

IDBI Executive 2023 Memory Based

Directions (1-5): Study the following information carefully to answer the given questions:

In a certain code language;

“Wait till exam over” is coded as “mn ty st re”

“Exam date fixed now” is coded as “st ad bj vt”

“Date till fixed later” is coded as “ad ty bj jt”

“Later exam will over” is coded as “jt st lo re”

Q1. What will be the code for the word “later” in a certain code language?

- (a) jt
- (b) lo
- (c) mn
- (d) ty
- (e) st

Q2. Which among the following word will be coded as “bj” in a certain code language?

- (a) Date
- (b) Fixed
- (c) Now
- (d) Either date or fixed
- (e) Either fixed or now

Q3. What will be the code for the word “till” in a certain code language?

- (a) st
- (b) mn
- (c) ty
- (d) re
- (e) ad

Q4. Which among the following word will be coded as “vt” in a certain code language?

- (a) Will
- (b) Over
- (c) Exam
- (d) Wait
- (e) Now

Q5. If “wait extend” is coded as “mn za” then what will be the code for “extend will” in a certain code language?

- (a) lo mn
- (b) za jt
- (c) lo za
- (d) za st
- (e) Can't be determined

Directions (6-10): Study the following information carefully and answer the questions given below:

Seven persons A, B, C, D, E, F and G were born in seven different years viz. 1985, 1999, 1990, 1979, 1995, 1987, 2008 but not necessarily in the same order. (All the ages of the given persons have been calculated on the base year 2023 and all the persons are considered to be born on the same date of same month).

One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F. D was born two persons before B. C is younger than B. E was born before F but not just before.

Q6. Who among the following persons is just elder than C?

- (a) A
- (b) E
- (c) B
- (d) D
- (e) None of these

Q7. How many persons were born after A?

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

Q8. What is the difference between the ages of E and G?

- (a) 5 years
- (b) 11 years
- (c) 6 years
- (d) 9 years
- (e) None of these

Q9. If all the persons were born in alphabetical order from oldest to youngest, then the position of how many persons remain unchanged?

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

Q10. Who among the following persons was born two persons after E?

- (a) D
- (b) F
- (c) A
- (d) G
- (e) None of these

Directions (11-13): Study the following information carefully and answer the questions given below:

In a family of eight persons. X is the brother-in-law of M. T is the aunt of N who is the father of A. M is single parent. A is the daughter of Q who is the daughter-in-law of M. K is the sister-in-law of N. M is the brother of U. T is not married.

Q11. How is U related to N?

- (a) Sister
- (b) Aunt
- (c) Daughter
- (d) Daughter-in-law
- (e) None of these

Q12. How many male members are there in the family?

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

Q13. If T is married to W, then how is U related to W?

- (a) Sister
- (b) Aunt
- (c) Sister-in-law
- (d) Daughter-in-law
- (e) None of these

Directions (14-17): Each of the question below, consist of a question and two statements numbered I and II given below it. You have to decide whether the data given in the statements are sufficient to answer the question or not. Read both statements and choose the most appropriate option.

Q14. Among C, D, E, F, G, H and K, how many persons are shorter than E?

I. H is just shorter than C but taller to F. Equal number of persons are shorter to F and taller to G.

II. D is 3rd shortest among all. Two persons are in between D and K.

- (a) Only statement I is sufficient
- (b) Only statement II is sufficient
- (c) Either statement I or II is sufficient
- (d) Neither statement I nor II is sufficient
- (e) Both statement I and II is sufficient

Q15. In a family of six members, how is L related to N?

I. N is mother-in-law of T who is spouse of E. M is sibling of G whose paternal grandfather is S. G is son of E.

II. E is the wife of N's only sibling. E's mother-in-law has one daughter and a grandchild. G is son of S whose father is T. L is one of the members.

- (a) Only statement I is sufficient
- (b) Only statement II is sufficient
- (c) Either statement I or II is sufficient
- (d) Neither statement I nor II is sufficient
- (e) Both statement I and II is sufficient

Q16. Seven friends are sitting around a circular table facing inside. What is the position of P with respect to D?

I. Three persons sit between D and Y. M sits just left of Y. F sits second to the left of P but not sits adjacent to D.

II. P sits third to the right of Y. No one sits between Y and M who sits second to the left of F. Two persons sit between F and D.

- (a) Only statement I is sufficient
- (b) Only statement II is sufficient
- (c) Either statement I or II is sufficient
- (d) Neither statement I nor II is sufficient
- (e) Both statement I and II is sufficient

Q17. How many persons are in between Preeti and Shweta in the class?

I. Kavya is 11th from top. Four students are in between Kavya and Shweta.

II. Nidhi's rank is 12th after Shweta. Number of students after Preeti is half than the number of students between Kavya and Nidhi.

- (a) Only statement I is sufficient
- (b) Only statement II is sufficient
- (c) Either statement I or II is sufficient
- (d) Neither statement I nor II is sufficient
- (e) Both statement I and II is sufficient

Directions (18-22): Read the given information carefully and answer the questions based on it:

Seven boxes - A, B, C, D, E, F, and G are arranged in a stack with the bottommost box numbered as one and the topmost box as seven. Each box is of different color: Orange, Black, Violet, Silver, Gold, Brown and Cyan. Not all information is provided in the same order.

Box C is placed three boxes below the gold box. Box C is not at the bottommost position. The number of boxes above the gold box is equal to the number of boxes below the silver box. The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box. Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Q18. Which box is placed at the bottommost position?

- (a) Box A
- (b) Box B
- (c) Cyan box
- (d) Box F
- (e) Box E

Q19. What is the color of Box G?

- (a) Orange
- (b) Cyan
- (c) Violet
- (d) Silver
- (e) Brown

Q20. What is the position number of cyan box?

- (a) Number 3
- (b) Number 6
- (c) Number 4
- (d) Number 2
- (e) Number 5

Q21. Which of the following pairs of boxes are adjacent to each other?

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

Q22. How many boxes are placed above box B?

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

Q23. Statement: Fair glow in one week otherwise money will be returned. This is Ayurveda cream and there is no side effect-Use 'X' brand cream. -An advertisement in the newspaper A.

Which of the following statement can be assumed from the above sentence?

- I. Normally people like Ayurveda cream.
- II. Very few people read advertisement in a newspaper.
- III. Very few people read the newspaper A.
- (a) None is implicit
- (b) Only I and II are implicit
- (c) Only I, and either II or III are implicit
- (d) All are implicit
- (e) None of the above

Q24. Statement: Use for 2 weeks, your face will get pimple free. It is 100% tested and there is no side effect-Advertisement by a face wash company Y.

Assumption:

- (I) Pimple on face is common people issue.
- (II) People believe on tested products.
- (III) Stock of face wash by company will be sold in a week.

- (a) Only I and III
- (b) Only II and III
- (c) Only II
- (d) Only I and II
- (e) All of three

Q25. Statement: Rahul with his three brothers is ready to go for school. All of them have taken their umbrella with them.

Assumption:

- (I) It is going to rain.
- (II) It is very sunny outside.

Give answer:

- (a) if only I follows.
- (b) if only II follows.
- (c) if either I or II follows.
- (d) if neither I nor II follows.
- (e) if both I and II follow.

Directions (26-30): Study the following information carefully and answer the questions given below:

Eight persons P, Q, R, S, A, B, C and E are living in a four-storey building such that the ground floor is numbered as 1, just above it is floor 2 and the topmost floor is numbered as 4. Each of the floors has 2 flats in it as flat X and flat Y. Flat X of floor-2 is immediately above flat X of floor-1 and immediately below flat X of floor-3 and so on. In the same way, flat Y of floor 2 is immediately above flat Y of floor 1 and immediately below flat Y of floor 3 and so on. Flat X is in the west of flat Y.

One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A. One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor. No one lives to the west of C.

Q26. Who among the following persons lives just above A?

- (a) S
- (b) B
- (c) Q
- (d) No one
- (e) None of these

Q27. How many persons live between E and R in the same named flat?

- (a) Two
- (b) Either one or two
- (c) One
- (d) None
- (e) None of these

Q28. Four of the following five are alike in a certain way and hence form a group. Find the one who doesn't belong to the group?

- (a) R
- (b) A
- (c) E
- (d) P
- (e) B

Q29. How many persons live below C in the same named flat?

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

Q30. Who among the following persons lives to the east of P?

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

Directions (31-33): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

Q31. Statements: $H \leq S < T = M$; $S > E > W$

Conclusions:

I. $S > W$

II. $E < H$

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

Q32. Statements: $P > C \geq Z$; $D < Q = O > P$

Conclusions:

I. $P > D$

II. $C \geq O$

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

Q33. Statements: $4 \geq 3 \geq 5$; $1 < 2 = 7 < 3$

Conclusions:

I. $1 > 4$

II. $7 < 5$

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

Q34. If we form a six-letter meaningful word with the 2nd, 4th, 7th, 9th, 12th, and 14th letter from the left end of the word "CONVERSATIONALLY," then what would be the third letter from right end of that meaningful word (Using each letter once)? If no meaningful word is formed, then mark the answer as X. If more than one meaningful word is formed, then mark the answer as Z.

- (a) O
- (b) T
- (c) N
- (d) Z
- (e) X

Q35. Torrential rains and fierce winds, influenced by Cyclone Tauktae in the Arabian Sea, have left a trail of destruction in Kerala, especially in its coastal areas. Hundreds of families living close to the sea have had to abandon their homes and rush to relief camps set up by the state government. In the wake of the coronavirus pandemic, officials have demarcated facilities for those who have tested positive and in quarantine at relief camps, but many residents are still reluctant to move fearing the virus.

Which of the following can be inferred from the given statement?

- I. Houses and families near to costal areas are mainly get affected.
- II. Officials was aware and make arrangements by keeping covid19 in mind.
- III. Cyclone Tauktae will make its impact into another parts of country after Kerala.

- (a) Only II
- (b) Only I and III
- (c) Only III
- (d) Only I and II
- (e) All of three

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

Nine persons viz. Aryan, Bella, Chris, Divya, Ethan, Fiona, Gaurav, Hina, and Ivan. They attend a conference on three different dates: 6th, 17th, and 22nd of three given months: April, July, and November of a year but not necessarily in the same order.

Hina attends the conference on an odd date. Ivan attends the conference just after Hina. The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan. Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan. Ethan attends the conference after Fiona but on the same date.

Q36. Who attends the conference on the 17th November?

- (a) Aryan
- (b) Bella
- (c) Chris
- (d) Divya
- (e) Ethan

Q37. In which month does Fiona attend the conference?

- (a) April
- (b) July
- (c) November
- (d) Either April or November
- (e) Either July or November

Q38. Who attends the conference just before Bella?

- (a) Hina
- (b) Gaurav
- (c) Divya
- (d) Chris
- (e) None of these

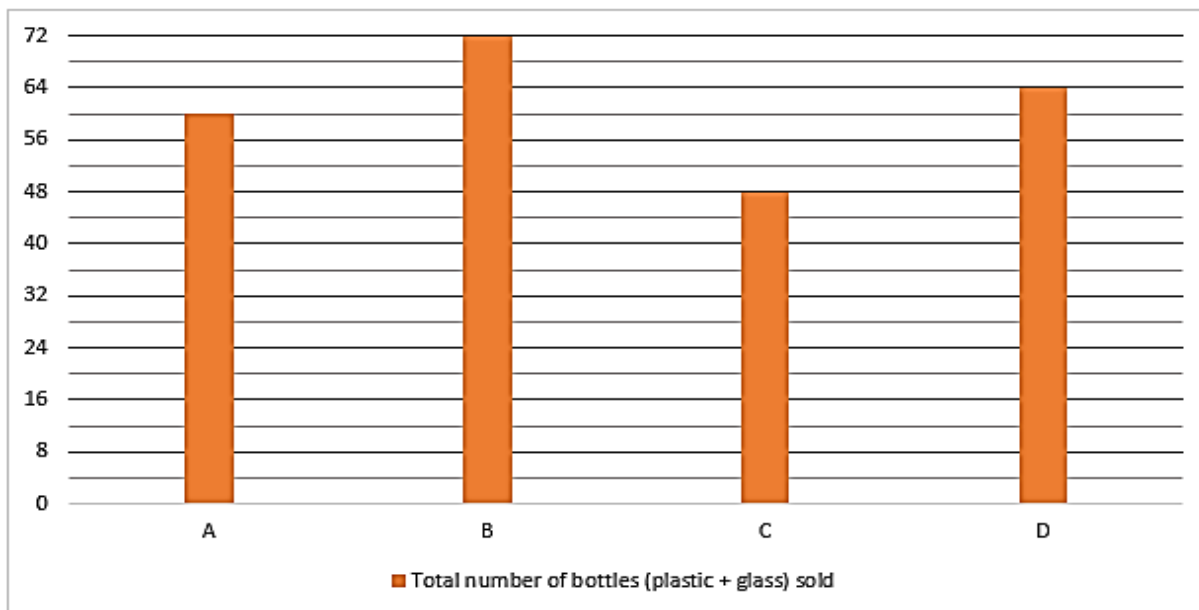
Q39. How many persons attend the conference after Divya?

