

NIACL Assistant Previous Year Paper (March 2024)

Directions (1-8): Read the given passage and answer the questions based on it.

Not doing something will always be faster than doing it. This statement reminds me of the old computer programming saying, “**Remember that there is no code faster than no code.**” The same philosophy applies in other areas of life. For example, there is no meeting that goes faster than not having a meeting at all. This is not to say you should never attend another meeting, but the truth is that we say yes to many things we don’t actually want to do.

We agree to many requests not because we want to do them, but because we don’t want to be seen as rude, arrogant, or unhelpful. Often, you have to consider saying no to someone you will interact with again in the future—your co-worker, your spouse, your family and friends. Saying no to these people can be particularly difficult because we like them and want to support them. (Not to mention, we often need their help too.) Collaborating with others is an important element of life. The thought of straining the relationship outweighs the commitment of our time and energy. For this reason, it can be helpful to be _____ in your response. Do whatever favours you can, and be warm-hearted and direct when you have to say no., The economist Tim Harford correctly put it, “Every time we say yes to a request, we are also saying no to anything else we might accomplish with the time.” Once you have committed to something, you have already decided how that future block of time will be spent.

Saying no is sometimes seen as a luxury that only those in power can afford. And it is true: turning down opportunities is easier when you can **fall back** on the safety net provided by power, money, and authority. But it is also true that saying no is not merely a privilege reserved for the successful among us. It is also a strategy that can help you become successful. Saying no is an important skill to develop at any stage of your career because it retains the most important asset in life: your time. You need to say no to whatever isn’t leading you toward your goals. You need to say no to distractions.

Q1. In the passage, a sentence is given in bold. Choose the correct meaning that the author wants to address through it.

- (a) It is better to never learn to code as it provides you with an unwanted load of work.
- (b) A person’s efficiency can only be measured by his ability to do fast coding
- (c) It is always faster to do nothing than doing anything
- (d) Coding always demands exorbitant amount of time.
- (e) None of these

Q2. According to the author, generally, why do we say yes to many tasks?

- (a) To become a multi-tasker by doing as many as possible tasks.
- (b) To build networking with our peers
- (c) To enhance our productivity and to overcome our lethargy
- (d) To not to present ourselves as rude or arrogant people.
- (e) None of these

Q3. Which of the following is the theme of the given passage?

- (a) Dividing time to do all the tasks is the key to healthy life
- (b) Life should be led without having any time or work obligation.
- (c) The ultimate productivity hack is saying no.
- (d) One should always be open to new ideas that you can only get by accepting every challenge that comes in your way.
- (e) None of these

Q4. As mentioned in the passage, why is saying no sometimes seen as a luxury only those in power can afford?

- (a) Because of the safety net provided by power, money, and authority
- (b) Because of the lack of opportunities for the less fortunate
- (c) Because saying no is not a necessary skill.
- (d) Because saying no is a skill set that can only be achieved after investing a lot of money on own self.
- (e) None of these

Q5. In what ways, does the author mention about saying no to distractions help you become successful?

- (a) By retaining energy level for the following task
- (b) By lowering confidence levels
- (c) By straining relationships
- (d) By freeing up time
- (e) None of these

Q6. Which of the following is Tim Harford's opinion about saying yes to a task, as mentioned in the passage?

- (a) A person should always be assertive towards extending his helping hand to his peers.
- (b) Saying yes to a task also means occupying ourselves for the time that could have been invested in some other purpose.
- (c) Saying yes to every task requires commitments that can only be fulfilled by some.
- (d) It is advisable to say yes to every opportunity that comes our way to gain ample experience and ideas to lead our life.
- (e) None of these

Q7. Which of the following words can fit into the blank given in the passage?

- (a) Frugal
- (b) gracious
- (c) adamant
- (d) coy
- (e) haughty

Q8. Which of the following is a synonym of 'fall back' as highlighted in the passage?

- (a) revolve
- (b) terminate
- (c) retreat
- (d) hold
- (e) None of these

Directions (9-13): In each question a word is omitted and with reference to that five options are given. Choose the word from the given options that can most appropriately fit into the blank without changing the intended meaning.

Q9. Delhi University on Wednesday declared _____ seats across colleges as part of its last leg of undergraduate admissions.

- (a) vacant
- (b) expressed
- (c) structured
- (d) inanimate
- (e) abandoned

Q10. The redevelopment of the station will _____ the exponential growth in passenger traffic for the upcoming years.

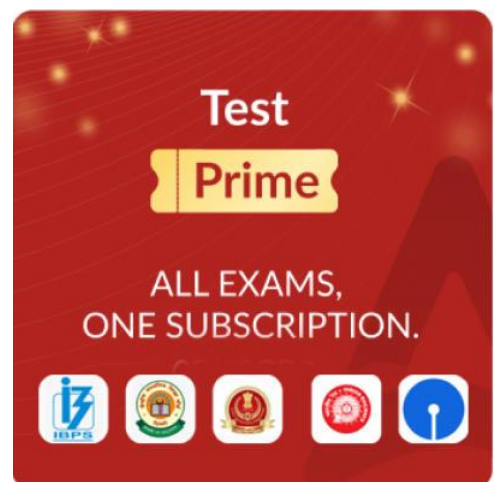
- (a) boost
- (b) accelerate
- (c) convey
- (d) accommodate
- (e) modify

Q11. The committee has established new procedures for the _____ of degrees.

- (a) accreditation
- (b) credentials
- (c) institution
- (d) disposal
- (e) contents

Q12. The scheme will cater to the introduction of new _____ as well as the upgradation and replacement of existing resources.

- (a) specialty
- (b) amenities
- (c) rearrangements
- (d) aid
- (e) acquisition



Q13. The team's success will depend on the _____ of its pitching.

- (a) occurrence
- (b) determination
- (c) uncertainty
- (d) flexibility
- (e) consistency

Directions (14-18): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The corresponding letter of that part is the answer. If the given sentence is correct as it is, then choose option 'No Error' as your answer response. (Ignore errors of punctuation, if any).

Q14. Though snoring is often (A)/considered a minor condition, (B)/ a snorer can sometimes experiences (C)/ severe impairment of lifestyle (D).

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No Error

Q15. I will give you (A)/a keyring which I (B)/ have got from Dubai (C)/when you will visit me. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No Error

Q16. The number of (A)/candidates who apply (B)/ for job vacancies are (C)/increasing year by year. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No Error

Q17. You and me (A)/together will definitely (B)/ complete this task (C)/ before tomorrow evening. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No Error

Q18. During the late medieval (A)/period, cotton became known as (B)/an imported fiber, without (C)/ any knowledge of how it was derived. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No Error

Directions (19-23): In each question below a sentence with four words printed in bold type is given. One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate if any. If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark (e) i.e. 'All correct' as your answer.

Q19. The court issued a sentence against him upon being found guilty on charges of maladiction.

- (a) issued
- (b) guilty
- (c) charges
- (d) maladiction
- (e) All are correct

Q20. The uranium atom is the heaviest of all the naturally occurring elements.

