IBPS RRB Clerk Pre 2025 Memory Based Paper Based on 13th December 2nd Shift

Directions (1-2): **In the question below, some statements are given followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.**
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either conclusion I or II follows
(d) If neither conclusion I nor II follows
(e) If both conclusions I and II follow

Q1. Statements:
Only a few fruits are nutrition
All fruits are healthy
Conclusions:
I. Some healthy are nutrition
II. No fruits being nutrition is a possibility

Q2. Statements:
Some sheets are not papers
All sheets are green
Conclusions:
I. Some green is not papers
II. All papers being green is a possibility

Q3. In the question below, some statements are given followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions ***logically doesn't follow*** from the given statements, disregarding commonly known facts.

Statements:
Only a few cars are fast
Some fast are electric
All electric is silent
Conclusions:
I. Some cars are electric
II. Some fast are silent
III. No cars are silent
(a) Only I and III
(b) Only I
(c) Only II
(d) Only II and III
(e) Only III

Directions (4-8): **Read the given information carefully and answer the related questions.**
Eight persons – A, B, C, D, E, F, G and H sit around a square-shaped table in such a way that four of them sit at the corners and face inside, while the other four sit at the middle of each side and face outside. All the information is not necessarily in the same order.
Two persons sit between H and D. D faces inside. B sits third to the right of D. G sits three places away from B. A sits immediate right of G. As many persons sit between G and D when counted right of G as between E and C when counted right of C.

Q4. Who among the following sits third to the left of C?
(a) A
(b) G
(c) D
(d) E
(e) H

Q5. How many persons sit between F and E when counted from the left of F?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q6. Which of the following statements is/are true?
I. A sits at a corner
II. C faces outside
III. E is an immediate neighbour of B
(a) Only I
(b) Only II
(c) Only I and II
(d) Only II and III
(e) Only III

Q7. Four of the following five are alike in a certain way and thus form a group.
Which one does not belong to the group?
(a) A
(b) B
(c) D
(d) F
(e) H

Q8. What is the position of D with respect to E?
(a) Immediate left
(b) Immediate right
(c) Second to the left
(d) Third to the right
(e) Opposite

Directions (9-13): Study the following three-letter word series carefully and answer the questions given below.

APE MEK SIP CUP HBN

Q9. If C is added before first letter of each word, then how many meaningful words are formed?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q10. If the letters within the words are arranged in English alphabet order from left to right, then how many words starts with a vowel?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q11. If all the consonants in each word are changed to immediately succeeding letter, then how many words will have more than one vowel?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q12. If all the words are arranged in dictionary order from left to right, then which word is second from right end?
(a) APE
(b) MEK
(c) CUP
(d) HBN
(e) SIP

Q13. If all the letters are written in reverse alphabetical order within each word, what will be the second letter of the fourth word from the right end?
(a) E
(b) K
(c) P
(d) M
(e) I

Q14. In the word **'OPTICAL'**, how many pairs of the letters have the same number of letters between them (both forward and backward direction) as in the English alphabet?
(a) One
(b) Two
(c) None
(d) Three
(e) Four

Directions (15-17): **In this question, the relationship between different elements is shown in the statements. The statements are followed by two conclusions. Study the conclusions based on the given statements and select the appropriate answer:**
(a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or II is true
(d) If both conclusions I and II are true
(e) If neither conclusion I nor II is true

Q15. Statements: J ≥ Z > L ≤ X = N < O
Conclusions:
I. L ≤ O
II. J > N

Q16. Statements: R > B = C ≤ D > E < F = G
Conclusions:
I. B ≤ F
II. E < G

Q17. Statements: D > S < T = O ≤ V = W
Conclusions:
I. S < W
II. W ≥ T

Directions (18-20): **Study the information carefully and answer the questions given below.**
There are eight persons A, B, C, D, E, F, G and H in a three-generation family. D is the brother-in-law of E. C is the only son of E. H is the sibling of C but H does not have children. B is the grandson of A. A is female. D doesn't have a sibling. F is also a family member. The family has no single parent. A and F is not married to D.

