

All India Mock for NICL AO Prelims 2024 (27-28 January)

Directions (1-6): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, options are given. Find out the appropriate word which fits into the blank appropriately.

Q1. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) implementation
- (b) suggestion
- (c) speculation
- (d) discussion
- (e) proposal

Q2. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) amendment
- (b) formulation
- (c) adjustment
- (d) adoption
- (e) alteration

Q3. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) enforced
- (b) neglected
- (c) repealed
- (d) ignored
- (e) abolished

Q4. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) initiative
- (b) proposition
- (c) concept
- (d) research
- (e) theory

Q5. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) outdated
- (b) prominent
- (c) obscured
- (d) hidden
- (e) inconspicuous

Q6. Road safety is an essential aspect of modern transportation systems. It requires not only adherence to traffic rules but also the (1)_____ of safety measures by both drivers and pedestrians. The first step towards improving road safety is the (2)_____ of comprehensive traffic laws, which should be rigorously (3)_____. However, laws alone are not sufficient. There must be an (4)_____ to educate the public about road safety protocols. Moreover, engineering solutions such as better road design and (5)_____ signage play a critical role in reducing accidents. Finally, it is crucial to ensure the (6)_____ enforcement of traffic rules to maintain discipline and order on the roads.

- (a) arbitrary
- (b) sporadic
- (c) intermittent
- (d) consistent
- (e) erratic



NICL
Generalist AO (Scale I)
Prelims + Mains
Starts: 23 Jan | 10:30 am to 5 pm

Directions (7-12): In the following sentences, one of the parts is given in bold which is free from any error. Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in remaining part of the sentence. The alphabet corresponding to that part is your answer. If the given statement is correct, mark 'NO ERROR' as your answer. (Ignore errors of punctuation, if any.)

Q7. The committee members (A)/ **decided to postpone (B)**/ the meeting due (C)/ to the absence for (D)/ several key members. (E)

- (a) A
- (b) No error
- (c) C
- (d) D
- (e) E

Q8. After a thorough investigation (A)/, the police were unable (B)/ **to find any conclusive (C)**/ evidence against the suspect (D)/, which led to its eventual acquittal. (E)

- (a) A
- (b) B
- (c) No error
- (d) D
- (e) E

Q9. The new regulations require (A)/ that all employees submits (B)/ a monthly report (C)/ **on their activities (D)**/ to the management for review. (E)

- (a) A
- (b) B
- (c) C
- (d) No error
- (e) E

Q10. In an effort to improve (A)/ **customer satisfaction, (B)**/ the company has implement (C)/ new policies that focus (D)/ on quality and efficiency. (E)

- (a) A
- (b) No error
- (c) C
- (d) D
- (e) E

Q11. Despite many obstacles (A)/ along the way, the explorers (B)/ **continued their journey (C)**/ with unwavering determination (D)/ and a strong sense of purpose. (E)

- (a) A
- (b) B
- (c) No error
- (d) D
- (e) E

Q12. The company's annual report (A)/ revealed a significant increase (B)/ in revenue compare (C)/ to the previous year, (D)/ **indicating strong growth. (E)**

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

Directions (13-17): Rearrange the following five sentence (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

A. However, he was not only an inventor but also a successful manufacturer who was able to market his inventions to the public.

B. Thomas Edison, born in 1847, has been described as America's greatest inventor.

C. Among his most famous inventions are the phonograph, the motion picture camera, and, perhaps most importantly, the electric light bulb.

D. Edison's inventions greatly influenced life around the world, including the way people work, communicate, and entertain themselves.

E. His development of the electric light bulb and the electrical power system revolutionized the way people live and had a profound impact on the industrial world.

Q13. Which of the following should be the FIRST sentence after the rearrangement?

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

Q14. Which of the following should be the FOURTH sentence after the rearrangement?

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

Q15. Which of the following should be the SECOND sentence after the rearrangement?

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

Q16. Which of the following should be the THIRD sentence after the rearrangement?

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

Q17. Which of the following should be the LAST sentence after the rearrangement?

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

Directions (18-21): In each of the following sentences, four words have been highlighted which may or may not be misspelt or inappropriate in their usage. Find out if any and mark your answer accordingly.

Q18. The **arqueologist** was fascinated by the ancient ruins, which offered profound insights into the **civilization** and **customs** of a bygone **era**.

- (a) arqueologist
- (b) civilization
- (c) customs
- (d) era
- (e) All are correct

Q19. The company's **annual** report **revealed** a significant **increase** in revenue, despite the **economical** challenges faced during the year.

- (a) annual
- (b) revealed
- (c) increase
- (d) economical
- (e) All are correct

Q20. Many **celebrities** have become **advocates** for mental health **awareness**, using their **platform** to discuss personal experiences and reduce stigma.

- (a) celebrities
- (b) advocates
- (c) awareness
- (d) platform
- (e) All are correct

Q21. The **scientist's thorough investigation** into the **ecosystem's** diversity revealed several new species previously unknown.

- (a) scientist's
- (b) thorough
- (c) investigation
- (d) ecosystem's
- (e) All are correct

Directions (22-30): Read the following passage and answer the questions that follow.

Paragraph 1: Abraham Lincoln, a pivotal figure in American history, began his day in the spring with eagerness, preparing for a three-month journey on the Eighth Judicial Circuit. Lincoln's interest in law was _____ at a young age. He admired the art of legal argumentation and was encouraged by John T. Stuart, a Springfield lawyer, to study law. By 25, he had access to Stuart's law library and diligently studied legal codes and precedents, eventually earning his license to practice law in 1837. By the 1840s and 1850s, Lincoln had established himself as a prominent lawyer in Illinois, handling significant cases before the Supreme Court and in various U.S. courts.

Paragraph 2: Lincoln's legal career was not just confined to Springfield; he also worked in the Eighth Judicial Circuit. Except for a two-year period in Congress, he traveled this circuit from 1839 until his presidential election in 1860. His legal experience equipped him with skills to handle complex issues like the secession of Southern states and the drafting of the Emancipation Proclamation.

Paragraph 3: The circuit court sessions were intense, demanding quick thinking and flexibility, traits in which Lincoln excelled. He represented a diverse clientele, gaining respect and trust for his ability to understand and articulate opposing viewpoints. These skills, along with the relationships he built with local people, newspaper editors, and politicians, were instrumental in his political journey, including his Presidential campaign.

Paragraph 4: Lincoln's time on the circuit also included engaging in debates and endorsing Whig Presidential candidates, shaping his political ideologies that later influenced the Republican Party. His interactions, even with rivals like Stephen A. Douglas, raised his national profile, setting the stage for his 1860 Presidential nomination. Lincoln's legacy, built on his years as a circuit lawyer, transcended his lifetime, turning him from a man to a legend.

Q22. Based on the passage, what can be inferred about the role of Abraham Lincoln's early legal career in shaping his abilities as a President?

- (a) Lincoln's legal career had little impact on his presidency, as the skills required for law and politics are entirely different.
- (b) Lincoln's experience with diverse legal cases sharpened his responsiveness and versatility to address national challenges.
- (c) Lincoln's legal career was primarily a stepping stone to enter politics, with minimal influence on his actual presidential abilities.
- (d) The legal career hindered his presidential abilities as it confined him to legalistic thinking, which is not suitable for political leadership.
- (e) His legal career only assisted in enhancing his public speaking skills, which were useful during his presidential campaigns.

Q23. What activities did Abraham Lincoln engage in during his time on the circuit, as described in the fourth paragraph?

- (a) He focused solely on legal cases without involving himself in political activities.
- (b) Lincoln engaged in debates and endorsed Whig Presidential candidates, which shaped his political views.
- (c) He strictly avoided endorsing any political candidates to maintain a neutral stance.
- (d) Lincoln primarily wrote political essays rather than engaging in debates.
- (e) His time on the circuit was devoted exclusively to building a legal career without any political involvement.

Q24. From the details provided in the first paragraph, what accurate conclusions can be drawn about Lincoln's legal career?

- (a) He was just beginning his legal career with minor cases.
- (b) He was known more as a mentor than as a practicing lawyer.
- (c) He had shifted his focus from law to politics exclusively.
- (d) Lincoln's legal career was declining due to a lack of significant cases.
- (e) Lincoln was a prominent lawyer in Illinois, handling significant cases in the Supreme Court and various U.S. courts.

Q25. Identify the CORRECT statement from the following options.

- (a) Abraham Lincoln's legal career began after his presidential election in 1860.
- (b) John T. Stuart, a Springfield lawyer, discouraged Lincoln from studying law.
- (c) Lincoln's experience in the Eighth Judicial Circuit helped equip him to handle complex issues.
- (d) Lincoln primarily practiced law in international courts, not in the United States.
- (e) Lincoln was not known for his quick thinking and flexibility in court.

Q26. Based on Paragraph 3, what can be deduced about Abraham Lincoln's political journey?

- (a) Lincoln displayed an ability to build strong relationships which were instrumental in his Presidential campaign.
- (b) His legal career was largely separate from his political ambitions, and his skills in court were not fruitful in his political career.
- (c) Lincoln struggled with the demands of circuit court sessions which negatively impacted his political journey.
- (d) Lincoln's success in the circuit court was solely due to his legal knowledge.
- (e) He was primarily known for his rapport with newspaper editors and politicians.

Q27. Choose the most appropriate word to fill in the given blank.

- (a) diminished
- (b) withdrawn
- (c) obstructed
- (d) ignited
- (e) repelled

Q28. Identify the INCORRECT statement from the following options.

- (a) Lincoln earned his license to practice law in 1837 after studying legal codes and precedents.
- (b) Throughout his career, Lincoln's legal practice was confined only to the Springfield area.
- (c) He was encouraged by John T. Stuart to study law and had access to Stuart's law library.
- (d) Lincoln's ability to understand and articulate opposing viewpoints gained him respect and trust.
- (e) His time on the circuit included debates and endorsing Whig Presidential candidates.

Q29. According to the passage, what is the antonym of 'complex' as used in the passage?

- (a) intricate
- (b) straightforward
- (c) complicated
- (d) convoluted
- (e) elaborate

Q30. In the context of the passage, which word is a synonym for 'prominent' as used in "Lincoln had established himself as a prominent lawyer"?

- (a) obscure
- (b) insignificant
- (c) renowned
- (d) trivial
- (e) unknown

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

Eight people, A, B, C, D, E, F, G and H are sitting around a circular table, facing the centre but not necessarily in the same order. Each person is seated at equal distances from their neighbours.

A is sitting directly opposite E. B is sitting three places to the right of A. C is sitting to the immediate right of F. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Q31. Who is sitting immediately to the right of A?

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

Q32. Who is sitting directly opposite H?

