perceptive** means showing insight or understanding, which is a positive trait and does not align with the description of hatred’s impact.
- Thus, **(e) perceptive** is not appropriate.

### S4. Ans.(a)

**Sol.** The blank describes a negative and enduring emotional state caused by hatred.

- **(a) longing** means a yearning or desire, which is a positive or neutral emotional state and doesn't fit the tone of persistent negativity.
- **(c) resolute** and **(e) obstinate** both imply firmness or stubbornness, which metaphorically suit a hardened state of hatred.
- **(d) persistent** matches the idea of an ongoing emotional state.
- Hence, **(a) longing** is unsuitable.

**S5. Ans.(c)**

**Sol.** The sentence talks about hidden pain that is not dealt with.

- **(a) deferred** (postponed) suits the idea.
- **(b) unaddressed** clearly fits.
- **(c) deliberate** means done on purpose, which implies intention—opposite to the idea of hidden or unacknowledged pain.
- **(d) untreated** also matches well.
- So, **(c) deliberate** is contextually inappropriate.

**S6. Ans.(d)**

**Sol.** The sentence suggests that living with hate is harmful.

- **(a) detrimental**, **(b) noxious**, and **(e) obstructive** all imply harm or negativity, which suit the context.
- **(d) altruistic** means selflessly concerned for the well-being of others, which is positive and contradicts the meaning of harboring hate.
- Thus, **(d) altruistic** is not suitable.

**S7. Ans.(b)**

**Sol.** Both C and A

**Sentence A:**

"Not only did the manager approve the changes hastily, but he also neglected to inform the board, causing unrest among stakeholders."

- This is CORRECT. The structure "Not only did...but also..." is used properly with parallel structure and correct verb forms.

**Sentence B:**

"Were she to arrive earlier, she would had seen the presentation from the beginning."

- INCORRECT: "would had seen" should be "would have seen" (conditional perfect tense requires "have" not "had").
- Correct version: "she would have seen..."

**Sentence C:**

"No sooner had the news of the policy leaked than investors began pulling out their capital in haste."

- This is CORRECT. The inversion structure "No sooner had...than..." is used properly with correct verb forms.

**S8. Ans.(d)**

**Sol.** only C

**Sentence A:**

"The committee insisted that he leaves immediately, citing breaches of confidentiality and decorum."

- **Error:** After verbs like "insist" that take the subjunctive mood, we use the base form of the verb without "s".
- **Correction:** "that he leave immediately"
- **Status:** Incorrect

### Sentence B:

"Each of the dancers and singers was given an opportunity for showcasing their unique talent during the gala."

- **Error 1:** "for showcasing" is awkward phrasing - better as "to showcase"
- **Error 2:** "their" doesn't agree with singular "Each" (should be "his or her")
- **Correction:** "an opportunity to showcase his or her unique talent"
- **Status:** Incorrect

### Sentence C:

"It was neither her qualifications nor her connections that were questioned during the rigorous interview process."

- **Analysis:**
  - "neither...nor" construction is correct
  - Verb agreement ("were") is correct because the nearest noun ("connections") is plural
- **Status:** Correct

### S9. Ans.(d)

**Sol.** The correct sequence is FBEACDG.

**Sentence F** introduces the three primary types of sugars, setting the base for elaboration.

**Sentence B** then describes **Glucose**, the simplest form, aligning with the order of discussion.

**Sentence E** follows naturally, discussing **Fructose**, the second sugar.

**Sentence A** completes the trio by covering **Sucrose**, the third type.

**Sentence C** shifts focus to **Honey**, which contains a combination of these sugars and introduces its complexity.

**Sentence D** elaborates on the **source of enzymes** in honey, leading directly into:

**Sentence G**, which is fixed, explaining the role of enzymes and what makes honey distinct.

### S10. Ans.(a)

**Sol.** The correct sequence is FBEACDG.

**Sentence F** introduces the three primary types of sugars, setting the base for elaboration.

**Sentence B** then describes **Glucose**, the simplest form, aligning with the order of discussion.

**Sentence E** follows naturally, discussing **Fructose**, the second sugar.

**Sentence A** completes the trio by covering **Sucrose**, the third type.

**Sentence C** shifts focus to **Honey**, which contains a combination of these sugars and introduces its complexity.

**Sentence D** elaborates on the **source of enzymes** in honey, leading directly into:

**Sentence G**, which is fixed, explaining the role of enzymes and what makes honey distinct.

### S11. Ans.(c)

**Sol.** The correct sequence is FBEACDG.

**Sentence F** introduces the three primary types of sugars, setting the base for elaboration.

**Sentence B** then describes **Glucose**, the simplest form, aligning with the order of discussion.

**Sentence E** follows naturally, discussing **Fructose**, the second sugar.

**Sentence A** completes the trio by covering **Sucrose**, the third type.

**Sentence C** shifts focus to **Honey**, which contains a combination of these sugars and introduces its complexity.

**Sentence D** elaborates on the **source of enzymes** in honey, leading directly into:

**Sentence G**, which is fixed, explaining the role of enzymes and what makes honey distinct.

S12. Ans.(e)

Sol. The correct sequence is FBEACDG.

**Sentence F** introduces the three primary types of sugars, setting the base for elaboration.

**Sentence B** then describes **Glucose**, the simplest form, aligning with the order of discussion.

**Sentence E** follows naturally, discussing **Fructose**, the second sugar.

**Sentence A** completes the trio by covering **Sucrose**, the third type.

**Sentence C** shifts focus to **Honey**, which contains a combination of these sugars and introduces its complexity.

**Sentence D** elaborates on the **source of enzymes** in honey, leading directly into:

**Sentence G**, which is fixed, explaining the role of enzymes and what makes honey distinct.

S13. Ans.(e)

Sol. The correct sequence is FBEACDG.

**Sentence F** introduces the three primary types of sugars, setting the base for elaboration.

**Sentence B** then describes **Glucose**, the simplest form, aligning with the order of discussion.

**Sentence E** follows naturally, discussing **Fructose**, the second sugar.

**Sentence A** completes the trio by covering **Sucrose**, the third type.

**Sentence C** shifts focus to **Honey**, which contains a combination of these sugars and introduces its complexity.

**Sentence D** elaborates on the **source of enzymes** in honey, leading directly into:

**Sentence G**, which is fixed, explaining the role of enzymes and what makes honey distinct.

S14. Ans.(c)

- Sol. **Sentence A** is **incorrect** due to the use of the word "**indicative**". The correct word should be "**indicate**" (verb), not "**indicative**" (adjective). The correct sentence should be:
  - "*Light-headedness can sometimes indicate an underlying medical condition...*"
  - **Sentence B** is **correct**. It is grammatically sound and logically coherent. It clearly states the availability of tickets **before** the movie release.
  - **Sentence C** is **incorrect** due to inappropriate word usage. The word "**suspense**" is wrongly used in place of "**suspension**".
  - The correct sentence should be:
  - "*People were demanding an independent probe and the suspension of several high-level officials.*"
- Hence, only sentence **B** is both grammatically and logically correct.

S15. Ans.(a)

S16. Ans.(b)

Sol. ☒ **A. As looming deadlines...**

*As looming deadlines emerged from the delayed business deal, the office atmosphere grew tense, and employees became increasingly irritable and exhausted.*

☒ **B. The stressed atmosphere of the deadlines...**

*The stressed atmosphere of the deadlines affected the employees' mood.*

(This is grammatically awkward; "stressed atmosphere of the deadlines" is unclear and unidiomatic.)

☒ **C. The atmosphere among employees...**

*The atmosphere among employees became increasingly tense due to the pressure of the looming deadlines that followed the delayed business deal.*

**S17. Ans.(c)**

**Sol.** Option (C) is correct as it logically follows the passage's sequence—feedback was received, inefficiencies were identified, and reforms were then initiated. This option maintains clarity and consistency.

- Option (A) contradicts the passage by stating that *no action* was taken, whereas the original states that reforms *were* initiated.
- Option (B) incorrectly suggests that the reforms happened before the feedback and were unrelated, which again conflicts with the stated cause-effect relationship.
- Hence, only **Option C** is valid and accurately represents the sequence and impact outlined in the passage.

**S18. Ans.(d)**

**Sol. Correct Answer: (d) EBACD**

**Sequence Breakdown:**

**(E)** "*a mirror creates your reflection by*"

Introduces the main subject and verb – the sentence must start here.

**(B)** "*bouncing back light rays that*"

Continues the action started in (E) – explains **how** the mirror creates a reflection.

**(A)** "*hit its smooth, shiny surface,*"

Modifies "light rays" – these rays bounce **after** hitting the surface.

**(C)** "*allowing your eyes to see an image that*"

Shows the **result** of the previous process – your eye sees an image.

**(D)** "*appears reversed from left to right*"

Final detail – describing the characteristic of the image.



**Final Reconstructed Sentence:**

**"A mirror creates your reflection by bouncing back light rays that hit its smooth, shiny surface, allowing your eyes to see an image that appears reversed from left to right."**

**S19. Ans.(a)**

**Sol. Correct Answer: (a) CDEBA**

**Sequence Breakdown:**

**(C)** "*the art of rest lies in choosing*"

This introduces the main idea: selecting how to truly rest.

**(D)** "*holidays that truly rejuvenate the*"

What should one choose? → Rejuvenating holidays.

**(E)** "*sleep-deprived—where quiet landscapes,*"

Further defines **who** needs this and **where** rejuvenation happens.

**(B)** "*unhurried mornings, and digital*"

Continues the imagery from (E) – describing peaceful experiences.

**(A)** "*detox become the new luxury*"

Final conclusion – digital detox is now seen as a **luxury**.



**Final Reconstructed Sentence:**

**"The art of rest lies in choosing holidays that truly rejuvenate the sleep-deprived—where quiet landscapes, unhurried mornings, and digital detox become the new luxury."**

### S20. Ans.(d)

**Sol. Sentence A is incorrect.** The subject "The government website" is singular, so the verb should be "provides" (not "provide"). Also, "inform" should be "information," though that was corrected in a previous version. As it stands, this sentence has a subject-verb agreement error.

✗ Incorrect: *The government website provide...*

✓ Correct: *The government website provides...*

- **Sentence B is correct.** The sentence is both grammatically sound and logically coherent. "Mandated to adhere" is a valid formal usage, especially in official or institutional contexts.
- ✓ Correct: *All attendees were mandated to adhere to the official dress code.*
- **Sentence C is correct.** It clearly conveys the intended meaning. "Analysing" is correctly used as a gerund, and the structure of the sentence is error-free.
- ✓ Correct: *It is important to analyse market trends before making any decisions.*

Hence, both **B** and **C** are correct, making **option (d)** the correct answer.

### S21. Ans.(b)

**Sol. both A and B**

**Sentence A:**

"Walking through the dim hallway, the paintings on the walls seemed to whisper stories from a forgotten era."

