

SBI PO Prelims Previous Year Paper 2022 Mock 5

Directions (1-9) : Read the given passage carefully and answer the following questions. Certain parts have been highlighted to help answer the questions.

Last year, the industry ministry identified several potentially rich sectors. These industries **acquire** the potential to spread their wings and impact the economy of our country positively. 12 champion sectors were identified, and the furniture industry is one such strong sector that can firmly stand by our country's 'Make in India' agendas. Such e-commerce furniture brands have changed the game for the furniture industry. It is so true that talent plus technology is the best way to innovate something in today's modern era. The online furniture brands have understood it well and it has been a boon to local artisans' and laborer's life.

Technology can sharpen various aspects of the furniture industry. From manufacturing to delivery, technology can smooth out the whole process and be more understandable in terms of growth. The most **crucial** companies that offer positive economic growth to the furniture industry are those with a stable online presence. This has promoted the indulgence of modern technology in the furniture industry, and the importance of Make in India is significantly attracting Indians enough to invest in reliable Indian furniture brands for which online presence is a must. Therefore, any furniture company planning to widen their business will surely **promote** technology usage, which will result in an increase in skilled labor.

The whole concept of launching Make in India was to improve the living quality of rural regions by promoting employment, and the furniture industry of India still consists of companies that promote hand-made furniture. The major reason that has pulled back India from blooming its furniture industry to the maximum is its small-scale workers. Hand-made furniture is surely the best kind but if technology gets involved in the uniqueness of hand-made, faster productivity will take place.

Q1. Potentially rich sectors selected by the industry ministry have.....

- (a) been provided with the highest budget by the government
- (b) the capability to grow further
- (c) significant positive impressions on the Indian economy
- (d) Only b) and c)
- (e) Only a) and c)

Q2. Which are the pivotal companies in the furniture industry for the economic growth?

- (a) Companies that mainly deal with the high-end furniture
- (b) Companies that operate their businesses on online platforms
- (c) Those which have an abundance of capital and manpower
- (d) Firms that are associated with the industry ministry
- (e) None of these

Q3. Which of the fundamentals can boost labors' and artisans' growth?

- (a) Research and arrangement of investment as the primary objective
- (b) Business shouldn't rely on technology to get its product's marketing
- (c) Talent plus technology is the best ground for innovation in contemporary world.
- (d) customer centric product for a positive customer experience.
- (e) None of these

Q4. As per the passage, what was the main reason to launch Make in India?

- (a) To make India a world leader in startup and skill development
- (b) Make India self-reliant by reducing its dependence on various import
- (c) The betterment of living quality in rural areas by promoting employment
- (d) Both a) and b)
- (e) All of these

Q5. Which of the following will be the impact of the usage of technology in hand made furniture industry?

- (a) more creativity in furniture
- (b) better quality of product
- (c) production cost minimization
- (d) enhancement of productivity
- (e) None of these

Q6. Which of the following statements is/are incorrect as per the passage?

- (a) Technology facilitates the manufacturing and delivery processes.
- (b) Small-scale workers have demotivated the Indian furniture market from flourishing
- (c) Make in India is encouraging Indians to invest in reliable Indian furniture brands.
- (d) Usage of technology in the furniture industry will lead to an increase in skilled labor.
- (e) None of these

Q7. Which of the following word is synonym of 'Acquire'?

- (a) curb
- (b) defy
- (c) attain
- (d) entice
- (e) None of these

Q8. Which of the following word is an antonym of 'Crucial'?

- (a) trivial
- (b) conferred
- (c) augured
- (d) graved
- (e) None of these

Q9. Which of the following word is synonym of 'promote'?

- (a) grow
- (b) inhibit
- (c) forbid
- (d) extirpate
- (e) None of these

Q10. In each of the questions given below, four sentences have been given. Out of four sentences, one sentence has an error. Find out which of the following sentences has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.

- (a) The world's population is expected to hit a peak and then drop by the end of the century.
- (b) The recent National Games showed how a mega event could been hosted with smart planning.
- (c) The forex market is regulated by the RBI with impregnable exchange control regulations.
- (d) With the explosion of television channels, the world of the actors became more accessible to the common public.
- (e) All are correct

Q11. In each of the questions given below, four sentences have been given. Out of four sentences, one sentence has an error. Find out which of the following sentences has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.

- (a) Satellite data transfer provides poor connectivity and limited bandwidth.
- (b) When you discovers something, you find something that already existed.
- (c) Brazil promotes a vast array of actions for the advancement of human rights.
- (d) Snow forms when tiny ice crystals in clouds stick together to become snowflakes.
- (e) All are correct

Q12. In each of the questions given below, four sentences have been given. Out of four sentences, one sentence has an error. Find out which of the following sentences has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.

- (a) A heat wave is an extreme weather, and poses danger to human health.
- (b) This is going to be an era of entrepreneurship for building Indian economy.
- (c) Adobe has been accelerating document productivity and push the paperless agenda.
- (d) Human activities release large amounts of carbon dioxide due to fuel burning.
- (e) All are correct

Q13. In each of the questions given below, four sentences have been given. Out of four sentences, one sentence has an error. Find out which of the following sentences has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.

- (a) Earthquakes manifest themselves by shaking and displacing or disrupting the ground.
- (b) NGOs are define as nonprofit entities that are independent of governmental influence.
- (c) Japan is a highly developed country, and a great power in global politics.
- (d) I Bear a grudge against him for not taking me into confidence.
- (e) All are correct

Directions (14-18) : In each of the questions given below a sentence is given with three words in bold. Choose the option which gives the correct sequence of these words to make the sentence grammatically and contextually correct.

Q14. Nearly four years have **withdrawal (A)** since China's **decided (B)** from the project before Nepal **passed (C)** to grant the project to India.

- (a) ACB
- (b) BAC
- (c) CAB
- (d) BCA
- (e) No rearrangement required

Q15. India ranks **countries (A)** high in the list of **quite (B)** that make regular **requests (C)** for removal of online content.

- (a) ACB
- (b) BAC
- (c) CBA
- (d) BCA
- (e) No rearrangement required

Q16. The Indian Railways' **coaches (A)** to **introduce (B)** AC III tier economy class **experiment (C)** has started to pay off.

- (a) ACB
- (b) BAC
- (c) CBA
- (d) BCA
- (e) No rearrangement required

Q17. During the peak of the **bagging (A)** season, we keep **placement (B)** news about engineering graduates **seeing (C)** job offers worth lakhs of rupees.

- (a) ACB
- (b) BAC
- (c) CBA
- (d) BCA
- (e) No rearrangement required

Q18. Down a narrow street **attention (A)** the seawall, another fisherman draws **hugging (B)** to his house, whose roof has been tightly **protect (C)** in blue tarpaulin to **wrapped (D)** it from the waves.

- (a) A-B and C-D
- (b) Only A and B
- (c) Only C and D
- (d) A-C and B-D
- (e) No correction required

Directions (19-22) : In each question, two words are omitted and replaced with blanks. Choose the correct pair of words from the given options that can fit into the blanks in respective order without altering the intended meaning.

Q19. We meet at very short _____, not having had time to _____ any new value for each other.

- (a) contrast, renunciate
- (b) delay, generate
- (c) intervals, acquire
- (d) motive, renovate
- (e) breach, regenerate

Q20. Lord Krishna's legitimate _____ was Rukmini, daughter of the king of Berar; but Radha is always _____ with him in his temples.

- (a) betroth, taken
- (b) consort, associated
- (c) kin, referred
- (d) believer, preferred
- (e) heathen, accompanied

Q21. Through her _____ opinion articles, the backbiting editor is known for her _____ of people she doesn't like.

- (a) abasement, vengeance
- (b) sumptuous, deafening
- (c) vengeance, submissive
- (d) tumult, suggestion
- (e) malicious, vilification

Q22. _____ renovations to the restaurant, we experienced little inconvenience and no _____ in service.

- (a) Apart from, fabrication
- (b) Though, saturation
- (c) In spite, contraction
- (d) Despite, diminution
- (e) Although, dissipation

Directions (23-27) : The five sentences given below are parts of a narrative, but not necessarily coherent in the current order. Rearrange the sentences to form the correct narrative and answer the question that follow.

- (A) Also, as the black hole is a dormant one, its discovery by astronomers is an astounding achievement.
- (B) Astronomers think there are about 100 million black holes in the Milky Way, but almost all of them are invisible.
- (C) The closest black hole yet found is just 1,560 light-years from Earth, a new study reports.
- (D) Even though the black hole might be nearest black hole to Earth ever discovered, it is probably not the closest that exists.
- (E) The black hole, dubbed Gaia BH1, is about 10 times the mass of the sun and orbits a sunlike star.

Q23. Which of the following will be the **FOURTH** sentence after rearrangement?

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

Q24. Which of the following will be the **SECOND** sentence after rearrangement?

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

Q25. Which of the following will be the **FIFTH** sentence after rearrangement?

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

Q26. Which of the following will be the **THIRD** sentence after rearrangement?

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

Q27. What will be the correct order of the sentences after meaningful rearrangement?

- (a) ACDBE
- (b) CEADB
- (c) DABEC

- (d) EBCAC
- (e) BEACD

Directions (28-30) : In the following question, sentences are given with a part in bold. The given phrase in the bold may or may not contain an error. The options following can replace the incorrect phrase. The correct phrase that is to be replaced will be your answer. If the sentences are correct then select 'No improvement required' as your answer.

Q28. Tourism has been one of the **sectors severely effected** by COVID-19.

- (a) sectors severe effected
- (b) sectors severely affected
- (c) sector severely affected
- (d) sector severely effected
- (e) No improvement required

Q29. New Delhi **continue to affirm its** commitment to diplomacy and the need for international cooperation.

- (a) continues to affirm its
- (b) continues to affirms its
- (c) continue to affirm their
- (d) continue to affirm it's
- (e) No improvement required

Q30. Global economic growth is slowing **more then was forecast** a few months ago.

- (a) more then were forecast
- (b) more than was forecasts
- (c) more than was forecast
- (d) more than have been forecast
- (e) No improvement required

Q31. Six years ago, average age of 8 family members was 27 years. Present average of 3 eldest members is 65 years and another 3 member's average age is 20 years. Out of remaining two one is 3 years elder. Find age of elder member out of remaining two?

- (a) 6 years
- (b) 5 years
- (c) 4 years
- (d) 7 years
- (e) 8 years

Q32. A and B invested Rs 2000 and Rs $(2000 + x)$ respectively. B withdraw from the business after eight months. If at the end of the year profit obtained by B is 20% less than the profit obtained by A, then find the value of x

- (a) Rs 500
- (b) Rs 400
- (c) Rs 450
- (d) Rs 600
- (e) Rs 200

Q33. Mixture A and B contains petrol & kerosene in the ratio of 5 : 4 and 2 : 1 respectively. 20% of mixture from A and 50% of mixture from B is mixed to form another mixture C. If quantity of petrol in mixture C is 90 liters and ratio of petrol to kerosene in mixture C is 30 : 19, then find initial quantity of mixture A.

- (a) 100 liters
- (b) 160 liters
- (c) 150 liters
- (d) 200 liters
- (e) 360 liters

Q34. A solid spherical ball of radius 21 cm is melted to form 'n' solid hemispherical bowl. If radius of each hemispherical bowl is half of radius of spherical ball, then find sum of total surface area of all hemispherical bowls.

- (a) 15846 cm^2
- (b) 16632 cm^2
- (c) 16028 cm^2
- (d) 16272 cm^2
- (e) 16748 cm^2

Q35. Arun invested Rs x in scheme I for three years at the rate of 12% p.a. on simple interest while Kush invested Rs (x + 4000) in scheme II for two years on compound interest at 20% p.a. rate. Find sum invested by Kush if total interest earned by both is Rs. 3360. (in Rs.)