- (a) uranium
- (b) heaviest
- (c) naturally
- (d) occurring
- (e) All are correct

Q21. The highest possible stage in moral culture is when we recognize that we ought to control our thoughts.

- (a) possible
- (b) culture
- (c) recognize
- (d) control
- (e) All are correct

Q22. In a democracy, no one can overlook the cultural sensitivity of the people

- (a) democracy
- (b) overlook
- (c) cultural
- (d) sensitivity
- (e) All are correct

Q23. Sample **surveys** can provide **reliable** data on social **indicators** only at higher **geographic** levels.

- (a) survey
- (b) reliable
- (c) indicators
- (d) geographical
- (e) All are correct

Directions (24-28): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a paragraph; then answer the questions given below them.

- (A) Sometimes, these reactions are related to the intensity and different shades of a colour.
- (B) Lastly, green's calming effects might derive from its association with nature, which people experience as relaxing.
- (C) One study found a "green effect" on those who exercised indoors while watching a video of outdoor space with a green overlay.
- (D) Research in colour psychology suggests that colours evoke psychological reactions, affecting moods and emotions.
- (E) They experienced less exertion and calmness than when they watched the same video with a red or grey overlay.
- (F) Green colour especially has a strong effect on human nature and cast on the mind.

Q24. Which of the following will be the third statement after rearrangement?

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

Q25. Which of the following will be the first statement after rearrangement?

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

Q26. Which of the following will be the fourth statement after rearrangement?

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

Q27. Which of the following will be the second statement after rearrangement?

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

Q28. Which of the following will be the last statement after rearrangement?

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

Directions (29-30): In each of the questions, a word is given, and corresponding to it three sentences are given. Choose the correct sentence that has the correct usage of the word.

Q29. Revoke

- (A) University will **revoke** students' graduate degrees who were found guilty of theft.
- (B) The embassy will **revoke** your visa if you do not submit the required documents.
- (C) I will **revoke** late night in the party as tomorrow is my office off.

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

Q30. Conserve

- (A) Environmentalists have suggested many innovative solutions to **conserve** forests.
- (B) Many new buildings are under **conserve** in this industrial area.
- (C) The government is planning to **conserve** energy amid the crisis.

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

Directions (31-35): Study the following information carefully and answer the questions given below.

Eight persons A-H sit in a row such that all of them face towards north but not necessarily in the same order. Two persons sit between A and B. H sits third from one of the ends. B sits to the left of H but not immediate left. A does not sit immediate left of H. B does not sit at the end. One person sits between H and D. Number of persons sits between B and D is one more than the number of persons sit between C and E. C is not adjacent to B. F sits to the right of H.

Q31. Who among the following sits second to the left of F?

- (a) E
- (b) A
- (c) C
- (d) D
- (e) None of these

Q32. How many persons sit between G and H?

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

Q33. Which among the following statement is true?

- (a) D does not sit at one of the ends
- (b) Two persons sit between G and E
- (c) B sits third to the left of F
- (d) More than two persons sit to the right of F
- (e) E and H doesn't sit adjacent

Q34. Four of the following five belong to a group in a certain way, which among the following does not belong to that group?

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

Q35. What is the position of C with respect to E?

- (a) Second to the right
- (b) Third to the right
- (c) Third to the left
- (d) Immediate right
- (e) None of these

Directions (36-38): In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.

Q36. Statements: $P \leq Q > R = S < T \leq U < V$

Conclusions: I. $Q > T$ II. $U > S$

- (a) Either I or II is true
- (b) Neither I nor II is true
- (c) Both I and II are true
- (d) Only II is true
- (e) Only I is true

Q37. Statements: $L < M = N \leq O < P > Q = R$

Conclusions: I. $N < Q$ II. $R > L$

- (a) Either I or II is true
- (b) Neither I nor II is true
- (c) Both I and II are true
- (d) Only II is true
- (e) Only I is true

Q38. Statements: $A > B \leq C = D < E > F = G \leq H$

Conclusions: I. $A > E$ II. $B \leq G$

- (a) Either I or II is true
- (b) Neither I nor II is true
- (c) Both I and II are true
- (d) Only II is true
- (e) Only I is true

Directions (39-40): Study the following information carefully and answer the below questions.

Five persons- U, V, W, X and Y are having different number of balls. V has more balls than Y. X has more balls than W. Only two persons have the balls between V and W. The number of persons having more balls than V is same as the number of persons having less balls than X.

Q39. If V has 20 balls then what may be the possible sum of the balls of V and U?

- (a) 38
- (b) 35
- (c) 33
- (d) 42
- (e) None of these

Q40. How many persons are having more balls than Y?

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

Directions (41-45): Study the following information carefully and answer the questions given below:

Eight persons A-H are sitting around a square table but not necessarily in the same order. Four persons sit at the corners and four at the middle of the sides of the table. Persons sitting at the corners are facing away from the center of the table and person sitting at the middle of the side of the table are facing towards the center of the table.

One person sits between A and D. D does not sit at the corner. B sits third to the left of A. G sits three positions away from B. As many persons sits between A and G when counted from the right of A as between C and E. Neither C nor E sit adjacent to D and B. Number of persons sits between C and B when counted from the right of C is one more than the number of persons sits between H and F when counted from the right of H. H doesn't sit at the corner.

Q41. What is the position of F with respect to A?

- (a) Immediate left
- (b) Immediate right
- (c) Second to the right
- (d) Third to the left
- (e) None of these

Q42. How many persons sit between H and G?

- (a) Five
- (b) Three
- (c) Either One or Five
- (d) One
- (e) None of these

Q43. Four of the following five belong to a group in a certain way, which among the following does not belong to that group?

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

Q44. Who among the following person sits opposite to the one who sits third to the left of C?

- (a) A
- (b) D
- (c) E
- (d) F
- (e) None of these

Q45. Which among the following statement(s) is/are true?

- (a) C sits third to the left of G
- (b) D and G sit opposite to each other
- (c) E and H does not sit immediate left to each other
- (d) E does not sit at the corner
- (e) All are true

Directions (46-50): Study the following information carefully and answer the questions given below:

In a certain code language;

“Global economic growth nation” is coded as “mj rs yw pb”

“World economic outlook update” is coded as “zn kp bd rs”

“Challenges risks nation growth” is coded as “cx yw dw pb”

“Update challenges slowed down” is coded as “ir bd cx jq”

Q46. Which among the following word will be coded as “zn”?

- (a) World
- (b) Update
- (c) Outlook
- (d) Either World or Outlook
- (e) Either Update or Outlook

Q47. What will be code for the word “Slowed”?

- (a) jq
- (b) bd
- (c) cx
- (d) ir
- (e) Can't be determined

Q48. If “with nation” is coded as “uv pb” then what will be code for “growth with”?

- (a) yw uv
- (b) uv dw
- (c) yw cx
- (d) pb yw
- (e) Can't be determined

Q49. Which among the following combination is definitely true?

- (a) Global- rs
- (b) Down-dw
- (c) Update-cx
- (d) Economic-rs
- (e) None is true

Q50. What is the code for the word “Challenges”?