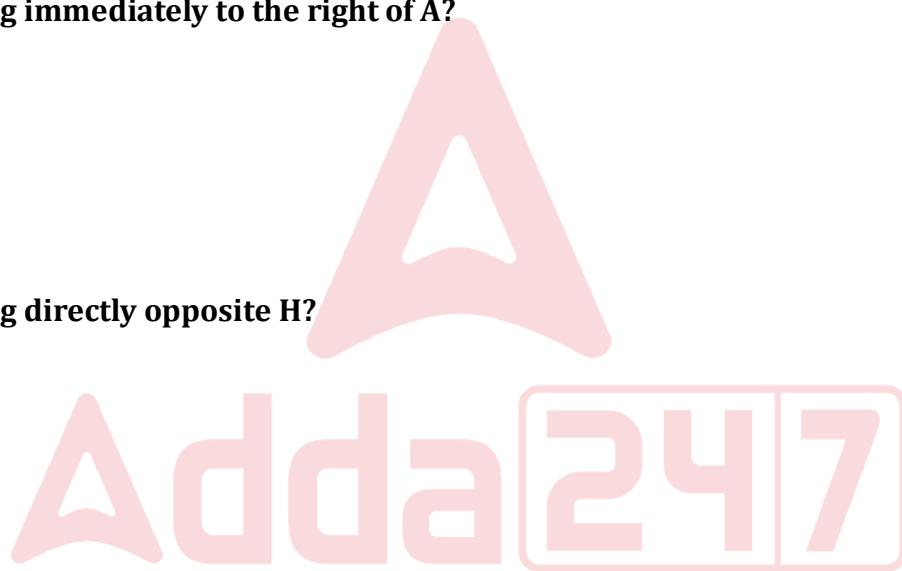
- (a) None of these
- (b) B
- (c) C
- (d) D
- (e) G

Q33. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

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

Q34. Who are the immediate neighbours of G?

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



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Q35. Who is sitting two places to the right of C?

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

Directions (36-40): Study the following information carefully and answer the questions given below:

In a certain code language:

"Noble timely help essential" is coded as "pe ra gm bz".

"Help coming timely for people" is coded as "bz kt pe lf df".

"Noble cause attract for" is coded as "ra tm sn kt".

"People appreciate noble gesture" is coded as "df vx ra xl".

Q36. What is the code for 'noble'?

- (a) pe
- (b) ra
- (c) gm
- (d) bz
- (e) None of these

Q37. What does 'df' stand for?

- (a) coming
- (b) for
- (c) people
- (d) timely
- (e) None of these

Q38. Which of the following represents 'attract for noble'?

- (a) tm ra sn
- (b) ra sn xl
- (c) kt tm ra
- (d) kt sn vx
- (e) None of these

Q39. What may be the code for 'gesture'?

- (a) df
- (b) tm
- (c) sn
- (d) xl
- (e) gm

Q40. Which of the following correctly matched?

- (a) coming - kt
- (b) people - gm
- (c) Essential-gm
- (d) cause - xl
- (e) gesture - lf

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

Eight individuals, P, Q, R, S, T, U, V and X live in a building on eight different floors, numbered from one to eight from bottom to top respectively (1 being the bottommost and 8 the topmost).

V lives on even numbered floor but not at topmost floor. Three floors gap between V and R. T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Q41. Who lives on the topmost floor?

- (a) P
- (b) R
- (c) S
- (d) U
- (e) X

Q42. On which floor does T live?

- (a) Second
- (b) Third
- (c) Fifth
- (d) Seventh
- (e) Eighth

Q43. How many floors are there between U and Q?

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

Q44. If S and R exchange their floors, which statement will be true?

- (a) R will live immediately below S
- (b) S will live on an even-numbered floor
- (c) R will live on the top floor
- (d) S will live immediately above V
- (e) None of the above

Q45. Four of the following five are alike in a certain way and hence form a group. Who among the following does not belong to that group?

- (a) U
- (b) P
- (c) T
- (d) S
- (e) X

Directions (46-48): Study the following information carefully and answer the questions given below:

In a family of 8 members live in three generations, there are two married couples. The family includes A, B, C, D, E, F, G, and H. E is the grandfather of A and the father of B. D is the grandmother of G and is married to E. C is the mother of A but not married to B. F is the unmarried brother of A. H is the wife of B and has only one son. Gender of A and B are different.

Q46. What is the relation of F with respect to B?

- (a) Son
- (b) Brother
- (c) Cousin
- (d) Nephew
- (e) None of the above

Q47. If K is the wife of G then how K is related to B?

- (a) Mother-in-law
- (b) Sister-in-law
- (c) Daughter-in-law
- (d) Niece
- (e) None of the above

Q48. Which of the following is true?

- (a) D is the mother of H
- (b) D is the mother-in-law of C
- (c) D is married to A
- (d) D has three grandchildren
- (e) D is the mother of A

Directions (49-52): Study the following information carefully and answer the questions given below:

Seven friends, named from A to G, decide to buy a room heater each on a different day of the week, starting from Monday and ending on Sunday. Each person buys exactly one room heater and on different days. At most one person buy before A. F buys just before D. There are as many persons buy before A as after F. There are as many persons buy before G as after B. E buys just before B.

Q49. Who bought the room heater on Monday?

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

Q50. On which day did person B buy the room heater?

- (a) Tuesday
- (b) Saturday
- (c) Monday
- (d) Sunday
- (e) None of these

Q51. Who bought the room heater a day after A?

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

Q52. If all of them buys room heater according to the alphabetical order from Monday to Sunday then the position of how many persons remain unchanged?

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

Directions (53-56): These questions are based on the following letter/number/symbol series. Study it carefully and answer the questions.

7 D 5 # A B 1 % K \$ 4 E J F € ★ 2 H I @ L 6 Q U © 9 M T 8 W

Q53. Which of the following is the seventh to the right of the nineteenth element from the right?

- (a) L
- (b) Q
- (c) 6
- (d) U
- (e) I

Q54. How many letters are there in the series which are immediately followed by a number?

- (a) Four
- (b) One
- (c) Two
- (d) Three
- (e) More than four

Q55. If all the numbers are dropped from the series, which element will be midway between the tenth element from the left and the eleventh element from the right?

- (a) ©
- (b) F
- (c) €
- (d) H
- (e) None of these

Q56. Which of the following letter is the 5th to the left of 7th letter from the right end?

- (a) I
- (b) E
- (c) K
- (d) H
- (e) None of these

Directions (57-58): Study the following information carefully and answer the questions given below:

Seven friends - P, Q, R, S, T, U, and V - are standing in a line (but not in same order) according to their heights in descending order.

T is taller than R but shorter than P. V is the shortest. S is taller than U but shorter than T. P is standing immediately after the tallest person. R is taller than S.

Q57. Based on the information given above, who is the tallest among the seven friends?

- (a) P
- (b) Q
- (c) R
- (d) S
- (e) T

Q58. How many persons are standing between P and U?

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

Directions (59-63): Study the following information carefully and answer the questions given below:

Six persons, A, B, C, D, E, and F, sit in a row facing North, and each of them has a different age - 12, 15, 18, 22, 25, and 28 years old.

B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C. F sits just right of C and 10 years younger to the one who sits 2nd to the left of F. A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who are 12 years and 22 years old who sits 2nd to the right of D.

Q59. Who is sitting at the extreme left end of the row?

- (a) The one who is 25 years old
- (b) B
- (c) C
- (d) F
- (e) The one who is 22 years old

Q60. What is the age of the person sitting immediately to the right of the person who is 22 years old?

- (a) 12 years
- (b) 15 years
- (c) 18 years
- (d) 25 years
- (e) Cannot be determined

Q61. Four of the following five are alike in a certain way and hence form a group. Who among the following does not belong to that group?

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

Q62. Who is the oldest among all?

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

Q63. Which of the following statement(s) is /are true?

I. Sum of the ages of D and F is more than 40 years

II. C is older than F

III. A is not at extreme end

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

Directions (64-65): Study the following information carefully and answer the questions given below:

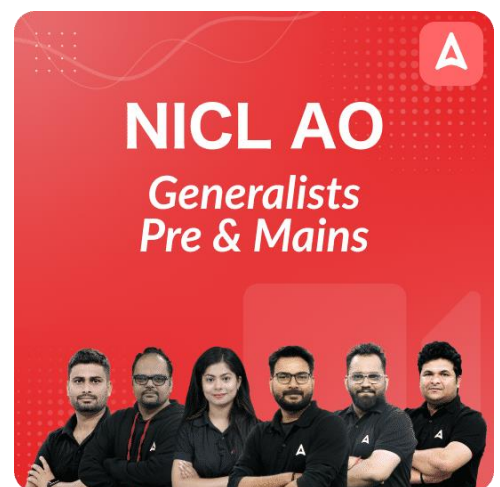
A is 10m north of B. B is 30m east of C. D is 25m south of H. E is 15m west of D. F is 20m north of E. G is 5m east of F. C is 15m south of G.

Q64. In which direction is G with respect to B?

- (a) North-east
- (b) South-west
- (c) East
- (d) North-west
- (e) None of these

Q65. What is the shortest distance between A and E?

- (a) 20m
- (b) 25m
- (c) 30m
- (d) 35m
- (e) None of these



Directions (66-70): What approximate value come in place of question mark (?). (You are not expected to calculate the exact value)

Q66. $45.01 \div 15.35 \times 3.11 + ?^2 = \sqrt{168}$

- (a) 2
- (b) 5
- (c) 8
- (d) 12
- (e) 15

Q67. $432.99 + 345.86 + ? = 873.32 - 45.76$

- (a) 42
- (b) 55
- (c) 48
- (d) 32
- (e) 25

Q68. $344.22 \div ? \times (6.99)^2 = (19.87)^2 + 199.99 + 1.99$

- (a) 15
- (b) 56
- (c) 44
- (d) 28
- (e) 35

Q69. $\frac{4.95}{24.77} \times (4.99)^3 + 76.97 = ?$

- (a) 90
- (b) 95
- (c) 125
- (d) 120
- (e) 102

Q70. $55.22\% \text{ of } 239.89 + 65.11\% \text{ of } 119.99 = ?$

- (a) 200
- (b) 210
- (c) 250
- (d) 190
- (e) 180

Q71. Cost price of the article is $33\frac{1}{3}\%$ of the marked price and by selling the article it made a profit of 40%. Discount offered on the article is Rs. 640. Find the selling price of the article when $33\frac{1}{3}\%$ discount is given on that article.

- (a) Rs. 800
- (b) Rs. 700
- (c) Rs. 1200
- (d) Rs. 1600
- (e) Rs. 1000

Q72. A vessel contains 64 liters mixture of milk and water having ratio 5: 3 respectively. If x liters of mixture removed and 10 liters of water is added in the remaining mixture, then the milk becomes 0% more than the water. Find the value of x.

- (a) 40
- (b) 16
- (c) 32
- (d) 24
- (e) 48

Q73. If the difference between the compound and simple interest for 3 years is Rs. 31 at the rate of 10%, then find the amount invested.

- (a) Rs. 500
- (b) Rs. 2000
- (c) Rs. 1000
- (d) Rs. 1200
- (e) Rs. 800

Directions (74-78): Read the information carefully and answer the following questions.

The given information is about three companies A, B and C manufacturing three types of umbrellas i.e. Q, R and S. Total S type umbrellas manufactured is 67. S type umbrella manufactured by A is half that of type Q and equal to the Q type umbrella manufactured by C.

