Directions (1-2): Two columns are given in each question and each column has three phrases. Choose the most suitable pair of phrases, which makes a grammatically correct and contextually coherent statement.

Q1. COLUMN A
A. The regulator did not wait for sufficient safety and efficacy data to be collected
B. If there is already some degree of apprehension about the safety and efficacy of COVID-19 vaccines,
C. If the answers to those questions are affirmative, then
COLUMN B
D. the opaque nature of the approval process has done little to mitigate such concerns.
E. and did not share information about the clinical trials before granting approval.
F. made assumptions about increasing rates of technological progress is very reasonable.
(a) B-D
(b) A-E & B-D
(c) C-D & B-F
(d) A-E & C-F
(e) A-E, B-D & B-F

Q2. COLUMN A
A. These regulatory bodies and committees have remained silent
B. More than being a scientific methodology,
C. The coercive attempt to falsify a study participant's claims and intimidate him or her
COLUMN B
D. violates the agreed upon rules of clinical trials
E. clinical trials are a method of human cooperation
F. the impression that they are not independent
(a) B-D
(b) A-E & B-D
(c) C-D & B-F
(d) A-E & C-F
(e) B-E & C-D

Directions (3-6): In each of the questions given below a sentence is given in which a word is highlighted. Each sentence is then followed by three words. Choose the word(s) that can replace the given word in bold to make a grammatically and contextually meaningful sentence as your answer. If none of the words can replace the highlighted word then choose "None can replace" as the correct choice.

Q3. There is a vending machine on the platform that **dispenses** snacks.
(i) Disburses
(ii) Squander
(iii) Distributes

(a) Only (i)

(b) Both (I) &(iii)

(c) None can replace

(d) Only (ii)

(e) Only (iii)

Q4. India and Japan have devised a **mechanism** for cooperation in the steel industry at the joint secretary level.

(i) System

(ii) Method

(iii) tools

(a) Only (i)

(b) Both (I) &(iii)

(c) Both (i) & (ii)

(d) Only (ii)

(e) None 0can replace

Q5. Your business premises which **qualify** for business asset taper relief have become too cramped.

(i) Hamper

(ii) Measured

(iii) Inclined

(a) None can replace

(b) Both (I) &(iii)

(c) Both (i) & (ii)

(d) Only (ii)

(e) Only (iii)

Q6. The misuse of the Governor's office to undermine duly elected State governments is a particularly mischievous **disruption** of federalism.

(i) Disturbance

(ii) Obstruction

(iii) Relevant

(a) None can replace

(b) Both (I) &(iii)

(c) Both (i) & (ii)

(d) Only (ii)

(e) Only (iii)

Directions (7-9): In each of the following sentences, parts of the sentence are left blank. Beneath each sentence, five different ways of completing the sentence are indicated. Choose the best alternative among the given options.

Q7. Police _____ Notorious Gangster after relentless chase that_____for 3 weeks.
(a) Arrest, reigned
(b) Nabbed, lasted
(c) Snatched, persist
(d) Contempt, endured
(e) Apprehend, sustain

Q8. Tropical rain forests choked in fog and continuously _____by mists and down pours are least _____ by fires.
(a) Rejuvenate, impact
(b) Exhausted, Overwhelm
(c) Drenched, affected
(d) Approach, Influence
(e) Devoured, swayed

Q9. An interview is a good chance to _____ how candidates _____ difficult situations
(a) Discuss, improved
(b) Assess, addressed
(c) Analyze, tackling
(d) Evaluate, approach
(e) understand, enhance

Directions (10-12): Improve the bold part in the following sentences, if needed.

Q10. He made himself master of practically every branch of medieval learning, and **has a thoroughly knowledge of** the sources and the bibliography of his subject
(a) having a thorough knowledge of
(b) has had a thorough knowledge to
(c) Have a thoroughly knowledge for
(d) had a thorough knowledge of
(e) No Correction required

Q11. Gionee **has been found guilty for** intentionally inflicting malware in over 20 million phones by a Chinese court.
(a) had been found guilty for
(b) has been found guilty of
(c) has been found being guilty with
(d) have found to guilty for
(e) No Correction required

Q12. Many people believe that voluntary bodies as they are today should **not entrusted with** this national responsibility.
(a) be entrust not with
(b) not be entrust with
(c) not being entrusted for
(d) not be entrusted with
(e) No Correction required

Directions (13-14): In each of the questions given below, four words have been highlighted which may or may not be at their correct positions. Pick the most suitable option to interchange the words, so that the statement becomes grammatically correct and contextually meaningful.

Q13. The MNM's promise to directly pay women a monthly amount may be **competitive (A)** as a **landscape (B)** to grab attention in an over-crowded, highly **viewed (C)** electoral **strategy (D).**
(a) CDAB
(b) No rearrangement required
(c) BDCA
(d) ADCB
(e) CABD

Q14. With the Indian economy gradually **debating (A)** its feet after a historic contraction, economic commentators have **finding (B)** themselves with **viability(C)** the need for fiscal expansion and the **busied (D)** of a "V-shaped recovery".
(a) CADB
(b) ABDC
(c) No rearrangement required
(d) BDAC
(e) DBAC

Directions (15-21): Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them, while answering some of the questions.

In some ways we already do: every time we spend our cash we are making an active choice about the companies we support and the practices we **endorse**. Today, when corporations can be more influential than entire states, where we put our pounds is where the power lies. The problem is, so it is difficult to confidently make an informed choice.

Consider this: the retail manufacturing industry is the second most polluting industry on earth, second only to oil. According to Annie Leonard, an expert in overconsumption, only 1% of the materials used to produce our consumer goods are still in use six months after sale. Somewhere, the value of craftsmanship and of provenance has been lost. Price and speed are trumping value. However, the tide is turning. Increasing awareness around these issues has led to a rise in what is known as conscious consumption, a movement of people who seek out ways to make positive decisions about what to buy and look for a solution to the negative impact consumerism is having on our world.

This is a growing tribe: a third of UK consumers claim to be very concerned about issues regarding the origin of products. A study from YouGov and the Global Poverty Project revealed that 74% of those surveyed would pay an extra 5% for their clothes if there was a guarantee workers were being paid fairly and working in safe conditions. If you're thinking that 5% doesn't sound like a lot, consider the fact that the fashion industry could take a **staggering** 125 million people out of poverty by adding only 1% of its profits to workers' wages.

Issues such as equal pay, environmentally conscious manufacturing processes, prevention of counterfeit goods, human trafficking, responsible farming practices and overproduction of goods are all at the forefront of consumers' minds when making these choices. In an increasingly open, digital world where authenticity is the buzzword of choice, businesses must keep up with growing demands for ethical behaviour and transparency in everything from employee rights and gender discrimination to the supply chain.

In studying for my PhD, I researched product supply chain transparency in depth, looking at technologies to improve information about products and the global network of people and resources that fuel them. I believe technology is the key to dealing with the challenges created by consumerism. Open data, social networks and mobile tech can change the game. Groundbreaking technologies could enable transparency in supply chains, which is why this year I have **__(I)__**on turning my findings into a social enterprise to empower businesses to take steps to being open.

Q15. Why businesses must keep up with growing demands of ethical behaviour and transparency?
(a) As the world of business can be opaque and supply chains are murky
(b) As the value of craftsmanship and of provenance has been lost
(c) As they want to tackle the huge impact our current production levels having on the world
(d) As Customers are taking an increasing interest in the ethical practices of those from whom they buy
(e) None of these

Q18. According to the author how can we tackle the impact of consumerism?
(a) By using technology in order to increase transparency in supply chains
(b) By repleting the resources which were otherwise depleted due to overconsumption
(c) By increasing the lifespan of the products so as to reduce the consumption.
(d) By spending extra for the products if there was a guarantee worker
were being paid fairly
(e) None of these

Q19. Which of the following word is most **similar** in meaning to the
word "**endorse**" as given in the passage?
(a) Sabotage
(b) Promote
(c) Veto
(d) Deliberate
(e) Censure

Q20. Which of the following word is most **similar** in meaning to the word "**staggering**" as given in the passage?
(a) Enfeebling
(b) Common
(c) Mundane
(d) Draining
(e) Confound

Q21. Choose the most suitable word/phrase to fill the given blank (I).
(a) Persist
(b) Sustaining
(c) Ceased
(d) Resist
(e) Embarked

Directions (22-26): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.
A. This is partly linked to drop in payment rates, as consumers are struggling to pay their bills amid rising consumption and tight finances.
B. Embracing energy efficiency can be a win-win solution as this can bring down household energy bills and reduce discoms' financial stress
C. The Indian government has sanctioned liquidity relief to help discoms tide over this crisis, but these are just short-term fixes.
D. The rules lay down uniform performance standards for power distribution companies (discoms) and make them liable to compensate consumers in case of violations.
E. The well-intentioned rules come at a time when Indian discoms are struggling to manage their finances.
F. The Power Minister, R.K. Singh, recently announced the Electricity (Rights of Consumers) Rules, 2020.

