# IBPS PO Pre 2022 (16th October) Shift-Wise Previous Year Papers Mock 06

**Directions (1-8) : Read the passage and answer the questions given below.**

Consumption is an important element of human civilization. The success of modern economies is dependent on, and measured a great deal by, the level and nature of consumption. From the hunter-gatherers whose consumption was survival-centric to the millennials for whom consumption is about fulfilling aspirations, the nature of consumerism has seen tremendous shifts. Modern-day consumerism is not only about wanting more but also wanting it fast. We are in an age of 'hyper lapse consumerism'. The **ubiquitous** growth of the Internet and the rise of e-commerce have fueled hyper lapse consumerism, which refers not only to the kinds of products being sold but also to the ease with which consumers order them and the speed at which such products are delivered. According to a study by Invesp, 56% of online consumers between the age of 18 and 34 years expect the goods they have ordered to be delivered on the same day, whereas 61% want their packages even faster — within 1-3 hours of placing an order.

After e-commerce companies made delivery their core competence by putting boots on the ground and even drones in the sky, the competition to deliver faster and better is shaping consumer behavior and industry patterns. Recently in India we saw food and grocery delivery companies announcing 10-minute deliveries for consumers in select cities. This is being done by strengthening the hyper-local logistical network, leveraging predictive algorithms, process optimization and, in some cases, providing incentives and disincentives for delivery partners. When the 10-minute delivery plan was announced, policymakers and experts raised concerns that delivery professionals might resort to reckless driving and put themselves and others at risk in their rush to stick to timelines. **Indiscriminate** work pressure can lead to fatigue, mental health issues and other health issues among delivery professionals. In an industry which offers little to no social security for gig workers, this could have serious consequences. A NITI Aayog report, 'India's Booming Gig and Platform Economy', suggests extending social security for gig and platform workers, including paid sick leave, health access and insurance, and occupational disease and work accident insurance.

Hyperlapse consumerism is not without its benefits. According to NITI Aayog, in 2020-21, about 7.7 million workers were engaged in the gig economy, accounting for 1.5% of the total workforce in India. This is expected to grow to 23.5 million workers by 2029-30. Going ahead, there are two paths. Either we continue with hyper lapse consumerism or shift back to a more laid-back delivery model. In the rush to come up with better value propositions for the customer, businesses often tend to ignore the social, ethical, environmental and personal costs of business decisions. These decisions get influenced by, and further influence, consumer needs and behaviour. While advertising serves a positive purpose by educating consumers, much _____ has been focused on the question of whether advertising is manipulative.

**Q1. How is Consumerism evolved in human civilization?**
(a) It shifted its gear to a more elementary approach by instituting "less is more" concept in economic activity
(b) Abiding the concept of pluralism, consumerism showcased a multifaceted dynamism in society
(c) Consumption evolved decisively from facilitating universal growth to an approach of targeting only a restricted population of urban rich people
(d) Renouncing the primitive approach of providing the basic necessities, consumerism grew as a means to fulfil the satisfaction or desire of the millennials
(e) None of these

**Q2. How are the delivery companies approaching with their "10-minute delivery" service?**
(a) By reinforcing their local logistical network
(b) By using the predictive algorithm
(c) By encouraging the delivery partners through incentives
(d) Only (a) and (c)
(e) All of these

**Q3. Why are the policymakers skeptical about the newly introduced "10-minute delivery" services by the food and grocery delivering companies?**
(a) The short delivery timeline may put added pressure on already overworked delivery persons, potentially prompting them to engage in rash driving.
(b) It could put undue pressure on delivery person, who have no benefits or security
(c) Due to the extensive work pressure, delivery person could subject to fatigue, mental or other health issues
(d) Only (a) and (c)
(e) All of these

**Q4. Which of the following is FALSE about hyper-lapse consumerism?**
(a) It refers not solely to the sorts of merchandise being offered but additionally to the convenience and pace with which customers get them.
(b) In an attempt to conquest the race of provision of services, companies some times compromise with moral, social, ethical cost
(c) Companies had gone to the extent of employing drones to strengthen their delivery services.
(d) Hyper-lapse consumerism is gradually in its way to deteriorate the economy by promoting the concept of providing more to the rich.
(e) None of these

**Q5. Which of the following options is/are TRUE with respect to the data given in the passage?**
(a) 56% of on-line customers between the age of 18 and 34 years anticipate the products they've ordered to be delivered on the identical day.
(b) Hyper-consumerism is making significant impact on economy by contributing 7.7 million workforces currently to the projected number of 23.5 million in 2029-30.
(c) It has been advised to provide gig workers with social security, sick leaves, health insurance, and other benefits.
(d) Only (a) and (c)
(e) All of these

**Q6. Which of the following can fit into the blank given in the passage?**
(a) awareness
(b) attention
(c) belief
(d) intention
(e) enticement

**Q7. Which of the following words is the synonym of "indiscriminate" highlighted in the passage?**
(a) capricious
(b) lethargic
(c) chide
(d) befuddle
(e) terse

**Q8. Which of the following words is the antonym of "ubiquitous" highlighted in the passage?**
(a) unprecedented
(b) peripatetic
(c) scarce
(d) clamber
(e) impending

**Directions (9-13)** : **In each of the questions given below four words are given in bold. These four words may or may not be in their correct position. The sentence is then followed by options with the correct combination of words that should interchange with each other in order to make the sentence grammatically and contextually correct. Find the correct combination of the words that replace each other. If the sentence is correct as it is then select 'No interchange required' as your choice.**

**Q9.** No **subjected (A)** of society would ever **draconian (B)** itself to be **section (C)** to a law that is **allow (D)** .
(a) Only (A) -(D)
(b) Only (B) -(D)
(c) Both (A) -(B) and (C) -(D)
(d) Both (A) -(C) and (B) -(D)
(e) No interchange needed

**Q10.** The judgment **delivered (A)** formally **fundamental (B)** the right to **privacy (C)** as being a **recognized (D)** right.
(a) Only (A) -(D)
(b) Only (B) -(D)
(c) Both (A) -(B) and (C) -(D)
(d) Both (A) -(C) and (B) -(D)
(e) No interchange needed

**Q11.** From the data security **individual (A)** of a/an **perspective (B)** , the threats posed by **underestimated (C)** cannot be **malware (D)** .
(a) Only (A) -(D)
(b) Only (B) -(D)
(c) Both (A) -(B) and (C) -(D)
(d) Both (A) -(C) and (B) -(D)
(e) No interchange needed

**Q12.** To allot the task of **violation (A)** excreta and **cleaning (B)** sewers to humans when **machines (C)** are able to do the work is a gross **removing (D)** of rights.
(a) Only (A) -(D)
(b) Only (B) -(D)
(c) Both (A) -(B) and (C) -(D)
(d) Both (A) -(C) and (B) -(D)
(e) No interchange needed

**Q13.** Manipur is **divided (A)** and psychologically **geographically (B)** between the Imphal **hills (C)** and the many **valley (D)** around it.
(a) Only (A) -(D)
(b) Only (B) -(D)
(c) Both (A) -(B) and (C) -(D)
(d) Both (A) -(C) and (B) -(D)
(e) No interchange needed

**Directions (14-19)** : **Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error the answer is 'No Error'. (Ignore errors of punctuation, if any.)**

**Q14. Jamaica is looking (A) / forward to enrich (B) / investment ties (C) / with India (D) / No Error (E)**
(a) D
(b) A
(c) B
(d) C
(e) No Error

**Q15. The world was relying (A) / on India for shipments of (B) /wheat due to a shortage (C) / sparks by the Ukraine war (D) /No Error (E)**
(a) D
(b) A
(c) B
(d) C
(e) No Error

**Q16. The upcoming web series (A) / on the OTT platform (B) / has triggered many a debates (C) / throughout the country (D) / No Error (E)**
(a) D
(b) A
(c) B
(d) C
(e) No Error

**Q17. India was among the 12 countries which (A) / abstained to voting on a UN Human (B) / Rights Council resolution seeking to address (C) / the deteriorating situation in Ukraine (D) / No Error (E)**

(a) D

(b) A

(c) B

(d) C

(e) No Error

**Q18. More than 33 lakh cheque (A) / bounce cases are pending (B) / in difference courts and (C) / blocking judicial docket (D) / No Error (E)**

(a) D

(b) A

(c) B

(d) C

(e) No Error

**Q19. The Indian government proposed a new (A) /Emigration Bill which aims to (B) / integrate emigration management and streamlines (C) / the welfare of emigrant workers (D) / No Error (E)**

(a) B

(b) D

(c) No Error

(d) C

(e) A

**Directions (20-24)** : **In the following questions six sentences are given. You have to rearrange these sentences to make a contextually meaningful paragraph. It is given that the sentence (D) will be the fourth sentence in the arrangement. After rearrangement, answer the following questions.**

(A) The carrier is set to be commissioned in September in the presence of Prime Minister Narendra Modi.

(B) Moreover, it has been expected that the carrier will be fully operational by 2023-end.

(C) From November, the naval army will commence landing trials which it hope to complete by the middle of next year.

**(D) When the complete crew is there, all systems are in place, only then aircraft landing trials will happen**.

(E) The commissioning of the country's first indigenously built aircraft carrier Vikrant will enhance peace and security in the Indian Ocean.

(F) It will put in all effort so that the aircraft carrier is operational with the aircraft.

