

SBI PO Prelims Previous Year Paper 2022 Mock 2

Directions (1-8): Read the given passage and answer the questions that follow.

This year, a quarter of all new cars purchased in China will be an all-electric vehicle or a plug-in hybrid. There are roughly four million charging units in the country, double the number from a year ago, with more coming. While other E.V. markets are still heavily dependent on subsidies and financial incentives, China has entered a new **phase**: Consumers are weighing the merits of electric vehicles against gas-powered cars based on features and price without much consideration of state support. By comparison, the United States is far behind. This year, the country passed a key threshold of E.V.s accounting for 5 percent of new car sales. China passed that level in 2018. China has one of the fastest growing EV markets, with sales expected to double this year to about six million vehicles — more than the rest of the world combined.

Even new U.S. incentives have raised questions about how effective they will be in addressing **mitigating** factors for electric cars, such as long wait lists, limited supplies and high prices. The U.S. Inflation Reduction Act passed last month included a \$7,500 tax credit for electric vehicles with conditions on where the cars are manufactured and where batteries are sourced. Automakers complained that the credit did not apply to many current E.V. models, and that the sourcing requirements could increase the cost of building an E.V. It took China more than a decade of subsidies, long-term investments and infrastructure spending to lay the foundation for its electric vehicle market to start standing on its own. Some industry experts believe competition and dynamism are now driving the Chinese market, not government subsidies. The country's seriousness about developing electric vehicles was on display when it **rolled out the red carpet for** Tesla to build a massive factory in Shanghai in 2018. The move was seen as a way to force the domestic market to compete directly with an industry leader.

Q1. What actions has the Chinese government taken to establish its current EV market structure?

- (a) Making investments and encouraging competition in the EV market
- (b) Aiding the advent of foreign brands to better the market's EV standards
- (c) Reducing dependence of EV manufacturers on subsidies and investments
- (d) Both (a) and (b)
- (e) All of these

Q2. How efficient has China been in its EV production throughout the years?

- (a) China recently became the largest producer of electric vehicles.
- (b) China has surpassed its goals regarding EV production in the country.
- (c) China now exports its domestically manufactured EVs in large capacity.
- (d) China has three-fourths of the population using only electric vehicles.
- (e) All of these

Q3. How does America fail to address its growing problems of EV production?

- (a) A heavy dependence on government support has crippled the American EV market.
- (b) American manufacturers are not provided enough incentives for feasible operations.
- (c) Reforms in policies were reportedly limited in the type of electric vehicles they cover.
- (d) Forced geographical restrictions make production subject to availability of parts.
- (e) All of the above

Q4. Among the following, which factor most contributed to a continual growth of the EV market in China? (a) Incentives for production to EV manufacturers (b) The economy of the country and the price of fuel (c) EV-production-favouring government policies (d) A focus on the general interests of consumers (e) Availability of parts for electric vehicle production
Q5. Which of the following statements is true according to the facts in the passage? (a) Manufacturers in China are not dependent on government subsidies for production. (b) China is far further in EV production and sales than the rest of the world. (c) EV sales in China this year will amount to 25% of the total sales of all cars. (d) EV sales in the US suffer from a lack of awareness among the people. (e) Tesla has become one of the top EV manufacturers in China.
Q6. Choose the correct meaning of "rolled out the red carpet for". (a) trust what someone says (b) to give a guest special treatment (c) to get something over with because it is inevitable (d) doing a good job (e) tell something briefly
Q7. From among the following options, choose the most appropriate synonym of "phase" with regard to its inherent meaning in the passage. (a) condition (b) epoch (c) aspect (d) episode

(d) episode				
(e) transition				

- Q8. Choose the word most opposite in meaning to "mitigating" as it is used in the passage.
- (a) isolating
- (b) aggravating
- (c) alleviating
- (d) devastating
- (e) acclimating

Directions (9-13): In each of the following questions one sentence has been given. Each sentence has two blanks. From the options given below the sentence, pick the pair of words that fits into both the blanks respectively to make the sentence contextually meaningful and mark the letter corresponding to it as your answer.

corresponding to it as your answer.					
Q9. Part of Justin's hyperactivity	that he couldn't concentrate	to read			
(a) summarise, ended					
(b) meant, enough					
(c) concluded, just					
(d) implied, by					
(e) simplified, farther					
0 1 1	11				

Q10. Poetry is	_ of	spiritual freedom, both, as concentrated inwardness,			
and as action in space and					
(a) capable, showing					
(b) nominal, describing					
(c) neglected, proper(d) similar, some					
(e) surely, decent					
Q11. PricelessAtlantic.	of	history remainwith the Titanic at the bottom of the			
(a) pieces, buried					
(b) artifacts, lie					
(c) proofs, down					
(d) surfaces, above					
(e) object, drown					
		_ in the courtyard to unfurl the flag andit up the pole.			
(a) squandered, let					
(b) raised, raise(c) gathered, hoist					
(d) wandering, pull					
(e) exited, let					
Q13. Plowing an entire field to do it all the time.	1 IS _	it is hard work farmers have			
(a) very, although					
(b) hardly, if					
(c) extreme, still					
(d) endlessly, then					
(e) quite, though					
014. In each of the question	nc ai	ven below, four sentences have been given. Out of four sentences, one			
•		hich of the following sentence has an error. If all the given sentences are			
		are correct' as your answer choice.			
_		hers that are expected to be convert to cash.			
(b) Researchers can measure the intensity of sunlight using a sunshine recorder					
		d as tasteless, colorless and odorless.			
(e) All are correct	ng oi	secularism in India has undergone a sea change.			
Q15. In each of the question	ns gi	ven below, four sentences have been given. Out of four sentences, one			
sentence has an error. Find o	ut w	hich of the following sentence has an error. If all the given sentences are			
		are correct' as your answer choice.			
(a) People with high self-con					
		he dipped his hands in the ocean and scooped some water. night to built a big and spacious house			
		fast becoming a selfie backdrop for local tourists.			
(e) All are correct					

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- **Q16.** 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 sentence has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.
- (a) Many villages can facilitate tourism because many villagers are eager to welcome visitors
- (b) After over a month, I finally met my uncle while a family function.
- (c) There are an unknown number of smaller dwarf planets orbiting the Sun.
- (d) Fasting may have different results on health in different circumstances.
- (e) All are correct
- **Q17.** 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 sentence has an error. If all the given sentences are error-free then choose option 'All are correct' as your answer choice.
- (a) Adversity in childhood can contribute to depression in adulthood.
- (b) Supporters praise the BRI for its potential to boost the global GDP
- (c) The first country to receive a World Bank loan was France in 1947.
- (d) The bag had a hole, which allowing the sugar to fall off.
- (e) All are correct

Directions (18-22): Five coherent statements are given. Rearrange those in a meaningful order and answer the questions following to that.

- (A) During the decades preceding independence, as well as those after, India's sole emphasis was on agriculture.
- (B) Recently Indian government announced reintroduction of 8 cheetah in Indian forest by translocating them from Namibia.
- (C) While over-hunting was a major contributing factor for the cheetah's extinction, the decimation of grassland-forest habitat also played a role.
- (D) The aim behind the translocation is not only to restore India's 'historic evolutionary balance', but also to develop a cheetah 'metapopulation'.
- (E)This included acquiring off grassland, which led to a decline in the cheetah's habitat.

Q18. Which of the following will be the third statement after rearrangement?

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

Q19. Which of the following will be the fifth statement after rearrangement?

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



Q20. Which of the following will be the first statement after rearrangement?
(a) A
(b) B
(c) C
(d) D
(e) E
Q21. Which of the following will be the fourth statement after rearrangement?
(a) A
(b) B
(c) C
(d) D
(e) E
Q22. Which of the following will be the second statement after rearrangement?
(a) A
(b) B
(c) C
(d) D
(a) B (e) E
(e) E
below. Identify the statements where the word has been used in a contextually and grammatically correct manner. If the word has been used incorrectly in all the statements, mark (e), "None of these", as your answer.
Q23. Irrational
(i) The CEO blamed the irrational behavior of the employees for the loss the company had suffered.
(ii) India's first Census was held in 1872, irrational non-synchronously in different parts of the country.
(iii) Indian Council of Medical Research mulled over setting up network centers to curb the irrational use
of drugs.
(a) only (i)
(b) only (ii)
(c) both (ii) and (i)
(d) both (i) and (iii)
(e) none of these
(e) none of these
Q24. Escalate
(i) Cost of commodities will increase as a result of escalating input prices
(ii) There were fears that violence could escalate further after Iran restricted internet access.
(iii) These past few months, India's sports administrators have been in the news far too escalate.
(a) only (i)
(b) only (ii)
(c) both (i) and (ii)
(d) both (i) and (iii)

(e) none of these

Q25. Reckon

- (i) After decelerating for three **reckon** months, India's retail inflation accelerated to 7%.
- (ii) In the past 15 years, India has seen **reckon** episodes of extreme rainfall in 24 hours
- (iii) The newly built building which the government has ordered to demolish is **reckoned** as waste of money
- (a) only (i)
- (b) only (iii)
- (c) both (ii) and (i)
- (d) both (i) and (iii)
- (e) none of these

Directions (26-30): In each question, four words are highlighted. One out of four words may or may not be misspelled. Choose the misspelled word, if any, as your answer.