- (a) 6000
- (b) 4500
- (c) 2000
- (d) 3500
- (e) 5200

Directions (36-40) : Study the table given below carefully and answer the questions.

Table given below shows total number of students in four different class and number of students who do not participate. And table also shows percentage of students who participate in dance out of no. of students who participate.

Classes	Total students	Number of students who do not participate	% of students who participate in Dance
III	180	60	60
IV	150	50	45
V	200	55	80
VI	250	130	70

Note- Student participate only in either dancing or singing.

Q36. Number of students who participate in singing from class III is how much more or less than number of students who participate in dancing from class V?

- (a) 68
- (b) 62
- (c) 72
- (d) 84
- (e) 58

Q37. What is the total number of students who participate in either dancing or singing from all class together?

- (a) 442
- (b) 524
- (c) None of these
- (d) 485
- (e) 584

Q38. Number of students who participate in singing from class VI is what percent of total number of students from class V?

- (a) 12%
- (b) 18%
- (c) 24%
- (d) 32%
- (e) None of these

Q39. What is the ratio of number of students who participate from class IV to the number of students who do not participate from class V?

- (a) 20 : 13
- (b) 10 : 7
- (c) None of these
- (d) 5 : 2
- (e) 20 : 11

Q40. What is the average number of students who participate in dancing from class III, IV and VI?

- (a) 63
- (b) 71
- (c) 67
- (d) 76
- (e) 82

Directions (41-46) : What will come in the place of question (?) mark in following number series.

Q41. 12, 48, 24, 96, ?, 192

- (a) 48
- (b) 24
- (c) 64
- (d) 60
- (e) 12

Q42. 756, 774, 738, 792, ?, 810

- (a) 700
- (b) 712
- (c) 724
- (d) 720
- (e) 748

Q43. ?, 3, 6.4, 11.5, 18.3, 26.8

- (a) 2.7
- (b) 2.3
- (c) 2.1
- (d) 1.6
- (e) 1.3

Q44. 4, 262, 460, 606, 708, ?

- (a) 772
- (b) 778
- (c) 774
- (d) 784
- (e) None of these

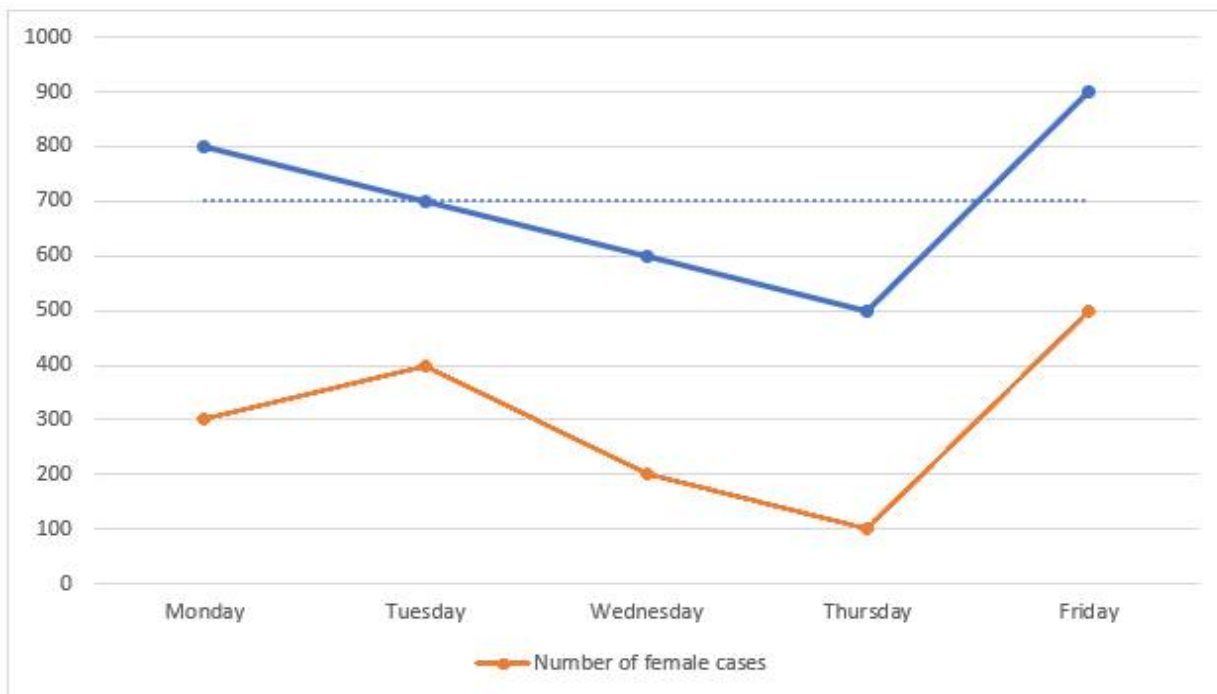
Q45. 120, 208, 286, ?, 412, 460

- (a) 360
- (b) 364
- (c) 354
- (d) 340
- (e) 348

Q46. 131, 143, 157, 175, 201, ?

- (a) 243
- (b) 221
- (c) 287
- (d) 265
- (e) 299

Directions (47-51) : Line graph given below shows the total number of 'COVID-19' cases registered in AIIMS Delhi on five different days and the number of females 'COVID-19' cases out of total registered cases in these five days. Read the data carefully and answer the questions.



Q47. The total number of male COVID-19 cases registered on Friday is what percent more than the total number of male COVID-19 cases registered on Tuesday?

- (a) $30\frac{1}{3}\%$
- (b) $33\frac{1}{3}\%$
- (c) $37\frac{1}{2}\%$
- (d) 35%
- (e) 40%

Q48. Find the ratio of the total number of female COVID-19 cases registered on Wednesday to the total number of male COVID-19 cases registered on Monday respectively?

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

Q49. If 40% of the total number of male COVID-19 cases registered on Thursday is taken by the males having age above 40 years, then find the difference between total male COVID-19 cases registered on Thursday who are below or equal to 40 years and total female COVID-19 cases registered on that day?

- (a) 180
- (b) 160
- (c) 100
- (d) 120
- (e) 140

Q50. Find the average number of male COVID-19 cases registered on Monday, Tuesday and Friday?

- (a) 400
- (b) 300
- (c) 600
- (d) 500
- (e) 200

Q51. The total number of male COVID-19 cases registered on Wednesday is what percent of the total number of male COVID-19 cases registered on Monday?

- (a) 90%
- (b) 85%
- (c) 80%
- (d) 60%
- (e) 50%

Directions (52-54) : Read the following data carefully and answer the questions given below.

Ratio of students in class A to class B is 5:3 respectively and number of boys in class B is 40% of the total students in class B. Girls in class A is $11\frac{1}{9}\%$ more than girls in class B and average number of girls in both classes are 19.

Q52. Find the total boys in both the class together.

- (a) 26
- (b) 52
- (c) 38
- (d) 42
- (e) 64

Q53. Girls in class B is what percent of boys in class A?

- (a) 60%
- (b) 80%
- (c) 40%
- (d) 20%
- (e) 100%

Q54. Find the respective ratio of girls in class A to boys in class B.

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

Directions (55-60) : What approximate value will come in place of question mark (?) in the following questions (You are not expected to calculate the exact value) .

Q55. $59.90\% \text{ of } 1020.11 - 9.88\% \text{ of } 79.91 = ?^3 + 92.01$

- (a) 6
- (b) 2
- (c) 14
- (d) 8
- (e) 10

Q56. $(10.22 \times 9.94) \div 4.98 - ? = 6.97$

- (a) 19
- (b) 5
- (c) 45
- (d) 27
- (e) 13

Q57. $129.92 + 199.89 + 40.01\% \text{ of } 160.21 + 6.12 = ?^2$

- (a) 24
- (b) 8
- (c) 16
- (d) 20
- (e) 12

Q58. $\sqrt{1764.02} + 21.04^2 - ? = \frac{5}{12} \times 167.97$

- (a) 413
- (b) 478
- (c) 394
- (d) 446
- (e) 492

Q59. $\sqrt[3]{729.14} + 11.01^3 + 60.24\% \text{ of } 449.86 = ?$

- (a) 1240
- (b) 1610
- (c) 1460
- (d) 1090
- (e) 820

Q60. $22.11^2 + 199.98 - ? = 29.89\% \text{ of } 400.02$

- (a) 608
- (b) 666
- (c) 720
- (d) 492
- (e) 564

Q61. The discount allowed on an article is Rs.960 more than the profit earned on the article. If the selling price of the article is Rs.1920 and shopkeeper marked the article 100% above its cost price, then find profit% earned on the article.

- (a) 10%
- (b) 20%
- (c) 15%
- (d) 30%
- (e) 25%

Q62. A boat covers 44.8 km in downstream in 1 hour 36 minutes and speed of stream is 40% of speed of boat in still water. Find ratio of time taken by boat to cover 108 km in upstream to time taken by boat to cover 420 km in downstream respectively?

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

Q63. Train P can cross a pole in 32 seconds and it can cross a 1200 meters long platform in 72 seconds. If speed and length of train Q is 72 km/hr. and 1280 meters respectively, then find the time taken by train P to cross train Q, while both running in same direction.

- (a) 224 seconds
- (b) 176 seconds
- (c) 216 seconds
- (d) 196 seconds
- (e) 210 seconds

Q64. Deepak and Shivam together can complete a work in "T" days while the efficiency of Deepak and Shivam is in the ratio of 5:6 respectively. If Deepak alone started the same work and after 11 days Shivam joins Deepak and both together completed the remaining work in 31 days, then find "T"?

- (a) 28
- (b) 32
- (c) 36
- (d) 38
- (e) 24

Q65. The average speed of a car is $\frac{7}{5}$ times of the average speed of a scooter. A truck covers 240 km in 5 hours. If the speed of the scooter is $\frac{3}{2}$ times the speed of truck, then how much distance will the car cover in 2 hours.

- (a) 204.8 km
- (b) 201.6 km
- (c) 118.5 km
- (d) 250.4 km
- (e) 196.2 km

Q66. Find the odd one out.

- (a) BVK
- (b) DLC
- (c) BKE
- (d) IRB
- (e) COE

Directions (67-71) : Study the given information carefully and answer the questions given below.

Six persons from I to N were born on the same date in January in six different years i.e., 1974, 1979, 1982, 1985, 1990 and 1993. Their ages are calculated as per 2022. Each of them belongs to six different states viz. Assam, Goa, Haryana, Gujarat, Delhi and Sikkim. All the above information is not necessarily in the same order.

The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa. The digit sum of the year in which N was born is half of his age. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim. The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J.

Q67. How many persons were born between the one who belongs to Gujarat and L?

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

Q68. Which of the following combination(s) is/are correct?

- (a) L - Delhi
- (b) N - Assam
- (c) K - 40
- (d) J- Haryana
- (e) All are correct

Q69. In which of the following year L was born?

- (a) 1979
- (b) 1993
- (c) 1990
- (d) 1982
- (e) 1985

Q70. Who among the following persons is elder than N?

- (a) M
- (b) J
- (c) I
- (d) The one who belongs to Sikkim
- (e) The one who belongs to Assam

Q71. In which of the following pairs the age gap is more than 8 years?

- (a) M, L
- (b) J, K
- (c) I, N
- (d) M, J
- (e) N, L

Directions (72-74) : Study the following information carefully and answer the questions given below.

Nine persons bought different dresses at different prices. Three persons bought dresses between M and K. T's dress is just costlier than M's dress. J's dress is costlier than T and not cheaper than K. Two persons bought dresses between J and P who doesn't buy the maximum costlier dress. P neither bought just cheaper nor just costlier dress than K. U's dress is just costlier than B and just cheaper than K. R bought a costlier dress than S.

Q72. How many persons dresses are cheaper than P?

- (a) Three
- (b) Four
- (c) Five
- (d) Two
- (e) More than five

Q73. Who among the following bought the third cheapest dress among all?