**Q20.** Which of the following would be the **SECOND** sentence after rearrangement?
(a) A
(b) F
(c) C
(d) D
(e) B

**Q21.** Which of the following would be the **LAST** sentence after rearrangement?
(a) A
(b) F
(c) C
(d) E
(e) B

**Q22.** Which of the following would be the **FIFTH** sentence after rearrangement?
(a) A
(b) F
(c) C
(d) E
(e) B

**Q23.** Which of the following would be the **FIRST** sentence after rearrangement?
(a) A
(b) F
(c) C
(d) E
(e) B

**Q24.** Which of the following would be the **THIRD** sentence after rearrangement?
(a) A
(b) F
(c) C
(d) E
(e) B

**Directions (25-30)** : **In each question, a sentence is divided into four parts, which may or may not be correctly placed. Choose the correct order of the phrases from the given options that can make a meaningful sentence.**

**Q25.** on two think tanks and a charity organisation (A) / related to financial transactions (B) / on suspicion of irregularities (C) / the Income Tax Department conducted surveys (D)
(a) CDBA
(b) DACB
(c) BCDA
(d) BDCA
(e) No rearrangement required

**Q26. the interchange of (A) / research and statistics between scientists (B) / working on similar studies (C) / can lead to new discoveries (D)**
(a) CDBA
(b) DACB
(c) BCDA
(d) DBCA
(e) No rearrangement required

**Q27. when you sit, you use less (A) / researchers have found that (B) / when you stand or move (C) / energy than you do (D)**
(a) DBAC
(b) BCAD
(c) BADC
(d) ADCB
(e) No rearrangement required

**Q28. difficult to manage their emotions (A) / life event they may find it more (B) / when someone experiences a stressful (C) /and can become overwhelmed (D) .**
(a) CBAD
(b) BCAD
(c) CDAB
(d) ADCB
(e) No rearrangement required

**Q29. The U.S. Equal Employment Opportunity Commission enforces (A) / during a variety of work situations (B) / a job applicant or an employee (C) / federal laws prohibiting discrimination against (D)**
(a) DBAC
(b) BCAD
(c) CDAB
(d) ADCB
(e) No rearrangement required

**Q30. Enzymes split up the proteins (A) / the food and the digestive (B) / gastric juice breaks down (C) / the hydrochloric acid in the (D)**
(a) DBAC
(b) BCAD
(c) DCBA
(d) ADCB
(e) No rearrangement required

**Directions (31-37)** : **What approximate value will come in the place of question (?) mark in the following given questions.**

**Q31.** $(419.85 \div 21.15) \times 7.96 + 139.68 = ? \times 5.15$
(a) 75
(b) 60
(c) 55
(d) 49
(e) 63

**Q32.** $(? \times 2.12) + 37.5\%$ of $959.96 = 5600.05 \div 6.85$
(a) 205
(b) 300
(c) 159
(d) 220
(e) 196

**Q33.** $39.86\%$ of $37.5\%$ of $3999.86 + 19.82\%$ of $30.15\%$ of $499.89 = ?$
(a) 520
(b) 630
(c) 590
(d) 545
(e) 645

**Q34.** $62.5\%$ of $319.95 - 20\%$ of $784.8 + 43.75\%$ of $480 = ?$
(a) 253
(b) 143
(c) 243
(d) 175
(e) 233

**Q35.** $25.05^3 - 44.95^2 = (16.32 \times 3.96^3) + 4.06 \times ?$
(a) 3045
(b) 2875
(c) 3246
(d) 2765
(e) 3144

**Q36.** $12.03\%$ of $(? + 224.99) + \sqrt{255.99} = (7.99)^2$
(a) 225
(b) 175
(c) 125
(d) 25
(e) 75

**Q37.** $(? + 23.03) \times 35.03 = (12.99)^3 - 96.99$
(a) 47
(b) 27
(c) 37
(d) 17
(e) 57

**Directions (38-41)** : **Read the data carefully and answer the questions.**

There are total 'X' number of students in a class of three different (A, B & C) sections. 40% of total students are in section A and the ratio of total students in section A to C is 10: 9. The ratio of boys to girls in section B is 7: 5 and 60% of total students in section A are boys. There are 40 girls in section C and total 170 girls in the class.

**Q38. Find difference between total boys and girls in the class?**
(a) 160
(b) 120
(c) 180
(d) 260
(e) 140

**Q39. Total boys in section B are what percent less than total girls in section A?**
(a) 8%
(b) 12.5%
(c) 12%
(d) 10%
(e) 17.5%

**Q40. Find average number of boys in all three sections?**
(a) 120
(b) 90
(c) 110
(d) 80
(e) 130

**Q41. Find ratio of total boys in section C to total girls in all three sections?**
(a) 17 : 14
(b) 12 : 17
(c) 7 : 17
(d) 13 : 17
(e) 14 : 17

**Q42.** Ram and Sohan entered into business investing Rs. 36000 and 72000 respectively. After six months, Sohan left and Aman entered into the business investing Rs. 32000. If at the end of the year, profit share of Aman was Rs. 5680 then find the total profit earned by all of them together.
(a) Rs. 17640
(b) Rs.31240
(c) Rs. 25795
(d) Rs. 16975
(e) Rs. 40460

**Q43.** Atul invested 62.5% of his monthly income in scheme A offering 20% C.I. (compounded annually) for 2 years and rest amount in scheme B offering 12.5% per annum simple interest for same period. If the difference between CI and SI is Rs. 2430 after 2 years, then find the monthly income(approx.) of Atul.
(a) Rs 15067
(b) Rs 16550
(c) Rs 13407
(d) Rs 12000
(e) Rs 18750

**Q44.** Average of 25 numbers is 96. If average of first 11 numbers is 50 while average of last 12 numbers is 80 and 12th and 13th numbers are (2x+26) and (3x+14) respectively. Find the 13th number.
(a) 624
(b) 524
(c) 575
(d) 325
(e) 765

**Q45.** Aman's friend Mayank gave him Rs. 14000 and Naman gave to Aman 30% less than what Mayank gave to Aman. If Chetan gave 50% more than Naman to Aman, then the amount received by Aman from Chetan is what percent more than that of amount which is received by Aman from Mayank?
(a) 12.5%
(b) 2%
(c) 3%
(d) 5%
(e) 7.5%

**Q46.** The curved surface area of a cylindrical vessel is 10692cm². The respective ratio of the radius and the height of the vessel is 3:7 respectively. If the cylindrical vessel is full of water, then find the time taken to empty the vessel at the rate of 1782cm³ of water per minute.

(a) 75minute
(b) 67minute
(c) 81minute
(d) 90minute
(e) 80minute

Q47. 8 men and 7 women can complete a piece of work in 15 days. If additional 2 men joined them, then they could finish the 4/5$^{th}$ of work in 10 days, find the time taken by 21 women to complete the work.
(a) 24 days
(b) 18 days
(c) 32 days
(d) 21 days
(e) 25 days

Q48. Delhi Express is running with a speed of 144 km/h crosses a pole in 12.5 seconds. If the time taken by Delhi Express to cross Patna Express which is running with a speed of 162 km/h and coming from opposite direction in 12 seconds, then find the length of Patna Express.
(a) 490 m
(b) 520 m
(c) 370 m
(d) 540 m
(e) 300 m

Q49. In a box there are 36 pink balls and rest are orange balls. The probability of picking an orange ball at random is 1/5. Find the probability of picking a pink ball and an orange ball.
(a) 18/55
(b) 3/7
(c) 46/57
(d) 55/111
(e) 9/13

Q50. Anand is running with a speed of (x+13) km/h and covers a certain distance in 10 hours. If his speed had been (4x-12) km/h, then he would have taken 2.5 hours more to cover the same distance. Find the distance he travelled(km) .
(a) 163
(b) 200
(c) 305
(d) 225
(e) 195

Directions (51-55) : Read the given below pie chart carefully and answer the questions based on it.

The pie chart give below shows the percentage distribution of number of candidates who applied for the post of clerk in IBPS from 5 cities.



TOTAL CANDIDATES APPLIED FROM GIVEN CITIES = 2700

■A ■B ■C ■D ■E

A 15%, B 25%, C 30%, D 20%, E 10%
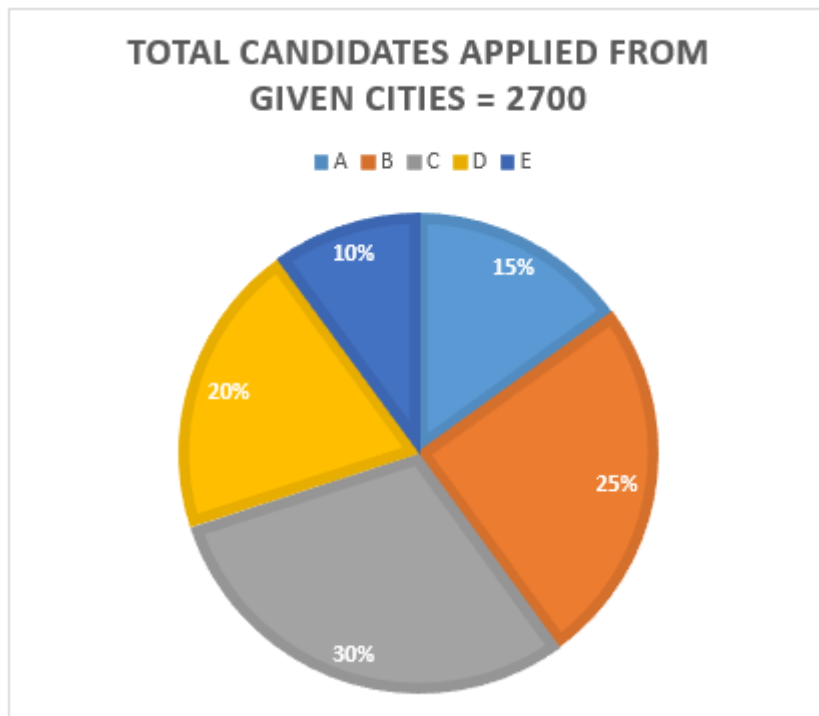
**Q51.** Find the ratio of number of candidates who applied from city A and C together to the number of candidates who applied from city B.
(a) 7: 5
(b) 6: 5
(c) 8: 5
(d) 9: 5
(e) 4: 5

**Q52.** Find the difference between number of candidates applied from city B and that from city D.
(a) 160
(b) 135
(c) 105
(d) 150
(e) 125

**Q53.** Ratio of male and female candidates who applied from city E and city A is 5: 4 and 22: 23 respectively, then find the no. of female candidates applied from city A and E together.
(a) 377
(b) 189
(c) 327
(d) 243
(e) 297

**Q54.** $\frac{2}{15}$ th of candidates qualified the exam from city D and 80% of candidates disqualified from city C. Find disqualified candidates from city D is what approximately percentage more or less than qualified candidates from city C.
(a) 189%
(b) 171%
(c) 219%
(d) 167%
(e) 195%

**Q55. Find the average number of candidates who applied from city A, C and D.**
(a) 538
(b) 495
(c) 625
(d) 585
(e) 605

**Directions (56-60)** : **Study the given table carefully to answer the questions that follow:**
The following table shows the total number of five different items manufactured by BMW Company and percentage of each item sold.

| Items | No. of items manufactured | Percentage distribution of items sold |
|-------|---------------------------|----------------------------------------|
| A | 2000 | 35% |
| B | 1500 | 65% |
| C | 1600 | 40% |
| D | 600 | 63% |
| E | 2800 | 70% |

**Q56. What is the ratio of sold items of type A and C together to unsold items of type B and E together?**
(a) 1341:746
(b) 251:476
(c) 1340:609
(d) 609:1340
(e) 268:273

**Q57. If ratio of defective to non-defective items which are unsold of type B and type D is 7:8 and 5:1 respectively then find the difference between total defective and total non-defective items which are unsold of these companies?**

(a) 212

(b) 313

(c) 125

(d) 113

(e) 95

**Q58. If 60% of total items of type A are defective, then non-defective items of type A is approximately what percent of the average of unsold items of type C and type E?**