Q26. Unlawful **incursion** has been **thretening** the **safety** of computer **network** system.

- (a) Incursion
- (b) thretening
- (c) safety
- (d) network
- (e) No error

Q27. Swimming a little **further** each **session** will build **endurence**.

- (a) swimming
- (b) further
- (c) session
- (d) endurence
- (e) No error

Q28. A regional conflict would erupt into violent warfare.

- (a) regional
- (b) conflict
- (c) erupt
- (d) violent
- (e) No error

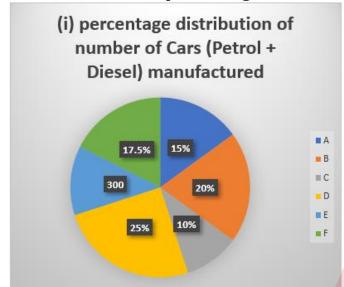
Q29. To some, this **situation** cries out for **draconian** measures to **inject** more **compatition**.

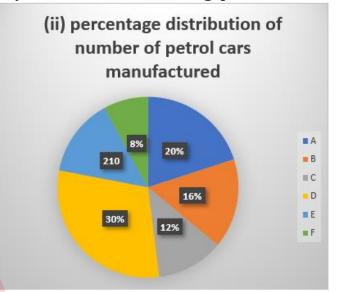
- (a) situation
- (b) inject
- (c) draconian
- (d) compatition
- (e) No error.

Q30. The **objective** of the **reserch** is to gain a better **insight** into labour market **processes**

- (a) objective
- (b) reserch
- (c) insight
- (d) processes
- (e) No error

Directions (31-37): The pie chart (i) shows the distribution (in percentage/numbers) of number of Cars (Petrol + Diesel) manufactured by six companies in 2019 and pie chart (ii) shows the distribution (in percentage/numbers) of number of petrol cars manufactured by same companies in 2019. Read the both pie charts given below carefully and answer the following questions.





Q31. Find the total number of Diesel cars manufactured by company B and D together.

- (a) 320
- (b) 410
- (c) 390
- (d) 330
- (e) 300

Q32. What is ratio of Diesel cars manufactured by company A and C together and total cars manufactured by F?

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

Q33. What is the central angle of diesel cars manufactured by company E?

- (a) 14°
- (b) 36°
- (c) 12.5°
- (d) 10°
- (e) 72°

Q34. Two-fifth cars of company D remains unsold. If 65% of them are of Petrol cars, then find the sold diesel cars of company D.

- (a) 84
- (b) 156
- (c) 76
- (d) 60
- (e) 66

_	l number of petrol cars manufactured by company C and F together is what percentage apany A and D together.
•	er company X manufactures 20% more cars than company B and the ratio of diesel to nanufactured by it is 5:3, then find the difference between petrol and diesel cars d by it.
(a) 144	
(b) 184	
(c) 224	
(d) 326	
(e) 420	
027 Find the	average number of noticel gave manufactured by companies A. P. and C.
•	e average number of petrol cars manufactured by companies A, B and C.
(a) 340	
(b) 320	
(c) 220	
(d) 260	
(e) 240	
cost of paintin	t of painting the walls of a cubical room is Rs.8640 at the rate of 15 Rs. /m². Find the ng four walls of a cuboidal room having length and breadth 2 m more and 2 m less than respectively and height is equal to side of cube. (Note: Rate of painting is same in both
the cases)	
(a) Rs.6480	
(b) Rs.5600	
(c) Rs.6820	
(d) Rs.8640	
(e) Rs.7250	
	g, there are total 15 balls of red and blue color. Find the number of blue balls, if f getting both balls of same color when two balls are picked randomly is $17/35$. (Blue alls)
(a) 8	
(b) 9	
(c) 10	
(d) 11	
(e) 12	
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Q40. Two pipes A and B can fill a tank in 40 min and 60 min respectively. Find the time taken by the pipes A, B and C to fill the tank, if tank C is emptying pipe whose efficiency is 25% more than that of pipe B.
(a) 48 min
(b) 54 min
(c) 45 min
(d) 42 min
(e) 52 min
(e) 32 mm
Q41. The monthly income of Rajesh is 22.5% more than that of Rakesh while expenditure of Rajesh
is Rs.15000 more than that of Rakesh. If savings of Rajesh is Rs.3000 more than savings of Rakesh,
then find the income Rakesh.
(a) Rs.75000
(b) Rs.72000
(c) Rs.84000
(d) Rs.98000
(e) Rs.80000
Q42. The ratio of milk and water in mixture A is 9: 5. The quantity of milk in mixture B is 20% more that in mixture A and quantity of water in mixture A is 25% more than that in mixture B. If sum of quantity of water of both mixture is 54 liters, then find the total quantity of mixture in A. (a) 72 liters (b) 64 liters (c) 84 liters (d) 75 liters (e) 80 liters Q43. Abhishek took a loan of Rs.1,20,000 from the bank at the rate of 8% compound interest for two years. He invested 3/4 th of the loan amount in a scheme which offers 10% compound interest annually for 2 years. Find his profit/loss at the end of 2 years, if he keeps rest of the money. (a) Rs.600 profit (b) R.300 profit (c) Rs.700 loss (d) Rs.700 profit (e) Rs.1068 loss
Q44. Dev and Deepak start a business in partnership. Dev invested 25% more capital than Deepak but he invested for 4 months less than that by Deepak. If the profit share of Deepak is Rs.4000, which is Rs.1000, more than that of Dev, then find the time of investment of Dev. (a) 10 months (b) 8 months (c) 6 months (d) 4 months (e) 9 months

Q45. Rahul is going from Gurgaon to Agra from his car at the speed of 80 kmph. After 120 km, he
reduces his speed by 12.5% and completes the whole journey in 5.5 hours. Find total time taken by
him to cover the same distance, if he had reduced the speed after two hours.
(a) 6 hours

- (a) 6 hours
- (b) 5.2 hours
- (c) $5\frac{3}{2}$ hours
- (d) $4\frac{3}{7}$ hours
- (e) 4.8 hours

Q46. The selling price of one chair and one table is Rs.480 each. If chair was sold at the loss of 25% and table was sold at the profit of 60%, then find the difference between the cost price of chair and table.

- (a) Rs.360
- (b) Rs.280
- (c) Rs.300
- (d) Rs.340
- (e) Rs.350

Q47. A shopkeeper marked an article 80% above the cost price. Sumit purchased the article at the discount of 50% and sold it to Ayush at a profit of 25%. If Ayush purchased the article in Rs. 4500, then find the cost price of the article.

- (a) Rs.4200
- (b) Rs.4800
- (c) Rs.3600
- (d) Rs.4000
- (e) Rs.3900

Directions (48-52): What will come in place of question mark (?) in the following questions.

72, 113, ?, Q48.35, 203, 256, 315

- (a) 151
- (b) 167
- (c) 163
- (d) 156
- (e) 145

Q49.17, 28, 50, 83, 127, 182, ?

- (a) 245
- (b) 251
- (c) 248
- (d) 254
- (e) 242

Q50.?, 8, 19, 61, 249, 1251 (a) 4 (b) 6(c) 5(d) 10 (e) 8Q51.4, 5, 13, 22, 86, ? (a) 111 (b) 113 (c) 107(d) 119 (e) 117 Q52.8, 30, 49, 73, 90, 116, ? (a) 137 (b) 131



- Q53. The average weight of the students of a class is 45 kg. If the weight of a student calculated mistakenly as 84 kg instead of 48 kg, due to which the average weight of the students increased by 0.9, then find the total no. of students in the class.
- (a) 45

(c) 133 (d) 129 (e) 135

- (b) 44
- (c) 50
- (d) 40
- (e) 48
- Q54. A boat covers a certain distance in downstream in 90 minutes. If the ratio of speed of boat in still water and speed of stream is 3: 1, then find the time taken by boat to cover the same distance in upstream.
- (a) 2.5 hours
- (b) 3.5 hours
- (c) 2 hours
- (d) 1.5 hours
- (e) 3 hours
- Q55. Rahul and Rajeev can complete a work in 17 days while Rahul, Rajeev & Raj together can complete the same work in 12 days. If Rahul is 60% more efficient than Raj, then find the time taken by Rajeev to complete the whole work.

- (a) 51 days
- (b) 55 days
- (c) 47 days
- (d) 42 days
- (e) 60 days

Directions (56-60): In each of these questions, two equation (I) and (II) are given. You have to solve both the equations and give answer.

056.

$$I. x^2 - 7x - 260 = 0$$

II.
$$y^2 - 3y - 54 = 0$$

- (a) If x > y
- (b) If $x \ge y$
- (c) If x < y
- (d) If $x \le y$
- (e) If x = y or no relation can be established between x and y.