- **Error:** Dangling modifier - "Walking through the dim hallway" incorrectly modifies "the paintings" (paintings can't walk).
- **Correction:** "As I walked through the dim hallway, the paintings..."
- **Status:** Incorrect

**Sentence B:**

"The CEO decided to stand his ground on the new policy, but the board members stood him up during the vote, leaving him isolated."

- **Error:** Wrong phrasal verb - "stood him up" means to fail to meet someone (like a date), not to oppose someone.
- **Correction:** "stood against him" or "turned against him"
- **Status:** Incorrect

**Sentence C:**

"Had she studied the patterns more closely, she might have predicted the market reversal with remarkable accuracy."

- **Analysis:** Perfect use of third conditional (past unreal condition).
- **Status:** Correct

### S22. Ans.(e)

**Sol. Sentence A is incorrect** because the preposition "**to**" should be replaced with "**through**" or "**into**" to show the duration extending until the weekend.

✓ Correct: *"...that lasted through the weekend."*

**Sentence B is incorrect** due to the incorrect use of the word "**generation**", which should be "**generate**" to maintain the correct verb form.

✓ Correct: *"...new insights they generate."*

**Sentence C is incorrect** as the phrase "**in the hope let**" is grammatically incorrect. It should be "**in the hope that**" to convey the intended meaning.

✓ Correct: *"...in the hope that artificial intelligence (AI) can enhance their daily lives."*

S23. Ans.(b)

**Sol. Statement I is correct.** This can be inferred from:

- *"These developments are not only catalysing EV adoption but also compelling legacy automakers to pivot, innovate, and invest in electrification."*
- This implies that government and ecosystem changes are influencing even traditional players.
- **Statement II is correct.** It aligns with:
  - *"Technological breakthroughs... have significantly curtailed production costs"* and
  - *"Features like adaptive cruise control, predictive maintenance... are redefining user experience, especially among Gen Z consumers."*
- This shows cost-effectiveness **and** alignment with evolving demands.
- **Statement III is incorrect.** The passage clearly states:
  - *"While challenges persist—especially in rural connectivity..."*
- This indicates that rural demand is **not** a primary driver and remains a challenge.

Thus, only statements **I and II** are logically inferred.

S24. Ans.(b)

**Sol. (I) is correct.**

- From the passage:
- *"High battery costs, limited product availability, and nascent infrastructure impeded early adoption. Traditional automotive giants exercised caution..."*
- This directly supports the claim of initial setbacks due to cautious legacy players and expensive batteries.
- **(II) is incorrect.**
- The passage mentions AI features like:
  - *"adaptive cruise control, predictive maintenance, and advanced driver assistance systems (ADAS)"*
- **There is no mention of AI enhancing battery lifespan or energy efficiency during idle states,** making this factually inaccurate.
- **(III) is correct.**
- From:
  - *"Government initiatives like FAME-II, EMPS 2024... are playing a pivotal role in ecosystem development... addressing range anxiety and enhancing user confidence."*
- Clearly, policies helped consumers adopt EVs by reducing hesitation.

Hence, **only (I) and (III)** are correct.

S25. Ans.(d)

**Sol.**

- **(I)** is misleading but not entirely incorrect. While the passage doesn't **explicitly** talk about logistics companies, it does say:
  - *"...user experience, especially among Gen Z consumers who demand innovation, sustainability, and digital integration..."*
- This **focuses on individuals**, not businesses. However, it doesn't **outright contradict** the idea of business application. So, it's **debatable**, but not provably wrong.
- **(II)** is a flawed interpretation. The passage says:
  - *"Reduction in dependency on expensive raw materials such as cobalt..."*
- However, **this doesn't mean supply chain issues have been "completely eliminated"**. That's an exaggeration.

- (III) is incorrect. The passage clearly states:
- “challenges persist—especially in rural connectivity...”
- This means rural areas are **lagging**, not driving growth. So attributing the rapid rise to rural adoption is an error.

Hence, (II) and (III) are **incorrect interpretations**.

#### S26. Ans.(c)

**Sol.** (I) is incorrect. The passage highlights **technological breakthroughs**:

“Enhanced energy density, reduction in dependency on expensive raw materials such as cobalt...” and “AI and ML are revolutionising vehicle intelligence...”

So **lack of tech advancement is no longer a major challenge**.

(II) is accurate. Direct from the passage:

“challenges persist—especially in rural connectivity... and grid readiness.”

This is a **correct interpretation** of ongoing structural barriers.

(III) is incorrect. The **passage no longer emphasizes high costs or market competition** as dominant issues. Instead, it shows how those are **being addressed**, and that sales are already surging:

“sales have reached a significant 18 million units...”

So this misrepresents the **current state** of consumer interest and pricing.

#### S27. Ans.(b)

**Sol.** (I) is incorrect. The passage says:

“Government initiatives like FAME-II, EMPS 2024, and Battery-as-a-Service (BaaS) are playing a pivotal role in ecosystem development.”

This includes **infrastructure** (“rollout of over 74,000 EV chargers”) and **battery solutions**, contradicting the idea that support is only for buyers.

- (II) is incorrect. The passage does **not** say EMPS 2024 is about digital education or awareness campaigns. It’s grouped with other operational and infrastructural initiatives, suggesting it **provides more tangible support**.
- (III) is accurate. These policies are “catalysing EV adoption” and enhancing user confidence via **financial, infrastructural, and operational** means — as stated in multiple parts of the passage.

Thus, (I) and (II) are incorrect interpretations.

#### S28. Ans.(b)

**Sol.** The sentence fragment appears in the passage as:

“The ripple effects are unmistakable. The traditional internal combustion engine (ICE) sector is being redefined...”

Let’s evaluate each option for contextual fit:

- (a) **technological criticisms** – Incorrect. The tone of the passage is **positive and forward-looking**, not critical.
- (b) **ripple effects** – **Correct**. This fits perfectly with the chain reaction described in the passage: tech improvements, policy shifts, and changing consumer habits **cascading into changes** in the ICE sector.
- (c) **infrastructure failures** – Incorrect. The passage acknowledges past challenges but highlights **progress** in infrastructure, not failures.
- (d) **operational loopholes** – Incorrect. There’s **no mention** of loopholes; the tone is about solutions, not system flaws.
- (e) **manufacturing oversights** – Incorrect. The passage discusses advances and adaptation, not oversights.

Thus, “**ripple effects**” logically completes the sentence, capturing the broad-reaching impact of EV adoption on traditional sectors.

**S29. Ans.(e)**

**Sol.** The word "**fraught**", in this context, means **filled with or burdened by something undesirable**, such as difficulties or tension.

Let's analyze the options:

- **(a) equipped** – Incorrect. This means "well-prepared or provided with tools," which is the **opposite** of being burdened.
- **(b) composed** – Incorrect. Means calm or put together, which clashes with the idea of **struggle and obstacles**.
- **(c) neutral** – Incorrect. Doesn't fit the tone or meaning; it implies **lack of bias or emotion**, not difficulty.
- **(d) aligned** – Incorrect. Suggests harmony or agreement, which doesn't reflect the challenges described.
- **(e) burdened** – **Correct**. "Burdened with setbacks" aligns with "fraught with setbacks." Both imply being weighed down by problems.

Thus, "**burdened**" is the closest in meaning to "**fraught**" in this usage.

**S30. Ans.(c)**

**Sol.** In this context, the word "**ushered**" means **to lead or cause the beginning of something**, especially something new or important. It conveys a sense of **starting or introducing**.

Let's examine each option:

- **(a) obstructed** – Incorrect. This means to block or hinder — the opposite of facilitating something new.
- **(b) eliminated** – Incorrect. Means to remove or get rid of, which does not match the idea of **starting** something.
- **(c) initiated** – **Correct**. This means **to begin, set in motion, or launch something**, which fits perfectly.
- **(d) delayed** – Incorrect. Implies slowing down or postponing — again, the opposite of **ushering in** progress.
- **(e) dissolved** – Incorrect. Means to disintegrate or end something, not to start or introduce.

Thus, the best synonym for "ushered" in this context is **initiated**.

**S31. Ans.(c)**

**Sol. Explanation:**

The sentence highlights how the diplomatic efforts failed to reduce mistrust or genuinely resolve the underlying hostility.

**Mitigate** fits because it means to lessen the intensity or seriousness of something harmful, like mistrust.

**Dismantle** works well to describe a deliberate and systematic process of breaking down deeply rooted hostility.

This combination is often found in editorials on peace talks and international diplomacy.

**Vocabulary Meanings:**

- **Mask:** To cover or disguise something so it is not easily seen or understood (छुपाना).
- **Perpetuate:** To make something continue indefinitely, especially something negative like a conflict or stereotype (स्थायी करना).

- **Address:** To think about and begin to deal with a problem or issue in a practical or serious way (समाधान करना).
- **Rekindle:** To revive or reignite something that was previously diminished or extinguished, often feelings or tensions (फिर से प्रज्वलित करना).
- **Mitigate:** To make something bad less severe, serious, or painful, such as risk, conflict, or mistrust (कम करना).
- **Dismantle:** To take something apart methodically, especially systems or organizations, often to end or eliminate them (विघटित करना).
- **Conceal:** To hide or keep something secret deliberately so it is not discovered or known (छिपाना).
- **Ignite:** To set off or provoke something strongly, especially emotions, violence, or debate (भड़काना).
- **Fabricate:** To invent or make up something falsely, usually with the intent to deceive (गढ़ना).
- **Intensify:** To increase in degree or strength, especially something negative like conflict or effort (तेज़ करना).

**S32. Ans.(c)**

**Sol. Explanation:**

The sentence refers to how economic benefits in urban areas are not resulting in corresponding rural gains.

**Translate** here means to convert or result in a practical outcome, which hasn't happened.

**Ossify** metaphorically refers to a dynamic problem becoming permanent and resistant to change — a term frequently used in economic and institutional analysis.

**Vocabulary Meanings:**

- **Catalyse:** To cause or accelerate a change or reaction, especially a significant one in a process or system (प्रेरित करना या तेज़ करना).
- **Escalate:** To increase or intensify rapidly, often used for conflicts, prices, or problems (बढ़ जाना या तीव्र होना).
- **Justify:** To show or prove something to be right or reasonable, especially decisions or actions (औचित्य सिद्ध करना).
- **Collapse:** To fall down or break down completely due to failure or pressure, often referring to systems or structures (ढह जाना या बिखरना).
- **Translate:** To turn one form of outcome into another, such as converting ideas into action or growth into benefit (परिणाम देना या रूपांतरित करना).
- **Ossify:** To become rigid or fixed, especially in attitude, structure, or system, implying loss of flexibility (जड़ हो जाना).
- **Induce:** To cause something to happen or to bring about a particular effect, often used for actions, feelings, or processes (उत्पन्न करना).
- **Fade:** To gradually lose brightness, strength, or visibility, typically used for colors, hopes, or memories (मंद पड़ना या धीरे-धीरे गायब होना).
- **Inflect:** To change the form of a word (especially in grammar) to express tense, mood, number, etc., or to alter the tone or pitch of voice slightly. (रूप बदलना / स्वर मोड़ना).
- **Evolve:** To gradually develop or change into a more advanced or different form over time (विकसित होना).