R type umbrella manufactured by B is 60% less than that of Q type umbrella manufactured by B which is 25% more than that of type S. Ratio of R type umbrella manufactured by A to the type S umbrella manufactured by A is 1: 3 and type S umbrella manufactured by C is three less than that of by A. Total umbrella manufactured by C is 57. R type umbrella manufactured by C is $\frac{3}{5}$ th of Q type umbrella manufactured by B

Q74. Find the respective ratio of Q- type umbrella manufactured by A to S type umbrella manufactured by B.

- (a) 4: 7
- (b) 3: 4
- (c) 5: 7
- (d) 4: 3
- (e) 2: 1

Q75. Find the average number of Q-type umbrella and S-type umbrella manufactured by B.

- (a) 50
- (b) 65
- (c) 55
- (d) 45
- (e) 48

Q76. Which company manufactured maximum number of Q type umbrella.

- (a) A
- (b) B
- (c) C
- (d) Can't be determined
- (e) None of these

Q77. If A manufactured 40% defective umbrella and B manufactured 10 more defective umbrella than A, then find the total number of non-defective umbrella by A and B.

- (a) 110
- (b) 124
- (c) 98
- (d) 87
- (e) 90

Q78. D manufactured 20% more umbrella than B and the ratio of type Q, R and S manufactured by D is 1:2:1 respectively. Find the number of type S umbrella manufactured by B is how much more/less than that of D.

- (a) 12
- (b) 10
- (c) 7
- (d) 15
- (e) 18

Directions (79-83): What will come in place of question mark (?) in the following number series.

Q79. 88, 93, ?, 120, 146, 183

- (a) 97
- (b) 99
- (c) 103
- (d) 115
- (e) 110

Q80. 64, 32, ?, 64, 256, 2048

- (a) 80
- (b) 40
- (c) 50
- (d) 30
- (e) None of these

Q81. 65, 64, 127, ?, 1519, 7594

- (a) 381
- (b) 377
- (c) 385
- (d) 388
- (e) 380

Q82. ?, 16, 21, 28, 38, 52

- (a) 12
- (b) 15
- (c) 18
- (d) 17
- (e) 16

Q83. 450, 465, 495, ?, 600, 675

- (a) 517
- (b) 575
- (c) 570
- (d) 530
- (e) 540

Directions (84-88): The table given below shows the total number of people took part in food making competition from five different societies (A, B, C, D and E) and it also shows the ratio of males to females who took part in the competition from these societies. Read the information carefully and answer the following questions.

Societies	Total number of people	Ratio of males to females
A	500	1: 1
B	250	3: 2
C	400	5: 3
D	300	2: 1
E	200	3: 7

Q84. Number of females who took part in the competition from C and B together is what percentage of the total people who took part in the competition from society A.

- (a) 65%
- (b) 50%
- (c) 85%
- (d) 95%
- (e) 55%

Q85. Find the difference between the average number of males in all the societies who took part in competition and the average number of females in all the societies who took part in that competition.

- (a) 38
- (b) 48
- (c) 24
- (d) 34
- (e) 54

Q86. Find the ratio of the males who took part in the competition from A and B together to the females who took part in the competition from D and E together.

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

Q87. If the registration fees for taking part in the competition for male is Rs 50 and for the females is Rs 100 in society C, then find the revenue generated by the society C in the competition from registration.

- (a) Rs 27500
- (b) Rs 27800
- (c) Rs 27300
- (d) Rs 27100
- (e) Rs 27000

Q88. Ratio of the total people who took part from B to F is 5: 6 and number of males who took part in competition from F is $33\frac{1}{3}\%$ less than that of females. Find the number of females who took part in competition from F is what percentage more/less than that of in B.

- (a) 20%
- (b) 60%
- (c) 40%
- (d) 80%
- (e) 70%

Q89. A and B entered into partnership by investing Rs. 8000 and Rs. (X+8000). If the investment period for A and B is 18 months and 9 months respectively, then the profit share of A Rs 16000 out of the total profit of Rs 36000. Find the value of X.

- (a) 11000
- (b) 14000
- (c) 12000
- (d) 10000
- (e) 18000

Q90. A and B together can complete the work in 10 days and B and C together can complete that work in 5 days more than that of A and B together. If C and A together can complete the work in 12 days, then find the number of days taken by A, B and C to complete the work while working on alternate days starting with A, then B and then C.

- (a) 24
- (b) 28
- (c) 16
- (d) 20
- (e) None of these

Directions (91-94): What will come in the place of question (?) mark in following the question:

Q91. $\{(200\% \text{ of } ? + 13 \times 11) - 43\} = 160$

- (a) 35
- (b) 40
- (c) 60
- (d) 30
- (e) 27

Q92. $2596 + 5648 + \sqrt{1089} + \sqrt{9} = ? \times 9$

- (a) 937
- (b) 920
- (c) 960
- (d) 990
- (e) 950

Q93. $? = 5\frac{1}{4} + 7\frac{2}{3} + 9\frac{1}{4} - \frac{1}{12}$

- (a) $21\frac{1}{12}$
- (b) $24\frac{1}{12}$
- (c) $20\frac{1}{12}$
- (d) $22\frac{1}{12}$
- (e) $25\frac{1}{12}$

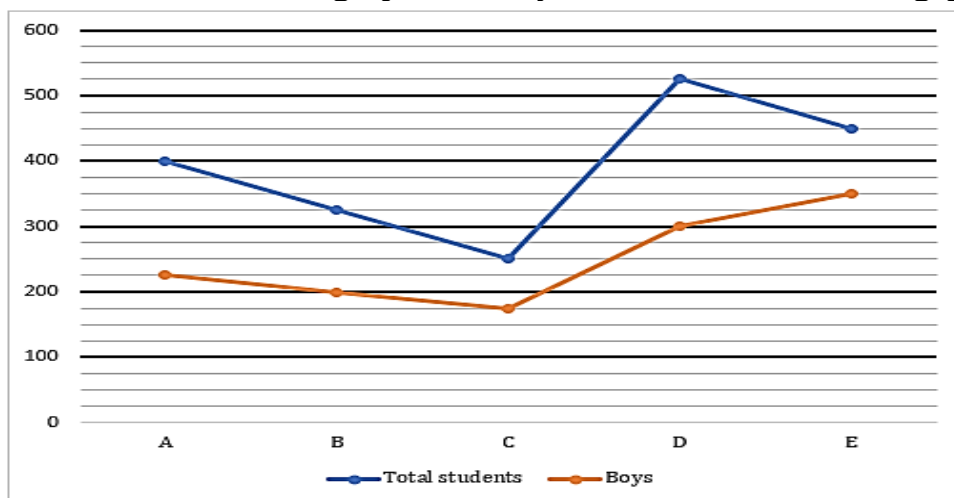
Q94. $350 = 25\% \text{ of } 680 + 12.5\% \text{ of } ?$

- (a) 1600
- (b) 1440
- (c) 1240
- (d) 1300
- (e) 1540

Q95. Average marks of a student in five subjects is 57 but in two subjects the marks count is wrong. He counts 40 & 90 instead of 80 and 45. Find the correct average mark of the student.

- (a) 36
- (b) 40
- (c) 45
- (d) 56
- (e) 42

Directions (96-100): The line graph shows total number of students visited to the trip from five different sections (A, B, C, D and E) of class 6th and it also shows the number of boys visited to the trip from these sections. Read the line graph carefully and answer the following questions.



Q96. Find the ratio of the number of girls visited from A and B together to the number of girls visited from D.

- (a) 4: 3
- (b) 3: 1
- (c) 2: 3
- (d) 2: 5
- (e) 6: 7

Q97. Number of boys visited from D is what percentage more/less than the number of boys visited from E

- (a) $28\frac{4}{7}\%$
- (b) 30%
- (c) 15%
- (d) $14\frac{2}{7}\%$
- (e) 20%

Q98. If 60% of total students from the class 6th went to the trip, find the difference between students went to the trip and students did not go the trip.

- (a) 1200
- (b) 1000
- (c) 1300
- (d) 650
- (e) can't be determined

Q99. If the trip fees for the 6th class is Rs. 200, then find the difference between the amount collected from the section A and D.

- (a) Rs. 22000
- (b) Rs. 25000
- (c) Rs. 26000
- (d) Rs. 20000
- (e) Rs. 23000

Q100. If only the class teacher of each section went on a trip with each section and a bus with a capacity of 16 (excluding the bus driver, class teacher, and one conductor seat), then find how many buses will be rented by the school for section A.

- (a) 20
- (b) 15
- (c) 25
- (d) 35
- (e) 30



NICL
Generalist AO (Scale I)
Prelims + Mains
Starts: 23 Jan | 10:30 am to 5 pm

Solutions

S1. Ans.(a)

Sol. Implementation: Putting a decision, plan, or agreement into effect.

Suggestion: An idea or plan put forward for consideration.

Speculation: Forming of a theory without firm evidence.

Discussion: The action or process of talking about something.

Proposal: A plan or suggestion put forward for consideration.

'Implementation' is the correct choice as it implies putting safety measures into actual practice.

S2. Ans.(b)

Sol. Amendment: A minor change or addition designed to improve a text, piece of legislation, etc.

Formulation: The action of devising or creating something.

Adjustment: A small alteration or movement made to achieve a desired fit, appearance, or result.

Adaptation: The action or process of adapting or being adapted.

Alteration: A change or modification.

'Formulation' fits best as it refers to creating comprehensive traffic laws.

S3. Ans.(a)

Sol. Enforced: Caused something to happen or be the case.

Neglected: Not receiving proper attention; disregarded.

Repealed: Revoked or annulled (a law or act of parliament).

Ignored: Refused to take notice of or acknowledge.

Abolished: Formally put an end to (a system, practice, or institution).

S4. Ans.(a)

Sol. Initiative: An act or strategy intended to resolve a difficulty or improve a situation.

Proposition: A statement or assertion that expresses a judgment or opinion.

Concept: An abstract idea.

Idea: A thought or suggestion as to a possible course of action.

Theory: A set of principles on which the practice of an activity is based.

'Initiative' is correct, denoting the action of educating the public about road safety.

S5. Ans.(b)

Sol. Outdated: Old-fashioned or obsolete.

Prominent: Important; famous or conspicuous.

Obscured: Not clear or plain; ambiguous, vague, or uncertain.

Hidden: Concealed; out of sight.

Inconspicuous: Not clearly visible or attracting attention.

'Prominent' is the correct choice, as it refers to signage that is easily noticeable and important for safety.

S6. Ans.(d)

Sol. Arbitrary: Based on random choice or personal whim, rather than any reason or system.

Sporadic: Occurring at irregular intervals or only in a few places; scattered or isolated.

Intermittent: Occurring at irregular intervals; not continuous or steady.

Consistent: Acting or done in the same way over time, especially to be fair

S7. Ans.(d)

Sol. The error is in part (D). The correct phrase should be "to the absence of" instead of "to the absence for." The preposition "of" is used after "absence" to indicate possession or relation. The corrected sentence reads, "The committee members decided to postpone the meeting due to the absence of several key members." This usage of "of" follows the common grammatical structure where "of" is used to show relationships or connections between words.