- (a) U
- (b) B
- (c) S
- (d) K
- (e) None of these

Q74. Which among the following statement(s) is/are not true?

- (a) T's dress price is more than U's dress
- (b) More than three persons bought dresses between B and T
- (c) J bought a cheaper dress than R
- (d) B bought the cheapest dress
- (e) None is true

Directions (75-77) : Study the following information carefully and answer the questions below:

Eight balls of different colours stuck on a snooker board at different directions and at some distance from each other. The black ball is 50 inches to the west of the green ball. The pink ball is 70 inches to the east of the purple ball. The grey ball is 20 inches to the north of the magenta ball which is 30 inches to the west of the yellow ball. The black ball is 40 inches to the south of the purple ball. The green ball is 40 inches to the north of the white ball. The grey ball is 30 inches to the west of the white ball.

Q75. In which direction is the Black ball with respect to the Magenta ball?

- (a) North-east
- (b) South-west
- (c) South
- (d) North-west
- (e) North

Q76. How far and in which direction is the yellow ball with respect to the green ball?

- (a) 60-inch, East
- (b) 40- inch, North
- (c) 60- inch, South
- (d) 30- inch, North
- (e) 50- inch, South

Q77. What is the shortest distance between green and grey-coloured balls?

- (a) 25-inch
- (b) $\sqrt{5}$ -inch
- (c) $\sqrt{25}$ -inch
- (d) 50-inch
- (e) None of these

Directions (78-81) : Study the following information carefully and answer the questions given below.

Seven persons sit in a linear row such that all of them face north direction. Each of them buys different cars i.e., Ford, Tata, Fiat, Skoda, Hyundai, Toyota and Ferrari but not necessarily in the same order.

The one who buys Tata sits two persons away from G. G sits second from one of the extreme ends. The one who buys Ferrari sits second to the right of the one who buys Tata. M neither sit adjacent to G nor sit at the extreme end of the row. Three persons sit between R and M. The person who buys Skoda sits adjacent to M. H sits second to the left of D. One person sits between P and the one who buys Toyota. J doesn't sit adjacent to H. The one who buys Hyundai doesn't sit at the extreme end. The one who buys Ford sits to the left of R.

Q78. Who among the following buys a Fiat car?

- (a) G
- (b) P
- (c) R
- (d) H
- (e) D

Q79. How many persons sit between P and G?

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

Q80. Which among the following combination(s) is/are correct?

- (a) P-Fiat
- (b) R-Skoda
- (c) J-Ferrari
- (d) D-Tata
- (e) None is correct

Q81. Which among the following statement(s) is/are true?

- (a) R sits at the extreme end
- (b) H buys Skoda
- (c) P sits adjacent to H
- (d) More than two persons sit to the right of D
- (e) All are true

Q82. If we form a four-letter meaningful word by using the first, fifth, eighth and ninth letter from the left end of the word "INSTALLMENT", then which of the following will be the first letter of the meaningful word thus formed? If more than one meaningful word is formed mark Y as your answer. If no meaningful word is formed, mark X as your answer.

- (a) X
- (b) Y
- (c) A
- (d) M
- (e) E

Directions (83-87) : In each of the questions below, some statements are given followed by some 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 follows from the given statements, disregarding commonly known facts. Give answer of the question given below:

Q83. Statements:

23% Hockey is Tennis.

All Tennis is golf

Some Cricket is Golf

Conclusion:

I. Some Cricket are not Hockey

II. All Golf being Cricket is a possibility

- (a) Only I follow
- (b) Only II follow
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None follows

Q84. Statements:

Only a few Mug is Glass.

All Jug is Glass

No Plate is Jug

Conclusion:

I. Some Glass are not Plate

II. All Glass being Mug is a possibility

- (a) Only I follow
- (b) Only II follow
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None follows

Q85. Statements:

All Star are Sun.

Some Sun is light

All Light is Planet

Conclusion:

I. Some Star is Light

II. No Light is Star

- (a) Only I follow
- (b) Only II follow
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None follows

Q86. Statements:

All Grey is Magenta

No Pink is grey

All Pink is Green

Conclusion:

I. Some Green are not Magenta

II. Some Grey is Green

- (a) Only I follow
- (b) Only II follow
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None follows

Q87. Statements:

No Yen is Dollar.

Some Rupee are Dollar

All Paisa are Rupee

Conclusion:

I. Some Rupee are not Yen

II. Some Rupee are Yen

- (a) Only I follow
- (b) Only II follow
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None follows

Directions (88-92) : Study the given information carefully and answer the questions given below.

Seven festivals will be celebrated on the 13th, 5th, 23rd, 17th, 29th, 7th and 2nd in six different months viz. January, February, March, April, May and June of a leap year. Two festivals will be celebrated in the same month.

Ram Navami will be celebrated on an even date in the month having 30 days. Holi will be celebrated two months before Ram Navami. Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25. Lohri will be celebrated on the 13th but not in May. Eid and Vaisakhi will not be celebrated on the 7th.

Q88. Which of the following festivals will be celebrated in May?

- (a) Vaisakhi
- (b) Eid
- (c) Holi
- (d) Buddha Purnima
- (e) None of these

Q89. In which of the following month, Buddha Purnima will be celebrated?

- (a) January
- (b) April
- (c) May
- (d) June
- (e) Either April or June

Q90. Which of the following festivals will be celebrated in the same month?

- (a) Eid, Vaisakhi
- (b) Holi, Lohri
- (c) Diwali, Holi
- (d) Buddha Purnima, Ram Navami
- (e) Vaisakhi, Ram Navami

Q91. Which of the following combination is not correct?

- (a) 23 - Vaisakhi
- (b) 13 - January
- (c) 17 - May
- (d) Holi - February
- (e) Ram Navami - June

Q92. Which of the following festivals will be celebrated two months after Diwali?

- (a) Vaisakhi
- (b) Ram Navami
- (c) Eid
- (d) Buddha Purnima
- (e) Either Eid or Vaisakhi

Directions (93-96) : In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.

Q93. Statement:

$$P > S \geq Z, M \leq N < Z, N = W$$

Conclusions:

I. $S > M$

II. $W \leq P$

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

Q94. Statement:

$$6779 > 5862 < 8241 = 5789, 5789 \geq 7145 = 3914$$

Conclusions:

I. $6779 < 5789$

II. $3914 \geq 8241$

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

Q95. Statement:

$B > M > F \leq P < Q, L > M > H$

Conclusions:

I. $B > L$

II. $F < H$

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

Q96. Statement:

$\&@ > * \% = \# \% < @ \$, \# \% > @ ! \leq * ^$

Conclusions:

I. $* \% > @ !$

II. $* ^ < \& @$

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

Directions (97-100) : Study the following information carefully and answer the questions given below.

Eight persons from A to H work in a school. Each of them has a different designation Director, Principal, Vice Principal (VP) , Senior Teacher (ST) , Teacher, Assistant Teacher (AT) , Librarian and Assistant Librarian (AL) but not necessarily in the same order. The designations are given in decreasing order of seniority such that the Director is the seniormost person and the Assistant Librarian is the junior most person.

There are three designations between G and C who is just senior to F. At most two persons are junior to H. G is senior to Senior Teacher but not the senior most. D is junior to B and just senior to A. E is senior to both B and G who is not the principal.

Q97. Who among the following is a Librarian?

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

Q98. How many persons are senior to H?

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

Q99. Which of the following is the designation of B?

- (a) AT
- (b) ST
- (c) Principal
- (d) VP
- (e) None of these

Q100. Who among the following is just junior to H?

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

Solutions

S1. Ans.(d)

Sol. The correct choice is option (d) which can be inferred from the first paragraph which mention, "Last year, the industry ministry identified several potentially rich sectors. These industries acquire the potential to spread their wings and impact the economy of our country positively."

S2. Ans.(b)

Sol. The correct choice is option (b) which can be inferred from the second paragraph which mention, "The most crucial companies that offer positive economic growth to the furniture industry are those with a stable online presence."

S3. Ans.(c)

Sol. The correct choice is option (c) which can be inferred from the first paragraph which mention, "It is so true that talent plus technology is the best way to innovate something in today's modern era. The online furniture brands have understood it well and it has been a boon to local artisans' and laborer's life."

S4. Ans.(c)

Sol. The correct choice is option (c) which can be inferred from the last paragraph which mention, "The whole concept of launching Make in India was to improve the living quality of rural regions by promoting employment, and the furniture industry of India still consists of companies that promote hand-made furniture"

S5. Ans.(d)

Sol. The correct choice is option (d) , which can be inferred from the third paragraph which mentions, "Hand-made furniture is surely the best kind but if technology gets involved in the uniqueness of hand-made, faster productivity will take place."

S6. Ans.(e)

Sol. All the given statements are correct with reference to the paragraph.

For option (a) , refer to the second paragraph which mentions, "Technology can sharpen various aspects of the furniture industry. From manufacturing to delivery, technology can smooth out the whole process and be more understandable in terms of growth."

For option (b) , refer to the third paragraph which mentions, "The major reason that has pulled back India from blooming its furniture industry to the maximum is its small-scale workers."

For option (c) , refer to the second paragraph which mentions, “This has promoted the indulgence of modern technology in the furniture industry, and the importance of Make in India is significantly attracting Indians enough to invest in reliable Indian furniture brands for which online presence is a must.”

For option (d) , refer to the second paragraph which mentions, “Therefore, any furniture company planning to widen their business will surely promote technology usage, which will result in an increase in skilled labor.”

S7. Ans.(c)

Sol. ‘Attain’ is a synonym of ‘acquire’

curb means a check or restraint on something.

defy means openly resist or refuse to obey.

attain means succeed in achieving (something that one has worked for) .

entice means attract or tempt by offering pleasure or advantage.

S8. Ans.(a)

Sol. ‘Trivial’ is an antonym of ‘crucial’.

trivial means of little value or importance.

conferred means grant (a title, degree, benefit, or right) .

augured means (of an event or circumstance) portend a good or bad outcome.

graved means fix (something) indelibly in the mind.

S9. Ans.(a)

Sol. ‘grow’ is a synonym of ‘promote’.

Promote means to actively support, encourage, or advance the progress, development, or popularity of something or someone.

Grow: To grow refers to the process of increasing in size, quantity, or complexity.

Inhibit: To inhibit means to hinder, restrain, or suppress something or someone.

Forbid: To forbid means to prohibit or disallow a specific action, behaviour, or condition.

Extirpate: To extirpate means to completely remove, eradicate, or destroy something,

S10. Ans.(b)

Sol. The erroneous sentence is option (b) . Here ‘been’ should be replaced with ‘be’ because modal verbs (can/could/ may/ might/ will/ would/ shall/ should) is always followed by the base form of the verb.

S11. Ans.(b)

Sol. The error lies in sentence (b) . In the sentence, ‘discovers’ should be in plural form because in the case of pronouns, he, she and it take a singular verb while you, we and they take a plural verb.

S12. Ans.(c)

Sol. The error lies in sentence (c) . In the sentence, ‘push’ should be replaced with ‘pushing’ because of parallelism which refers to the use of identical grammatical structures for related words, phrases, or clauses in a sentence or a paragraph.

S13. Ans.(b)

Sol. The error lies in sentence (b) . In the sentence, ‘define’ should be replaced with ‘defined’ because the sentence is in passive voice and the correct structure of passive voice of simple present tense is ‘am/is/are+ v3’.

S14. Ans.(c)

Sol. The correct rearrangement of the highlighted words is CAB. Therefore the sentences will be, “Nearly four years have passed since China’s withdrawal from the project before Nepal decided to grant the project to India.”

S15. Ans.(b)

Sol. The correct rearrangement of the highlighted words is BAC. Therefore the sentences will be, "India ranks quite high in the list of countries that make regular requests for removal of online content."

S16. Ans.(c)

Sol. The correct rearrangement of the highlighted words is CBA. Therefore the sentences will be, "The Indian Railways' experiment to introduce AC III tier economy class coaches has started to pay off."