- (a) Five
- (b) Three
- (c) Four
- (d) Two
- (e) Cannot be determined

Q40. Who attends the conference on the same date as Chris?

- (a) Aryan
- (b) Bella
- (c) Fiona
- (d) Divya
- (e) Hina

Directions (41-45): The bar graph given below shows total number of bottles (plastic + glass) sold by four different shops (A, B, C and D) and the table shows number of glass bottles sold by these shops. Read the data carefully and answer the questions.



Shops	Total number of glass bottles sold
A	24
B	42
C	18
D	44

Q41. Find the difference between total number of plastic bottles sold by A and D.

- (a) 20
- (b) 16
- (c) 12
- (d) 18
- (e) 24

Q42. Total glass bottles sold by B is what percent less than total plastic bottles sold by B and C together.

- (a) 30%
- (b) 25%
- (c) 20%
- (d) 36%
- (e) 15%

Q43. If total glass bottles sold by shop X are 25% more than that of by A and total plastic bottles sold by X are 10 more than that of by D, then find the total bottles (plastic + glass) sold by shop X.

- (a) 60
- (b) 50
- (c) 70
- (d) 40
- (e) 55

Q44. Find average number of plastic bottles sold by A, B and C.

- (a) 40
- (b) 36
- (c) 34
- (d) 28
- (e) 32

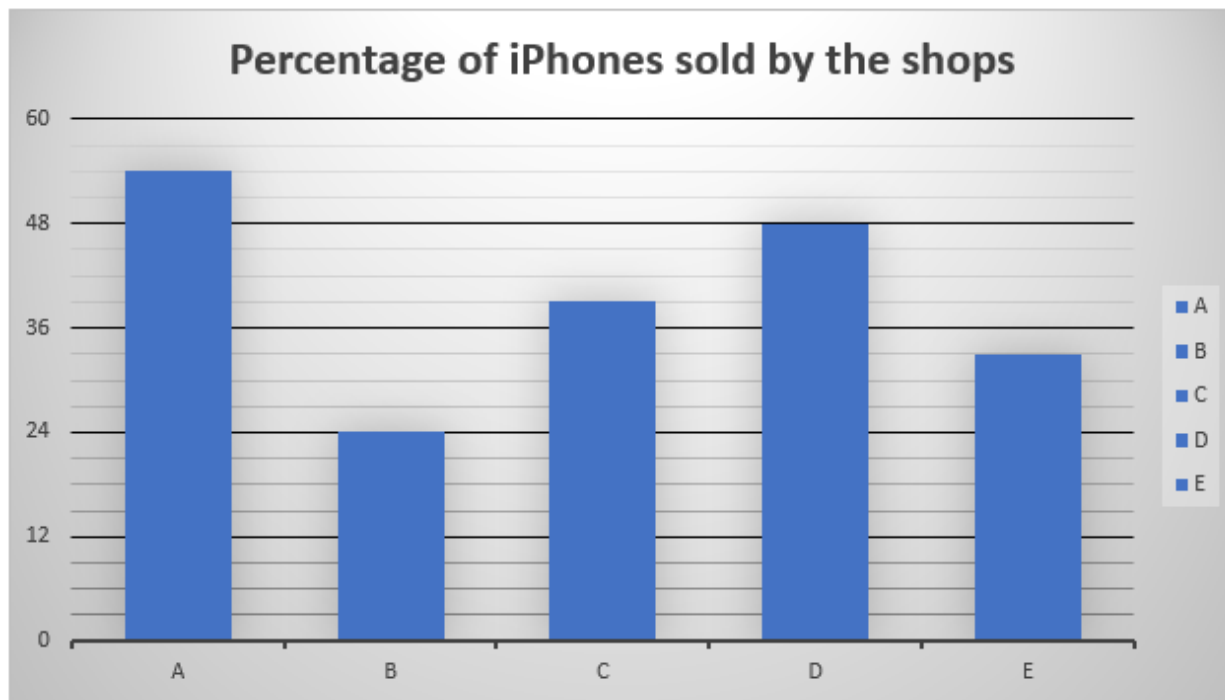
Q45. Find the ratio of total plastic bottles sold by A to total glass bottles sold by A and C together.

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

Directions (46-50): The bar graph given below shows the percentage of iPhones sold by five different shops (A, B, C, D, and E) out of total phones sold by these shops. Study the graph carefully and answer the questions given below.

Note – (i) Total number of phones sold by each shop = 600

(ii) Total number of phones sold by any shops = Total number of (iPhone + Android) phones sold by that shop.



Q46. Total number of iPhones sold by D is how much more or less than total number of iPhones sold by E?

- (a) 180
- (b) 126
- (c) 54
- (d) 90
- (e) 45

Q47. Find the average number of android phones sold by shops A, B and D?

- (a) 359
- (b) 252
- (c) 365
- (d) 395
- (e) 348

Q48. In which shops the number of android phones sold is highest?

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

Q49. Total number of iPhones sold by E is what percent (approx.) of total number of android phones sold by A?

- (a) 72%
- (b) 80%
- (c) 59%
- (d) 65%
- (e) 75%

Q50. Find the difference between the total number of android phones sold and total number of iPhones sold by all the five shops together?

- (a) 600
- (b) 624
- (c) 632
- (d) 648
- (e) 606

Directions (51-55): The table given below shows number of employees present and absent on three different days of a week (Friday, Saturday and Sunday). Read the data carefully and answer the questions.

Days	Present employees	Absent employees
Friday	600	700
Saturday	750	500
Sunday	800	600

Q51. Find the sum of number of employees present on Sunday, absent on Friday and Saturday together.

- (a) 1500
- (b) 2000
- (c) 1800
- (d) 1650
- (e) 1700

Q52. If total number of employees present on Wednesday is 50% of employees absent on Friday, then the number of employees present on Wednesday is what percent of total number of employees present & absent on Sunday?

- (a) 75%
- (b) 50%
- (c) 100%
- (d) 25%
- (e) 10%

Q53. Find the ratio of total employees present & absent on Friday to number of employees absent on Saturday.

- (a) 12:25
- (b) 13:5
- (c) 11:21
- (d) 12:19
- (e) 25:13

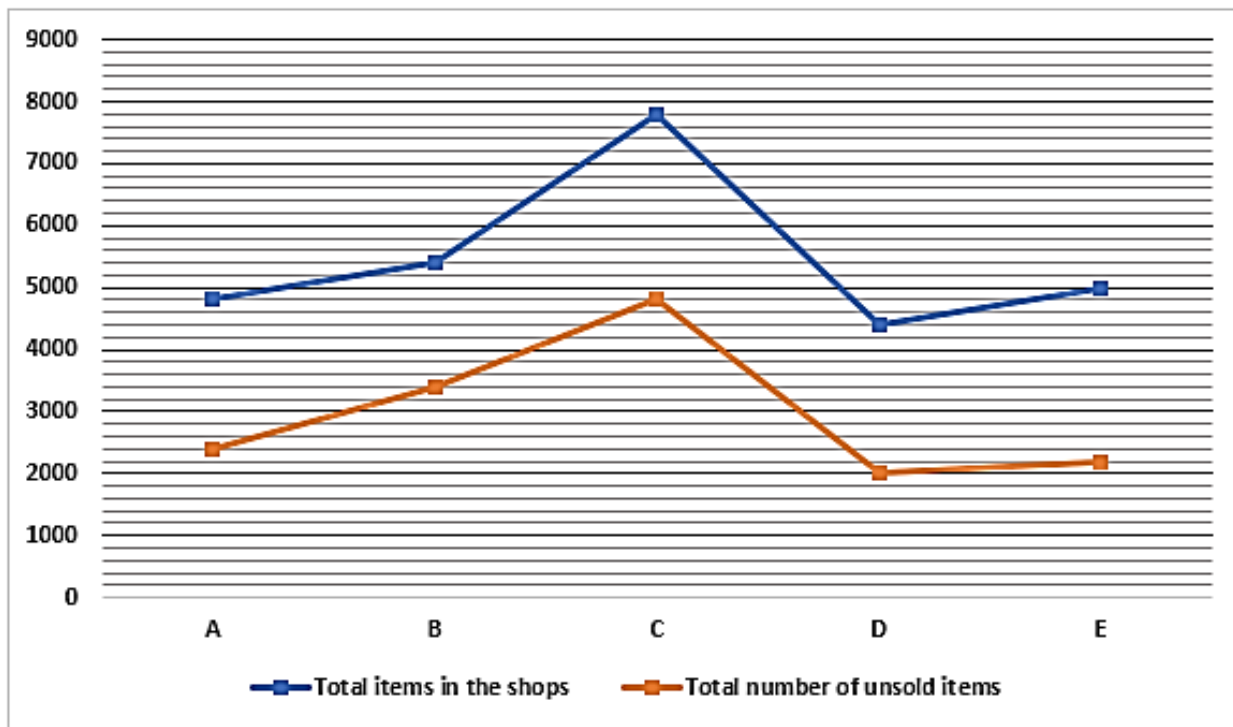
Q54. Find the average number of employees absent in all three days.

- (a) 500
- (b) 200
- (c) 600
- (d) 150
- (e) 100

Q55. Find the difference between the total number of employees present on Sunday and number of employees absent on Friday.

- (a) 150
- (b) 140
- (c) 105
- (d) 110
- (e) 100

Directions (56-60): Line graph shows the total number of items in five different (A, B, C, D and E) shops and number of unsold items in these shops. Read the line graph carefully and answer the question given below.



Note – Total items = Number of items sold + Number of items unsold.

Q56. Find the difference between total items in A and C together and unsold items in D.

- (a) 10600
- (b) 10500
- (c) 10400
- (d) 11500
- (e) 11200

Q57. Find the average of total number sold items by shops A, C & D?

- (a) 2100
- (b) 2600
- (c) 2800
- (d) 2400
- (e) 2500

Q58. Find the ratio of unsold items in shops C and D together to items sold by shops A?

- (a) 17:6
- (b) 6:17
- (c) 11:6
- (d) 2:11
- (e) 11:12

Q59. In shop F, total number of items are two times the total number of unsold items in shop C and the ratio of unsold to sold items in shop F is 3:5, then find the number of items sold by shop F.

- (a) 2000
- (b) 4000
- (c) 6000
- (d) 8000
- (e) 1000

Q60. The total number of unsold items in C and E together is what percentage more/less than items sold by B and C together.

- (a) 20%
- (b) 40%
- (c) 60%
- (d) 80%
- (e) 10%

Directions (61-70): Read the given passage carefully and answer the following questions. Certain words have been highlighted to help answer the questions

Sustainable development is a concept that involves meeting the needs of the present generation without compromising the **ability** of future generations to meet their own needs. It is about balancing economic, social, and environmental considerations to ensure that development is equitable and environmentally sound. One of the key aspects of sustainable development is reducing the impact of human activities on the environment. This can be achieved through measures such as energy efficiency, conservation of natural resources, and reduction of greenhouse gas emissions. Sustainable development also involves _____ (II) economic growth that is both inclusive and environmentally sustainable. This can be **achieved** by creating jobs that are environmentally friendly, investing in renewable energy, and promoting sustainable agriculture.

In addition to economic considerations, social factors are also important in sustainable development. This includes ensuring access to basic services such as healthcare, education, and housing for all members of society, regardless of their income level. It also involves promoting gender equality, reducing inequalities, and promoting social cohesion. **Sustainable development is a complex and multifaceted concept that requires a holistic approach.** It requires a commitment from governments, businesses, and individuals to work together to create a more sustainable future for everyone. By taking action now, we can ensure that future generations _____ (I) a world that is healthy, equitable, and prosperous.

Q61. As mentioned in the passage, what does sustainable development rivet on?

- (a) To focus on the expansion of the socio-economic culture to promote social cultures and norms with economic factors.
- (b) To create a society for the growth of socio-economic factors including the environmental aspects.
- (c) To concentrate on social and environmental factors for the use of future generation to access the use of resources
- (d) To aim at equating the social, environmental along with economic factors to promote growth and levelling
- (e) To aim at the attention towards factors affecting environment in order to create a space safe and sound in the society

Q62. According to the author, how does social development and growth can be equitable?

- (a) By promoting green house gas effects on the environment and reducing the carbon emissions.
- (b) By centring the attention towards education and health care services of a specific class and gender in the society.
- (c) By considering the social equality on the basis of gender and class to create a social unity
- (d) By promoting the development of inequality to focus on current growth and saving minimum rights and equalities for the future generation
- (e) By focusing on housing, health care services, equal rights to the people on the basis of their income levels in the society.

Q63. According to the passage, what does the sustainable development demand to achieve the goal of it?

- (a) It involves the need to build a cohesive work environment of the people in every factor to reach up to the goal of the development.
- (b) It dictates the demand to solely perceive the goal to achieve for the future generation by each and every individual.
- (c) It requires to take actions to promote the achievement to the goal by environmental factors
- (d) It needs the society to act upon the goal achievement with different approaches
- (e) It requires the society to divide the spaces into different categories according to the classes in order to give small portion to the future generation

Q64. Which of the following statements is/are correct with reference to the passage?

