OICL Assistant Prelims 2025 Memory Based Paper

Directions (1-5): Study the following information carefully and answer the questions given below:

In a certain code language:

'Test doctor testing lab' is coded as 'di po as sq'

'Doctor high demand medicine' is coded as 'di we yu cx'

'High costly lab too' is coded as 'we gh as kh'

'Now demand testing too' is coded as 'yu po kh ai'

Q1. What is the code of "Test" as per the given code language?

(a) di

(b) as

(c) sq

(d) yu

(e) cx

Q2. What is the code of "Costly" as per the given code language?

(a) gh

(b) we

(c) sq

(d) yu

(e) cx

Q3. What may be the possible code of "China doctor" as per the given code language?

(a) di as

(b) po di

(c) sq di

(d) yu as

(e) di lp

Q4. Which of the following word is coded as 'po' as per the given code language?

(a) Lab

(b) Testing

(c) Too

(d) Demand

(e) None of these

Q5. What is the code of 'high time' as per the given code language?

(a) as we

(b) we yu

(c) kh cx

(d) yu cx

(e) None of these

Q6. If in the given word "WEBSERIES" if we removed all the vowels and replace all the consonants with just next letter according to the alphabetical series then how many vowels are there in the new arrangement?
(a) One
(b) None
(c) Three
(d) Two
(e) None of these

Directions (7-11): **In the question below, some statements are given followed by two conclusions. 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 follow from the given statements disregarding commonly known facts.**

Q7. Statements: Some A are B
Only a few B are C
All C are D
Conclusions: I. Some B are D
II. No A is C
(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

Q8. Statements: No 7 is 10
Only a few 12 is 10
Some 12 is 13
Conclusions: I. Some 7 is 13
II. All 10 being 12 is a possibility
(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

Q9. Statements: Some Planes are Trains
Only a few Electric are Trains
Only Electric are Buses
Conclusions: I. No Planes are Buses
II. Some trains may be Buses
(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

Q10. Statements: Some Sky is not Dark
Only a few Dark is Light
Some Light is Ice
Conclusions: I. No Ice is Dark
II. Some Light is not Sky
(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

Q11. Statements: Some Hot are Cold
No Cold is Dream
Only a few Day is Dream
Conclusions: I. Some Hot are Day
II. No Hot is Dream
(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

Directions (12-16): Study the alphanumeric symbol series carefully and answer the questions given below:
3 A @ 2 B # 7 C $ 9 D 4 E ^ 6 F & 7 G 2 H 9 # I * J 5 K @ 3 L

Q12. What is the position of the element "F" in the series from the right end?
(a) 11th
(b) 12th
(c) 16th
(d) 14th
(e) None of these

Q13. What is the sum of the digits given in the series?
(a) 57
(b) 58
(c) 56
(d) 49
(e) None of these

Q14. If all the vowels are dropped from the series, then which of the following element is 9th from the right end?
(a) H
(b) 9
(c) #
(d) *
(e) None of these

Q15. Which of the following element is the 7th to the left of the 6thelement from the right end in the given series?
(a) 7
(b) G
(c) 2
(d) H
(e) None of these

Q16. What will be the difference between the 6th number from both ends?
(a) 2
(b) 1
(c) 0
(d) 3
(e) None of these

Directions (17-19): Study the following information carefully and answer the questions given below.
Six students P, Q, R, S, T and U scored different marks in a test. The marks scored by each student are in integers. No two students scored the same marks. P scored 45 marks. R scored less marks than Q but more marks than S. S scored 11 marks less than P. R score is a prime number between the marks of S and 40. Q scored 5 marks more than R. Difference between the marks of P and U and R and S is same. T scored more marks than U and Q.

Q17. Who among the following scored just less marks than U?
(a) P
(b) The one who scored 34 marks
(c) R
(d) Q
(e) None of the above

Q18. What is the difference between the marks of Q and S?
(a) 8
(b) 10
(c) 7
(d) 4
(e) 6

Q19. If the marks scored by T are 50, then what is the total of marks scored by all six students?
(a) 357
(b) 187
(c) 190
(d) 195
(e) 256

Q20. If it is possible to make only one meaningful word from the 4th, 5th, 8th and 11th letters from the left end of the word "VICISSITUDE"" using each letter only once, then what is the last letter of the meaningful word. If no such meaningful word can be formed the answer is "Y" and if more than one such meaningful word can be formed, the answer will be "Z"?

(a) I
(b) S
(c) Z
(d) E
(e) Y

Directions (21-25): Study the following information carefully and answer the questions given below:

Seven persons A, B, C, D, E, F and G of a college are working at seven different designations (but not necessarily in the same order) viz. Chancellor, Vice Chancellor (VC), Dean, HOD, Professor, Assistant Professor and Lecturer. All the designations given are to be considered in the same order (As Chancellor is considered to be the Senior-most designation and Lecturer is considered to be the Junior-most designation).

A is three persons senior to G who is not designated as junior to Assistant professor. A is not the senior-most person. The number of persons senior to A is same as junior to C. F is immediately senior to B but junior to D.

Q21. Who among the following person is HOD?

(a) B
(b) C
(c) F
(d) D
(e) A

Q22. How many persons are designated between D and G?

(a) Two
(b) Four
(c) Three
(d) One
(e) Five

Q23. Which among the following combination is correct?

(a) D- Vice chancellor
(b) E- Professor
(c) C- Assistant professor
(d) G-Dean
(e) None of these

Q24. If all the persons are designated in alphabetical order from chancellor to Lecturer, then the position of how many persons remains unchanged?
(a) One
(b) Two
(c) Three
(d) None
(e) More than three

Q25. Which of the following statement is true regarding C?
(a) C is junior to E
(b) C is junior most among all
(c) Two persons are junior to C
(d) C is Assistant professor
(e) None is true

Directions (26-30): 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.

Q26. 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

Q27. How many persons sit between H and G?
(a) Five
(b) Three
(c) Either One or Five
(d) One
(e) None of these

Q28. 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

Q29. 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

Q30. 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 (31-35): Study the following information carefully and answer the questions given below:
Eight persons i.e., Rajesh, Vikram, Priya, Deepak, Nisha, Ananya, Arjun and Rahul were born on two different dates i.e., 7th and 10th of four different months viz. January, March, April and May of the same year but not necessarily in the same order.
One person was born between Vikram and Nisha. Arjun was born three persons before Nisha. Arjun is older than Vikram but not just older. Nisha was born in the month having an even number of days. Two persons were born between Deepak and Ananya. Neither Deepak nor Ananya was born in the month in which Vikram was born. Deepak is not just older than Arjun and Nisha. Ananya was not the first person to be born. Rajesh was born two persons before Rahul.