S8. Ans.(e)

Sol. The error is in part (E). The correct phrase should be "which led to his eventual acquittal," ensuring that "his" is appropriately used to indicate the correct pronoun for the suspect. The corrected sentence reads, "After a thorough investigation, the police were unable to find any conclusive evidence against the suspect, which led to his eventual acquittal."

S9. Ans.(b)

Sol. The error is in part (B). The correct form should be "employees submit," not "employees submits." After "require that," the verb should be in the base form. The corrected sentence reads, "The new regulations require that all employees submit a monthly report on their activities to the management for review."

S10. Ans.(c)

Sol. The error is in part (C). The correct form should be "has implemented" instead of "has implement." The verb should be in the past participle form to match the present perfect tense "has." The corrected sentence reads, "In an effort to improve customer satisfaction, the company has implemented new policies that focus on quality and efficiency."

S11. Ans.(d)

Sol. The error is in part (D). The correct phrase should be "unwavering determination" instead of "unwaivered determination." "Unwavering" means steady or resolute, which correctly describes the explorers' determination. The corrected sentence reads, "Despite many obstacles along the way, the explorers continued their journey with unwavering determination and a strong sense of purpose."

S12. Ans.(c)

Sol. The error is in part (C). The correct form should be "compared" as in "compared to the previous year." This phrase is used to show the relationship between the current year's revenue and that of the previous year. The corrected sentence reads, "The company's annual report revealed a significant increase in revenue compared to the previous year, indicating strong growth."

S13. Ans.(b)

Sol. The correct sequence for these sentences to form a coherent narrative is:

B - Introduces Thomas Edison.

A - Describes his role as an inventor and manufacturer.

C - Lists some of his most famous inventions.

E - Highlights the impact of his development of the electric light bulb and electrical power system.

D - Concludes with the overall influence of his inventions on global life.

The first sentence should introduce Thomas Edison, which is done in sentence B, "Thomas Edison, born in 1847, was an American inventor and businessman who has been described as America's greatest inventor."

S14. Ans.(e)

Sol. The correct sequence for these sentences to form a coherent narrative is:

B - Introduces Thomas Edison.

A - Describes his role as an inventor and manufacturer.

C - Lists some of his most famous inventions.

E - Highlights the impact of his development of the electric light bulb and electrical power system.

D - Concludes with the overall influence of his inventions on global life.

The fourth sentence should discuss a specific impact of his inventions, which is described in sentence E, "His development of the electric light bulb and the electrical power system revolutionized the way people live and had a profound impact on the industrial world."

S15. Ans.(a)

Sol. The correct sequence for these sentences to form a coherent narrative is:

B - Introduces Thomas Edison.

A - Describes his role as an inventor and manufacturer.

C - Lists some of his most famous inventions.

E - Highlights the impact of his development of the electric light bulb and electrical power system.

D - Concludes with the overall influence of his inventions on global life.

The second sentence should provide additional information about Edison's role, which is done in sentence A, "He was not only an inventor but also a successful manufacturer who was able to market his inventions to the public."

S16. Ans.(c)

Sol. The correct sequence for these sentences to form a coherent narrative is:

B - Introduces Thomas Edison.

A - Describes his role as an inventor and manufacturer.

C - Lists some of his most famous inventions.

E - Highlights the impact of his development of the electric light bulb and electrical power system.

D - Concludes with the overall influence of his inventions on global life.

The third sentence should list some of Edison's famous inventions, which is covered in sentence C, "Among his most famous inventions are the phonograph, the motion picture camera, and, perhaps most importantly, the electric light bulb."

S17. Ans.(d)

Sol. The correct sequence for these sentences to form a coherent narrative is:

B - Introduces Thomas Edison.

A - Describes his role as an inventor and manufacturer.

C - Lists some of his most famous inventions.

E - Highlights the impact of his development of the electric light bulb and electrical power system.

D - Concludes with the overall influence of his inventions on global life.

The last sentence should conclude with the overall influence of his inventions, which is described in sentence D, "Edison's inventions greatly influenced life around the world, including the way people work, communicate, and entertain themselves."

S18. Ans.(a)

Sol. The incorrect word is "arqueologist." The correct spelling is "archaeologist." "Civilization," "customs," and "era" are correctly spelled.

Meanings:

Archaeologist: A person who studies human history and prehistory through the excavation of sites and the analysis of artifacts.

Civilization: The stage of human social and cultural development and organization.

Customs: Traditional and widely accepted ways of behaving or doing something.

Era: A long and distinct period of history.

S19. Ans.(d)

Sol. The incorrect word is "economical." The correct word should be "economic." "Annual," "revealed," and "increase" are correctly spelled.

Meanings:

Annual: Occurring once every year.

Revealed: Made known to others.

Increase: Become or make greater in size, amount, or degree.

Economic: Relating to economics or the economy.

S20. Ans.(e)

Sol. All the words "celebrities," "advocates," "awareness," and "platform" are correctly spelled.

Meanings:

Celebrities: Famous people, especially in entertainment or sport.

Advocates: People who publicly support or recommend a particular cause or policy.

Awareness: Knowledge or perception of a situation or fact.

Platform: A raised level surface on which people can stand.

S21. Ans.(e)

Sol. All the words "scientist's," "thorough," "investigation," "ecosystem's," and "unknown" are correctly spelled.

Meanings:

Scientist's: Relating to a scientist (a person who conducts scientific research).

Thorough: Complete with regard to every detail; not superficial or partial.

Investigation: The action of investigating something or someone.

Ecosystem's: Relating to an ecosystem (a biological community of interacting organisms and their physical environment).

Unknown: Not known or familiar.

S22. Ans.(b)

Sol. The passage in Paragraph 2 states, "His legal experience equipped him with skills to handle complex issues like the secession of Southern states and the drafting of the Emancipation Proclamation." This implies that Lincoln's legal career, which involved dealing with diverse and complex legal cases, honed his skills in responsiveness and versatility. These skills were critical in addressing the national challenges he faced as President, making option (b) the correct inference. The other options do not align with the information provided in the passage.

S23. Ans.(b)

Sol. According to Paragraph 4, "Lincoln's time on the circuit also included engaging in debates and endorsing Whig Presidential candidates, shaping his political ideologies that later influenced the Republican Party." This clearly indicates that Lincoln was actively involved in debates and political endorsements, which shaped his political views, making option (b) the correct answer. The other options do not align with the activities described in the passage.

S24. Ans.(e)

Sol. Paragraph 1 states, "By the 1840s and 1850s, Lincoln had established himself as a prominent lawyer in Illinois, handling significant cases before the Supreme Court and in various U.S. courts." This directly supports option (e), indicating that Lincoln was a prominent lawyer handling significant cases. The other options either contradict the information given in the passage or are not supported by it.

S25. Ans.(c)

Sol. The correct statement is option (c). As mentioned in Paragraph 2, "His legal experience equipped him with skills to handle complex issues like the secession of Southern states and the drafting of the Emancipation Proclamation." This validates that Lincoln's experience in the Eighth Judicial Circuit was instrumental in preparing him for dealing with complex national issues.

S26. Ans.(a)

Sol. Paragraph 3 clearly states, "These skills, along with the relationships he built with local people, newspaper editors, and politicians, were instrumental in his political journey, including his Presidential campaign." This suggests that Lincoln's ability to build strong relationships was a key factor in his political journey and his presidential campaign. The other options do not align with the details provided in the passage or misinterpret the information given.

S27. Ans.(d)

Sol. 'Ignited' means to arouse or inflame (an emotion or situation). It is the appropriate choice as it conveys the idea of Lincoln's interest in law being sparked or kindled.

Diminished: Made smaller or less.

Ignited: Set on fire; aroused or inflamed.

Obstructed: Blocked or impeded.

Withdrawn: Removed or taken away.

Repelled: Driven back or repulsed.

S28. Ans.(b)

Sol. The incorrect statement is option (b). Paragraph 2 clearly states, "Lincoln's legal career was not just confined to Springfield; he also worked in the Eighth Judicial Circuit." This indicates that Lincoln's legal practice extended beyond Springfield, contradicting the statement in option (b).

S29. Ans.(b)

Sol. 'Straightforward' means easy to understand or simple, making it the antonym of 'complex,' which implies something that is not simple or easy to understand.

Intricate: Very complicated or detailed.

Straightforward: Easy to understand; uncomplicated.

Complicated: Consisting of many interconnecting parts or elements; intricate.

Convolutd: (Especially of an argument, story, or sentence) extremely complex and difficult to follow.

Elaborate: Involving many carefully arranged parts or details; detailed and complicated.

S30. Ans.(c)

Sol. 'Renowned' means known or talked about by many people; famous. It is a synonym for 'prominent,' which refers to something important and well-known.

Obscure: Not clear or plain; ambiguous or vague.

Insignificant: Too small or unimportant to be worth consideration.

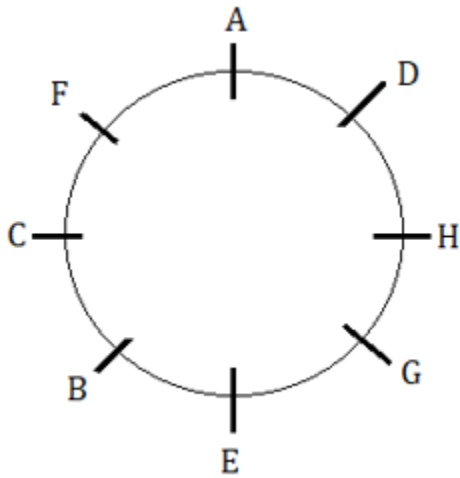
Renowned: Known or talked about by many people; famous.

Trivial: Of little value or importance.

Unknown: Not known or familiar.

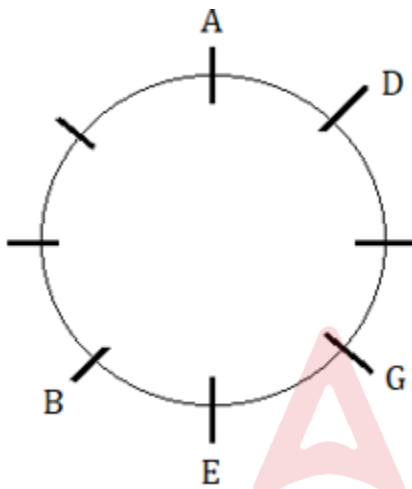
S31. Ans.(a)

Sol. Final arrangement-



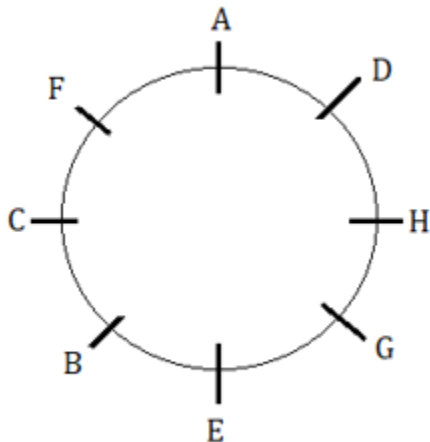
Clues-A is sitting directly opposite E. B is sitting three places to the right of A. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Inference-



Clues-C is sitting to the immediate right of F.