- (i) Sustainable development is a concept that prioritizes economic growth over social and environmental concerns.
 - (ii) The key aspect to sustainable development is ensuring access to basic services such as healthcare, education, and housing for all members of society.
 - (iii) One of the features of the sustainable development is promoting social cohesion and reducing inequalities.
- (a) Both (ii) and (iii)
 - (b) Only (iii)
 - (c) Both (i) and (ii)
 - (d) None of these
 - (e) Only (i)

Q65. From among the following given options, choose the word most similar in meaning to the similar word “achieved”, as used in the context of the passage.

- (a) repeated
- (b) near
- (c) slurred
- (d) skimped
- (e) accomplished

Q66. Choose the most suitable antonym of the word “ability”, as highlighted in the given passage.

- (a) capability
- (b) capacity
- (c) faculty
- (d) disability
- (e) aptitude

Q67. Which of the following statements is/are Incorrect with reference to the passage?

- (i) One of the key factors involve reduction in the impact of human activities on the environment.
 - (ii) It requires creating jobs that are income friendly and promoting renewable energy resources.
 - (iii) A concept that balances economic, social, and environmental considerations to ensure equitable and environmentally sound development.
- (a) All of these
 - (b) Only (ii)
 - (c) Both (ii) and (iii)
 - (d) None of these
 - (e) Only (i)

Q68. Which of the following words can most appropriately fill the blank (I) given in the passage?

- (a) Surrender
- (b) inherit
- (c) Repudiate
- (d) Renounce
- (e) Divest

Q69. What does the highlighted phrase, “Sustainable development is a complex and multifaceted concept that requires a holistic approach” in the passage illustrate?

- (a) Sustainable development requires a comprehensive understanding of the challenges and opportunities related to socio-economic factors
- (b) It means that all aspects of sustainable development, such as economic growth, social equity, and environmental protection, must be integrated and balanced to ensure long-term sustainability.
- (c) Sustainable development is a simple and straightforward concept, that involves single dimensions and dependencies.
- (d) It encompasses social factors that are closely interconnected with the income levels of different people and need to be considered as a whole to fulfil the meaning of the sustainable development
- (e) It refers to ability to develop and implement strategies that address economic factors in a coordinated and integrated manner.

Q70. Which of the following words can most appropriately fill the blank (II) given in the passage?

- (a) inhibiting
- (b) combatting
- (c) interdiction
- (d) promoting
- (e) barring

Directions (71-74): In each question a word is given, corresponding to it three sentences are given. Choose the correct sentence(s) that has/have the correct usage of the word.

Q71. Liberty

- (A) He has been given the **liberty** to take his all decisions in life.
 - (B) Patients with mental illness need help, not loss of **liberty**.
 - (C) It takes many years for a plant to grow **liberty** to provide fruits.
- (a) Only (A)
 - (b) Only (B)
 - (c) Only (C)
 - (d) Only (A) and (B)
 - (e) Only (A) and (C)

Q72. Futile

- (A) My friend and I **futile** a start-up in the next year.
 - (B) Persistent hard work never turns out **futile**.
 - (C) It is **futile** to ask for permission to go out at night.
- (a) Only (A)
 - (b) Only (B) and (C)
 - (c) Only (C)
 - (d) Only (A) and (B)
 - (e) Only (A) and (C)

Q73. Impediment

- (A) Electronic vehicle charger is still an **impediment** for buyers to adopt electric vehicles.
 - (B) Most of us eat wheat and rice as **impediment** foods
 - (C) The tectonic plates continually **impediment**, push and grate against each other.
- (a) Only (A)
 - (b) Only (B)
 - (c) Only (C)
 - (d) Only (A) and (B)
 - (e) Only (A) and (C)

Q74. Vandalize

- (A) Investors planning to **vandalize** advantage of recent price swings.
 - (B) Union Budget is aimed at **vandalizing** loan sanctions and credit flows.
 - (C) Angry customers had **vandalized** the store before leaving.
- (a) Only (A)
 - (b) Only (B)
 - (c) Only (C)
 - (d) Only (A) and (B)
 - (e) Only (A) and (C)

Directions (75-77): Each question is divided into four parts in which one part has the error. Choose the incorrect part of the statement as your answer choice. If no part has any error, choose, "No Error" as your answer.

Q75. Darwin's observations led (A) /him to deduce that plants (B) /and animals could adapt (C)/to its surroundings (D)

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

Q76. The old man sat quietly in (A)/ his rocking chair on the front (B)/ porch, watched the sunset and reminiscing (C)/about his youth (D).

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

Q77. The BBC must (A)/ ensure that duly (B)/impartiality is preserved (C)/ in its news programs (D).

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

Directions (78-81): In each question, four words are given in bold, which may not be in their correct place. Choose the replacement needed between these words so to make a meaningful and grammatically correct sentence.

Q78. After a thorough **analysis** (A)of the market **targeting** (B)and customer feedback, our company has decided to launch a new product line **trends** (C)young adults with an **affordable** (D)pricing strategy.

- (a) Only (A)-(D)
- (b) Only (B)-(C)
- (c) Only (A)-(B) and (C)-(D)
- (d) Only (A)-(C) and (B)-(D)
- (e) No replacement needed

Q79. Despite facing several **deadline**, (A) the team was able to successfully **deliver** (B) the project within the given **obstacles**, (C) thanks to their hard work and **dedication** (D).

- (a) Only (A)-(C)
- (b) Only (B)-(D)
- (c) Only (A)-(B) and (C)-(D)
- (d) Only (A)-(C) and (B)-(D)
- (e) No replacement needed

Q80. The latest research findings suggest that **productivity (A)** mindfulness **routines (B)** into daily **techniques (C)** can have a positive impact on mental well-being and overall **incorporating (D)**.

- (a) Only (A)-(C)
- (b) Only (B)-(D)
- (c) Only (A)-(D) and (B)-(C)
- (d) Only (A)-(C) and (B)-(D)
- (e) No replacement needed

Q81. As a result of the recent economic **downturn**, (A) many businesses have been **reducing** (B) to adopt cost-cutting measures such as **forced** (C) employee **benefits** (D) and laying off workers.

- (a) Only (A)-(C)
- (b) Only (B)-(D) and (A)-(C)
- (c) Only (A)-(D) and (B)-(C)
- (d) Only (B)-(C)
- (e) No replacement needed

Directions (82-84): Two columns are given in each question and each column has three parts of a sentence. Choose the most suitable pair, which makes a grammatically correct and contextually coherent statement.

Q82. Column (I)

- (1) The sunlight filtering through the leaves of the
- (2) the toddler's laughter echoed through the park
- (3) she stood on the mountaintop, feeling the

Column (II)

- (4) trees created a dappled effect on the forest floor
- (5) through the air, making my mouth water
- (6) walked along the beach

- (a) 1-4
- (b) 2-4 and 3-6
- (c) 3-5
- (d) 2-5
- (e) all of the above

Q83. Column (I)

- (1) The savory scent of simmering spices emanated from
- (2) The intricate patterns on the handmade rug
- (3) The vibrant colours of the sunset painted the sky

Column (II)

- (4) corner as the musician played a soulful melody
- (5) caught the eye of every visitor to the room
- (6) bringing joy to everyone who heard it

- (a) 2-4
- (b) 2-5 and 3-6
- (c) 2-5
- (d) 1-6
- (e) all of the above

Q84. Column (I)

- (1) The birds chirped merrily as they flitted
- (2) The rumble of thunder in the distance
- (3) The sound of the rain tapping against

Column (II)

- (4) the window was a soothing lullaby
- (5) enticing everyone in the house
- (6) making my stomach growl

- (a) 1-6
- (b) 2-6
- (c) 3-4
- (d) 1-4
- (e) all of the above

Directions (85-89): In the given question five sentences are given. Rearrange these sentences in a meaningful order to answer the following questions.

- (A) So, always lean towards action—start where you are and trust that you'll navigate the rest along the way.
- (B) There are times when you don't know anything about something, and you're still asked to do something about it.
- (C) Otherwise, you might become overly attached to your initial idea and overlook valuable opposing perspectives.
- (D) But, if you think about it, it's in fact better not to have too much conviction.
- (E) In the end, what often holds us back isn't the risk of taking action but the paralysis caused by inaction.

Q85. Which of the following statements will be the fourth after rearrangement?

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

Q86. Which of the following statements will be the second after rearrangement?

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

Q87. Which of the following statements will be the fifth after rearrangement?

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

Q88. Which of the following statements will be the third after rearrangement?

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

Q89. Which of the following statements will be the first after rearrangement?

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

Directions (90-94): Each question given below has one blank, which is indicating that something has been omitted. Find out which word from option can be used to fill up the blank to make it meaningful.

Q90. The _____ of new technologies has completely transformed the way we live and work.

- (a) scrutiny
- (b) implementation
- (c) expedience
- (d) contemplation
- (e) excavation

Q91. The team's _____ performance in the tournament led to their defeat in the finals.

- (a) exemplary
- (b) mediocre
- (c) exceptional
- (d) unparalleled
- (e) transcendent

Q92. His _____ actions during the crisis earned him praise from all quarters.

- (a) commendable
- (b) repugnant
- (c) reprehensible
- (d) irresponsible
- (e) repellent

Q93. The company's _____ strategies enabled it to expand its operations rapidly.

- (a) conservative
- (b) obsolete
- (c) orthodox
- (d) conventional
- (e) innovative

Q94. The teacher provided _____ guidance to her students on how to prepare for the upcoming exams.

- (a) inadequate
- (b) disrespectful
- (c) trivial
- (d) competent
- (e) inconsistent

Directions (95-100): In the following passage there are blanks, each of which has been denoted by letters. For each blank, five options are given. Choose the most appropriate word from the options that fits the blank appropriately.

In recent years, there has been a growing concern about the impact of social media on mental health. While social media can be a _____ (A) tool for staying connected with friends and family, it can also be a source of stress and anxiety. One of the biggest problems is _____ (B) comparison. People often compare their lives to the carefully curated and filtered _____ (C) they see on social media, leading to feelings of inadequacy and low self-esteem. Additionally, the constant _____ (D) to be connected can lead to a lack of sleep and increased _____ (E) to blue light, which can disrupt the body's natural sleep-wake cycle. Finally, social media can also be a platform for _____ (F) behavior, including cyberbullying and trolling.

Q95. Which of the following words will fit in the given blank (A)?

- (a) aesthetic
- (b) perpetuate
- (c) extinguish
- (d) valuable
- (e) wonderful

Q96. Which of the following words will fit in the given blank (B)?

- (a) social
- (b) media
- (c) humble
- (d) yelling
- (e) farther

Q97. Which of the following words will fit in the given blank (C)?

- (a) edition
- (b) volume
- (c) admire
- (d) versions
- (e) subdue

Q98. Which of the following words will fit in the given blank (D)?

- (a) need
- (b) urge
- (c) chilling
- (d) responsibility
- (e) demand

Q99. Which of the following words will fit in the given blank (E)?

- (a) exposure
- (b) vulnerability
- (c) sensitivity
- (d) resistance
- (e) immunity

Q100. Which of the following words will fit in the given blank (F)?

- (a) altruistic
- (b) beneficial
- (c) harmful
- (d) kind
- (e) charitable

Q101. A shopkeeper marked up the price of a toy by 40% and gives a discount of 20%. If the selling price of the toy is Rs.896, then find the cost price of the toy (in Rs.).

- (a) 840
- (b) 620
- (c) 800
- (d) 1120
- (e) 720

Q102. X and Y started a business with investment of Rs.9000 and Rs.12000 respectively. After eight months, Y withdraws one-third of his investment. At the end of a year, the total profit was Rs.5900. Find the profit share of X (in Rs.).

- (a) 1840
- (b) 1620
- (c) 1800
- (d) 1100
- (e) 2700

Q103. If the numerator of a fraction is increased by 25% and denominator is decreased by 20%, the resulting fraction is $\frac{25}{8}$. Find the original fraction.

- (a) $\frac{1}{1}$
- (b) $\frac{2}{3}$
- (c) $\frac{8}{1}$
- (d) $\frac{9}{1}$
- (e) $\frac{2}{1}$

Q104. A pipe can fill a tank in 18 hours. After one-third of the tank is filled, two more identical pipes are connected to the tank. Find the total time in which the tank will be fill completely.

- (a) 10 hr
- (b) 15 hr
- (c) 6 hr
- (d) 7.5 hr
- (e) 8 hr

Q105. A boat takes 4 hours to travel 36 km in downstream and 6 hours to travel the same distance in upstream. Find the speed of the boat in still water.

- (a) 12 km/hr
- (b) 1.5 km/hr
- (c) 5 km/hr
- (d) 7.5 km/hr
- (e) 7 km/hr

Q106. A train takes 30 seconds to cross a pole and 45 seconds to cross a 350 meters long bridge. Find the length of the train.

- (a) 840 m
- (b) 600 m
- (c) 800 m
- (d) 700 m
- (e) 900 m

Q107. The average age of a group of 25 persons increased by 1 years, when a 76 years old new person was included in the group. Find the new average age (in years) of the group.

- (a) 40
- (b) 60
- (c) 51
- (d) 50
- (e) 54

Q108. A sum of Rs. P is invested at a simple interest rate of 8% per annum for 4 years. If he received Rs.13200 as amount, then find the value of P.