- (a) bd
- (b) cx
- (c) jq
- (d) ir
- (e) dw

Q51. If we form a five-letter meaningful word with 2nd, 3rd, 4th, 7th and 8th letter from the left end of the word “NECESSARY” (using each letter only once), then what would be the third letter of that meaningful word from the right end? 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) C
- (b) E
- (c) R
- (d) X
- (e) Z

Q52. How many such pairs of letters are there in the given word “FEATURES”, each of which has as many letters between them as they have in English alphabetical series (In backward and forward direction)?

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

Directions (53-57): Study the following information carefully and answer the questions given below.

There are eight boxes placed one above the other in such a way that the bottommost box is numbered as 1 and just above the box is numbered as 2 and so on till the top most box is numbered as 8. Five boxes are placed above box F which is placed above box H. Three boxes are placed between box D and box H. The sum of the box number of box C and box H is equal to the box number of box G which is placed below box B. Box A is placed above box E which is not placed below box H.

Q53. Which of the following box is placed just below box B?

- (a) E
- (b) C
- (c) F
- (d) G
- (e) None of these

Q54. What is the box number of box C?

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

Q55. How many boxes are placed between box A and box H?

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) 0

Q56. What will be the sum of the box number of box F and box G?

- (a) 11
- (b) 12
- (c) 13
- (d) 14
- (e) 10

Q57. Which box is placed two boxes above box D?

- (a) A
- (b) B
- (c) G
- (d) E
- (e) None of these



Directions (58-62): Following questions are based on the five words given below, study the following words and answer the following question:

TIN CTU SIN TOP ERA

Q58. If all the letters of the given words are arranged in alphabetical order from left to right within the word, then how many meaningful words will be formed?

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

Q59. If in each of the given words, each of the consonants is changed to the just succeeding letter and each vowel is changed to the just preceding letter in the alphabetical order, then how many words will have at least one vowel (Consider the circle of A-Z, means Z comes before A)?

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

Q60. If 'W' is added at the start of each of the given words, how many meaningful words thus formed using the given words?

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

Q61. How many vowels are there between the third letter of the second word from the left end and the first letter of the third word from the right end?

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

Q62. If the given words are arranged in the order as they appear in the dictionary from left to right, then which of the following word will be second from the right end?

- (a) SIN
- (b) TOP
- (c) TIN
- (d) ERA
- (e) None of these

Directions (63-65): Study the information carefully and answer the questions given below.

There are seven members in a family of three generations in which there are two married couples. R is the father of D who has one brother. G is the daughter in law of T. Q is the wife of T. F is the L's aunt and sister-in-law of G. F has no niece.

Q63. How many females are in the family?

- (a) Two
- (b) Three
- (c) Five
- (d) Four
- (e) Can't be determined

Q64. If X is the D's spouse than how is G related to X?

- (a) Aunt
- (b) Mother
- (c) Sister-in-law
- (d) Mother-in-law
- (e) Niece

Q65. How is L related to Q?

- (a) Son-in-law
- (b) Grandson
- (c) Father
- (d) Grandfather
- (e) None of these

Directions (66-80): What will come in the place of question (?) mark in following questions?

Q66. $12 \times 15 + 27 - ? = 28\% \text{ of } 400$

- (a) 95
- (b) 85
- (c) 105
- (d) 75
- (e) 65

Q67. $25\% \text{ of } 680 + 16\% \text{ of } 525 - 22\% \text{ of } 450 = ?$

- (a) 166
- (b) 126
- (c) 136
- (d) 146
- (e) 156

Q68. $10^2 \times \frac{210}{20} \times 44 = 462 \times ?^2$

- (a) 10
- (b) 20
- (c) 5
- (d) 15
- (e) 25

Q69. $(2.89)^4 \div (4913 \div 1000)^3 \times (0.17 \times 10)^3 = (1.7)^{? - 3}$

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

Q70. $(45)^4 \div 225 \div 25 \div 729 + 3^3 = ?$

- (a) 31
- (b) 28
- (c) 27
- (d) 30
- (e) 26

Q71. $35\% \text{ of } 80 \times 20\% \text{ of } 250 - 424 = ? + 52 \times 8$

- (a) 580
- (b) 550
- (c) 570
- (d) 560
- (e) 590

Q72. $45 \div 65 \times 312 + 361 = ?^2 + 11 \times 32$

- (a) 15
- (b) 45
- (c) 35
- (d) 55
- (e) 25

Q73. $? \% \text{ of } (1131 - 502 - 241 - 188) = 60$

- (a) 30
- (b) 50
- (c) 40
- (d) 60
- (e) 70

Q74. $(? - 554) - 50\% \text{ of } \left(\frac{6450}{43}\right) = 36 \times 41 \div 369$

- (a) 647
- (b) 537
- (c) 679
- (d) 511
- (e) 633

Q75. $56.66 + 86.66 + 96.66 + 76.66 = ?$

- (a) 314.44
- (b) 311.64
- (c) 316.64
- (d) 316.46
- (e) 313.64

Q76. $\frac{31}{3}$ of $\frac{124}{93}$ of $\frac{27}{4}$ + $\frac{5}{7}$ of $\frac{147}{3}$ of $\frac{36}{70}$ = ?

- (a) 117
- (b) 101
- (c) 122
- (d) 111
- (e) 138

Q77. $\sqrt{1225} \times 28 + 203 \times 7 = (?)^2$

- (a) 47
- (b) 45
- (c) 49
- (d) 51
- (e) 53

Q78. $(1365 \div 35) + (1089 \div 33) + (72 \div 8) = ?^2$

- (a) 3
- (b) 9
- (c) 7
- (d) 11
- (e) 5

Q79. $\sqrt[4]{625} + (15)^2 + \sqrt[3]{1728} = ?$

- (a) 232
- (b) 262
- (c) 242
- (d) 272
- (e) 252

Q80. $(0.5)^4 \div (0.25)^3 \div 0.04 \times \sqrt[3]{64} \div 100 = ?$

- (a) 6
- (b) 8
- (c) 4
- (d) 12
- (e) 2

Directions (81-85): What will come in the place of the question mark (?) in the following number series.

Q81. 10, 131, 275, 444, 640, 865, ?

- (a) 1131
- (b) 1121
- (c) 1161
- (d) 1122
- (e) 1120

Q82. 17, 20, 26, ?, 55, 82, 120

- (a) 30
- (b) 34
- (c) 36
- (d) 38
- (e) 37

Q83. 300, 150, ?, 225, 450, 1125, 3375

- (a) 150
- (b) 125
- (c) 130
- (d) 135
- (e) 145

Q84. ?, 56, 34, 67, 23, 78, 12

- (a) 40
- (b) 48
- (c) 45
- (d) 35
- (e) 30

Q85. 0, 1, 6, ?, 156, 781, 3906,

- (a) 25
- (b) 29
- (c) 31
- (d) 22
- (e) 20

Q86. A can do a piece of work in 15 days and B takes 40% more time than that of A to complete the same work. If A and B start working together, then find in how much time 60% of the work will be completed?