Q57.

$$I. 2x^2 + 16x + 32 = 0$$

$$II. 2y^2 + 45y - 98 = 0$$

- (a) If x > y
- (b) If $x \ge y$
- (c) If x < y
- (d) If $x \le y$
- (e) If x = y or no relation can be established between x and y.

Q58.

I.
$$x = \sqrt{289}$$

II.
$$y^2 = 289$$

- (a) If x > y
- (b) If $x \ge y$
- (c) If x < y
- (d) If $x \le y$
- (e) If x = y or no relation can be established between x and y.

Q59.

$$I. x^2 - 15x + 44 = 0$$

II.
$$y^2 - 11y - 80 = 0$$

- (a) If x > y
- (b) If $x \ge y$
- (c) If x < y
- (d) If $x \le y$
- (e) If x = y or no relation can be established between x and y.

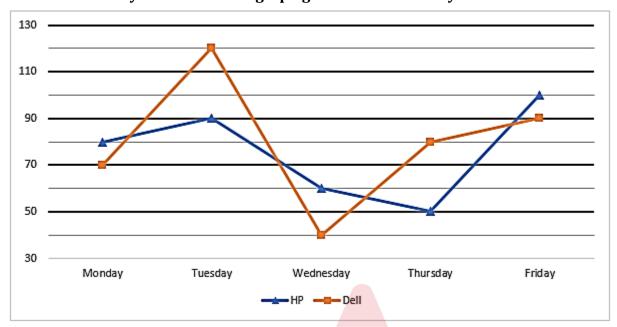
060.

$$I. x^2 - 20x + 96 = 0$$

II.
$$y^2 - 3y - 28 = 0$$

- (a) If x > v
- (b) If $x \ge y$
- (c) If x < y
- (d) If $x \le y$
- (e) If x = y or no relation can be established between x and y.

Directions (61-65): The line graph given below shows the number of laptops (HP and Dell) sold by Hemant in five days. Read the Line graph given below carefully and answer the following questions.



Q61. What is the difference between the average number of HP laptop sold by Hemant on Wednesday, Thursday and Friday and that of Dell laptop on Tuesday, Wednesday and Thursday?

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

Q62. If price of HP laptop is 20% more than that of Dell laptop, then find the amount he earned on Wednesday is what percentage of amount he earned on Thursday.

- (a) 60%
- (b) 75%
- (c) 50%
- (d) 100%
- (e) 80%

Q63. Total laptops sold on Tuesday is what percentage more/less than that on Monday.

- (a) 20%
- (b) 40%
- (c) 60%
- (d) 50%
- (e) 25%

Q64. From Monday to Friday, 20% of total Dell laptops found defective while 60% of remaining
remains unsold. Find the total no. of Dell laptops.
(a) 1250
(b) 1000
(c) 750
(d) 600
(e) 1500
Q65. If the ratio of no. of HP and Apple laptops sold by shopkeeper on Wednesday, Thursday and
Friday is 4: 7, 5: 3 and 4: 5 respectively, then find the total apple laptops sold by shopkeeper on same
days.
(a) 240
(b) 220
(c) 280
(d) 250
(e) 260
Directions (66-70): Study the following information and answer the questions below:
Eight persons sit in a linear row and face north. All of them work in a company on different designations
viz. CMD, CEO, COO, CFO, Manager, AM, HR and Intern.
S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons
sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. Four
persons sit between V and U who is COO. The number of persons sit left of R is same as the number of
persons sit right of W. R is not intern. The one who is AM sits second left of Q who is CFO. The one who is
CEO sits left of the one who is Manager but sits right of the one who is HR.
Q66. Who among the following is HR of the company?
(a) T
(b) V
(c) S
(d) R
(e) None of these
Q67.Who among the following sits second to the right of Q?
(a) R
(b) S
(c) V
(d) T
(e) None of these

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Q68. The number of persons sit left of U is same as the number of persons sit right of ____. (a) S (b) Q (c) V (d) T (e) None of these Q69. How many persons sit between R and V? (a) Four

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

Q70. Four of the following five are alike in a certain way so form a group, which of the following does not belong to that group?

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

Directions (71-73): In the question below three statements are given followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Q71. Statements:

Only a few second is minute.

Only minute is hour.

Few minute is time.

Conclusions:

- I. Some hour can be time.
- II. All time can be second.
- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Either conclusion I or II follows
- (d) Both conclusions I and II follow
- (e) Neither conclusion I nor II follows

Q72. Statements:

Only a few Chess is Carrom.

Some Carrom is Ludo.

Mostly Ludo is Monopoly.

Conclusions:

I. All Carrom can be Chess.

II. Some Monopoly can be Chess.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Either conclusion I or II follows
- (d) Both conclusions I and II follow
- (e) Neither conclusion I nor II follows

Q73. Statements:

Only a few September is October.

All November is September.

Only September is December.

Conclusions:

I. All December can be November.

II. Some November can be October.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Either conclusion I or II follows
- (d) Both conclusions I and II follow
- (e) Neither conclusion I nor II follows

Directions (74-78): Study the information carefully and answer the questions given below.

Ten persons were born in five different months of the same year starting from August to December, but on two different dates, i.e., 10th and 15th. K was born in the month which has odd number of days. Six persons were born in between K and D who was born after K. D was not born in the last. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G. R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. Z was born before V but after H.

Q74. How many persons were born between V and P?

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

Q75. Who among the following was born on 15th September?

- (a) H
- (b) F
- (c) Z
- (d) V
- (e) None of these

Q76. H was born in which of the following month?

- (a) November
- (b) August
- (c) September
- (d) October
- (e) None of these

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Q77. Who am (a) S (b) F (c) Z (d) D (e) None of the	ong the following is third youngest person?
_	the following five are alike in a certain way so form a group, which of the following ng to that group?
Seven hockey 14m west of k	9-81): Answer the questions based on the information given below. players H, I, J, K, L, M & N are at different positions with each other in a hockey ground. N is X who is 10m west of H. J is east of N. The distance between H and N is twice the distance N. L is 16m north of J. M is 12m east of L. M is 10m north of I.
Q79. What is (a) 18m (b) 12m (c) 16m (d) 14m (e) None of the	the shortest distance between J and H? e above
Q80. In which (a) North-east (b) North-wes (c) South-east (d) South-wes (e) None of the	LAddal2417
Q81. In which (a) North-east (b) North (c) South-east (d) South (e) None of the	
between the direction)? (a) Five (b) Six (c) Seven (d) Eight (e) None of the	
17	<u>www.bankersadda.com</u> <u>Adda247 App</u>

Directions (83-87): Study the following information carefully and answer the questions given below-

Six persons are living on different floors of six storey building. Ground floor is numbered as 1^{st} floor and just above the floor is numbered as 2^{nd} floor and so on till the topmost floor is numbered as 6^{th} floor. For Diwali Each of them made rangoli on their floor in different colours.

B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. C lives above F. E does not make rangoli in violet colour.

Q83. How many persons live between E and F?

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

Q84. Which of the following colour does D use?

- (a) Yellow
- (b) Green
- (c) Blue
- (d) Purple
- (e) None of these

Q85. The number of persons lives above D is one less than the number of persons live below ____.

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

Q86. Which of the following is true?

- I. A does not live below the one who made rangoli in yellow
- II. C does not make rangoli in hazel colour
- III. E lives on the 2nd floor
- (a) Only III
- (b) Both I and III
- (c) Only II
- (d) Both I and II
- (e) None is true

Q87. Who lives on the topmost floor?

- (a) A
- (b) The one who made rangoli in purple
- (c) The one who made rangoli in Hazel
- (d) C
- (e) None of these

Directions (88-90): In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer.

Q88.

Statements: $P > H \ge T < U = L \le G < J$

- Conclusions: I: G > T II: $U \le P$
- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Q89.

Statements: $M \ge D = K \ge P = F \le V = L$

Conclusions: I: D> V II: $K \le L$

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

090.

Statements: $A < M \le Y = P > Z \ge D$

Conclusions: I: Z<M II. P>A

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Directions (91-95): Study the given information and answer the questions based on it.

Ten persons from A to J sit around a circular table facing towards the centre but not necessarily in the same order. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Two persons sit between A and G who sits immediate right of E. Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. H sits immediate right of C. Equal number of persons sit between D and J from both sides.

I

Q91. How many persons sit between D and G when counted from left of D?

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

Q92. Who among the following person sits 4 th to the left of H? (a) B (b) J (c) D (d) F (e) G
Q93. Who among the following person face F? (a) J (b) D (c) A (d) C (e) None of these
Q94. What is the position of E with respect to C? (a) 2 nd to the left (b) 3 rd to the left. (c) 4 th to the right. (d) 3 rd to the left.
Q95. Number of persons sit between C and G is same as the number of persons sit between and
(a) F, C (b) B, H (c) A, I (d) D, E (e) I, F
Directions (96-98): Study the following information carefully and answer the questions given below. In a three-generation family of eight persons there is three married couple. M is the only daughter-in -law of V. J has two children and he has one sibling. S is daughter of L who is parent of J. S is sister-in-law of M and is unmarried. U is nephew of S. T is sister-in-law of R who has no siblings. V is not a mother of J.
Q96. How is L related to T? (a) Grand father (b) Grand mother (c) Mother (d) Sister (e) Father
Q97. Which among the following statement(s) is/are not true? I. R is daughter-in-law of S II. U is brother of T III. Number of female members are more than male members (a) Only I (b) Both I and III (c) Only III (d) Both II and III (e) All I, II and III

Q98. Four of the following five are alike in a certain way and hence form a group	p. Find the one who
doesn't belong to the group?	