Q31. Who among the following persons was born just before Ananya?
(a) Arjun
(b) Nisha
(c) Rajesh
(d) Vikram
(e) None of these

Q32. How many persons were born between Vikram and Rajesh?
(a) Two
(b) Four
(c) One
(d) Three
(e) None of these

Q33. Who among the following persons was born in May?
(a) Priya
(b) Vikram
(c) Rajesh
(d) Nisha
(e) None of these

Q34. Which of the following statement(s) is/are true?
I. No one was born before Deepak
II. One person was born between Ananya and Nisha
III. Arjun is the oldest person among all
(a) Only II
(b) Only I
(c) Both I and II
(d) Both II and III
(e) All I, II and III

Q35. How many persons were born after Nisha?
(a) Four
(b) None
(c) One
(d) Two
(e) None of these

Directions (36-44): Read the given passage carefully and answer the following questions. Certain words have been highlighted to help answer the questions
The coconut tree is one of the most beautiful and useful trees in the tropics. It is grown in more than 90 countries, with world production concentrated in Asia and the Pacific. The Philippines, Indonesia, India, Sri Lanka, Thailand, Malaysia, and Papua New Guinea together account for about 80% of the total area planted to coconuts worldwide. With the **advent** of new processing technologies, the commercial production of a great array of commercial commodities can now be derived from coconut oil, which is the dominant product of the coconut. World coconut oil production has been increasing for the past decade because of greater global demand for its important characteristics.
Coconut oil contains the most concentrated commodity source of medium chain triglycerides (MCTs). Research has shown that MCTs derived from coconut oil possess **unique** properties with important nutritional and medical applications. Emerging applications of coconut include virgin coconut oil, which is a relatively new value-added product that has become available in the international market. Increasing attention has also been given to the use of coconut oil for biofuels or as bio-lubricants. It was established that lauric acid (C12) from coconut oil has a potent antimicrobial activity and was found to reduce the HIV virus.
Multi- story cropping is slowly gaining popularity with increased profitability. It is a system of growing together, crops of different heights at the same time and thus using land, water, and space most efficiently and economically. This is the most suited form of intensification of agriculture in many of the tropical islands and enhances the diversification of farming system and also brings climate resilience to the production system. Multi-storey cropping, for instance, coconut + black pepper + cacao + pineapple are planted so that each crop produces canopies at different heights.

Q36. As mentioned in the passage, which of the following factors has propelled the rise in coconut oil production?
(a) A significant increase in the production of coconut cultivation.
(b) Inadequate storage services to store coconuts for a long time.
(c) Considerably high demand for coconut oil due to its vital qualities.
(d) Frequent rise in coconut oil prices in the domestic market.
(e) None of these

Q37. What is/are the advantage(s) of multi-storey cropping suggested by the author?
(a) Makes production system withstand climate change.
(b) Increases agricultural production in many tropical islands.
(c) Promotes the diversity of the farming system.
(d) All of these
(e) None of these

Q38. What can be definitely concluded from the passage, about the production volume of coconut across the world?
(a) Seven countries are the major contributor to aggregate coconut production.
(b) India is the leading country in coconut production throughout the world.
(c) Sri Lanka, Thailand, and India are the largest producers of edible coconut oil.
(d) All of these
(e) None of these

Q39. According to the passage, which of the following type of plantation farming is called multi-storey cropping?
(a) Plantation that is done in the most fertile areas have thickly forested areas like amazon basin.
(b) Farming that requires a low level of technology, household labour and produces small amount of output.
(c) Farming which includes a small plot of land, simple and low-cost tools and, more labour.
(d) Cultivation of crops of different heights together to avail required natural resources effectively and in a frugal manner.
(e) None of these

Q40. As mentioned by the author, for what purpose(s) medium chain triglycerides can be used?
(a) MCT can be used for beautification purposes only.
(b) MCT is beneficial in nourishment and medical uses.
(c) Many mechanical activities found MCT crucial component.
(d) In various science experiments, MCT is an important substance.
(e) None of these

Q41. Which of the following statements is/are Incorrect with reference to the passage?
(i) More than ninety countries are involved in coconut production.
(ii)Coconut oil is the prime product of the coconut.
(iii)Coconut oil is also used for biofuels and bio-lubricants.
(a) All of these
(b) Only (iii)
(c) Both (ii) and (iii)
(d) None of these
(e) Only (i)

Q42. Which of the following words can replace word 'unique'?
(a) enigma
(b) extraordinary
(c) customary
(d) frequent
(e) cease

Q43. Which of the following words is an antonym of 'advent'?
(a) docile
(b) fervent
(c) prevail
(d) edifice
(e) departure

Q44. Which of the following statements best explains the significance of *lauric acid* derived from coconut oil as mentioned in the passage?
(a) It helps extend the storage life of coconut-based products and foods.
(b) It acts as a compound with antimicrobial effects and helps fight the HIV virus.
(c) It enhances the overall flavor and fragrance of coconut-derived oils.
(d) It improves the density and solid nature of coconut-based products.
(e) It contributes to the smooth and glossy texture of coconut-related items.

Directions (45-47): In each of the question given below, a statement has been given with a blank. Some words or phrases have been given in the options following the statement. Choose the most appropriate word or phrase that could fit in the statement to make it contextually meaningful and grammatically correct.

Q45. The ____ of the new policy has caused uproar among the employees.
(a) implementation
(b) interpretation
(c) revision
(d) formulation
(e) adoption

Q46. The _____ are bringing a White Tiger from Chennai as a mate for a White Tigress in the park.
(a) dabblers
(b) amateurs
(c) laymen
(d) authorities
(e) novices

Q47. Pulling one brick at a time, can _____ up the whole co-operative structure.
(a) stretch
(b) loosen
(c) attain
(d) bind
(e) restrain

Directions (48-52): Each question is divided into four parts in which one part has a grammatical error in it. Choose the incorrect part as your answer choice. If all the given parts are grammatically correct, choose "No Error" as your answer choice.

Q48. Brandon believed (A)/he could actualized his (B)/ vision, so he put a plan in (C)/ place to make it happen (D).
(a) A
(b) B
(c) C
(d) D
(e) No error

Q49. Police used a Taser to (A)/immobilize the combative (B)/suspect and arrest him (C)/once he was no longer fighting (D).
(a) A
(b) B
(c) C
(d) D
(e) No error

Q50. The store has placed a (A)/limitation for coupon use, (B) /only allowing one discount (C)/to be used at a time (D).
(a) A
(b) B
(c) C
(d) D
(e) No error

Q51. As a citizen, we study (A)/ our country's history because (B)/the past is a reliable way (C)/ to calculate the future (D).
(a) A
(b) B
(c) C
(d) D
(e) No error

Q52. It's high time you (A)/go to bed as (B)/you'll have to get (C)/up early tomorrow (D).
(a) A
(b) B
(c) C
(d) D
(e) No error

Directions (53-55): In each question four words are given in bold, in which one may or may not be grammatically or contextually correct. Choose the incorrect word as your answer choice.

Q53. Silk is a natural **fabric** that has long been the **prefareble material** for **garments**.
(a) fabric
(b) prefareble
(c) material
(d) garments
(e) All are correct

Q54. During the election, several **celebrities** held **fundraising** events to **endourse** their **favorite** candidates.
(a) celebrities
(b) fundraising
(c) endourse
(d) favorite
(e) All are correct

Q55. A man with a **generous heart** can see the **eccentric** value in something which looks **worthless** to others.
(a) generous
(b) heart
(c) eccentric
(d) worthless
(e) All are correct

Directions (56-60): A few sentences are provided in the following questions, each with a phrase highlighted in bold. There may or may not be an error in the highlighted phrase. The erroneous phrase can be replaced with one of the given alternatives. Choose "No replacement required" as your response if the sentence is correct.