S33. Ans.(a)

**Sol. Explanation:**

This sentence discusses how the leader's speech failed to convince a wider audience and may have reduced the party's credibility.

**Persuade** is suitable because it refers to attempting to convince people of one's capability.

**Erode** fits because it describes a slow decline or weakening — in this case, of political appeal. This pair reflects how editorial writers critique rhetorical excess and its electoral consequences.

**Vocabulary Meanings:**

- **Persuade:** To convince someone to believe or do something through reasoning or appeal (राज़ी करना).
- **Erode:** To gradually wear away or diminish something, especially reputation, support, or credibility (घिस जाना या क्षीण होना).
- **Distract:** To divert someone's attention away from something important or central (ध्यान भटकाना).
- **Amplify:** To increase the strength, volume, or intensity of something, including messages or effects (बढ़ाना या विस्तार देना).
- **Polarise:** To cause a division into two sharply contrasting groups or opinions, especially in politics or ideology (ध्रुवीकरण करना).
- **Consolidate:** To strengthen or bring together elements into a single more effective or coherent whole (मजबूत बनाना या समेकित करना).
- **Dissuade:** To persuade someone not to take a particular course of action (मना करना या रोकना).
- **Bolster:** To support, reinforce, or strengthen something physically or emotionally (सहारा देना या मज़बूती देना).
- **Impress:** To make a strong positive impact on someone through actions, words, or appearance (प्रभावित करना).
- **Enshrine:** To preserve or protect something as sacred or important, often used in laws or principles (स्थायी रूप से सुरक्षित करना).

S34. Ans.(d)

**Sol.** The original sentence begins incorrectly with "**No Sooner**", which is a correlative conjunction typically used with "**than**" (e.g., *No sooner had he arrived than the meeting began*), and therefore it is grammatically incorrect in this context.

- **Option (I): "Rarely have employees"** – This is correct. It follows the rule of **inversion** after negative adverbs (e.g., rarely, seldom, never), which is a formal structure.
- **Option (II): "Employees have rarely"** – This is also correct. It uses a standard word order and places the adverb of frequency appropriately. It is less formal but still grammatically sound.
- **Option (III): "Employees have been scarcely"** – This is incorrect. "Scarcely" generally modifies the verb directly and is often used with **perfect tense in an inverted structure** (e.g., *Scarcely had they left when the storm began*). Here, the phrase is awkward and unidiomatic.

Hence, both (I) and (II) are acceptable, making **option (d)** the correct answer.

S35. Ans.(c)

Sol.

- "Sprig" is a noun that refers to a **small stem or twig** of a plant, often with leaves or flowers. It can also metaphorically or decoratively be used in expressions referring to a **small part of a plant** used in cooking, rituals, or nature.

• **Sentence A – Correct**

A **sprig of rosemary** is a common phrase in cooking and home decor. The word *sprig* here correctly refers to a small stem of the rosemary herb.

✓ Usage: *She garnished the soup with a sprig of thyme.*

• **Sentence B – Incorrect**

Medals are not plant-based or natural growths; using *sprig* here is incorrect. A group of medals is not called a "sprig"; words like "set", "collection", or "row" would be accurate.

✗ Incorrect metaphor: *a sprig of medals* (doesn't make sense)

• **Sentence C – Correct**

Describing a **young shoot or growth** emerging from the soil is a textbook use of *sprig*. It reflects the idea of new life, which aligns perfectly with both literal and poetic language.

✓ Usage: *Tiny sprigs poked through the cracked earth after the monsoon rains.*

✓ **Additional Examples of Correct Usage:**

1. **Culinary Context:**

2. *He added a sprig of mint to the lemonade for a fresh aroma.*

3. (Here, *sprig* refers to a small piece of a mint plant — correct usage.)

4. **Decorative/Nature Context:**

5. *The bride's hair was adorned with a sprig of lavender tucked behind her ear.*

6. (Again, *sprig* means a small stem of a flower — used correctly.)

S36. Ans.(b)

Sol. The sentence is an example of a **third conditional** sentence, used to express a hypothetical situation in the past that did not happen. In standard grammar, the correct structure is:

**If + past perfect, would have + past participle**

- The original sentence incorrectly uses "**If the team would have submitted,**" which is **grammatically incorrect**.
- (I) "**If the team had submitted**" — **Correct** structure of third conditional.
- (II) "**Had the team submitted**" — **Correct**, this is an **inverted form** of the third conditional and is also grammatically accurate.
- (III) "**If the team have submitted**" — **Incorrect**, this is present perfect, which is incompatible with the conditional structure required here.

Hence, both (I) and (II) are valid corrections.

S37. Ans.(c)

Sol. The central argument revolves around the **need to shift recruitment** away from language fluency and towards **demonstrable job skills**, especially to include non-native speakers.

- (a) is incorrect because it ignores the passage's critique of traditional interviews.
- (b) contradicts the author's suggestion to minimize dependence on language.
- (d) goes too far—eliminating interviews entirely is not suggested.
- (e) is the opposite of the passage's recommendation.

S38. Ans.(c)

**Sol.** The author implies that **language fluency is not necessarily a true indicator of competence**, especially in technical or hands-on roles, and that an overreliance on communication skills can be a barrier.

- (a) is rejected in the passage.
- (b) is extreme; language still plays a role but should not be overemphasized.
- (d) is not supported by the text.
- (e) oversimplifies and contradicts the solution-focused tone.

S39. Ans.(d)

**Sol. Statement (I)** is correct as the passage explicitly critiques traditional interviews for depending heavily on communication skills, which creates a **barrier** for non-native speakers.

**Statement (II)** is also correct. The passage suggests that investing in language development helps companies leverage their **multilingual workforce** to serve a **diverse customer base**.

**Statement (III)** is incorrect because the passage **opposes reliance on language testing**, advocating instead for **task-based skill assessments**.

S40. Ans.(e)

**Sol.** The sentence discusses assessing candidates based on how well they perform a task. The word "**evaluated**" fits best in this context, as it means **assessed or judged**, which aligns with the idea of measuring **proficiency in execution**.

- (a) **commanded** means ordered or directed, which doesn't make sense here.
- (b) **regulated** means controlled or governed by rules, not appropriate in the context of assessment.
- (c) **fostered** means encouraged or nurtured, not suitable when referring to assessment.
- (d) **declined** means rejected or reduced, which is contextually incorrect.
- (e) **evaluated** correctly completes the sentence as it implies **assessment of performance**.

S41. Ans.(e)

**Sol.**

**For shop A**, sold mangoes = sold apples + 16

$$\text{So, sold mangoes} = \frac{80+16}{2} = 48$$

$$\text{And, sold apples} = 80 - 48 = 32$$

$$\frac{32}{48} = \frac{p}{p+1}$$

$$2p + 2 = 3p$$

$$p = 2$$

$$\text{For shop B, sold apples} = 50 \times \frac{3}{10} = 15$$

$$\text{Sold mangoes} = 50 - 15 = 35$$

$$\text{For shop C, } 0.5 : 2 = 1 : 4$$

$$\text{Sold apples} = 120 \times \frac{1}{5} = 24$$

$$\text{Sold mangoes} = 120 - 24 = 96$$

$$\text{Total number of mangoes sold by shops A \& C} = 48 + 96 = 144$$

$$\text{Total number of apples sold by shops A \& B} = 32 + 15 = 47$$

$$\text{Required difference} = 144 - 47 = 97$$

**S42. Ans.(b)**

**Sol.**

**For shop A,** sold mangoes = sold apples + 16

$$\text{So, sold mangoes} = \frac{80+16}{2} = 48$$

$$\text{And, sold apples} = 80 - 48 = 32$$

$$\frac{32}{48} = \frac{p}{p+1}$$

$$2p + 2 = 3p$$

$$p = 2$$

$$\text{For shop B, sold apples} = 50 \times \frac{3}{10} = 15$$

$$\text{Sold mangoes} = 50 - 15 = 35$$

$$\text{For shop C, } 0.5 : 2 = 1 : 4$$

$$\text{Sold apples} = 120 \times \frac{1}{5} = 24$$

$$\text{Sold mangoes} = 120 - 24 = 96$$

$$\text{Total apples sold by A, C and D} = 32 \times 3 = 96$$

$$\text{Total apples sold by D} = 96 - (32+24) = 40$$

$$\text{Total mangoes sold by D} = 96 \times \frac{5}{8} = 60$$

$$\text{ATQ, } \frac{40}{60} = \frac{2}{q}$$

$$20q = 60$$

$$q = 3$$

**S43. Ans.(e)**

**Sol.**

**For shop A,** sold mangoes = sold apples + 16

$$\text{So, sold mangoes} = \frac{80+16}{2} = 48$$

$$\text{And, sold apples} = 80 - 48 = 32$$

$$\frac{32}{48} = \frac{p}{p+1}$$

$$2p + 2 = 3p$$

$$p = 2$$

$$\text{For shop B, sold apples} = 50 \times \frac{3}{10} = 15$$

$$\text{Sold mangoes} = 50 - 15 = 35$$

$$\text{For shop C, } 0.5 : 2 = 1 : 4$$

$$\text{Sold apples} = 120 \times \frac{1}{5} = 24$$

$$\text{Sold mangoes} = 120 - 24 = 96$$

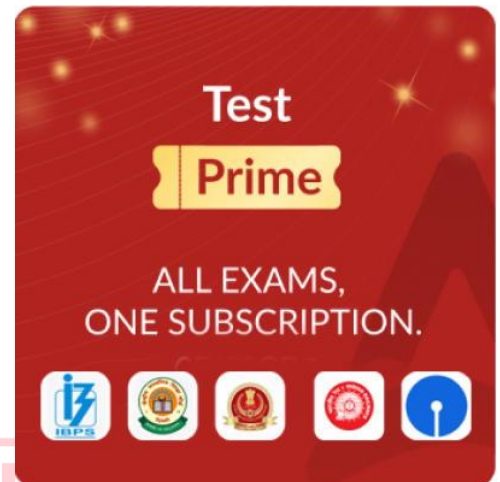
$$\text{Total fruits available (Apples & Mangoes)} = 120 \times \frac{100}{40} = 300$$