- (a) L
- (b) S
- (c) R
- (d) J
- (e) T

Directions (99-100): Study the following information carefully and answer the questions given below.

In a certain code language:

"wake of the reserve" is coded as "mn pg ht rs"

"reserve interest wake rate" is coded as "rs mn st ej"

"rate of interest arise" is coded as "pg ij st ej"

"the reserve of arise "is coded as "ht rs pg ij"

Q99. What is the code for the words "of the"?

- (a) pg st
- (b) ht ij
- (c) pg ht
- (d) mn ht
- (e) Can't be determined

Q100. Which among the following word is coded as "rs"?

- (a) Arise
- (b) Wake
- (c) Either "arise" or "wake"
- (d) Reserve
- (e) Either "reserve" or "wake"

Solutions

S1. Ans.(d)

Sol. For justification, refer to the last paragraph of the passage, stating, "It took China more than a decade of subsidies... to force the domestic market to compete directly with an industry leader."

This validates the truth of options (a) and (b), whereas option (c) is not true as it is nowhere mentioned in the passage.

S2. Ans.(a)

Sol. Only option (a) is specifically stated in the passage, and for validation refer to the lines in the first passage which state, "China has one of the fastest growing EV markets, with sales expected to double this year to about six million vehicles — more than the rest of the world combined."

S3. Ans.(c)

Sol. For justification of the truth of option (c), refer to the lines in the second paragraph, which state, "Automakers complained that the credit did not apply to many current E.V. models, and that the sourcing requirements could increase the cost of building an E.V." All other options are either not established as true or are half-truths, and vague references to all can be found in the second paragraph.

S4. Ans.(d)

Sol. For justification of option (d), refer to the sentence in the first paragraph of the passage which states, "While other E.V. markets are still heavily dependent on subsidies and financial incentives, China has entered a new **phase**: Consumers are weighing the merits of electric vehicles against gas-powered cars based on features and price without much consideration of state support."

Further, refer to the line in the last paragraph of the passage stating, "Some industry experts believe competition and dynamism are now driving the Chinese market, not government subsidies."

S5. Ans.(c)

Sol. For justification of option (c), refer to the following lines in the second paragraph: "This year, a quarter of all new cars purchased in China will be an all-electric vehicle or a plug-in hybrid." None of the other options are established as being true in the passage.

S6. Ans.(b)

Sol. The correct meaning of "rolled out the red carpet for" is "to give a guest special treatment". The meaning is apparent from the context too as the paragraph indicates that the Chinese government welcomed the leading manufacturer of EVs to bring in competition in domestic market.

S7. Ans.(d)

Sol. phase – a distinct period or stage in a series of events or a process of change or development condition – the state of something with regard to its appearance, quality, or working order epoch – a particular period of time in history or a person's life aspect – a particular part or feature of something episode – a single event or group of related events transition – the process or a period of changing from one state or condition to another

S8. Ans.(b)

Sol. "To mitigate" is defined as "to make (something bad) less severe, serious, or painful." to isolate – to identify (something) and examine or deal with it separately to aggravate – to make (a problem, injury, or offence) worse or more serious to alleviate – to make (suffering, deficiency, or a problem) less severe to devastate – to destroy or ruin

to acclimate – to respond physiologically or behaviourally to a change in an environmental factor under controlled conditions

S9. Ans.(b)

Sol. Only option (b) gives the pair of words where both fit into the blanks properly while making the sentence grammatically and contextually correct. The other options either convey different meanings or tenses, use wrong forms of the word, or conflict with singular-plural appropriation, for example.

\$10. Ans.(a)

Sol. Only option (a) gives the pair of words where both fit into the blanks properly while making the sentence grammatically and contextually correct. The other options either convey different meanings or tenses, use wrong forms of the word, or conflict with singular-plural appropriation, for example.

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Some of the words have been defined below for better understanding.

nominal – existing in name only neglect – fail to care for properly

S11. Ans.(a)

Sol. Only option (a) gives the pair of words where both fit into the blanks properly while making the sentence grammatically and contextually correct. The other options either convey different meanings or tenses, use wrong forms of the word, or conflict with singular-plural appropriation, for example.

S12. Ans.(c)

Sol. Only option (c) gives the pair of words where both fit into the blanks properly while making the sentence grammatically and contextually correct. The other options either convey different meanings or tenses, use wrong forms of the word, or conflict with singular-plural appropriation, for example.

Some of the words have been defined below for better understanding.

squander - allow (an opportunity) to pass or be lost

hoist - raise (something) by means of ropes and pulleys

S13. Ans.(d)

Sol. Only option (d) gives the pair of words where both fit into the blanks properly while making the sentence grammatically and contextually correct. The other options either convey different meanings or tenses, use wrong forms of the word, or conflict with singular-plural appropriation, for example.

S14. Ans.(a)

Sol. The erroneous sentence is option (a). Here 'convert' should be replaced with 'converted' to make sentence grammatically correct. The given is passive sentence and its correct structure will be, 'to+ be+ V3'.

S15. Ans.(c)

Sol. In sentence (c), 'built' should be in base form of verb because 'to' is followed by base form. 'Build' is base form while 'built' is v3 form.

S16. Ans.(b)

Sol. The erroneous sentence is option (b). Here 'while' should be changed with 'during' because we use 'during' followed by a noun. Usually, that noun I s some kind of event that happens over time. On the other hand, we use while followed by a gerund - that's the -ing verb.

During: throughout the course or duration of (a period of time).

While: whereas (indicating a contrast).

\$17. Ans.(d)

Sol. The erroneous sentence is option (d). Here 'allowing' should be in past form 'allowed' because the given sentence is in past perfect tense and its correct structure will be, 'had+ V3'

S18. Ans.(e)

Sol. Going through the given sentences, it is clear that the paragraph talks about Cheetah's extinction from Indian forest and subsequently Indian government's recent step to reintroduce it. Here, only statement (C) can be the first statement as it successfully introduces the premise of the paragraph by stating the reason behind the extinction of cheetahs. Statement (A) should be followed by sentence as it gives details about the reason, which is then followed by statement (E). The introduction of cheetahs into the Indian wild life is mentioned in the statement (B), making it the fourth statement of the rearrangement and the concluding statement is statement (D) which gives the importance of the translocation. Hence, the coherent rearrangement will be CAEBD.

S19. Ans.(d)

Sol. Going through the given sentences, it is clear that the paragraph talks about Cheetah's extinction from Indian forest and subsequently Indian government's recent step to reintroduce it. Here, only statement (C) can be the first statement as it successfully introduces the premise of the paragraph by stating the reason behind the extinction of cheetahs. Statement (A) should be followed by sentence as it gives details about the reason, which is then followed by statement (E). The introduction of cheetahs into the Indian wild life is mentioned in the statement (B), making it the fourth statement of the rearrangement and the concluding statement is statement (D) which gives the importance of the translocation. Hence, the coherent rearrangement will be CAEBD.

S20. Ans.(c)

Sol. Going through the given sentences, it is clear that the paragraph talks about Cheetah's extinction from Indian forest and subsequently Indian government's recent step to reintroduce it. Here, only statement (C) can be the first statement as it successfully introduces the premise of the paragraph by stating the reason behind the extinction of cheetahs. Statement (A) should be followed by sentence as it gives details about the reason, which is then followed by statement (E). The introduction of cheetahs into the Indian wild life is mentioned in the statement (B), making it the fourth statement of the rearrangement and the concluding statement is statement (D) which gives the importance of the translocation. Hence, the coherent rearrangement will be CAEBD.

S21. Ans.(b)

Sol. Going through the given sentences, it is clear that the paragraph talks about Cheetah's extinction from Indian forest and subsequently Indian government's recent step to reintroduce it. Here, only statement (C) can be the first statement as it successfully introduces the premise of the paragraph by stating the reason behind the extinction of cheetahs. Statement (A) should be followed by sentence as it gives details about the reason, which is then followed by statement (E). The introduction of cheetahs into the Indian wild life is mentioned in the statement (B), making it the fourth statement of the rearrangement and the concluding statement is statement (D) which gives the importance of the translocation. Hence, the coherent rearrangement will be CAEBD.

S22. Ans.(a)

Sol. Going through the given sentences, it is clear that the paragraph talks about Cheetah's extinction from Indian forest and subsequently Indian government's recent step to reintroduce it. Here, only statement (C) can be the first statement as it successfully introduces the premise of the paragraph by stating the reason behind the extinction of cheetahs. Statement (A) should be followed by sentence as it gives details about the reason, which is then followed by statement (E). The introduction of cheetahs into the Indian wild life is mentioned in the statement (B), making it the fourth statement of the rearrangement and the concluding statement is statement (D) which gives the importance of the translocation. Hence, the coherent rearrangement will be CAEBD.