S17. Ans.(d)

Sol. The correct rearrangement of the highlighted words is BCA. Therefore the sentences will be, "During the peak of the placement season, we keep seeing news about engineering graduates bagging job offers worth lakhs of rupees."

S18. Ans.(a)

Sol. Here, A-B i.e., 'attention – hugging' and C-D 'protect-wrapped' need to be interchanged to make the sentence grammatically and contextually correct. After interchanges the sentence will be, "Down a narrow street hugging the seawall, another fisherman draws attention to his house, whose roof has been tightly wrapped in blue tarpaulin to protect it from the waves."

S19. Ans.(c)

Sol. The correct combination of words required for this sentence is, 'intervals' and 'acquire'.

Contrast: differ strikingly.

Renunciate: a person who formally rejects or gives up something

Delay: make (someone or something) late or slow.

Generate: produce or create.

Interval: gap

Acquire: gain

Motive: ambition

Renovate: restore (something old, especially a building) to a good state of repair.

Breach: an act of breaking or failing to observe a law, agreement

Regenerate: grow (new tissue) after loss or damage

S20. Ans.(b)

Sol. The correct combination of words required for this sentence is, 'consort' and 'associated'

Betroth: formally engage (someone) to be married.

Consort: a wife, husband, or companion, in particular the spouse of a reigning monarch

Associated: connected with something else

Kin: one's family and relations.

Heathen: a person who does not belong to a widely held religion

Accompanied: go somewhere with (someone) as a companion or escort

S21. Ans.(e)

Sol. The correct combination of words required for this sentence is, 'malicious' and 'vilification'.

Abasement: the action or fact of abasing or being abased; humiliation or degradation

Vengeance: punishment inflicted or retribution exacted for an injury or wrong

Sumptuous: splendid and expensive-looking.

Deafening: so loud as to make it impossible to hear anything else

Submissive: ready to conform to the authority or will of others; meekly obedient or passive.

Tumult: a loud, confused noise, especially one caused by a large mass of people.

Malicious: characterized by malice; intending or intended to do harm.

Vilification: abusively disparaging speech or writing.

S22. Ans.(d)

Sol. The correct combination of words required for this sentence is, 'despite' and 'diminution'

Apart From: except for.

Saturation: the state of being saturated or the action of saturating

Fabrication: the action or process of manufacturing or inventing something.

Though: however (indicating that a factor qualifies or imposes restrictions on what was said previously)

Saturation: the state of being saturated or the action of saturating.

Inspite: in disregard or defiance of; notwithstanding; despite.

Contraction: the process of becoming smaller.

Despite: without being affected by; in spite of

Diminution: a lessening or reduction

Although: in spite of the fact that; even though.

Dissipation: the squandering of money, energy, or resources.

S23. Ans.(d)

Sol. Statement C will be the first after rearrangement, as it gives the best introduction to the main theme of the passage which is somewhat established by the point of discussion in the statements – the discovery of a black hole. Statement E follows next as it gives most proper elaboration to statement C, giving the black hole an identity and establishing its basic characteristics. Statement A also elaborates on the characteristics of the black hole, but also provide a conclusion to the introduction and is the last sentence explicitly establishing facts about Gaia BH1 and is a weak elaboration on statement C but successfully elaborates on statement E. Thus, statement A comes third after rearrangement. Statements D and B express the full implications and a rough sketch of the future scopes, if it is that. Statement D comes fourth in the rearrangement as it best connects the previous part of discussion to the newer one, and statement B follows next and is the last sentence as it concludes statement B and explains the significance of the discovery of the black hole. Thus, the correct order after rearrangement is CEADB.

S24. Ans.(e)

Sol. Statement C will be the first after rearrangement, as it gives the best introduction to the main theme of the passage which is somewhat established by the point of discussion in the statements – the discovery of a black hole. Statement E follows next as it gives most proper elaboration to statement C, giving the black hole an identity and establishing its basic characteristics. Statement A also elaborates on the characteristics of the black hole, but also provide a conclusion to the introduction and is the last sentence explicitly establishing facts about Gaia BH1 and is a weak elaboration on statement C but successfully elaborates on statement E. Thus, statement A comes third after rearrangement. Statements D and B express the full implications and a rough sketch of the future scopes, if it is that. Statement D comes fourth in the rearrangement as it best connects the previous part of discussion to the newer one, and statement B follows next and is the last sentence as it concludes statement B and explains the significance of the discovery of the black hole. Thus, the correct order after rearrangement is CEADB.

S25. Ans.(b)

Sol. Statement C will be the first after rearrangement, as it gives the best introduction to the main theme of the passage which is somewhat established by the point of discussion in the statements – the discovery of a black hole. Statement E follows next as it gives most proper elaboration to statement C, giving the black hole an identity and establishing its basic characteristics. Statement A also elaborates on the characteristics of the black hole, but also provide a conclusion to the introduction and is the last sentence explicitly establishing facts about Gaia BH1 and is a weak elaboration on statement C but successfully elaborates on statement E. Thus, statement A comes third after rearrangement. Statements D and B express the full implications and a rough sketch of the future scopes, if it is that. Statement D comes fourth in the rearrangement as it best connects the previous part of discussion to the newer one, and statement B follows next and is the last sentence as it concludes statement B and explains the significance of the discovery of the black hole. Thus, the correct order after rearrangement is CEADB.

S26. Ans.(a)

Sol. Statement C will be the first after rearrangement, as it gives the best introduction to the main theme of the passage which is somewhat established by the point of discussion in the statements – the discovery of a black hole. Statement E follows next as it gives most proper elaboration to statement C, giving the black hole an identity and establishing its basic characteristics. Statement A also elaborates on the characteristics of the black hole, but also provide a conclusion to the introduction and is the last sentence explicitly establishing facts about Gaia BH1 and is a weak elaboration on statement C but successfully elaborates on statement E. Thus, statement A comes third after rearrangement. Statements D and B express the full implications and a rough sketch of the future scopes, if it is that. Statement D comes fourth in the rearrangement as it best connects the previous part of discussion to the newer one, and statement B follows next and is the last sentence as it concludes statement B and explains the significance of the discovery of the black hole. Thus, the correct order after rearrangement is CEADB.

S27. Ans.(b)

Sol. Statement C will be the first after rearrangement, as it gives the best introduction to the main theme of the passage which is somewhat established by the point of discussion in the statements – the discovery of a black hole. Statement E follows next as it gives most proper elaboration to statement C, giving the black hole an identity and establishing its basic characteristics. Statement A also elaborates on the characteristics of the black hole, but also provide a conclusion to the introduction and is the last sentence explicitly establishing facts about Gaia BH1 and is a weak elaboration on statement C but successfully elaborates on statement E. Thus, statement A comes third after rearrangement. Statements D and B express the full implications and a rough sketch of the future scopes, if it is that. Statement D comes fourth in the rearrangement as it best connects the previous part of discussion to the newer one, and statement B follows next and is the last sentence as it concludes statement B and explains the significance of the discovery of the black hole. Thus, the correct order after rearrangement is CEADB.

S28. Ans.(b)

Sol. The highlighted phrase is incorrect because we need 'affected' (verb) here while 'effect' is a noun. Therefore option (a) and (d) are also incorrect. In option (c) , 'sector' should be in plural form because the phrase 'one of the' is always followed by plural noun. Hence option (b) is correct choice.

S29. Ans.(a)

Sol. The highlighted phrase is incorrect because New Delhi is singular noun so we need singular verb 'continues' here. Therefore option (c) and option (d) is also incorrect. Option (b) is incorrect because 'to' is followed by v1. Hence option (a) is correct choice.

S30. Ans.(c)

Sol. The highlighted phrase is incorrect because we use 'than' form comparison. Therefore option (a) is also incorrect. In option (b) , 'forecasts' is incorrect as the given sentence is in past tense. In option (d) , 'have been' is incorrect as the noun 'growth' is singular here.

S31. Ans.(a)

Sol. Present average age of family = $27+6=33$ years

Let age of elder member out of remaining two members = x years

ATQ

$$x+x-3+3\times 65+3\times 20=33\times 8$$

$$2x=264-60-195+3$$

$$2x=12$$

$$x=6 \text{ years}$$

S32. Ans.(b)

Sol.

According to question

$$\frac{2000 \times 12}{(2000+x)8} = \frac{5}{4}$$

$$50 \times 48 = 2000 + x$$

$$x = \text{Rs } 400$$

S33. Ans.(e)

Sol. Let initial quantity of petrol & kerosene in mixture – A be '5x' & '4x' liters respectively and let initial quantity of petrol & kerosene in mixture – B be '2y' & 'y' liters respectively.

ATQ,

$$\frac{20}{100} \times 5x + \frac{50}{100} \times 2y = 90$$

$$x + y = 90 \quad \dots\dots(i)$$

And,

$$\frac{\frac{20}{100} \times 5x + \frac{50}{100} \times 2y}{\frac{20}{100} \times 4x + \frac{50}{100} \times y} = \frac{30}{19}$$

$$\Rightarrow \frac{x+y}{0.8x+0.5y} = \frac{30}{19} \quad \dots(ii)$$

On solving (i) & (ii), we get:

$$\frac{90}{0.8x+0.5y} = \frac{30}{19}$$

$$\Rightarrow 0.8x + 0.5y = 57 \quad \dots(iii)$$

On solving (i) & (iii), we get:

$$x = 40, y = 50$$

$$\text{Required quantity} = 5x + 4x$$

$$= 9x = 9 \times 40 = 360 \text{ litres}$$

S34. Ans.(b)

Sol. ATQ,

Volume of spherical ball = n × volume of hemispherical bowl

$$\frac{4}{3} \times \frac{22}{7} \times 21 \times 21 \times 21 = n \times \frac{2}{3} \times \frac{22}{7} \times \frac{21}{2} \times \frac{21}{2} \times \frac{21}{2}$$

$$\Rightarrow n = 16$$

$$\text{Required area} = 16 \times 3 \times \frac{22}{7} \times \frac{21}{2} \times \frac{21}{2}$$

$$= 16632 \text{ cm}^2$$

S35. Ans.(a)

Sol.

Interest received by Arun in scheme I,

$$\text{S.I.} = \frac{P \times R \times T}{100} \quad (\text{where, P- principal, R- Rate and T- time})$$

$$\text{S.I.} = \frac{x \times 12 \times 3}{100} = \frac{36x}{100}$$

$$\text{C.I. received by Kush after 2 years} = P \left[\left(1 + \frac{r}{100} \right)^2 - 1 \right]$$

$$= (x + 4000) \left[\left(1 + \frac{20}{100} \right)^2 - 1 \right]$$

$$= (x + 4000) \times \frac{11}{25}$$

ATQ,

$$\frac{36x}{100} + \frac{11}{25}(x + 4000) = 3360$$

$$36x + 44(x + 4000) = 3360 \times 100$$

$$\Rightarrow x = 2000 \text{ Rs.}$$

$$\text{Sum invested by Kush} = x + 4000 = 2000 + 4000 = \text{Rs. } 6000$$

S36. Ans.(a)

Sol.

$$\text{Required difference} = (200 - 55) \times \frac{80}{100} - (180 - 60) \times \frac{40}{100} = 116 - 48 = 68$$

S37. Ans.(d)

$$\text{Sol. Required number of students} = (180 - 60) + (150 - 50) + (200 - 55) + (250 - 130)$$

$$= 120 + 100 + 145 + 120 = 485$$

S38. Ans.(b)

Sol.

$$\text{Required percentage} = \frac{(250 - 130) \times \frac{80}{100}}{200} \times 100$$

$$= \frac{3600}{200} = 18\%$$

S39. Ans.(e)

Sol.

$$\text{Required ratio} = \frac{(150 - 50)}{55} = \frac{100}{55} = 20 : 11$$

S40. Ans.(c)

Sol.

$$\text{Required average} = \frac{1}{3} \left[(180 - 60) \times \frac{60}{100} + (150 - 50) \times \frac{45}{100} + (250 - 130) \times \frac{70}{100} \right]$$

$$= \frac{1}{3} [72 + 45 + 84] = 67$$

S41. Ans.(a)

Sol. Pattern of series –

$$12 \times 4 = 48$$

$$48 \div 2 = 24$$

$$24 \times 4 = 96$$

$$? = 96 \div 2 = 48$$

$$48 \times 4 = 192$$

S42. Ans.(d)

Sol. Pattern of series –

$$756 + (18 \times 1) = 774$$

$$774 - (18 \times 2) = 738$$

$$738 + (18 \times 3) = 792$$

$$? = 792 - (18 \times 4) = 720$$

$$720 + (18 \times 5) = 810$$

S43. Ans.(e)

Sol. Pattern of series –

$$+ (1.7 \times 1), + (1.7 \times 2), + (1.7 \times 3), + (1.7 \times 4), + (1.7 \times 5)$$

$$\text{So, ?} = 3 - 1.7 = 1.3$$

S44. Ans.(c)

Sol.