Q22. What should be the FOURTH sentence after rearrangement?
(a) F
(b) A
(c) B
(d) C
(e) D

Q23. What should be the THIRD sentence after rearrangement?
(a) E
(b) C
(c) A
(d) B
(e) F

Q24. What should be the LAST sentence after rearrangement?
(a) F
(b) C
(c) B
(d) A
(e) D

Q25. What should be the SECOND sentence after rearrangement?
(a) F
(b) B
(c) C
(d) D
(e) E

Q26. What should be the FIRST sentence after rearrangement?
(a) F
(b) D
(c) E
(d) B
(e) C

Directions (27-30): In each of the following questions, four sentences are given and you have to choose the one which has some or any grammatical error in it. If all the given four sentences are correct choose option (e) as your choice.

Q27.
(a) The government acknowledged that the Form 27 format was problematic and provided an undertaking to the court to effect appropriate amendments.
(b) Opacity in communication is dangerous when there is high vaccine hesitancy
(c) Hong Kong should no sooner erase its colonial past the Beijing should demolish the Forbidden City
(d) We need to improve the availability and affordability of energy-efficient appliances.
(e) All are correct

Q28.
(a) The growth conundrum that Kantibhai and Sureshbhai plan to solve is perhaps the same which a majority of MSME owners in the country face.
(b) India needs a nationwide consumer awareness campaign on energy efficiency.
(c) Record GST inflows in December augur well, but the economy is still in a flux
(d) The country requires a new political instrument for governability
(e) All are correct

Q29.
(a) The government has significantly weakened the critical duty imposed by the law on patentees/licensees to disclose patent working information
(b) Too much of strong leadership has robbed India of its democratic exuberance and constitutional dynamism.
(c) Core sectors recorded yet another contraction in November, with cement and steel slipping back after a minor uptick.
(d) Many of his pieces have designs incised or in relief, and others are skilful decorated with gold and silver
(e) All are correct

Q30.
(a) The gender gap in the agriculture sector will only widen more with the current farm laws
(b) Journalism focuses on a narrative of gloom that forces many people to avoid news altogether.
(c) Journalism creates a better-informed citizenry, which in turn creates a better collective future
(d) There will possibly be a unanimous rejection of the Republican objections to Joe Biden's electoral votes
(e) All are correct

Direction (31 – 35): Given bar graph shows percentage distribution of total CD's ordered by four shopkeeper (A, B, C & D) and percentage of CD's sold by these four shopkeepers out of total CD's ordered by each. Read the data carefully and answer the questions.

Total CD's ordered by all four shopkeeprs together = 600
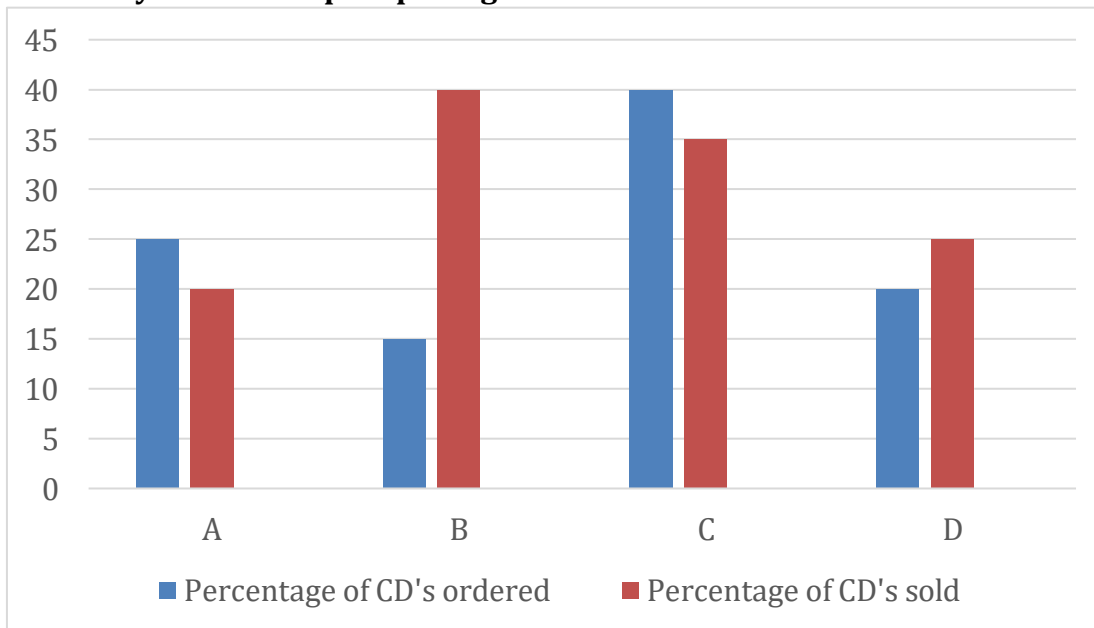
Q31. Total unsold CD's by A & D together are how much more than total sold CD's by C?
(a) 126
(b) 132
(c) 128
(d) 116
(e) 118

Q32. If total CD's sold by shopkeeper E are 125% more than total CD's sold by B and shopkeeper E sold 27% of total ordered CD's, then find total CD's ordered by E are what percent more than total CD'S ordered by C ?
(a) 36%
(b) 15%
(c) 30%
(d) 20%
(e) 25%

Q33. Find average number of unsold CD's by B, C & D?
(a) 120
(b) 100
(c) 80
(d) 110
(e) 72

Q34. Find ratio of total CD's sold by A & D together to total CD's sold by B?
(a) 5 : 3
(b) 3 : 5
(c) 5 : 4
(d) 5 : 6
(e) 4 : 5

Q35. If total CD's ordered by shopkeeper X is 100% more than total unsold CD's by D and X sold 30% of total ordered CD's, then find unsold CD's by X are what percent of unsold CD's by A?
(a) 105%
(b) 110%
(c) 100%
(d) 96%
(e) 90%

Directions (36-40): In each question two equations numbered (I) and (II) are given. You should solve both the equations and mark appropriate answer.
(a) if x > y
(b) if x ≥ y
(c) if x < y
(d) if x ≤ y
(e) if = y or the relationship cannot be established

Q36. I. $x^2 - 7x + 10 = 0$
II. $y^2 - 2y - 3 = 0$

Q37. I. $x^2 - 24x + 143 = 0$
II. $y^2 - 29y + 210 = 0$

Q38. I. $x^2 + 22x + 117 = 0$
II. $y^2 + 23y + 132 = 0$

Q39. I. $2x^2 - 3x - 20 = 0$
II. $2y^2 + 11y + 15 = 0$

Q40. I. $x^2 - 12x + 32 = 0$
II. $y^2 - 20y + 96 = 0$

Q41. A boat travels in upstream. If the speed of boat in upstream is decreased by 40% then it is equal to the speed of current and speed of boat in still water is given as 240 km/hr. Then find upstream speed of boat? (in km/hr).
(a) 120
(b) 180
(c) 150
(d) 210
(e) 125

Q42. A man invested Rs. X and Rs. 2X at 15% simple interest and at 8% compound interest (compounding annually) for two years respectively. Difference between simple interest and compound interest received after two years is Rs.820. Find the value of X.
(a) Rs.25000
(b) Rs.30600
(c) Rs.28600
(d) Rs.22200
(e) Rs.26200

Q43. Length of train A is 400 meters and length of train B is 'x' meters more than train A. If speed of both train A & B is equal and they cross a pole in 16 sec and 24 secs respectively, then in what time train 'B' will cross 400 m long platform.
(a) 32 sec
(b) 40 sec
(c) 45 sec
(d) 54 sec
(e) 24 sec

Q44. 'A' is 40% less efficient than 'B' who can do the same work in 20% less time than 'C'. If A and B together can complete 80% of work in 12 days, then in how many days 60% of work can be completed by B and C together.
(a) 2 days
(b) 4 days
(c) 6 days
(d) 8 days
(e) 10 days

Q45. Perimeter of rectangle is equal to the perimeter of square whose area is 400 cm² and length of rectangle is 40% more than the side of a square then find the area of rectangle?
(a) 248 cm²
(b) 420 cm²
(c) 356 cm²
(d) 336 cm²
(e) 348 cm²

Q46. A shopkeeper has two articles jeans and shirt. Cost price of a jeans is 32.5% more than cost price of a shirt and cost price of jeans is increased by 30% and it sold in Rs. 4134 at the profit of 25%. If shirt marked up 15% above cost price, then find the marked price of shirt (in Rs.)?
(a) 2200
(b) 2208
(c) 2280
(d) 2820
(e) 2082

Q47. In first mixture, quantity of milk was 6 lit more than that of water. After adding 40 ltr of second mixture (having ratio of water to milk 3: 5) in the first mixture, ratio of water to milk in the final mixture becomes 9: 13. Find the total quantity of water in the final mixture.
(a) 27 ltr
(b) 31.5 ltr
(c) 36 ltr
(d) 45 ltr
(e) None of these

Q48. A and B started a business together with capital of Rs. 8000 and Rs. 10,000 respectively. A left the business after 5 months while B continued. A gets 20% of total profit for managing business and remaining is distributed in ratio of their profit sharing. If after a year, A gets total profit of Rs.2500 then, find the total profit earned by 'A' and 'B' together.
(a) 10,000
(b) 8,500
(c) 7,500
(d) 6,250
(e) 5,750

Q49. The salary of A man is Rs. 50000 per month from which he spends 20% on rent, 10% of remaining on bills, 20% of further remaining on miscellaneous expenses. From the remaining amount, man gives some money to his wife and rest he invests in mutual funds in the ratio of 5 : 4. Find amount spent on rent is how much less or more than amount invested in mutual funds.
(a) 2800 Rs.
(b) 2400 Rs.
(c) 2600 Rs.
(d) 3200 Rs.
(e) 3000 Rs.