Q18. How is H related to G?
(a) Uncle
(b) Aunt
(c) Can't be determined
(d) Niece
(e) Nephew

Q19. How many female members are there in the family?
(a) Two
(b) Three
(c) Four
(d) Five
(e) None of these

Q20. How is F related to B?
(a) Grandmother
(b) Mother
(c) Grandfather
(d) Father
(e) Can't be determined

Directions (21-25): **Read the given information carefully and answer the related questions:**
Six persons A, B, C, D, E and F live on different floors of a three-floor building where bottom most floor is numbered as 1, just above it is 2 and the topmost floor is numbered as 3. Each floor has two flats i.e., flat P and flat Q (flat P is in west of flat Q). Only one person live in each flat on each floor.
B lives in that flat which is immediately above D's flat. C and B do not live on adjacent floors. F's flat is just to the north-west of C's flat. A lives east of F.

Q21. Which of the following statement is *not* true?
I. E lives in flat P
II. A and B live in flat Q
III. D and E live on same floor
(a) Only II
(b) Only I and II
(c) Only III
(d) Only II and III
(e) Only I

Q22. F lives in which flat and which floor?
(a) Flat P, floor 3
(b) Flat P, floor 1
(c) Flat Q, floor 2
(d) Flat Q, floor 3
(e) Flat P, floor 2

Q23. Who among the following lives in flat Q, floor 3?
(a) A
(b) E
(c) F
(d) D
(e) C

Q24. Which of the following combination is incorrect?
(a) B – Floor 2
(b) A – Flat Q
(c) D – Flat P
(d) C – Floor 1
(e) E – Floor 1

Q25. Four of the following five are similar in a certain manner and form a group, who among the following is not related to the group?
(a) F
(b) A
(c) D
(d) E
(e) B

Directions (26-28): **Read the given information carefully and answer the related questions:**
A certain number of persons sit in a row facing north. Four persons sit between P and Q. R sits second to the right of P. Two persons sit between R and S. T sits fifth to the left of S. U sits immediate right of T and third from an extreme end. V sits immediate right of R. Number of persons sit to the left of S is same as the number of persons sit to the right of V.

Q26. Who among the following sits third to the left of V?
(a) Q
(b) S
(c) U
(d) T
(e) P

Q27. How many total persons sit in the row?
(a) 18
(b) 15
(c) 17
(d) 21
(e) 20

Q28. How many persons sit between U and R?
(a) Seven
(b) Six
(c) Five
(d) Eight
(e) Ten

Q29. In the number '**628651924**', if all digits are arranged in descending order from left, then find the sum of third, fifth and seventh digit from left end?
(a) 10
(b) 11
(c) 12
(d) 13
(e) 14

Q30. If we form a four-letter meaningful word with first, third, fifth and eighth letter from the left end of the word "**PHENOMENA**" (using each letter only once), then what would be the second letter from right end of that meaningful word? If no meaningful word is formed, then mark the answer as X. If more than one meaningful word is formed then, mark the answer as Z.
(a) O
(b) N
(c) X
(d) P
(e) Z

Directions (31-35): Read the given series carefully and answer the related questions:

5 8 % 3 7 # 1 & 9 2 * 6 @ 4 ! 0 $ 7 ^ 3 5 & 8 #

Q31. Which element is 5th to the left of the element which is 7th from the right end?
(a) 2
(b) &
(c) 9
(d) 6
(e) @

Q32. What is the sum of digits which are to the right of @?
(a) 27
(b) 28
(c) 31
(d) 22
(e) 25

Q33. Which symbol is 4th left of 5th digit from right end?
(a) !
(b) &
(c) #
(d) @
(e) *

Q34. Which element is exactly in the middle of 6th element from left end and 9th element from right end?
(a) 9
(b) 6
(c) 2
(d) *
(e) @

Q35. How many digits are immediately preceded by a digit and immediately followed by a symbol?
(a) Two
(b) Three
(c) Four
(d) Five
(e) None

Directions (36-40): **Read the given information carefully and answer the related questions:**
Seven persons A, B, C, D, E, F and G purchase fruits on different days of a week starting from Monday. The information of persons is not used in same manner as given.
More than four persons purchase the fruit after B. Three persons purchase fruit between B and E. D purchases fruit immediately before E. Number of persons purchase fruit before A is same as after D. G purchase fruit before C but after F.