Q56. She felt a rush in adrenaline as she approached the finish line.
(a) She feels a rush by
(b) She felt a rush of
(c) She is feeling a rush
(d) She felt a rush from
(e) No replacement required

Q57. The wind howled outside, rattling the windows and **causes the curtains fluttering**.
(a) caused the curtains to fluttering.
(b) causing the curtains flutter.
(c) causes the curtains to flutter.
(d) causing the curtains to flutter.
(e) No replacement required

Q58. The **sound of laughter fill the** room as the friends reminisced about old times.
(a) sound of laugh fills the
(b) sound of laughter filled the
(c) sound of laugh filling the
(d) sound of laughter fills the
(e) No replacement required

Q59. The scent **of lavender permeated the air,** calming her nerves and soothing her soul.
(a) of lavender permeated into the air,
(b) of lavender permeated by the air,
(c) of lavender permeated in the air,
(d) of lavender permeated for the air,
(e) No replacement required

Q60. The museum was filled into artifacts and exhibits that told the story of a bygone era.
(a) The museum is filling from
(b) The museum was filled with
(c) The museum filled up into
(d) The museum is filled ever
(e) No replacement required

Directions (61-65): In the given paragraph, few words are omitted, which are then replaced by blanks and a letter. Choose the word from the given options against each letter that can fit into the blank appropriately.
The layer of ozone helps ___ **(A)** ___ the harmful ultraviolet rays away from entering the Earth's atmosphere. Ozone layer depletion over the years has resulted in ozone hole formation through which harmful radiations can now enter the atmosphere. Ozone layer depletion has many ___ **(B)** __ effects including cancer risks. These wavelengths can harm plants and animals and also cause skin cancer, sunburn, and cataracts in humans. The problem is very ___ **(C)** ___ indeed and has rightly generated global concern. These concerns led to the ___ **(D)** ___ of the Montreal Protocol in the year 1987. This protocol bans the production of ozone-depleting chemicals like CFCs and halons. Ozone depletion refers to a steady ___ **(E)** ___ in the total amount of ozone present in the Earth's atmosphere or the ozone layer. It can also be described as a much larger decrease in stratospheric ozone around the polar regions of the Earth. The second phenomenon is termed as the ozone hole.

Q61. Which of the following words will fit in the given blank (A)?
(a) legitimize
(b) shield
(c) abuse
(d) punish
(e) give

Q62. Which of the following words will fit in the given blank (B)?
(a) Positive
(b) Beneficial
(c) Advantageous
(d) adverse
(e) Favourable

Q63. Which of the following words will fit in the given blank (C)?
(a) juvenile
(b) serious
(c) serene
(d) Trivial
(e) Frivolous

Q64. Which of the following words will fit in the given blank (D)?
(a) acknowledgment
(b) abomination
(c) abduction
(d) ratification
(e) repudiation

Q65. Which of the following words will fit in the given blank (E)?
(a) reduction
(b) expansion
(c) synchronisation
(d) tranquillity
(e) annotation

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

Q66. 12 × 15 + 27 – ? = 28% of 400
(a) 95
(b) 85
(c) 105
(d) 75
(e) 65

Q67. 25% of 680 + 16% of 525 – 22% 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. $235 + 352 + 183 - 49 = ?$
(a) 720
(b) 721
(c) 722
(d) 724
(e) 723

Q72. $5\frac{1}{4} + 9\frac{1}{3} - 6\frac{1}{6} + 4\frac{1}{2} = ?$
(a) $12\frac{11}{12}$
(b) $12\frac{7}{12}$
(c) $12\frac{5}{12}$
(d) $12\frac{13}{12}$
(e) $12\frac{3}{4}$

Q73. $\frac{5}{6}$ of $\frac{8}{7}$ of $\frac{21}{24}$ of 2526 = ?
(a) 2105
(b) 2115
(c) 2125
(d) 2135
(e) 2145

Q74. $5^2 + 13^2 - 11^2 + 52 = (?)^3$
(a) 4
(b) 5
(c) 7
(d) 3
(e) 8

Q75. $\frac{32}{100} \times 850 - ? = \frac{14}{100} \times 640$
(a) 182.4
(b) 184.4
(c) 186.4
(d) 188.4
(e) 192.4

Q76. $(219 + 87 - 46) \div (2 \times 4 + 5) = ?$
(a) 10
(b) 5
(c) 2
(d) 20
(e) 3

Q77. $\sqrt{225} \times 10 + 9^2 + \sqrt[2]{625} = ?^2$
(a) 2
(b) 4
(c) 12
(d) 18
(e) 16

Q78. $5\frac{7}{12} + 1\frac{5}{12} - ? = \sqrt[3]{64}$
(a) 3
(b) $1\frac{1}{2}$
(c) 1
(d) 4
(e) 2

Q79. $144\%\ of\ 200 + 11\%\ of\ 900 + 10\%\ of\ 20 = ?$
(a) 289
(b) 189
(c) 389
(d) 489
(e) 358

Q80. $\sqrt{100} + \sqrt{64} + \sqrt{9} + \sqrt[4]{81} + \sqrt[3]{216} + \sqrt[3]{27} = 11 \times ?$
(a) 1
(b) 2
(c) 3
(d) 4
(e) 5

Q81. A and B enter into a business by investment of Rs. 4000 & Rs. 8000 respectively. After four-months A left the business and B withdrew half of his initial investment. If at the end of a year total profit is Rs.5000, then find the profit share (in Rs.) of B?
(a) 4000
(b) 4500
(c) 3800
(d) 3000
(e) 2100

Q82. In a container the ratio of milk to water is 6 : 1. If 21 liter of mixture is taken out from the vessel and one liter water is added, then the ratio of milk to water in the final mixture becomes 21 : 4. Find the initial quantity (in liters) of milk in the vessel?
(a) 20
(b) 40
(c) 50
(d) 35
(e) 60

Q83. The ratio of cost price to marked price of an article is 7 : 8 and shopkeeper gets a profit of Rs.80 by selling the article at Rs. 500. Find the marked price of the article?
(a) 840 Rs.
(b) 620 Rs.
(c) 480 Rs.
(d) 680 Rs.
(e) 720 Rs.

Q84. A and B working alone can complete a work in 9 days and 24 days respectively. If B starts working alone and after three days A also joined B, then in how many days the total work will be completed?
(a) $\frac{64}{11}$ days
(b) $\frac{62}{11}$ days
(c) $\frac{63}{11}$ days
(d) $\frac{96}{11}$days
(e) $\frac{120}{11}$ days

Q85. A person invests his money in two schemes, A and B. He invested Rs. (X+20000) in scheme A at 10% p.a. on simple interest for three years and Rs X in scheme B at 15% p.a. on simple interest for three years. If after three years the difference between interests received by man from both the scheme is zero, then find value of X?
(a) Rs 25000
(b) Rs 35000
(c) Rs 50000
(d) Rs 45000
(e) Rs 40000

Directions (86-90): What will come in the place of the question mark (?) in the following number series.