Q50. A bag has seven red, four white and three green balls while another bag has five red, six yellow and three blue balls. A bag is selected at random and a ball drawn out of it, then Find the probability that the ball drawn is red.

(a) $\frac{1}{7}$

(b) $\frac{3}{7}$

(c) $\frac{2}{7}$

(d) 1

(e) $\frac{6}{7}$

Direction (51 – 55): Table Given below shows total number of male visitors on four different days to a park and it also shows percentage of female visitors on these four days. Read the data carefully and answer the questions.

Days	Total male visitors	Percentage of female visitors
Sunday	120	76%
Monday	280	30%
Tuesday	500	37.5%
Wednesday	420	40%

Q51. Total female visitors on Sunday & Monday together is how much more or less than total number of female visitors on Tuesday & Wednesday together.

(a) 160

(b) 140

(c) 120

(d) 100

(e) 80

Q52. Total visitors on Wednesday are what percent more than total number of visitors on Sunday?

(a) 60%

(b) 20%

(c) 40%

(d) 80%

(e) 50%

Q53. Total number of male visitors on Friday are 25% more than total number of male visitors on Monday, while total number of female visitors on Friday are 40% more than total number of visitors on Tuesday. Find total visitors on Friday?

(a) 1470

(b) 1050

(c) 1620

(d) 1200

(e) 1170

Q54. Total number of visitors on Wednesday is how much more than total number of female visitors on Sunday and Monday together?
(a) 300
(b) 200
(c) 250
(d) 350
(e) 150

Q55. If there is one guide for per five visitors on each day, then find total **number** of guides required for all visitors on these four days?
(a) 240
(b) 480
(c) 220
(d) 440
(e) 460

Direction (56 – 60): Find the wrong number in following number series :

Q56. 5, 18, 34, 54, 79, 110, 158
(a) 34
(b) 5
(c) 18
(d) 54
(e) 158

Q57. 112, 128, 108, 132, 104, 134, 100
(a) 112
(b) 128
(c) 134
(d) 108
(e) 100

Q58. 5, 6, 14, 45, 184, 920, 5556
(a) 5
(b) 6
(c) 14
(d) 920
(e) 45

Q59. 10, 22, 35, 50, 68, 92, 117
(a) 92
(b) 117
(c) 10
(d) 22
(e) 35

Q60. 64, 34, 36, 56, 114 , 287, 860
(a) 114
(b) 860
(c) 64
(d) 36
(e) 56

Direction (61–65): Read the data carefully and answer the questions.

There are 450 students in a school and there are two sections A & B in the school. There are three streams in each section i.e., Art, Science & Commerce. $\frac{75}{4}$ % of total students in A are in Commerce and $\frac{200}{7}$ % of total students in B are in Science. Sum of total students in Commerce in A & total students in Science in B is 105. $\frac{400}{21}$ % of total students in B are in Commerce and 50% of total students in A are in Art.

Q61. Total students in Art in A is what percent more than total students in Science in B?
(a) 75%
(b) 70%
(c) 90%
(d) 100%
(e) 110%

Q62. Find the ratio of total students in Commerce in B to total students in Science in A?
(a) 8 : 15
(b) 8 : 17
(c) 8 : 13
(d) 8 : 11
(e) 8 : 9

Q63. If in other section C, total students are 180 and total student in Science in C are 25% more than total students in Commerce in B, then find total students in Art & Commerce in C is how much less than total students in Art &Commerce in A?
(a) 55
(b) 60
(c) 65
(d) 45
(e) 35

Q64. Find the average number of students in Science in A & B?
(a) $\frac{125}{2}$
(b) $\frac{135}{2}$
(c) 120
(d) 130
(e) 145

Q65. If out of total students in Art in A & B, ratio of boys to girl is 5 : 3 and 7 : 4 respectively, then find total boys in Art from both sections?
(a) 125
(b) 135
(c) 145
(d) 115
(e) 105

Direction (66-70): Study the following information carefully and answer the questions given below:

Eight persons i.e. A, B, C, D, P, Q, R and S are sitting around a rectangular table in such a way that four persons sit on each of the four corner of the table and other four persons sit on the middle of each side. The one who sits at the corner of table faces opposite to center of table and the one who sits at the middle side of table faces towards the center of table. Persons sitting on opposite sides are exactly opposite to each other. Q sits immediate to the right of D. Both R and C are sitting opposite to each other. Only one person sits between A and B, who does not sit near to D. C sits near to Q. Two persons sit between D and S, who faces to the center.

Q66. Who among the following sits 3ʳᵈ to the right of P?
(a) A
(b) B
(c) Q
(d) D
(e) None of these

Q67. How many persons sit between P and Q, when counted to the left of P?
(a) One
(b) Two
(c) Four
(d) Either (b) or (c)
(e) None of these

Q68. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) R
(b) D
(c) P
(d) C
(e) B

Q69. Which of the following is not true regarding P?
(a) C sits 2nd to the left of P
(b) P sits immediate to the right of B
(c) D sits opposite to P
(d) Two persons sit between P and R, when counted to the left of R
(e) All are true

Q70. What is the position of R with respect to Q?
(a) 2nd to the right
(b) 2nd to the left
(c) 3rd to the left
(d) 3rd to the right
(e) None of these

Directions (71-73): Study the information carefully and answer the questions given below.

Eight persons in three generation of the family. K is daughter in law of G. M is father of L, who is daughter-in-law of P. H is brother-in-law of G and only son of F. T is grandson of F. H is unmarried. G is male. M has two child.

Q71. How is M related to G?
(a) Father
(b) Brother
(c) Father-in- law
(d) Brother-in-law
(e) None of these

Q72. How is K related to L?
(a) Daughter
(b) Mother-in-law
(c) Daughter-in-law
(d) Sister
(e) None of these

Q73. Who among the following is son of M?
(a) H
(b) G
(c) T
(d) L
(e) None of these

Direction (74-77): Study the following information carefully and answer the questions given below:
In a certain code language
'work just not done' is coded as 'ds gi nj hq'
'work same and equal' is coded as 'gi sw as xz'
'same case just opposite' is coded as 'sw ds ap kl'
'not opposite but equal' is coded as 'mn ap nj as'

Q74. What is the code of 'opposite' as per the given code language?
(a) ap
(b) gi
(c) mn
(d) as
(e) None of these

Q75. What is the code of 'same' as per the given code language?
(a) ap
(b) sw
(c) mn
(d) as
(e) None of these

Q76. What is the code of 'case' as per the given code language?
(a) gi
(b) sw
(c) kl
(d) as
(e) None of these

Q77. What is the code of 'equal work' as per the given code language?
(a) gi ds
(b) sw kl
(c) as gi
(d) as sw
(e) None of these

Directions (78-82): Study the following information carefully and answer the question given below.

Seven students A, B, D, E, G, H and L have practical exams on different day of the same week starting from Monday to Sunday, but not necessarily in the same order. Only one student has a practical exam on each day.
There are more than three students have practical exam after A. Only one student has practical exam between A and H. There are three students have practical exam between G and B. G has practical exam before H but not immediate before H. There are three students have practical exam between D and E, who does not have practical exam in the last day of week.

Q78. On which of the following day L has practical exam?
(a) Tuesday
(b) Thursday
(c) Saturday
(d) Monday
(e) None of these

Q79. Who among the following has practical exam on Wednesday?
(a) A
(b) H
(c) G
(d) E
(e) None of these

Q80. How many students have exam between E and B?
(a) No one
(b) One
(c) Two
(d) Three
(e) More than three

Q81. Who among the following has practical exam immediate before H?
(a) E
(b) L
(c) B
(d) D
(e) None of these

Q82. Four of the following five belong to a group in a certain way, find which of the one does not belong to that group?
(a) A, G
(b) H, E
(c) L, B
(d) E, A
(e) B, D

Directions (83-85): In these questions, relationship between different elements is show in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer:
(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.

Q83. Statements: J=Q>R=V>B=Y>K≥M
Conclusion I: R>Y **II:** J<B

Q84. Statements: Q=T<I>X≥G>P=Z<O
Conclusion I: Z≤I **II:** O>G

Q85. Statements: S>F≥B=D≤P=E≤L>Q
Conclusion I: E>B **II:** B=E

Directions (86-88): Study the information carefully and answer the questions given below.