- (a) 18400
- (b) 10000
- (c) 18000
- (d) 11000
- (e) 12700

Q109. In a mixture, the ratio of the alcohol to water is 5 : 6. When 11 liters of mixture is taken out and 7 liters of water is added, then the ratio of alcohol to water becomes 5 : 7. Find the initial quantity of mixture?

- (a) 66 liters
- (b) 110 liters
- (c) 121 liters
- (d) 88 liters
- (e) 77 liters

Q110. The sum of the radius and circumference of a circle is 255 cm. Find the area of the circle.

- (a) 3490 cm^2
- (b) 3420 cm^2
- (c) 3440 cm^2
- (d) 3850 cm^2
- (e) 2480 cm^2

Q111. A contractor can complete a construction project alone in 20 days. His assistant alone can complete the same project in 30 days. If they work together, then in how many days it will be completed?

- (a) 12 days
- (b) 18 days
- (c) 15 days
- (d) 5 days
- (e) 20 days

Q112. The sum of two positive numbers is 22 and 50% of bigger number is equal to the 60% of the smaller number. Find the bigger number?

- (a) 12
- (b) 10
- (c) 9
- (d) 14
- (e) 16

Q113. In a journey the speed of car for 20% of the distance is X km/hr, for 60% of the distance is $3X$ km/hr and for the remaining the speed is $2X$ km/hr. If the average speed of the bus is 20 km/hr for whole journey, then find the value of X .

- (a) 10
- (b) 15
- (c) 12
- (d) 9
- (e) 18

Q114. Five years hence, the age of father will be $\frac{7}{3}$ times of his son age at that time. If the sum of present age of father and his son is 40 years, then find the present age of father.

- (a) 30 years
- (b) 35 years
- (c) 50 years
- (d) 40 years
- (e) 25 years

Q115. A and B entered into a business with investment of Rs.22000 and Rs.26400 respectively. B left the business after 'M' months and at end of a year, A and B get equal profit share. Find the value of M?

- (a) 10
- (b) 9
- (c) 8
- (d) 6
- (e) 7

Directions (116-120): What value should come in place of question (?) mark in the given number series?

Q116. 56, 112, ?, 236, 304, 376

- (a) 172
- (b) 182
- (c) 178
- (d) 180
- (e) 118

Q117. 1, 23, 59, 111, 181, ?

- (a) 296
- (b) 297
- (c) 213
- (d) 243
- (e) 271

Q118. 2, 198, ?, 778, 1178, 1662

- (a) 479
- (b) 456
- (c) 454
- (d) 432
- (e) 482

Q119. ?, 40, 160, 960, 7680, 76800

- (a) 20
- (b) 18
- (c) 10
- (d) 5
- (e) 12

Q120. ?, 1, 2, 7, 34, 203

- (a) 2
- (b) 1
- (c) 0.25
- (d) 0.5
- (e) None of these

Directions (121-125): Solve the given quadratic equations (I) & (II) and mark the correct option based on your answer.

Q121. I. $x^2 + 15x + 26 = 0$

II. $y^2 + 3y + 2 = 0$

- (a) $x < y$
- (b) No relation can be established between x and y.
- (c) $x > y$
- (d) $x \leq y$
- (e) $x \geq y$

Q122.

I. $x = \sqrt[3]{729}$

II. $y^2 = 64$

- (a) $x < y$
- (b) No relation can be established between x and y .
- (c) $x > y$
- (d) $x \leq y$
- (e) $x \geq y$

Q123. I. $x^2 - 25x + 156 = 0$

II. $y^2 - 23y + 132 = 0$

- (a) $x < y$
- (b) No relation can be established between x and y .
- (c) $x > y$
- (d) $x \leq y$
- (e) $x \geq y$

Q124. I. $x^2 + 19x + 78 = 0$

II. $y^2 + 21y + 104 = 0$

- (a) $x < y$
- (b) No relation can be established between x and y .
- (c) $x > y$
- (d) $x \leq y$
- (e) $x \geq y$

Q125. I. $8x^2 - 10x + 3 = 0$

II. $5y^2 + 14y - 3 = 0$

- (a) $x < y$
- (b) No relation can be established between x and y .
- (c) $x > y$
- (d) $x \leq y$
- (e) $x \geq y$

Directions (126-130): Read the information carefully and answer the questions given below.

In a company, there are 750 employees (male + female) in two different posts (A and B) and the ratio of male to female employees is 3: 2. The number of males in post A is 110 more than the females in post B. Number of females in post A is 50 more than the females in post B.

Q126. Find the ratio of male employees in post B to female employees in post A.

- (a) 43:57
- (b) 43:35
- (c) 41:55
- (d) 43:55
- (e) 40:53

Q127. Find the difference between total employees in post A and female employees in post B.

- (a) 255
- (b) 265
- (c) 275
- (d) 285
- (e) 295

Q128. If in the company only 20% of male employees from post A and 40% of female employees from post B got promotion, then find the number of employees who get promoted.

- (a) 97
- (b) 95
- (c) 93
- (d) 92
- (e) 90

Q129. 100 new employees joined the company such that the number of male employees is increased by 10%. Find the number of new female employees join the company.

- (a) 52
- (b) 58
- (c) 45
- (d) 50
- (e) 55

Q130. Find the total number of employees in the post B.

- (a) 315
- (b) 320
- (c) 330
- (d) 340
- (e) 346

Directions (131-140): What approximate value should come in place of question (?) mark.

Q131. $144.89\% \text{ of } 79.99 + \sqrt{676.06} + ?^2 = 2100.91 \div 10.89$

- (a) 23
- (b) 7
- (c) 13
- (d) 17
- (e) 9

Q132. $\frac{16.13 + 3.97 \times ?}{3.02} + 7.90^3 \div 2.09^2 = 156.089 \times 1.99$

- (a) 159
- (b) 129
- (c) 134
- (d) 144
- (e) 152

Q133. $5.12^3 \times 4.24^3 \div 2.12^5 + 74.95\% \text{ of } 360.09 = ?$

- (a) 520
- (b) 610
- (c) 540
- (d) 660
- (e) 500

Q134. $9.09 \times 25.25 + 51.051 \times 9.01 - 9.09 \times 58.058 = ?$

- (a) 172
- (b) 282
- (c) 222
- (d) 162
- (e) 192

Q135. $120.012\% \text{ of } 450.24 + 119.920 + 155.1 \div 5.1 = ?$

- (a) 611
- (b) 751
- (c) 691
- (d) 721
- (e) 911

Q136. $39.89\% \text{ of } 549.92 + 199.88 \div 4.02 = ?$

- (a) 470
- (b) 545
- (c) 260
- (d) 145
- (e) 270

Q137. $\sqrt{1440} \times 11.01 + 490.02 = ? + 560.02$

- (a) 308
- (b) 332
- (c) 364
- (d) 348
- (e) 386

Q138. $\frac{89.90\% \text{ of } 799.99}{8.82} = \sqrt[3]{?} \times 9.99$

- (a) 125
- (b) 512
- (c) 64
- (d) 216
- (e) 729

Q139. $19.09^2 - 20.04\% \text{ of } 190.04 - ? = 90.12$

- (a) 233
- (b) 247
- (c) 212
- (d) 202
- (e) 285

Q140. $(11.92\% \text{ of } 450.10) \div 8.90 + 3 \times ? = 1112.98 - 900.21$

- (a) 62
- (b) 61
- (c) 29
- (d) 74
- (e) 69

Solutions

S1. Ans.(a)

Sol.

Words	Codes
Wait	Mn
Till	Ty
Exam	St
Over	re
Date/Fixed	Ad/bj
Now	vt
Later	jt
Will	Lo

S2. Ans.(d)

Sol.

Words	Codes
Wait	Mn
Till	Ty
Exam	St
Over	re
Date/Fixed	Ad/bj
Now	vt
Later	jt
Will	Lo

S3. Ans.(c)

Sol.

Words	Codes
Wait	Mn
Till	Ty
Exam	St
Over	re
Date/Fixed	Ad/bj
Now	vt
Later	jt
Will	Lo

S4. Ans.(e)

Sol.

Words	Codes
Wait	Mn
Till	Ty
Exam	St
Over	re
Date/Fixed	Ad/bj
Now	vt
Later	jt
Will	Lo

S5. Ans.(c)

Sol.

Words	Codes
Wait	Mn
Till	Ty
Exam	St
Over	re
Date/Fixed	Ad/bj
Now	vt
Later	jt
Will	Lo

S6. Ans.(b)

Sol. Final arrangement:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

Clues: One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44		
1985	38	G	
1987	36		G
1990	33		F
1995	28	C	
1999	24		C
2008	15	F	

Clues: D was born two persons before B. C is younger than B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for B and D.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44	D	
1985	38	G	
1987	36	B	G
1990	33		F
1995	28	C	
1999	24		G
2008	15	F	

Clue: E was born before F but not just before.

Inference: Only one person remains i.e., A. So, the Final arrangement is:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

E is just elder than C

S7. Ans.(c)

Sol. Final arrangement:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

Clues: One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44		
1985	38	G	
1987	36		G
1990	33		F
1995	28	C	
1999	24		C
2008	15	F	

Clues: D was born two persons before B. C is younger than B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for B and D.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44	D	
1985	38	G	
1987	36	B	G
1990	33		F
1995	28	C	
1999	24		G
2008	15	F	

Clue: E was born before F but not just before.

Inference: Only one person remains i.e., A. So, the Final arrangement is:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

One person was born after A

S8. Ans.(a)

Sol. Final arrangement:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

Clues: One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44		
1985	38	G	
1987	36		G
1990	33		F
1995	28	C	
1999	24		C
2008	15	F	

Clues: D was born two persons before B. C is younger than B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for B and D.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44	D	
1985	38	G	
1987	36	B	G
1990	33		F
1995	28	C	
1999	24		G
2008	15	F	

Clue: E was born before F but not just before.

Inference: Only one person remains i.e., A. So, the Final arrangement is:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

The age of E and G is 33 years and 38 years

Difference between the age of E and G = $38 - 33 = 5$ years

S9. Ans.(b)

Sol. Final arrangement:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

Clues: One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44		
1985	38	G	
1987	36		G
1990	33		F
1995	28	C	
1999	24		C
2008	15	F	

Clues: D was born two persons before B. C is younger than B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for B and D.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44	D	
1985	38	G	
1987	36	B	G
1990	33		F
1995	28	C	
1999	24		G
2008	15	F	

Clue: E was born before F but not just before.

Inference: Only one person remains i.e., A. So, the Final arrangement is:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

No one remains unchanged

Years	Age (in years)	Persons	Persons born in alphabetical order
1979	44	D	A
1985	38	G	B
1987	36	B	C
1990	33	E	D
1995	28	C	E
1999	24	A	F
2008	15	F	G

S10. Ans.(c)

Sol. Final arrangement:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

Clues: One person was born between F and C. The age of F is an odd number. Two persons were born between C and G. G was not born just after F.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44		
1985	38	G	
1987	36		G
1990	33		F
1995	28	C	
1999	24		C
2008	15	F	

Clues: D was born two persons before B. C is younger than B.

Inference: From the above conditions Case 2 is cancelled here as there is no place for B and D.

Years	Age (in years)	Case 1	Case 2
		Persons	Persons
1979	44	D	
1985	38	G	
1987	36	B	G
1990	33		F
1995	28	C	
1999	24		G
2008	15	F	

Clue: E was born before F but not just before.

Inference: Only one person remains i.e., A. So, the Final arrangement is:

Years	Age (in years)	Persons
1979	44	D
1985	38	G
1987	36	B
1990	33	E
1995	28	C
1999	24	A
2008	15	F

A was born two persons after E

S11. Ans.(b)

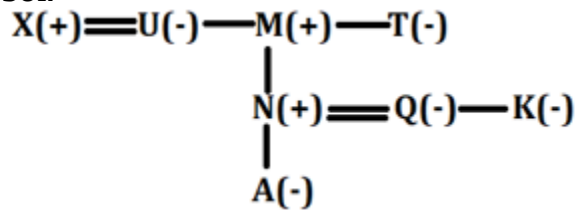
Sol.

$X(+)=U(-)-M(+)-T(-)$
 $\quad \quad \quad |$
 $\quad \quad \quad N(+)=Q(-)-K(-)$
 $\quad \quad \quad |$
 $\quad \quad \quad A(-)$

U is the aunt of N

S12. Ans.(b)

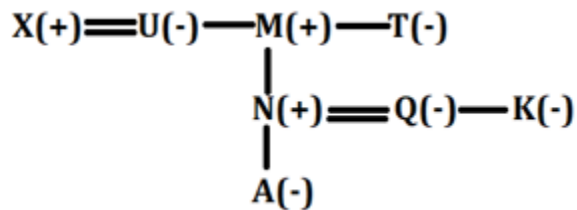
Sol.



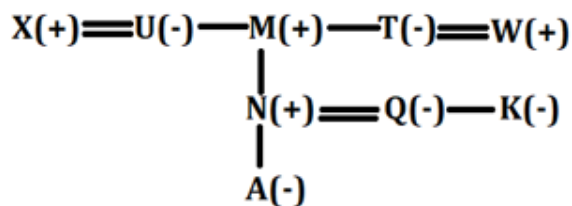
There are three male members in the family

S13. Ans.(c)

Sol.