S23. Ans.(d)

Sol. Statement (i) and statement (iii) have the correct usage of word 'irrational' which means not logical or reasonable.

S24. Ans.(c)

Sol. Statement (i) and statement (ii) have the correct usage of word 'escalate' which means 'increase rapidly'

S25. Ans.(b)

Sol. Only statement (iii) has the correct usage of the word 'reckon' which means 'consider or regard in a specified way.'

S26. Ans.(b)

Sol. 'thretening' is wrongly spelt and the correct spelling will be 'threatening'.

S27. Ans.(d)

Sol. 'endurence' is wrongly spelt and the correct spelling is 'endurance'.

S28. Ans.(e)

Sol. All the highlighted words are correct

S29. Ans.(d)

Sol. 'compatition' is wrong and the correct spelling is 'competition'

S30. Ans.(b)

Sol. 'reserch' is wrongly spelt and the correct spelling is 'research'.

S31. Ans.(c)

Sol.

Total Diesel cars manufactured by company
$$D = 300 \times \frac{25}{12.5} - 210 \times \frac{30}{14}$$

$$=600-450=150$$

Total Diesel cars manufactured by company B =
$$300 \times \frac{20}{12.5} - 210 \times \frac{16}{14}$$

$$=480-240=240$$

So, required sum =
$$150 + 240 = 390$$

S32. Ans.(b)

Sol.

Diesel cars manufactured by company A =
$$300 \times \frac{15}{12.5} - 210 \times \frac{20}{14}$$

$$= 360 - 300 = 60$$

Diesel cars manufactured by company
$$C = 300 \times \frac{10}{12.5} - 210 \times \frac{12}{14}$$

$$= 240 - 180 = 60$$

Total cars manufactured by
$$F = 300 \times \frac{17.5}{12.5} = 420$$

So, required ratio =
$$\frac{120}{420} = \frac{2}{7}$$

S33. Ans.(b)

Sol.

Diesel cars manufactured by car
$$E = 300 - 210 = 90$$

Total diesel cars manufactured by all the 6 companies =
$$300 \times \frac{100}{12.5} - \frac{210}{14} \times 100$$

$$= 2400 - 1500 = 900$$

So, required angle =
$$\frac{90}{900} \times 360 = 36^{\circ}$$

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\$34. Ans.(e)

Sol.

Total cars manufactured by D = $300 \times \frac{25}{125} = 600$

Total unsold cars = $\frac{2}{5} \times 600 = 240$

Total diesel car manufactured by D = $600 - \frac{210}{14} \times 30 = 150$

Unsold diesel cars of company D = $240 \times \frac{35}{100} = 84$

So, total sold diesel cars = 150 - 84 = 66

\$35. Ans.(b)

Sol.

Required
$$\% = \frac{12+8}{20+30} \times 100 = 40\%$$

\$36. Ans.(a)

Sol.

Total cars manufactured by company $X = \frac{120}{100} \times \frac{20}{12.5} \times 300 = 576$

Required difference = $\frac{2}{8} \times 576 = 144$

\$37. Ans.(e)

Sol.

Total cars manufactured by A, B and C = $210 \times \frac{48}{14} = 720$

Required average = $\frac{720}{3}$ = 240

\$38. Ans.(d)

Sol.

Let the side of the wall of cubical room be 'a' meter.

So, total area to paint = $4a^2$

Area of the one wall of cubical room = $8640 \times \frac{1}{4} \times \frac{1}{15} = 144 \text{ m}^2$

Side of the wall = $a = \sqrt{144} = 12m$

Let length, breadth and height of rectangular room be l, b and h meter respectively.

Total area of the wall of rectangular room to paint = 2h(l+b)

So, required cost = $2 \times 12 \times (14 + 10) \times 15$

= Rs.8640

\$39. Ans.(b)

Sol.

Let number of blue balls be x.

$$\Rightarrow \frac{x}{15} \times \frac{x-1}{14} + \frac{15-x}{15} \times \frac{14-x}{14} = \frac{17}{35}$$
$$\Rightarrow x(x-1) + (210 - 29x + x^2) = 102$$

$$\Rightarrow x(x-1) + (210 - 29x + x^2) = 10$$

$$\Rightarrow x^2 - 15x + 54 = 0$$

$$\implies x = 6,9$$

So, number of blue balls is 9.

\$40. Ans.(a)

Sol.

Let total capacity of tank be 120 units (LCM of 40 & 60)

So, efficiency of pipe A =
$$\frac{120}{40}$$
 = 3 units/min

Let total capacity of tank be 120 units (LCM of So, efficiency of pipe A =
$$\frac{120}{40}$$
 = 3 units/min

And efficiency of pipe B = $\frac{120}{60}$ = 2 units/min

Efficiency of pipe C =
$$2 \times \frac{125}{100} = 2.5 \text{ units/min}$$

So, required time = $\frac{120}{3+2-2.5} = \frac{120}{2.5} = 48 \text{ min}$

So, required time =
$$\frac{120}{3+2-2.5} = \frac{120}{2.5} = 48 \text{ min}$$

S41. Ans.(e)

Sol.

Let income of Rakesh be Rs. 40x.

Income of Rajesh =
$$40x \times \frac{122.5}{100} = 49x$$

Let expenditure of Rakesh be y.

Expenditure of Rajesh = y + 15000

ATQ

$$(49x - y - 15000) - (40x - y) = 3000$$

$$9x - 15000 = 3000$$

$$x = 2000$$

So, required income of Rakesh = 40x = Rs.80000

S42. Ans.(c)

Sol.

Let quantity of milk and water in the mixture A be 9l and 5l respectively.

Quantity of milk in mixture B =
$$9l \times \frac{120}{100} = \frac{54}{5}l$$

And quantity of water in mixture B = $5l \times \frac{4}{\epsilon} = 4l$

ATQ

$$5l + 4l = 54$$

$$l = 6$$

So, required quantity = 9l + 5l = 14l= 84 liter

\$43. Ans.(e)

Sol.

Amount to be paid by Abhishek to the bank =
$$1,20,000 \times (1 + \frac{8}{100})^2$$

$$= 1,20,000 \times \frac{27}{25} \times \frac{27}{25} = Rs. 1,39,968$$

Amount he got from scheme after 2 years = $120000 \times \frac{3}{4} \times \frac{110}{100} \times \frac{110}{100}$

$$= Rs. 1,08,900$$

Total amount which Abhishek has = 1,08,900 + 30,000 = Rs. 1,38,900

So, required amount = 1,39,968 - 138900 = Rs. 1068 (loss)

S44. Ans.(c)

Sol.

Let investment of Deepak be Rs. 4x.

Investment of Dev =
$$4x \times \frac{125}{100} = 5x$$

Let time of investment of Deepak is T months.

Time of investment for Dev = T - 4

ATQ

Ratio of profit share of Dev and Deepak =

$$\Rightarrow \frac{5x \times (T-4)}{4x \times T} = \frac{3000}{4000}$$

$$\Rightarrow 5T - 20 = 3T$$

$$\Rightarrow T = 10$$

So, time of investment of Dev = T - 4 = 6 months

S45. Ans.(c)

Sol.

Let the total distance be D km.

Reduced speed = $80 \times \frac{87.5}{100} = 70 \text{ kmph}$

$$\frac{120}{80} + \frac{D - 120}{70} = 5.5$$

$$\frac{\frac{80}{80} + \frac{70}{70}}{\frac{D-120}{70}} = 4$$

$$D = 400 \, km$$

Now,

Distance covered by him 2 hours = $80 \times 2 = 160 \text{ km}$

So, required time =
$$2 + \frac{400 - 160}{70}$$

$$=2+\frac{24}{7}=\frac{38}{7}=5\frac{3}{7}$$
 hours

S46. Ans.(d)

Sol.

Cost price of chair =
$$480 \times \frac{100}{75} = Rs.640$$

Cost price of chair =
$$480 \times \frac{100}{75} = Rs.640$$

Cost price of table = $480 \times \frac{100}{160} = Rs.300$

So, required difference =
$$640 - 300$$

$$= Rs.340$$

S47. Ans.(d)

Sol.

Let cost price of the article be Rs. x.

$$x \times \frac{180}{100} \times \frac{50}{100} \times \frac{125}{100} = 4500$$

$$x = 4000$$

So, cost price of article is Rs.4000

S48. Ans.(d)

Sol.

The pattern of the series is-

Addition of prime number

$$35 + 37 = 72$$

$$72 + 41 = 113$$

$$113 + 43 = 156$$

$$156 + 47 = 203$$

$$203 + 53 = 256$$

$$256 + 59 = 315$$

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S49. Ans.(c)

Sol.

The pattern of the series is-

$$17 + 11 = 28$$

$$28 + 22 = 50$$

$$50 + 33 = 83$$

$$83 + 44 = 127$$

$$127 + 55 = 182$$

$$182 + 66 = 248$$

\$50. Ans.(b)

Sol.