(a) 62%

(b) 84%

(c) 89%

(d) 50%

(e) 32%

**Q59. If the cost of each item sold of type B is Rs. 50 and that of type E is Rs. 70 then find the average of total selling cost of items of type B and type E?**

(a) 82850

(b) 92975

(c) 76458

(d) 68250

(e) 96450

**Q60. No. of items sold of type A and D together are approximately what percent more or less than no. of items sold of type C and B together?**

(a) 33%

(b) 28%

(c) 38%

(d) 45%

(e) 22%

**Q61. A mixture contains Alcohol and Water in the ratio of 13:17 respectively. If 180ml of mixture is taken out, and then 12ml of alcohol and 24ml of water is added into the remaining mixtures such that the ratio of alcohol and water becomes 5:7 respectively. Find the original quantity of the mixture.**

(a) 345ml

(b) 480ml

(c) 360ml

(d) 520ml

(e) 640ml

**Directions (62-65) : In each of the following questions two equations are given. Solve these equations and give answer:**

**Q62.**

I. $x^2 + 13x - 114 = 0$
II. $y^3 = 216$

(a) if x≥y, i.e., x is greater than or equal to y
(b) if x>y, i.e., x is greater than y
(c) if x≤y, i.e. x is less than or equal to y
(d) if x<y, i.e., x is less than y
(e) x=y or no relation can be established between x and y

**Q63.**

I. $3x^2 + 15x + 18 = 0$
II. $y^2 + 14y + 48 = 0$

(a) if x≥y, i.e., x is greater than or equal to y
(b) if x>y, i.e., x is greater than y
(c) if x≤y, i.e. x is less than or equal to y
(d) if x<y, i.e., x is less than y
(e) x=y or no relation can be established between x and y

**Q64.**

I. $x^2 - 6x + 8 = 0$
II. $y^2 + 2y - 8 = 0$

(a) if x≥y, i.e., x is greater than or equal to y
(b) if x>y, i.e., x is greater than y
(c) if x≤y, i.e. x is less than or equal to y
(d) if x<y, i.e., x is less than y
(e) x=y or no relation can be established between x and y

**Q65.**

I. $10x^2 - 9x + 2 = 0$
II. $15y^2 - 11y + 2 = 0$

(a) if x≥y, i.e., x is greater than or equal to y
(b) if x>y, i.e., x is greater than y
(c) if x≤y, i.e. x is less than or equal to y
(d) if x<y, i.e., x is less than y
(e) x=y or no relation can be established between x and y

**Directions (66-68)** : **In each of the questions below are given some statements followed by some Conclusions. You have to take the given statements to be true even, if they seem to be at variance from 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.**

**Q66. Statements:**
Some news are article.
All articles are headline.
Only a few articles are report.
**Conclusions:**
I: All headline can never be report.
II: Some news are not report.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

**Q67. Statements:**
No subject is relation.
Some relations are air.
No air is game.
**Conclusions**:
I: Some subject can be air.
II: Some relation is not game.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

**Q68. Statements:**
All rice is fry.
All fry are bake.
Only bake is chips.
**Conclusions**:
I: Some chips can be rice.
II: Some chips are rice.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

**Directions (69-73)** : **Study the following information and answer the questions given below:**
Eight persons Y, U, I, R, E, W, Q and P sit in a linear row but not necessarily in the same order.
Four persons face south and the remaining four persons face north direction.

Y is the only neighbour of P who faces north. U sits second to the left of Y and sits third to the right of R. Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R.

**Q69. Who among the following sits immediate right of W?**
(a) Y
(b) U
(c) Q
(d) R
(e) None of these

**Q70. How many persons sit between E and P?**
(a) One
(b) Two
(c) Three
(d) Four
(e) None of these

**Q71. Four among the following five are alike in a certain way and form a group. Find the one who does not belong to that group?**
(a) Y
(b) R
(c) I
(d) W
(e) Q

**Q72. What is the position of Q with respect to I?**
(a) Third to the right
(b) Second to the left
(c) Third to the left
(d) Immediate right
(e) None of these

**Q73. How many persons sit to the left of Y?**
(a) Two
(b) Three
(c) Four
(d) Five
(e) None of these

**Directions (74-76)** : **Study the following information carefully and answer the questions given below.**

Eight light houses installed in State Z at different distances and directions with respect to each other. Light house S is 600m west of light house T. Light house R is 6oom west of light house S. Light house Q is 600m north of light house R. Light house U is 1200m north of light house T. Light house V is 600m east of light house U. Light house W is 600m south of light house V. Light house P is 600m east of light house Q.

**Q74. Light house V is in which direction with respect to light house P?**
(a) South-east
(b) South
(c) East
(d) North-east
(e) None of these

**Q75. If light house X is west of light house W at a distance of 600m, then what is the distance between light house X and light house T?**
(a) 1200m
(b) 600m
(c) 800m
(d) 1000m
(e) None of these

**Q76. What is the total distance from light house Q to light house V?**
(a) 360m
(b) 2600m
(c) 3.6km
(d) 1.3km
(e) None of these

**Directions (77-80)** : **In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Find which of the conclusion will be true according to the statement:**

**Q77.**
**Statements:**
$C > T = R < W \leq S = A < E \geq B$
**Conclusions:**
I. $S > C$
II. $W < B$

(a) Only conclusion II is true
(b) Only conclusion I 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

**Q78.**
**Statements:**
M ≥ O ≥ L ≥ E ≤ T < G ≤ K = F
**Conclusions:**
I. F > T
II. M ≥ E
(a) Only conclusion II is true
(b) Only conclusion I 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

**Q79.**
**Statements:**
X = O ≥ Y ≤ N ≤ D = W, Y ≥ Q = F
**Conclusions:**
I. X ≥ F
II. D = Q
(a) Only conclusion II is true
(b) Only conclusion I 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

**Q80.**
**Statements:**
S ≥ Y ≥ E = F ≥ R > P = L
**Conclusions:**
I. F < S
II. E > L
(a) Only conclusion II is true
(b) Only conclusion I 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 (81-85)** : **Study the following information carefully and answer the questions given below.**
Six persons were born in three different months i.e., June, August and November of the same year and on two different dates- 4th and 13th of the each given month. Each of them likes different colours.
K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. G was born on even numbered date but not after the one who likes yellow. The number of persons born before G is same as the number of persons born after the one who likes black. The one who likes blue born before J and born after the one who likes red. M doesn't like green.

**Q81. Who among the following likes black colour?**

(a) P

(b) J

(c) M

(d) G

(e) None of these

**Q82. How many persons are younger than M?**

(a) One

(b) Two

(c) More than three

(d) Three

(e) None

**Q83. Which of the following combination is correct?**

(a) D-13th August

(b) G-Green

(c) M-Pink

(d) J-4th June

(e) None is correct

**Q84. P likes which of the following colour?**

(a) Black

(b) Red

(c) Pink

(d) Blue

(e) None of these

**Q85. Which of the following statement(s) is/are true?**

(a) J doesn't like green colour

(b) D was born in November

(c) Two persons were born before G

(d) The one who likes green colour is younger than P

(e) All are true

**Q86. Which of the following is the third letter of the meaningful word formed from the First, fourth, sixth and eighth letters from the left end of the word "NUTRITION'. If more than one word is formed your answer will be Z and if no word can be formed your answer will be X?**

(a) O

(b) X

(c) R

(d) Z

(e) N

**Directions (87-90)** : **Study the alphanumeric symbol series given below and answer the questions which follow:**

A ^ $ S F 7 9 K $ 5 # X K 8 J * F I R 3 1 @ V 9 5 % M L

**Q87. How many symbols are there in the given series which are immediately followed by a letter and immediately preceded by a number?**
(a) Three
(b) Four
(c) Two
(d) One
(e) None of these

**Q88. Which among the following element will be sixth to the right of the one which is eighteenth from right end?**
(a) *
(b) I
(c) F
(d) J
(e) None of these

**Q89. How many elements are there between the element which is tenth from left end and the element which is fourteenth from right end?**
(a) Two
(b) Four
(c) Six
(d) Five
(e) None of these

**Q90. How many numbers are there in the series which are immediately followed by another number?**
(a) Three
(b) Two
(c) None
(d) One
(e) None of these

**Q91. Five boxes Z, X, Q, P and L are arranged in a series according to their weight in increasing order from right to left. Box L is lighter than only one box. Box X is heavier than box Z but lighter than box Q which is not the heaviest among all. Find how many boxes are heavier than box P?**
(a) Two
(b) One
(c) None
(d) Three
(e) None of these

**Directions (92-96) : Study the following information carefully and answer the questions given below.**

Nine persons are sitting around a triangular table. Three persons sit at the corner of the table and facing outside and two persons sit in the each side of the table and facing inside. A sits immediate right of N. Three persons sit between E and D who does not sit at the side of the table. F does not sit near D. M sits 2nd to the right of E. The number of persons sit between M and D is same as between M and C (Either from the left or right) . B is neither an immediate neighbour of M nor D. L faces inside.

**Q92. If A interchanged his position with B then, who among the following is an immediate neighbour of A?**
(a) N
(b) L
(c) C
(d) E
(e) Both L and C

**Q93. How many persons sit between E and A when counted in an anticlockwise direction from A?**
(a) Three
(b) Four
(c) One
(d) Two
(e) None

**Q94. Which of the following pair/group of persons sit at the corner of the table?**
(a) C, N
(b) E, B
(c) L, D
(d) C, D, M
(e) B, C, D

**Q95. If all the persons sit in alphabetical order from A in clockwise direction, then, who among the following persons remains the same position (Excluding A) ?**
(a) Only E
(b) Both E and F
(c) Only D
(d) B, D and E
(e) Both L and M

**Q96. Which of the following statement is true?**
(a) F sits 3rd to the right of A
(b) Both L and B are not an immediate neighbour
(c) E sits immediate right of C
(d) B faces outside
(e) None is true

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

In a certain code language:

"Every Day score good" is coded as " ev ba  cr  do"

"Day hard work good" is coded as "ba  hd rk do"

"Work always day practice" is coded as " rk wl ba pc"

"Always practice score good" is coded as " pc wl cr do"

**Q97. What is the code for "good"?**

(a) cr

(b) do

(c) wl

(d) Either cr or wl

(e) Either do or wl

**Q98. Which among the following words are coded as "ba  cr"?**

(a) Practice Score

(b) Day every

(c) Day score

(d) Good score

(e) Can't be determined

**Q99. What will be the code for "practice"?**

(a) wl

(b) pc

(c) ev

(d) Either pc or ev

(e) Either wl or pc

**Q100. Which among the following combination is not correct?**

(a) Every- do

(b) Day-ba

(c) Hard-hd

(d) Work-rk

(e) All are correct

# Solutions

**S1. Ans.(d)**

**Sol.** On referring to the first few lines of the first paragraph, we can conclude that only option (d) is correct. Refer, "From the hunter-gatherers whose consumption was survival-centric to the millennials for whom consumption is about fulfilling aspirations, the nature of consumerism has seen tremendous shifts."