U is the sister-in-law of W



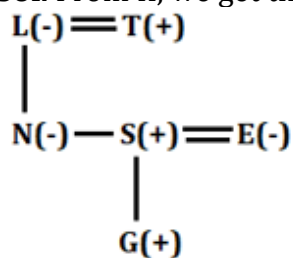
S14. Ans.(e)

Sol. From both I and II, we get that one person is shorter than E.

Order: $G > K > C > H > D > E > F$

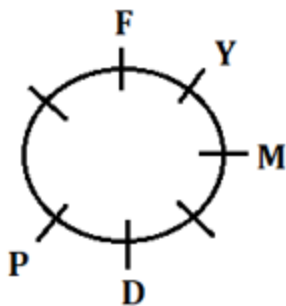
S15. Ans.(b)

Sol. From II, we get that L is mother of N.



S16. Ans.(a)

Sol. From I, we get that P sits immediate left of D.



S17. Ans.(d)

Sol. Even after combining both statements, we don't get the required answer.

S18. Ans.(a)

Sol. Final arrangement:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Clues: Box C is placed three boxes below the gold box. Box C is not at the bottommost position.

The number of boxes above the gold box is equal to the number of boxes below the silver box.

Inference: We have three possible cases here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				
6				Gold		
5						Gold
4	C					
3			C			Silver
2				Silver	C	
1		Silver				

Clues: The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box.

Inference: Case 2 and case 3 will cancel here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				Violet
6	D			Gold		Orange
5				Violet		Gold
4	C	Brown		Orange		
3		Violet	G			Silver
2		Orange		Silver	G	
1		Silver				

Clues: Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Inference: Remaining box is box F. So, the final arrangement is:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Box A is placed at the bottommost position.

S19. Ans.(a)

Sol. Final arrangement:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Clues: Box C is placed three boxes below the gold box. Box C is not at the bottommost position. The number of boxes above the gold box is equal to the number of boxes below the silver box.

Inference: We have three possible cases here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				
6				Gold		
5						Gold
4	C					
3			C			Silver
2				Silver	C	
1		Silver				

Clues: The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box.

Inference: Case 2 and case 3 will cancel here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				Violet
6	D			Gold		Orange
5				Violet		Gold
4	C	Brown		Orange		
3		Violet	G			Silver
2		Orange		Silver	G	
1		Silver				

Clues: Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Inference: Remaining box is box F. So, the final arrangement is:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Box G is of orange color.

S20. Ans.(b)

Sol. Final arrangement:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Clues: Box C is placed three boxes below the gold box. Box C is not at the bottommost position. The number of boxes above the gold box is equal to the number of boxes below the silver box.

Inference: We have three possible cases here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				
6				Gold		
5						Gold
4	C					
3			C			Silver
2				Silver	C	
1		Silver				

Clues: The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box.

Inference: Case 2 and case 3 will cancel here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				Violet
6	D			Gold		Orange
5				Violet		Gold
4	C	Brown		Orange		
3		Violet	G			Silver
2		Orange		Silver	G	
1		Silver				

Clues: Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Inference: Remaining box is box F. So, the final arrangement is:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Cyan box is 6th number box.

S21. Ans.(b)

Sol. Final arrangement:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Clues: Box C is placed three boxes below the gold box. Box C is not at the bottommost position. The number of boxes above the gold box is equal to the number of boxes below the silver box.

Inference: We have three possible cases here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				
6				Gold		
5						Gold
4	C					
3			C			Silver
2				Silver	C	
1		Silver				

Clues: The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box.

Inference: Case 2 and case 3 will cancel here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				Violet
6	D			Gold		Orange
5				Violet		Gold
4	C	Brown		Orange		
3		Violet	G			Silver
2		Orange		Silver	G	
1		Silver				

Clues: Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Inference: Remaining box is box F. So, the final arrangement is:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Boxes in option (b) are adjacent to each other.

S22. Ans.(b)

Sol. Final arrangement:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Clues: Box C is placed three boxes below the gold box. Box C is not at the bottommost position. The number of boxes above the gold box is equal to the number of boxes below the silver box.

Inference: We have three possible cases here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				
6				Gold		
5						Gold
4	C					
3			C			Silver
2				Silver	C	
1		Silver				

Clues: The violet box is placed immediately above the orange box. Box C is neither violet nor orange box. Box D is placed immediately below the box that is positioned three boxes above the brown box. Box D is placed above violet box.

Inference: Case 2 and case 3 will cancel here.

Number	Boxes	Colors	Boxes	Colors	Boxes	Colors
	Case 1		Case 2		Case 3	
7		Gold				Violet
6	D			Gold		Orange
5				Violet		Gold
4	C	Brown		Orange		
3		Violet	G			Silver
2		Orange		Silver	G	
1		Silver				

Clues: Box E is positioned two boxes below the black box. Box G is placed just above box A. Box B is neither Gold nor cyan box.

Inference: Remaining box is box F. So, the final arrangement is:

Number	Boxes	Colors
7	F	Gold
6	D	Cyan
5	B	Black
4	C	Brown
3	E	Violet
2	G	Orange
1	A	Silver

Two boxes are placed above box B.

S23. Ans.(e)

Sol. Any advertisement highlights only the desirable qualities of the product. So, I is implicit. The 'X' brand has advertised its product in newspaper A. This implies that a large section of people reads advertisements in newspapers and that news-paper A too has huge circulation and coverage. So, neither II nor III is implicit.

S24. Ans.(d)

Sol. In an advertisement, it is focused on pimple and testing it means company has surely consider the common people issue. And people believe on tested product. Nothing can be considered for stock or sale of products.

S25. Ans.(c)

Sol. If Rahul and his brother is going to use umbrellas then there are two possibilities, either there is chance of rain or outside it is too hot.

S26. Ans.(d)

Sol. Final arrangement:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Clues: One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				
2	R	A	P	
1				

Clues: One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor.

Inference: From the above conditions Case 1 is cancelled here as there is no place for S, Q and E.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				S
2	R	A	P	
1			E	Q

Clue: No one lives to the west of C.

Inference: Only one person remains i.e., B. So, the Final arrangement is:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

No one lives above A

S27. Ans.(a)

Sol. Final arrangement:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Clues: One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				
2	R	A	P	
1				

Clues: One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor.

Inference: From the above conditions Case 1 is cancelled here as there is no place for S, Q and E.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				S
2	R	A	P	
1			E	Q

Clue: No one lives to the west of C.

Inference: Only one person remains i.e., B. So, the Final arrangement is:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Two persons live between R and E in the same named flat

S28. Ans.(c)

Sol. Final arrangement:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Clues: One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				
2	R	A	P	
1				

Clues: One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor.

Inference: From the above conditions Case 1 is cancelled here as there is no place for S, Q and E.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				S
2	R	A	P	
1			E	Q

Clue: No one lives to the west of C.

Inference: Only one person remains i.e., B. So, the Final arrangement is:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Except for the person in option (c), all other person lives on an even-numbered floor

S29. Ans.(a)

Sol. Final arrangement:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Clues: One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				
2	R	A	P	
1				

Clues: One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor.

Inference: From the above conditions Case 1 is cancelled here as there is no place for S, Q and E.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				S
2	R	A	P	
1			E	Q

Clue: No one lives to the west of C.

Inference: Only one person remains i.e., B. So, the Final arrangement is:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Two persons live below C in the same named flat

S30. Ans.(d)

Sol. Final arrangement:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

Clues: One person lives between R and P in the same named flat. P lives on an even-numbered floor. R lives to the west of A.

Inference: From the above conditions there are two possibilities i.e., Case 1 and Case 2.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				
2	R	A	P	
1				

Clues: One person lives between S and Q in the same named flat. Q lives to the east of E. E and A do not live on the adjacent floor.

Inference: From the above conditions Case 1 is cancelled here as there is no place for S, Q and E.

Floors	Case 1		Case 2	
	Flat X	Flat Y	Flat X	Flat Y
4	P		R	A
3				S
2	R	A	P	
1			E	Q

Clue: No one lives to the west of C.

Inference: Only one person remains i.e., B. So, the Final arrangement is:

Floors	Flat X	Flat Y
4	R	A
3	C	S
2	P	B
1	E	Q

B lives to the east of P

S31. Ans.(a)

Sol. I. $S > W$ (True) II. $E < H$ (False)

S32. Ans.(e)

Sol. I. $P > D$ (False) II. $C \geq O$ (False)

S33. Ans.(e)

Sol. I. $1 > 4$ (False) II. $7 < 5$ (False)

S34. Ans.(e)

Sol. 2nd, 4th, 7th, 9th, 12th, and 14th letter – O, V, S, T, N and L respectively

Thus, no meaningful word is formed.

S35. Ans.(d)

Sol. It is mentioned in the statement, Cyclone Tauktae in the Arabian Sea, have left a trail of destruction in Kerala, especially in its coastal areas. Officials have demarcated facilities for those who have tested positive and in quarantine at relief camps and it can be assumed but not inferred that it will make its impact in another parts of country.

S36. Ans.(a)

Sol. Final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Clues: Hina attends the conference on an odd date. Ivan attends the conference just after Hina.

Inference: From the above conditions we get three possible cases: -

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			
	17	Hina		
	22	Ivan		
July	6			
	17		Hina	
	22		Ivan	
November	6			
	17			Hina
	22			Ivan

Clues: The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan.

Inference: Case 2 is ruled out here because there is no place for Aryan as per the condition.

Months	Dates	Persons	Persons	Persons
		Case 1	Case-2	Case 3
April	6			Divya
	17	Hina		Aryan
	22	Ivan		
July	6		Divya	
	17		Hina	
	22		Ivan	
November	6	Divya		
	17	Aryan		Hina
	22			Ivan

Clues: Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan.

Inference: Case 3 is cancelled here because there is no place for Chris.

Months	Dates	Persons	Persons
		Case 1	Case 3
April	6	Chris	Divya
	17	Hina	Aryan
	22	Ivan	
July	6	Gaurav	Gaurav
	17		
	22		
November	6	Divya	
	17	Aryan	Hina
	22		Ivan

Clues: Ethan attends the conference after Fiona but on the same date.

Inference: We know, Bella is one of the persons so the final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Aryan attends the conference on the 17th November.

S37. Ans.(b)

Sol. Final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Clues: Hina attends the conference on an odd date. Ivan attends the conference just after Hina.

Inference: From the above conditions we get three possible cases: -

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			
	17	Hina		
	22	Ivan		
July	6			
	17		Hina	
	22		Ivan	
November	6			
	17			Hina
	22			Ivan

Clues: The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan.

Inference: Case 2 is ruled out here because there is no place for Aryan as per the condition.

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			Divya
	17	Hina		Aryan
	22	Ivan		
July	6		Divya	
	17		Hina	
	22		Ivan	
November	6	Divya		
	17	Aryan		Hina
	22			Ivan

Clues: Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan.

Inference: Case 3 is cancelled here because there is no place for Chris.

Months	Dates	Persons	Persons
		Case 1	Case 3
April	6	Chris	Divya
	17	Hina	Aryan
	22	Ivan	
July	6	Gaurav	Gaurav
	17		
	22		
November	6	Divya	
	17	Aryan	Hina
	22		Ivan

Clues: Ethan attends the conference after Fiona but on the same date.

Inference: We know, Bella is one of the persons so the final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Fiona attend the conference in July.

S38. Ans.(b)

Sol. Final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Clues: Hina attends the conference on an odd date. Ivan attends the conference just after Hina.

Inference: From the above conditions we get three possible cases: -

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			
	17	Hina		
	22	Ivan		
July	6			
	17		Hina	
	22		Ivan	
November	6			
	17			Hina
	22			Ivan

Clues: The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan.

Inference: Case 2 is ruled out here because there is no place for Aryan as per the condition.

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			Divya
	17	Hina		Aryan
	22	Ivan		
July	6		Divya	
	17		Hina	
	22		Ivan	
November	6	Divya		
	17	Aryan		Hina
	22			Ivan

Clues: Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan.

Inference: Case 3 is cancelled here because there is no place for Chris.

Months	Dates	Persons	Persons
		Case 1	Case 3
April	6	Chris	Divya
	17	Hina	Aryan
	22	Ivan	
July	6	Gaurav	Gaurav
	17		
	22		
November	6	Divya	
	17	Aryan	Hina
	22		Ivan

Clues: Ethan attends the conference after Fiona but on the same date.

Inference: We know, Bella is one of the persons so the final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Gaurav attends the conference just before Bella.

S39. Ans.(d)

Sol. Final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Clues: Hina attends the conference on an odd date. Ivan attends the conference just after Hina.

Inference: From the above conditions we get three possible cases: -

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			
	17	Hina		
	22	Ivan		
July	6			
	17		Hina	
	22		Ivan	
November	6			
	17			Hina
	22			Ivan

Clues: The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan.

Inference: Case 2 is ruled out here because there is no place for Aryan as per the condition.

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			Divya
	17	Hina		Aryan
	22	Ivan		
July	6		Divya	
	17		Hina	
	22		Ivan	
November	6	Divya		
	17	Aryan		Hina
	22			Ivan

Clues: Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan.

Inference: Case 3 is cancelled here because there is no place for Chris.