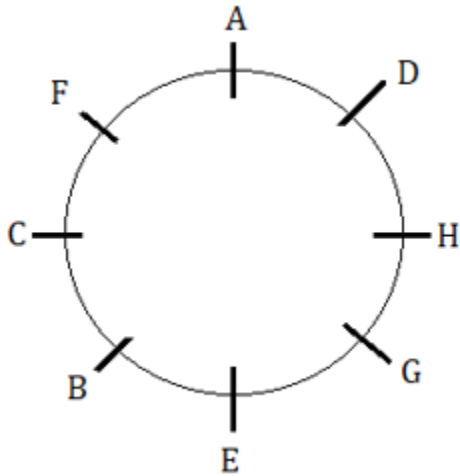
Inference-Only H remains. So, the final arrangement is-



F is sitting immediately to the right of A

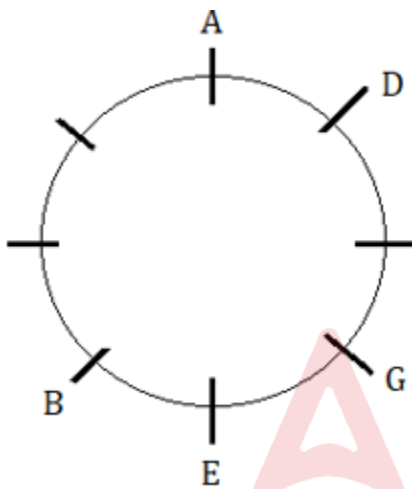
S32. Ans.(c)

Sol. Final arrangement-



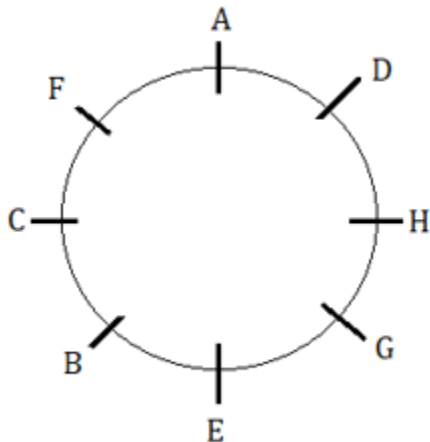
Clues-A is sitting directly opposite E. B is sitting three places to the right of A. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Inference-



Clues-C is sitting to the immediate right of F.

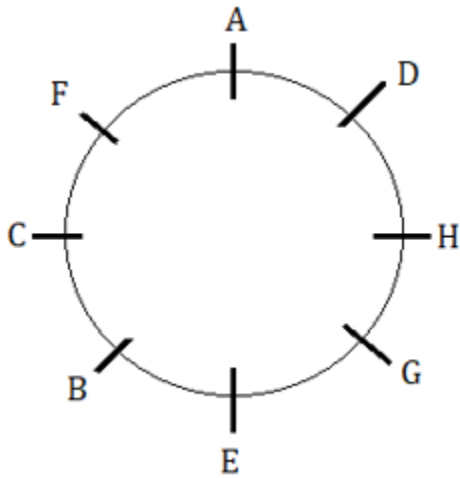
Inference-Only H remains. So, the final arrangement is-



C is sitting directly opposite H

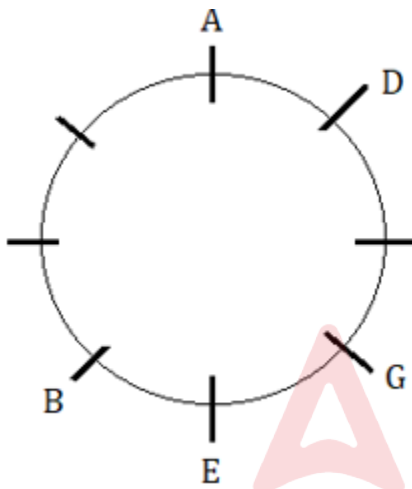
S33. Ans.(b)

Sol. Final arrangement-



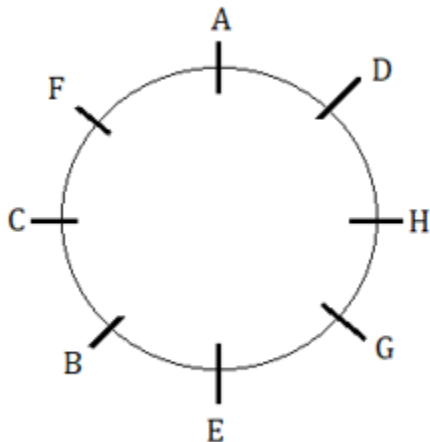
Clues-A is sitting directly opposite E. B is sitting three places to the right of A. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Inference-



Clues-C is sitting to the immediate right of F.

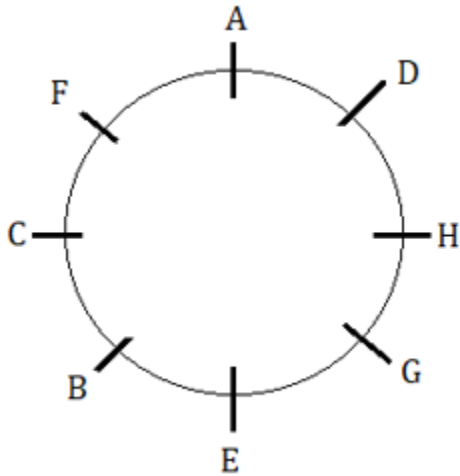
Inference-Only H remains. So, the final arrangement is-



Either one person or five persons sit between the given two persons except in option (b)

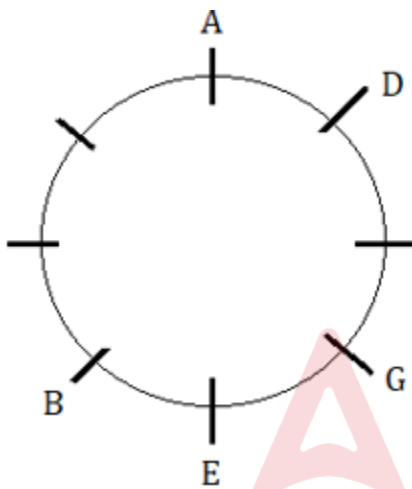
S34. Ans.(d)

Sol. Final arrangement-



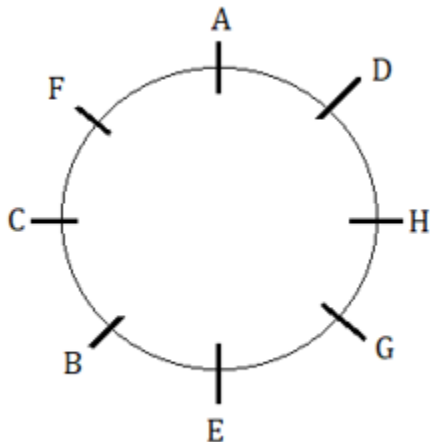
Clues-A is sitting directly opposite E. B is sitting three places to the right of A. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Inference-



Clues-C is sitting to the immediate right of F.

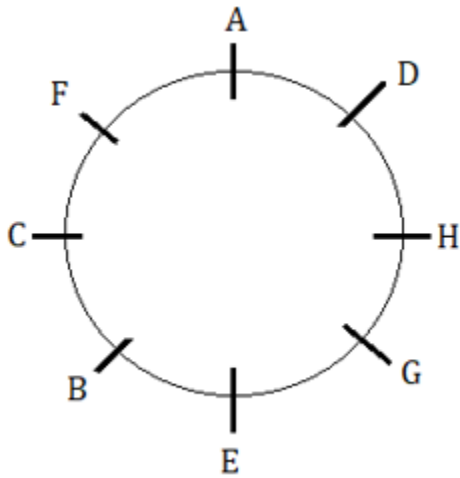
Inference-Only H remains. So, the final arrangement is-



H and E are the immediate neighbours of G

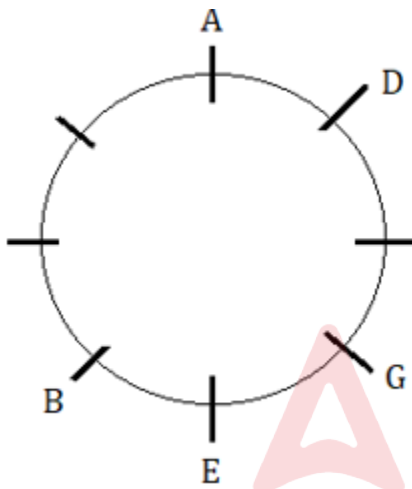
S35. Ans.(a)

Sol. Final arrangement-



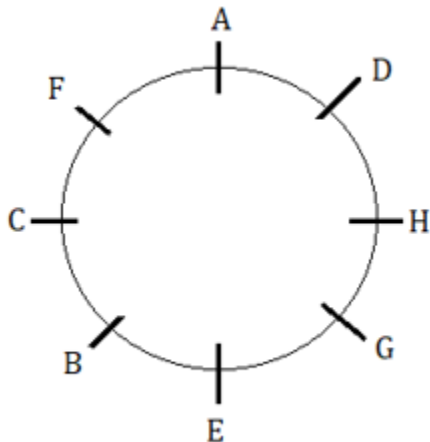
Clues-A is sitting directly opposite E. B is sitting three places to the right of A. D is sitting two places to the right of G who is not an immediate neighbour of A and C.

Inference-



Clues-C is sitting to the immediate right of F.

Inference-Only H remains. So, the final arrangement is-



E is sitting two places to the right of C

S36. Ans.(b)

Sol.

Word	Code
Noble	Ra
Timely/Help	Pe/bz
Essential	Gm
Coming	Lf
For	Kt
People	Df
Cause/Attract	Tm/sn
Appreciate/Gesture	Vx/xl

'ra' is the code for 'noble'

S37. Ans.(c)

Sol.

Word	Code
Noble	Ra
Timely/Help	Pe/bz
Essential	Gm
Coming	Lf
For	Kt
People	Df
Cause/Attract	Tm/sn
Appreciate/Gesture	Vx/xl

'df' stand for people

S38. Ans.(e)

Sol.

Word	Code
Noble	Ra
Timely/Help	Pe/bz
Essential	Gm
Coming	Lf
For	Kt
People	Df
Cause/Attract	Tm/sn
Appreciate/Gesture	Vx/xl

S39. Ans.(d)

Sol.

Word	Code
Noble	Ra
Timely/Help	Pe/bz
Essential	Gm
Coming	Lf
For	Kt
People	Df
Cause/Attract	Tm/sn
Appreciate/Gesture	Vx/xl

S40. Ans.(c)

Sol.

Word	Code
Noble	Ra
Timely/Help	Pe/bz
Essential	Gm
Coming	Lf
For	Kt
People	Df
Cause/Attract	Tm/sn
Appreciate/Gesture	Vx/xl

A

NICL AO

Generalists
Pre & Mains
100+ Total Tests

Test Series

S41. Ans.(a)

Sol. Final arrangement-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Clues- V lives on even numbered floor but not at topmost floor. Three floors gap between V and R.

Inference- Here we have 3 possible cases.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8		R	
7			
6	R		V
5			
4		V	
3			
2	V		R
1			

Clues- T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Inference- Here case 2 and case 3 are ruled out now.