Pattern of series –

$$+ (16^2 + 2), + (14^2 + 2), + (12^2 + 2), + (10^2 + 2), + (8^2 + 2)$$

$$\text{So, ?} = 708 + (8^2 + 2) = 774$$

S45. Ans.(c)

Sol. Pattern of series –

$$120 + 88 = 208$$

$$208 + 78 = 286$$

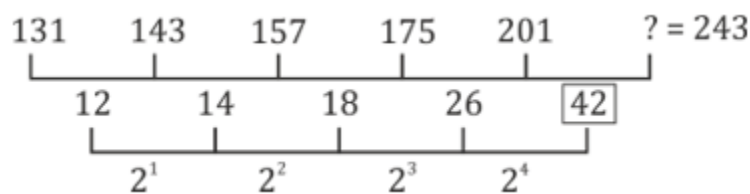
$$? = 286 + 68 = 354$$

$$354 + 58 = 412$$

$$412 + 48 = 460$$

S46. Ans.(a)

Sol. Pattern of series –



S47. Ans.(b)

Sol.

$$\text{Total number of male COVID - 19 cases registered on Friday} = 900 - 500 = 400$$

$$\text{Total number of male COVID - 19 cases registered on Tuesday} = 700 - 400 = 300$$

$$\text{Required percentage} = \frac{400 - 300}{300} \times 100$$

$$= \frac{100}{300} \times 100 = 33\frac{1}{3}\%$$

S48. Ans.(d)

$$\text{Sol. Total number of female COVID - 19 cases registered on Wednesday} = 200$$

$$\text{Total number of male COVID - 19 cases registered on Monday} = 800 - 300 = 500$$

$$\text{Required ratio} = 200 : 500 = 2 : 5$$

S49. Ans.(e)

Sol.

$$\text{Total male COVID - 19 cases registered on Thursday who are below or equal to 40 years}$$

$$= (500 - 100) \times \frac{60}{100} = 240$$

$$\text{Required difference} = 240 - 100 = 140$$

S50. Ans.(a)

Sol.

Total number of male COVID – 19 cases registered on Monday = $800 - 300 = 500$

Total number of male COVID – 19 cases registered on Tuesday = $700 - 400 = 300$

Total number of male COVID – 19 cases registered on Friday = $900 - 500 = 400$

Required average = $\frac{500+300+400}{3} = 400$

S51. Ans.(c)

Sol.

Total number of male COVID – 19 cases registered on Wednesday = $600 - 200 = 400$

Total number of male COVID – 19 cases registered on Monday = $800 - 300 = 500$

Required percentage = $\frac{400}{500} \times 100 = 80\%$

S52. Ans.(d)

Sol. Let total students in class A and class B be $50x$ and $30x$ respectively.

Boys in class B = $\frac{40}{100} \times 30x = 12x$

Girls in class B = $30x - 12x = 18x$

Girls in class A = $\frac{10}{9} \times 18x = 20x$

Boys in class A = $50x - 20x = 30x$

ATQ.

$$18x + 20x = 19 \times 2$$

$$x = 1$$

Class	Boys	Girls
A	30	20
B	12	18

Required boys = $30+12 = 42$

S53. Ans.(a)

Sol. Let total students in class A and class B be $50x$ and $30x$ respectively.

Boys in class B = $\frac{40}{100} \times 30x = 12x$

Girls in class B = $30x - 12x = 18x$

Girls in class A = $\frac{10}{9} \times 18x = 20x$

Boys in class A = $50x - 20x = 30x$

ATQ.

$$18x + 20x = 19 \times 2$$

$$x = 1$$

Class	Boys	Girls
A	30	20
B	12	18

Required % = $\frac{18}{30} \times 100 = 60\%$

S54. Ans.(b)

Sol. Let total students in class A and class B be $50x$ and $30x$ respectively.

$$\text{Boys in class B} = \frac{40}{100} \times 30x = 12x$$

$$\text{Girls in class B} = 30x - 12x = 18x$$

$$\text{Girls in class A} = \frac{10}{9} \times 18x = 20x$$

$$\text{Boys in class A} = 50x - 20x = 30x$$

ATQ.

$$18x + 20x = 19 \times 2$$

$$x = 1$$

Class	Boys	Girls
A	30	20
B	12	18

Required ratio = $20 : 12 = 5 : 3$

S55. Ans.(d)

Sol.

$$59.90\% \text{ of } 1020.11 - 9.88\% \text{ of } 79.91 = ?^3 + 92.01$$

$$60\% \text{ of } 1020 - 10\% \text{ of } 80 = ?^3 + 92$$

$$612 - 8 - 92 = ?^3$$

$$512 = ?^3$$

$$8 = ?$$

S56. Ans.(e)

$$\text{Sol. } (10.22 \times 9.94) \div 4.98 - ? = 6.97$$

$$(10 \times 10) \div 5 - ? = 7$$

$$13 = ?$$

S57. Ans.(d)

Sol.

$$129.92 + 199.89 + 40.01\% \text{ of } 160.21 + 6.12 = ?^2$$

$$130 + 200 + 40\% \text{ of } 160 + 6 = ?^2$$

$$330 + 64 + 6 = ?^2$$

$$400 = ?^2$$

$$20 = ?$$

S58. Ans.(a)

Sol.

$$\sqrt{1764.02} + 21.04^2 - ? = \frac{5}{12} \times 167.97$$

$$\sqrt{1764} + 21^2 - ? = \frac{5}{12} \times 168$$

$$42 + 441 - ? = 70$$

$$413 = ?$$

S59. Ans.(b)

Sol.

$$\sqrt[3]{729.14} + 11.01^3 + 60.24\% \text{ of } 449.86 = ?$$

$$\sqrt[3]{729} + 11^3 + 60\% \text{ of } 450 = ?$$

$$9 + 1331 + 270 = ?$$

$$1610 = ?$$

S60. Ans.(e)

Sol.

$$22.11^2 + 199.98 - ? = 29.89\% \text{ of } 400.02$$

$$22^2 + 200 - ? = 30\% \text{ of } 400$$

$$484 + 200 - ? = 120$$

$$564 = ?$$

S61. Ans.(b)

Sol.

Let cost price of the article be Rs.100x

$$\text{So marked price of the article} = 100x \times \frac{200}{100}$$

$$= \text{Rs.}200x$$

$$\text{ATQ, } (200x - 1920) - (1920 - 100x) = 960$$

$$\Rightarrow 300x = 960 + 3840$$

$$\Rightarrow x = 16$$

$$\text{Required profit \%} = \frac{1920 - 100 \times 16}{100 \times 16} \times 100 = 20\%$$

S62. Ans.(b)

Sol.

Let speed of boat in still water be 5x km/hr

$$\text{So, speed of stream} \times \frac{40}{100} = 2x \text{ km/hr}$$

$$\text{Downstream speed of boat} = 44.8 \times \frac{60}{96} = 28 \text{ km/hr}$$

ATQ -

$$(5x + 2x) = 28$$

$$x = 4 \text{ km/hr}$$

$$\text{So, Upstream speed of boat} = (5 \times 4 - 2 \times 4) = 12 \text{ km/hr}$$

$$\text{So, required ratio} = \frac{108}{12} : \frac{420}{28} = 3 : 5$$

S63. Ans.(a)

Sol. Let length and speed of train P be 'l' meters and 'v' m/sec respectively.

ATQ,

$$\frac{l}{32} = v$$

$$l = 32v \quad \dots(i)$$

Also,

$$\frac{l+1200}{72} = v$$

$$l = 72v - 1200 \quad \dots(ii)$$

On solving (i) & (ii), we get

$$v = 30, l = 960$$

$$\text{Now, speed of train Q} = 72 \times \frac{5}{18}$$

$$= 20 \text{ m/sec}$$

$$\text{Required time} = \frac{960+1280}{30-20} = 224 \text{ seconds}$$

S64. Ans.(c)

Sol. Let efficiency of Deepak and Shivam are $5x$ unit/day and $6x$ unit/day respectively.

$$\text{So, total work} = 11(5x) + 31(5x + 6x)$$

$$= 55x + 341x$$

$$= 396x \text{ units}$$

$$\text{Now, } T = \frac{396x}{5x+6x} = 36$$

S65. Ans.(b)

Sol.

Ratio of speed of car and speed of scooter = 7:5

$$\text{Speed of truck} = \frac{240}{5} = 48 \text{ km/h}$$

$$\text{Speed of scooter} = 48 \times \frac{3}{2} = 72 \text{ km/h}$$

$$\text{Speed of car} = 72 \times \frac{7}{5} = 100.8 \text{ km/h}$$

$$\text{Distance cover by car in 2 hours} = 100.8 \times 2 = 201.6 \text{ km}$$

S66. Ans.(c)

Sol. Except in option (c), the place value of the middle letter is equal to the multiple of the first and last letter in each option.

S67. Ans.(d)

Sol. The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48			I	Goa
1979	43	I	Goa		
1982	40				
1985	37				Delhi
1990	32		Delhi		
1993	29				

The digit sum of the year in which N was born is half of his age, it means N's age is 40 years. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N		N	
1985	37		Haryana		Delhi
1990	32		Delhi	K	
1993	29	M	Sikkim	M	Sikkim

The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J. So, case 2 is cancelled here.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N	Assam	N	
1985	37	L	Haryana		Delhi
1990	32	J	Delhi	K	
1993	29	M	Sikkim	M	Sikkim

We know, Gujarat is one of the states so K belongs to Gujarat. Now, the final arrangement is: -

Year	Age	Persons	States
1974	48	K	Gujarat
1979	43	I	Goa
1982	40	N	Assam
1985	37	L	Haryana
1990	32	J	Delhi
1993	29	M	Sikkim

Two persons were born between the one who belongs to Gujarat and L

S68. Ans.(b)

Sol. The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48			I	Goa
1979	43	I	Goa		
1982	40				
1985	37				Delhi
1990	32		Delhi		
1993	29				

The digit sum of the year in which N was born is half of his age, it means N's age is 40 years. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N		N	
1985	37		Haryana		Delhi
1990	32		Delhi	K	
1993	29	M	Sikkim	M	Sikkim

The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J. So, case 2 is cancelled here.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N	Assam	N	
1985	37	L	Haryana		Delhi
1990	32	J	Delhi	K	
1993	29	M	Sikkim	M	Sikkim

We know, Gujarat is one of the states so K belongs to Gujarat. Now, the final arrangement is: -

Year	Age	Persons	States
1974	48	K	Gujarat
1979	43	I	Goa
1982	40	N	Assam
1985	37	L	Haryana
1990	32	J	Delhi
1993	29	M	Sikkim

The combination in option (b) is correct.