Months	Dates	Persons	Persons
		Case 1	Case 3
April	6	Chris	Divya
	17	Hina	Aryan
	22	Ivan	
July	6	Gaurav	Gaurav
	17		
	22		
November	6	Divya	
	17	Aryan	Hina
	22		Ivan

Clues: Ethan attends the conference after Fiona but on the same date.

Inference: We know, Bella is one of the persons so the final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Two persons attend the conference after Divya.

S40. Ans.(d)

Sol. Final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Clues: Hina attends the conference on an odd date. Ivan attends the conference just after Hina.

Inference: From the above conditions we get three possible cases: -

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			
	17	Hina		
	22	Ivan		
July	6			
	17		Hina	
	22		Ivan	
November	6			
	17			Hina
	22			Ivan

Clues: The number of persons attending the conference after Ivan is same as the number of persons attending the conference before Divya who attends the conference just before Aryan.

Inference: Case 2 is ruled out here because there is no place for Aryan as per the condition.

Months	Dates	Persons	Persons	Persons
		Case 1	Case 2	Case 3
April	6			Divya
	17	Hina		Aryan
	22	Ivan		
July	6		Divya	
	17		Hina	
	22		Ivan	
November	6	Divya		
	17	Aryan		Hina
	22			Ivan

Clues: Gaurav attends the conference on 6th of July after Chris who doesn't attend the conference after Aryan.

Inference: Case 3 is cancelled here because there is no place for Chris.

Months	Dates	Persons	Persons
		Case 1	Case-3
April	6	Chris	Divya
	17	Hina	Aryan
	22	Ivan	
July	6	Gaurav	Gaurav
	17		
	22		
November	6	Divya	
	17	Aryan	Hina
	22		Ivan

Clues: Ethan attends the conference after Fiona but on the same date.

Inference: We know, Bella is one of the persons so the final arrangement:

Months	Dates	Persons
April	6	Chris
	17	Hina
	22	Ivan
July	6	Gaurav
	17	Bella
	22	Fiona
November	6	Divya
	17	Aryan
	22	Ethan

Divya attends the conference on the same date as Chris

S41. Ans.(b)

Sol.

Shops	Total plastic bottles sold	Total glass bottle sold
A	$60 - 24 = 36$	24
B	$72 - 42 = 30$	42
C	$48 - 18 = 30$	18
D	$64 - 44 = 20$	44

Required difference = $36 - 20 = 16$

S42. Ans.(a)

Sol.

Shops	Total plastic bottles sold	Total glass bottle sold
A	$60 - 24 = 36$	24
B	$72 - 42 = 30$	42
C	$48 - 18 = 30$	18
D	$64 - 44 = 20$	44

Total plastic bottles sold by B and C = $30 + 30 = 60$

Required percentage = $\frac{60 - 42}{60} \times 100 = 30\%$

S43. Ans.(a)

Sol.

Shops	Total plastic bottles sold	Total glass bottle sold
A	$60 - 24 = 36$	24
B	$72 - 42 = 30$	42
C	$48 - 18 = 30$	18
D	$64 - 44 = 20$	44

Total glass bottles sold by X = $24 \times \frac{125}{100} = 30$

Total plastic bottles sold by X = $20 + 10 = 30$

Required sum = $30 + 30 = 60$

S44. Ans.(e)

Sol.

Shops	Total plastic bottles sold	Total glass bottle sold
A	$60 - 24 = 36$	24
B	$72 - 42 = 30$	42
C	$48 - 18 = 30$	18
D	$64 - 44 = 20$	44

Required average = $\frac{36+30+30}{3} = 32$

S45. Ans.(e)

Sol.

Shops	Total plastic bottles sold	Total glass bottle sold
A	$60 - 24 = 36$	24
B	$72 - 42 = 30$	42
C	$48 - 18 = 30$	18
D	$64 - 44 = 20$	44

Required ratio = $36 : (24+18) = 6 : 7$

S46. Ans.(d)

Sol.

For shop A,

Total iPhone sold = $\frac{54}{100} \times 600 = 324$

Total Android phone sold = $600 - 324 = 276$

Similarly,

Shops	IPhones	Android phones
A	324	276
B	144	456
C	234	366
D	288	312
E	198	402

Required difference = $288 - 198 = 90$

S47. Ans.(e)

Sol.

For shop A,

$$\text{Total iPhone sold} = \frac{54}{100} \times 600 = 324$$

$$\text{Total Android phone sold} = 600 - 324 = 276$$

Similarly,

Shops	IPhones	Android phones
A	324	276
B	144	456
C	234	366
D	288	312
E	198	402

$$\text{Required average} = \frac{1}{3}(276 + 456 + 312) = 348$$

S48. Ans.(b)

Sol.

For shop A,

$$\text{Total iPhone sold} = \frac{54}{100} \times 600 = 324$$

$$\text{Total Android phone sold} = 600 - 324 = 276$$

Similarly,

Shops	IPhones	Android phones
A	324	276
B	144	456
C	234	366
D	288	312
E	198	402

From graph it is clear that shop B sold least number of iPhones.

So, shop B sold the highest number of Android phones.

S49. Ans.(a)

Sol.

For shop A,

$$\text{Total iPhone sold} = \frac{54}{100} \times 600 = 324$$

$$\text{Total Android phone sold} = 600 - 324 = 276$$

Similarly,

Shops	IPhones	Android phones
A	324	276
B	144	456
C	234	366
D	288	312
E	198	402

$$\text{Required percentage} = \frac{198}{276} \times 100 = 71.74\% \approx 72\%$$

S50. Ans.(b)

Sol.

For shop A,

$$\text{Total iPhone sold} = \frac{54}{100} \times 600 = 324$$

$$\text{Total Android phone sold} = 600 - 324 = 276$$

Similarly,

Shops	IPhones	Android phones
A	324	276
B	144	456
C	234	366
D	288	312
E	198	402

$$\text{Total phones sold by all the shops} = 5 \times 600 = 3000$$

$$\text{Total number of iPhones sold} = 324 + 144 + 234 + 288 + 198 = 1188$$

$$\text{Total android phones} = 3000 - 1188 = 1812$$

$$\text{So, required difference} = 1812 - 1188 = 624$$

S51. Ans.(b)

$$\text{Sol. Required sum} = 800 + 500 + 700 = 2000$$

S52. Ans.(d)

Sol.

$$\text{Total number of employees present on Wednesday} = \frac{50}{100} \times 700 = 350$$

$$\text{Required percentage} = \frac{350}{800 + 600} \times 100 = 25\%$$

S53. Ans.(b)

$$\text{Sol. Required ratio} = (600 + 700) : 500 = 13 : 5$$

S54. Ans.(c)

Sol.

$$\text{Required average} = \frac{1}{3} (700 + 500 + 600) = 600$$

S55. Ans.(e)

$$\text{Sol. Required difference} = 800 - 700 = 100$$

S56. Ans.(a)

$$\text{Sol. Required difference} = (4800 + 7800) - 2000 = 12600 - 2000 = 10600$$

S57. Ans.(b)

Sol.

$$\text{Required average} = \frac{2400 + 3000 + 2400}{3} = 2600$$

S58. Ans.(a)

Sol. Required ratio = $(4800+2000):2400=6800:2400=17:6$

S59. Ans.(c)

Sol.

Total items in shop F = $2 \times 4800 = 9600$

Total number of items sold by shop F = $9600 \times \frac{5}{8} = 6000$

S60. Ans.(b)

Sol.

Required percentage = $\frac{(4800+2200)-((5400-3400)+(7800-4800))}{((5400-3400)+(7800-4800))} \times 100 = \frac{7000-5000}{5000} \times 100 = 40\%$

S61. Ans.(d)

Sol. To validate the answer, refer to the second line **“It is about balancing economic, social, and environmental considerations to ensure that development is equitable and environmentally sound”**, in the first paragraph of the passage which emphasizes the holistic nature of sustainable development, which requires a comprehensive approach. It calls for collaboration and commitment from governments, businesses, and individuals to work together in creating a more sustainable future. By taking action now and implementing sustainable practices, we can ensure that future generations inherit a world that is healthy, equitable, and prosperous.

S62. Ans.(c)

Sol. The passage highlights that sustainable development involves promoting social equality based on gender and class. This means addressing social issues and striving for equal rights and opportunities for all individuals in society. By promoting gender equality, reducing inequalities, and considering social equality, a sense of unity and fairness can be fostered, leading to equitable social development and growth.

Option (a) is incorrect because promoting greenhouse gas effects and reducing carbon emissions relates to environmental concerns rather than social development and growth.

Option (b) is incorrect because the passage emphasizes ensuring access to basic services for all members of society, not focusing on a specific class or gender.

Option (d) is incorrect because promoting the development of inequality goes against the goal of equitable social development and growth.

Option (e) is partially correct as it mentions focusing on housing, healthcare services, and equal rights based on income levels, which aligns with aspects of social development and equity. However, the passage specifically mentions considering social equality based on gender and class, which is the primary emphasis for achieving equitable social development.

S63. Ans.(a)

Sol. To validate the answer, refer to the lines **“It requires a commitment from governments, businesses, and individuals to work together to create a more sustainable future for everyone”** in the second paragraph that mentions, sustainable development requires the need to build a cohesive work environment among people in every factor to achieve its goals. This means that cooperation and collaboration are essential among governments, businesses, and individuals in order to work towards sustainable development. By fostering a sense of unity and shared responsibility, different stakeholders can work together to address the economic, social, and environmental aspects of sustainable development. This inclusive and collaborative approach is crucial for achieving the goals of sustainable development and ensuring a more sustainable future for all.

S64. Ans.(a)

Sol. According to the passage:

(i) Sustainable development does not prioritize economic growth over social and environmental concerns. Instead, it aims to balance economic, social, and environmental considerations to ensure equitable and environmentally sound development. Therefore, statement (i) is incorrect. To validate the answer, refer to the lines, **"It is about balancing economic, social, and environmental considerations to ensure that development is equitable and environmentally sound."**

(ii) To validate the answer, refer to the lines, **"In addition to economic considerations, social factors are also important in sustainable development. This includes ensuring access to basic services such as healthcare, education, and housing for all members of society, regardless of their income level"** in the second paragraph of the passage which mentions that ensuring access to basic services such as healthcare, education, and housing for all members of society is a key aspect of sustainable development. This aligns with statement (ii) and makes it correct.

(iii) To validate the answer, refer to the lines, **"It also involves promoting gender equality, reducing inequalities, and promoting social cohesion"** in the second paragraph of the passage which mentions that promoting social cohesion and reducing inequalities are features of sustainable development. Therefore, statement (iii) is correct.

S65. Ans.(e)

Sol. 'accomplishes' is a synonym of 'achieved'. Accomplished means to finish something successfully or to achieve something.

Slurred: to pronounce the sounds of a word in a way that is wrong or not clear

Skimped: to use less of something than is necessary

S66. Ans.(d)

Sol. 'disability' is an antonym of 'ability'. Disability means a physical or mental condition that makes someone unable to act in a way that is considered usual for most people

Capability: the ability or power to do something

Capacity: the total amount that can be contained or produced

Faculty: a special ability to do a particular thing

Aptitude: natural ability or skill

S67. Ans.(b)

Sol. The correct choice is option(b), only (ii)

For statement (i), refer to the lines, **"One of the key aspects of sustainable development is reducing the impact of human activities on the environment."**

For statement (ii), refer to the lines, **"This can be achieved by creating jobs that are environmentally friendly, investing in renewable energy, and promoting sustainable agriculture."**

For statement (iii), refer to the lines, **"It is about balancing economic, social, and environmental considerations to ensure that development is equitable and environmentally sound."**

S68. Ans.(b)

Sol. The most appropriate word to fill the blank given in the passage is **"inherit"**. Inherit means to receive money, property, or assets from someone.

Surrender: to stop fighting and admit defeat

Repudiate: to refuse to accept something or someone as true, good, or reasonable

Renounce: to say formally or publicly that you no longer own, support, believe in, or have a connection with something

Divest: to sell something, especially a business or a part of a business.

S69. Ans.(b)

Sol. The highlighted phrase “**Sustainable development is a complex and multifaceted concept that requires a holistic approach**” implies that a holistic approach to sustainable development is essential to ensure that economic, social, and environmental goals are achieved in a balanced and integrated way, without compromising the ability of future generations to meet their own needs.

S70. Ans.(d)

Sol. The most appropriate word to fill the blank given in the passage is “**promoting**”. Promoting means to encourage people to like, buy, use, do, or support something

Inhibiting: to prevent someone from doing something by making them feel nervous or embarrassed

Combatting: a fight, especially during a war

Interdiction: the act of stopping something or of not allowing something, or an occasion when this happens

Barring: except if a particular thing happens

S71. Ans.(d)

Sol. ‘Liberty’ means ‘the state of being free within society from oppressive restrictions imposed by authority on one’s way of life, behaviour, or political views’ and its usage is correct in sentences (A) and (B).

S72. Ans.(b)

Sol. ‘Futile’ means ‘incapable of producing any useful result; pointless’ and its usage is correct in statements (B) and (C).

S73. Ans.(a)

Sol. ‘Impediment’ means ‘something that makes it difficult for a person or thing to move or progress’ and its usage is correct only in statement (A).