Floor	Case 1	Case-2	Case-3
	Person	Person	Person
8	P	R	P
7	T		T
6	R	P	V
5	X	T	X
4	Q	V	Q
3	S	X	S
2	V		R
1	U		U

Inference- So, the final arrangement is-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

P lives on the topmost floor

S42. Ans.(d)

Sol. Final arrangement-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Clues- V lives on even numbered floor but not at topmost floor. Three floors gap between V and R.

Inference- Here we have 3 possible cases.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8		R	
7			
6	R		V
5			
4		V	
3			
2	V		R
1			

Clues- T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Inference- Here case 2 and case 3 are ruled out now.

Floor	Case 1	Case-2	Case-3
	Person	Person	Person
8	P	R	P
7	T		T
6	R	P	V
5	X	T	X
4	Q	V	Q
3	S	X	S
2	V		R
1	U		U

Inference- So, the final arrangement is-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

T lives on Seventh floor

S43. Ans.(b)

Sol. Final arrangement-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Clues- V lives on even numbered floor but not at topmost floor. Three floors gap between V and R.

Inference- Here we have 3 possible cases.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8		R	
7			
6	R		V
5			
4		V	
3			
2	V		R
1			

Clues- T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Inference- Here case 2 and case 3 are ruled out now.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8	P	R	P
7	T		T
6	R	P	V
5	X	T	X
4	Q	V	Q
3	S	X	S
2	V		R
1	U		U

Inference- So, the final arrangement is-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Two floors are there between U and Q

S44. Ans.(b)

Sol. Final arrangement-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Clues- V lives on even numbered floor but not at topmost floor. Three floors gap between V and R.

Inference- Here we have 3 possible cases.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8		R	
7			
6	R		V
5			
4		V	
3			
2	V		R
1			

Clues- T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Inference- Here case 2 and case 3 are ruled out now.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8	P	R	P
7	T		T
6	R	P	V
5	X	T	X
4	Q	V	Q
3	S	X	S
2	V		R
1	U		U

Inference- So, the final arrangement is-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Option (b) is true

S45. Ans.(b)

Sol. Final arrangement-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

Clues- V lives on even numbered floor but not at topmost floor. Three floors gap between V and R.

Inference- Here we have 3 possible cases.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8		R	
7			
6	R		V
5			
4		V	
3			
2	V		R
1			

Clues- T lives just below P and two floors above X. X does not live at bottommost floor. S lives two floors above U. Q lives above V.

Inference- Here case 2 and case 3 are ruled out now.

Floor	Case 1	Case 2	Case 3
	Person	Person	Person
8	P	R	P
7	T		T
6	R	P	V
5	X	T	X
4	Q	V	Q
3	S	X	S
2	V		R
1	U		U

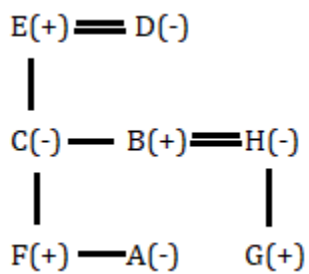
Inference- So, the final arrangement is-

Floor	Person
8	P
7	T
6	R
5	X
4	Q
3	S
2	V
1	U

All of them live on odd floor except P

S46. Ans.(d)

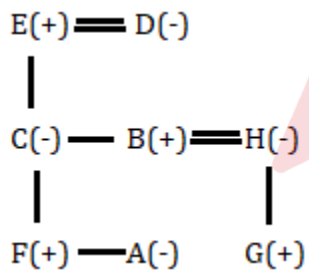
Sol.



F is the nephew of B

S47. Ans.(c)

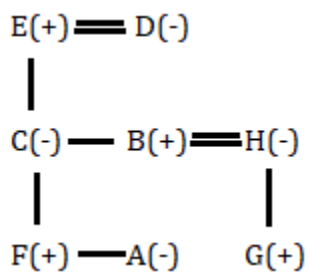
Sol.



K is the daughter-in-law of B

S48. Ans.(d)

Sol.



S49. Ans.(b)

Sol. Final arrangement-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

Clues-At most one person buy before A.

Inference-Here we have 2 possible cases i.e., case 1 and case 2.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Clues-There are as many persons buy before A as after F. F buys just before D.

Inference-Case 1 is ruled out now.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		F
Sunday	F	D

Clues-There are as many persons buy before G as after B. E buys just before B.

Inference-Now only C remains who buys on Monday. So, the final arrangement is-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

C buys on Monday

S50. Ans.(e)

Sol. Final arrangement-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

Clues-At most one person buy before A.

Inference-Here we have 2 possible cases i.e., case 1 and case 2.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Clues-There are as many persons buy before A as after F. F buys just before D.

Inference-Case 1 is ruled out now.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		F
Sunday	F	D

Clues-There are as many persons buy before G as after B. E buys just before B.

Inference-Now only C remains who buys on Monday. So, the final arrangement is-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

B buys on Friday

S51. Ans.(a)

Sol. Final arrangement-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

Clues-At most one person buy before A.

Inference-Here we have 2 possible cases i.e., case 1 and case 2.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Clues-There are as many persons buy before A as after F. F buys just before D.

Inference-Case 1 is ruled out now.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		F
Sunday	F	D

Clues-There are as many persons buy before G as after B. E buys just before B.

Inference-Now only C remains who buys on Monday. So, the final arrangement is-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

G buys a day after A

S52. Ans.(b)

Sol. Final arrangement-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

Clues-At most one person buy before A.

Inference-Here we have 2 possible cases i.e., case 1 and case 2.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Clues-There are as many persons buy before A as after F. F buys just before D.

Inference-Case 1 is ruled out now.

Day	Case 1	Case 2
	Person	Person
Monday	A	
Tuesday		A
Wednesday		
Thursday		
Friday		
Saturday		F
Sunday	F	D

Clues-There are as many persons buy before G as after B. E buys just before B.

Inference-Now only C remains who buys on Monday. So, the final arrangement is-

Day	Person
Monday	C
Tuesday	A
Wednesday	G
Thursday	E
Friday	B
Saturday	F
Sunday	D

Only F remains unchanged

S53. Ans.(e)

S54. Ans.(a)

Sol. D5, B1, L6, T8

S55. Ans.(c)

S56. Ans.(c)

S57. Ans.(b)

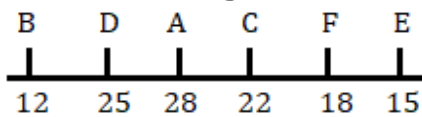
Sol. $Q > P > T > R > S > U > V$

S58. Ans.(a)

Sol. $Q > P > T > R > S > U > V$

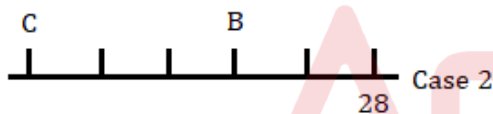
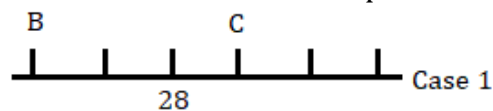
S59. Ans.(b)

Sol. Final arrangement-



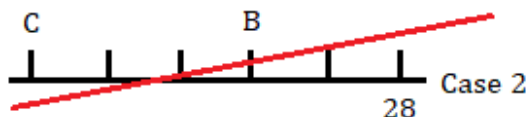
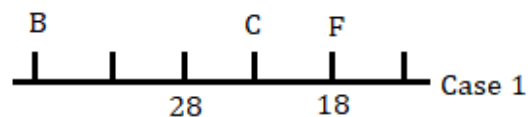
Clues-B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C.

Inference-Here we have 2 possible cases.



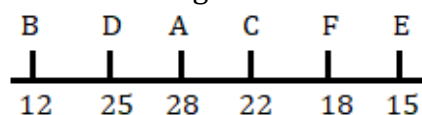
Clues-F sits just right of C and 10 years younger to the one who sits 2nd to the left of F.

Inference-Case 2 is ruled out now.



Clues-A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who 12 years and 22 years old who sits 2nd to the right of D.

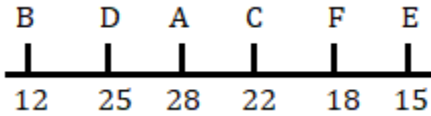
Inference-Now only E and the one who is 15 years old left so we get fixed position for both of them and the final arrangement is-



B is sitting at the extreme left end of the row

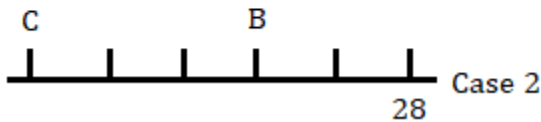
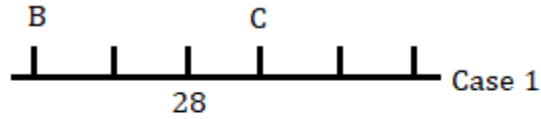
S60. Ans.(c)

Sol. Final arrangement-



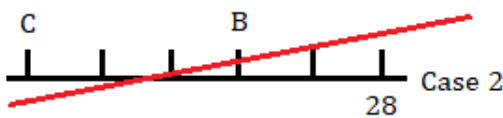
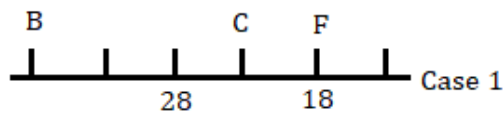
Clues-B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C.

Inference-Here we have 2 possible cases.



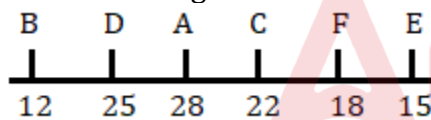
Clues-F sits just right of C and 10 years younger to the one who sits 2nd to the left of F.

Inference-Case 2 is ruled out now.



Clues-A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who 12 years and 22 years old who sits 2nd to the right of D.

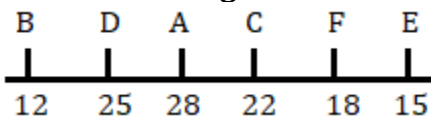
Inference-Now only E and the one who is 15 years old left so we get fixed position for both of them and the final arrangement is-



The one who is 18 years old is sitting immediately to the right of the person who is 22 years old

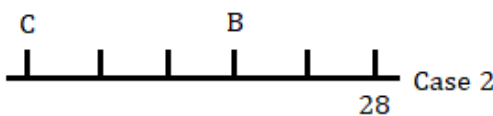
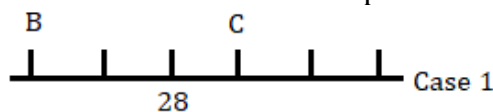
S61. Ans.(d)

Sol. Final arrangement-



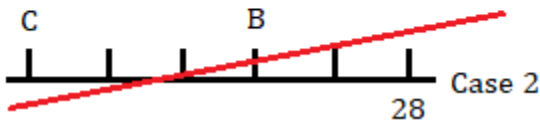
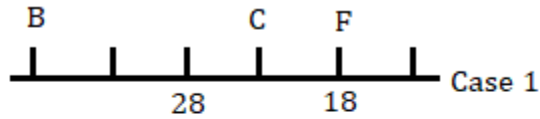
Clues-B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C.