S69. Ans.(e)

Sol. The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48			I	Goa
1979	43	I	Goa		
1982	40				
1985	37				Delhi
1990	32		Delhi		
1993	29				

The digit sum of the year in which N was born is half of his age, it means N's age is 40 years. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N		N	
1985	37		Haryana		Delhi
1990	32		Delhi	K	
1993	29	M	Sikkim	M	Sikkim

The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J. So, case 2 is cancelled here.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N	Assam	N	
1985	37	L	Haryana		Delhi
1990	32	J	Delhi	K	
1993	29	M	Sikkim	M	Sikkim

We know, Gujarat is one of the states so K belongs to Gujarat. Now, the final arrangement is: -

Year	Age	Persons	States
1974	48	K	Gujarat
1979	43	I	Goa
1982	40	N	Assam
1985	37	L	Haryana
1990	32	J	Delhi
1993	29	M	Sikkim

L was born in 1985.

S70. Ans.(c)

Sol. The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48			I	Goa
1979	43	I	Goa		
1982	40				
1985	37				Delhi
1990	32		Delhi		
1993	29				

The digit sum of the year in which N was born is half of his age, it means N's age is 40 years. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N		N	
1985	37		Haryana		Delhi
1990	32		Delhi	K	
1993	29	M	Sikkim	M	Sikkim

The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J. So, case 2 is cancelled here.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N	Assam	N	
1985	37	L	Haryana		Delhi
1990	32	J	Delhi	K	
1993	29	M	Sikkim	M	Sikkim

We know, Gujarat is one of the states so K belongs to Gujarat. Now, the final arrangement is: -

Year	Age	Persons	States
1974	48	K	Gujarat
1979	43	I	Goa
1982	40	N	Assam
1985	37	L	Haryana
1990	32	J	Delhi
1993	29	M	Sikkim

I is elder than N.

S71. Ans.(b)

Sol. The age difference between the one who belongs to Delhi and I is 11. At least four persons were born after I who belongs to Goa.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48			I	Goa
1979	43	I	Goa		
1982	40				
1985	37				Delhi
1990	32		Delhi		
1993	29				

The digit sum of the year in which N was born is half of his age, it means N's age is 40 years. Two persons were born between the one who belongs to Haryana and K whose age is an even number. M belongs to Sikkim.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N		N	
1985	37		Haryana		Delhi
1990	32		Delhi	K	
1993	29	M	Sikkim	M	Sikkim

The number of persons born between the one who belongs to Assam and L is same as the number of persons born between L and J. So, case 2 is cancelled here.

Year	Age	Persons	States	Persons	States
		Case 1		Case 2	
1974	48	K		I	Goa
1979	43	I	Goa		Haryana
1982	40	N	Assam	N	
1985	37	L	Haryana		Delhi
1990	32	J	Delhi	K	
1993	29	M	Sikkim	M	Sikkim

We know, Gujarat is one of the states so K belongs to Gujarat. Now, the final arrangement is: -

Year	Age	Persons	States
1974	48	K	Gujarat
1979	43	I	Goa
1982	40	N	Assam
1985	37	L	Haryana
1990	32	J	Delhi
1993	29	M	Sikkim

The age gap of J and K is more than 8 years i.e., 16 years.

S72. Ans.(c)

Sol. Three persons bought dresses between M and K. So, here we have two possible cases. T's dress is just costlier than M's dress.

Case 1: $T > M > _ > _ > _ > K$

Case 2: $K > _ > _ > T > M$

J's dress is costlier than T and not cheaper than K. Two persons bought dresses between J and P who doesn't buy the maximum costlier dress. P neither bought just cheaper nor just costlier dress than K. U's dress is just costlier than B and just cheaper than K. So, case 2 gets eliminated here.

Case 1: $J > T > M > P > _ > _ > K > U > B$

Case 2: $J > K > _ > P > T > M$

R bought a costlier dress than S. Thus, the final arrangement is:

$J > T > M > P > R > S > K > U > B$

Five person dresses are cheaper than P.

S73. Ans.(d)

Sol. Three persons bought dresses between M and K. So, here we have two possible cases. T's dress is just costlier than M's dress.

Case 1: $T > M > _ > _ > _ > K$

Case 2: $K > _ > _ > T > M$

J's dress is costlier than T and not cheaper than K. Two persons bought dresses between J and P who doesn't buy the maximum costlier dress. P neither bought just cheaper nor just costlier dress than K. U's dress is just costlier than B and just cheaper than K. So, case 2 gets eliminated here.

Case 1: $J > T > M > P > _ > _ > K > U > B$

Case 2: $J > K > _ > P > T > M$

R bought a costlier dress than S. Thus, the final arrangement is:

$J > T > M > P > R > S > K > U > B$

K bought the third cheapest dress of all.

S74. Ans.(c)

Sol. Three persons bought dresses between M and K. So, here we have two possible cases. T's dress is just costlier than M's dress.

Case 1: $T > M > _ > _ > _ > K$

Case 2: $K > _ > _ > T > M$

J's dress is costlier than T and not cheaper than K. Two persons bought dresses between J and P who doesn't buy the maximum costlier dress. P neither bought just cheaper nor just costlier dress than K. U's dress is just costlier than B and just cheaper than K. So, case 2 gets eliminated here.

Case 1: $J > T > M > P > _ > _ > K > U > B$

Case 2: $J > K > _ > P > T > M$

R bought a costlier dress than S. Thus, the final arrangement is:

$J > T > M > P > R > S > K > U > B$

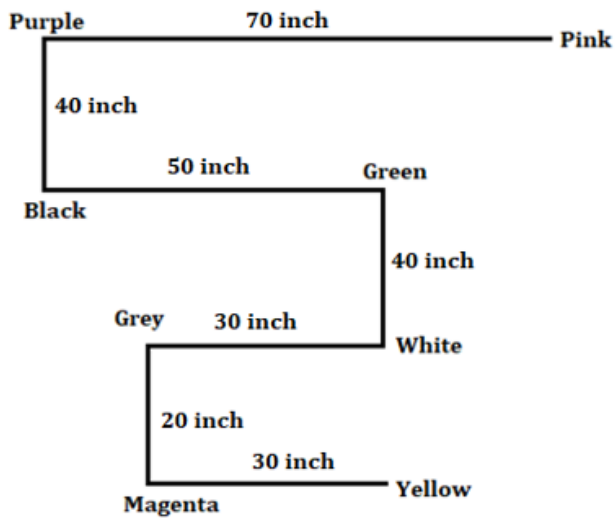
The statement given in option c is not true.

S75. Ans.(d)

Sol. Black ball is in the North-west with respect to Magenta ball

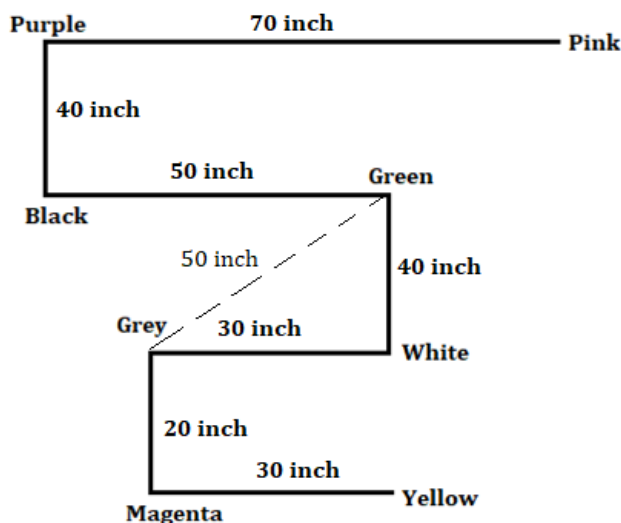
S76. Ans.(c)

Sol.



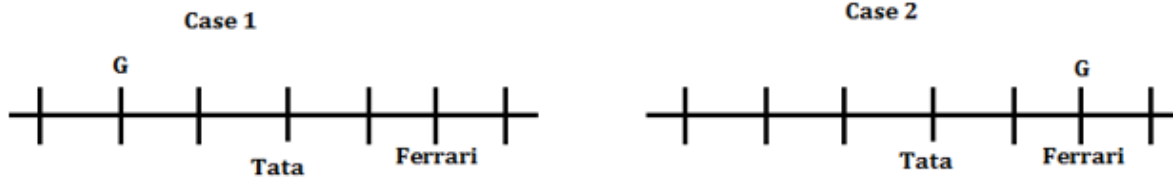
S77. Ans.(d)

Sol.

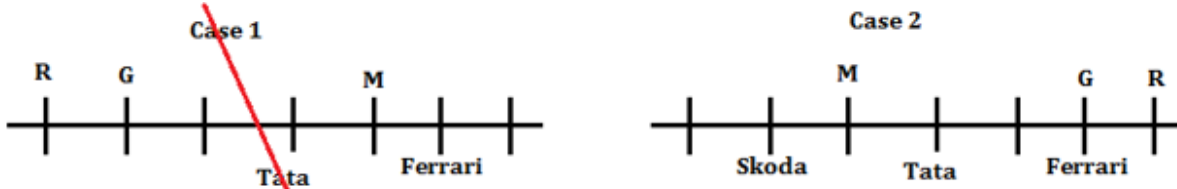


S78. Ans.(c)

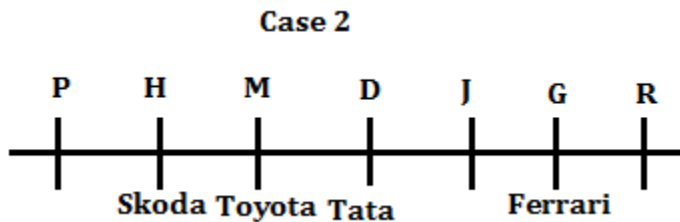
Sol. The one who buys Tata sits two persons away from G. G sits second from one of the extreme ends. So here we have two possible cases. The one who buys Ferrari sits second to the right of the one who buys Tata.



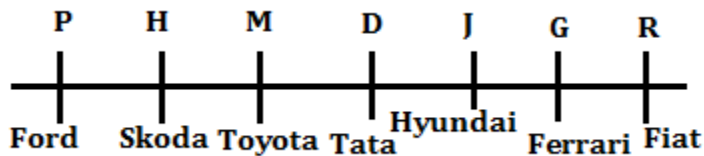
M neither sit adjacent to G nor sit at the extreme end of the row. Three persons sit between R and M. The person who buys Skoda sits adjacent to M. So, case 1 gets eliminated here.



H sits second to the left of D. One person sits between P and the one who buys Toyota. J doesn't sit adjacent to H.



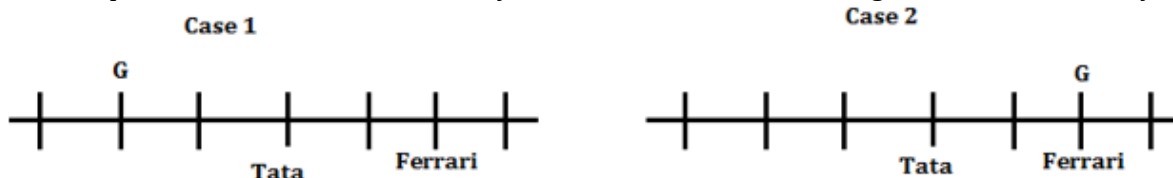
The one who buys Hyundai doesn't sit at the extreme end. The one who buys Ford sits to the left of R which means R buys Fiat. Thus, the final arrangement is:



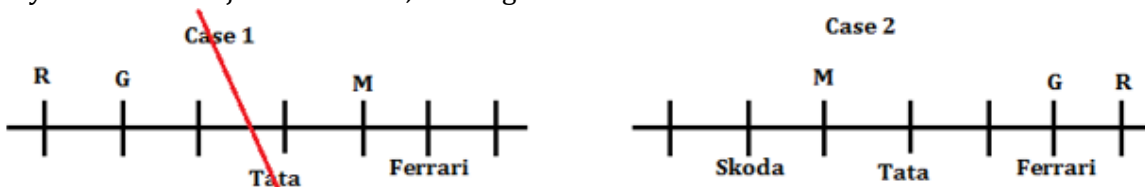
R buys a Fiat car.