Q86. 10, 131, 275, 444, 640, 865, ?
(a) 1131
(b) 1121
(c) 1161
(d) 1122
(e) 1120

Q87. 17, 20, 26, ?, 55, 82, 120
(a) 30
(b) 34
(c) 36
(d) 38
(e) 37

Q88. 300, 150, ?, 225, 450, 1125, 3375
(a) 150
(b) 125
(c) 130
(d) 135
(e) 145

Q89. ?, 56, 34, 67, 23, 78, 12
(a) 40
(b) 48
(c) 45
(d) 35
(e) 30

Q90. 0, 1, 6, ?, 156, 781, 3906,
(a) 25
(b) 29
(c) 31
(d) 22
(e) 20

Directions (91-95): The given table chart shows the number of three different Sims (Airtel, Vodafone and Idea) sold by a store in five different years. Study the table carefully and answer the following questions

Years	Airtel	Vodafone	Idea
2010	150	200	250
2011	120	120	180
2012	180	150	200
2013	200	180	220
2014	260	240	250

Q91. Average number of Airtel sims sold in 2012 and Idea sims sold in 2013 is how much more or less than total number of Vodafone sims sold in 2014?
(a) 20
(b) 40
(c) 30
(d) 25
(e) 18

Q92. Total number of Vodafone sims sold in 2013 is what percentage of total Airtel sims and idea sims together sold in 2011?
(a) 50%
(b) 40%
(c) 48%
(d) 54%
(e) 60%

Q93. Find the ratio of total number of Airtel sims sold in 2011, 2012 & 2014 together to total number of Vodafone sims sold in 2011, 2013 &2014 together?
(a) 28:27
(b) 14:13
(c) 12:11
(d) 15:14
(e) 17:16

Q94. In 2015, total number of Airtel sims sold is 20% more than average number of Airtel & Idea sims sold in 2013, then find total number of Airtel sims sold in 2015?
(a) 248
(b) 258
(c) 252
(d) 242
(e) 268

Q95. Average number of Airtel sims sold from 2010 to 2014 is what percentage more or less than average number of Vodafone & idea sims sold in 2013?
(a) 6%
(b) 9%
(c) 8%
(d) 5%
(e) 7%

Directions (96-98): Read the information carefully and answer the following question.
There are 800 people in three societies P, Q and R. The ratio of no. of males to no. of females in society P is 4: 3 and number of females in society Q are half of males in society P. Total people in society P and society Q is 600 and number of males in society Q is 50 more than no. of females in same society. Total number of males in society R is $66\frac{2}{3}\%$ more than no. of females in same society and in each society number of males is more than that of females.

Q96. Find the total number of people in society Q and society R together.
(a) 405
(b) 470
(c) 420
(d) 450
(e) 460

Q97. Total number of males in society P is what percentage of total number of females in society Q?
(a) 200%
(b) 80%
(c) 100%
(d) 150%
(e) 75%

Q98. Find the sum of total males in society P & that in society Q and females in society R together?
(a) 425
(b) 420
(c) 325
(d) 525
(e) 390

Q99. 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*

Q100. The respective ratio of radius of a circle, length of a rectangle and side of a square is 7:6:3. If the ratio of length to breadth of the rectangle is 3:1 and sum of perimeter of circle, rectangle and square is 216 cm, then find the length of rectangle?
(a) 18 cm
(b) 36 cm
(c) 42 cm
(d) 9 cm
(e) 6 cm

Solutions

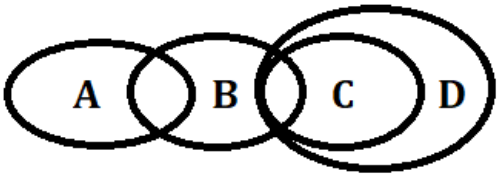
Solutions (1-5):

Words	Codes
Doctor	Di
Lab	As
Testing	Po
Test	Sq
High	We
Demand	Yu
Medicine	Cx
Too	Kh
Costly	Gh
Now	Ai

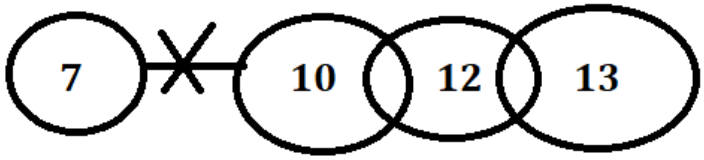
S1. Ans.(c)
S2. Ans.(a)
S3. Ans.(e)
S4. Ans.(b)
S5. Ans.(e)

S6. Ans.(b)
Sol. WEBSERIES
WBSRS
XCTST

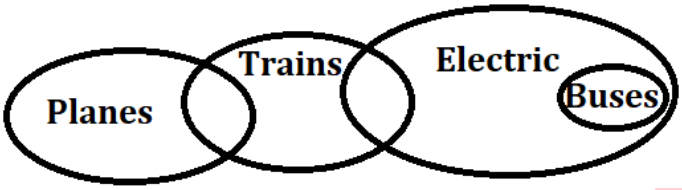
S7. Ans.(a)
Sol. I. follow – All C is D and some part of C is B therefore, Some B is also D.
II. does not follow – As there is no direct relation A and C. So, any definite relation doesn't follow.



S8. Ans.(b)
Sol. I. does not follow – As there is no direct relation A and C. So, any definite relation doesn't follow.
II. follow – Some part of 12 is restricted for relation with 10 but there is no such restriction on 10. So, All 10 being 12 is true in possibility. So, it follows.

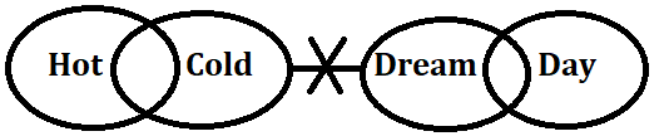


S9. Ans.(a)
Sol. I. follow – Buses is restricted for relation with anyone. So, No Planes are Buses. So, it follows.
II. does not follow – Buses is restricted for relation with anyone. So, Trains are not Buses. So, it does not follow.



S10. Ans.(d)
Sol. I. does not follow – As there is no direct relation Dark and Ice. So, any definite relation doesn't follow.
II. does not follow – As there is no direct relation Sky and Light. So, any definite relation doesn't follow.

S11. Ans.(d)
Sol. I. does not follow – As there is no direct relation Hot and Day. So, any definite relation doesn't follow.
II. does not follow – As there is no direct relation Hot and Dream. So, any definite relation doesn't follow.



S12. Ans.(c)
Sol. Position of element F is 16th from the right end

S13. Ans.(a)
Sol. Numbers in the series are "32794672953".
Sum of all the numbers is = 3+2+7+9+4+6+7+2+9+5+3 = 57

S14. Ans.(b)
Sol. Series after removing all the vowels: 3 @ 2 B # 7 C $ 9 D 4 ^ 6 F & 7 G 2 H 9 # * J 5 K @ 3 L

S15. Ans.(b)
Sol. 6th element from the right end– J
7th element to the left of J is G

S16. Ans.(c)
Sol. 6th number from left end is 6
6th number from right end is 6
Difference between both of the numbers = 6-6= 0

Solutions (17-19):
Final arrangement:

T > U > P > Q > R > S
(48) (45) (42) (37) (34)

Clues: R scored less marks than Q but more marks than S. P scored 45 marks. S scored 11 marks less than P.
Inference:

Q > R > S
(34)
P
(45)

Clues: R score is a prime number between the marks of S and 40. Q scored 5 marks more than R. Difference between the marks of P and U and R and S is same. T scored more marks than U and Q.
Inference: So, U will get 48 marks and Q will get 42 marks. Hence, the final arrangement: -

T > U > P > Q > R > S
(48) (45) (42) (37) (34)

S17. Ans.(a)
Sol. P scored just less marks than U.