$$\text{Unsold mangoes by shop C} = 96 \times \frac{5}{(2+2)} = 120$$

$$\text{Total unsold fruits (Apples & Mangoes) by shop C} = 300 - 120 = 180$$

$$\text{Total unsold apples by shop C} = 180 - 120 = 60$$

$$\text{Required \%} = \frac{60-48}{48} \times 100 = 25\%$$



**S44. Ans.(c)**

**Sol.**

**For shop A,** sold mangoes = sold apples + 16

$$\text{So, sold mangoes} = \frac{80+16}{2} = 48$$

$$\text{And, sold apples} = 80 - 48 = 32$$

$$\frac{32}{48} = \frac{p}{p+1}$$

$$2p + 2 = 3p$$

$$p = 2$$

$$\text{For shop B, sold apples} = 50 \times \frac{3}{10} = 15$$

$$\text{Sold mangoes} = 50 - 15 = 35$$

**For shop C,**  $0.5 : 2 = 1 : 4$

$$\text{Sold apples} = 120 \times \frac{1}{5} = 24$$

$$\text{Sold mangoes} = 120 - 24 = 96$$

$$\text{Total cost price of all apples and mangoes sold by C} = 24 \times 10 + 96 \times 15 = 1680 \text{ Rs.}$$

$$\text{Total selling price of all apples and mangoes sold by C} = 1680 \times \frac{140}{100} = 2352 \text{ Rs.}$$

$$\text{Required profit} = 2352 - 1680 = 672 \text{ Rs.}$$

**S45. Ans.(e)**

**Sol.**

$$100\% = (22+17+X+3+X+8+2X)\%$$

$$100 = 50 + 4X$$

$$50 = 4X$$

$$12.5 = X$$

$$\text{The total students in A} = 8000 \times \frac{22}{100} = 1760$$

$$\text{The total students in B} = 8000 \times \frac{17}{100} = 1360$$

$$\text{The total students in C} = 8000 \times \frac{12.5+3}{100} = 1240$$

$$\text{The total students in D} = 8000 \times \frac{12.5+8}{100} = 1640$$

$$\text{The total students in E} = 8000 \times \frac{2 \times 12.5}{100} = 2000$$

$$\text{The total number of students in schools B and D together} = (1360 + 1640) = 3000$$

$$\text{Required percentage} = \frac{3000-2000}{2000} \times 100 = 50\%$$

**S46. Ans.(d)**

**Sol.**

$$100\% = (22+17+X+3+X+8+2X)\%$$

$$100 = 50 + 4X$$

$$50 = 4X$$

$$12.5 = X$$

$$\text{The total students in A} = 8000 \times \frac{22}{100} = 1760$$

The total students in B =  $8000 \times \frac{17}{100} = 1360$

The total students in C =  $8000 \times \frac{12.5+3}{100} = 1240$

The total students in D =  $8000 \times \frac{12.5+8}{100} = 1640$

The total students in E =  $8000 \times \frac{2 \times 12.5}{100} = 2000$

Let the number of boys in C be g

And the number of girls in C =  $g + 170$

Given,  $g + g + 170 = 1240$

$2g = 1070$

$g = 535$

The number of boys in C = 535

And the number of girls in C =  $535 + 170 = 705$

The number of boys in B =  $230 + 535 = 765$

The number of girls in B =  $1360 - 765 = 595$

Required ratio =  $765 : 595 = 9:7$

**S47. Ans.(a)**

**Sol.**

$100\% = (22+17+X+3+X+8+2X)\%$

$100 = 50 + 4X$

$50 = 4X$

$12.5 = X$

The total students in A =  $8000 \times \frac{22}{100} = 1760$

The total students in B =  $8000 \times \frac{17}{100} = 1360$

The total students in C =  $8000 \times \frac{12.5+3}{100} = 1240$

The total students in D =  $8000 \times \frac{12.5+8}{100} = 1640$

The total students in E =  $8000 \times \frac{2 \times 12.5}{100} = 2000$

The total number of students in school F =  $1.25 \times 1240 = 1550$

The number of boys in school F =  $1550 \times \frac{19}{31} = 950$

The number of girls in school F =  $1550 - 950 = 600$

The number of girls in school E =  $1935 - 600 = 1335$

The number of boys in school E =  $2000 - 1335 = 665$

Required difference =  $950 - 665 = 285$

**S48. Ans.(e)**

**Sol.**

$100\% = (22+17+X+3+X+8+2X)\%$

$100 = 50 + 4X$

$50 = 4X$

$12.5 = X$

The total students in A =  $8000 \times \frac{22}{100} = 1760$

The total students in B =  $8000 \times \frac{17}{100} = 1360$

The total students in C =  $8000 \times \frac{12.5+3}{100} = 1240$

The total students in D =  $8000 \times \frac{12.5+8}{100} = 1640$

The total students in E =  $8000 \times \frac{2 \times 12.5}{100} = 2000$

The number of students in school A who participated in dance =  $\frac{25}{100} \times 1760 = 440$

The number of students in school A who participated in chess =  $1760 - 440 = 1320$

The number of students in school E who participated in chess =  $40 + \frac{1320}{2} = 700$

The number of students in school E who participated in dance =  $2000 - 700 = 1300$

Required average =  $\frac{440+1300}{2} = 870$

**S49. Ans.(d)**

**Sol.**

$100\% = (22+17+X+3+X+8+2X)\%$

$100 = 50 + 4X$

$50 = 4X$

$12.5 = X$

The total students in A =  $8000 \times \frac{22}{100} = 1760$

The total students in B =  $8000 \times \frac{17}{100} = 1360$

The total students in C =  $8000 \times \frac{12.5+3}{100} = 1240$

The total students in D =  $8000 \times \frac{12.5+8}{100} = 1640$

The total students in E =  $8000 \times \frac{2 \times 12.5}{100} = 2000$

Required central angle =  $\frac{17+(12.5+8)}{100} \times 360 = 135$

**S50. Ans.(e)**

**Sol.** Only root of 84 which follow  $a-b = 5$  are 12 and 7

So, equation,  $x^2 - 19x + 84 = 0$

So,  $P = 19$

**Quantity I:**  $2 \times 19 = 38$

**Quantity II:**  $7^2 - 12 + 1 = 49 - 12 + 1 = 38$

So, **Quantity I = Quantity II**

**S51. Ans.(b)**

**Sol.** ATQ,

$$\frac{x+10}{3x+30} = \frac{x}{3x+30} + \frac{1}{6}$$

$$\frac{10}{3x+30} = \frac{1}{6}$$

$$60 = 3x+30$$

$$x = 10$$

**Quantity I:** Total number of yellow marbles in the bag =  $10+20 = 30$

**Quantity II:** 40

So, **Quantity I < Quantity II**

**S52. Ans.(e)**

**Sol. Pattern of series I:**

$$386 \div 2 + 1 = 194$$

$$194 \div 2 + 1 = 98$$

$$98 \div 2 + 1 = 50$$

$$50 \div 2 + 1 = 26$$

$$26 \div 2 + 1 = 14$$

$$14 \div 2 + 1 = 8$$

**Series II:**

$$834 \div 2 + 1 = 418$$

$$P = 418 \div 2 + 1 = 210$$

$$Q = 210 \div 2 + 1 = 106$$

$$R = 106 \div 2 + 1 = 54$$

$$S = 54 \div 2 + 1 = 28$$

$$28 \div 2 + 1 = 15$$

**For I.**  $81 + 1 = 54 + 28$

$$82 = 82 \text{ (it is true)}$$

**For II.**  $2 \times 106 < 210 + \frac{28}{4}$

$$212 < 217 \text{ (it is false)}$$

**For III.**  $\frac{2 \times 210}{15} = 28$

$$28 = 28 \text{ (it is true)}$$

So, only I and III are true

**S53. Ans.(d)**

**Sol. Pattern of series I:**

$$386 \div 2 + 1 = 194$$

$$194 \div 2 + 1 = 98$$

$$98 \div 2 + 1 = 50$$

$$50 \div 2 + 1 = 26$$

$$26 \div 2 + 1 = 14$$

$$14 \div 2 + 1 = 8$$

**Series II:**

$$834 \div 2 + 1 = 418$$

$$P = 418 \div 2 + 1 = 210$$

$$Q = 210 \div 2 + 1 = 106$$

$$R = 106 \div 2 + 1 = 54$$

$$S = 54 \div 2 + 1 = 28$$

$$28 \div 2 + 1 = 15$$

Required answer = 50% of Q + R

$$= \frac{1}{2} \times 106 + 54$$

$$= 53 + 54$$

$$= 107$$

**S54. Ans.(c)**

**Sol. Pattern of series I:**

$$386 \div 2 + 1 = 194$$

$$194 \div 2 + 1 = 98$$

$$98 \div 2 + 1 = 50$$

$$50 \div 2 + 1 = 26$$

$$26 \div 2 + 1 = 14$$

$$14 \div 2 + 1 = 8$$

**Series II:**

$$834 \div 2 + 1 = 418$$

$$P = 418 \div 2 + 1 = 210$$

$$Q = 210 \div 2 + 1 = 106$$

$$R = 106 \div 2 + 1 = 54$$

$$S = 54 \div 2 + 1 = 28$$

$$28 \div 2 + 1 = 15$$

**For I:**  $210 + 54 = 264$  is not an odd number (false)

**For II:**  $210 + 54 = 264$  which is completely divisible by 4 (true)

**For III:**  $54 + 28 < 50$  (false)

**S55. Ans.(e)**

**Sol. Pattern of series I:**

$$16 \times 0.5 + 1 = 9 = A$$

$$9 \times 1 + 1 = 10$$

$$10 \times 2 + 1 = 21$$

$$21 \times 4 + 1 = 85$$

$$85 \times 8 + 1 = 681$$

**Pattern of series II:**

44	52	64	80	B=100	124
+8	+12	+16	+20	+24	
+4	+4	+4	+4		

**For (i):**  $A = 9$  is perfect square (correct)

**For (ii):**  $100 > 10 \times 9$

$100 > 90$  (incorrect)

**For (iii):**  $100 \div (9+1) = 10$  (correct)

**S56. Ans.(c)**

**Sol. Pattern of series I:**

$$16 \times 0.5 + 1 = 9 = A$$

$$9 \times 1 + 1 = 10$$

$$10 \times 2 + 1 = 21$$

$$21 \times 4 + 1 = 85$$

$$85 \times 8 + 1 = 681$$

**Pattern of series II:**

44	52	64	80	B=100	124
+8	+12	+16	+20	+24	
+4	+4	+4	+4		

Required value =  $4 \times 9 + 2 \times 100$

$$= 36 + 200 = 236$$

**S57. Ans.(b)**

**Sol. Pattern of series I:**

$$16 \times 0.5 + 1 = 9 = A$$

$$9 \times 1 + 1 = 10$$

$$10 \times 2 + 1 = 21$$

$$21 \times 4 + 1 = 85$$

$$85 \times 8 + 1 = 681$$

**Pattern of series II:**

$$\begin{array}{ccccccc} 44 & 52 & 64 & 80 & B=100 & 124 \\ +8 & +12 & +16 & +20 & & +24 \\ +4 & +4 & +4 & +4 & & \end{array}$$