Point P is 8m west of point G. Point G is 16m east of point T. Point H is east of point E. Point E is 5m north-west of point L. Point A is 12m south of point F and point P is midpoint between them. Point L is 8m south of point S. Point H is midpoint between point L and S. Point T is 14m south of point E.

Q86. If Point B is west of point A and south of point S, then what is the distance between point A and point B?
(a) 13m
(b) 7m
(c) 6m
(d) 5m
(e) None of these

Q87. In which direction point L is with respect to point F?
(a) South
(b) South-east
(c) North-east
(d) East
(e) None of these

Q88. What is the distance between point E and point H?
(a) 7m
(b) 3m
(c) 4m
(d) 5m
(e) None of these

Q89. How many pairs of letters are there in the word "**SPARKLE**" which has as many letters between them as we have in the English alphabetical series (from both forward and backward direction)?
(a) One
(b) None
(c) Two
(d) Three
(e) More than three

Q90. Which of the following is second letter from the left end of the meaningful word formed by the 1st,3rd, 5th, and 6th letter of the word **"DRAWER"** If more than one word is formed mark X as your answer. If no such word is formed mark Y as your answer?
(a) R
(b) D
(c) E
(d) X
(e) Y

Direction (91-95): Study the following information carefully and answer the questions given below:

A certain number of persons are sitting in a row facing to the north. There is one person sits between N and M and one of them sit at the extreme end of the row. There are three persons sit between N and C. L sits 2nd to the left of C. There are six persons sit between C and B, who sits 3rd from one of the end. B sits 2nd to the left of R, who does not sit at the extreme end. There are four persons sit between O and N. More than three persons sit between M and O. There are two persons sit between K and R.

Q91. How many persons are sitting in the row?
(a) 12
(b) 15
(c) 18
(d) 17
(e) 16

Q92. How many persons sit between R and C?
(a) None
(b) Four
(c) Six
(d) Five
(e) Seven

Q93. What is the position of K with respect to B?
(a) Immediate to the right
(b) 2nd to the left
(c) Immediate to the left
(d) 2nd to the right
(e) 3rd to the left

Q94. The number of persons sit to the left of L is same as the number of persons sit to the right of ___?
(a) N
(b) O
(c) C
(d) K
(e) None of these

Q95. If T sits between B and R, then how many persons sit between T and K?

(a) None

(b) One

(c) Two

(d) Three

(e) None of these

Direction (96-100): Study the following information carefully and answer the questions given below:

Eight boxes i.e. M, N, O, P, Q, R, S and T are placed one above the another but not necessarily in the same order. Three boxes are placed between M and T. M is placed either at the top most or bottom most position. Box O is placed just above to the box N. Box S is placed just below to the box T. There are two boxes placed between R and S. Not more than two boxes placed between M and R. More than three boxes placed between O and P.

Q96. Which of the following box is placed third from the bottom?

(a) S

(b) Q

(c) O

(d) R

(e) None of these

Q97. How many boxes are placed between O and Q?

(a) None

(b) One

(c) Four

(d) Two

(e) None of these

Q98. The number of boxes placed between P and S is same as the number of boxes placed between ___and R?

(a) M

(b) Q

(c) N

(d) T

(e) O

Q99. The number of boxes placed above of the box O is same as the number of boxes placed below to the box?

(a) R

(b) Q

(c) P

(d) T

(e) None of these

Q100. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?

(a) M and Q

(b) P and T

(c) R and S

(d) Q and O

(e) N and Q

S1. Ans.(b)
Sol. "C-F" combination is grammatically incorrect as 'making' should be used in place of 'made'
A-E: The regulator did not wait for sufficient safety and efficacy data to be collected and did not share information about the clinical trials before granting approval.
B-D: If there is already some degree of apprehension about the safety and efficacy of COVID-19 vaccines, the opaque nature of the approval process has done little to mitigate such concerns.

S2. Ans.(e)
Sol. Both B-E & C-D are correct.
B-E: More than being a scientific methodology, clinical trials are a method of human cooperation.
C-D: The coercive attempt to falsify a study participant's claims and intimidate him or her violates the agreed upon rules of clinical trials

S3. Ans.(b)
Sol. Option (b) is the correct choice.
Distribute, dispense and disburse are similar in meaning, therefore, disburses & distributes can replace dispenses.
Disburse: To distribute
Dispense: to give or provide people with something
Squander: to waste time, money, etc.

S4. Ans.(c)
Sol. Option (c) is the correct choice. The use of 'tools' will be incorrect grammatically while both system and method can replace mechanism. Therefore, option (c) is the correct choice.
Mechanism: the way in which something works or is done
System: a group of things or parts that work together
Method: a way of doing something

S5. Ans.(a)
Sol. Option (a) is the correct choice because none of the options can replace 'qualify' to make a meaningful and contextually correct statement.
Hamper: to make something difficult
Inclined: wanting to behave in a particular way

S6. Ans.(c)
Sol. Option (c) is the correct choice. The use of "relevant" is grammatically incorrect.
Disruption: the action of preventing something, especially a system, process, or event, from continuing as usual or as expected:
Obstruction: the act of stopping something from happening or moving
Disturbance: something that makes you stop what you are doing

S7. Ans.(b)
Sol. Option (b) is the correct choice. All the other options are either making sentence grammatically or contextually incorrect.
Meaning of some other words:
Nabbed: to catch or arrest somebody who is doing something wrong
Snatched: to attempt to seize something suddenly
Persist: to continue doing something even though other people say that you are wrong or that you cannot do it
Apprehend: arrest, seize apprehend a thief.
Endured: to suffer something painful or uncomfortable, usually without complaining
Sustain: to keep somebody/something alive or healthy

S8. Ans.(c)
Sol. Option (c) is the correct choice. All the other options are either making sentence grammatically or contextually incorrect.
Meaning of some other words:
Drenched: to make somebody/something completely wet
Affected: make somebody/something change in a particular way; to influence somebody/something
Rejuvenate: to make somebody/something feel or look younger
Drenched: to make somebody/something completely wet
Devoured: to eat something quickly because you are very hungry
Swayed: to influence somebody

S9. Ans.(d)
Sol. Option (d) is the correct choice. All the other options are either making sentence grammatically or contextually incorrect.
Meaning of some other words:
Assess: to determine the importance, size, or value of
Evaluate: to study the facts and then form an opinion about something
Enhance: heighten, increase especially
Analyze: to look at or think about the different parts or details of something carefully in order to understand or explain it

S10. Ans.(d)
Sol. Option (d) is the correct. We need to replace 'thoroughly' with thorough because thoroughly is an adverb while we need an adjective (thorough) to tell us more about the noun (Knowledge).

S11. Ans.(b)
Sol. Option (b) is the correct choice.
Use 'found guilty of' in place of 'found guilty for'.
Ex- Guilty of murder
Guilty of theft.

S12. Ans.(d)
Sol. Option (d) is the correct choice for the given question.
Replace "not entrusted with" with "not be entrusted with" because 'should' is used before 'not' and we use V1 after 'should' in active voice and be+V3 in passive voice.

S13. Ans.(a)
Sol. The correct sequence is **CDAB.**
The correct statement after rearrangement:
The MNM's promise to directly pay women a monthly amount may be **viewed (C)** as a **strategy (D)** to grab attention in an over-crowded, highly **competitive (A)** electoral **landscape (B)**.

S14. Ans.(d)
Sol. Option (d) is the correct choice.
The correct sequence is **BDAC.**
The correct statement after rearrangement:
With the Indian economy gradually **finding (B)** its feet after a historic contraction, economic commentators have **busied (D)** themselves with **debating (A)** the need for fiscal expansion and the **viability(C)** of a "V-shaped recovery".

S15. Ans.(d)
Sol. Option (d) is the correct choice because in the 2nd paragraph of the passage it is mentioned that "the tide is turning. Increasing awareness around these issues has led to a rise in what is known as conscious consumption, a movement of people who seek out ways to make positive decisions about what to buy and look for a solution to the negative impact consumerism is having on our world."

Q16. Which of the following statement(s) is/are corroborating the statement made by the author that "the tide is turning"?
(i) 74% of those surveyed would pay an extra 5% for their clothes if there was a guarantee that workers were paid fairly
(ii) Awareness about environmentally conscious manufacturing processes among customers while making their choices is increasing.
(iii) Every time we spend our cash, we are making an active choice about the companies we support and the practices we endorse.
(a) Both (i) & (ii)
(b) Both (i) & (iii)
(c) Only (iii)
(d) Only (i)
(e) None of these

S16. Ans.(a)

Sol. Option (a) is correct because both (i) & (ii) are correct. Both these statements indicate conscious consumption and show that the tide has turned (that people's opinion or a situation is changing)
(iii) is incorrect and does not show any changing behaviour and is just making a general statement.