S18. Ans.(a)
Sol. Difference between the marks of Q and S is 8 marks.

S19. Ans.(e)
Sol. If the marks scored by T are 50, then the total of marks scored by all six students combined will be 256.

S20. Ans.(c)
Sol. The letters are I, S, T and E.
Words formed are Site and Ties.

Solutions (21-25):
Final arrangement:

Designations	Persons
Chancellor	D
Vice Chancellor (VC)	A
Dean	F
HOD	B
Professor	G
Assistant Professor	C

Lecturer	E

Clues: A is three persons senior to G who is not designated as junior to Assistant professor. A is not the senior-most person. The number of persons senior to A is same as junior to C.

Inference: From the above condition we have two cases:

Designations	**Case 1**	**Case 2**
	Persons	**Persons**
Chancellor		
Vice Chancellor (VC)		A
Dean	A	
HOD		
Professor	C	G
Assistant Professor	G	C
Lecturer		

Clues: F is immediately senior to B but junior to D.

Inference: Case 1 gets eliminated here because we can't place D. E is left only.

Designations	~~**Case 1**~~	**Case 2**
	~~**Persons**~~	**Persons**
Chancellor	~~F~~	D
Vice Chancellor (VC)	~~B~~	A
Dean	~~A~~	F
HOD		B
Professor	~~C~~	G
Assistant Professor	~~G~~	C
Lecturer		E

Inference: Thus, the final arrangement is:

Designations	**Persons**
Chancellor	D
Vice Chancellor (VC)	A
Dean	F
HOD	B
Professor	G
Assistant Professor	C
Lecturer	E

S21. Ans.(a)

Sol. B is HOD.

S22. Ans.(c)

Sol. Three persons are designated between D and G.

S23. Ans.(c)

Sol. "C- Assistant professor" is the correct combination.

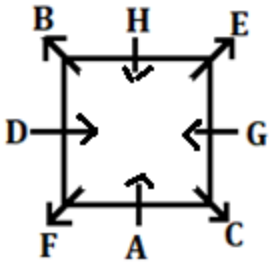
S24. Ans.(d)

Sol. If all the persons are designated in alphabetical order from chancellor to Lecturer, then the position of no one remains unchanged.

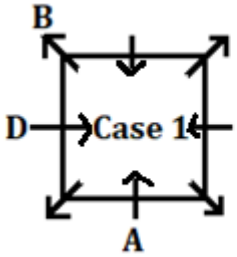
Designations	Persons	After arrangement
Chancellor	D	A
Vice Chancellor (VC)	A	B
Dean	F	C
HOD	B	D
Professor	G	E
Assistant Professor	C	F
Lecturer	E	G

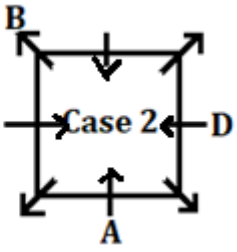
S25. Ans.(d)
Sol. Statement in option (d) is true.

Solutions (26-30):
Final arrangement:

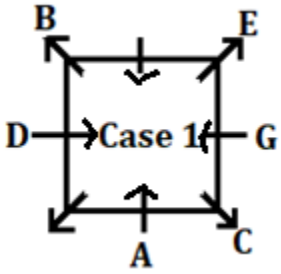


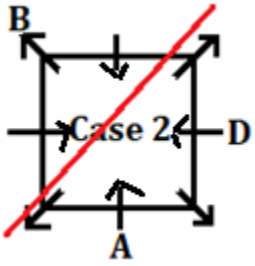
Clues: One person sits between A and D. D does not sit at the corner. B sits third to the left of A.
Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

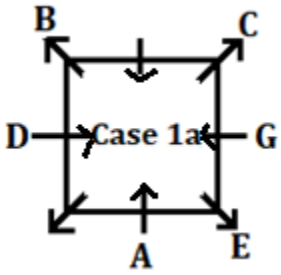




Clues: G sits three positions away from B. As many persons sit between A and G when counted from the right of A as between C and E. Neither C nor E sits adjacent to D and B.
Inference: From the above conditions Case 2 is cancelled here as there is no place for G and one more possibility arises from Case 1 i.e., Case 1a.

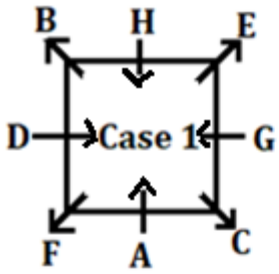


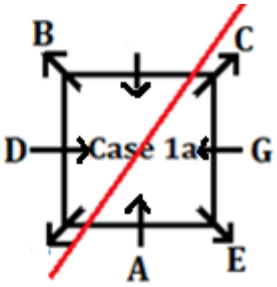




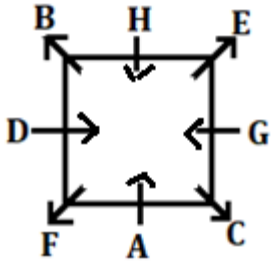
Clues: Number of persons sits between C and B when counted from the right of C is one more than the number of persons sits between H and F and when counted from the right of H. H doesn't sit at the corner.

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





Inference: Final arrangement:



S26. Ans.(a)
Sol. F sits immediate left of A

S27. Ans.(c)
Sol. Either one or five persons sit between H and G

S28. Ans.(c)
Sol. Except the person in option (c), all other person facing away from the center

S29. Ans.(a)
Sol. H sits third to the left of C
A sits opposite to H

S30. Ans.(b)
Sol. Statement given in option (b) is true

Solutions (31-35):
Final arrangement:

Months	Dates	Persons
January	7th	Deepak
	10th	Priya
March	7th	Arjun
	10th	Ananya
April	7th	Rajesh

	10th	Nisha
May	7th	Rahul
	10th	Vikram

Clues: One person was born between Vikram and Nisha. Arjun was born three persons before Nisha. Arjun is older than Vikram but not just older. Nisha was born in the month having an even number of days.

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

Months	**Dates**	**Case 1**	**Case 2**
		Persons	**Persons**
January	7th		
	10th		Arjun
March	7th	Arjun	
	10th		
April	7th		Nisha
	10th	Nisha	
May	7th		Vikram
	10th	Vikram	

Clues: Two persons were born between Deepak and Ananya. Neither Deepak nor Ananya was born in the month in which Vikram was born. Deepak is not just older than Arjun and Nisha. Ananya was not the first person to be born.

Inference: From the above conditions we get the following arrangement:

Months	**Dates**	**Case 1**	**Case 2**
		Persons	**Persons**
January	7th	Deepak	
	10th		Arjun
March	7th	Arjun	Deepak/Ananya/
	10th	Ananya	
April	7th		Nisha
	10th	Nisha	Ananya/Deepak/
May	7th		Vikram
	10th	Vikram	

Clue: Rajesh was born two persons before Rahul.

Inference: From the above conditions Case 2 is cancelled here as there is no place for Rajesh and Rahul.