S79. Ans.(d)

Sol. The one who buys Tata sits two persons away from G. G sits second from one of the extreme ends. So here we have two possible cases. The one who buys Ferrari sits second to the right of the one who buys Tata.

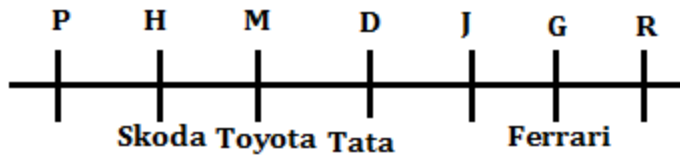


M neither sit adjacent to G nor sit at the extreme end of the row. Three persons sit between R and M. The person who buys Skoda sits adjacent to M. So, case 1 gets eliminated here.

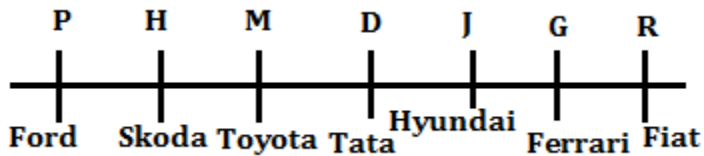


H sits second to the left of D. One person sits between P and the one who buys Toyota. J doesn't sit adjacent to H.

Case 2



The one who buys Hyundai doesn't sit at the extreme end. The one who buys Ford sits to the left of R which means R buys Fiat. Thus, the final arrangement is:

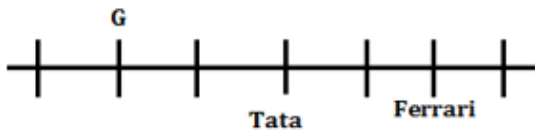


Four persons sit between P and G.

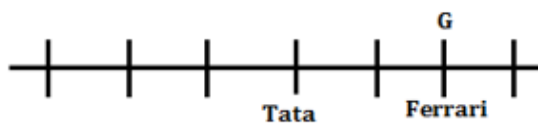
S80. Ans.(d)

Sol. The one who buys Tata sits two persons away from G. G sits second from one of the extreme ends. So here we have two possible cases. The one who buys Ferrari sits second to the right of the one who buys Tata.

Case 1

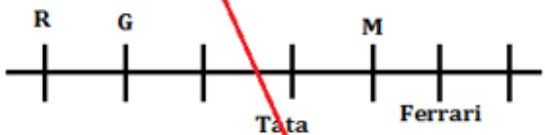


Case 2

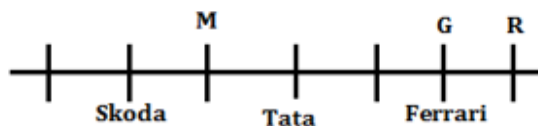


M neither sit adjacent to G nor sit at the extreme end of the row. Three persons sit between R and M. The person who buys Skoda sits adjacent to M. So, case 1 gets eliminated here.

Case 1

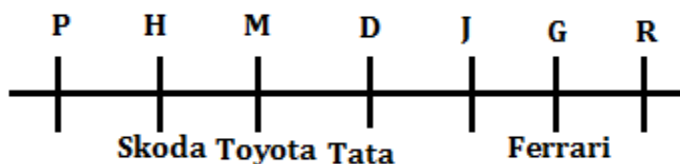


Case 2

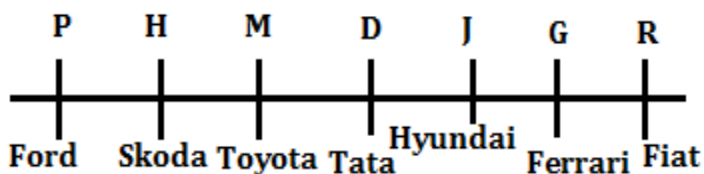


H sits second to the left of D. One person sits between P and the one who buys Toyota. J doesn't sit adjacent to H.

Case 2



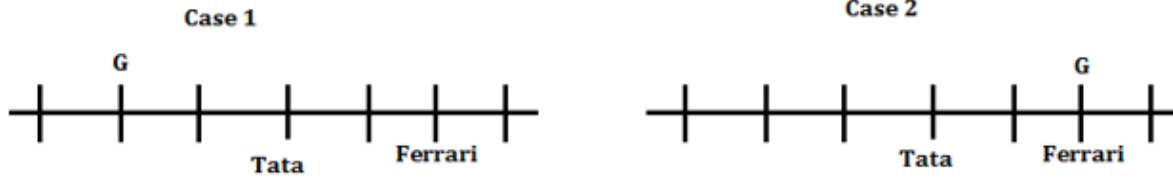
The one who buys Hyundai doesn't sit at the extreme end. The one who buys Ford sits to the left of R which means R buys Fiat. Thus, the final arrangement is:



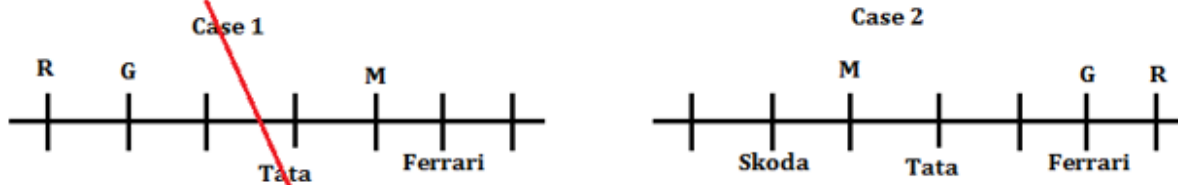
D-Tata is the correct combination.

S81. Ans.(e)

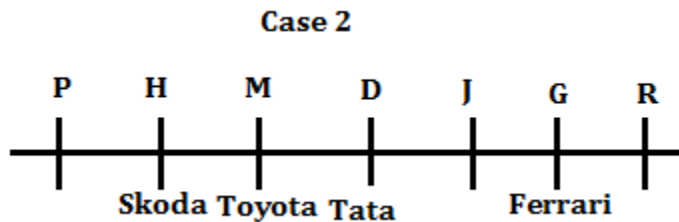
Sol. The one who buys Tata sits two persons away from G. G sits second from one of the extreme ends. So here we have two possible cases. The one who buys Ferrari sits second to the right of the one who buys Tata.



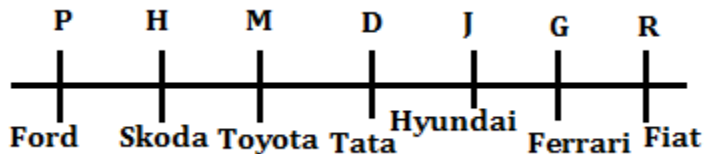
M neither sit adjacent to G nor sit at the extreme end of the row. Three persons sit between R and M. The person who buys Skoda sits adjacent to M. So, case 1 gets eliminated here.



H sits second to the left of D. One person sits between P and the one who buys Toyota. J doesn't sit adjacent to H.



The one who buys Hyundai doesn't sit at the extreme end. The one who buys Ford sits to the left of R which means R buys Fiat. Thus, the final arrangement is:



All statements are true.

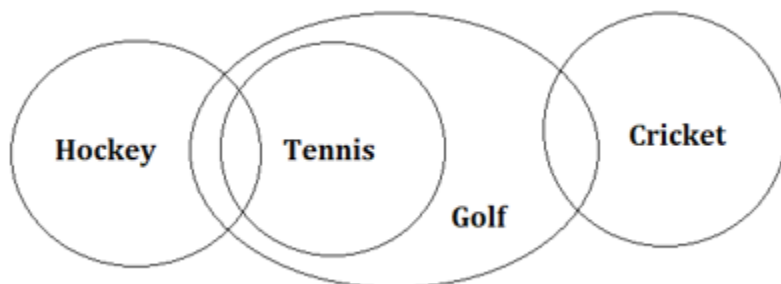
S82. Ans.(c)

Sol. The meaningful word formed by I, A, M and E is AMIE.

S83. Ans.(b)

Sol. I. does not follow because there is no direct relation between Cricket and Hockey So, it does not hold true

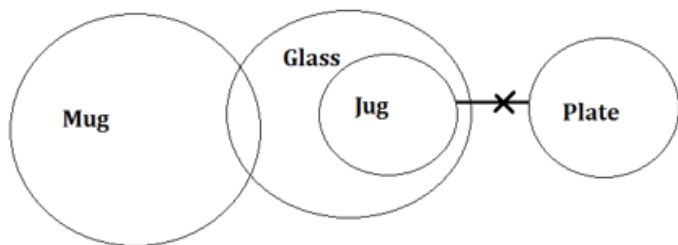
II. Follow because it is given that some Cricket are Golf, so in possibility, the relation of all Golf being Cricket will hold true.



S84. Ans.(d)

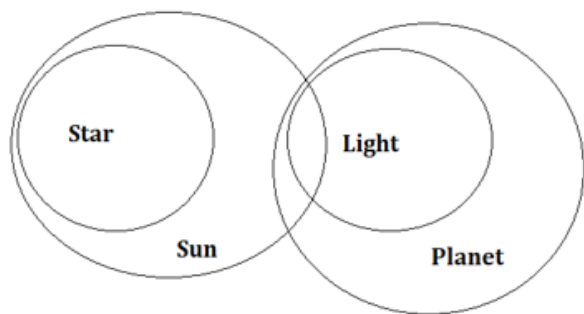
Sol. I. follow because, as per the Venn diagram we can see some glass which is jug can never be plate.

II. follow because we can see that some mug are glass, so relation of all glass being mug will hold true in possibility.



S85. Ans.(c)

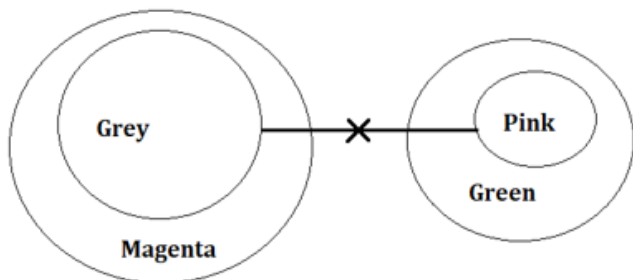
Sol. Both I and II individually wrong but satisfy the “either or” condition.



S86. Ans.(e)

Sol. I. does not follow because there is no direct relation between Green and Magenta so it does not hold true

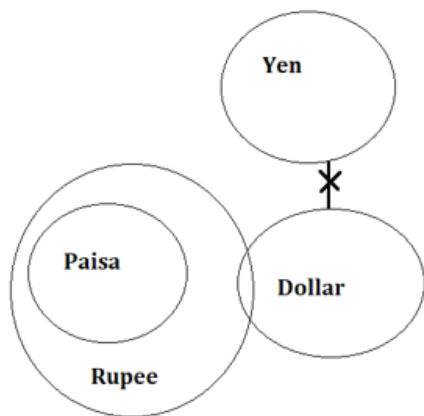
II. does not follow because there is no direct relation between Grey and Green so it does not hold true



S87. Ans.(a)

Sol. I. follow because as per the Venn diagram we can see some part of dollar is in rupee and no dollar is yen so it holds true

II. does not follow because there is no direct relation between yen and Rupee so it doesn't hold true



S88. Ans.(b)

Sol. Ram Navami will be celebrated on an even date in the month having 30 days, so it will be celebrated on 2nd either in April or in June. Thus, two possibilities arise from this statement. Holi will be celebrated two months before Ram Navami.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				
February		Holi		
March				
April	2	Ram Navami		Holi
May				
June			2	Ram Navami

Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25, which means the festivals on the 2nd and 23rd will be celebrated in a single month.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				Eid
February		Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid		
June	5	Buddha Purnima	2 23	Ram Navami

Lohri will be celebrated on the 13th but not in May. Here, case 2 is ruled out. Holi will be on the 29th as the year is a leap year.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January	13	Lohri		Eid
February	29	Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid	13	Lohri
June	5	Buddha Purnima	2 23	Ram Navami

Eid will not be celebrated on the 7th, so it will be celebrated on the 17th. Also, Diwali will be celebrated on the 7th and Vaisakhi will be celebrated on the 23rd in April. Hence, the final arrangement is:

Months	Date	Festivals
January	13	Lohri
February	29	Holi
March	7	Diwali
April	23 2	Vaisakhi Ram Navami
May	17	Eid
June	5	Buddha Purnima

Eid will be celebrated in May.