Q36. If F is related to B, A is related to G, then who among the following is related to C?
(a) A
(b) F
(c) E
(d) D
(e) G

Q37. Who among the following purchase fruit on Thursday?
(a) F
(b) G
(c) A
(d) D
(e) None of these

Q38. F purchases fruit on which of the following days?
(a) Friday
(b) Tuesday
(c) Monday
(d) Wednesday
(e) Thursday

Q39. How many persons purchase fruit before A?
(a) None
(b) One
(c) Two
(d) Three
(e) Four

Q40. Which of the following combination is incorrect?
(a) Monday - F
(b) Tuesday - B
(c) Wednesday - A
(d) Friday - D
(e) Saturday – C

Direction (41-45): **The table given below shows the items sold by A,B and C sold on Monday, Tuesday and Wednesday.**

Sellers	Monday	Tuesday	Wednesday
A	98	78	45
B	100	55	60
C	22	90	82

Q41. **Find the average number of items sold by A on Monday and Tuesday.**
(a) 66
(b) 55
(c) 60
(d) 54
(e) 88

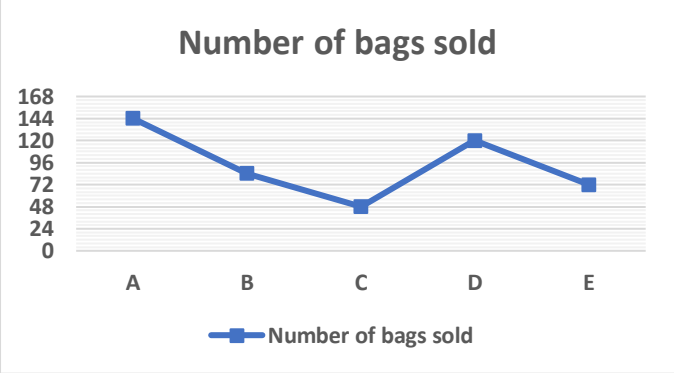
Q42. Find the difference between items sold by B and C on Wednesday.
(a) 24
(b) 50
(c) 60
(d) 54
(e) 22

Q43. Items sold by C on Tuesday is what percentage of sum of items sold by B on Tuesday and A on Wednesday.
(a) 90
(b) 50
(c) 60
(d) 80
(e) 100

Q44. If the ratio of defective to non-defective items sold by B on Wednesday is 1:5, then find the difference between defective and non-defective items sold by B.
(a) 40
(b) 50
(c) 60
(d) 54
(e) 22

Q45. Find the difference between total items sold on Tuesday and Wednesday by all the sellers.
(a) 24
(b) 36
(c) 48
(d) 60
(e) 90

Direction (46-50): **The line graph given below shows the bags sold by five different sellers. Read the line graph and answer the following question.**



Q46. Find the ratio of bags sold by B and C together to bags sold by E.
(a) 17 : 13
(b) 19 : 6
(c) 31 : 19
(d) 11 : 15
(e) 11 : 17

Q47. If the bottles sold by C is 50% more than bags sold by B, then find the bottles sold by C is what percentage more/less than of bags sold by D.
(a) 4
(b) 0
(c) 5
(d) 3
(e) 6

Q48. Bags sold by D and E together is what percentage of bags sold by C.
(a) 240
(b) 500
(c) 400
(d) 540
(e) 220

Q49. Out of the total bags sold by A, 55 bags are red bags and rest are blue bags. Find the blue bags sold by A is how many more/less than bags sold by E.
(a) 17
(b) 34
(c) 32
(d) 16
(e) 24

Q50. Find the average number of bags sold by sold by A, C and E.
(a) 66
(b) 55
(c) 60
(d) 54
(e) 88

Q51. A man invested equal amounts in Scheme X and Scheme Y. Scheme X offers simple interest at 10% per annum for 3 years, while Scheme Y offers simple interest at 6% per annum for 3 years. The total simple interest earned from both schemes together is Rs 4,800. Find the amount invested in Scheme X (in Rs).

(a) 12000
(b) 10000
(c) 8000
(d) 7500
(e) 16000

Q52. Riya and Meena started a business together with a total investment of Rs 6,000. After 6 months, Meena withdrew her capital. At the end of the year, their profit-sharing ratio was equal. Find the initial investment of Riya (in Rs).

(a) 2500
(b) 2000
(c) 1500
(d) 3500
(e) 3000

Q53. A train crosses a platform in 24 seconds while running at a speed of 90 km/h. The length of the platform is 80 meters more than the length of the train. Find the length of the train (in meters).

(a) 260
(b) 240
(c) 300
(d) 210
(e) 280

Q54. The monthly incomes of Rohit and Amit are in the ratio of 4 : 5 respectively. Rohit spends 25% of his income on rent, 20% of the remaining amount on groceries, and 15% of the remaining amount on transport. He saves the rest of his income. If Rohit's savings amount to Rs 9,180, find the monthly income (in Rs) of Amit.