The pattern of the series is-

$$6 \times 1 + 2 = 8$$

$$8 \times 2 + 3 = 19$$

$$19 \times 3 + 4 = 61$$

$$61 \times 4 + 5 = 249$$

$$249 \times 5 + 6 = 1251$$

S51. Ans.(a)

Sol.

The pattern of the series is-

$$4 + 1^2 = 5$$

$$5 + 2^3 = 13$$

$$13 + 3^2 = 22$$

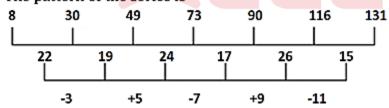
$$22 + 4^3 = 86$$

$$86 + 5^2 = 111$$

S52. Ans.(b)

Sol.

The pattern of the series is-



S53. Ans.(d)

Sol.

Let total number of students be x.

$$45x - 84 + 48 = x \times 44.1$$

$$45x - 44.1x = 36$$

$$x = \frac{36}{0.9} = 40$$

So, total number of students in class is 40.



\$54. Ans.(e)

Sol. Let the distance be D km and speed of boat in still water and speed of stream be 3a and a kmph respectively.

ATQ

$$D = (3a + a) \times 1.5$$

$$D = 6a$$

So, required time =
$$\frac{D}{3a-a}$$

$$=\frac{6a}{2a}=3$$
 hours

\$55. Ans.(a)

Sol.

Let total work (L.C.M. of 17 & 12) = 204 units

Efficiency of Rahul and Rajeev = $\frac{204}{17}$ = 12 unit/day Efficiency of Rahu, Rajeev & Raj = $\frac{204}{12}$ = 17 unit/day

Efficiency of Raj = 17 - 12 = 5 unit/day

Efficiency of Rahul = $5 \times \frac{160}{100} = 8 \text{ unit/day}$

Efficiency of Rajeev = 12 - 8 = 4 umit/day

Required time = $\frac{204}{4}$ = 51 days

\$56. Ans.(e)

Sol.

$$I. x^2 - 7x - 260 = 0$$

$$x^2 - 20x + 13x - 260 = 0$$

$$x(x-20) + 13(x-20) = 0$$

$$(x+13)(x-20)=0$$

$$x = 20, -13$$

II.
$$v^2 - 3v - 54 = 0$$

$$y^2 - 9y + 6y - 54 = 0$$

$$y(y-9)+6(y-9)=0$$

$$(y-9)(y+6)=0$$

$$y = 9, -6$$

So, no relation can be established between x and y.

\$57. Ans.(e)

Sol.

$$I. 2x^2 + 16x + 32 = 0$$

$$2x^2 + 8x + 8x + 32 = 0$$

$$2x(x+4) + 8(x+4) = 0$$

$$(2x+8)(x+4)=0$$

$$x = -\frac{8}{2}, -4$$

$$x = -4, -4$$

II.
$$2y^2 + 45y - 98 = 0$$

$$2y^2 + 49y - 4y - 98 = 0$$

$$y(2y-49)-2(2y+49)=0$$

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$$(y-2)(2y+49) = 0$$
49

 $y = 2, -\frac{49}{2}$

So, no relation can be established between x and y.

S58. Ans.(b)

Sol.

I.
$$x = \sqrt{289}$$

$$x = 17$$

II.
$$y^2 = 289$$

$$y = 17, -17$$

So, x≥y

S59. Ans.(e)

Sol.

$$I. x^2 - 15x + 44 = 0$$

$$x^2 - 11x - 4x + 44 = 0$$

$$x(x-11) - 4(x-11) = 0$$

$$(x-4)(x-11)=0$$

$$x = 4, 11$$

II.
$$y^2 - 11y - 80 = 0$$

$$v^2 - 16v + 5v - 80 = 0$$

$$y(y-16) + 5(y-16) = 0$$

$$(y+5)(y-16)=0$$

$$y = 16, -5$$

So, no relation can be established between x and y.

S60. Ans.(a)

Sol.

$$I. x^2 - 20x + 96 = 0$$

$$x^2 - 12x - 8x + 96 = 0$$

$$x(x-12) - 8(x-12) = 0$$

$$(x-8)(x-12)=0$$

$$x = 8.12$$

II.
$$y^2 - 3y - 28 = 0$$

$$y^2 - 7y + 4y - 28 = 0$$

$$y(y-7) + 4(y-7) = 0$$

$$(y+4)(y-7)=0$$

$$y = 7, -4$$

S61. Ans.(b)

Sol

Average number of HP laptops sold on Wednesday, Thursday and Friday = $\frac{60+50+100}{3}$

$$=\frac{210}{3}=70$$

Average number of Dell laptops sold on Tuesday, Wednesday and Thursday = $\frac{120+40+80}{3}$

$$=\frac{240}{3}=80$$

So, required difference = 80 - 70 = 10

Ī

S62. Ans.(e)

Sol.

Let cost price of Dell laptop be Rs.5x.

Cot price of HP laptop = $5x \times \frac{120}{100} = Rs. 6x$

Amount earned by Hemant on Wednesday = $6x \times 60 + 5x \times 40 = 560x$

Amount earned by Hemant on Thursday = $6x \times 50 + 5x \times 80 = 700x$

So, required
$$\% = \frac{560x}{700x} \times 100$$

= 80%

S63. Ans.(b)

Sol.

Total laptops sold on Tuesday = 90 + 120 = 210

Total laptops sold on Monday = 80 + 70 = 150

Required
$$\% = \frac{60}{150} \times 100 = 40\%$$

S64. Ans.(a)

Sol.

Total Dell laptops sold from Monday to Friday = 70 + 120 + 40 + 80 + 90

= 400

So, total Dell laptops = $400 \times \frac{100}{80} \times \frac{100}{40}$

= 1250

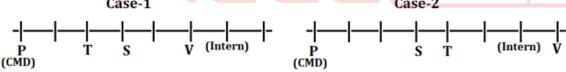
S65. Ans.(e)

Sol

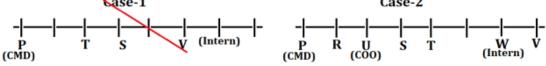
Total Apple laptops sold = $60 \times \frac{7}{4} + 50 \times \frac{3}{5} + 100 \times \frac{5}{4} = 105 + 30 + 125$ = 260

S66. Ans.(d)

Sol. S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. There are two possibilities-

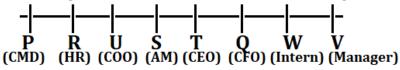


Four persons sit between V and U who is COO. From this condition case-1 will be eliminated. The number of persons sit left of R is same as the number of persons sit right of W. R is not intern.



The one who is AM sits second left of Q who is CFO. The one who is CEO sits left of the one who is Manager but sits right of the one who is HR. The final arrangement is-

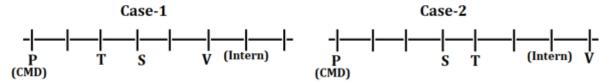
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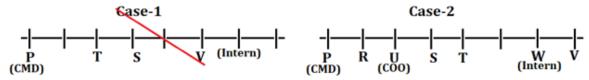
R is HR of the company.

S67. Ans.(c)

Sol. S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. There are two possibilities-



Four persons sit between V and U who is COO. From this condition case-1 will be eliminated. The number of persons sit left of R is same as the number of persons sit right of W. R is not intern.

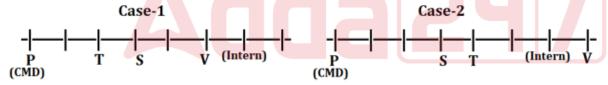


The one who is AM sits second left of Q who is CFO. The one who is CEO sits left of the one who is Manager but sits right of the one who is HR. The final arrangement is-

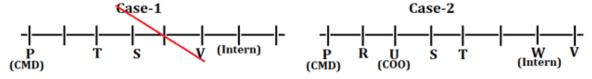
V sits second to the right of Q.

S68. Ans.(b)

Sol. S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. There are two possibilities-

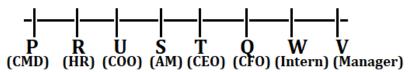


Four persons sit between V and U who is COO. From this condition case-1 will be eliminated. The number of persons sit left of R is same as the number of persons sit right of W. R is not intern.



The one who is AM sits second left of Q who is CFO. The one who is CEO sits left of the one who is Manager but sits right of the one who is HR. The final arrangement is-

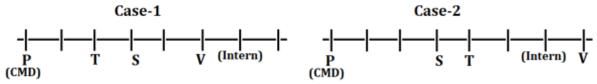
1



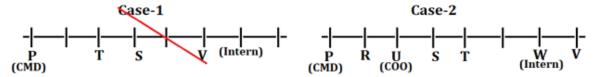
Same number of persons sit left of U and right of Q.

S69. Ans.(e)

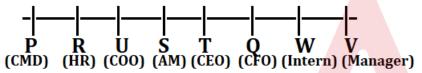
Sol. S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. There are two possibilities-



Four persons sit between V and U who is COO. From this condition case-1 will be eliminated. The number of persons sit left of R is same as the number of persons sit right of W. R is not intern.