S89. Ans.(d)

Sol. Ram Navami will be celebrated on an even date in the month having 30 days, so it will be celebrated on 2nd either in April or in June. Thus, two possibilities arise from this statement. Holi will be celebrated two months before Ram Navami.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				
February		Holi		
March				
April	2	Ram Navami		Holi
May				
June			2	Ram Navami

Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25, which means the festivals on the 2nd and 23rd will be celebrated in a single month.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				Eid
February		Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid		
June	5	Buddha Purnima	2 23	Ram Navami

Lohri will be celebrated on the 13th but not in May. Here, case 2 is ruled out. Holi will be on the 29th as the year is a leap year.

Months	Date	Festivals	Date	Festivals
	Case 1		Case-2	
January	13	Lohri		Eid
February	29	Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid	13	Lohri
June	5	Buddha Purnima	2 23	Ram Navami

Eid will not be celebrated on the 7th, so it will be celebrated on the 17th. Also. Diwali will be celebrated on the 7th and Vaisakhi will be celebrated on the 23rd in April. Hence, the final arrangement is:

Months	Date	Festivals
January	13	Lohri
February	29	Holi
March	7	Diwali
April	23	Vaisakhi
	2	Ram Navami
May	17	Eid
June	5	Buddha Purnima

Buddha Purnima will be celebrated in June.

S90. Ans.(e)

Sol. Ram Navami will be celebrated on an even date in the month having 30 days, so it will be celebrated on 2nd either in April or in June. Thus, two possibilities arise from this statement. Holi will be celebrated two months before Ram Navami.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				
February		Holi		
March				
April	2	Ram Navami		Holi
May				
June			2	Ram Navami

Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25, which means the festivals on the 2nd and 23rd will be celebrated in a single month.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				Eid
February		Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid		
June	5	Buddha Purnima	2 23	Ram Navami

Lohri will be celebrated on the 13th but not in May. Here, case 2 is ruled out. Holi will be on the 29th as the year is a leap year.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January	13	Lohri		Eid
February	29	Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid	13	Lohri
June	5	Buddha Purnima	2 23	Ram Navami

Eid will not be celebrated on the 7th, so it will be celebrated on the 17th. Also, Diwali will be celebrated on the 7th and Vaisakhi will be celebrated on the 23rd in April. Hence, the final arrangement is:

Months	Date	Festivals
January	13	Lohri
February	29	Holi
March	7	Diwali
April	23	Vaisakhi
	2	Ram Navami
May	17	Eid
June	5	Buddha Purnima

Vaisakhi and Ram Navami will be celebrated in the same month.

S91. Ans.(e)

Sol. Ram Navami will be celebrated on an even date in the month having 30 days, so it will be celebrated on 2nd either in April or in June. Thus, two possibilities arise from this statement. Holi will be celebrated two months before Ram Navami.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				
February		Holi		
March				
April	2	Ram Navami		Holi
May				
June			2	Ram Navami

Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25, which means the festivals on the 2nd and 23rd will be celebrated in a single month.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				Eid
February		Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid		
June	5	Buddha Purnima	2 23	Ram Navami

Lohri will be celebrated on the 13th but not in May. Here, case 2 is ruled out. Holi will be on the 29th as the year is a leap year.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January	13	Lohri		Eid
February	29	Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid	13	Lohri
June	5	Buddha Purnima	2 23	Ram Navami

Eid will not be celebrated on the 7th, so it will be celebrated on the 17th. Also, Diwali will be celebrated on the 7th and Vaisakhi will be celebrated on the 23rd in April. Hence, the final arrangement is:

Months	Date	Festivals
January	13	Lohri
February	29	Holi
March	7	Diwali
April	23	Vaisakhi
	2	Ram Navami
May	17	Eid
June	5	Buddha Purnima

The combination in option (e) is not correct.

S92. Ans.(c)

Sol. Ram Navami will be celebrated on an even date in the month having 30 days, so it will be celebrated on 2nd either in April or in June. Thus, two possibilities arise from this statement. Holi will be celebrated two months before Ram Navami.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				
February		Holi		
March				
April	2	Ram Navami		Holi
May				
June			2	Ram Navami

Buddha Purnima will be celebrated on the 5th and just after the month in which Eid will be celebrated. Diwali will be celebrated in March but not just before the month of Eid. The sum of the dates of the two festivals which will be celebrated in a single month is 25, which means the festivals on the 2nd and 23rd will be celebrated in a single month.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January				Eid
February		Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid		
June	5	Buddha Purnima	2 23	Ram Navami

Lohri will be celebrated on the 13th but not in May. Here, case 2 is ruled out. Holi will be on the 29th as the year is a leap year.

Months	Date	Festivals	Date	Festivals
	Case 1		Case 2	
January	13	Lohri		Eid
February	29	Holi	5	Buddha Purnima
March		Diwali		Diwali
April	2 23	Ram Navami		Holi
May		Eid	13	Lohri
June	5	Buddha Purnima	2 23	Ram Navami

Eid will not be celebrated on the 7th, so it will be celebrated on the 17th. Also, Diwali will be celebrated on the 7th and Vaisakhi will be celebrated on the 23rd in April. Hence, the final arrangement is:

Months	Date	Festivals
January	13	Lohri
February	29	Holi
March	7	Diwali
April	23	Vaisakhi
	2	Ram Navami
May	17	Eid
June	5	Buddha Purnima

Eid will be celebrated two months after Diwali.

S93. Ans.(a)**Sol.** I. $S > M$ (True)II. $W \leq P$ (False)**S94. Ans.(d)****Sol.** I. $6779 < 5789$ (False)II. $3914 \geq 8241$ (False)**S95. Ans.(d)****Sol.** I. $B > L$ (False)II. $F < H$ (False)**S96. Ans.(a)****Sol.** I. $*\% > @!$ (True)II. $*^{\wedge} < \&@$ (False)**S97. Ans.(d)****Sol.** At most two persons are junior to H. There are three possible cases: -

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director			
Principal			
Vice Principal (VP)			
Senior Teacher (ST)			
Teacher			
Assistant Teacher (AT)	H		
Librarian		H	
Assistant Librarian (AL)			H

There are three designations between G and C who is just senior to F. G is senior to Senior Teacher but not the senior most, so case 2 is cancelled here.

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director		G	
Principal			G
Vice Principal (VP)	G		
Senior Teacher (ST)			
Teacher		G	
Assistant Teacher (AT)	H	F	C
Librarian	C	H	F
Assistant Librarian (AL)	F		H

D is junior to B and just senior to A. E is senior to both B and G who is not the Principal, so case 3 is ruled out here.

Designations	Persons	Persons
	Case 1	Case 3
Director	E	E
Principal	B	G
Vice Principal (VP)	G	B
Senior Teacher (ST)	D	D
Teacher	A	A
Assistant Teacher (AT)	H	G
Librarian	C	—F
Assistant Librarian (AL)	F	H

Thus, the final arrangement is: -

Designations	Persons
Director	E
Principal	B
Vice Principal (VP)	G
Senior Teacher (ST)	D
Teacher	A
Assistant Teacher (AT)	H
Librarian	C
Assistant Librarian (AL)	F

C is the Librarian.

S98. Ans.(e)

Sol. At most two persons are junior to H. There are three possible cases: -

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director			
Principal			
Vice Principal (VP)			
Senior Teacher (ST)			
Teacher			
Assistant Teacher (AT)	H		
Librarian		H	
Assistant Librarian (AL)			H

There are three designations between G and C who is just senior to F. G is senior to Senior Teacher but not the senior most, so case 2 is cancelled here.

Designations	Persons	Persons	Persons
	Case 1	Case-2	Case 3
Director		G	
Principal			G
Vice Principal (VP)	G		
Senior Teacher (ST)			
Teacher		G	
Assistant Teacher (AT)	H	F	C
Librarian	C	H	F
Assistant Librarian (AL)	F		H

D is junior to B and just senior to A. E is senior to both B and G who is not the Principal, so case 3 is ruled out here.

Designations	Persons	Persons
	Case 1	Case-3
Director	E	E
Principal	B	G
Vice Principal (VP)	G	B
Senior Teacher (ST)	D	D
Teacher	A	A
Assistant Teacher (AT)	H	G
Librarian	C	—F
Assistant Librarian (AL)	F	H

Thus, the final arrangement is: -

Designations	Persons
Director	E
Principal	B
Vice Principal (VP)	G
Senior Teacher (ST)	D
Teacher	A
Assistant Teacher (AT)	H
Librarian	C
Assistant Librarian (AL)	F

Five persons are senior to H.

S99. Ans.(c)

Sol. At most two persons are junior to H. There are three possible cases: -

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director			
Principal			
Vice Principal (VP)			
Senior Teacher (ST)			
Teacher			
Assistant Teacher (AT)	H		
Librarian		H	
Assistant Librarian (AL)			H

There are three designations between G and C who is just senior to F. G is senior to Senior Teacher but not the senior most, so case 2 is cancelled here.

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director		G	
Principal			G
Vice Principal (VP)	G		
Senior Teacher (ST)			
Teacher		G	
Assistant Teacher (AT)	H	F	C
Librarian	C	H	F
Assistant Librarian (AL)	F		H

D is junior to B and just senior to A. E is senior to both B and G who is not the Principal, so case 3 is ruled out here.

Designations	Persons	Persons
	Case 1	Case 3
Director	E	E
Principal	B	G
Vice Principal (VP)	G	B
Senior Teacher (ST)	D	D
Teacher	A	A
Assistant Teacher (AT)	H	G
Librarian	C	—F
Assistant Librarian (AL)	F	H

Thus, the final arrangement is: -

Designations	Persons
Director	E
Principal	B
Vice Principal (VP)	G
Senior Teacher (ST)	D
Teacher	A
Assistant Teacher (AT)	H
Librarian	C
Assistant Librarian (AL)	F

B is the principal.

S100. Ans.(c)

Sol. At most two persons are junior to H. There are three possible cases: -

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director			
Principal			
Vice Principal (VP)			
Senior Teacher (ST)			
Teacher			
Assistant Teacher (AT)	H		
Librarian		H	
Assistant Librarian (AL)			H

There are three designations between G and C who is just senior to F. G is senior to Senior Teacher but not the senior most, so case 2 is cancelled here.

Designations	Persons	Persons	Persons
	Case 1	Case 2	Case 3
Director		G	
Principal			G
Vice Principal (VP)	G		
Senior Teacher (ST)			
Teacher		G	
Assistant Teacher (AT)	H	F	C
Librarian	C	H	F
Assistant Librarian (AL)	F		H

D is junior to B and just senior to A. E is senior to both B and G who is not the Principal, so case 3 is ruled out here.

Designations	Persons	Persons
	Case 1	Case 3
Director	E	E
Principal	B	G
Vice Principal (VP)	G	B
Senior Teacher (ST)	D	D
Teacher	A	A
Assistant Teacher (AT)	H	G
Librarian	C	—F
Assistant Librarian (AL)	F	H

Thus, the final arrangement is: -

Designations	Persons
Director	E
Principal	B
Vice Principal (VP)	G
Senior Teacher (ST)	D
Teacher	A
Assistant Teacher (AT)	H
Librarian	C
Assistant Librarian (AL)	F

C is just junior to H.