(a) 21400
(b) 22000
(c) 22500
(d) 25500
(e) 26000

Q55. The present ages of two friends, Arjun and Karan, together are equal to the present age of their mentor. Four years ago, Arjun's age was half of the Montu age at that time. If the present age of Karan is 25 years, find the age (in years) of the Montu after 1 year from now.

(a) 39
(b) 66
(c) 50
(d) 45
(e) 55

Q56. P can complete a piece of work in 18 days, and Q can complete the same work in 27 days. Working together, P, Q, and R can finish the work in 9 days. Find the number of days R alone would take to complete the work.

(a) 54
(b) 60
(c) 48
(d) 44
(e) None of these

Q57. A shopkeeper marks the price of a watch 40% above its cost price and then allows a 25% discount on the marked price. If the profit earned is Rs 60, find the discount allowed (in Rs).

(a) 380
(b) 400
(c) 420
(d) 450
(e) 520

Q58. A mixture contains milk and water in the ratio 3 : 2. The total quantity of the mixture is 40 liters. If x liters of water are added to the mixture, the ratio of milk to water becomes 3 : 5. Find the value of x.
(a) 15
(b) 12
(c) 20
(d) 28
(e) 24

Q59. The downstream speed of a boat is 20 km/h, and the speed of the stream is 4 km/h. Find the time taken (in hours) by the boat to cover a distance of 24 km upstream.
(a) 2
(b) 1.5
(c) 2.5
(d) 4
(e) 3.5

Q60. The breadth of a rectangle is half of its length. If the perimeter is 60 cm, find the area (in sq. cm).
(a) 100
(b) 200
(c) 150
(d) 120
(e) 300

Direction (61–65): What will come in the place of question (?) mark in the following number series.

Q61. ?, 46, 71, 87, 96, 100
(a) 8
(b) 12
(c) 9
(d) 10
(e) 11

Q62. 218, 231, 253, 293, 369, ?
(a) 507
(b) 517
(c) 515
(d) 516
(e) 519

Q63. 1308, ?, 324, 160, 78, 37
(a) 652
(b) 762
(c) 682
(d) 672
(e) 632

Q64. 64, 71, 81, 96, ?, 149
(a) 116
(b) 112
(c) 118
(d) 122
(e) 120

Q65. 18, 57, 174, 525, 1578, ?
(a) 4737
(b) 4677
(c) 4697
(d) 4717
(e) 4767

Direction (66 – 75) : What will come in the place of question (?) marks:

Q66. $12^2 + 16^2 + 7.5 \times 12 = ?^2 + \sqrt[3]{216}$
(a) 22
(b) 21
(c) 20
(d) 24
(e) 26

Q67. $3\frac{1}{7} + 5\frac{1}{14} - ? = 2\frac{1}{7}$
(a) $4\frac{1}{14}$
(b) $6\frac{1}{14}$
(c) $8\frac{1}{14}$
(d) $9\frac{1}{14}$
(e) $2\frac{1}{14}$

Q68. ? % of 37.5 + 12.5 × 14 = 25% 0f 760
(a) 36
(b) 32
(c) 44
(d) 48
(e) 40

Q69. 1246 + 1567 − ? = $22^2 + \sqrt[3]{1000}$
(a) 2317
(b) 2315
(c) 2319
(d) 2313

(e) 2321

Q70. $\frac{783}{?}$ + 175.75 − 175.5 ÷ 6 = 190
(a) 18
(b) 16
(c) 14
(d) 12
(e) 10

Q71. 56 % of 55 + ? % of 132.8 = 8^2
(a) 20
(b) 15
(c) 25
(d) 5
(e) 10

Q72. 17.5 × 16 + ? = $28^2 - \sqrt{576}$
(a) 440
(b) 420
(c) 410
(d) 480
(e) 460

Q73. $\frac{?}{32.5}$ + 32^2 + 80% of 317.5 = 36^2
(a) 565
(b) 580
(c) 575
(d) 585
(e) 582

Q74. 5.25 × 18 + 12.25 × 8 + ? = 14^2
(a) 3.5
(b) 2.5
(c) 1.5
(d) 4.5
(e) 5.5

Q75. 41% of 2560 + 32% of 388.75 = 34^2 + ?
(a) 16
(b) 18
(c) 14
(d) 12
(e) 10

Q76. 43% of 800 + 36% of 750 = ?% of 400
(a) 168.5
(b) 15.35
(c) 153.5
(d) 145.4
(e) 144.3