**For (i):**  $100+69 = 169$  is a perfect square **(true)**

**For (ii):** 9 is not a prime number **(false)**

**For (iii):**  $100+25 = 125$

25 is factor of 125 **(true)**

**S58. Ans.(b)**

**Sol.**

$$\text{Total students (boys + girls) appeared in exam A} = 900 \times \frac{20}{100} = 180$$

$$\text{Total students (boys + girls) appeared in exam B} = 900 \times \frac{50}{100} = 450$$

$$\text{Total students (boys + girls) appeared in exam C} = 900 - (180 + 450) = 270$$

$$\text{Total students (boys + girls) passed in exam A} = 180 \times \frac{50}{100} = 90$$

$$\text{Total students (boys + girls) passed in exam B} = 450 \times \frac{40}{100} = 180$$

$$\text{Total students (boys + girls) passed in exam C} = 270 \times \frac{60}{100} = 162$$

$$\text{Total number of students who did not pass the exam A} = 180 - 90 = 90$$

$$\text{Total number of students who did not pass the exam B} = 450 - 180 = 270$$

$$\text{Total number of students who did not pass the exam C} = 270 - 162 = 108$$

$$\text{Required average} = \frac{90+270+108}{2}$$

$$= \frac{468}{3} = 156$$

**S59. Ans.(c)**

**Sol.**

$$\text{Total students (boys + girls) appeared in exam A} = 900 \times \frac{20}{100} = 180$$

$$\text{Total students (boys + girls) appeared in exam B} = 900 \times \frac{50}{100} = 450$$

$$\text{Total students (boys + girls) appeared in exam C} = 900 - (180 + 450) = 270$$

$$\text{Total students (boys + girls) passed in exam A} = 180 \times \frac{50}{100} = 90$$

$$\text{Total students (boys + girls) passed in exam B} = 450 \times \frac{40}{100} = 180$$

$$\text{Total students (boys + girls) passed in exam C} = 270 \times \frac{60}{100} = 162$$

**For I.** Total number of students who did not pass the exam  $B = 450 - 180 = 270$

And 270 is multiple of 9 (**correct**)

**For II.**  $90+180 < 180+162$  (**incorrect**)

**For III.**  $\frac{90}{2} = \frac{270}{6}$   
 $45 = 45$  (**correct**)

**S60. Ans.(d)**

**Sol.**

$$\text{Total students (boys + girls) appeared in exam A} = 900 \times \frac{20}{100} = 180$$

$$\text{Total students (boys + girls) appeared in exam B} = 900 \times \frac{50}{100} = 450$$

$$\text{Total students (boys + girls) appeared in exam C} = 900 - (180 + 450) = 270$$

$$\text{Total students (boys + girls) passed in exam A} = 180 \times \frac{50}{100} = 90$$

$$\text{Total students (boys + girls) passed in exam B} = 450 \times \frac{40}{100} = 180$$

$$\text{Total students (boys + girls) passed in exam C} = 270 \times \frac{60}{100} = 162$$

$$\text{Total students who passed the exam D} = 150 \times 3 - (90 + 180) = 180$$

$$\text{Total students who did not pass the exam D} = 180 \times \frac{70}{30} = 420$$

$$\text{Total boys who did not pass the exam D} = \frac{420}{2} = 210$$

$$\text{Total boys who passed exam D} = 180 - 180 \times \frac{40}{100} = 180 - 72 = 108$$

$$\text{Required number} = 210 + 108 = 318$$

**S61. Ans.(b)**

**Sol.**

$$\text{Total students (boys + girls) appeared in exam A} = 900 \times \frac{20}{100} = 180$$

$$\text{Total students (boys + girls) appeared in exam B} = 900 \times \frac{50}{100} = 450$$

$$\text{Total students (boys + girls) appeared in exam C} = 900 - (180 + 450) = 270$$

$$\text{Total students (boys + girls) passed in exam A} = 180 \times \frac{50}{100} = 90$$

$$\text{Total students (boys + girls) passed in exam B} = 450 \times \frac{40}{100} = 180$$

$$\text{Total students (boys + girls) passed in exam C} = 270 \times \frac{60}{100} = 162$$

$$\text{Total girls appeared in exam B} = 450 \times \frac{40}{100} = 180$$

$$\text{Total boys appeared in exam B} = 450 - 180 = 270$$

$$\text{Total passed girls in exam B} = 180 - 80 = 100$$

$$\text{Total passed boys in exam B} = 180 - 100 = 80$$

$$\text{So, boys who did not pass the exam B} = 270 - 80 = 190$$

$$\text{Required difference} = 190 - 100 = 90$$

**S62. Ans.(b)**

**Sol.** Let the present ages of Sonam and Niharika be  $5x + 4$  and  $7x + 4$  years respectively.

Given,

$$\frac{5x + 4 + 12}{7x + 4 + 12} = \frac{9}{11}$$

$$55x + 176 = 63x + 144$$

$$32 = 8x$$

$$4 = x$$

$$X = 5x + 4$$

$$X = 5(4) + 4 = 24$$

$$Y = 7x + 4$$

$$Y = 7(4) + 4 = 32$$

**Quantity I:**  $X - \frac{4Y}{8} = 24 - \frac{4 \times 32}{8}$

$$= 24 - 16$$

$$= 8$$

**Quantity II:**  $0.2Y + 1.5X$

$$= 0.2 \times 32 + 1.5 \times 24$$

$$= 6.4 + 36$$

$$= 42.4$$

So, Quantity I < Quantity II

**S63. Ans.(b)**

**Sol.**  $4b + 2a = 24 \dots (i)$

And

$$\frac{(6b - a)}{7} = 4$$

$$6b - a = 28$$

$$6b - 28 = a$$

a value put in (i)

$$4b + 2(6b - 28) = 24$$

$$4b + 12b - 56 = 24$$

$$16b = 80$$

$$b = 5$$

$$6b - 28 = a$$

$$30 - 28 = a$$

$$2 = a$$

**Quantity I:**  $2a = 4$

**Quantity II:**  $b = 5$

So, Quantity I < Quantity II

**S64. Ans.(c)**

**Sol.** Given,

$$P + Q + R = 48 \dots (i)$$

And

$$S - 9 = \frac{Q+R}{2}$$

$$2S - 18 = Q + R$$

Q + R value put in (i)

$$P + 2S - 18 = 48$$

$$2S + P = 66$$

**S65. Ans.(e)**

**Sol. I:**  $3x^2 - 16x + 5 = 0$

$$3x^2 - 15x - x + 5 = 0$$

$$3x(x - 5) - 1(x - 5) = 0$$

$$(x - 5)(3x - 1) = 0$$

$$x = 5, 1/3$$

**II:**  $2y^2 - 7y + 3 = 0$

$$2y^2 - 6y - y + 3 = 0$$

$$2y(y - 3) - 1(y - 3) = 0$$

$$(2y - 1)(y - 3) = 0$$

$$y = 1/2, 3$$

So, relation cannot be determined.

**S66. Ans.(e)**

**Sol.**

Let the radius of the sphere be R cm

Given,

$$4 \times \frac{22}{7} \times r \times r = 5544$$

$$r \times r = 441$$

$$r = 21$$

$$\text{Side of the cube} = 21 \times \frac{64}{336} = 4 \text{ cm}$$

Let n number of cubes formed

ATQ,

$$\frac{1}{2} \times \frac{4}{3} \times \frac{22}{7} \times 21 \times 21 \times 21 = n \times 4 \times 4 \times 4$$

$$n = 303.1875$$

Maximum number of cubes formed = 303

**S67. Ans.(e)**

**Sol.**

$$\text{I: } 0.5x^2 + \sqrt{144x^2} + \sqrt{169x^2} + 3.5x = \sqrt[3]{343} + 22$$

$$\frac{x^2}{2} + 12x + 13x + 3.5x = 29$$

$$\frac{x^2}{2} + 28.5x = 29$$

$$x^2 + 57x - 58 = 0$$

$$x^2 + 58x - x - 58 = 0$$

$$x(x+58) - 1(x+58) = 0$$

$$(x+58)(x-1) = 0$$

$$x = -58, 1$$

$$\text{II: } 9y^2 + 16y(0.5 \times \sqrt{36}) - \sqrt{289} = 0$$

$$9y^2 + 48y - 17 = 0$$

$$9y^2 + 51y - 3y - 17 = 0$$

$$3y(3y + 17) - 1(3y + 17) = 0$$

$$(3y - 1)(3y + 17) = 0$$

$$y = 1/3, -17/3$$

So, relation cannot be determined

**S68. Ans.(e)**

**Sol. I:**  $3x^2 - 5x - 2 = 0$

$$3x^2 - 3x - 2x - 2 = 0$$

$$3x(x-1) - 2(x-1) = 0$$

$$(x-1)(3x-2) = 0$$

$$x = 1, 2/3$$

$$\text{II: } 2y^2 - 3y + 1 = 0$$

$$2y^2 - 2y - y + 1 = 0$$

$$2y(y-1) - 1(y-1) = 0$$

$$(2y-1)(y-1) = 0$$

$$y = 1/2, 1$$

So, relation cannot be determined

**S69. Ans.(a)**

**Sol.**

In vessel P

$$\text{Milk} = 56 \times \frac{3}{4} = 42 \text{ liters}$$

$$\text{Water} = 56 - 42 = 14 \text{ litres}$$

Let the quantity of mixture in vessel Q be  $20x$  litres

$$\text{Milk} = 20x \times \frac{60}{100} = 12x \text{ liters}$$

$$\text{Water} = 20x - 12x = 8x \text{ litres}$$

$$\text{Quantity of mixture taken out from vessel Q} = \frac{25}{100} \times 20x = 5x \text{ liters}$$

$$\text{Quantity of mixture taken out from vessel P} = \frac{60}{100} \times 56 = 33.6 \text{ litres}$$

ATQ,

$$\frac{42 \times \frac{60}{100} + 12x \times \frac{25}{100}}{14 \times \frac{60}{100} + 8x \times \frac{25}{100}} = \frac{141}{52}$$

$$52(25.2 + 3x) = 141(8.4 + 2x)$$

$$1310.4 + 156x = 1184.4 + 282x$$

$$x = 1$$

$$\text{Required answer} = 12x \times \frac{25}{100} = 3x$$

$$= 3x = 3 \text{ litres}$$

### S70. Ans.(b)

**Sol.**  $Q = c = \text{multiple of } 2$

$P = a = \text{prime number}$

Given,  $P \times Q = 18$

Possible values of  $P = 2, 3, 5, 7, 9, 11, 13 \text{ \& } 17$

Only  $P = 3$  and  $Q = 6$  is satisfy the condition

$$a \frac{b}{c} = 3 \frac{b}{6}$$

Also given, product of the denominator and numerator is 24.