S74. Ans.(c)

Sol. ‘Vandalize’ means ‘to intentionally damage property belonging to other people’ and its usage is correct only in statement (C).

S75. Ans.(d)

Sol. The error lies in part D. Here, “its” should be changed to “their”. ‘Plants’ and ‘animals’ together depict plurality, thus need a plural verb(their).

Note that subject-verb agreement is a crucial rule in English grammar that ensures that the subject (the doer of the action) and the verb (the action itself) in a sentence agree in number. In other words, singular subjects should be paired with singular verbs, and plural subjects should be paired with plural verbs.

S76. Ans.(c)

Sol. The error lies in part C. Here, ‘watched’ should be changed to ‘watching’, as according to rule of parallelism, there should be a balance within one or more sentences of similar phrases or clauses that have the same grammatical structure.

The rule of parallelism, also known as parallel structure or parallel construction, is a fundamental principle in grammar. It states that words, phrases, or clauses within a sentence should be structured in a balanced and consistent manner, especially when they are expressing similar ideas or performing similar functions. When constructing sentences using parallelism, the elements should have the same grammatical form to create a sense of harmony and symmetry. This creates a smooth flow and makes the sentence easier to read and understand.

S77. Ans.(b)

Sol. The error lies in part B. Here, 'duly' should be replaced with 'due'. As adverbs, the difference between **due** and **duly** is that **due** means "directly; exactly", while **duly** means "in a due, fit, or becoming manner; as it ought to be; properly."

S78. Ans.(b)

Sol. The replacement needed between the words are 'targeting' and 'trends'. Thus, the sentence will be, **"After a thorough analysis of the market trends and customer feedback, our company has decided to launch a new product line targeting young adults with an affordable pricing strategy."**

S79. Ans.(a)

Sol. The replacement needed between the words are 'deadline' and 'obstacles'. Thus, the sentence will be, **"Despite facing several obstacles, the team was able to successfully deliver the project within the given deadline, thanks to their hard work and dedication."**

S80. Ans.(c)

Sol. The replacement needed between the words are 'productivity' with 'incorporating' and 'routines' with 'techniques'. Thus, the sentence will be, **"The latest research findings suggest that incorporating mindfulness techniques into daily routines can have a positive impact on mental well-being and overall productivity."**

S81. Ans.(d)

Sol. The replacement needed between the words are 'reducing' and 'forced'. Thus, the sentence will be, **"As a result of the recent economic downturn, many businesses have been forced to adopt cost-cutting measures such as reducing employee benefits and laying off workers".**

S82. Ans.(a)

Sol. The correct choice is **option (a)** as the combination of **phrases (1) and (4)** frame a meaningful sentence. The other possible combinations of the phrases from each column are incorrect as they are unrelated and do not form a logical sentence whereas, the context of the correct combination suggests how the sunlight shining through the leaves of trees causes a dappled pattern of light and shade on the forest floor. This creates a beautiful and serene natural setting.

Hence, the only correct sentence formed will be **"The sunlight filtering through the leaves of the trees created a dappled effect on the forest floor."**

S83. Ans.(c)

Sol. The correct choice is **option (c)** as the combination of **phrases (2) and (5)** frame a meaningful sentence. The other possible combinations of the phrases from each column are incorrect as they are unrelated and do not form a logical sentence whereas, the context of the correct combination describes how the intricate patterns on a handmade rug in a room attract the attention of every visitor who enters. The rug is likely a focal point in the room and is admired for its craftsmanship and design.

Hence, the only correct sentence formed will be **"The intricate patterns on the handmade rug caught the eye of every visitor to the room."**

S84. Ans.(c)

Sol. The correct choice is **option (c)** as the combination of **phrases (3) and (4)** frame a meaningful sentence. The other possible combinations of the phrases from each column are incorrect as they are unrelated and do not form a logical sentence whereas, the context of the correct combination describes how the sound of rain tapping against a window creates a soothing and calming effect, similar to that of a lullaby.

Hence, the only correct sentence formed will be “The sound of the rain tapping against the window was a soothing lullaby.”

S85. Ans.(e)

Sol. Analyzing the given sentences, it can be clearly understood that sentence (B), being the only independent statement here, is the initiator of the given passage. The next statement in the series of sentences is statement (D), which states the downside of having too many convictions, this is then further described in statement (C). Statement (E) and statement (A) established the fact and thus will be placed next in line in the same order. Hence, the correct order statement is BDCEA.

S86. Ans.(d)

Sol. Analyzing the given sentences, it can be clearly understood that sentence (B), being the only independent statement here, is the initiator of the given passage. The next statement in the series of sentences is statement (D), which states the downside of having too many convictions, this is then further described in statement (C). Statement (E) and statement (A) established the fact and thus will be placed next in line in the same order. Hence, the correct order statement is BDCEA.

S87. Ans.(a)

Sol. Analyzing the given sentences, it can be clearly understood that sentence (B), being the only independent statement here, is the initiator of the given passage. The next statement in the series of sentences is statement (D), which states the downside of having too many convictions, this is then further described in statement (C). Statement (E) and statement (A) established the fact and thus will be placed next in line in the same order. Hence, the correct order statement is BDCEA.

S88. Ans.(c)

Sol. Analyzing the given sentences, it can be clearly understood that sentence (B), being the only independent statement here, is the initiator of the given passage. The next statement in the series of sentences is statement (D), which states the downside of having too many convictions, this is then further described in statement (C). Statement (E) and statement (A) established the fact and thus will be placed next in line in the same order. Hence, the correct order statement is BDCEA.

S89. Ans.(b)

Sol. Analyzing the given sentences, it can be clearly understood that sentence (B), being the only independent statement here, is the initiator of the given passage. The next statement in the series of sentences is statement (D), which states the downside of having too many convictions, this is then further described in statement (C). Statement (E) and statement (A) established the fact and thus will be placed next in line in the same order. Hence, the correct order statement is BDCEA.

S90. Ans.(b)

Sol. The correct word for the blank is 'implementation'. The sentence is talking about how new technologies have changed the way we live and work. In this context, the blank needs a word that fits the idea of putting new technologies into action or use, which is the central concept of the sentence.

- (a) scrutiny means critical observation or examination.
- (b) implementation means the process of putting a decision or plan into effect.
- (c) expedience means the quality of being convenient and practical despite being improper or immoral.
- (d) contemplation means the action of looking thoughtfully at something for a long time.
- (e) excavation means the action of excavating something, especially an archaeological site.

S91. Ans.(b)

Sol. The correct word for the blank is 'mediocre'. The sentence is discussing the performance of a team in a tournament and how that performance contributed to their defeat in the finals. The blank needs a word that describes the quality of the team's performance in the tournament.

- (a) exemplary means serving as a desirable model; representing the best of its kind.
- (b) mediocre means of only moderate quality; not very good.
- (c) exceptional means unusual; not typical.
- (d) unparalleled means having no parallel or equal; exceptional.
- (e) transcendent means beyond or above the range of normal or physical human experience.

S92. Ans.(a)

Sol. The correct word for the blank is 'commendable'. The sentence is discussing someone's actions during a crisis and how those actions led to praise from various sources. The blank needs a word that describes the nature of the person's actions.

- (a) commendable means deserving praise.
- (b) repugnant means extremely distasteful; unacceptable.
- (c) reprehensible means deserving censure or condemnation.
- (d) irresponsible means not showing a proper sense of responsibility.
- (e) repellent means causing disgust or distaste.

S93. Ans.(e)

Sol. The correct word for the blank is 'innovative'. The sentence is discussing the strategies employed by a company and how these strategies contributed to the rapid expansion of its operations. The blank needs a word that describes the nature of the company's strategies.

- (a) conservative means averse to change or innovation and holding traditional values.
- (b) obsolete means no longer produced or used; out of date.
- (c) orthodox means conforming to what is generally or traditionally accepted as right or true.
- (d) conventional means based on or in accordance with what is generally done or believed.
- (e) innovative means featuring new methods; advanced and original.

S94. Ans.(d)

Sol. The correct word for the blank is 'competent'. The sentence is discussing the kind of guidance that a teacher provided to her students on preparing for upcoming exams. The blank needs a word that describes the quality of the guidance.

- (a) inadequate means lacking the quality or quantity required; insufficient for a purpose.
- (b) disrespectful means showing a lack of respect or courtesy; impolite.
- (c) trivial means of little value or importance.
- (d) competent means having the necessary ability, knowledge, or skill to do something successfully.
- (e) inconsistent means not staying the same throughout.

S95. Ans.(d)

Sol. The passage discusses the negative impacts of social media on mental health, despite its potential as a wonderful tool. Therefore, option (d) is the appropriate choice.

- (a) **Aesthetic:** concerned with beauty or the appreciation of beauty; having a pleasing appearance or effect
- (b) **Perpetuate:** to make something continue indefinitely or for a prolonged period; to preserve or prolong something
- (c) **Extinguish:** to put out a fire or a light; to bring to an end or destroy something
- (d) **Valuable:** something of great importance, worth, or usefulness.
- (e) **Wonderful:** causing a feeling of wonder or delight; extremely good or pleasant.

S96. Ans.(a)

Sol. The sentence refers to one of the biggest problems being "**comparison**." Given that social media is the topic of discussion, it makes sense that the comparison is happening on social media. Therefore, option (a) is the appropriate choice.

- (a) **Social:** relating to society or its organization; involving interaction between people or groups
- (b) **Media:** the means of mass communication, including newspapers, magazines, television, radio, and the internet
- (c) **Humble:** having or showing a modest or low estimate of one's own importance
- (d) **Yelling:** shouting loudly, especially because one is angry, excited, or in pain
- (e) **Farther:** at, to, or by a greater distance

S97. Ans.(d)

Sol. The sentence discusses how people often compare their lives to the "**carefully curated and filtered versions**" they see on social media. Therefore, option (d) is the appropriate choice.

- (a) **Edition:** a particular form or version of a published text, typically one that has been revised or updated
- (b) **Volume:** a book forming part of a work or series; a single book of a series
- (c) **Admire:** to regard with respect, approval, or pleasure; to find someone or something impressive or inspiring
- (d) **Versions:** different forms or adaptations of something, such as a piece of writing or a piece of software, often with changes or modifications made to the original
- (e) **Subdue:** to overcome, conquer, or bring under control, often through force or persuasion.

S98. Ans.(b)

Sol. The sentence mentions the "**constant...urge to be connected**," which can lead to a lack of sleep and other negative impacts. Therefore, option (b) is the appropriate choice.

- (a) **Need:** a requirement or necessity for something; a lack of something essential
- (b) **Urge:** a strong desire or impulse to do something; a compulsion or drive
- (c) **Chilling:** horrifying or frightening.
- (d) **Responsibility:** the state or fact of being accountable or responsible for something; the duty to take care of something or someone
- (e) **Demand:** an insistent and pressing request or requirement; the desire or expectation for something to be provided or done.

S99. Ans.(a)

Sol. The sentence discusses the increased exposure to blue light, which can disrupt the body's natural sleep-wake cycle. Therefore, option (a) is the appropriate choice.

- (a) **Exposure:** the state of being exposed to something, especially something harmful or unpleasant
 (b) **Vulnerability:** the quality or state of being exposed to the possibility of harm or damage.
 (c) **Sensitivity:** the quality or state of being responsive or susceptible to stimuli, changes, or influences; the ability to feel or perceive things acutely
 (d) **Resistance:** the ability to withstand or oppose something, especially something harmful or unpleasant.
 (e) **Immunity:** the state of being immune or protected from something.

S100. Ans.(c)

Sol. The sentence refers to social media as a platform for "**harmful**" behavior, such as cyberbullying and trolling. Therefore, option (c) is the appropriate choice.

- (a) **Altruistic:** showing a selfless concern for the well-being of others; unselfish
 (b) **Beneficial:** producing or promoting a favorable result; helpful or advantageous
 (c) **Harmful:** causing or likely to cause harm.
 (d) **Kind:** having or showing a friendly, generous, and considerate nature
 (e) **Charitable:** relating to the assistance of those in need; generous and benevolent.

S101. Ans.(c)

Sol.

Let cost price of the toy be Rs.100x

So, marked price of the toy = Rs.140x

Selling price of the toy = $140x \times \frac{80}{100} = \text{Rs. } 112x$

ATQ –

$$112x = 896$$

$$x = 8$$

Cost price of the toy = Rs.800

S102. Ans.(e)

Sol.

Ratio of profit share of X and Y

$$9000 \times 12 : ((12000 \times 8) + (\frac{12000 \times 2}{3} \times 4)) = 27:32$$

$$\text{So, profit share of X} = \frac{27}{27+32} \times 5900 = \text{Rs. } 2700$$

S103. Ans.(e)

Sol.

Let the original fraction be x/y.

ATQ

$$\frac{x \times 125}{y \times 80} = \frac{25}{8}$$

$$\text{So, Original fraction} = \frac{x}{y} = \frac{2}{1}$$

S104. Ans.(a)**Sol.**

Time taken by a pipe to fill one-third of the tank $= \frac{1}{3} \times 18 = 6 \text{ hr}$

After adding two more similar pipes, there will be total 3 identical pipes.