Q77. 7777 ÷ 700 + 7777 ÷ 1100 – 5555 ÷ 500 = ?
(a) 9.09
(b) 8.08
(c) 7.07
(d) 10.03
(e) 6.07

Q78. 4345 + 5625 + 7125 – 3345 = ?
(a) 11,750
(b) 13,750
(c) 12,750
(d) 10,350
(e) 14,450

Q79. $\sqrt{80 \div 5 \times 8 + (17 \times 5) - 17} \div \sqrt[3]{343} = \sqrt[4]{?}$

(a) 36
(b) 32
(c) 25
(d) 16
(e) 49

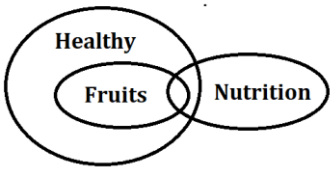
Q80. $\frac{4}{5}$ of $\frac{2}{3}$ of $\frac{7}{9}$ of 16,200 = $\frac{1}{6}$ of ?

(a) 40,320
(b) 34,240
(c) 36,420
(d) 32,320
(e) 48,340

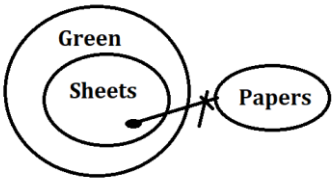
SOLUTIONS

Directions (1-2):

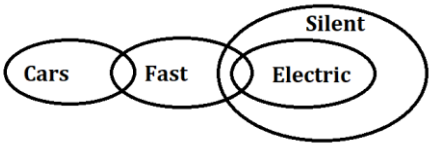
S1. Ans. (a)
Sol.



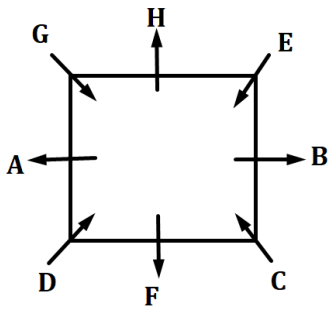
S2. Ans. (e)
Sol.



S3. Ans. (a)
Sol.



Directions (4-8):
Sol.



S4. Ans. (a)

S5. Ans. (c)

S6. Ans. (e)

S7. Ans. (c)

S8. Ans. (e)

Directions (9-13):

S9. Ans. (b)
Sol. Before: APE MEK SIP CUP HBN
After: **CAPE** CMEK CSIP CCUP CHBN

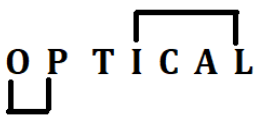
S10. Ans. (d)
Sol. Before: APE MEK SIP CUP HBN
After: **AEP EKM IPS** CPU BHN
Three

S11. Ans. (c)
Sol. Before: APE MEK SIP CUP HBN
After: **AQE** NEL TIQ DUQ **ICO**
Two

S12. Ans. (b)
Sol. Before: APE MEK SIP CUP HBN
After: APE CUP HBN **MEK** SIP

S13. Ans. (b)
Sol. Before: APE MEK SIP CUP HBN
After: PEA M**K**E SPI UPC NHB

S14. Ans. (b)
Sol. Two pairs are formed.



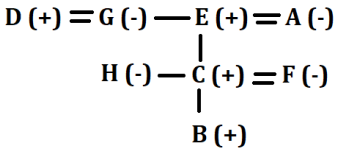
Directions (15-17):

S15. Ans. (e)
Sol. I. L ≤ O (False)
II. J > N (False)

S16. Ans. (b)
Sol. I. B ≤ F (False)
II. E < G (True)

S17. Ans. (d)
Sol. I. S < W (True)
II. W ≥ T (True)

Directions (18-20):
Sol.



S18. Ans. (d)

S19. Ans. (c)

S20. Ans. (b)

Directions (21-25):
Sol.

Floor	Flat P	Flat Q
3	F	A
2	B	C
1	D	E

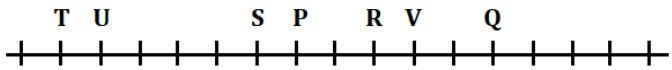
S21. Ans. (b)

S22. Ans. (a)

S23. Ans. (a)

S24. Ans. (d)

S25. Ans. (e)
Directions (26-28):
Sol.