Q17. Which of the following statement is true in context of the passage?
(a) The biggest problem with consumerism is the fact that people do not realize that there is a problem.
(b) Difficulty in making an informed choice is increasingly important for the conscious consumer.
(c) We are currently consuming resources at an unsustainable rate, which is causing mass environmental destruction and social problems across the world.
(d) Conscious consumption can help in taking significant number of people out of poverty.
(e) None of these

S17. Ans.(d)

Sol. Option (d) is correct. All the other statements are incorrect (or not mentioned or implied) in context of the passage.
Refer to the 3rd paragraph of the passage, "74% of those surveyed would pay an extra 5% for their clothes …………………If you're thinking that 5% doesn't sound like a lot, consider the fact that the fashion industry could take a staggering 125 million people out of poverty by adding only 1% of its profits to workers' wages"

S18. Ans.(a)

Sol. Option (a) is the correct choice.
Refer to the last paragraph of the passage, " I believe technology is the key to dealing with the challenges created by consumerism. Open data, social networks and mobile tech can change the game. Groundbreaking technologies could enable transparency in supply chains" . Information about supply chains, about materials and processes can give add to the conscious movement.

S19. Ans.(b)

Sol. Endorse means to promote the interests or cause of. Hence, promote is the word most similar in meaning.
Censure: to tell somebody, in a strong and formal way, that he/she has
done something wrong
Veto: A veto (Latin for "I forbid") is the power (used by an officer of
the state, for example) to unilaterally stop an official action, especially
the enactment of legislation
Sabotage: a deliberate action aimed at weakening a polity, effort, or
organization through subversion, obstruction, disruption, or
destruction.

S20. Ans.(e)

Sol. Option (e) is the correct choice.

Staggering means that you find difficult to believe. Hence, confound which means to confuse and surprise somebody is the word most similar in meaning.

Enfeebling: unsympathetic, harsh, or callous.

Mundane: ordinary; not interesting or exciting

S21. Ans.(e)

Sol. Option (e) is the correct choice. All the other options are either grammatically or contextually incorrect.

Embarked: to go onto a journey.

Persist: to continue doing something even though other people say that you are wrong or that you cannot do it

Ceased: to stop or end

Sustaining: to keep somebody/something alive or healthy

S22. Ans.(b)

Sol. The correct sequence is **FDEACB.**

F is the 1st statement because it is stating the announcement on which the whole discussion is based.

D is the 2nd statement because it is then elaborating the rules mentioned in **F**

E-A are the next two statements because they are then giving the reason due to which the rules were announce.

C is the penultimate statement because it is stating how these fixes are short term and therefore in the final statement, we can expect a long-term solution.

B Since in C short term fixes are mentioned, B then concludes the paragraph by giving a solution which could be long term.

S23. Ans.(a)

Sol. The correct sequence is **FDEACB.**

F is the 1st statement because it is stating the announcement on which the whole discussion is based.

D is the 2nd statement because it is then elaborating the rules mentioned in **F**

E-A are the next two statements because they are then giving the reason due to which the rules were announce.

C is the penultimate statement because it is stating how these fixes are short term and therefore in the final statement, we can expect a long-term solution.

B Since in C short term fixes are mentioned, B then concludes the paragraph by giving a solution which could be long term.

S24. Ans.(c)

Sol. The correct sequence is **FDEACB.**

F is the 1st statement because it is stating the announcement on which the whole discussion is based.

D is the 2nd statement because it is then elaborating the rules mentioned in **F**

E-A are the next two statements because they are then giving the reason due to which the rules were announce.

C is the penultimate statement because it is stating how these fixes are short term and therefore in the final statement, we can expect a long-term solution.

B Since in C short term fixes are mentioned, B then concludes the paragraph by giving a solution which could be long term.

S25. Ans.(d)

Sol. The correct sequence is **FDEACB.**

F is the 1st statement because it is stating the announcement on which the whole discussion is based.

D is the 2nd statement because it is then elaborating the rules mentioned in **F**

E-A are the next two statements because they are then giving the reason due to which the rules were announce.

C is the penultimate statement because it is stating how these fixes are short term and therefore in the final statement, we can expect a long-term solution.

B Since in C short term fixes are mentioned, B then concludes the paragraph by giving a solution which could be long term.

S26. Ans.(a)

Sol. The correct sequence is **FDEACB.**

F is the 1st statement because it is stating the announcement on which the whole discussion is based.

D is the 2nd statement because it is then elaborating the rules mentioned in **F**

E-A are the next two statements because they are then giving the reason due to which the rules were announce.

C is the penultimate statement because it is stating how these fixes are short term and therefore in the final statement, we can expect a long-term solution.

B Since in C short term fixes are mentioned, B then concludes the paragraph by giving a solution which could be long term.

S27. Ans.(c)

Sol. Option (c) is incorrect.

In (c) replace 'the' with 'than' because after 'No sooner' we use 'than'.

S28. Ans.(a)

Sol. Option (a) is incorrect because in place of 'which' we should use 'that' because after 'the same' we use 'that' when the verb is clear.

S29. Ans.(d)
Sol. There is an error in option (d), we will use 'skilfully' in place of 'skilful' as it describes the specialty of the verb 'decorated'

S30. Ans.(e)
Sol. All the given statements are correct.

S31. Ans.(a)
Sol. Total unsold CD's by A & D = $600 \times \frac{25}{100} \times \frac{80}{100} + 600 \times \frac{20}{100} \times \frac{75}{100}$

= 120 + 90
= 210
Total sold CD's by C = $600 \times \frac{40}{100} \times \frac{35}{100} = 84$
Required difference = 210 – 84 = 126

S32. Ans.(e)
Sol. Total CD's sold by E = $600 \times \frac{15}{100} \times \frac{40}{100} \times \frac{225}{100} = 81$

Total CD's ordered by E = $81 \times \frac{100}{27} = 300$
Total CD's ordered by C = $600 \times \frac{40}{100} = 240$
Required percentage = $\frac{300-240}{240} \times 100 = 25\%$

S33. Ans.(b)
Sol. Total unsold CD's by B, C & D
= $600 \times \frac{15}{100} \times \frac{60}{100} + 600 \times \frac{40}{100} \times \frac{65}{100} + 600 \times \frac{20}{100} \times \frac{75}{100}$
= 54 + 156 + 90 = 300
Required average = $\frac{300}{3} = 100$

S34. Ans.(a)
Sol. Total CD's sold by A & D = $600 \times \frac{25}{100} \times \frac{20}{100} + 600 \times \frac{20}{100} \times \frac{25}{100}$

= 30 + 30 = 60
Total CD's sold by B = $600 \times \frac{15}{100} \times \frac{40}{100} = 36$
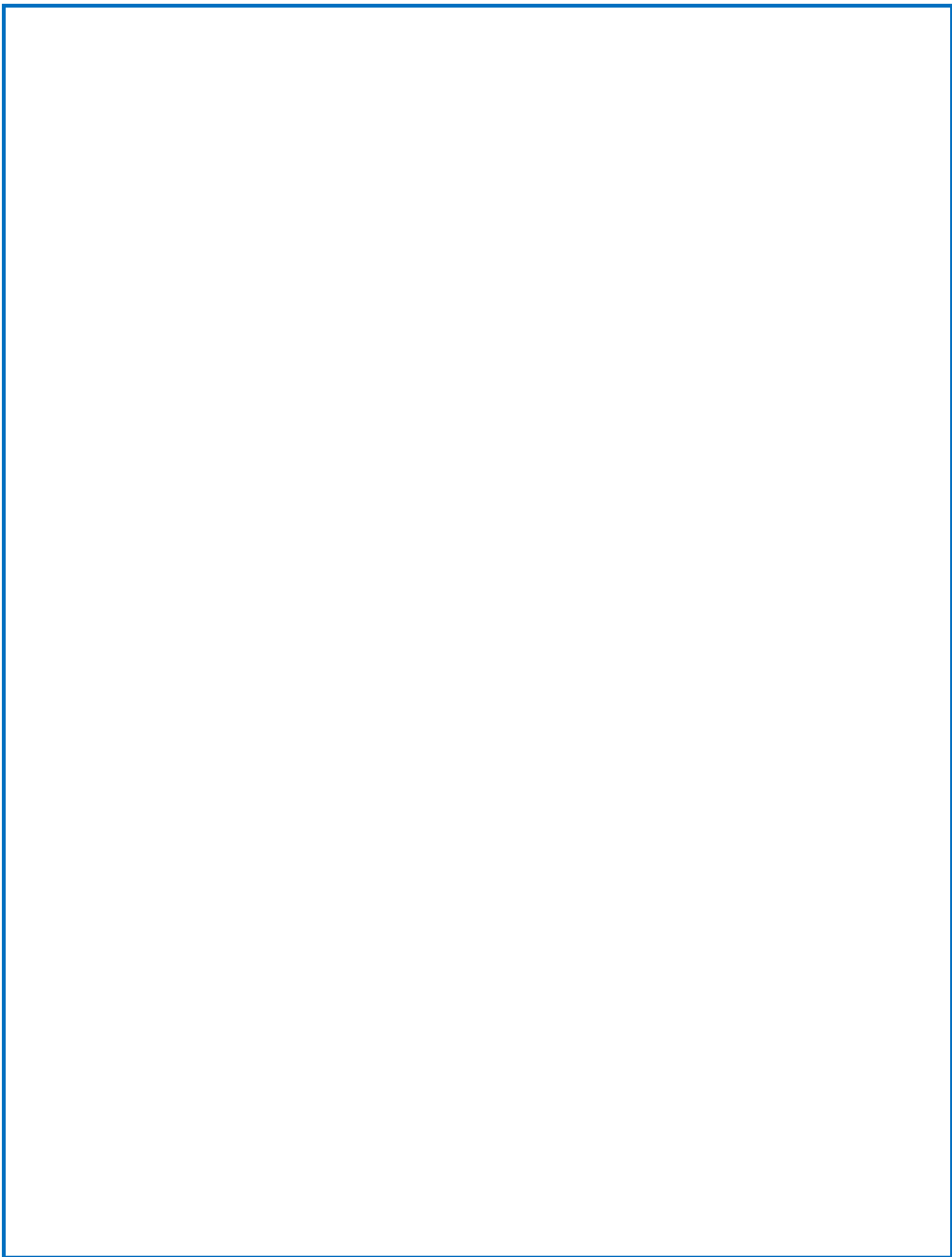Required ratio = 60 : 36 = 5 : 3