$$b = 24/6 = 4$$

### S71. Ans.(e)

**Sol.** P and Q together can complete the work

$$= \frac{9}{\left(\frac{3}{2}\right)} = 6 \text{ days}$$

R (working twice of efficiency) and P together can complete the work = 5 days

We have no more information

So, can't be determined

### S72. Ans.(a)

**Sol.**

$$\text{I: } \frac{(5x)^2}{4} = 10x - \sqrt{9}$$

$$\frac{25x^2}{4} = 10x - 3$$

$$25x^2 - 40x + 12 = 0$$

$$25x^2 - 30x - 10x + 12 = 0$$

$$5x(5x - 6) - 2(5x - 6) = 2$$

$$(5x - 6)(5x - 2) = 0$$

$$x = 6/5, 2/5$$

$$\text{II: } 169(y)^2 - \sqrt[3]{64} + 2(10)y = 144y^2 + 110y - 3^4$$

$$169y^2 - 4 + 20y = 144y^2 + 110y - 81$$

$$25y^2 - 90y + 77 = 0$$

$$25y^2 - 35y - 55y + 77 = 0$$

$$5y(5y - 7) - 11(5y - 7) = 0$$

$$(5y - 7)(5y - 11) = 0$$

$$y = 7/5, 11/5$$

**Quantity I:** The value of  $y = 7/5$  &  $11/5$

**Quantity II:** The value of  $x = 6/5$  &  $2/5$

So, Quantity I > Quantity II

**S73. Ans.(b)**

**Sol.** Let the length of the train and length of the platform be  $l$  meter and  $p$  meters respectively.

Also let the speed of the train be  $5x$  m/sec.

Given,

$$\frac{l + 0.5p}{5x \times \frac{40}{100}} = 30$$

$$l + 0.5p = 30 \times 2x$$

$$l + 0.5p = 60x \dots (i)$$

And

$$\frac{l + 3l}{5x} = 24$$

$$4l = 120x$$

$$l = 30x$$

$$30x + 0.5p = 60x \quad \{l \text{ value put in (i)}\}$$

$$0.5p = 30x$$

$$p = 60x$$

Required ratio =  $60x : 5x$

$$12:1$$

S74. Ans.(b)

Sol.

**For country Q**

Number of visas granted = 4000

Visas granted to males =  $4000 \times \frac{75}{100} = 3000$

Visas granted to females =  $4000 - 3000 = 1000$

**For country R**

Number of visas granted = 6000

Visas granted to males =  $6000 \times \frac{80}{100} = 4800$

Visas granted to females =  $6000 - 4800 = 1200$

Let the total number of males rejected for visas be  $3a$

The total number of females rejected for visas =  $3a \times \frac{5}{3} = 5a$

ATQ,

$$5a - 3a = \frac{1}{6} \times 6000$$

$$2a = 1000$$

$$a = 500$$

$$\text{Required answer} = 4000 + (3a + 5a)$$

$$= 4000 + 8a$$

$$= 4000 + 8(500)$$

$$= 4000 + 4000 = 8000$$



S75. Ans.(c)

Sol.

**For country Q**

Number of visas granted = 4000

Visas granted to males =  $4000 \times \frac{75}{100} = 3000$

Visas granted to females =  $4000 - 3000 = 1000$

**For country R**

Number of visas granted = 6000

$$\text{Visas granted to males} = 6000 \times \frac{80}{100} = 4800$$

$$\text{Visas granted to females} = 6000 - 4800 = 1200$$

Total number of applications received from P be  $100x$

$$\text{Number of visas granted from P} = 100x \times \frac{60}{100} = 60x$$

$$\text{Number of visas granted to males from P} = 60x \times \frac{40}{100} = 24x$$

$$\text{Number of visas granted to females from P} = 60x - 24x = 36x$$

$$\text{Given, } 36x = 7200$$

$$x = 200$$

$$\text{Number of visas rejected from P} = 100x - 60x = 40x$$

$$40x = 40 \times 200 = 8000$$

$$\text{Required difference} = 8000 - 3000 = 5000$$

**S76. Ans.(e)**

**Sol.**

**For country Q**

$$\text{Number of visas granted} = 4000$$

$$\text{Visas granted to males} = 4000 \times \frac{75}{100} = 3000$$

$$\text{Visas granted to females} = 4000 - 3000 = 1000$$

**For country R**

$$\text{Number of visas granted} = 6000$$

$$\text{Visas granted to males} = 6000 \times \frac{80}{100} = 4800$$

$$\text{Visas granted to females} = 6000 - 4800 = 1200$$

$$\text{X type of visas granted to males} = \frac{7}{12} \times 4800 = 2800$$

$$\text{Y type of visas granted to males} = \frac{5}{12} \times 4800 = 2000$$

$$\text{Y type of visas granted to females} = 2000/5 = 400$$

$$\text{X type of visas granted to females} = 1200 - 400 = 800$$

$$\text{Required ratio} = (2800 + 800) : (2000 + 400)$$

$$= 3600 : 2400$$

$$= 3 : 2$$

S77. Ans.(c)

Sol.

**For country Q**

Number of visas granted = 4000

$$\text{Visas granted to males} = 4000 \times \frac{75}{100} = 3000$$

$$\text{Visas granted to females} = 4000 - 3000 = 1000$$

**For country R**

Number of visas granted = 6000

$$\text{Visas granted to males} = 6000 \times \frac{80}{100} = 4800$$

$$\text{Visas granted to females} = 6000 - 4800 = 1200$$

$$\text{The total number of visas granted from S} = 500 + \frac{4000+6000}{2} = 5500$$

$$\text{The number of visas granted to males from S} = 2 \times (3000 - 1000) = 4000$$

$$\text{Required answer} = 5500 - 4000 = 1500$$

S78. Ans.(a)

Sol.

**For country Q**

Number of visas granted = 4000

$$\text{Visas granted to males} = 4000 \times \frac{75}{100} = 3000$$

$$\text{Visas granted to females} = 4000 - 3000 = 1000$$

**For country R**

Number of visas granted = 6000

$$\text{Visas granted to males} = 6000 \times \frac{80}{100} = 4800$$

$$\text{Visas granted to females} = 6000 - 4800 = 1200$$

$$\begin{aligned} \text{The total number of visas granted from all three countries} &= 3.5 \times 4800 \\ &= 16800 \end{aligned}$$

$$\text{The total number of visas granted from P} = 16800 - 4000 - 6000 = 6800$$

$$\text{Total number of visas granted to females in P} = 6800 \times \frac{60}{100} = 4080$$

$$\text{Required difference} = 4080 - 1000 = 3080$$

**S79. Ans.(a)**

**Sol.** Let the total number of boys who played hockey and the total number of girls who played football be  $5x$  and  $3x$  respectively.

The total number of boys who played volleyball =  $2 \times 3x = 6x$

The number of girls who played volleyball =  $6x - 30$

The total number of boys and girls who played hockey together is 160

The total number of girls who played hockey =  $160 - 5x$

The total number of boys who played football =  $1.25 \times (160 - 5x)$

=  $200 - 6.25x$

Given,

$$5x + 6x + 200 - 6.25x = 295$$

$$4.75x = 95$$

$$x = 20$$

Sports	Boys	Girls	Total
Hockey	100	60	160
Football	75	60	135
Volleyball	120	90	210

$$\text{Required percentage} = \frac{90 - 75}{75} \times 100 = 20\%$$

**S80. Ans.(b)**

**Sol.** Let the total number of boys who played hockey and the total number of girls who played football be  $5x$  and  $3x$  respectively.

The total number of boys who played volleyball =  $2 \times 3x = 6x$

The number of girls who played volleyball =  $6x - 30$

The total number of boys and girls who played hockey together is 160

The total number of girls who played hockey =  $160 - 5x$

The total number of boys who played football =  $1.25 \times (160 - 5x)$

=  $200 - 6.25x$

Given,

$$5x + 6x + 200 - 6.25x = 295$$

$$4.75x = 95$$

$$x = 20$$

Sports	Boys	Girls	Total
Hockey	100	60	160
Football	75	60	135
Volleyball	120	90	210

$$\text{Required ratio} = 210 : (100 + 75)$$

$$= 210 : 175$$

$$= 6:5$$

**S81. Ans.(c)**

**Sol.** Let the total number of boys who played hockey and the total number of girls who played football be  $5x$  and  $3x$  respectively.

The total number of boys who played volleyball =  $2 \times 3x = 6x$

The number of girls who played volleyball =  $6x - 30$

The total number of boys and girls who played hockey together is 160

The total number of girls who played hockey =  $160 - 5x$

The total number of boys who played football =  $1.25 \times (160 - 5x)$   
 $= 200 - 6.25x$

Given,

$$5x + 6x + 200 - 6.25x = 295$$

$$4.75x = 95$$

$$x = 20$$

Sports	Boys	Girls	Total
Hockey	100	60	160
Football	75	60	135
Volleyball	120	90	210

$$\text{Required difference} = (60 + 60 + 90) - 135 = 75$$

**S82. Ans.(c)**

**Sol.** Let the total number of boys who played hockey and the total number of girls who played football be  $5x$  and  $3x$  respectively.

The total number of boys who played volleyball =  $2 \times 3x = 6x$

The number of girls who played volleyball =  $6x - 30$

The total number of boys and girls who played hockey together is 160

The total number of girls who played hockey =  $160 - 5x$

The total number of boys who played football =  $1.25 \times (160 - 5x)$   
 $= 200 - 6.25x$

Given,

$$5x + 6x + 200 - 6.25x = 295$$

$$4.75x = 95$$

$$x = 20$$

Sports	Boys	Girls	Total
Hockey	100	60	160
Football	75	60	135
Volleyball	120	90	210

The total number of boys who played chess =  $1.2 \times 60 = 72$

The total number of girls who played chess =  $2 \times 75 = 150$

$$\text{Required difference} = 150 - 72 = 78$$

**S83. Ans.(d)**

**Sol.** Let the total number of boys who played hockey and the total number of girls who played football be  $5x$  and  $3x$  respectively.