Inference-Here we have 2 possible cases.



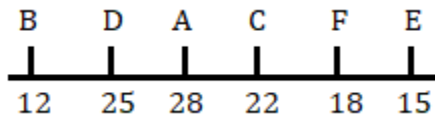
Clues-F sits just right of C and 10 years younger to the one who sits 2nd to the left of F.

Inference-Case 2 is ruled out now.



Clues-A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who 12 years and 22 years old who sits 2nd to the right of D.

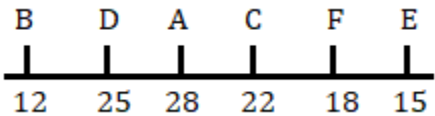
Inference-Now only E and the one who is 15 years old left so we get fixed position for both of them and the final arrangement is-



All of them sits in the middle of the row except E

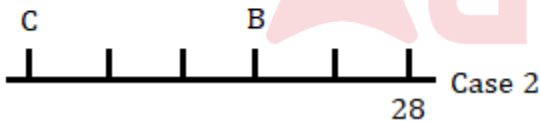
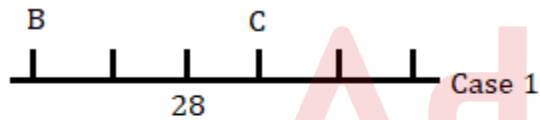
S62. Ans.(a)

Sol. Final arrangement-



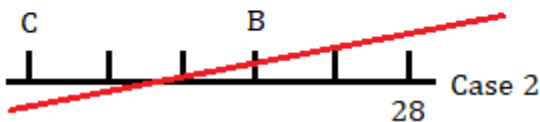
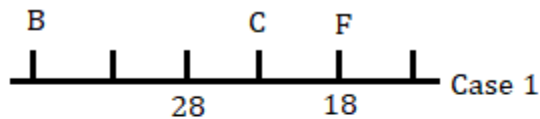
Clues-B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C.

Inference-Here we have 2 possible cases.



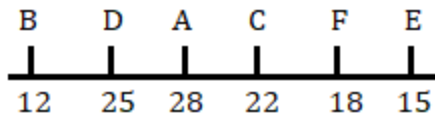
Clues-F sits just right of C and 10 years younger to the one who sits 2nd to the left of F.

Inference-Case 2 is ruled out now.



Clues-A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who 12 years and 22 years old who sits 2nd to the right of D.

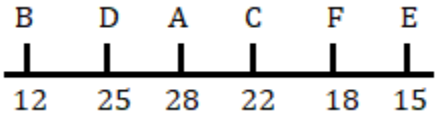
Inference-Now only E and the one who is 15 years old left so we get fixed position for both of them and the final arrangement is-



A is the oldest

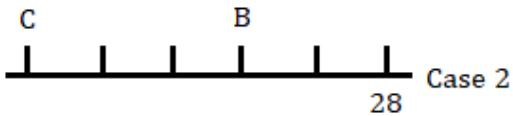
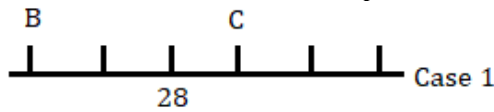
S63. Ans.(c)

Sol. Final arrangement-



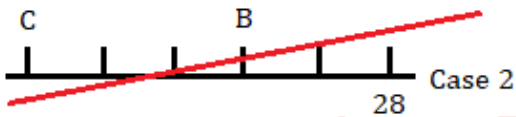
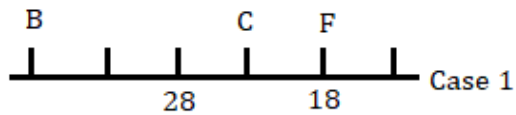
Clues-B sits 2nd to the left of the one who is oldest and one of them sits at extreme end. Two persons sit between B and C.

Inference-Here we have 2 possible cases.



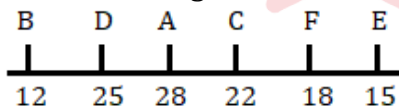
Clues-F sits just right of C and 10 years younger to the one who sits 2nd to the left of F.

Inference-Case 2 is ruled out now.



Clues-A sits just right of the one who is 25 years old who does not sit at any extreme end. Two persons sit between the ones who 12 years and 22 years old who sits 2nd to the right of D.

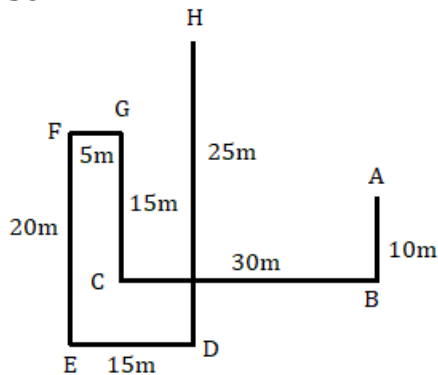
Inference-Now only E and the one who is 15 years old left so we get fixed position for both of them and the final arrangement is-



All the given statements are true

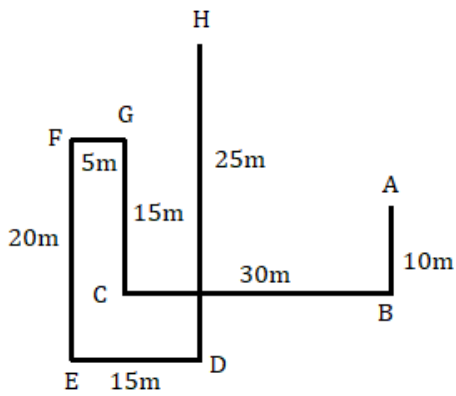
S64. Ans.(d)

Sol.



S65. Ans.(e)

Sol.



S66. Ans.(a)

Sol.

$$\frac{45}{15} \times 3 + ?^2 = 13$$

$$?^2 = 13 - 9$$

$$?^2 = 4$$

$$? = 2$$

S67. Ans.(c)

Sol. $433 + 346 + ? = 873 - 46$

$$? = 827 - 779$$

$$? = 48$$

S68. Ans.(d)

Sol.

$$\frac{344}{?} \times 49 = 400 + 200 + 2$$

$$? = 344 \times \frac{49}{602}$$

$$? = 28$$

S69. Ans.(e)

Sol.

$$\frac{5}{25} \times 125 + 77 = ?$$

$$? = 25 + 77$$

$$? = 102$$

S70. Ans.(b)

Sol.

$$\frac{55}{100} \times 240 + \frac{65}{100} \times 120 = ?$$

$$132 + 78 = ?$$

$$210 = ?$$

S71. Ans.(a)**Sol.**Let the marked price of the article be $15x$

$$\text{Cost price} = \frac{1}{3} \times 15x = 5x$$

$$\text{Selling price} = 5x \times \frac{7}{5} = 7x$$

$$\text{ATQ, } 15x - 7x = 640$$

$$8x = 640$$

$$x = 80$$

Now,

$$\text{Marked price} = 15 \times 80 = 1200$$

$$\text{Selling price} = 1200 \times \frac{2}{3} = \text{Rs. } 800$$

S72. Ans.(d)**Sol.**Let $x = 8a$

$$\text{ATQ, } \left(64 \times \frac{5}{8} - 8a \times \frac{5}{8}\right) = \left(64 \times \frac{3}{8} - 8a \times \frac{3}{8} + 10\right)$$

$$40 - 5a = 24 - 3a + 10$$

$$5a - 3a = 40 - 24 - 10$$

$$2a = 6$$

$$a = 3$$

Now,

$$x = 8a = 24$$

S73. Ans.(c)**Sol.** Let the amount invested be Rs. P

As we know the formula for the difference between the compound and simple interest for 3 years,

$$\text{Difference} = 3 \times P \left(\frac{R}{100}\right)^2 + P \left(\frac{R}{100}\right)^3, \text{ where } R \text{ is the rate of interest}$$

$$\text{ATQ, } 31 = 3 \times P \times \frac{1}{100} + P \times \frac{1}{1000}$$

$$31 = \frac{30P + P}{1000}$$

$$P = 1000$$

S74. Ans.(b)**Sol. For company A,** let the Q type umbrella manufactured by A be $2x$ Number of S type umbrella manufactured by A = x Number of R type umbrella manufactured by A = $\frac{x}{3}$ **For company B,** let number of S type umbrella manufactured by B be $4y$ Number of Q type umbrella manufactured by B = $\frac{5}{4} \times 4y = 5y$ Number of R type umbrella manufactured by B = $\frac{40}{100} \times 5y = 2y$ **For company C,** number of R type umbrella manufactured by C = $\frac{3}{5} \times 5y = 3y$ Number of Q type umbrella manufactured by C = x Number of S type umbrella manufactured by C = $x - 3$

ATQ, $x + 3y + x - 3 = 57$

$2x + 3y = 60$(1)

Also,

$x - 3 + 4y + x = 67$

$2x + 4y = 70$(2)

Solving (1) and (2)

$y = 10$

$x = 15$

Type of umbrella	A	B	C
Q	30	50	15
R	5	20	30
S	15	40	12

Required ratio = $\frac{30}{40} = 3:4$

S75. Ans.(d)

Sol. For company A, let the Q type umbrella manufactured by A be $2x$

Number of S type umbrella manufactured by A = x

Number of R type umbrella manufactured by A = $\frac{x}{3}$

For company B, let number of S type umbrella manufactured by B be $4y$

Number of Q type umbrella manufactured by B = $\frac{5}{4} \times 4y = 5y$

Number of R type umbrella manufactured by B = $\frac{40}{100} \times 5y = 2y$

For company C, number of R type umbrella manufactured by C = $\frac{3}{5} \times 5y = 3y$

Number of Q type umbrella manufactured by C = x

Number of S type umbrella manufactured by C = $x - 3$

ATQ, $x + 3y + x - 3 = 57$

$2x + 3y = 60$(1)

Also,

$x - 3 + 4y + x = 67$

$2x + 4y = 70$(2)

Solving (1) and (2)

$y = 10$

$x = 15$

Type of umbrella	A	B	C
Q	30	50	15
R	5	20	30
S	15	40	12

Required average = $\frac{50+40}{2} = 45$

S76. Ans.(b)

Sol. For company A, let the Q type umbrella manufactured by A be $2x$

Number of S type umbrella manufactured by A = x

Number of R type umbrella manufactured by A = $\frac{x}{3}$

For company B, let number of S type umbrella manufactured by B be $4y$

Number of Q type umbrella manufactured by B = $\frac{5}{4} \times 4y = 5y$

Number of R type umbrella manufactured by B = $\frac{40}{100} \times 5y = 2y$

For company C, number of R type umbrella manufactured by C = $\frac{3}{5} \times 5y = 3y$

Number of Q type umbrella manufactured by C = x

Number of S type umbrella manufactured by C = x - 3

ATQ, $x + 3y + x - 3 = 57$

$2x + 3y = 60$(1)

Also,

$x - 3 + 4y + x = 67$

$2x + 4y = 70$(2)

Solving (1) and (2)

$y = 10$

$x = 15$

Type of umbrella	A	B	C
Q	30	50	15
R	5	20	30
S	15	40	12

From the table B manufactured maximum number of Q type umbrella

S77. Ans.(a)