Months	**Dates**	**Case 1**	~~**Case 2**~~
		Persons	~~**Persons**~~
January	7th	Deepak	
	10th		~~Arjun~~
March	7th	Arjun	~~Deepak/Ananya/~~
	10th	Ananya	
April	7th	Rajesh	~~Nisha~~

	10th	Nisha	~~Ananya/Deepak/~~
May	7th	Rahul	~~Vikram~~
	10th	Vikram	

Inference: Only one person remains i.e., Priya. So, the Final arrangement is:

Months	Dates	Persons
January	7th	Deepak
	10th	Priya
March	7th	Arjun
	10th	Ananya
April	7th	Rajesh
	10th	Nisha
May	7th	Rahul
	10th	Vikram

S31. Ans.(a)
Sol. Arjun was born just before Ananya

S32. Ans.(a)
Sol. Two persons were born between Vikram and Rajesh

S33. Ans.(b)
Sol. Vikram was born in the month of May

S34. Ans.(c)
Sol. The statements I and II both are true

S35. Ans.(d)
Sol. Two persons were born after Nisha

S36. Ans.(c)
Sol. To validate the answer, refer to the last line of the first paragraph that mentions, "World coconut oil production has been increasing for the past decade because of greater global demand for its important characteristics", we can conclude that option (c) is the correct choice.

S37. Ans.(d)
Sol. To validate the answer, refer to the last paragraph that mentions, "This is the most suited form of intensification of agriculture in many of the tropical islands and enhances the diversification of farming system and also brings climate resilience to the production system."

S38. Ans.(a)
Sol. To validate the answer, refer to the first paragraph that mentions, "The Philippines, Indonesia, India, Sri Lanka, Thailand, Malaysia, and Papua New Guinea together account for about 80% of the total area planted to coconuts worldwide."

S39. Ans.(d)
Sol. To validate the answer, refer to the first paragraph that mentions, "multi-story cropping is slowly gaining popularity with increased profitability. It is a system of growing together, crops of different heights at the same time and thus using land, water, and space most efficiently and economically."

S40. Ans.(b)
Sol. The correct choice is option (b) which can be concluded from the second paragraph that mentions, "Coconut oil contains the most concentrated commodity source of medium chain triglycerides (MCTs). Research has shown that MCTs derived from coconut oil possess unique properties with important nutritional and medical applications."

S41. Ans.(d)
Sol. All the given statements are correct.
For statement (i), refer to the lines, "It is grown in more than 90 countries, with world production concentrated in Asia and the Pacific."
For statement (ii), refer to the lines, "With the advent of new processing technologies, the commercial production of a great array of commercial commodities can now be derived from coconut oil, which is the dominant product of the coconut."
For statement (iii), refer to the lines, "Emerging applications of coconut include virgin coconut oil, which is a relatively new value-added product that has become available in the international market. Increasing attention has also been given to the use of coconut oil for biofuels or as bio-lubricants."

S42. Ans.(b)
Sol. 'Extraordinary' can replace the word 'unique'.
(a) enigma: a person or thing that is mysterious or difficult to understand.
(b) extraordinary: very unusual or remarkable.
(c) customary: according to the customs or usual practices associated with a particular society, place, or set of circumstances.
(d) frequent: occurring or done many times at short intervals.
(e) cease: come or bring to an end.

S43. Ans.(e)
Sol. 'Departure' is an antonym of 'advent'.
(a) docile: ready to accept control or instruction; submissive.
(b) fervent: having or displaying a passionate intensity.
(c) prevail: prove more powerful or superior.
(d) edifice: a large, imposing building.
(e) departure: the action of leaving, especially to start a journey.

S44. Ans.(b)
Sol. Correct Answer: (b)
Explanation:

The passage clearly mentions that *"lauric acid (C12) from coconut oil has a potent antimicrobial activity and was found to reduce the HIV virus."* This shows that lauric acid is valued for its **antimicrobial properties** and its **ability to combat the HIV virus**, making option **(b)** the most accurate choice.
Options (a), (c), (d), and (e) are unrelated to the scientific or medicinal significance described in the passage.

S45. Ans.(b)
Sol. The most appropriate word that could fit in the blank to make the sentence contextually meaningful and grammatically correct is loosen. Loosen means to become or make something less firmly fixed or to cause or permit to become less strict, which fits the context of the sentence. The sentence implies that pulling one brick at a time can loosen or weaken the entire cooperative structure.
Option (a) stretch is an incorrect option as it means to extend or lengthen something, which does not fit the context of the sentence.
Option (c) attain is an incorrect option as it means to achieve or reach a goal, which does not fit the context of the sentence.
Option (d) bind is an incorrect option as it means to tie or secure something together, which does not fit the context of the sentence.
Option (e) restrain is an incorrect option as it means to hold back or prevent something from moving or acting, which does not fit the context of the sentence.

S46. Ans.(c)
Sol. The most appropriate word that could fit in the blank to make the sentence contextually meaningful and grammatically correct is handling. Handling refers to the action of one that handles something or how someone deals with situation or person, which fits the context of the sentence. The sentence implies that the Kempegowda International Airport (KIA) has become the third-ranked airport in India for handling international cargo, which means the process of loading, unloading, and transporting goods.
Option (a) fumbling is an incorrect option as it means to grope for or handle something clumsily or aimlessly, which does not fit the context of the sentence.
Option (b) muffing is an incorrect option as it means to spoil an opportunity or do something badly, which does not fit the context of the sentence.
Option (d) bungling is an incorrect option as it means the action or fact of carrying out a task clumsily or incompetently, which does not fit the context of the sentence.
Option (e) scamping is an incorrect option as it means an unscrupulous person; rascal, which does not fit the context of the sentence.

S47. Ans.(e)
Sol. The most appropriate word that could fit in the blank to make the sentence contextually meaningful and grammatically correct is approval. Approval refers to the act of officially agreeing to or accepting something, which fits the context of the sentence. The sentence implies that the Department of Technical Education is conducting the admission process for technical courses online from this year.
Option (a) censure is an incorrect option as it means to criticize or blame someone, which does not fit the context of the sentence.

Option (b) opprobrium is an incorrect option as it means strong disapproval or criticism, which does not fit the context of the sentence.
Option (c) reproach is an incorrect option as it means to express disapproval or disappointment, which does not fit the context of the sentence.
Option (d) condemnation is an incorrect option as it means strong disapproval or criticism, which does not fit the context of the sentence.

S48. Ans.(b)
Sol. In the given sentence, the grammatically incorrect part is (b) B: "he could actualized his."
The correct verb form to use in this context is "actualize" instead of "actualized." "Actualize" is the base form of the verb, while "actualized" is the past tense form. Since the sentence is referring to Brandon's belief in his ability to make his vision a reality, the verb should be in the base form to indicate a general or ongoing action.
Note: There are nine modal auxiliary verbs: shall, should, can, could, will, would, may, must, might. These verbs are always followed by base form of the main verb.
Moreover, here the base form "actualize" is used to convey Brandon's belief in his ability to bring his vision into reality. The past tense form "actualized" would imply that the action has already been completed, which does not fit the context of the sentence.
Therefore, the correct answer is (b) B.