S35. Ans.(a)
Sol. Total CD's ordered by shopkeeper X = $600 \times \frac{20}{100} \times \frac{75}{100} \times \frac{200}{100} = 180$

Unsold CD's by X = $180 \times \frac{70}{100} = 126$
Unsold CD's by A = $600 \times \frac{25}{100} \times \frac{80}{100} = 120$

Required parentage = $\frac{126-120}{120} \times 100 = 105\%$

S36. Ans.(e)
Sol. (i) $x^2 - 7x + 10 = 0$
$x^2 - 2x - 5x + 10 = 0$
$(x - 2)(x - 5) = 0$
$x = 2, 5$
(ii) $y^2 - 2y - 3 = 0$
$y^2 + y - 3y - 3 = 0$
$(y + 1)(y - 3) = 0$
$y = -1, 3$
$\therefore$ *no relation*

S37. Ans.(c)
Sol. (i) $x^2 - 24x + 143 = 0$
$x^2 - 11x - 13x + 143 = 0$
$(x - 11)(x - 13) = 0$
$x = 11, 13$
(ii) $y^2 - 29y + 210 = 0$
$y^2 - 14y - 15y + 210 = 0$
$(y - 14)(y - 15) = 0$
$y = 14, 15$
$\therefore y > x$

S38. Ans.(e)
Sol. (i) $x^2 + 22x + 117 = 0$
$x^2 + 9x + 13x + 117 = 0$
$(x + 9)(x + 13) = 0$
$x = -9, -13$
(ii) $y^2 + 23y + 132 = 0$
$y^2 + 11y + 12y + 132 = 0$
$(y + 11)(y + 12) = 0$
$y = -11, -12$
$\therefore$ *no relation*

S39. Ans.(b)
Sol. (i) $2x^2 - 3x - 20 = 0$
$2x^2 - 8x + 5x - 20 = 0$
$2x(x - 4) + 5(x - 4) = 0$
$(x - 4)(2x + 5) = 0$
$x = 4, -5/2$
(ii) $2y^2 + 11y + 15 = 0$
$2y^2 + 6y + 5y + 15 = 0$
$2y(y + 3) + 5(y + 3) = 0$
$(2y + 5)(y + 3) = 0$
$y = \frac{-5}{2}, -3$
$x \geq y$

S40. Ans.(d)
Sol. (i) $x^2 - 12x + 32 = 0$
$x^2 - 8x - 4x + 32 = 0$
$x(x - 8) - 4(x - 8) = 0$
$(x - 8)(x - 4) = 0$
$x = 8, 4$
(ii) $y^2 - 20y + 96 = 0$
$y^2 - 12y - 8y + 96 = 0$
$y(y - 12) - 8(y - 12) = 0$
$(y - 8)(y - 12) = 0$
$y = 8, 12$
$y \geq x$

S41. Ans.(c)
Sol. Let speed of current be x km/hr.
ATQ,
$(240-x) \times \frac{60}{100} = x$
$144 - 0.6x = x$
$1.6x = 144$
$x = 90$
speed in upstream = 240-90 = 150km/hr

S42. Ans.(a)
Sol. ATQ,
$[2X(1.08)^2 - 2X] - \frac{X \times 15 \times 2}{100} = 820$
$[2.3328X - 2X] - \frac{3X}{10} = 820$
$\Rightarrow \frac{3328X}{1000} - \frac{3X}{10} = 820$
$\Rightarrow \frac{328X}{1000} = 820$
$X = 25000$ Rs.

S43. Ans.(b)
Sol. Speed of train A = $\frac{400}{16}$ = 25 m/sec
So, speed of train B = 25 m/sec
ATQ,
$\frac{400+x}{25} = 24$
$x = 200$ m
Now time required to cross platform by B
$= \frac{400+200+400}{25} = 40$ sec
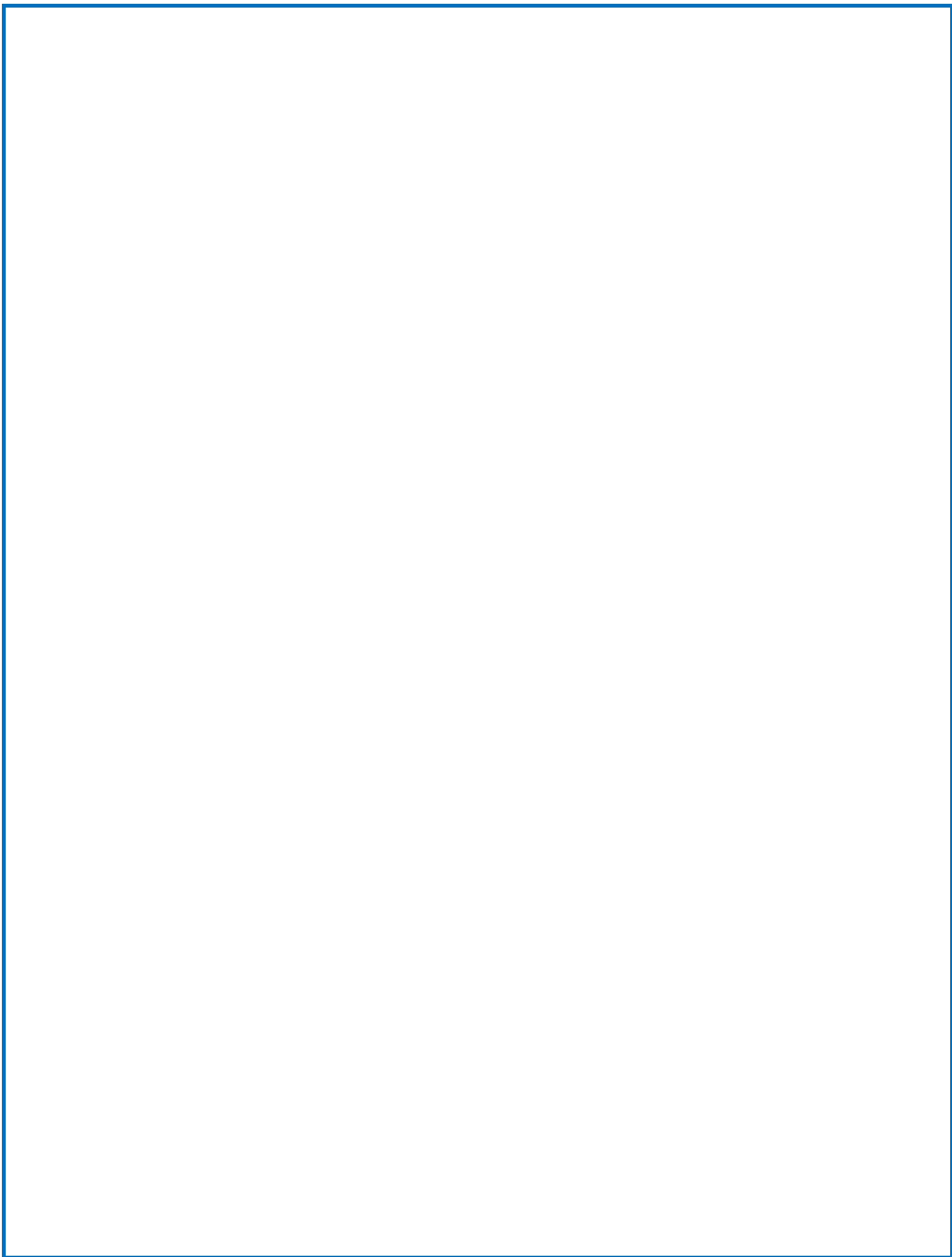
S44. Ans.(d)

Sol. Ratio of efficiency of A and B = 3 : 5

⇒ Time taken be A and B alone to complete the work = 5 : 3

Ratio of time taken by B and C alone to complete the work = 4 : 5

⇒ Ratio of time taken by A, B and C alone to complete the work = 20 : 12 : 15

Let, A, B and C alone can complete the work alone is 20x, 12x and 15x days respectively.