The total number of boys who played volleyball =  $2 \times 3x = 6x$

The number of girls who played volleyball =  $6x - 30$

The total number of boys and girls who played hockey together is 160

The total number of girls who played hockey =  $160 - 5x$

The total number of boys who played football =  $1.25 \times (160 - 5x)$

=  $200 - 6.25x$

Given,

$$5x + 6x + 200 - 6.25x = 295$$

$$4.75x = 95$$

$$x = 20$$

Sports	Boys	Girls	Total
Hockey	100	60	160
Football	75	60	135
Volleyball	120	90	210

$$\text{Total number of girls who played cricket} = \frac{75}{15} \times 11 = 55$$

$$\text{Total number of boys and girls together who played cricket} = \frac{60}{100} \times 210 = 126$$

$$\text{Required answer} = 126 - 55 = 71$$

**S84. Ans.(d)**

**Sol.**

$$\frac{40}{100} \times 120 + \frac{1}{5} \times 85 - ? = 42$$

$$48 + 17 - ? = 42$$

$$? = 23$$

**S85. Ans.(c)**

**Sol.**

$$196 - ?^2 + 64 = 235$$

$$?^2 = 260 - 235$$

$$? = 5$$

**S86. Ans.(a)**

**Sol.**

$$\frac{?}{100} \times 3200 - \frac{8}{7} \times 42 = 400$$

$$? \times 32 = 448$$

$$? = 14$$

**S87. Ans.(e)**

**Sol.**

$$\frac{832}{8} \times \frac{5}{?} = 13$$

$$? = 40$$

**S88. Ans.(b)**

**Sol.**

$$\sqrt{?} + \frac{25}{100} \times 96 \times 15 = 361$$

$$\sqrt{?} = 361 - 360$$

$$? = 1$$

**S89. Ans.(b)**

**Sol.** Let the unit and tens digit be y and x respectively.

Original number =  $10x + y$

From A:

$$x + y = 21 \text{ and } xy = 110$$

From B:

$$x + y = 5 \text{ and}$$

$$10x + y - (10y + x) = 27$$

From B alone, it can be solved

**S90. Ans.(d)**

**Sol.** Let the present age father and his son be x years and y years respectively.

From A,

$$\frac{x}{y} = \frac{8}{5} \text{ and } \frac{x-12}{y-12} = \frac{5}{2}$$

From B,

$$x - y = 24 \text{ and } xy = 256$$

Therefore, either statement A or statement B by itself is sufficient.

**S91. Ans.(c)**

**Sol.** I is correct because the policy's aim is to increase female leadership, indicating a move toward gender equality.

III is correct as critics highlight the need for childcare and transportation to make the policy feasible.

II is not directly supported by the statement — it doesn't say companies previously had no requirement at all.

**S92. Ans.(d)**

**Sol. Explanation:**

(d) is the only accurate inference. It reflects the government's push for AI and highlights ongoing concerns about weak regulations.

(a) is incorrect: The statement only mentions a focus, not actual widespread improvements.

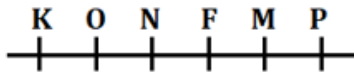
(b) is incorrect: The passage clearly states there's a lack of strong regulations.

(c) is incorrect: Civil rights groups' concerns prove that not everyone is fully convinced.

(e) is incorrect: Because it wrongly implies regulations are already strong.

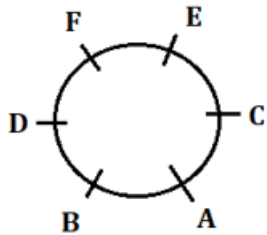
**S93. Ans.(d)**

**Sol.** From II: F is second to the right of O.



**S94. Ans.(c)**

**Sol.** From both I and II: D sits immediate right of F.



**S95. Ans.(b)**

**Sol.** From I: P lives on 4<sup>th</sup> floor.

Floors	Persons
6	L
5	M
4	P
3	K
2	O
1	N

**S96. Ans.(c)**

**Sol.**

Months	Dates	Persons	Cities
January	7	P	Delhi
	14	N	Jaipur
	28	O	Shimla
April	7	L	Surat
	14	Q	Ambala
	28	M	Patna
October	7	K	Pune
	14	S	Agra
	28	R	Lucknow

**S97. Ans.(a)**

**Sol.**

Months	Dates	Persons	Cities
January	7	P	Delhi
	14	N	Jaipur
	28	O	Shimla
April	7	L	Surat
	14	Q	Ambala
	28	M	Patna
October	7	K	Pune
	14	S	Agra
	28	R	Lucknow

S98. Ans.(e)

Sol.

Months	Dates	Persons	Cities
January	7	P	Delhi
	14	N	Jaipur
	28	O	Shimla
April	7	L	Surat
	14	Q	Ambala
	28	M	Patna
October	7	K	Pune
	14	S	Agra
	28	R	Lucknow

S99. Ans.(e)

Sol.

Months	Dates	Persons	Cities
January	7	P	Delhi
	14	N	Jaipur
	28	O	Shimla
April	7	L	Surat
	14	Q	Ambala
	28	M	Patna
October	7	K	Pune
	14	S	Agra
	28	R	Lucknow

S100. Ans.(d)

Sol.

Months	Dates	Persons	Cities
January	7	P	Delhi
	14	N	Jaipur
	28	O	Shimla
April	7	L	Surat
	14	Q	Ambala
	28	M	Patna
October	7	K	Pune
	14	S	Agra
	28	R	Lucknow

S101. Ans.(e)

Sol. Logic Explanation:

**Symbol:** If number of letters in the word is odd, then it will be coded as \$

If the number of letters in the word are even, then it will be coded as #

**Numbers:** Total number of letters in the word + Number of vowels in that word

**Letters:** Second succeeding letter of second letter from right end of the word

\$13K

**S102. Ans.(d)**

**Sol.** Logic Explanation:

**Symbol:** If number of letters in the word is odd, then it will be coded as \$

If the number of letters in the word are even, then it will be coded as #

**Numbers:** Total number of letters in the word + Number of vowels in that word

**Letters:** Second succeeding letter of second letter from right end of the word

\$7X #7J

**S103. Ans.(c)**

**Sol.** Logic Explanation:

**Symbol:** If number of letters in the word is odd, then it will be coded as \$

If the number of letters in the word are even, then it will be coded as #

**Numbers:** Total number of letters in the word + Number of vowels in that word

**Letters:** Second succeeding letter of second letter from right end of the word

Glory

**S104. Ans.(a)**

**Sol.** Logic Explanation:

**Symbol:** If number of letters in the word is odd, then it will be coded as \$

If the number of letters in the word are even, then it will be coded as #

**Numbers:** Total number of letters in the word + Number of vowels in that word

**Letters:** Second succeeding letter of second letter from right end of the word

#8V

**S105. Ans.(c)**

**Sol.** Logic Explanation:

**Symbol:** If number of letters in the word is odd, then it will be coded as \$

If the number of letters in the word are even, then it will be coded as #

**Numbers:** Total number of letters in the word + Number of vowels in that word

**Letters:** Second succeeding letter of second letter from right end of the word

Both I and III are correct

**S106. Ans.(d)**

**Sol.** Meaningful word formed – Ripe, Pier

**S107. Ans.(c)**

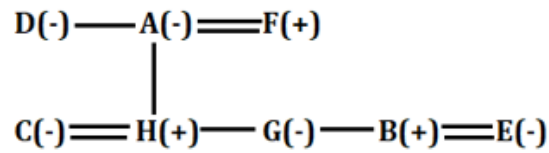
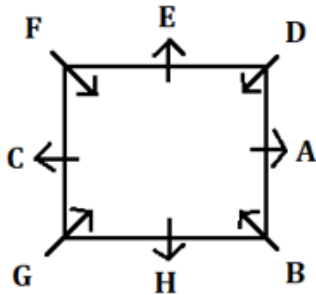
**Sol.** (c) matches the statement about “interactive lessons and digital content” improving learning. (a), (b), and (d) are not mentioned or are outside the scope of the information given.

**S108. Ans.(a)**

**Sol.** Rising global temperatures (Statement I) are directly responsible for the melting of ice caps and sea level rise (Statement II). Hence, Statement I is the cause, and Statement II is the effect.

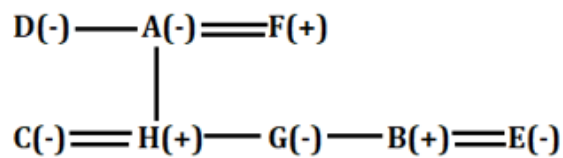
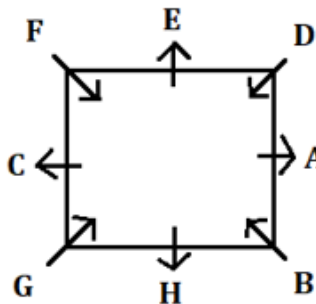
S109. Ans.(e)

Sol.



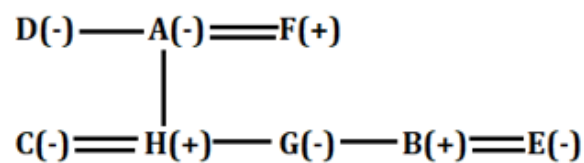
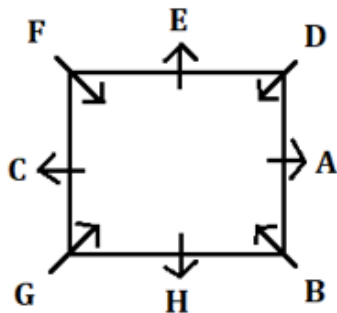
S110. Ans.(d)

Sol.



S111. Ans.(e)

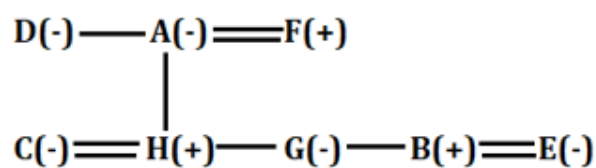
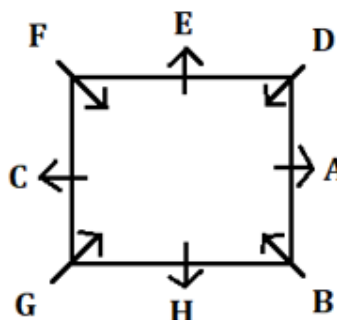
Sol.



7

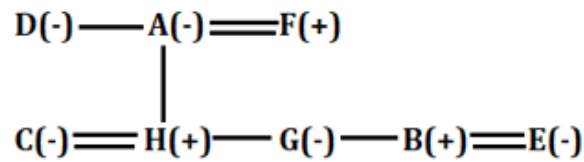
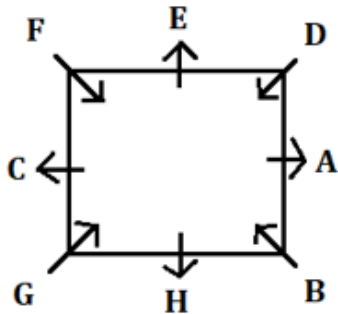
S112. Ans.(b)

Sol.



S113. Ans.(c)

Sol.



S114. Ans.(d)

S115. Ans.(c)

S116. Ans.(a)

Sol.  $865499 = 644288$ ;  $761829 = 640608$

Sum =  $0 + 2 = 2$

S117. Ans.(a)

Sol.