**S2. Ans.(e)**

**Sol.** Refer to the second paragraph, "This is being done by strengthening the hyper-local logistical network, leveraging predictive algorithms, process optimization and, in some cases, providing incentives and disincentives for delivery partners."

**S3. Ans.(e)**

**Sol.** To validate the answer, refer to the second paragraph, "When the 10-minute delivery plan was announced, policymakers and experts raised concerns that delivery professionals might resort to reckless driving and put themselves and others at risk in their rush to stick to timelines. Indiscriminate work pressure can lead to fatigue, mental health issues and other health issues among delivery professionals. In an industry which offers little to no social security for gig workers, this could have serious consequences"

**S4. Ans.(d)**

**Sol.** Only option (d) is false here as it is nowhere mentioned in the passage.

Option (a) : Refer first paragraph, "We are in an age of 'hyper lapse consumerism'. The ubiquitous growth of the Internet and the rise of e-commerce have fueled hyper lapse consumerism, which refers not only to the kinds of products being sold but also to the ease with which consumers order them and the speed at which such products are delivered"

Option (b) : Refer to the last paragraph, "In the rush to come up with better value propositions for the customer, businesses often tend to ignore the social, ethical, environmental and personal costs of business decisions.

Option (c) : Refer to the second paragraph, "After e-commerce companies made delivery their core competence by putting boots on the ground and even drones in the sky, the competition to deliver faster and better is shaping consumer behavior and industry patterns"

**S5. Ans.(e)**

**Sol.** Option (a) : refer to the first paragraph, "According to a study by Invesp, 56% of online consumers between the age of 18 and 34 years expect the goods they have ordered to be delivered on the same day, whereas 61% want their packages even faster — within 1-3 hours of placing an order."

Option (b) : Refer to the second paragraph, "A NITI Aayog report, 'India's Booming Gig and Platform Economy', suggests extending social security for gig and platform workers, including paid sick leave, health access and insurance, and occupational disease and work accident insurance."

Option (c) : Refer to the last paragraph, "Hyperlapse consumerism is not without its benefits. According to NITI Aayog, in 2020-21, about 7.7 million workers were engaged in the gig economy, accounting for 1.5% of the total workforce in India. This is expected to grow to 23.5 million workers by 2029-30."

**S6. Ans.(b)**
**Sol.** Awareness: knowledge or perception of a situation or fact
Attention: the work of providing treatment for or attending to someone or something
Belief: an acceptance that something exists or is true, especially one without proof
Intention: a thing intended; an aim or plan
Enticement: something used to attract or to tempt someone; a lure

**S7. Ans.(a)**
**Sol.** Indiscriminate means done at random or without careful judgement.
Capricious: done at random or without careful judgement.
Lethargic: affected by lethargy; sluggish and apathetic
Chide: scold or rebuke.
Befuddle: unable to think clearly; confused or perplexed.
Terse: sparing in the use of words; abrupt

**S8. Ans.(c)**
**Sol.** Ubiquitous means present, appearing, or found everywhere
Unprecedented: never done or known before.
Peripatetic: travelling from place to place,
Scarce: insufficient for the demand
Clamber: an awkward and laborious climb or movement
Impending: about to happen; forthcoming

**S9. Ans.(d)**
**Sol.** In order to make to sentence meaningful, we need to interchange 'subjected' with 'section' and 'draconian' with 'allow'. After interchanges, the meaningful sentence will be, "No section of society would ever allow itself to be subjected to a law that is draconian."

**S10. Ans.(b)**
**Sol.** In order to make to sentence meaningful, we need to interchange 'fundamental' with 'recognized'. After interchange, the meaningful sentence will be, "The judgment delivered on that date formally recognized the right to privacy as being a fundamental right."

**S11. Ans.(c)**
**Sol.** In order to make to sentence meaningful, we need to interchange 'perspective' with 'individual' and 'malware' with 'underestimated'. After interchanges, the meaningful sentence will be, "From the data security perspective of an individual, the threats posed by malware cannot be underestimated."

**S12. Ans.(a)**
**Sol.** In order to make to sentence meaningful, we need to interchange 'removing' with 'violation'. After interchange, the meaningful sentence will be, "To allot the task of removing excreta and cleaning sewers to humans when machines are able to do the work is a gross violation of rights."

**S13. Ans.(c)**
**Sol.** In order to make to sentence meaningful, we need to interchange 'divided' with 'geographically' and 'valley' with 'hills'. Therefore, the meaningful sentence will be, "Manipur is **geographically** and psychologically **divided** between the Imphal **valley** and the many **hills** around it."

**S14. Ans.(c)**
**Sol.** The error is in part (B) . Here 'enrich' should be replaced with 'enriching' because 'look forward to' something means to be pleased or excited that it is going to happen. The 'to' in 'look forward to' is a preposition, so we must follow it by a noun phrase or a verb in the -ing form.

**S15. Ans.(a)**
**Sol.** The error is in part (D) . Here 'sparks' should be 'sparked' because the given sentence is in simple past tense.

**S16. Ans.(d)**
**Sol.** The error is in part (C) . Here 'debates' should be in 'debate' because many a/an... is used to indicate a large number of something. However, if we include "a" after "many," it turns the object back into the singular form. Thus, it takes a singular noun, which can be followed by a singular verb.

**S17. Ans.(c)**
**Sol.** The error is in part (B) . Here 'abstain to' should be replaced with 'abstain from' because 'abstain' is followed by the preposition 'from' when it means "to give something up" or "not to indulge in something."

**S18. Ans.(d)**
**Sol.** The error is in part (C) . Here 'difference' (noun) should be 'different' (adjective) .

**S19. Ans.(d)**
**Sol.** The error lies in part (C) . Here 'streamlines' should be 'streamline' because we use parallel structure with elements joined by coordinating conjunctions. Here 'integration' is given in base form after 'to' therefore 'streamline' is correct here.

**S20. Ans.(a)**
**Sol.** Sentence (E) will be the introductory sentence as it best presents the theme of the given paragraph which is about the commencement of the country's first indigenously built aircraft carrier Vikrant. The next sentence is (A) as it mentions the time when a commission of carrier will take place. Further, sentence (C) will be followed by sentence (A) as it further describes the trials by the naval army in November after the commission in September. It is given that sentence (D) will be the fourth sentence. Now, sentence (D) will be followed by sentence (F) as it describes that the army will put efforts into carrier operationalization. Further, sentence (B) will be the last sentence of the paragraph that mentions the expected date for the carrier's being fully operational. Therefore, the correct rearrangement of the given sentences would be "EACDFB".

**S21. Ans.(e)**
**Sol.** Sentence (E) will be the introductory sentence as it best presents the theme of the given paragraph which is about the commencement of the country's first indigenously built aircraft carrier Vikrant. The next sentence is (A) as it mentions the time when a commission of carrier will take place. Further, sentence (C) will be followed by sentence (A) as it further describes the trials by the naval army in November after the commission in September. It is given that sentence (D) will be the fourth sentence. Now, sentence (D) will be followed by sentence (F) as it describes that the army will put efforts into carrier operationalization. Further, sentence (B) will be the last sentence of the paragraph that mentions the expected date for the carrier's being fully operational. Therefore, the correct rearrangement of the given sentences would be "EACDFB".

**S22. Ans.(b)**
**Sol.** Sentence (E) will be the introductory sentence as it best presents the theme of the given paragraph which is about the commencement of the country's first indigenously built aircraft carrier Vikrant. The next sentence is (A) as it mentions the time when a commission of carrier will take place. Further, sentence (C) will be followed by sentence (A) as it further describes the trials by the naval army in November after the commission in September. It is given that sentence (D) will be the fourth sentence. Now, sentence (D) will be followed by sentence (F) as it describes that the army will put efforts into carrier operationalization. Further, sentence (B) will be the last sentence of the paragraph that mentions the expected date for the carrier's being fully operational. Therefore, the correct rearrangement of the given sentences would be "EACDFB".

**S23. Ans.(d)**
**Sol.** Sentence (E) will be the introductory sentence as it best presents the theme of the given paragraph which is about the commencement of the country's first indigenously built aircraft carrier Vikrant. The next sentence is (A) as it mentions the time when a commission of carrier will take place. Further, sentence (C) will be followed by sentence (A) as it further describes the trials by the naval army in November after the commission in September. It is given that sentence (D) will be the fourth sentence. Now, sentence (D) will be followed by sentence (F) as it describes that the army will put efforts into carrier operationalization. Further, sentence (B) will be the last sentence of the paragraph that mentions the expected date for the carrier's being fully operational. Therefore, the correct rearrangement of the given sentences would be "EACDFB".

**S24. Ans.(c)**
**Sol.** Sentence (E) will be the introductory sentence as it best presents the theme of the given paragraph which is about the commencement of the country's first indigenously built aircraft carrier Vikrant. The next sentence is (A) as it mentions the time when a commission of carrier will take place. Further, sentence (C) will be followed by sentence (A) as it further describes the trials by the naval army in November after the commission in September. It is given that sentence (D) will be the fourth sentence. Now, sentence (D) will be followed by sentence (F) as it describes that the army will put efforts into carrier operationalization. Further, sentence (B) will be the last sentence of the paragraph that mentions the expected date for the carrier's being fully operational. Therefore, the correct rearrangement of the given sentences would be "EACDFB".

**S25. Ans.(b)**
**Sol.** From among the given options, the correct order that gives a meaningful sentence is DACB. Hence, the sentence will be, "The Income Tax Department conducted surveys on two think tanks and a charity organisation on suspicion of irregularities related to financial transactions"

**S26. Ans.(e)**
**Sol.** The sentence is already meaningfully arranged.

**S27. Ans.(c)**
**Sol.** The correct sequence of given phrases to make a meaningful sentence is BADC. Therefore the sentence will be, "Researchers have found that when you sit, you use less energy than you do when you stand or move."

**S28. Ans.(a)**
**Sol.** The correct sequence of given phrases to make a meaningful sentence is CBAD. Therefore, the sentence will be, "When someone experiences a stressful life event they may find it more difficult to manage their emotions and can become overwhelmed."

**S29. Ans.(d)**
**Sol.** The correct sequence of given phrases to make a meaningful sentence is ADCB. Therefore, the sentence will be, "The U.S. Equal Employment Opportunity Commission enforces federal laws prohibiting discrimination against a job applicant or an employee during a variety of work situations"

**S30. Ans.(c)**
**Sol.** The correct sequence of given phrases to make a meaningful sentence is DCBA. Therefore, the sentence will be, "The hydrochloric acid in the gastric juice breaks down the food and the digestive enzymes split up the proteins."