- (a) 6.25 days
- (b) 5.25 days
- (c) 4.25 days
- (d) 2.25 days
- (e) 7.25 days

Q87. P spends 25% of his monthly income on food, 20% of remaining on travelling and 35% of remaining on miscellaneous. If money spend on miscellaneous is Rs.4200, then find the monthly income of P?

- (a) Rs.25,000
- (b) Rs.20,000
- (c) Rs.30,000
- (d) Rs.10,000
- (e) Rs.25,500

Q88. Speed of boat in still water is 13 km/hr and the difference between downstream speed and upstream speed of boat is 10 km/hr. Find the time taken by boat to cover 80 km in upstream?

- (a) 8 hr
- (b) 2.5 hr
- (c) 7 hr
- (d) 10 hr
- (e) 5 hr

Q89. A person deposited Rs.15600 at R% per annum on simple interest and after four years he got Rs.3120 as interest. Had the rate of interest been (R+3)%, how much he would have got interest after three years?

- (a) Rs. 3741
- (b) Rs. 3742
- (c) Rs. 3743
- (d) Rs. 3744
- (e) Rs. 3745

Q90. A and B started a business by investing Rs.10000 and Rs.12000 respectively. After eight months, C joined them by investing Rs.15000. If after eighteen months, the profit share of C is Rs.5000, then find the total profit in the business?

- (a) Rs. 18100
- (b) Rs. 18300
- (c) Rs. 18200
- (d) Rs. 18000
- (e) Rs. 18500

Q91. Alcohol and water in mixture A and mixture B are 20% and 55% respectively. If mixture A and B mixed together, then the percentage of alcohol in resultant mixture becomes 35%. Find the ratio of quantity of mixture A to mixture B in resultant mixture?

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

Q92. If 64 identical small spheres made out of big sphere having diameter of 8 cm, then find the surface area of each small sphere?

- (a) 10π
- (b) 2π
- (c) 4π
- (d) 16π
- (e) 8π

Q93. Amit has 40 articles of same cost price. He sold 24 articles at profit of 30% and remaining articles at profit of 20%. If he sold all 40 articles at profit of 15%, then his profit would have reduced by Rs. 5720. Find the cost price of each article?

- (a) Rs.1000
- (b) Rs.1100
- (c) Rs.1200
- (d) Rs.1300
- (e) Rs.1400

Q94. Length of train A is 240 meters and length of a tunnel is 150% more than that of train A. Train A can cross the tunnel in 30 seconds. If train B having length is 320 meters running in opposite direction to train A at the speed of 72 km/hr, then find time required in which both trains can cross each other?

- (a) $\frac{35}{3}$ sec.
- (b) 36 sec.
- (c) 15 sec.
- (d) $\frac{36}{5}$ sec.
- (e) $\frac{37}{3}$ sec.

Q95. The ratio of present age of Aarti to her mother is 3 : 4 and the ratio of present ages of Aarti's mother to her brother is 9 : 4. If Aarti's brother is 11 years younger than Aarti, then find the age of her mother?

- (a) 36 years
- (b) 22 years
- (c) 26 years
- (d) 46 years
- (e) 56 years

Directions (96-100): Read the following table carefully and answer the questions given below. The table shows four different persons sold number of shirts on four different days.

Persons	Sunday	Monday	Tuesday	Wednesday
A	80	65	105	72
B	120	150	175	148
C	100	180	50	108
D	75	60	90	78

Q96. Total number of shirts sold by B on Tuesday is how many more or less than the total number of shirts sold by A on Sunday.

- (a) 100
- (b) 80
- (c) 85
- (d) 90
- (e) 95

Q97. Total number of shirts sold by C on Wednesday is what percentage of the total number of shirts sold by B on Sunday?

- (a) 50%
- (b) 75%
- (c) 90%
- (d) 66.67%
- (e) 83.33%

Q98. Find the ratio of the total number of shirts sold by D on Mondays to the total number of shirts sold by A on Tuesday.

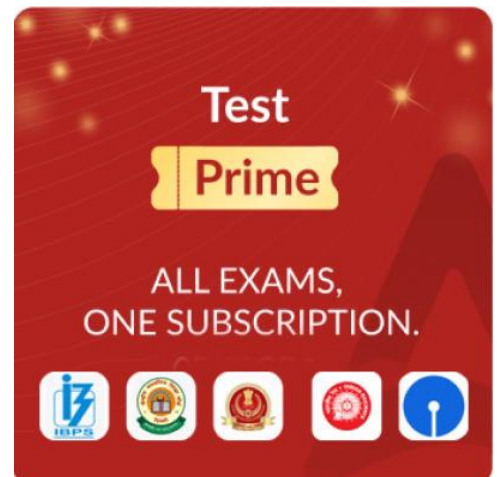
- (a) 8:9
- (b) 11:10
- (c) 4:7
- (d) 9:7
- (e) 5:8

Q99. If the total number of shirts sold by E on Sunday is 25% more than the total number of shirts sold by A on Wednesday, then find the difference between the total number of shirts sold by E on Sunday and that by D.

- (a) 10
- (b) 18
- (c) 12
- (d) 10
- (e) 15


Q100. Find the average number of shirts sold by B, C and D on Monday.

- (a) 120
- (b) 130
- (c) 110
- (d) 140
- (e) 150



Test
Prime

ALL EXAMS,
ONE SUBSCRIPTION.



Solutions

S1. Ans.(c)

Sol. By going through the passage, it is clear that the statement referred here is about 'nothing can be as fast as doing nothing.' With reference to this concept, the author has used this analogy of old programming. For clear understanding, refer to the very first statement of the passage, "Not doing something will always be faster than doing it."

S2. Ans.(d)

Sol. To validate the answer, refer to the second paragraph, "We agree to many requests not because we want to do them, but because we don't want to be seen as rude, arrogant, or unhelpful."

S3. Ans.(c)

By going through the given passage, it can be clearly understood that the main concept of the passage is to make us understand the importance of saying 'no'. To have a better management of time, we need to eliminate the tasks that are not aligned with our goals. Thus, option (c) is the correct answer choice for the given question.

S4. Ans.(a)

Sol. To validate the answer, refer to the last paragraph, "saying no is sometimes seen as a luxury that only those in power can afford. And it is true: turning down opportunities is easier when you can fall back on the safety net provided by power, money, and authority"

S5. Ans.(d)

Sol. To validate the answer, refer to the lines of the last paragraph, "saying no is an important skill to develop at any stage of your career because it retains the most important asset in life: your time. You need to say no to whatever isn't leading you toward your goals. You need to say no to distractions."

S6. Ans.(b)

Sol. To validate the answer, refer to the second paragraph which mentions, "The economist Tim Harford correctly put it, "Every time we say yes to a request, we are also saying no to anything else we might accomplish with the time."

S7. Ans.(b)

Sol. The correct choice is option(b)

Frugal: sparing or economical as regards money or food.

Gracious: courteous, kind, and pleasant

Adamant: refusing to be persuaded or to change one's mind.