S26. Ans. (e)

S27. Ans. (c)

S28. Ans. (b)

S29. Ans. (d)
Sol. 628651924 – 986654221
6+5+2 = 13

S30. Ans. (e)
Sol. OPEN, PEON
Directions (31-35):

S31. Ans. (e)
Sol. 7th element from right = 7, 5th to the left of 7 = @

S32. Ans. (a)
Sol. 4 + 0 + 7 + 3 + 5 + 8 = 27

S33. Ans. (b)
Sol. 5th digit from right end = 0, 4th symbol from left of 0 = &

S34. Ans. (d)

S35. Ans. (c)
Sol. 5 8 %, 3 7 #, 9 2 *, 3 5 &
Directions (36-40):
Sol.

Days	Persons
Monday	F
Tuesday	B
Wednesday	A
Thursday	G
Friday	D
Saturday	E

Sunday	C

S36. Ans. (c)

S37. Ans. (b)

S38. Ans. (c)

S39. Ans. (c)

S40. Ans. (e)

S41. Ans. (e)
Sol.
Required answer = $\frac{98+78}{2} = 88$

S42. Ans. (e)
Sol.
Required answer = 82 – 60 = 22

S43. Ans. (a)
Sol.
Required answer = $\frac{90}{55+45} \times 100 = 90\%$

S44. Ans. (a)
Sol.
Defective items = $\frac{1}{6} \times 60 = 10$
Non-defective items = $\frac{5}{6} \times 60 = 50$
Required answer = 50 – 10 = 40

S45. Ans. (b)
Sol.
Required answer = (78+55+90)- (45+60+82) = 223 – 187 = 36

S46. Ans. (b)
Sol.
Required answer = 144 +84 : 72 = 228:72 = 19:6

S47. Ans. (c)
Sol.
Bottles sold by C = 150% of 84 = 126
Required answer = (126-120)/120 × 100 = 5%

S48. Ans. (c)
Sol.
Required answer = $\frac{120+72}{48} \times 100 = 400\%$

S49. Ans. (a)
Sol.
Blue bags sold by A = 144 – 55 = 89
Required answer = 89 – 72 = 17

S50. Ans. (e)
Sol.
Required answer = $\frac{144+48+72}{3} = 88$

S51. Ans (b)
Sol.
Information Given in the Question:
Equal amounts invested in Scheme X and Scheme Y
Scheme X: 10% p.a. simple interest for 3 years
Scheme Y: 6% p.a. simple interest for 3 years
Total interest earned = Rs 4,800
Concept/Formula Used in the Question:
Simple Interest (SI) = (P × R × T) / 100
Let investment in each scheme = Rs P
Total interest = Interest from X + Interest from Y
Detailed Explanation:
Let the amount invested in each scheme = Rs P
Interest from Scheme X = $\frac{(P \times 10 \times 3)}{100} = \frac{30P}{100} = 0.3P$
Interest from Scheme Y = $\frac{(P \times 6 \times 3)}{100} = \frac{18P}{100} = 0.18P$
Total interest = 0.3P + 0.18P = 0.48P
Given, 0.48P = 4800
=> P = 4800 / 0.48
=> P = 10,000

S52. Ans (b)
Sol.
Information Given in the Question:
Total investment = Rs 6000
Riya and Meena invested together: Riya = R, Meena = (6000 - R)
Meena withdrew her capital after 6 months
Profit-sharing ratio at the end of the year = 1 : 1 (equal)
Concept/Formula Used in the Question:
Profit sharing in a partnership depends on:
Investment × Time
Riya's profit share = R × 12
Meena's profit share = (6000 – R) × 6
Detailed Explanation:
Riya's capital is for 12 months:
Riya's share = R × 12 = 12R
Meena's capital is for 6 months:
Meena's share = (6000 – R) × 6 = 6(6000 – R)
Since profit shares are equal:
12R = 6(6000 – R)
Divide both sides by 6:
2R = 6000 – R
=> 2R + R = 6000
=> 3R = 6000
=> R = 2000

S53. Ans (a)
Sol.
Information Given in the Question:
Time to cross the platform = 24 seconds
Length of platform = Length of train + 80 meters
Concept/Formula Used in the Question:
Distance = Speed × Time
When a train crosses a platform, the distance = length of train + length of platform
Let train length = L meters, then platform = L + 80 meters
Total distance = L + (L + 80) = 2L + 80
Detailed Explanation:
Speed of train = $= 90 \times \frac{5}{18} = 25$ m/s
Time = 24 seconds
So,
Distance = Speed × Time = 25 × 24 = 600 meters
Now,
2L + 80 = 600
=> 2L = 600 – 80 = 520
=> L = 520 / 2 = 260 meters