**S31. Ans.(b)**
**Sol.**
$(419.85 \div 21.15) \times 7.96 + 139.68 = ? \times 5.15$
$(420 \div 21) \times 8 + 140 = ? \times 5$
$20 \times 8 + 140 = ? \times 5$
$160 + 140 = ? \times 5$
$? = \frac{300}{5}$
$? = 60$

**S32. Ans.(d)**
**Sol.**
$(? \times 2.12) + 37.5\% \text{ of } 959.96 = 5600.05 \div 6.85$
$2 \times ? + 3/8 \times 960 = 5600 \div 7$
$2 \times ? + 360 = 800$
$2 \times ? = 800 - 360$
$? = 440/2$
$? = 220$

## S33. Ans.(b)
**Sol.**

39.86% of 37.5% of 3999.86 + 19.82% of 30.15% of 499.89 = ?

40% of 3/8 of 4000 + 20% of 3/10 of 500 = ?

2/5 of 3/8 of 4000 + 1/5 of 3/10 of 500= ?

600 + 30= ?

**630**= ?

## S34. Ans.(a)
**Sol.**

62.5% of 319.95 – 20% of 784.8 + 43.75% of 480 =   ?

5/8 of 320 – 1/5 of 785 + 7/16 of 480=   ?

200 – 157 + 210=   ?

410 – 157=   ?

**253**=   ?

## S35. Ans.(e)
**Sol.**

$25.05^3 - 44.95^2 = (16.32 \times 3.96^3) + 4.06 \times$   ?

$15625 - 2025 = (16 \times 64) + 4 \times?$

$13600 = 1024 + 4 \times?$

$4 \times?\ = 13600 - 1024$

$?\ = \dfrac{12576}{4}\ = 3144$

## S36. Ans.(b)
**Sol.**

$12.03\%$ of $(? + 224.99) + \sqrt{255.99} = (7.99)^2$

$\dfrac{12}{100} \times (?\ +225) + 16 = 64$

$\dfrac{12}{100} \times (?\ +225) = 48$

$\dfrac{12}{100} \times ? = 21$

$?\ = 175$

## S37. Ans.(c)
**Sol.**

$(?\ +23.03\ ) \times 35.03 = (12.99)^3 - 96.99$

$(?\ + 23) \times 35 = 2197 - 97$

$(?\ + 23) \times 35 = 2100$

$?\ + 23 = 60$

$?\ = 37$

**S38. Ans.(a)**
**Sol.**
Let total students in class = 100x

Total students in section A= $100x \times \frac{40}{100} = 40x$

Total students in section C = $40x \times \frac{9}{10} = 36x$

Total students in section B = 100x − (40x + 36x) = 24x

Total girls in section B = $24x \times \frac{5}{12} = 10x$

Total girls in section A = $40x \times \frac{40}{100} = 16x$

ATQ −

10x + 16x + 40 = 170

26x = 130

x = 5

| Sections | Boys | Girls | Total |
|----------|------|-------|-------|
| A | 120 | 80 | 200 |
| B | 70 | 50 | 120 |
| C | 140 | 40 | 180 |
| Total | 330 | 170 | 500 |

Required difference = 330 − 170 = 160

**S39. Ans.(b)**
**Sol.**
Let total students in class = 100x

Total students in section A= $100x \times \frac{40}{100} = 40x$

Total students in section C = $40x \times \frac{9}{10} = 36x$

Total students in section B = 100x − (40x + 36x) = 24x

Total girls in section B = $24x \times \frac{5}{12} = 10x$

Total girls in section A = $40x \times \frac{40}{100} = 16x$

ATQ −

10x + 16x + 40 = 170

26x = 130

x = 5

| Sections | Boys | Girls | Total |
|----------|------|-------|-------|
| A | 120 | 80 | 200 |
| B | 70 | 50 | 120 |
| C | 140 | 40 | 180 |
| Total | 330 | 170 | 500 |

Required percentage = $\frac{80-70}{80} \times 100 = 12.5\%$

## S40. Ans.(c)
**Sol.**

Let total students in class = 100x

Total students in section A= $100x \times \frac{40}{100} = 40x$

Total students in section C = $40x \times \frac{9}{10} = 36x$

Total students in section B = 100x − (40x + 36x) = 24x

Total girls in section B = $24x \times \frac{5}{12} = 10x$

Total girls in section A = $40x \times \frac{40}{100} = 16x$

ATQ −

10x + 16x + 40 = 170

26x = 130

x = 5

| Sections | Boys | Girls | Total |
|----------|------|-------|-------|
| A | 120 | 80 | 200 |
| B | 70 | 50 | 120 |
| C | 140 | 40 | 180 |
| Total | 330 | 170 | 500 |

Required average = $\frac{330}{3} = 110$

## S41. Ans.(e)
**Sol.**

Let total students in class = 100x

Total students in section A= $100x \times \frac{40}{100} = 40x$

Total students in section C = $40x \times \frac{9}{10} = 36x$

Total students in section B = 100x − (40x + 36x) = 24x

Total girls in section B = $24x \times \frac{5}{12} = 10x$

Total girls in section A = $40x \times \frac{40}{100} = 16x$

ATQ −

10x + 16x + 40 = 170

26x = 130

x = 5

| Sections | Boys | Girls | Total |
|----------|------|-------|-------|
| A | 120 | 80 | 200 |
| B | 70 | 50 | 120 |
| C | 140 | 40 | 180 |
| Total | 330 | 170 | 500 |

Required ratio = $\frac{140}{170}$ = 14 : 17

**S42. Ans.(b)**
**Sol.**

Ram : Sohan : Aman

Profit ratio = $36000 \times 12$ : $72000 \times 6$ : $32000 \times 6$

9 : 9 : 4

Let the shares of Ram, Sohan and Aman be 9x, 9x and 4x respectively.

So, $4x = 5680$

$x = 1420$

So, Total profit $= 22x = 22 \times 1420 = Rs.31240$

**S43. Ans.(c)**
**Sol.**

Let the monthly income of Atul $= 100x$

Investment in scheme A $= 62.5\%$ of $100x = 62.5x$

C.I. for 2 years $= 20 + 20 + \frac{20 \times 20}{100} = 44\%$

$= 44\%$ of $62.5x$

$= \frac{44}{100} \times 62.5x = 27.5x$

Investment in scheme B $= 100x - 62.5x = 37.5x$

$\frac{37.5x \times 12.5 \times 2}{100} = 9.375x$

ATQ.$= 27.5x - 9.375x = 2430$

$18.125x = 2430$

$x = \frac{2430}{18.125}$

Req. income $= \frac{2430}{18.125} \times 100 = Rs.\,13,406.8 \approx Rs.\,13,407$

**S44. Ans.(b)**
**Sol.**

Sum of 25 numbers $= 25 \times 96 = 2400$

Sum of first $11^{th}$ number $= 11 \times 50 = 550$

Sum of last $12^{th}$ numbers $= 12 \times 80 = 960$

ATQ,

Sum of $12^{th}$ and $13^{th}$ numbers $= 2400 - (550+960)$

$(2x+26) + (3x+14) = 2400 - 1510$

$5x+40 = 890$

$x = \frac{890-40}{5}$

$x = 170$

So, $13^{th}$ number $= (3x+14) = 3 \times 170+14 = 524$

## S45. Ans.(d)
**Sol.**

Aman Received from Mayank = 14000

Aman received from Naman = 30% less than Mayank

= $14000 - 14000 \times \dfrac{30}{100}$

= Rs.9800

Aman received from Chetan = 50% more than Naman

= $9800 \times \dfrac{150}{100}$

= Rs.14700

So, Percentage = $\dfrac{14700 - 14000}{14000} \times 100$

= $\dfrac{700}{14000} \times 100$

= 5%

## S46. Ans.(c)
**Sol.**

Let radius = $3x$ and height = $7x$

Curved surface area of cylindrical Vessel = 10692 cm²

$2\pi rh = 10692$

$2 \times 22/7 \times 3x \times 7x = 10692$

$132x^2 = 10692$

$x^2 = 81$

$x = 9\text{cm}$

So, radius = $3x = 3 \times 9 = 27\text{cm}$

Height = $7x = 7 \times 9 = 63\text{cm}$

ATQ,

Time Taken to empty the vessel = $\dfrac{\pi r^2 h}{1782}$

= $\dfrac{22/7 \times 27 \times 27 \times 63}{1782}$

= 81 minutes

## S47. Ans.(e)
**Sol.**

Let the efficiency of a man and a woman be M & W respectively.

ATQ,

$$\dfrac{(8M + 7W) \times 15}{1} = \dfrac{(10M + 7W) \times 10}{\frac{4}{5}}$$

$48M + 42W = 50M + 35W$

$\dfrac{M}{W} = \dfrac{7}{2}$

Total work = $(8 \times 7 + \times 7 \times 2) \times 15 = 1050\ units$

Req. days = $\dfrac{1050}{21 \times 2} = 25\ days$

**S48. Ans.(b)**

**Sol.**

Let the length of Patna Express = 'x' meters

ATQ,

Speed of Delhi Express in m/s = $144 \times \frac{5}{18} = 40$ m/s

Length of Delhi Express = $40 \times 12.5$

= 500 meters

So, speed of Patna Express in m/s = $162 \times \frac{5}{18} = 45$ m/s

Req. length = $\frac{500+x}{40+45} = 12$

$(500 + x) = 12 \times 85$

$x = 520$ meter

**S49. Ans.(a)**

**Sol.**

Let orange balls = x

Given, Pink balls = 36

Probability of picking an orange ball = 1/5

ATQ,

$\frac{x}{x+36} = \frac{1}{5}$

$5x - x = 36$

$x = 9$

Total balls = 9+36 = 45

Req. Probability = $\frac{9c_1 \times 36c_1}{45c_2} = \frac{18}{55}$

**S50. Ans.(b)**

**Sol.**

ATQ.