Coy: making a pretence of shyness or modesty that is intended to be alluring

Haughty: arrogantly superior and disdainful

S8. Ans.(c)

Sol. The correct choice is option(c). As 'fall back' means move or turn back. Thus, retreat is the only synonym here.

Terminate: bring to an end.

Retreat: move back or withdraw.

S9. Ans.(a)

Sol. The most suitable word for the given blank is "vacant".

Vacant- (of a place) not occupied; empty.

Expressed- convey (a thought or feeling) in words or by gestures and conduct.

Structured- construct or arrange according to a plan; give a pattern or organization to.

Inanimate- possessing none of the characteristics of life that an animal or plant has: an inanimate object.

Abandoned- having been deserted or left

S10. Ans.(d)

Sol. The most suitable word for the given blank is "accommodate".

Boost- help or encourage (something) to increase or improve.

Accelerate- (especially of a vehicle) begin to move more quickly.

Convey- transport or carry to a place.

Accommodate- (of a building or other area) provide lodging or sufficient space for.

Modify- make partial or minor changes to (something).

S11. Ans.(a)

Sol. The most suitable word for the given blank is "accreditation".

Accreditation- the action or process of officially recognizing someone as having a particular status or being qualified to perform a particular activity.

Credentials- a document proving a person's identity or qualifications.

Institution-an organization founded for a religious, educational, professional, or social purpose.

Disposal- the action or process of getting rid of something.

Contents- the things that are held or included in something.

S12. Ans.(b)

Sol. The most suitable word for the given blank is "amenities".

Specialty: a pursuit, area of study, or skill to which someone has devoted much time and effort and in which they are expert.

Amenities- a desirable or useful feature or facility of a building or place.

Rearrangements- the action or process of changing the position, time, or order of something.

Aid- help, typically of a practical nature.

Acquisition- the learning or developing of a skill, habit, or quality.

S13. Ans.(e)

Sol. The most suitable word for the given blank is “consistency”.

Occurrence: an incident or event.

Determination- the quality of being determined; firmness of purpose.

Uncertainty- something that is uncertain or that causes one to feel uncertain.

Flexibility- the ability to be easily modified.

Consistency- the quality of achieving a level of performance which does not vary greatly in quality over time.

S14. Ans.(c)

Sol. The error is in part (C). Here ‘experiences’ should be replaced with ‘experience’ after the modal verb ‘can’.

S15. Ans.(d)

Sol. The error is in part (D). When we have two future events ‘will give you keyring’ and ‘you will visit me’, then we use future tense for events that will happen later in the future and simple present tense for the first event. Hence the correct structure will be “I will give you a keyring which I have got from Dubai when you visit me”.

S16. Ans.(c)

Sol. The error is in part (C). Here ‘are’ should be replaced with ‘is’ because “The number of’ is always followed by a singular verb.

S17. Ans.(a)

Sol. The error is in part (A). Here ‘me’ which is the objective case personal pronoun should be replaced with ‘I’ subjective case personal pronoun as the objective case personal pronoun can’t be used as a subject.

S18. Ans.(e)

Sol. The given sentence is error-free.

S19. Ans.(d)

Sol. the word “maladiction” is wrongly spelt and correct spelling should be “malediction”

S20. Ans.(d)

Sol. The word “occurring” is wrongly spelt and correct spelling should be “occurring”

S21. Ans.(e)

Sol. All the highlighted words are correctly spelt.

S22. Ans.(d)

Sol. ‘Sensitivity’ is misspelt and its correct spelling is ‘sensitivity’.

S23. Ans.(b)

Sol. 'Reliable' is misspelt and its correct spelling is 'reliable'.

S24. Ans.(b)

Sol. By going through all the statements, we can conclude that the passage is talking about colours and their effect on humans. The first in the arrangement will be sentence (D) which mentions that colours evoke psychological reactions which affect mood swings. Sentence (D) will be followed by sentence (A) which mentions these reactions, mentioned in statement (D), are related to the intensity and different shades of a colour. The third will be statement (F) which mentions that the green colour especially has a strong effect. Fourth in the arrangement is sentence (C) which mentions the green effect on those who are exercising while watching a video of outdoor space with a green overlay. The fifth will be sentence (E) which mentions the effect of the experiment. Last will be a statement (B) which gives a reason for the calming effect mentioned in previous statement. The correct sequence of sentences is DAFCEB.

S25. Ans.(c)

Sol. By going through all the statements, we can conclude that the passage is talking about colours and their effect on humans. The first in the arrangement will be sentence (D) which mentions that colours evoke psychological reactions which affect mood swings. Sentence (D) will be followed by sentence (A) which mentions these reactions, mentioned in statement (D), are related to the intensity and different shades of a colour. The third will be statement (F) which mentions that the green colour especially has a strong effect. Forth in the arrangement is sentence (C) which mentions the green effect on those who are exercising while watching a video of outdoor space with a green overlay. The fifth will be sentence (E) which mentions the effect of the experiment. Last will be a statement (B) which gives a reason for the calming effect mentioned in previous statement. The correct sequence of sentences is DAFCEB.

S26. Ans.(e)

Sol. By going through all the statements, we can conclude that the passage is talking about colours and their effect on humans. The first in the arrangement will be sentence (D) which mentions that colours evoke psychological reactions which affect mood swings. Sentence (D) will be followed by sentence (A) which mentions these reactions, mentioned in statement (D), are related to the intensity and different shades of a colour. The third will be statement (F) which mentions that the green colour especially has a strong effect. Forth in the arrangement is sentence (C) which mentions the green effect on those who are exercising while watching a video of outdoor space with a green overlay. The fifth will be sentence (E) which mentions the effect of the experiment. Last will be a statement (B) which gives a reason for the calming effect mentioned in previous statement. The correct sequence of sentences is DAFCEB.

S27. Ans.(b)

Sol. By going through all the statements, we can conclude that the passage is talking about colours and their effect on humans. The first in the arrangement will be sentence (D) which mentions that colours evoke psychological reactions which affect mood swings. Sentence (D) will be followed by sentence (A) which mentions these reactions, mentioned in statement (D), are related to the intensity and different shades of a colour. The third will be statement (F) which mentions that the green colour especially has a strong effect. Forth in the arrangement is sentence (C) which mentions the green effect on those who are exercising while watching a video of outdoor space with a green overlay. The fifth will be sentence (E) which mentions the effect of the experiment. Last will be a statement (B) which gives a reason for the calming effect mentioned in previous statement. The correct sequence of sentences is DAFCEB.

S28. Ans.(a)

Sol. By going through all the statements, we can conclude that the passage is talking about colours and their effect on humans. The first in the arrangement will be sentence (D) which mentions that colours evoke psychological reactions which affect mood swings. Sentence (D) will be followed by sentence (A) which mentions these reactions, mentioned in statement (D), are related to the intensity and different shades of a colour. The third will be statement (F) which mentions that the green colour especially has a strong effect. Forth in the arrangement is sentence (C) which mentions the green effect on those who are exercising while watching a video of outdoor space with a green overlay. The fifth will be sentence (E) which mentions the effect of the experiment. Last will be a statement (B) which gives a reason for the calming effect mentioned in previous statement. The correct sequence of sentences is DAFCEB.