S49. Ans.(c)
Sol. The error lies in part C. Here, 'arrest' must be changed to 'arrested'. Note: In the given sentence two clauses i.e., "Police used a taser to immobilize the combative suspect" and "arrest him once he was no longer fighting." are connected with the conjunction 'and'. According to the
Rule of parallelism all the clauses in a given sentence should be in the same tense. Thus, here 'used' and 'arrested' should be in same tense.
In the (D) part we can see by the usage of 'was' that the correct form of the sentence is past tense.

S50. Ans.(b)
Sol. The error lies in part B. It has a prepositional error. Here, 'for' must be changed to 'on'. We use 'on' to refer a state. Ex: *The products available in the store are **on** sale.*
Whereas, 'for' is mostly used to show who is intended to have or use something or where something is intended to be put. Ex: *There's a letter **for** you.*

S51. Ans.(e)
Sol. The sentence has no grammatical error in it.

S52. Ans.(b)
Sol. The error lies in part (B). Here, 'go' must be changed to 'went'. **It's (high) time + past subjunctive** expresses that something should be done and that it is already a bit late.
Ex: It's **high time I bought** a new pair of jeans.

S53. Ans.(b)
Sol. 'prefareble' is wrongly spelt here and the correct word will be 'preferable'. It means more desirable or suitable.

All other words are correctly spelt and appropriate with the context of the sentence.

S54. Ans.(c)
Sol. 'endourse' is wrongly spelt here, and the correct word will be 'endorse'. It means declare one's public approval or support of.
All other words are correctly spelt and appropriate with the context of the sentence.

S55. Ans.(c)
Sol. The usage of 'eccentric' is wrong here, and should be replaced with 'intrinsic'. All other words are correctly spelt and appropriate with the context of the sentence.
Eccentric: unconventional and slightly strange
Intrinsic: belonging naturally; essential.

S56. Ans.(b)
Sol. Among the given alternatives, the phrase given in option (b) is the most appropriate phrase to replace the highlighted one. The sentence thus formed would be "She felt a rush of adrenaline as she approached the finish line."
The sentence is in the past tense and describes an action that happened in the past. The subject is "she", the verb is "felt" which is in the past tense, and the object is "a rush of adrenaline". The sentence also contains a prepositional phrase "as she approached the finish line" which explains the circumstances under which the action took place. The sentence is a simple sentence and expresses a complete thought. "A rush of adrenaline" means a sudden feeling of excitement or energy that a person experiences in response to a challenging or exciting situation.

S57. Ans.(d)
Sol. Among the given alternatives, the phrase given in option (d) is the most appropriate phrase to replace the highlighted one. The sentence thus formed would be "The wind howled outside, rattling the windows and causing the curtains to flutter."
The sentence is a complex sentence with two independent clauses connected by a comma and a coordinating conjunction "and". The first independent clause is "The wind howled outside," and the second independent clause is "causing the curtains to flutter." The use of "causing" in the given sentence is appropriate because it is used in the present participle form as a gerund. The word "causing" is used to indicate that the action of the wind is happening at the same time as the action of the main verb, "howled". The use of other words would not convey the same sense of ongoing action as "causing".

S58. Ans.(b)
Sol. Among the given alternatives, the phrase given in option (b) is the most appropriate phrase to replace the highlighted one. The sentence thus formed would be "The sound of laughter filled the room as the friends reminisced about old times."
This sentence describes an event that occurred in the past. The subject of the sentence is "the sound of laughter," and the verb is "filled," which is in the past tense. The phrase "as the friends reminisced about old times" is a subordinate clause that describes the reason for the laughter. Together, the sentence describes a scene where the friends were reminiscing about old times and as a result, the sound of laughter filled the room.

S59. Ans.(e)
Sol. The highlighted phrase in the given sentence is grammatically and contextually correct. Thus, no replacement is required. This sentence is describing a sensory experience, specifically the smell of

lavender that is present in the air. The subject of the sentence is "scent of lavender", which is the noun phrase that represents the thing being smelled. The verb "permeated" is used to describe how the scent of lavender is spreading throughout the air and filling the room.
Using the prepositions "into", "by", "in", and "for" with the verb "permeated" in this sentence would be incorrect because "permeate" already indicates a movement of something through space or substance, so adding additional prepositions would create redundancy or confusion in the meaning of the sentence.

S60. Ans.(b)
Sol. Among the given alternatives, the phrase given in option (b) is the most appropriate phrase to replace the highlighted one. The sentence thus formed would be "The museum was filled with artifacts and exhibits that told the story of a bygone era." In the given sentence, instead of "filled into," it should be "filled with" to indicate what the museum was filled with.

S61. Ans.(b)
Sol. (a) Legitimize: To legitimize means to give official or legal recognition to something, making it valid, acceptable, or legitimate.
(b) Shield: A shield is a protective barrier or object that is used to defend against or block harm or danger.
(c) Abuse: Abuse refers to the improper or harmful use of something or the mistreatment of a person or animal.
(d) Punish: Punish means to impose a penalty or consequence on someone as a response to their wrongdoing or disobedience.
(e) Give: Give means to transfer the possession or control of something to someone else willingly or without expecting anything in return.

S62. Ans.(d)
Sol. (a) Positive: Positive refers to something that is characterized by optimism,
(b) Beneficial: Beneficial means having a positive or advantageous effect.
(c) Advantageous: Advantageous indicates that something is favourable or beneficial in a specific context.
(d) Adverse: Adverse is the opposite of favourable or positive. It describes something that is harmful, unfavourable, or detrimental to a person, situation, or system.
(d) Favourable: Favourable signifies that something is advantageous, positive, or supportive.

S63. Ans.(b)
Sol. (a) Juvenile: Juvenile refers to a young person who is not yet considered an adult, typically in the context of legal or developmental stages.
(b) Serious: Serious describes something that is grave, important, or significant in nature.
(c) Serene: Serene denotes a state of calmness, tranquility, or peacefulness.
(d) Trivial: Trivial refers to something that is of little importance, significance, or relevance
(e) Frivolous: Frivolous describes something that lacks seriousness, depth, or importance

S64. Ans.(d)
Sol. (a) Acknowledgment: Acknowledgment refers to the act of recognizing, admitting, or accepting the existence or truth of something or someone.

(b) Abomination: Abomination refers to something that is considered extremely repugnant, offensive, or morally wrong.
(c) Abduction: Abduction is the act of unlawfully taking someone away against their will, typically by force or deception
(d) Ratification: Ratification is the formal confirmation or approval of something, typically through a legal or official process.
(e) Repudiation: Repudiation refers to the rejection or denial of something, often in a formal or explicit manner.

S65. Ans.(a)
Sol. (a) Reduction: Reduction refers to the act or process of making something smaller, less in quantity, or diminishing its size, extent, or importance.
(b) Expansion: Expansion denotes the act or process of increasing in size, extent, or volume.
(c) Synchronization: Synchronization, also spelled as synchronisation, refers to the coordination or alignment of events, actions, or processes to occur at the same time or in a harmonized manner.
(e) Annotation: Annotation refers to the act of adding explanatory notes, comments, or remarks to a text, document, or piece of literature.

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.(b)
Sol. 235 + 352 + 183 – 49 = ?
721=?