$10(x+13) = 12.5(4x-12)$

$10x+130 = 50x-150$

$50x-10x = 130+150$

$40x = 280$

$x = 7$

So, distance travelled by Anand = $10(7+13)$

= $10 \times 20$

= 200 km

**S51. Ans.(d)**

**Sol.**

Required ratio = $\frac{15+30}{25} = \frac{45}{25}$

= 9 : 5

**S52. Ans.(b)**
**Sol.**

Required difference $= \frac{25-20}{100} \times 2700$

$= 135$

**S53. Ans.(c)**
**Sol.**

Female candidates who applied from city A $= \frac{23}{45} \times \frac{15}{100} \times 2700 = 207$

Female candidates who applied from city E $= \frac{4}{9} \times \frac{10}{100} \times 2700 = 120$

So, required sum $= 207 + 120 = 327$

**S54. Ans.(a)**
**Sol.**

Disqualified candidates from city D $= \frac{13}{15} \times \frac{20}{100} \times 2700 = 468$

Qualified candidates from city C $= \frac{20}{100} \times \frac{30}{100} \times 2700 = 162$

So, required percentage $= \frac{468-162}{162} \times 100$

$= 188.88\% \approx 189\%$

**S55. Ans.(d)**
**Sol.**

Required average $= \frac{1}{3} \times \frac{15+30+20}{100} \times 2700$

$= \frac{1755}{3} = 585$

**S56. Ans.(e)**
**Sol.**

$2000 \times \frac{35}{100} + 1600 \times \frac{40}{100} : 1500 \times \frac{35}{100} + 2800 \times \frac{30}{100}$

$= 700 + 640 : 525 + 840$

$= 1340 : 1365$

$268 : 273$

**S57. Ans.(d)**
**Sol.**

Unsold item of B $= 1500 \times \frac{35}{100} = 525$

Defective item of type B $= 525 \times \frac{7}{15} = 245$

Non-defective item of type B $= 525 - 245 = 280$

Unsold item of D $= 600 \times \frac{37}{100} = 222$

Defective item of type D $= 222 \times \frac{5}{6} = 185$

Non-defective item of type B $= 222 - 185 = 37$

Req. difference $= (245 + 185) - (280 + 37)$

$= 430 - 317 = 113$

## S58. Ans.(c)
Sol.

Non-defective items of type A = $2000 \times \frac{40}{100} = 800$

Average of unsold items of type C and type E = $\dfrac{1600 \times \frac{60}{100} + 2800 \times \frac{30}{100}}{2}$

= 900

Req. Percentage = $\dfrac{800}{900} \times 100 = 88.88\% \approx 89\%$

## S59. Ans.(b)
Sol.

Req. average = $\dfrac{\left(1500 \times \frac{65}{100}\right) \times 50 + \left(2800 \times \frac{70}{100}\right) \times 70}{2}$

$\dfrac{48750 + 137200}{2} = 92975$

## S60. Ans.(a)
Sol.

No. of items sold of type A and D = $2000 \times \frac{35}{100} + 600 \times \frac{63}{100}$

= 700+378 = 1078

No. of items sold of type C and B = $1600 \times \frac{40}{100} + 1500 \times \frac{65}{100}$

= 640+975

= 1615

Req. Percentage = $\dfrac{1615-1078}{1615} \times 100$

= $\dfrac{537}{1615} \times 100 = 33.25\% \approx 33\%$

## S61. Ans.(c)
Sol.

Let the original quantity of alcohol be 13x and water be 17x

So, total original quantity = 30x

If 180ml mixture is taken out then remaining quantity of alcohol and water will be 13x – 78 and 17x – 102 respectively.

ATQ,

$\dfrac{13x - 78 + 12}{17x - 102 + 24} = \dfrac{5}{7}$

7(13x – 66) = 5(17x – 78)

91x – 462 = 85x – 390

91x – 85x = 462 – 390

6x = 72

x = 12

**So,** Original quantity = 30x = 30*12 = 360ml

**S62. Ans.(c)**
**Sol.**

I. $x^2 + 13x - 114 = 0$
$x^2 + 19x - 6x - 114 = 0$
$x(x + 19) - 6(x + 19) = 0$
$(x + 19)(x - 6) = 0$
$x = -19, 6$
II. $y^3 = 216$
$y^3 = 6^3$
$y = 6$
So, $x \leq y$, i.e. $x$ is less than or equal to $y$

**S63. Ans.(b)**
**Sol.**

I. $3x^2 + 15x + 18 = 0$
$3x^2 + 9x + 6x + 18 = 0$
$3x(x + 3) + 6(x + 3) = 0$
$(3x + 6)(x + 3) = 0$
$x = -2, -3$
II. $y^2 + 14y + 48 = 0$
$y^2 + 8y + 6y + 48 = 0$
$y(y + 8) + 6(y + 8) = 0$
$(y + 6)(y + 8) = 0$
$y = -6, -8$
So, $x > y$, i.e., $x$ is greater than $y$

**S64. Ans.(a)**
**Sol.**

I. $x^2 - 6x + 8 = 0$
$x^2 - 4x - 2x + 8 = 0$
$x(x - 4) - 2(x - 4) = 0$
$(x - 4)(x - 2) = 0$
$x = 2, 4$
II. $y^2 + 2y - 8 = 0$
$y^2 + 4y - 2y - 8 = 0$
$y(y + 4) - 2(y + 4) = 0$
$(y + 4)(y - 2) = 0$
$y = -4, 2$
So, $x \geq y$, i.e., $x$ is greater than or equal to $y$

**S65. Ans.(a)**
**Sol.**

I. $10x^2 - 9x + 2 = 0$

$\Rightarrow 10x^2 - 5x - 4x + 2 = 0$

$\Rightarrow 5x(2x-1) - 2(2x-1) = 0$

$\Rightarrow (5x-2)(2x-1) = 0$

$\Rightarrow x = \frac{2}{5}$ or $\frac{1}{2}$

II. $15y^2 - 11y + 2 = 0$

$\Rightarrow 15y^2 - 5y - 6y + 2 = 0$

$\Rightarrow 5y(3y-1) - 2(3y-1) = 0$

$\Rightarrow (3y-1)(5y-2) = 0$

$\Rightarrow y = 1/3$ or $2/5$

So, $x \geq y$, i.e., $x$ is greater than or equal to $y$

**S66. Ans.(a)**
**Sol.**
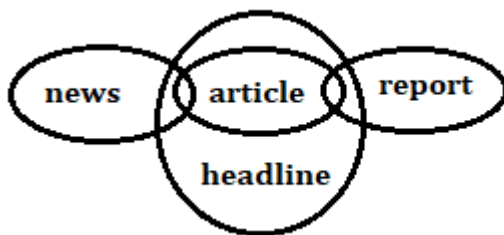


**S67. Ans.(e)**
**Sol.**
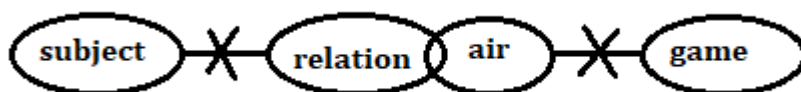


**S68. Ans.(d)**
**Sol.**
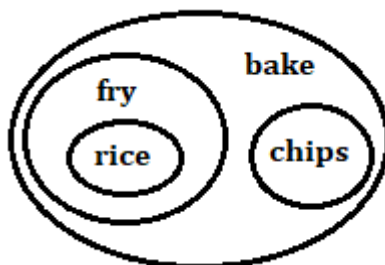


**S69. Ans.(a)**
**Sol.** From the statements, Y is the only neighbour of P who faces north. We get two possibilities here. U sits second to the left of Y and sits third to the right of R.

**Case 1**                              **Case 2**
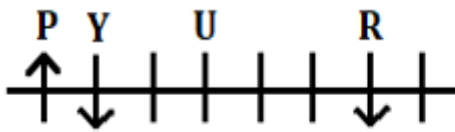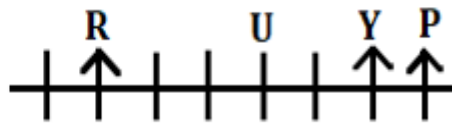


Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R. Case 2 will eliminate here. So, the final arrangement is:
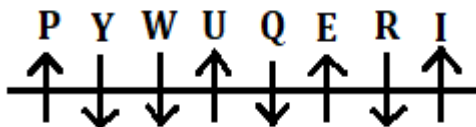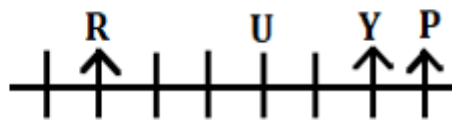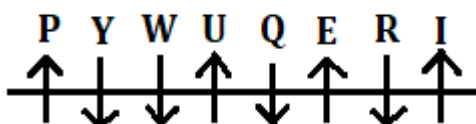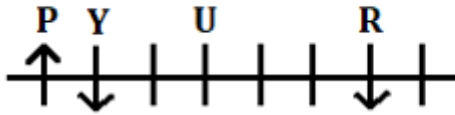


**S70. Ans.(d)**
**Sol.** From the statements, Y is the only neighbour of P who faces north. We get two possibilities here. U sits second to the left of Y and sits third to the right of R.

**Case 1**                              **Case 2**
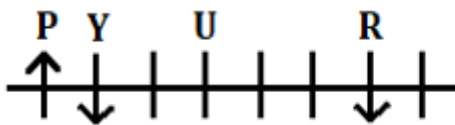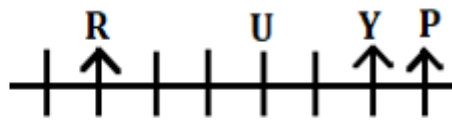


Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R. Case 2 will eliminate here. So, the final arrangement is:
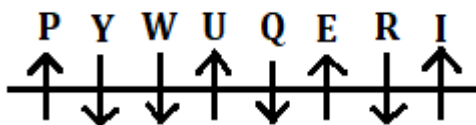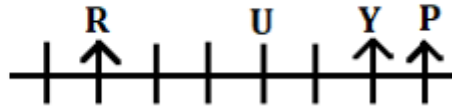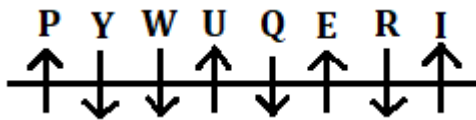


**S71. Ans.(c)**
**Sol.** From the statements, Y is the only neighbour of P who faces north. We get two possibilities here. U sits second to the left of Y and sits third to the right of R.
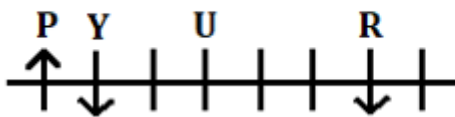
**Case 1**                              **Case 2**
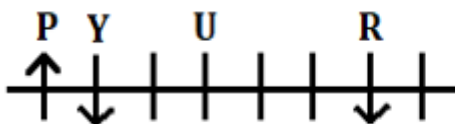


Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R. Case 2 will eliminate here. So, the final arrangement is:

## S72. Ans.(c)
**Sol.** From the statements, Y is the only neighbour of P who faces north. We get two possibilities here. U sits second to the left of Y and sits third to the right of R.



Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R. Case 2 will eliminate here. So, the final arrangement is:



## S73. Ans.(e)
**Sol.** From the statements, Y is the only neighbour of P who faces north. We get two possibilities here. U sits second to the left of Y and sits third to the right of R.
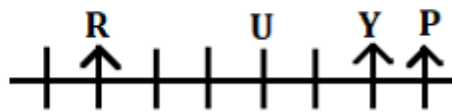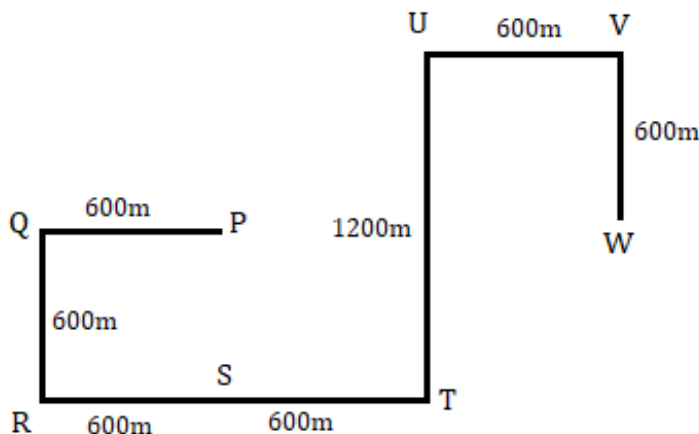


Only two persons sit between W and E and none of them sit at any of the extreme ends of the row. Q and U sit immediate right to each other. I and E face north and both are the immediate neighbours of R. Case 2 will eliminate here. So, the final arrangement is:
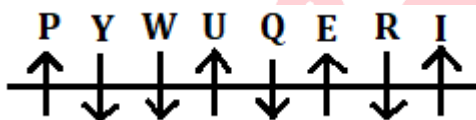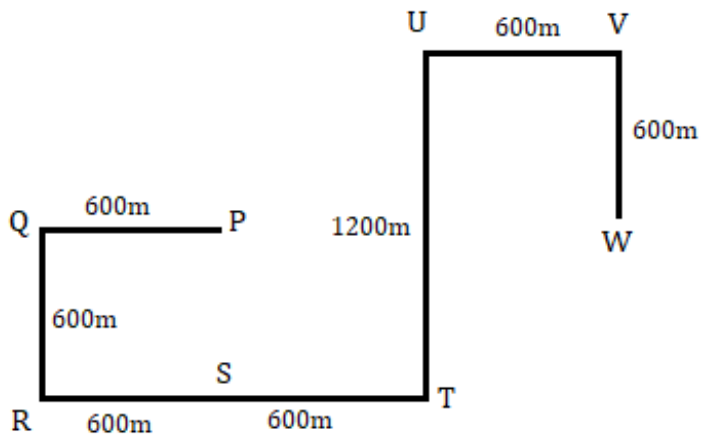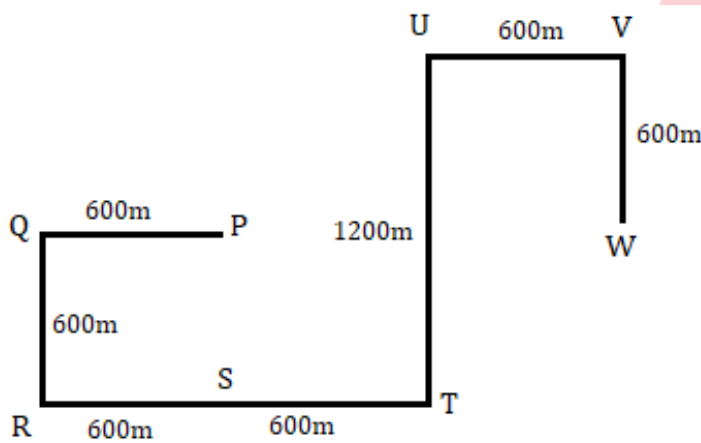


## S74. Ans.(d)
**Sol.**

**S75. Ans.(b)**
**Sol.**



**S76. Ans.(c)**
**Sol.**



**S77. Ans.(d)**
**Sol.**
I. S > C (False)
II. W < B (False)

**S78. Ans.(e)**
**Sol.**
I. F > T (True)
II. M ≥ E (True)

**S79. Ans.(b)**
**Sol.**
I. X ≥ F (True)
II. D = Q (False)

**S80. Ans.(a)**
**Sol.**
I. F < S (False)
II. E > L (True)

**S81. Ans.(b)**
**Sol.**
K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. So, we have two possible cases here.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | | | | |
| | 13 | | | | |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

G was born on even numbered date but not after the one who likes yellow. So, case 1 gets eliminated here. The number of persons born before G is same as the number of persons born after the one who likes black.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | G | | G | |
| | 13 | | | | Black |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

The one who likes blue born before J and born after the one who likes red. M doesn't like green. And the final arrangement is:

| Months | Dates | Persons | Colours |
|---|---|---|---|
| June | 4 | P | Red |
| | 13 | M | Pink |
| August | 4 | G | Blue |
| | 13 | J | Black |
| November | 4 | K | Green |
| | 13 | D | Yellow |

J likes black colour.

**S82. Ans.(c)**
**Sol.** K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. So, we have two possible cases here.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | | | | |
| | 13 | | | | |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

G was born on even numbered date but not after the one who likes yellow. So, case 1 gets eliminated here. The number of persons born before G is same as the number of persons born after the one who likes black.

| Months | Dates | ~~Case 1~~ | | Case 2 | |
|---|---|---|---|---|---|
| | | ~~Persons~~ | ~~Colours~~ | Persons | Colours |
| June | 4 | ~~K~~ | | P | |
| | 13 | ~~D~~ | ~~Yellow~~ | | Pink |
| August | 4 | ~~G~~ | | G | |
| | 13 | | | | Black |
| November | 4 | ~~P~~ | | K | |
| | 13 | | ~~Pink~~ | D | Yellow |

The one who likes blue born before J and born after the one who likes red. M doesn't like green. And the final arrangement is:

| Months | Dates | Persons | Colours |
|---|---|---|---|
| June | 4 | P | Red |
| | 13 | M | Pink |
| August | 4 | G | Blue |
| | 13 | J | Black |
| November | 4 | K | Green |
| | 13 | D | Yellow |

Four persons are younger than M.

**S83. Ans.(c)**
**Sol.** K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. So, we have two possible cases here.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | | | | |
| | 13 | | | | |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

G was born on even numbered date but not after the one who likes yellow. So, case 1 gets eliminated here. The number of persons born before G is same as the number of persons born after the one who likes black.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | G | | G | |
| | 13 | | | | Black |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

The one who likes blue born before J and born after the one who likes red. M doesn't like green. And the final arrangement is:

| Months | Dates | Persons | Colours |
|---|---|---|---|
| June | 4 | P | Red |
| | 13 | M | Pink |
| August | 4 | G | Blue |
| | 13 | J | Black |
| November | 4 | K | Green |
| | 13 | D | Yellow |

M-Pink

**S84. Ans.(b)**

**Sol.** K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. So, we have two possible cases here.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | | | | |
| | 13 | | | | |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

G was born on even numbered date but not after the one who likes yellow. So, case 1 gets eliminated here. The number of persons born before G is same as the number of persons born after the one who likes black.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | G | | G | |
| | 13 | | | | Black |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

The one who likes blue born before J and born after the one who likes red. M doesn't like green. And the final arrangement is:

| Months | Dates | Persons | Colours |
|---|---|---|---|
| June | 4 | P | Red |
| | 13 | M | Pink |
| August | 4 | G | Blue |
| | 13 | J | Black |
| November | 4 | K | Green |
| | 13 | D | Yellow |

P likes Red.

**S85. Ans.(e)**
**Sol.** K was born in the month having even number of days. D likes yellow and born just after K. More than two persons were born between D and the one who likes pink. P was born just before the one who likes pink. So, we have two possible cases here.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | | | | |
| | 13 | | | | |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

G was born on even numbered date but not after the one who likes yellow. So, case 1 gets eliminated here. The number of persons born before G is same as the number of persons born after the one who likes black.

| Months | Dates | Case 1 | | Case 2 | |
|---|---|---|---|---|---|
| | | Persons | Colours | Persons | Colours |
| June | 4 | K | | P | |
| | 13 | D | Yellow | | Pink |
| August | 4 | G | | G | |
| | 13 | | | | Black |
| November | 4 | P | | K | |
| | 13 | | Pink | D | Yellow |

The one who likes blue born before J and born after the one who likes red. M doesn't like green. And the final arrangement is:

| Months | Dates | Persons | Colours |
|---|---|---|---|
| June | 4 | P | Red |
| | 13 | M | Pink |
| August | 4 | G | Blue |
| | 13 | J | Black |
| November | 4 | K | Green |
| | 13 | D | Yellow |

All are true.