S54. Ans (c)
Sol.
Information Given in the Question:
Income ratio (Rohit : Amit) = 4 : 5
Rohit spends:
25% on rent
20% of remaining on groceries
15% of remaining on transport
Rohit's savings = Rs 9,180
Detailed Explanation:
Let Rohit's income = 4x
Rent
25% of 4x = (25/100) × 4x = x
Remaining = 4x – x = 3x
Groceries
20% of 3x = (20/100) × 3x = 0.6x
Remaining = 3x – 0.6x = 2.4x
Transport
15% of 2.4x = (15/100) × 2.4x = 0.36x
Remaining (i.e., Savings) = 2.4x – 0.36x = **2.04x**
Given: 2.04x = 9180
⇒ x = 9180 / 2.04 = 4500
So, Amit's income = 5x = 5 × 4500 = Rs 22,500

S55. Ans (e)
Sol.
Information Given in the Question:
Present age of Karan = 25 years
Arjun's age + Karan's age = Montu's present age
4 years ago: Arjun's age = ½ × Montu's age
Required: Montu's age **1 year from now**
Concept/Formula Used in the Question:
Let Arjun's present age = A

Montu's present age = A + 25
4 years ago:
Arjun = A – 4
Montu = A + 25 – 4 = A + 21
Condition: A – 4 = ½ × (A + 21)
Detailed Explanation:
From the equation:
A – 4 = 1/2(A + 21):
2A – 8 = A + 21
⇒ 2A – A = 21 + 8
⇒ A = 29
So, Arjun's age = 29
Montu's present age = Arjun + Karan = 29 + 25 = 54
Montu's age after 1 year = 54 + 1 = 55 years

S56. Ans (a)
Sol.
Information Given in the Question:
P's time to complete work = 18 days
Q's time to complete work = 27 days
P + Q + R together finish work in 9 days
Need to find R's individual time to complete the work
Detailed Explanation:
Let total work = 54 units
P's 1 day work = 54 / 18 = 3 units
Q's 1 day work = 54 / 27 = 2 units
P + Q = 3 + 2 = 5 units/day
P + Q + R together = 54 / 9 = 6 units/day
So, R's 1 day work = 6 – 5 = 1 unit/day
Therefore, R alone would take = 54 / 1 = 54 days

S57. Ans (c)
Sol.
Information Given in the Question:
Marked Price (MP) = 40% above Cost Price (CP)
Discount = 25% on MP
Profit = Rs 60
Concept/Formula Used in the Question:
MP = CP × (1 + Markup%)
SP = MP × (1 – Discount%)
Profit = SP – CP
Discount allowed = MP – SP
Detailed Explanation:
Let the Cost Price (CP) = Rs 100 (assumed for simplicity)
Then,
Marked Price (MP) = 100 + 40% of 100 = Rs 140
Discount = 25% of MP = 25% of 140 = Rs 35
Selling Price (SP) = MP – Discount = 140 – 35 = Rs 105
Profit = SP – CP = 105 – 100 = Rs 5 (on Rs 100 CP)
Now, if Rs 5 profit corresponds to actual profit of Rs 60, then:
Multiply all amounts by (60 / 5) = 12
So,
Actual Discount = 35 × 12 = Rs 420

S58. Ans (e)

Sol.
Information Given in the Question:
Initial ratio of milk : water = 3 : 2
Total mixture = 40 liters
After adding **x liters** of water, new ratio becomes 3 : 5
Need to find the value of x
Detailed Explanation:
From the ratio:

$$\frac{24}{16+x}=\frac{3}{5}$$

$$5\times 24=3\times(16+x)$$

$\Rightarrow 120=48+3x$

$\Rightarrow 3x=72$

$$\Rightarrow x=24$$

S59. Ans (a)
Sol.
Information Given in the Question:

Downstream speed = 20 km/h
Speed of stream = 4 km/h
Distance to cover upstream = 24 km
Concept/Formula Used in the Question:
Downstream speed = Boat speed in still water + Stream speed
Upstream speed = Boat speed in still water – Stream speed
Time = Distance / Speed
Detailed Explanation:
Boat speed in still water = Downstream – Stream = 20 – 4 = 16 km/h
Upstream speed = 16 – 4 = 12 km/h
Time = $\frac{24}{12}$ = 2 hours