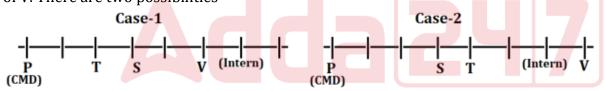
The one who is AM sits second left of Q who is CFO. The one who is CEO sits left of the one who is Manager but sits right of the one who is HR. The final arrangement is-



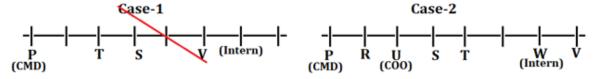
Five persons sit between R and V.

S70. Ans.(d)

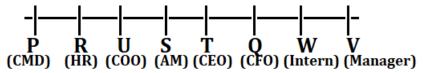
Sol. S sits third to the right of P who is CMD, and either of them sit on the extreme end of the row. Two persons sit between S and the one who is Intern. T is an immediate neighbor of S and sits third to the left of V. There are two possibilities-



Four persons sit between V and U who is COO. From this condition case-1 will be eliminated. The number of persons sit left of R is same as the number of persons sit right of W. R is not intern.



The one who is AM sits second left of Q who is CFO. The one who is CEO sits left of the one who is Manager but sits right of the one who is HR. The final arrangement is-

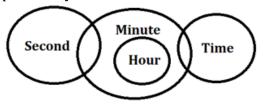


Except option (d), all other options follow the same logic- second person sits second to the right of the first person.

S71. Ans.(b)

Sol. I. Not Follows - Because hour is only related to minute.

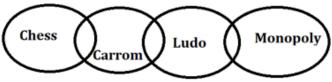
II. Follows – Because there is no direct relation between second and time, so their relation will follow in possibility.



S72. Ans.(d)

Sol. I. Follows – Because only a few chess is carrom, so all carrom can be chess.

II. Follows – Because there is no direct relation between Monopoly and Chess, so their relation will follow in possibility.



S73. Ans.(b)

Sol. I. Not follows – Because December is only related to September.

II. Follows – Because there is no direct relation between November and October, so their relation will follow in possibility.



S74. Ans.(d)

Sol. Six persons were born in between K and D who was born after K. D was not born in the last. There are two possibilities. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	
	15		K
September	10		
	15		
October	10	S	G
	15	G	S
November	10		
	15	D	
December	10		D
	15		

R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. From this condition case-2 will be eliminated.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	F
	15		K
September	10	R	
	15		
October	10	S	G
	15	G	S
November	10		R
	15	D	
December	10	F	Đ
	15	P	

Z was born before V but after H. The final arrangement is-

Months	Dates	Persons
August	10	K
	15	Н
September	10	R
	15	Z
October	10	S
	15	G
November	10	V
	15	D
December	10	F
	15	P

Two persons were born between V and P.

S75. Ans.(c)

Sol. Six persons were born in between K and D who was born after K. D was not born in the last. There are two possibilities. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	
	15		K
September	10		
	15		
October	10	S	G
	15	G	S
November	10		
	15	D	
December	10		D
	15		

R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. From this condition case-2 will be eliminated.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	F
	15		K
September	10	R	
	15		
October	10	S	G
	15	G	S
November	10		R
	15	D	
December	10	F	Đ
	15	P	

Months	Dates	Persons
August	10	K
	15	Н
September	10	R
	15	Z
October	10	S
	15	G
November	10	V
	15	D
December	10	F
	15	P

Z was born on 15th September.

S76. Ans.(b)

Sol. Six persons were born in between K and D who was born after K. D was not born in the last. There are two possibilities. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	
	15		K
September	10		
	15		
October	10	S	G
	15	G	S
November	10		
	15	D	
December	10		D
	15		

R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. From this condition case-2 will be eliminated.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	F
	15		K
September	10	R	
	15		
October	10	S	G
	15	G	S
November	10		R
	15	D	
December	10	F	Ð
	15	P	

Months	Dates	Persons
August	10	K
	15	Н
September	10	R
	15	Z
October	10	S
	15	G
November	10	V
	15	D
December	10	F
	15	P

H was born in August.

S77. Ans.(d)

Sol. Six persons were born in between K and D who was born after K. D was not born in the last. There are two possibilities. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	
	15		K
September	10		
	15		
October	10	S	G
	15	G	S
November	10		
	15	D	
December	10		D
	15		

R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. From this condition case-2 will be eliminated.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	F
	15		K
September	10	R	
	15		
October	10	S	G
	15	G	S
November	10		R
	15	D	
December	10	F	Ð
	15	P	

Months	Dates	Persons
August	10	K
	15	Н
September	10	R
	15	Z
October	10	S
	15	G
November	10	V
	15	D
December	10	F
	15	P

D is the third youngest person.

S78. Ans.(a)

Sol. Six persons were born in between K and D who was born after K. D was not born in the last. There are two possibilities. Two persons were born between D and S. The number of persons born before S is same as the number of persons born after G.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	
	15		K
September	10		
	15		
October	10	S	G
	15	G	S
November	10		
	15	D	
December	10		D
	15		

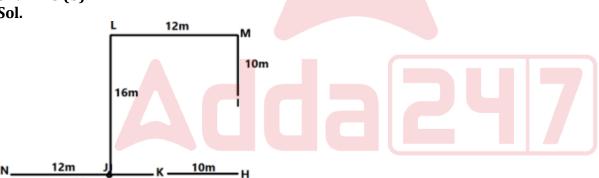
R was born on an even number date and the month which has even number of days. Five persons were born between R and F who was born in the same month as P. From this condition case-2 will be eliminated.

Months	Dates	Case-1	Case-2
		Persons	Persons
August	10	K	F
	15		K
September	10	R	
	15		
October	10	S	G
	15	G	S
November	10		R
	15	D	
December	10	F	Ð
	15	P	

Months	Dates	Persons
August	10	K
	15	Н
September	10	R
	15	Z
October	10	S
	15	G
November	10	V
	15	D
December	10	F
	15	P

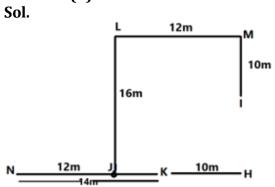
R was born on an even number date.





Shortest distance between J and H is 12m.

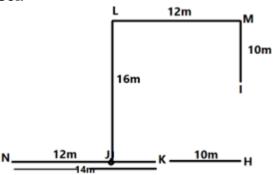
S80. Ans.(b)



L is in north-west of K.

S81. Ans.(b)

Sol.



M is in North of H.

S82. Ans.(a)

Sol. There are five such pairs.



S83. Ans.(a)

Sol. From the given statements, B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. Here we have 2 possible cases.

Floor	Case 1		C	ase 2
	Persons	Colours	Persons	Colours
6	В	Purple/Hazel		Green
5				
4				
3				
2		Green	В	Purple/Hazel
1				

One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. Here case 1 is ruled out now.

Floor	Case 1		C	ase 2
	Persons	Colours	Persons	Colours
6	₽	Purple/Hazel	A	Green
5				
4		Blue		Blue
3				
2		Green	В	Purple/Hazel
1	E	Purple	Е	Purple

D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. E does not make rangoli in violet colour.

Floor	Case 2		
	Persons	Colours	
6	A	Green	
5	D	Yellow	
4		Blue	
3		Purple	
2	В	Violet	
1	Е		

The one who made rangoli in hazel definitely lives on the ground floor. C lives above F. So, the final arrangement is-

Floor	Persons	Colours
6	A	Green
5	D	Yellow
4	С	Blue
3	F	Purple
2	В	Violet
1	Е	Hazel

One person lives between E and F

S84. Ans.(a)

Sol. From the given statements, B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. Here we have 2 possible cases.

Floor	Case 1		Case 2	
	Persons	Colours	Persons	Colours
6	В	Purple/Hazel		Green
5				
4				
3				
2		Green	В	Purple/Hazel
1				

One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. Here case 1 is ruled out now.

Floor	Case 1		C	Case 2
	Persons	Colours	Persons	Colours
6	₽	Purple/Hazel	A	Green
5				
4		Blue		Blue
3				
2		Green	В	Purple/Hazel
1	E	Purple	Е	Purple

D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. E does not make rangoli in violet colour.

I

Floor	Case 2		
	Persons	Colours	
6	A	Green	
5	D	Yellow	
4		Blue	
3		Purple	
2	В	Violet	
1	Е		

The one who made rangoli in hazel definitely lives on the ground floor. C lives above F. So, the final arrangement is-

Floor	Persons	Colours
6	A	Green
5	D	Yellow
4	С	Blue
3	F	Purple
2	В	Violet
1	Е	Hazel

D made rangoli in yellow colour

S85. Ans.(d)

Sol. From the given statements, B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. Here we have 2 possible cases.

Floor	Case 1		C	Case 2
	Persons	Colours	Persons	Colours
6	В	Purple/Hazel		Green
5				
4				
3				
2		Green	В	Purple/Hazel
1				

One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. Here case 1 is ruled out now.