So, time taken in filling remaining tank $= \frac{1}{3} \times \frac{2}{3} \times 18 = 4 \text{ hr}$

So, total required time $= (6+4) \text{ hr} = 10 \text{ hours}$

S105. Ans.(d)

Sol. Let the speed of boat in still water and speed of stream be x and y respectively.

ATQ,

$$\frac{36}{x+y} = 4$$

$$x + y = 9 \text{ km/hr}$$

$$\frac{36}{x-y} = 6$$

$$x - y = 6 \text{ km/hr}$$

$$x = 7.5 \text{ km/hr and } y = 1.5 \text{ km/hr}$$

S106. Ans.(d)

Sol. Let the length of the train be x meter and speed of train be y m/s.

ATQ,

$$x = 30y \text{ ____ (i)}$$

And

$$(x+350) = 45y \text{ ____ (ii)}$$

From (i) and (ii) we get:

$$\text{length of the train} = x = 700 \text{ m.}$$

S107. Ans.(c)

Sol. Let the average age of 25 persons be x years.

ATQ,

$$25x + 76 = 26(x+1)$$

$$26x - 25x = 76 - 26$$

$$x = 50 \text{ years}$$

$$\text{New average age} = (x+1) = 51 \text{ years}$$

S108. Ans.(b)**Sol.**

$$\text{Simple interest} = \frac{P \times 8 \times 4}{100}$$

$$13200 = P + \frac{P \times 8 \times 4}{100}$$

$$1320000 = 132P$$

$$P = \text{Rs.}10000$$

S109. Ans.(d)

Sol.

Let the quantity of alcohol in mixture initially = $5x$

Quantity of water in mixture initially = $6x$

$$\text{ATQ} - \frac{5x - 11 \times \frac{5}{11}}{6x - 11 \times \frac{6}{11} + 7} = \frac{5}{7}$$

$$\frac{5x - 5}{6x - 6 + 7} = \frac{5}{7}$$

$$\frac{x - 1}{6x + 1} = \frac{1}{7}$$

$$7x - 7 = 6x + 1$$

$$x = 8$$

Initial quantity of mixture = $(5 + 6) \times x = 11x = 88 \text{ liters}$

S110. Ans.(d)

Sol.

Let radius of circle be r cm.

ATQ -

$$r + 2\pi r = 255$$

$$r\left(1 + \frac{44}{7}\right) = 255$$

$$r = 35 \text{ cm}$$

$$\text{Area of circle} = \frac{22}{7} \times 35 \times 35 = 3850 \text{ cm}^2$$

S111. Ans.(a)

Sol.

Total work = 60 units (LCM of 20 and 30)

$$\text{Efficiency of contractor} = \frac{60}{20} = 3 \text{ units/day}$$

$$\text{Efficiency of assistant} = \frac{60}{30} = 2 \text{ units/day}$$

$$\text{Number of days both takes together to complete same project} = \frac{60}{3+2} = 12 \text{ days}$$

S112. Ans.(a)

Sol.

Let two numbers be a and b respectively (if $a > b$)

$$a + b = 22 \text{(i)}$$

$$\frac{50}{100} \times a = \frac{60}{100} \times b$$

$$5a = 6b \text{(ii)}$$

From equations (i) and (ii) we get

$$a = 12 \text{ and } b = 10$$

So, bigger number = 12

S113. Ans.(a)

Sol.

Let the total distance be y km.

$$\frac{0.2}{X}y + \frac{0.6}{3X}y + \frac{0.2}{2X}y = \frac{y}{20}$$

$$\frac{1.2+1.2+0.6}{6X} = \frac{1}{20}$$

$$X = 10 \text{ km/hr}$$

S114. Ans.(a)

Sol.

Let the age of son after five years = $3x$

So, the age of father after five years = $7x$

ATQ,

$$3x + 7x = 40 + 10$$

$$10x = 50$$

$$x = 5 \text{ years}$$

$$\text{Present age of father} = 7x - 5 = 30 \text{ years}$$

S115. Ans.(a)

Sol.

ATQ,

$$\frac{22000 \times 12}{26400 \times M} = \frac{1}{1}$$

$$6M = 60$$

$$M = 10$$

S116. Ans.(a)

Sol. Pattern of series –

$$56+56=112$$

$$112+60=172$$

$$172+64=236$$

$$236+68=304$$

$$304+72=376$$

Missing number is 172

S117. Ans.(e)

Sol. Pattern of series –

$$1+ 11 \times 2 = 23$$

$$23+ 12 \times 3 = 59$$

$$59+ 13 \times 4 = 111$$

$$111+ 14 \times 5 = 181$$

$$181+15 \times 6 = 271$$

Missing number is 271

S118. Ans.(c)**Sol.** Pattern of series –

$$2+14^2=198$$

$$198+16^2=454$$

$$454+18^2=778$$

$$778+20^2=1178$$

$$1178+22^2=1662$$

Missing number is 454

S119. Ans.(a)**Sol.** Pattern of series –

$$20 \times 2 = 40$$

$$40 \times 4 = 160$$

$$160 \times 6 = 960$$

$$960 \times 8 = 7680$$

$$7680 \times 10 = 76800$$

Missing number is 20

S120. Ans.(b)**Sol.** Pattern of series –

$$1 \times 2 - 1 = 1$$

$$1 \times 3 - 1 = 2$$

$$2 \times 4 - 1 = 7$$

$$7 \times 5 - 1 = 34$$

$$34 \times 6 - 1 = 203$$

Missing number is 1

S121. Ans.(d)

Sol. I: $x^2 + 13x + 2x + 26 = 0$

$$x(x + 13) + 2(x + 13) = 0$$

$$(x + 13)(x + 2) = 0$$

$$x = -13, -2$$

II: $y^2 + 2y + y + 2 = 0$

$$y(y + 2) + 1(y + 2) = 0$$

$$(y + 2)(y + 1) = 0$$

$$y = -2, -1$$

$$\text{So, } y \geq x$$

S122. Ans.(c)

Sol. I. $x = 9$

II. $y = \pm 8$

$$\text{So, } x > y$$

S123. Ans.(e)

Sol. I: $x^2 - 13x - 12x + 156 = 0$

$$x(x - 13) - 12(x - 13) = 0$$

$$(x - 13)(x - 12) = 0$$

$$x = 13, 12$$

II: $y^2 - 11y - 12y + 132 = 0$

$$y(y - 11) - 12(y - 11) = 0$$

$$(y - 12)(y - 11) = 0$$

$$y = 12, 11$$

$$\text{So, } y \leq x$$

S124. Ans.(b)

Sol. I. $x^2 + 13x + 6x + 78 = 0$

$$x(x + 13) + 6(x + 13) = 0$$

$$(x + 13)(x + 6) = 0$$

$$x = -13, -6$$

II. $y^2 + 13y + 8y + 104 = 0$

$$y(y + 13) + 8(y + 13) = 0$$

$$(y + 13)(y + 8) = 0$$

$$y = -13, -8$$

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

S125. Ans.(c)

Sol. I. $8x^2 - 10x + 3 = 0$

$$8x^2 - 6x - 4x + 3 = 0$$

$$2x(4x - 3) - 1(4x - 3) = 0$$

$$(2x - 1)(4x - 3) = 0$$

$$x = 1/2, 3/4$$

II. $5y^2 + 14y - 3 = 0$

$$5y^2 + 15y - y - 3 = 0$$

$$5y(y + 3) - 1(y + 3) = 0$$

$$(5y - 1)(y + 3) = 0$$

$$y = 1/5 \text{ or } -3.$$

$$x > y$$

S126. Ans.(b)

Sol. Number of male employees = $3/5 \times 750 = 450$

Number of female employees = $750 - 450 = 300$

Let the number male employees in post A be X

Number of female employees in post B = $X - 110$

Let number of male employees in the post B = Y

Number of female employees in the post A = $X - 60$

ATQ

$$X + Y = 450 \dots(i)$$

$$X - 60 + X - 110 = 300$$

$$2X = 300 + 170$$

$$X = 470/2 = 235$$

Put value of X in (i)

$$Y = 450 - 235$$

$$Y = 215$$

	A	B	Total
Males	235	215	450
Females	175	125	300
Total	410	340	750

$$\text{Required ratio} = \frac{215}{175} = 43:35$$

S127. Ans.(d)

Sol. Number of male employees = $3/5 \times 750 = 450$

Number of female employees = $750 - 450 = 300$

Let the number male employees in post A be X

Number of female employees in post B = $X - 110$

Let number of male employees in the post B = Y

Number of female employees in the post A = $X - 60$

ATQ

$$X + Y = 450 \dots (i)$$

$$X - 60 + X - 110 = 300$$

$$2X = 300 + 170$$

$$X = 470/2 = 235$$

Put value of X in (i)

$$Y = 450 - 235$$

$$Y = 215$$

	A	B	Total
Males	235	215	450
Females	175	125	300
Total	410	340	750

$$\text{Required difference} = 410 - 125 = 285$$

S128. Ans.(a)

Sol. Number of male employees = $3/5 \times 750 = 450$

Number of female employees = $750 - 450 = 300$

Let the number male employees in post A be X

Number of female employees in post B = $X - 110$

Let number of male employees in the post B = Y

Number of female employees in the post A = $X - 60$

ATQ

$$X + Y = 450 \dots (i)$$

$$X - 60 + X - 110 = 300$$

$$2X = 300 + 170$$

$$X = 470/2 = 235$$

Put value of X in (i)

$$Y = 450 - 235$$

$$Y = 215$$

	A	B	Total
Males	235	215	450
Females	175	125	300
Total	410	340	750

$$\text{Number of males from post A got promotion} = \frac{20}{100} \times 235 = 47$$

$$\text{Number of females from post B got promotion} = \frac{40}{100} \times 125 = 50$$

$$\text{Required sum} = 47 + 50 = 97$$

S129. Ans.(e)

Sol. Number of male employees = $3/5 \times 750 = 450$

Number of female employees = $750 - 450 = 300$

Let the number male employees in post A be X

Number of female employees in post B = $X - 110$

Let number of male employees in the post B = Y

Number of female employees in the post A = $X - 60$

ATQ

$$X + Y = 450 \dots(i)$$

$$X - 60 + X - 110 = 300$$

$$2X = 300 + 170$$

$$X = 470/2 = 235$$

Put value of X in (i)

$$Y = 450 - 235$$

$$Y = 215$$

	A	B	Total
Males	235	215	450
Females	175	125	300
Total	410	340	750

$$\text{Number of male employees joined} = \frac{10}{100} \times 450 = 45$$

$$\text{Number of female employees joined} = 100 - 45 = 55$$

S130. Ans.(d)

Sol. Number of male employees = $3/5 \times 750 = 450$

Number of female employees = $750 - 450 = 300$

Let the number male employees in post A be X

Number of female employees in post B = $X - 110$

Let number of male employees in the post B = Y

Number of female employees in the post A = $X - 60$

ATQ

$$X + Y = 450 \dots(i)$$

$$X - 60 + X - 110 = 300$$

$$2X = 300 + 170$$

$$X = 470/2 = 235$$

Put value of X in (i)

$$Y = 450 - 235$$

$$Y = 215$$

	A	B	Total
Males	235	215	450
Females	175	125	300
Total	410	340	750

Total number of employees in post B = 340

S131. Ans.(b)

Sol.

$$\frac{145}{100} \times 80 + \sqrt{676} + ?^2 = \frac{2101}{11}$$

$$116 + 26 + ?^2 = 191$$

$$?^2 = 49$$

$$? = 7$$

S132. Ans.(c)

Sol.

$$\frac{16+4 \times ?}{3} + \frac{512}{4} = 312$$

$$16 + 4 \times ? = 3 \times (312 - 128)$$

$$4 \times ? = 552 - 16$$

$$? = 134$$

S133. Ans.(a)

Sol.

$$125 \times \frac{64}{32} + \frac{75}{100} \times 360 = ?$$

$$? = 250 + 270$$

$$? = 520$$

S134. Ans.(d)

$$\text{Sol. } 9 \times (25 + 51 - 58) = ?$$

$$? = 9 \times 18$$

$$? = 162$$

S135. Ans.(c)

Sol.

$$\frac{120}{100} \times 450 + 120 + 31 = ?$$

$$540 + 120 + 31 = ?$$

$$? = 691$$

S136. Ans.(e)

Sol. $40\% \text{ of } 550 + 200 \div 4 = ?$

$220 + 50 = ?$

$270 = ?$

S137. Ans.(d)

Sol.

$\sqrt{1444} \times 11 + 490 = ? + 560$

$418 + 490 - 560 = ?$

$348 = ?$

S138. Ans.(b)

Sol.

$\frac{90\% \text{ of } 800}{9} = \sqrt[3]{?} \times 10$

$\frac{80}{10} = \sqrt[3]{?}$

$8 = \sqrt[3]{?}$

$512 = ?$

S139. Ans.(a)

Sol. $19^2 - 20\% \text{ of } 190 - ? = 90$

$361 - 38 - ? = 90$

$233 = ?$

S140. Ans.(e)

Sol. $(12\% \text{ of } 450) \div 9 + 3 \times ? = 1113 - 900$

$6 + 3 \times ? = 213$

$3 \times ? = 207$

$? = 69$