S60. Ans (b)

Sol.
Information Given in the Question:
Perimeter of rectangle = 60 cm
Breadth = 1/2 × Length
Concept/Formula Used in the Question:
Perimeter of rectangle = 2 × (Length + Breadth)
Area of rectangle = Length × Breadth
Detailed Explanation:
Let the length of the rectangle = L cm
Then, breadth = $\frac{1}{2}L$
ATQ,

$$2\left(L+\frac{1}{2}L\right)=60$$

$$\Rightarrow 2\times\frac{3}{2}L=60$$

$$\Rightarrow 3L=60$$

$$\Rightarrow L=20 \text{ cm}$$

Breadth = $\frac{1}{2}\times 20 = 10$cm
Required area = $L \times B = 20 \times 10 = 200$ cm^2

S61. Ans.(d)
Sol. 10, 46, 71, 87, 96, 100
(+6², +5², +4², +3², +2²)

S62. Ans.(b)
Sol. 218, 231, 253, 293, 369, [517]
(13, 22, 40, 76, 148)
(9, 18, 36, 72)

1308, [652], 324, 160, 78, 37
(÷2–2, ÷2–2, ÷2–2, ÷2–2, ÷2–2)

S63. Ans.(a)
Sol.

S64. Ans.(c)
Sol. 64, 71, 81, 96, [118], 149
(7, 10, 15, 22, 31)
(3, 5, 7, 9)

S65. Ans.(a)
Sol.

18, 57, 174, 525, 1578, [4737]
(×3+3, ×3+3, ×3+3, ×3+3, ×3+3)

S66. Ans.(a)
Sol.
$144 + 256 + 90 = ?^2 + 6$
$490 = ?^2 + 6$
$?^2 = 484$
$? = 22$

S67. Ans.(b)
Sol.

$$(3+5-2)+\frac{2+1-2}{14}$$

$$=6\frac{1}{14}$$

S68. Ans.(e)
Sol.

$$\frac{?}{100}\times 37.5+175=\frac{25}{100}\times 760$$

$$\frac{?}{100}\times 37.5=190-175$$

$$?=\frac{1500}{37.5}$$

$? = 40$

S69. Ans.(c)
Sol. 2813 – ? = 484 + 10
? = 2813 – 494
? = 2319

S70. Ans.(a)
Sol.
$\frac{783}{?} = 190 + 29.25 - 175.75$
$? = \frac{783}{43.5}$
? = 18

S71. Ans.(c)
Sol.
$\frac{56\times55}{100} + \frac{?}{100} \times 132.8 = 64$
$30.8 + \frac{?}{100} \times 132.8 = 64$
$? = \frac{33.2\times100}{132.8}$
? = 25

S72. Ans.(d)
Sol.
280 + ? = 784 – 24
? = 760 – 280
? = 480

S73. Ans.(d)
Sol.
$\frac{?}{32.5} + 1024 + \frac{80}{100} \times 317.5 = 1296$
$\frac{?}{32.5} = 1296 - 1024 - 254$
$\frac{?}{32.5} = 18$
?= 585

S74. Ans.(a)
Sol.
94.5 + 98 + ? = 196
? = 196 – 192.5
? = 3.5

S75. Ans.(b)
Sol.
$\frac{41}{100} \times 2560 + \frac{32}{100} \times 388.75 = 1156 + ?$
1049.6 + 124.4 – 1156 = ?
? = 1174 – 1156
? = 18

S76. Ans.(c)
Sol.
$? \times \frac{400}{100} = \frac{43}{100} \times 800 + \frac{36}{100} \times 750$
$\Rightarrow ? = \frac{614}{4} = 153.5$

S77. Ans.(c)
Sol.
? = 11.11 + 7.07 – 11.11 = 7.07

S78. Ans.(b)
Sol.
? = 17095 – 3345 = 13,750

S79. Ans.(d)
Sol.
$\sqrt[4]{?} = \sqrt{196} \div 7$
$= 14 \div 7 = 2$
$\Rightarrow ? = 2^4 = 16$

S80. Ans.(a)
Sol.
$\frac{1}{6} \times ? = \frac{4}{5} \times \frac{2}{3} \times \frac{7}{9} \times 16200$
$\Rightarrow$? = 40,320