S72. Ans.(a)
Sol. $5\frac{1}{4} + 9\frac{1}{3} - 6\frac{1}{6} + 4\frac{1}{2} = ?$
$(5 + 9 - 6 + 4)\left(\frac{3 + 4 - 2 + 6}{12}\right) = ?$
$? = 12\frac{11}{12}$

S73. Ans.(a)
Sol. $\frac{5\times8\times21\times2526}{6\times7\times24} = ?$
$2105 = ?$

S74. Ans.(b)
Sol. $5^2 + 13^2 - 11^2 + 52 = (?)^3$
$25+169-121+52 = (?)^3$
$125 = (?)^3$
$5 = ?$

S75. Ans.(a)
Sol. $\frac{32}{100} \times 850 - ? = \frac{14}{100} \times 640$
272-89.6= ?
182.4= ?

S76. Ans.(d)
Sol. $(219 + 87 - 46) \div (2 \times 4 + 5) = ?$
$260 \div 13 = ?$
$20 = ?$

S77. Ans.(e)
Sol. $\sqrt{225} \times 10 + 9^2 + \sqrt[2]{625} = ?^2$
$150 + 81 + 25 = ?^2$
$256 = ?^2$
$16 = ?$

S78. Ans.(a)
Sol. $5\frac{7}{12} + 1\frac{5}{12} - ? = \sqrt[3]{64}$
$7 - ? = 4$

$3 = ?$

S79. Ans.(c)
Sol. $144\%\ of\ 200 + 11\%\ of\ 900 + 10\%\ of\ 20 = ?$
$288 + 99 + 2 = ?$
$389 = ?$

S80. Ans.(c)
Sol. $\sqrt{100} + \sqrt{64} + \sqrt{9} + \sqrt[4]{81} + \sqrt[3]{216} + \sqrt[3]{27} = 11 \times ?$
$10 + 8 + 3 + 3 + 6 + 3 = 11 \times ?$
$33 = 11 \times ?$
$3 = ?$

S81. Ans.(a)
Sol. Profits sharing ratio of A to B
$= (4000 \times 4) : [(8000 \times 4 + 4000 \times 8) = 1 : 4$
Required profit share of B = $5000 \times \frac{4}{5} = Rs.4000$

S82. Ans.(e)
Sol. Let the initial milk & water in vessel be 6x & x liters respectively.
ATQ –
$$\frac{6x-21\times\frac{6}{7}}{x-21\times\frac{1}{7}+1} = \frac{21}{4}$$
$$\frac{6x-18}{x-3+1} = \frac{21}{4}$$
$$24x - 72 = 21x - 42$$
$$3x = 30$$
x = 10 liters
Initial quantity of milk in vessel = 6x = 60 liters

S83. Ans.(c)
Sol. Let cost price of article = Rs 210x
So, marked price of article = $210x \times \frac{8}{7}$ = Rs. 240x
ATQ –
$210x = 500 - 80 = 420$
x = 2 Rs.
Marked price=Rs.480

S84. Ans.(d)
Sol. Let the total work be 72 units. (L.C.M. of 9 & 24)
Let 'n' be the days on which A & B worked together.
Efficiency of A= $\frac{72}{9} = 8\ units/day$
Efficiency of B= $\frac{72}{24} = 3\ units/day$

ATQ,
$3 \times 3 + n \times (8 + 3) = 72$
$11n = 72 - 9$
$n = \frac{63}{11}$
So, Total days taken$= \frac{63}{11} + 3 = \frac{96}{11}\ days$

S85. Ans.(e)
Sol. ATQ
$\frac{X \times 15 \times 3}{100} - \frac{(X+20000) \times 10 \times 3}{100} = 0$
$45X = 30X + 600000$
$15X = 600000$
$X = 40000$

S86. Ans.(b)
Sol. Pattern of series –
$10 + 11^2 = 131$
$131 + 12^2 = 275$
$275 + 13^2 = 444$
$444 + 14^2 = 640$
$640 + 15^2 = 865$
$865 + 16^2 = 1121$

S87. Ans.(e)
Sol. Pattern of series –
$17 + (1^2 + 2) = 20$
$20 + (2^2 + 2) = 26$
$26 + (3^2 + 2) = 37$
$37 + (4^2 + 2) = 55$
$55 + (5^2 + 2) = 82$
$82 + (6^2 + 2) = 120$

S88. Ans.(a)
Sol. $300 \times 0.5 = 150$
$150 \times 1 = 150$
$150 \times 1.5 = 225$
$225 \times 2 = 450$
$450 \times 2.5 = 1125$
$1125 \times 3 = 3375$

S89. Ans.(c)
Sol. Pattern of series –
45 + (11) = 56
56 – (22) = 34

34 + (33) = 67
67 – (44) = 23
23 + (55) = 78
78 – (66) = 12

S90. Ans.(c)
Sol. Pattern of series –
$0 + 5^0 = 1$
$1 + 5^1 = 6$
$6 + 5^2 = 31$
$31 + 5^3 = 156$
$156 + 5^4 = 781$
$781 + 5^5 = 3906$

S91. Ans.(b)
Sol. Average number of Airtel sims sold in 2012 and Idea sims sold in 2013 = $\frac{1}{2}(180 + 220) = 200$
Required difference = 240 – 200 = 40

S92. Ans.(e)
Sol. Required percentage = $\frac{180}{120+180} \times 100 = 60\%$

S93. Ans.(a)
Sol. Required ratio = (120+180+260) : (120+180+240)
= 560 : 540
= 28 : 27

S94. Ans.(c)
Sol. Required number of sims = $\frac{120}{100} \times \frac{200+220}{2} = 252$

S95. Ans.(b)
Sol. Average number of Airtel sims sold from 2010 to 2014 = $\frac{1}{5}(150 + 120 + 180 + 200 + 260)$
= $\frac{910}{5} = 182$
Average number of Vodafone & idea sims sold in 2013 = $\frac{1}{2} \times (180 + 220)$
= 200
Required percentage= $\frac{200-182}{200} \times 100 = 9\%$

Solutions (96-98):
Total number of people in all societies together = 800
Let females in society P = 3x
Males in society P = 4x

Females in society Q = $\frac{1}{2} \times 4x = 2x$

Let males in society Q = M

$3x + 4x + 2x + M = 600$

$9x + M = 600 \ldots\ldots (i)$

$M - 2x = 50$ .....(ii)

By solving (i) and (ii)

$x = 50$

M= 150

Let males in society R = 5m

And females in society R= 3m

$5m + 3m = 800 - 600$

$8m = 200$

$m = 25$

Society	Males	Females
P	200	150
Q	150	100
R	125	75

S96. Ans.(d)

Sol. Required sum = $150 + 100 + 125 + 75 = 450$

S97. Ans.(a)

Sol. Required percentage = $\frac{200}{100} \times 100 = 200\%$

S98. Ans.(a)

Sol. Required sum = $200 + 150 + 75 = 425$

S99. Ans.(d)

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

ATQ,

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

$2y=10$

$y = 5$

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

S100. Ans.(a)

Sol. Let radius to circle, length of rectangle and side of square be 7x, 6x and 3x respectively.

Breadth of rectangle = $\frac{6x}{3} \times 1 = 2x$

ATQ

$2 \times \frac{22}{7} \times 7x + 2 \times (6x + 2x) + 4 \times 3x = 216$

$44x + 16x + 12x = 216$

$72x = 216$

$x = 3$

Length of rectangle = 6x = 18 cm