ATQ,

$\frac{12}{20x} + \frac{12}{12x} = \frac{80}{100}$

$\Rightarrow \frac{144+240}{240x} = \frac{4}{5}$

$\Rightarrow \frac{5 \times 384}{4 \times 240} = x$

⇒ x = 2

Let in 'a' days 'B' and 'C' can complete 60% of work

ATQ,

$\frac{a}{12 \times 2} + \frac{a}{15 \times 2} = \frac{60}{100}$

$\Rightarrow \frac{5a+4a}{120} = \frac{3}{5}$

$\Rightarrow a = \frac{3}{5} \times \frac{120}{9} = 8$ days

S45. Ans.(d)

Sol. Let side of square be a cm.

∴ a² = 400 cm²

a = 20 cm

Length of rectangle (ℓ) = 20 × 1.4 = 28 cm

ATQ,

4 × 20 = 2(ℓ + b)   [b → breadth of rectangle]

80 = 2 (28 + b)

b = 12 cm

∴ Area of rectangle = 28 × 12 = 336 cm²

S46. Ans.(b)

Sol. Let cost price of shirt = 100x

So, cost price of jeans = 132.5x

New cost price of jeans = 132.5x × 1.3 = 172.25x

Selling price of jeans = 172.25x × 1.25 = 215.3125x

Cost price of jeans = 4134 × $\frac{132.5x}{215.3125x}$

= 2544 Rs.

Cost price of shirt = 2544 × $\frac{100x}{132.5x}$ = 1920 Rs.

Marked price of shirt = 1920 × $\frac{115}{100}$ = 2208 Rs.

Alternate
Let cost price of jeans = $53x$
So, cost price of shirt = $40x$
New cost price of jeans = $53x \times 1.3 = 68.9x$
Selling price of jeans = $68.9x \times 1.25$
So, $4134 = 68.9x \times 1.25$
$x = 48$
Cost price of shirt = $40 \times 48 = 1920 \ Rs.$
Marked price of shirt = $1920 \times \dfrac{115}{100} = 2208 \ Rs$

S47. Ans.(c)
Sol. Let quantity of water in first mixture be x liters
Then quantity of milk in the first mixture=(x+6) lit
Quantity of water added = 15 ltr
And quantity of milk added = 25 lit
ATQ
$\dfrac{x+15}{x+6+25} = \dfrac{9}{13}$
$\Rightarrow$ x=21
Total quantity of water in final mixture = 36 ltrs.

S48. Ans.(d)
Sol. Let total profit = 100x
A get 20% of total profit for managing business= 20x
Remaining profit is shared in the ratio of their profit sharing
= 8000 × 5 : 10,000 × 12
= 1 : 3
Remaining profit is divided between A and B in the ratio 1 : 3.
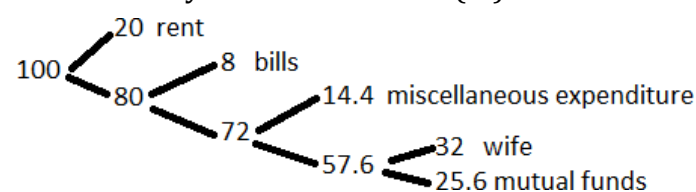$\Rightarrow$ A's total profit = 20x + 80x × $\dfrac{1}{4}$
= 20x + 20x
= 40x
ATQ,
40x = 2500
$\Rightarrow$ Total profit = 100x = $\dfrac{2500}{40} \times 100$
= 6250

S49. Ans.(a)
Sol. Let salary of man be Rs. 100 (%)

Amount spent on rent = $\dfrac{20}{100}$ X 50000 = $Rs.\,10000$
Amount invested in mutual funds = $\dfrac{25.6}{100}$ X 50000 = $Rs.\,12800$
Required difference=12800-10000 =2800 Rs

S50. Ans.(b)

Sol. In this case we need to select the probability of choosing one bag out of two given bags which will be $= \frac{1}{2}$

So, the required probability $= \frac{1}{2}$(Red ball from bag 1 + Red ball from bag 2)

$= \frac{1}{2}\left(\frac{7}{14} + \frac{5}{14}\right)$

$= \frac{12}{28} = \frac{6}{14} = \frac{3}{7}$

S51. Ans.(e)

Sol. Total female visitors on Sunday $= 120 \times \frac{76}{24} = 380$

Total female visitors on Monday $= 280 \times \frac{30}{70} = 120$

Total female visitors on Tuesday $= 500 \times \frac{37.5}{62.5} = 500 \times \frac{3}{5} = 300$

Total female visitors on Wednesday $= 420 \times \frac{40}{60} = 280$

Required difference $= 300 + 280 - 380 - 120 = 580 - 500 = 80$

S52. Ans.(c)

Sol. Total visitors on Wednesday $= 420 \times \frac{100}{60} = 700$

Total number of visitors on Sunday $= 120 \times \frac{100}{24} = 500$

Required percentage $= \frac{70-50}{50} \times 100 = 40\%$

S53. Ans.(a)

Sol. Total number of male visitors on Friday $= \frac{125}{100} \times 280 = 350$

Total number of female visitors on Friday $= \frac{140}{100} \times 500 \times \frac{100}{62.5} = 1120$

Total visitors on Friday $= 1120 + 350 = 1470$

S54. Ans.(b)

Sol. Total number of visitors on Wednesday $= 420 \times \frac{100}{60} = 700$

Total number of female visitors on Sunday and Monday $= 120 \times \frac{76}{24} + 280 \times \frac{30}{70}$

$= 380 + 120 = 500$

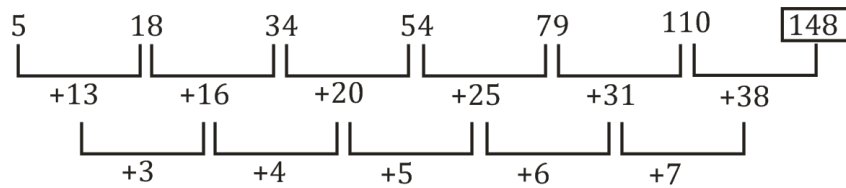Required difference $= 700 - 500 = 200$

S55. Ans.(b)

Sol. Total number of visitors on all four days $= 120 \times \frac{100}{24} + 280 \times \frac{100}{70} + 500 \times \frac{100}{62.5} + 420 \times \frac{100}{60}$

$= 500 + 400 + 800 + 700 = 2400$

Total **number** of guides required $= \frac{2400}{5} = 480$

S56. Ans.(e)
Sol. Wrong number = 158
Pattern of series –

5   18   34   54   79   110   148

+13   +16   +20   +25   +31   +38

+3   +4   +5   +6   +7

So, there should be 148 in the place of 158

S57. Ans.(c)
Sol. Wrong number = 134
Pattern of series –
112 + 16 = 128
128 – 20 = 108
108 + 24 = 132
132 – 28 = 104
104 + 32 = 136
136 – 36 = 100
So, should be 136 come in the place of 134.

S58. Ans.(d)
Sol. Wrong number = 920
Pattern of series –
$5 \times 1 + 1 = 6$
$6 \times 2 + 2 = 14$
$14 \times 3 + 3 = 45$
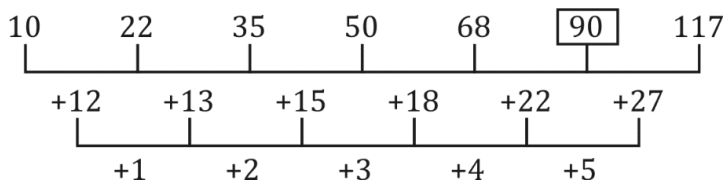$45 \times 4 + 4 = 184$
$184 \times 5 + 5 = 925$
$925 \times 6 + 6 = 5556$
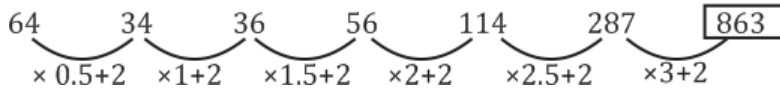So, 925 should come in the place of 920.

S59. Ans.(a)
Wrong number = 92
Pattern of series –

10   22   35   50   68   90   117

+12   +13   +15   +18   +22   +27

+1   +2   +3   +4   +5

So, 90 should come in the place of 92.

S60. Ans.(b)
Sol.

64   34   36   56   114   287   [863]

× 0.5+2   ×1+2   ×1.5+2   ×2+2   ×2.5+2   ×3+2

Wrong number is 860.