Floor	Case 1		C	ase 2
	Persons	Colours	Persons	Colours
6	₽	Purple/Hazel	A	Green
5				
4		Blue		Blue
3				
2		Green	В	Purple/Hazel
1	E	Purple	Е	Purple

D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. E does not make rangoli in violet colour.

Floor	C	ase 2
	Persons	Colours
6	A	Green
5	D	Yellow
4		Blue
3		Purple
2	В	Violet
1	Е	

The one who made rangoli in hazel definitely lives on the ground floor. C lives above F. So, the final arrangement is-

Floor	Persons	Colours
6	A	Green
5	D	Yellow
4	С	Blue
3	F	Purple
2	В	Violet
1	Е	Hazel

The number of persons lives above D is one less than the number of persons live below F

S86. Ans.(d)

Sol. From the given statements, B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. Here we have 2 possible cases.

Floor	Case 1		Case 2	
	Persons	Colours	Persons	Colours
6	В	Purple/Hazel		Green
5				
4				
3				
2		Green	В	Purple/Hazel
1				

One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. Here case 1 is ruled out now.

Floor	Case 1			Case 2
	Persons	Colours	Persons	Colours
6	₽	Purple/Hazel	Α	Green
5				
4		Blue		Blue
3				
2		Green	В	Purple/Hazel
1	E	Purple	Е	Purple

D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. E does not make rangoli in violet colour.

Floor	Case 2	
	Persons	Colours
6	A	Green
5	D	Yellow
4		Blue
3		Purple
2	В	Violet
1	Е	

The one who made rangoli in hazel definitely lives on the ground floor. C lives above F. So, the final arrangement is-

I

Floor	Persons	Colours
6	A	Green
5	D	Yellow
4	С	Blue
3	F	Purple
2	В	Violet
1	Е	Hazel

Both I and II statement are true

S87. Ans.(a)

Sol. From the given statements, B lives on an even numbered floor but neither made rangoli in Hazel nor purple colour. Three persons live between B and the one who made rangoli in green colour. Here we have 2 possible cases.

Floor	Case 1		C	ase 2
	Persons	Colours	Persons	Colours
6	В	Purple/Hazel		Green
5				
4				
3				
2		Green	В	Purple/Hazel
1				

One person lives between the ones who made rangoli in green and blue colour. E lives below the one who made rangoli in blue colour but not just below. E does not make rangoli in purple and green colour. The number of persons live below A is same as the number of persons live above E. Here case 1 is ruled out now.

Floor	Case 1		C	Case 2
	Persons	Colours	Persons	Colours
6	₽	Purple/Hazel	A	Green
5				
4		Blue		Blue
3				
2		Green	В	Purple/Hazel
1	E	Purple	E	Purple

D lives above the one who made rangoli in purple colour but not just above. The one who made rangoli in yellow colour lives above the one who made rangoli in violet colour. E does not make rangoli in violet colour.

Floor	Case 2		
	Persons	Colours	
6	A	Green	
5	D	Yellow	
4		Blue	
3		Purple	
2	В	Violet	
1	Е		

The one who made rangoli in hazel definitely lives on the ground floor. C lives above F. So, the final arrangement is-

1

Floor	Persons	Colours
6	A	Green
5	D	Yellow
4	С	Blue
3	F	Purple
2	В	Violet
1	Е	Hazel

A lives on the topmost floor

\$88. Ans.(a)

Sol.

I: G > T(True) II: $U \le P(False)$

S89. Ans.(c)

Sol.

I: D> V(False) II: K ≤L(False)

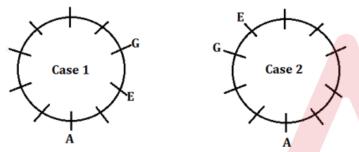
S90. Ans.(b)

Sol.

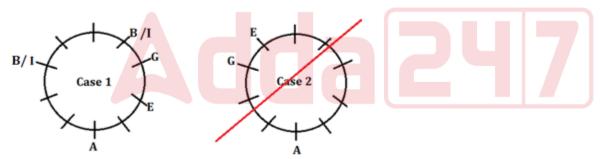
I: Z<M (False) II. P>A(True)

S91. Ans.(b)

Sol. Two persons sit between A and G who sits immediate right of E. From this statement two possible cases arise: -

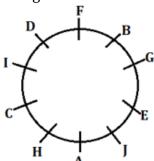


Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. They will be placed as per the condition i.e., consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Here case 2 is ruled out now.



H sits immediate right of C. Equal number of persons sit between D and J from both sides. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. The final arrangement is: -

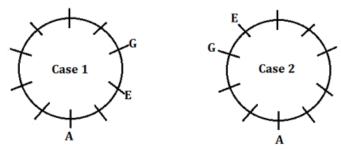
I



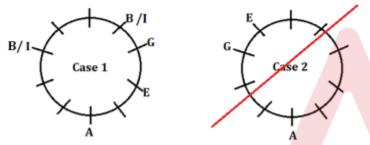
Two persons sit between D and G when counted from left of D.

S92. Ans.(d)

Sol. Two persons sit between A and G who sits immediate right of E. From this statement two possible cases arise: -



Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. They will be placed as per the condition i.e., consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Here case 2 is ruled out now.



H sits immediate right of C. Equal number of persons sit between D and J from both sides. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. The final arrangement is: -

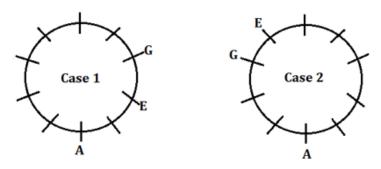


F sits 4th to the left of H

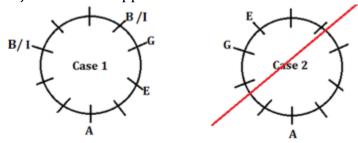
S93. Ans.(c)

Sol. Two persons sit between A and G who sits immediate right of E. From this statement two possible cases arise: -

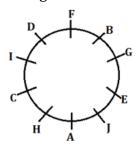
I



Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. They will be placed as per the condition i.e., consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Here case 2 is ruled out now.



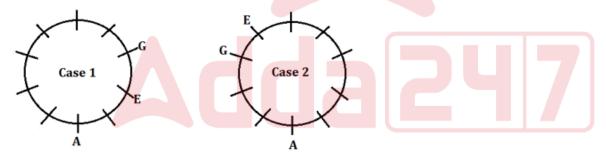
H sits immediate right of C. Equal number of persons sit between D and J from both sides. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. The final arrangement is: -



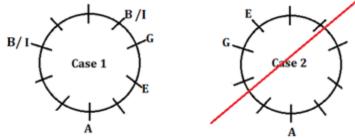
A faces F.

S94. Ans.(c)

Sol. Two persons sit between A and G who sits immediate right of E. From this statement two possible cases arise: -

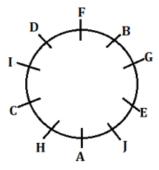


Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. They will be placed as per the condition i.e., consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Here case 2 is ruled out now.



H sits immediate right of C. Equal number of persons sit between D and J from both sides. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. The final arrangement is: -

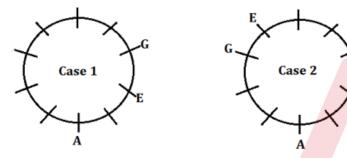
1



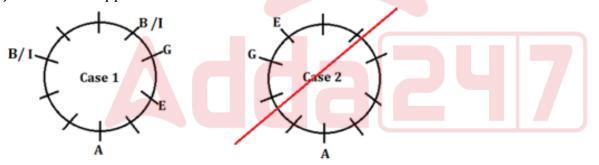
E sits 4th to the right of C.

S95. Ans.(b)

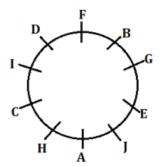
Sol. Two persons sit between A and G who sits immediate right of E. From this statement two possible cases arise: -



Two persons sit between B and I who doesn't sit adjacent to A. I does not sit opposite to A. They will be placed as per the condition i.e., consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. Here case 2 is ruled out now.



H sits immediate right of C. Equal number of persons sit between D and J from both sides. Consecutive named persons as per the alphabetical series neither sit adjacent nor sit opposite to each other. The final arrangement is: -



Number of persons sit between C and G is same as the number of persons sit between B and H.



$$(+)V = L(-)$$
 $|$
 $(-)M = (+)J = S(-)$
 $|$
 $(-)T = U(+) = R(-)$

L is grandmother of T.

Sol.

Only statement I is not true.

S98. Ans.(d)

Sol.

$$(+)V = L(-)$$

$$| (-)M = (+)J = S(-)$$

$$| (-)T - U(+) = R(-)$$

Except J, all are female members.

S99. Ans.(c)

Sol.

Words	Codes
Wake	Mn
Of	Pg
The	Ht
Reserve	Rs
Interest	St/ej
Rate	Ej/st
Arise	ij

S100. Ans.(d)

Sol.

Words	Codes
Wake	Mn
Of	Pg
The	Ht
Reserve	Rs
Interest	St/ej
Rate	Ej/st
Arise	ij





1