S29. Ans.(d)

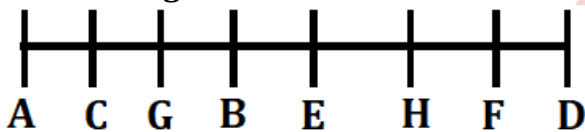
Sol. **Revoke** means 'officially cancel (a decree, decision, or promise)' and its usage is correct in **statements (A) and (B)**.

S30. Ans.(e)

Sol. '**Conserve**' means 'protect (something, especially something of environmental or cultural importance) from harm or destruction' and its usage is correct in **statements (A) and (C)**.

Solutions (31-35):

Final arrangement:



Explanation:

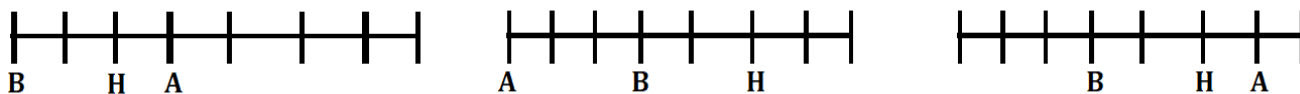
Clues: Two persons sit between A and B. H sits third from one of the ends. B sits to the left of H but not immediate left. A does not sit immediate left of H. B does not sit at the end.

Inference: From the above conditions there are three possibilities i.e., Case 1, Case 2 and Case 3.

Case 1

Case 2

Case 3



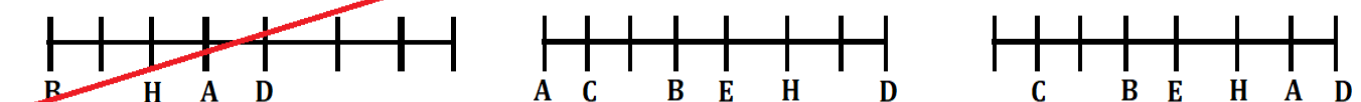
Clues: One person sits between H and D. Number of persons sits between B and D is one more than the number of persons sit between C and E. C is not adjacent to B.

Inference: From the above conditions Case 1 is cancelled here as there is no place for C and E.

Case 1

Case 2

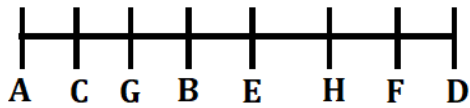
Case 3



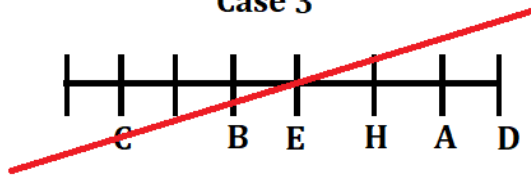
Clue: F sits to the right of H.

Inference: From the above conditions Case 3 is cancelled here as there is no place for F.

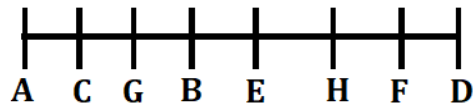
Case 2



Case 3



Inference: Final arrangement:



S31. Ans.(a)

Sol. E sits second to the left of F.

S32. Ans.(d)

Sol. Two persons sit between G and H.

S33. Ans.(c)

Sol. Statement given in option(c) is true

S34. Ans.(d)

Sol. Except the person in option (d), first person sits second to the left of second person

S35. Ans.(c)

Sol. C sits third to the left of E.

S36. Ans.(d)

Sol. I. $Q > T$ (False) **II.** $U > S$ (True)

S37. Ans.(b)

Sol. I. $N < Q$ (False) **II.** $R > L$ (False)

S38. Ans.(b)

Sol. I. $A > E$ (False) **II.** $B \leq G$ (False)

Solutions (39-40):

$U > V > Y > X > W$

S39. Ans.(d)

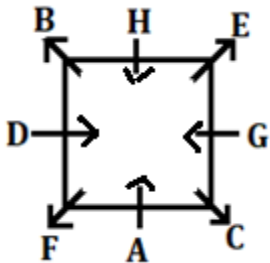
Sol. The possible sum of the balls of V and U is 42 balls.

S40. Ans.(b)

Sol. Two persons are having more balls than Y.

Solutions (41-45):

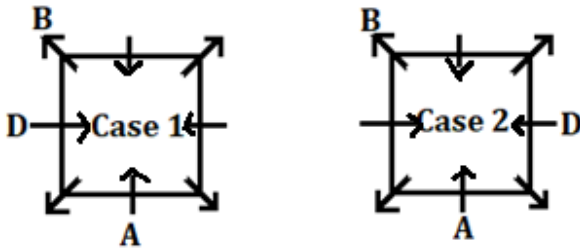
Final arrangement:



Explanation:

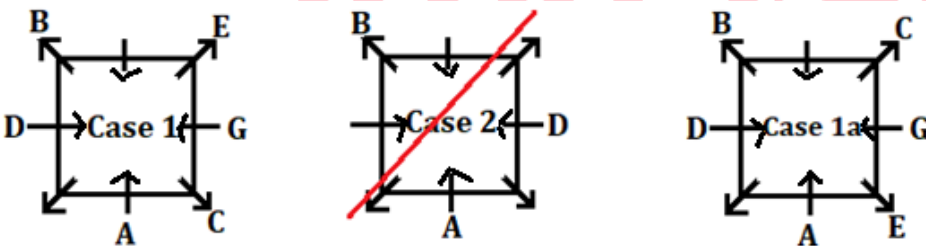
Clues: One person sits between A and D. D does not sit at the corner. B sits third to the left of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.



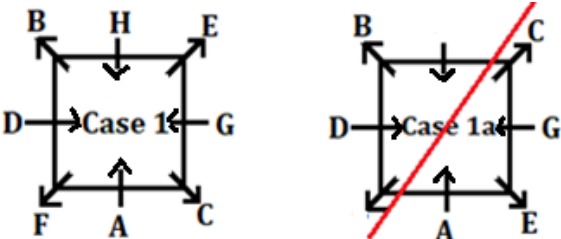
Clues: G sits three positions away from B. As many persons sit between A and G when counted from the right of A as between C and E. Neither C nor E sits adjacent to D and B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for G and one more possibility arises from Case 1 i.e., Case 1a.

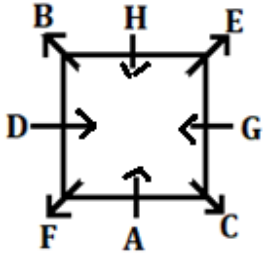


Clues: Number of persons sits between C and B when counted from the right of C is one more than the number of persons sits between H and F and when counted from the right of H. H doesn't sit at the corner.

Inference: From the above conditions Case 1a is cancelled here as there is no place for H and F.