Solutions (61–65):

Let total students in A = a
And, total students in B = b
Total students in Commerce in A = $a \times \dfrac{75}{4} \times \dfrac{1}{100} = \dfrac{3a}{16}$

Total students in Science in B = $b \times \dfrac{200}{7} \times \dfrac{1}{100} = \dfrac{2b}{7}$

Given, $\dfrac{3a}{16} + \dfrac{2b}{7} = 105$ ----------------------(i)

And $a + b = 450$ ------------------------ (ii)
So, from (i) and (ii),
Total students in A = 240
Total students in B = 210
Total students in Commerce in B = $\dfrac{400}{21} \times \dfrac{1}{100} \times 210 = 40$

Total students in Art in A = $\dfrac{1}{2} \times 240 = 120$

Now, total students in Science in A = $240 - \dfrac{3}{16} \times 340 - 120 = 75$

And total students in Art in B = $210 - \dfrac{2}{7} \times 210 - 40 = 110$

Stream	A	B
Art	120	110
Science	75	60
Commerce	45	40
Total	**240**	**210**

S61. Ans.(d)
Sol. Required percentage = $\dfrac{120-60}{60} \times 100 = 100\%$

S62. Ans.(a)
Sol. Required ratio = $\dfrac{40}{75} = 8:15$

S63. Ans.(e)
Sol. Total students in Art & Commerce in C = $180 - 40 \times \dfrac{125}{100} = 130$

Required difference = (120 + 45) – 130 = 35

S64. Ans.(b)
Sol. Required average = $\dfrac{75+60}{2} = \dfrac{135}{2}$

S65. Ans.(c)
Sol. total boys in Art from both sections = $120 \times \frac{5}{8} + 110 \times \frac{7}{11}$

= 75 + 70 = 145

Solutions (66-70): From the given statements, two persons sit between D and S, who faces to the center. Here we get 2 possibilities i.e. Case 1 and Case 2. Q sits immediate to the right of D. Both R and C are sitting opposite to each other. C sits near to Q.
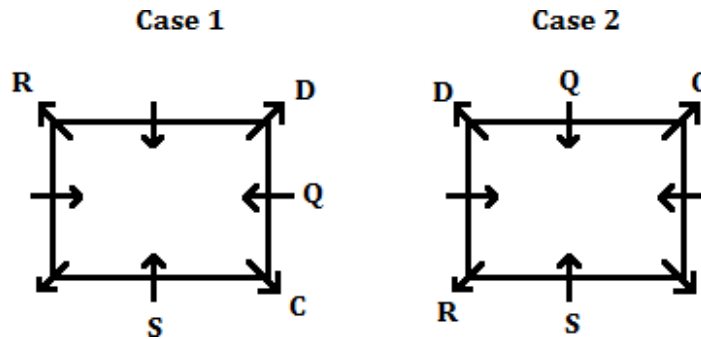
From the given statements, only one person sits between A and B, who does not sit near to D. Here Case 2 is ruled out now.
So, the final arrangement will be like this-
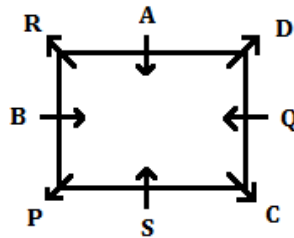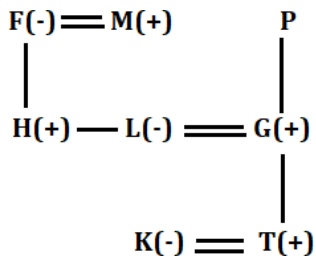

S66. Ans.(a)
S67. Ans.(b)
S68. Ans.(e)
S69. Ans.(d)
S70. Ans.(d)

Solutions (71-73):

S71. Ans.(c)
S72. Ans.(c)
S73. Ans.(a)

Solutions (74-77):

Words	Codes
work	gi
just	ds
not	nj
done	hq
same	sw
equal	as
opposite	ap
case	kl
but	mn
and	xz

S74. Ans.(a)
S75. Ans.(b)
S76. Ans.(c)
S77. Ans.(c)

Solutions (78-82): There are more than three students have exam after A. Only one student has exam between A and H. From these conditions we have four possible cases-

	Case- 1	Case- 2	Case- 3	Case- 4
Day	**Student**	**Student**	**Student**	**Student**
Monday	H			A
Tuesday			A	
Wednesday	A	A		H
Thursday			H	
Friday		H		
Saturday				
Sunday				

G has exam before H but not immediate before H. By this condition case- 1 and case- 4 are cancelled. There are three students have exam between G and B. So new arrangement will be-

	Case- 2	Case- 3
Day	**Student**	**Student**
Monday		G
Tuesday	G	A
Wednesday	A	
Thursday		H
Friday	H	B
Saturday	B	
Sunday		

There are three students have exam between D and E, who does not have exam in the last day of week. By this condition case- 2 is cancelled. So final arrangement will be-

Day	Student
Monday	G
Tuesday	A
Wednesday	E
Thursday	H
Friday	B
Saturday	L
Sunday	D

S78. Ans.(c)
S79. Ans.(d)
S80. Ans.(b)
S81. Ans.(a)
S82. Ans.(e)

Solutions (83-85):

S83. Ans.(a)
Sol. I: R>Y(True)   **II:** J<B(False)

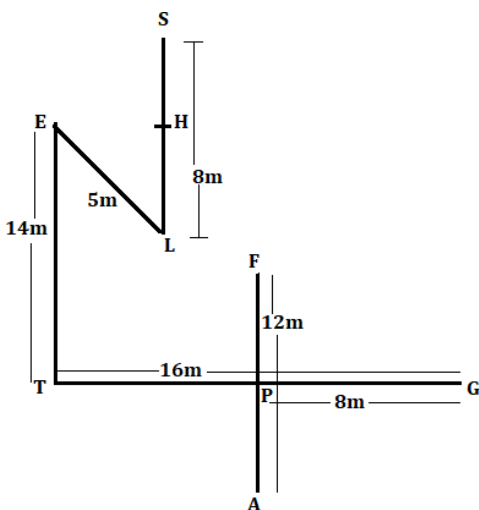**S84. Ans.(d)**
Sol. I: Z≤I (False)   **II:** O>G(False)

S85. Ans.(c)
Sol. I: E>B(False)   **II:** B=E(False)

Solutions (86-88):

S86. Ans.(d)
S87. Ans.(e)
S88. Ans.(b)
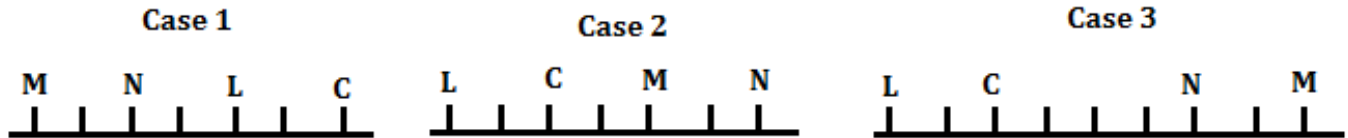
S89. Ans.(e)
Sol.

S90. Ans.(d)
Sol. Words are- D, A, E, R
Meaningful words will be **Dear, Dare, Read**.

Solutions (91-95): From the given statements, there is one person sits between N and M and one of them are sit at the extreme end of the row. There are three persons sit between N and C. L sits 2nd to the left of C. **Here we get 3 possibilities i.e. Case 1 , Case 2 and Case 3.**

From the given statements, there are six persons sit between C and B, who sits 3rd from one of the end. B sits 2nd to the left of R, who does not sit at the extreme end. **From this condition Case 1 is ruled out now.**

From the given statements, there are four persons sit between O and N. More than three persons sit between M and O. **From this condition Case 2 is ruled out now.** There are two persons sit between K and R.
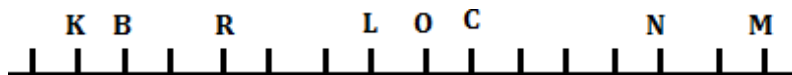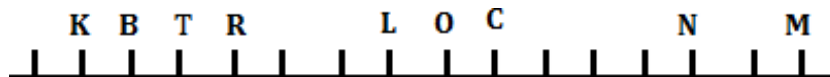

S91. Ans.(e)
S92. Ans.(b)
S93. Ans.(c)
S94. Ans.(b)

S95. Ans.(b)
Sol.

Solutions (96-100): From the given statements, three boxes are placed between M and T. M is placed either at the top most or bottom most position. **Here we get 2 possibilities i.e. Case 1 and Case 2.** Box S is placed just below to the box T. There are two boxes placed between R and S.

Case 1	Case 2
Boxes	Boxes
M	
	R
R	
	T
T	S
S	
	M

From the given statements, not more than two boxes placed between M and R. **Here case 2 is ruled out now.** Box O is placed just above to the box N. More than three boxes placed between O and P.
So, the final arrangement will be like this-

Boxes
M
P
R
Q
T
S
O
N

S96. Ans.(a)
S97. Ans.(d)
S98. Ans.(e)
S99. Ans.(c)
S100. Ans.(e)