Sol. For company A, let the Q type umbrella manufactured by A be 2x

Number of S type umbrella manufactured by A = x

Number of R type umbrella manufactured by A = $\frac{x}{3}$

For company B, let number of S type umbrella manufactured by B be 4y

Number of Q type umbrella manufactured by B = $\frac{5}{4} \times 4y = 5y$

Number of R type umbrella manufactured by B = $\frac{40}{100} \times 5y = 2y$

For company C, number of R type umbrella manufactured by C = $\frac{3}{5} \times 5y = 3y$

Number of Q type umbrella manufactured by C = x

Number of S type umbrella manufactured by C = x - 3

ATQ, $x + 3y + x - 3 = 57$

$2x + 3y = 60$(1)

Also,

$x - 3 + 4y + x = 67$

$2x + 4y = 70$(2)

Solving (1) and (2)

$y = 10$

$x = 15$

Type of umbrella	A	B	C
Q	30	50	15
R	5	20	30
S	15	40	12

Total number of non-defective umbrella by A and B = $\frac{60}{100} \times 50 + (110 - (10 + \frac{40}{100} \times 50))$

= 30 + 80 = 110

S78. Ans.(c)**Sol. For company A**, let the Q type umbrella manufactured by A be $2x$ Number of S type umbrella manufactured by A = x Number of R type umbrella manufactured by A = $\frac{x}{3}$ **For company B**, let number of S type umbrella manufactured by B be $4y$ Number of Q type umbrella manufactured by B = $\frac{5}{4} \times 4y = 5y$ Number of R type umbrella manufactured by B = $\frac{40}{100} \times 5y = 2y$ **For company C**, number of R type umbrella manufactured by C = $\frac{3}{5} \times 5y = 3y$ Number of Q type umbrella manufactured by C = x Number of S type umbrella manufactured by C = $x - 3$ ATQ, $x + 3y + x - 3 = 57$ $2x + 3y = 60$(1)

Also,

 $x - 3 + 4y + x = 67$ $2x + 4y = 70$(2)

Solving (1) and (2)

 $y = 10$ $x = 15$

Type of umbrella	A	B	C
Q	30	50	15
R	5	20	30
S	15	40	12

Total number of umbrellas manufactured by D = $\frac{6}{5} \times 110 = 132$ Number of S type umbrella manufactured by D = $\frac{1}{4} \times 132 = 33$ Required difference = $40 - 33 = 7$ **S79. Ans.(c)****Sol.** Pattern of series -

$88 + (2^2 + 1) = 93$

$93 + (3^2 + 1) = 103$

$103 + (4^2 + 1) = 120$

$120 + (5^2 + 1) = 146$

$146 + (6^2 + 1) = 183$

S80. Ans.(e)**Sol.** Pattern of series -

$64 \times 0.5 = 32$

$32 \times 1 = 32$

$32 \times 2 = 64$

$64 \times 4 = 256$

$256 \times 8 = 2048$

S81. Ans.(e)**Sol.** Pattern of series -

$65 \times 1 - 1 = 64$

$64 \times 2 - 1 = 127$

$127 \times 3 - 1 = \mathbf{380}$

$380 \times 4 - 1 = 1519$

$1519 \times 5 - 1 = 7594$

S82. Ans.(a)**Sol.** Pattern of series -

$$\begin{array}{cccccccc}
 12, & 16, & 21, & 28, & 38, & & 52 \\
 & +4 & & +7 & & +10 & \\
 & & +5 & & +3 & & \\
 & & +1 & +2 & & +4 & +14
 \end{array}$$

S83. Ans.(e)**Sol.** Pattern of series -

$450 + 15 = 465$

$465 + 30 = 495$

$495 + 45 = \mathbf{540}$

$540 + 60 = 600$

$600 + 75 = 675$

S84. Ans.(b)**Sol.**

Societies	Total people	Males	Females
A	500	$\frac{1}{2} \times 500 = 250$	$500 - 250 = 250$
B	250	$\frac{3}{5} \times 250 = 150$	$250 - 150 = 100$
C	400	$\frac{5}{8} \times 400 = 250$	$400 - 250 = 150$
D	300	$\frac{2}{3} \times 300 = 200$	$300 - 200 = 100$
E	200	$\frac{3}{10} \times 200 = 60$	$200 - 60 = 140$

$$\text{Required percentage} = \frac{250}{500} \times 100\% = 50\%$$

S85. Ans.(d)**Sol.**

Societies	Total people	Males	Females
A	500	$\frac{1}{2} \times 500 = 250$	$500 - 250 = 250$
B	250	$\frac{3}{5} \times 250 = 150$	$250 - 150 = 100$
C	400	$\frac{5}{8} \times 400 = 250$	$400 - 250 = 150$
D	300	$\frac{2}{3} \times 300 = 200$	$300 - 200 = 100$
E	200	$\frac{3}{10} \times 200 = 60$	$200 - 60 = 140$

$$\text{Average number of males in all the societies} = \frac{250+150+250+200+60}{5} = \frac{910}{5} = 182$$

$$\text{Average number of females in all the societies} = \frac{250+100+150+100+140}{5} = \frac{740}{5} = 148$$

$$\text{Required difference} = 182 - 148 = 34$$

S86. Ans.(e)

Sol.

Societies	Total people	Males	Females
A	500	$\frac{1}{2} \times 500 = 250$	$500 - 250 = 250$
B	250	$\frac{3}{5} \times 250 = 150$	$250 - 150 = 100$
C	400	$\frac{5}{8} \times 400 = 250$	$400 - 250 = 150$
D	300	$\frac{2}{3} \times 300 = 200$	$300 - 200 = 100$
E	200	$\frac{3}{10} \times 200 = 60$	$200 - 60 = 140$

$$\text{Required ratio} = \frac{400}{240} = 5:3$$

S87. Ans.(a)

Sol.

Societies	Total people	Males	Females
A	500	$\frac{1}{2} \times 500 = 250$	$500 - 250 = 250$
B	250	$\frac{3}{5} \times 250 = 150$	$250 - 150 = 100$
C	400	$\frac{5}{8} \times 400 = 250$	$400 - 250 = 150$
D	300	$\frac{2}{3} \times 300 = 200$	$300 - 200 = 100$
E	200	$\frac{3}{10} \times 200 = 60$	$200 - 60 = 140$

$$\text{Required revenue} = 50 \times 250 + 100 \times 150 = 12500 + 15000 = \text{Rs } 27500$$

S88. Ans.(d)

Sol.

Societies	Total people	Males	Females
A	500	$\frac{1}{2} \times 500 = 250$	$500 - 250 = 250$
B	250	$\frac{3}{5} \times 250 = 150$	$250 - 150 = 100$
C	400	$\frac{5}{8} \times 400 = 250$	$400 - 250 = 150$
D	300	$\frac{2}{3} \times 300 = 200$	$300 - 200 = 100$
E	200	$\frac{3}{10} \times 200 = 60$	$200 - 60 = 140$

Number of people who took part in competition from F = $\frac{6}{5} \times 250 = 300$

Let number of females who took part in competition from F be $3x$

Number of males who took part in competition from F = $\frac{2}{3} \times 3x = 2x$

ATQ, $5x = 300$

$x = 60$

Required percentage = $\frac{180-100}{100} \times 100 = 80\%$

S89. Ans.(c)

Sol.

Profit sharing ratio of A and B = $\frac{8000 \times 18}{(X+8000) \times 9} = \frac{16000}{X+8000}$

ATQ, $\frac{16000}{X+8000} = \frac{16000}{20000}$

$X + 8000 = 20000$

$X = 12000$

S90. Ans.(a)

Sol.

Total work = LCM of (10, 15 and 12) = 60 units

Efficiency of A and B = $\frac{60}{10} = 6$ units/day

Efficiency of B and C = $\frac{60}{15} = 4$ units/day

Efficiency of C and A = $\frac{60}{12} = 5$ units/day

Efficiency of A, B and C = $\frac{15}{2} = 7.5$ units/day

Efficiency of A = $7.5 - 4 = 3.5$ units/day

Efficiency of B = $7.5 - 5 = 2.5$ units/day

Efficiency of C = $7.5 - 6 = 1.5$ units/day

In 3 days,

Total work done by A, B and C = 7.5 units

To get total work complete in combination of 3 days

Multiply both side by 8

So, in 24-day total work which of 60 units will be completed

S91. Ans.(d)

Sol.

$\frac{200}{100} \times ? + 143 - 43 = 160$

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

$? = 30$

S92. Ans.(b)

Sol.

$2596 + 5648 + 33 + 3 = ? \times 9$

$? = \frac{8280}{9} = 920$

S93. Ans.(d)

Sol.

$? = 21 + \frac{3+8+3-1}{12}$

$? = 21 + \frac{13}{12}$

$? = 22\frac{1}{12}$

S94. Ans.(b)

Sol.

$$350 = 170 + \frac{1}{8} \times ?$$
$$? = 180 \times 8 = 1440$$

S95. Ans.(d)

Sol.

$$\text{Total correct marks} = 57 \times 5 - 40 - 90 + 80 + 45 = 280$$

$$\text{Corrected average} = \frac{280}{5} = 56$$

S96. Ans.(a)

Sol.

Sections	Total students	Boys	Girls
A	400	225	400-225=175
B	325	200	325-200 = 125
C	250	175	250-175=75
D	525	300	525-300 = 225
E	450	350	450-350=100

$$\text{Required ratio} = \frac{175+125}{225} = \frac{300}{225}$$

$$= 12:9 = 4:3$$

S97. Ans.(d)

Sol.

Sections	Total students	Boys	Girls
A	400	225	400-225=175
B	325	200	325-200 = 125
C	250	175	250-175=75
D	525	300	525-300 = 225
E	450	350	450-350=100

$$\text{Required percentage} = \frac{350-300}{350} \times 100 = 14\frac{2}{7}\%$$

S98. Ans.(d)

Sol.

Sections	Total students	Boys	Girls
A	400	225	400-225=175
B	325	200	325-200 = 125
C	250	175	250-175=75
D	525	300	525-300 = 225
E	450	350	450-350=100

$$\text{Total students in class 6}^{\text{th}} = \frac{100}{60} \times (400 + 325 + 250 + 525 + 450) = 3250$$

$$\text{Students went to the trip} = (400 + 325 + 250 + 525 + 450) = 1950$$

$$\text{Students did not go to the trip} = 3250 - 1950 = 1300$$

$$\text{Required difference} = 1950 - 1300 = 650$$

S99. Ans.(b)

Sol.

Sections	Total students	Boys	Girls
A	400	225	400-225=175
B	325	200	325-200 = 125
C	250	175	250-175=75
D	525	300	525-300 = 225
E	450	350	450-350=100

Required difference = $200 \times (525 - 400) = 200 \times 125 = \text{Rs } 25000$

S100. Ans.(c)

Sol.

Sections	Total students	Boys	Girls
A	400	225	400-225=175
B	325	200	325-200 = 125
C	250	175	250-175=75
D	525	300	525-300 = 225
E	450	350	450-350=100

Number of buses = $\frac{400}{16} = 25$ buses