Inference: Final arrangement:



S41. Ans.(a)

Sol. F sits immediate left of A

S42. Ans.(c)

Sol. Either one or five persons sit between H and G

S43. Ans.(c)

Sol. Except the person in option (c), all other person facing away from the center

S44. Ans.(a)

Sol. H sits third to the left of C

A sits opposite to H

S45. Ans.(b)

Sol. Statement given in option (b) is true

Solutions (46-50):

Words	Codes
Global	Mj
Economic	Rs
Growth/Nation	Yw/pb
World/Outlook	Zn/kp
Update	Bd
Challenges	Cx
Risks	Dw
Slowed /down	Ir/jq

S46. Ans.(d)

S47. Ans.(e)

S48. Ans.(a)

S49. Ans.(d)

S50. Ans.(b)

S51. Ans.(a)

Sol.



S52. Ans.(d)

Sol. 2nd, 3rd, 4th, 7th and 8th letter – E, C, E, A and R respectively

Thus, no meaningful word is formed.

Solutions (53-57):

Final arrangement:

Number	Boxes
8	B
7	G
6	C
5	D
4	A
3	F
2	E
1	H

Explanation:

Clues:

Five boxes are placed above box F which is placed above box H. Three boxes are placed between box D and box H.

Inference:

So, here we get two possibilities: -

Number	Boxes	Boxes
	Case 1	Case 2
8		
7		
6	D	
5		D
4		
3	F	F
2	H	
1		H

Clues:

The sum of the box number of box C and box H is equal to the box number of box G which is placed below box B.

Inference: So, as per the condition, number of box C and box G will be 5 and 7 respectively in case 1, and number of box C and box G will be 6 and 7 respectively in case 2.

Number	Boxes	Boxes
	Case 1	Case 2
8	B	B
7	G	G
6	D	C
5	C	D
4		
3	F	F
2	H	
1		H

Clues:

Box A is placed above box E which is not placed below box H.

Inference:

So, case 1 is cancelled here because box E is placed below box H.

Number	Boxes	Boxes
	Case 1	Case 2
8	B	B
7	G	G
6	D	C
5	C	D
4	A	A
3	F	F
2	H	E
1	E	H

Inference:

Final arrangement:

Number	Boxes
8	B
7	G
6	C
5	D
4	A
3	F
2	E
1	H

S53. Ans.(d)

Sol. Box G is placed just below box B.



BANK MAHAPACK
for all Bank & Insurance Exams
Selection Ka Saathi

S54. Ans.(a)

Sol. Box C is 6th number box.

S55. Ans.(b)

Sol. Two boxes are placed between box A and box H.

S56. Ans.(e)

Sol. The sum of the box number of box F (3) and box G (7) is 10

S57. Ans.(c)

Sol. Box G is placed two boxes above box D.

S58. Ans.(c)

Sol. Words after arranging in alphabetical order:

INT CTU INS OPT AER

One meaningful word is formed i.e., OPT

S59. Ans.(e)

Sol. After changing the consonants and vowels:

UHO DUT THO UNQ DSZ

Four such words have at least one vowel.

S60. Ans.(b)

Sol. Words after adding "W" at the start of each word:

WTIN WCTU WSIN WTOP WERA

No meaningful word is formed.

S61. Ans.(b)

Sol. The second word from the left end is CTU

The third letter of the word CTU is U

The third word from the right end is SIN

The first letter of the word SIN is S

There is no vowel between S and U

S62. Ans.(c)

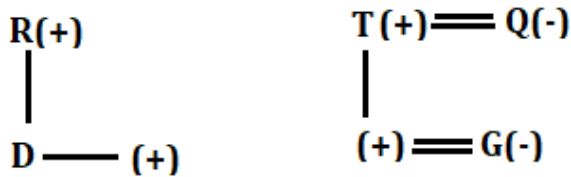
Sol. Words are arranged in the order as they appear in the dictionary from left to right

CTU ERA SIN TIN TOP

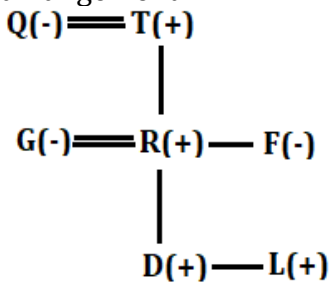
TIN is the second word from the right end

Solutions (63-65):

From the given statements, R is the father of D who has one brother. G is the daughter in law of T. Q is the wife of T.



F is the L's aunt and sister-in-law of G. F has no niece. After combing all these statements, we get the final arrangement -

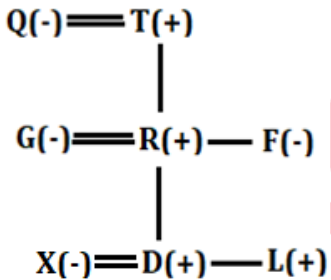


S63. Ans.(b)

Sol. Three females are in the family

S64. Ans.(d)

Sol.



S65. Ans.(b)

Sol. L is the grandson of Q

S66. Ans.(a)

Sol. $180 + 27 - 28 \times 4 = ?$

$207 - 28 = ?$

$95 = ?$

S67. Ans.(d)

Sol. $\frac{1}{4} \times 680 + \frac{16}{100} \times 525 - \frac{24}{100} \times 450 = ?$

$170 + 84 - 108 = ?$

$146 = ?$

S68. Ans.(a)

Sol. $100 \times \frac{210}{20} \times 44 \times \frac{1}{462} = ?^2$

$100 = ?^2$

$10 = ?$

S69. Ans.(e)

Sol. $(2.89)^4 \div (4913 \div 1000)^3 \times (0.17 \times 10)^3 = (1.7)^{?-3}$

$1.7^2 = (1.7)^{?-3}$

$2 = ? - 3$

$? = 5$

S70. Ans.(b)

Sol. $(45)^4 \div 225 \div 25 \div 729 + 3^3 = ?$

$? = 28$

S71. Ans.(d)

Sol. $\frac{35}{100} \times 80 \times \frac{20}{100} \times 250 - 424 = ? + 52 \times 8$

$1400 - 424 = ? + 416$

$? = 560$

S72. Ans.(a)

Sol. $45 \times \frac{1}{65} \times 312 + 361 = ?^2 + 11 \times 32$

$577 = ?^2 + 352$

$? = (225)^{\frac{1}{2}}$

$? = 15$

S73. Ans.(a)

Sol. $\frac{?}{100} \times (1131 - 502 - 241 - 188) = 60$

$\frac{?}{100} \times 200 = 60$

$? = \frac{60}{2}$

$? = 30$

S74. Ans.(e)

Sol. $? - 554 - \frac{50}{100} \times \frac{6450}{43} = \frac{36 \times 41}{369}$

$? - 554 - 75 = 4$

$? = 4 + 629$

$? = 633$

S75. Ans.(c)

Sol. $? = 56.66 + 86.66 + 96.66 + 76.66$
 $? = 316.64$

S76. Ans.(d)

Sol. $? = \frac{31}{3} \times \frac{124}{93} \times \frac{27}{4} + \frac{5}{7} \times \frac{147}{3} \times \frac{36}{70}$
 $= 93 + 18$
 $= 111$

S77. Ans.(c)