**S86. Ans.(c)**
**Sol.** Meaningful word formed by using letter N, R, T , O is TORN.

**S87. Ans.(a)**
**Sol.** 5 # X, 1 @ V, 5 % M

**S88. Ans.(c)**
**Sol.** # X K 8 J * **F** I R 3 1 @ V 9 5 % M L

**S89. Ans.(b)**
**Sol.** Tenth from left end=5; 14th from right end=J; mid elements= Four **(# X K 8)**

**S90. Ans.(a)**
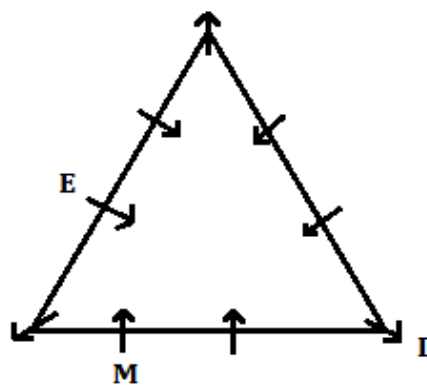**Sol.** 7 9, 3 1, 9 5

**S91. Ans.(c)**
**Sol.** P > L > Q > X > Z

**S92. Ans.(e)**
**Sol.** From the given statements, three persons sit between E and D who does not sit at the side of table. From this condition we get 2 possibilities. M sits 2nd to the right of E.
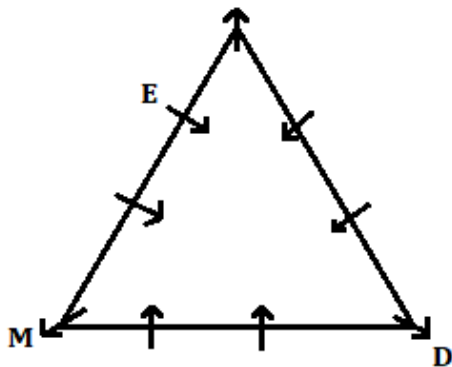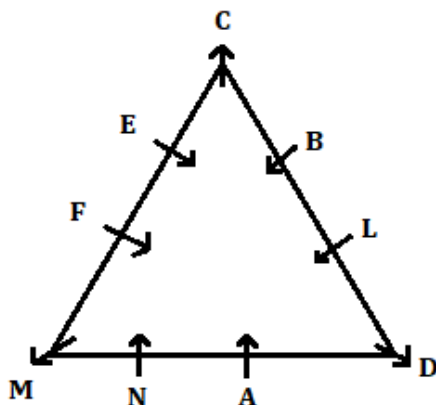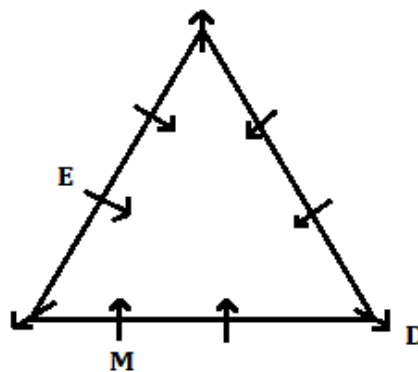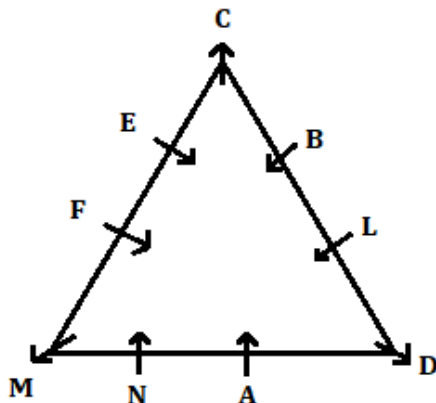


The number of persons sit between M and D is same as between M and C (Either from the left or right) . Here Case 2 is ruled out now. B is neither an immediate neighbour of M nor D. A sits immediate right of N. F does not sit near D. L faces inside. So, the final arrangement is-
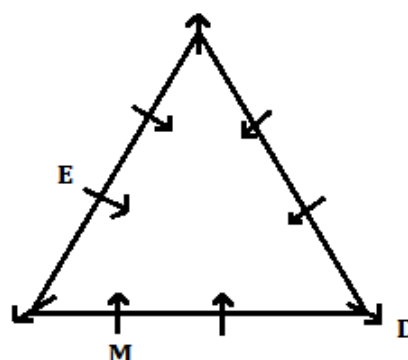
**S93. Ans.(b)**

**Sol.** From the given statements, three persons sit between E and D who does not sit at the side of table. From this condition we get 2 possibilities. M sits 2$^{nd}$ to the right of E.
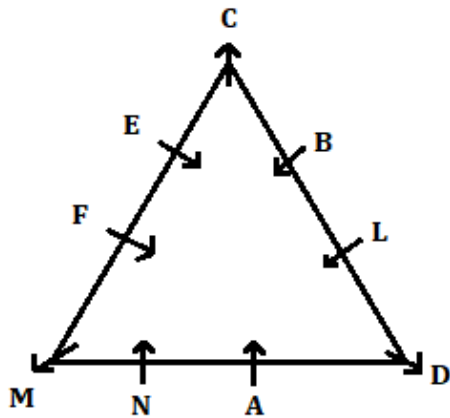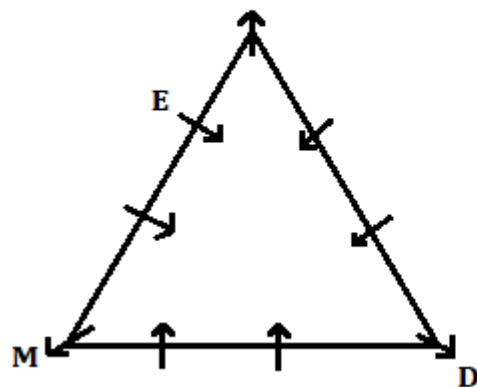
Case 1
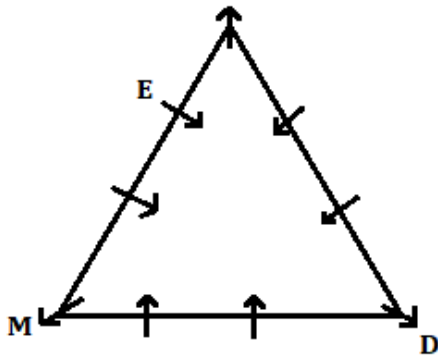
Case 2



The number of persons sit between M and D is same as between M and C (Either from the left or right) . Here Case 2 is ruled out now. B is neither an immediate neighbour of M nor D. A sits immediate right of N. F does not sit near D. L faces inside. So, the final arrangement is-
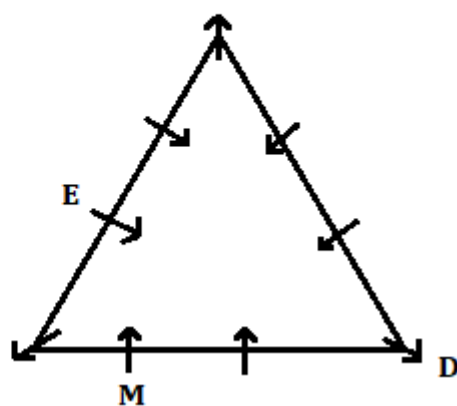


**S94. Ans.(d)**

**Sol.** From the given statements, three persons sit between E and D who does not sit at the side of table. From this condition we get 2 possibilities. M sits 2$^{nd}$ to the right of E.

Case 1
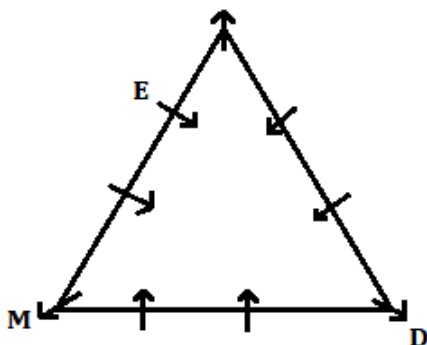
Case 2

The number of persons sit between M and D is same as between M and C (Either from the left or right) . Here Case 2 is ruled out now. B is neither an immediate neighbour of M nor D. A sits immediate right of N. F does not sit near D. L faces inside. So, the final arrangement is-



**S95. Ans.(a)**
**Sol.** From the given statements, three persons sit between E and D who does not sit at the side of table. From this condition we get 2 possibilities. M sits 2$^{nd}$ to the right of E.
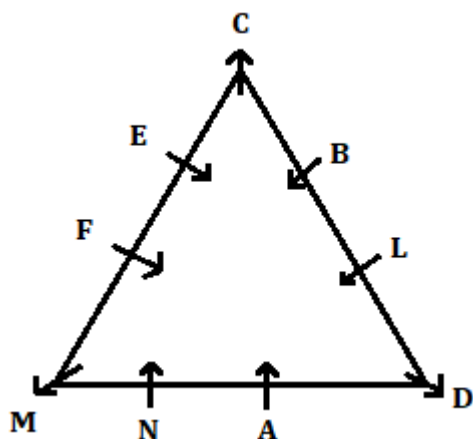
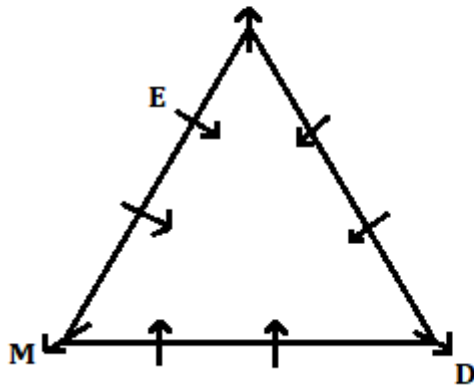**Case 1**                          **Case 2**



The number of persons sit between M and D is same as between M and C (Either from the left or right) . Here Case 2 is ruled out now. B is neither an immediate neighbour of M nor D. A sits immediate right of N. F does not sit near D. L faces inside. So, the final arrangement is-
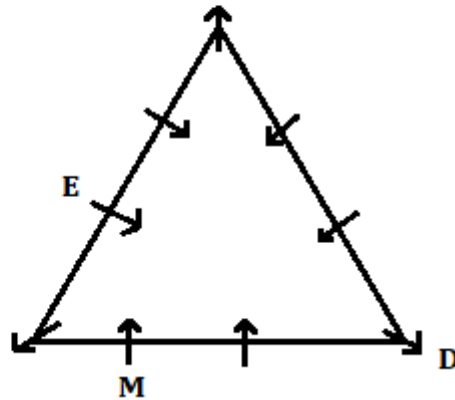
**S96. Ans.(e)**
**Sol.** From the given statements, three persons sit between E and D who does not sit at the side of table. From this condition we get 2 possibilities. M sits 2nd to the right of E.
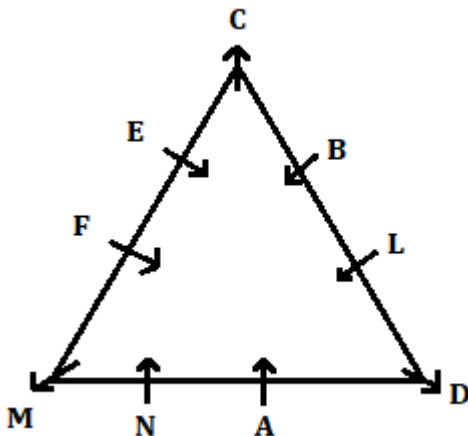
Case 1                           Case 2



The number of persons sit between M and D is same as between M and C (Either from the left or right) . Here Case 2 is ruled out now. B is neither an immediate neighbour of M nor D. A sits immediate right of N. F does not sit near D. L faces inside. So, the final arrangement is-



**S97. Ans.(b)**
**Sol.**

| Words | Codes |
|---|---|
| Every | Ev |
| Day | Ba |
| Score | Cr |
| Good | Do |
| Hard | Hd |
| Work | Rk |
| Always/Practice | Wl/pc |

**S98. Ans.(c)**
**Sol.**

| Words | Codes |
|---|---|
| Every | Ev |
| Day | Ba |
| Score | Cr |
| Good | Do |
| Hard | Hd |
| Work | Rk |
| Always/Practice | Wl/pc |

**S99. Ans.(e)**
**Sol.**

| Words | Codes |
|---|---|
| Every | Ev |
| Day | Ba |
| Score | Cr |
| Good | Do |
| Hard | Hd |
| Work | Rk |
| Always/Practice | Wl/pc |

**S100. Ans.(a)**
**Sol.**

| Words | Codes |
|---|---|
| Every | Ev |
| Day | Ba |
| Score | Cr |
| Good | Do |
| Hard | Hd |
| Work | Rk |
| Always/Practice | Wl/pc |