Time	Class
9am-10am	SSC
10am-11am	UPSC
11am-12pm	Banking
12pm-1pm	Lunch
1pm-2pm	UPSC
2pm-3pm	Celebration
3pm-4pm	
4pm-5pm	Tea
5pm-6pm	Banking

S118. Ans.(c)

Sol.

Time	Class
9am-10am	SSC
10am-11am	UPSC
11am-12pm	Banking
12pm-1pm	Lunch
1pm-2pm	UPSC
2pm-3pm	Celebration
3pm-4pm	
4pm-5pm	Tea
5pm-6pm	Banking

S119. Ans.(b)

Sol.

Time	Class
9am-10am	SSC
10am-11am	UPSC
11am-12pm	Banking
12pm-1pm	Lunch
1pm-2pm	UPSC
2pm-3pm	Celebration
3pm-4pm	
4pm-5pm	Tea
5pm-6pm	Banking

S120. Ans.(d)

Sol.

Time	Class
9am-10am	SSC
10am-11am	UPSC
11am-12pm	Banking
12pm-1pm	Lunch
1pm-2pm	UPSC
2pm-3pm	Celebration
3pm-4pm	
4pm-5pm	Tea
5pm-6pm	Banking

S121. Ans.(c)

Sol.

Time	Class
9am-10am	SSC
10am-11am	UPSC
11am-12pm	Banking
12pm-1pm	Lunch
1pm-2pm	UPSC
2pm-3pm	Celebration
3pm-4pm	
4pm-5pm	Tea
5pm-6pm	Banking

S122. Ans.(e)

Sol. **Step I to Step III:** Words are picked based on dictionary order.

Break the input in two parts: first three words and last three words.

**Step I:** Pick the word which comes first in dictionary order among these three words (from left end) and place it at extreme left end, then pick the word which comes first in dictionary order among these three words (from right end) and place it at second position from right end.

The same step will be followed in Step II and III.

In step III, we get first three letters arranged in reverse dictionary order from left end, and then next three letters are arranged in dictionary order from the right end.

**Step IV** – From left end, join first and second letter, third and fourth letter, fifth and sixth letter.

**Step V** – Arrange the letters within the word in alphabetical order.

**Input:** LEN DEN BAT CER JAM TIL

Step I: BAT LEN DEN JAM TIL CER

Step II: DEN BAT LEN TIL JAM CER

Step III: LEN DEN BAT TIL JAM CER

Step IV: LENDEN BATTIL JAMCER

Step V: DEELNN ABILTT ACEJMR

Step VI: EDFKOM BAJKUS BBFINQ

DEN is fifth word from right end in step III.

### S123. Ans.(d)

**Sol. Step I to Step III:** Words are picked based on dictionary order.

Break the input in two parts: first three words and last three words.

**Step I:** Pick the word which comes first in dictionary order among these three words (from left end) and place it at extreme left end, then pick the word which comes first in dictionary order among these three words (from right end) and place it at second position from right end.

The same step will be followed in Step II and III.

In step III, we get first three letters arranged in reverse dictionary order from left end, and then next three letters are arranged in dictionary order from the right end.

**Step IV** – From left end, join first and second letter, third and fourth letter, fifth and sixth letter.

**Step V** – Arrange the letters within the word in alphabetical order.

**Input:** LEN DEN BAT CER JAM TIL

Step I: BAT LEN DEN JAM TIL CER

Step II: DEN BAT LEN TIL JAM CER

Step III: LEN DEN BAT TIL JAM CER

Step IV: LENDEN BATTIL JAMCER

Step V: DEELNN ABILTT ACEJMR

Step VI: EDFKOM BAJKUS BBFINQ

TIL is fourth word from left end in step II.

### S124. Ans.(c)

**Sol. Step I to Step III:** Words are picked based on dictionary order.

Break the input in two parts: first three words and last three words.

**Step I:** Pick the word which comes first in dictionary order among these three words (from left end) and place it at extreme left end, then pick the word which comes first in dictionary order among these three words (from right end) and place it at second position from right end.

The same step will be followed in Step II and III.

In step III, we get first three letters arranged in reverse dictionary order from left end, and then next three letters are arranged in dictionary order from the right end.

**Step IV** – From left end, join first and second letter, third and fourth letter, fifth and sixth letter.

**Step V** – Arrange the letters within the word in alphabetical order.

**Input:** LEN DEN BAT CER JAM TIL  
Step I: BAT LEN DEN JAM TIL CER  
Step II: DEN BAT LEN TIL JAM CER  
Step III: LEN DEN BAT TIL JAM CER  
Step IV: LENDEN BATTIL JAMCER  
Step V: DEELNN ABILTT ACEJMR  
Step VI: EDFKOM BAJKUS BBFINQ  
Step VI

**S125. Ans.(b)**

**Sol. Step I to Step III:** Words are picked based on dictionary order.

Break the input in two parts: first three words and last three words.

**Step I:** Pick the word which comes first in dictionary order among these three words (from left end) and place it at extreme left end, then pick the word which comes first in dictionary order among these three words (from right end) and place it at second position from right end.

The same step will be followed in Step II and III.

In step III, we get first three letters arranged in reverse dictionary order from left end, and then next three letters are arranged in dictionary order from the right end.

**Step IV** – From left end, join first and second letter, third and fourth letter, fifth and sixth letter.

**Step V** – Arrange the letters within the word in alphabetical order.

**Input:** LEN DEN BAT CER JAM TIL  
Step I: BAT LEN DEN JAM TIL CER  
Step II: DEN BAT LEN TIL JAM CER  
Step III: LEN DEN BAT TIL JAM CER  
Step IV: LENDEN BATTIL JAMCER  
Step V: DEELNN ABILTT ACEJMR  
Step VI: EDFKOM BAJKUS BBFINQ  
DEELNN ABILTT ACEJMR

**S126. Ans.(d)**

**Sol. Step I to Step III:** Words are picked based on dictionary order.

Break the input in two parts: first three words and last three words.

**Step I:** Pick the word which comes first in dictionary order among these three words (from left end) and place it at extreme left end, then pick the word which comes first in dictionary order among these three words (from right end) and place it at second position from right end.

The same step will be followed in Step II and III.

In step III, we get first three letters arranged in reverse dictionary order from left end, and then next three letters are arranged in dictionary order from the right end.

**Step IV** – From left end, join first and second letter, third and fourth letter, fifth and sixth letter.

**Step V** – Arrange the letters within the word in alphabetical order.

**Input:** LEN DEN BAT CER JAM TIL  
Step I: BAT LEN DEN JAM TIL CER  
Step II: DEN BAT LEN TIL JAM CER  
Step III: LEN DEN BAT TIL JAM CER  
Step IV: LENDEN BATTIL JAMCER  
Step V: DEELNN ABILTT ACEJMR  
Step VI: EDFKOM BAJKUS BBFINQ  
DEN

**S127. Ans.(d)**

**Sol.** R1:  $4+3 = 7$ ;  $(7+25) \div 2 = 16$

R2:  $53-16 = 37$

R2:  $8+7 = 15$ ;  $15+22 = 37$

**S128. Ans.(c)**

**Sol.** R1:  $(17-15) + 17 = 19$ ;  $19+12 = 31$

R2:  $12+11 = 23$ ;  $(23+25) \div 2 = 24$

R3:  $13+10 = 23$ ;  $(23+9) \div 2 = 16$

$31-24 = 7$ ;  $7+16 = 23$

**S129. Ans.(e)**

**Sol.** R1:  $(21+49) \div 2 = 35$ ;  $35-15 = 20$ ;  $20+35 = 55$

R2:  $14-9 = 5$ ;  $5 \times 2 = 10$ ;  $10-4 = 6$

R3:  $(11-5) + 11 = 17$ ;  $17+8 = 25$

$55+6+25 = 86$

**S130. Ans.(c)**

**Sol.** R1:  $8+2 = 10$ ;  $25-10 = 15$ ;  $15 \times 2 = 30$

R2:  $(13-5) + 13 = 21$ ;  $21+12 = 33$

R3:  $(21+9) \div 2 = 15$ ;  $15+24 = 39$

Difference of Row I and Row II =  $33-30 = 3$ ;

Multiplication =  $39 \times 3 = 117$

**S131. Ans.(c)**

**Sol.**

Day	Persons	Money (rupees)
Monday	K	1380
Tuesday	T	1600
Wednesday	H	1580
Thursday	Y	1260
Friday	L	2200
Saturday	G	1120
Sunday	D	1050

**S132. Ans.(d)**

**Sol.**

Day	Persons	Money (rupees)
Monday	K	1380
Tuesday	T	1600
Wednesday	H	1580
Thursday	Y	1260
Friday	L	2200
Saturday	G	1120
Sunday	D	1050

**S133. Ans.(a)**

**Sol.**

Day	Persons	Money (rupees)
Monday	K	1380
Tuesday	T	1600
Wednesday	H	1580
Thursday	Y	1260
Friday	L	2200
Saturday	G	1120
Sunday	D	1050

**S134. Ans.(e)**

**Sol.**

Day	Persons	Money (rupees)
Monday	K	1380
Tuesday	T	1600
Wednesday	H	1580
Thursday	Y	1260
Friday	L	2200
Saturday	G	1120
Sunday	D	1050

**S135. Ans.(a)**

**Sol.**

Day	Persons	Money (rupees)
Monday	K	1380
Tuesday	T	1600
Wednesday	H	1580
Thursday	Y	1260
Friday	L	2200
Saturday	G	1120
Sunday	D	1050

**S136. Ans.(b)**

**Sol.** The launch of a national digital infrastructure program in education (Statement II) led to the adoption of smart classrooms and digital tools in rural schools (Statement I). So, Statement II is the cause, and Statement I is its effect.

**S137. Ans.(b)**

**Sol.** Statement I aligns with the recycling effort  
Statement III reflects penalties under the new rules  
Statement II is unrelated—it discusses discounts, not e-waste

**S138. Ans.(c)**

**Sol.** Statement (c) contradicts the central idea of transitioning to clean energy and reducing reliance on fossil fuels. Increasing coal production till 2100 goes against the objective of achieving net-zero emissions by 2070.

**S139. Ans.(b)**

**Sol.** Option (b) directly aligns with the statement: “rural expansion, exchange offers, and loyalty programs.”

The other options are either assumptions or unrelated to the facts provided.

**S140. Ans.(a)**

**Sol. Explanation:** The statement clearly mentions that due to rising air pollution, residents are buying air purifiers and indoor plants to improve indoor air quality. This indicates that people are becoming more health-conscious.

Option (a) is correct as it logically follows from the actions of the people in the statement.

Option (b) is incorrect because there's no mention of declining sales of air purifiers.

Option (c) is incorrect because pollution still exists; no mention is made of cities being pollution-free.

Option (d) is incorrect as both natural and artificial methods (air purifiers) are being used.

Hence, only option (a) is inferred.