Sol. $\sqrt{1225} \times 28 + 203 \times 7 = (?)^2$
 $(?)^2 = 35 \times 28 + 203 \times 7$
 $= 980 + 1421$
 $= 2401$
 $? = \sqrt{2401}$
 $? = 49$

S78. Ans.(b)

Sol. $(1365 \div 35) + (1089 \div 33) + (72 \div 8) = ?^2$
 $39 + 33 + 9 = ?^2$
 $81 = ?^2$
 $9 = ?$

S79. Ans.(c)

Sol. $? = 5 + 225 + 12$
 $242 = ?$

S80. Ans.(c)

Sol. $(0.5)^4 \div (0.25)^3 \div 0.04 \times \sqrt[3]{64} = ?$
 $\frac{625}{10000} \times \frac{1000000}{25 \times 25 \times 25} \times \frac{100}{4} \times 4 \times \frac{1}{100} = ?$
 $4 = ?$

S81. Ans.(b)

Sol. Pattern of series -
 $10 + 11^2 = 131$
 $131 + 12^2 = 275$
 $275 + 13^2 = 444$
 $444 + 14^2 = 640$
 $640 + 15^2 = 865$
 $865 + 16^2 = 1121$

S82. Ans.(e)**Sol.** Pattern of series –

$$17 + (1^2 + 2) = 20$$

$$20 + (2^2 + 2) = 26$$

$$26 + (3^2 + 2) = 37$$

$$37 + (4^2 + 2) = 55$$

$$55 + (5^2 + 2) = 82$$

$$82 + (6^2 + 2) = 120$$

S83. Ans.(a)**Sol.** $300 \times 0.5 = 150$

$$150 \times 1 = 150$$

$$150 \times 1.5 = 225$$

$$225 \times 2 = 450$$

$$450 \times 2.5 = 1125$$

$$1125 \times 3 = 3375$$

S84. Ans.(c)**Sol.** Pattern of series –

$$45 + (11) = 56$$

$$56 - (22) = 34$$

$$34 + (33) = 67$$

$$67 - (44) = 23$$

$$23 + (55) = 78$$

$$78 - (66) = 12$$

S85. Ans.(c)**Sol.** Pattern of series –

$$0 + 5^0 = 1$$

$$1 + 5^1 = 6$$

$$6 + 5^2 = 31$$

$$31 + 5^3 = 156$$

$$156 + 5^4 = 781$$

$$781 + 5^5 = 3906$$

S86. Ans.(b)**Sol.** A complete the work in 15 days

$$B \text{ complete the work} = \frac{140}{100} \times 15 = 21 \text{ days}$$

Total work = 105 units (LCM of 15 and 21)

$$\text{Efficiency of A} = \frac{105}{15} = 7 \text{ unit/day}$$

$$\text{Efficiency of B} = \frac{105}{21} = 5 \text{ unit/day}$$

$$\text{Req. days} = \frac{105 \times \frac{60}{100}}{7+5}$$

$$\frac{63}{12} = 5.25 \text{ days}$$

S87. Ans.(b)

Sol. Let monthly income of P be Rs.100x

$$\text{Money spend on miscellaneous} = 100x \times \frac{75}{100} \times \frac{80}{100} \times \frac{35}{100} = 4200$$

$$21x = 4200$$

$$x = 200$$

$$\text{Monthly income of P} = 100x = \text{Rs.20000}$$

S88. Ans.(d)

Sol. Let the speed of stream be y km/h

ATQ,

$$(13+y) - (13-y) = 10$$

$$2y = 10$$

$$y = 5$$

$$\text{Required time} = \frac{80}{13-5} = 10 \text{ hr}$$

S89. Ans.(d)

$$\text{Sol. } \frac{15600 \times R \times 4}{100} = \text{Rs. 3120}$$

$$R = 5\%$$

$$\text{Req. interest} = \frac{15600 \times (5+3) \times 3}{100} = \text{Rs. 3744}$$

S90. Ans.(c)

Sol. Ratio of profit share of A, B and C =

$$10000 \times 18 : 12000 \times 18 : 15000 \times 10$$

$$= 30 : 36 : 25$$

$$\text{So, total profit} = \frac{5000}{25} \times 91 = \text{Rs. 18200}$$

S91. Ans.(b)

Sol. Alcohol in mixture A = 20%

Alcohol in mixture B = 45%

By allegation,

20% 45%

35%

10% 15%

So, required ratio = 2:3

S92. Ans.(c)

Sol. Radius of bigger sphere = $\frac{8}{2} = 4 \text{ cm}$

Let radius of smaller sphere be r cm

$$\frac{4}{3}\pi r^3 = \frac{\frac{4}{3}\pi \times 4^3}{64}$$

$$r = 1 \text{ cm}$$

$$\text{Surface area each small sphere} = 4\pi r^2 = 4\pi$$

S93. Ans.(d)

Sol. Let cost price of each article = $100x$ Rs.

So, total cost price of 40 articles = $40 \times 100x = 4000x$ Rs.

And total selling price, when 24 articles at profit of 30% and remaining articles at profit of 20%
 $= (24 \times 100x) \times \frac{130}{100} + (16 \times 100x) \times \frac{120}{100} = 5040x$ Rs.

Total profit, when 24 articles at profit of 30% and remaining articles at profit of 20%
 $= (5040x - 4000x) = 1040x$ Rs.

When all articles sell at 15% profit, then selling price of 40 articles = $\frac{115}{100} \times 4000x = 4600x$ Rs.

Total profit, when all articles sell at 15% profit, then selling price of 40 articles
 $= 4600x - 4000x = 600x$ Rs.

ATQ,

$$1040x - 600x = 5720$$

$$x = 13 \text{ Rs.}$$

Cost price of each article = Rs.1300

S94. Ans.(a)

Sol. Length of train A = 240 meters

Length of tunnel = $240 \times \frac{250}{100} = 600$ meters

\therefore speed of train A = $\frac{600+240}{30} = 28$ meters/sec

Required time = $\frac{320+240}{28+20}$ ($\because 72 \text{ km/h} = 20 \text{ m/sec}$)

$$= \frac{560}{48} = \frac{35}{3} \text{ sec}$$

S95. Ans.(a)

Sol. Given,

Aarti : **Aarti's mother** = 3 : 4

Also,

Aarti's mother : **Aarti's brother** = 9 : 4

So, Aarti : **Aarti's mother** : **Aarti's brother** = 27 : 36 : 16

ATQ,

$$27x - 16x = 11$$

$$x = 1$$

Age of **Aarti's mother** = 36 years

S96. Ans.(e)

Sol. Required difference = $175 - 80 = 95$

S97. Ans.(c)

Sol. Required percentage = $\frac{108}{120} \times 100 = 90\%$

S98. Ans.(c)

Sol. Required ratio = 60 : 105 = 4:7

S99. Ans.(e)

Sol. Total number of shirts sold by E on Sunday = $\frac{125}{100} \times 72 = 90$

Required difference = 90 - 75 = 15

S100. Ans.(b)

Sol. Required average = $\frac{150+180+60}{3} = 130$

