

ECGC PO Previous Year Paper 2022

Directions (1-4): In each question below some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusion **logically definitely follows** from the given statements, disregarding commonly known facts. Give answer –

Q1. Statements: Only a few Asian is Apex. Some Royal is not Indigo. All Apex is Royal. Only a few Berger is Indigo

Conclusions:

- (a) Some Berger
- (b) Some Roy
- (c) All Royal b
- (d) Some Berg
- (e) All Asian c

Q2. Statemen

All Printers ar

Conclusions:

- (a) Some Prin
- (b) No Printe
- (c) All Envelo
- (d) All Paper
- (e) No Mail is

Q3. Statemen

is Rice. No wh

Conclusions:

- (a) Some Rice
- (b) Some Grai
- (c) All Wheat
- (d) Some Rice
- (e) All follow

Q4. Statements: Only Blue is Green.

Some Red is not White.

Some Blue is White.

Only a few Yellow is Red.

Conclusions:

- (a) Some Blue is definitely not White
- (b) All Green can never be Red.
- (c) All yellow can never be Green
- (d) Some yellow is not red
- (e) All follow



Directions (5-10): Study the following information carefully and answer the given questions.

Eight persons of a three-generation family sit around a square table such that four persons sit at the corners and the remaining four sit at the middle of the side. All of them face towards the centre.

M is son in law of T. Q's only daughter sits second to the right of D. One person sits between Q's spouse and the one who is Q's daughter. D is unmarried and brother-in-law of I. T's only son sits opposite to I. I sits to the immediate right of Q's daughter. P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits opposite to B. Gender of B and T is same.

Q5. How many

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

Q6. Who among the following is the son of I's spouse?

- (a) Q's daughter
- (b) Q
- (c) P's mother
- (d) D
- (e) None of the

Q7. How many persons sit between I's sibling and M's spouse?

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

Q8. Four of the following five are alike in a certain way and thus form a group. Which of the following one does not belong to the group?

- (a) Q
- (b) B
- (c) I
- (d) P
- (e) M



(a) Uncle
(b) Brother
(c) Nephew
(d) Brother-in-law
(e) None of these

(a) The one who sits second to the right of M
(b) The one who sits immediate left of L
(c) B
(d) None of the
(e) Q

Q11. Statement: The bilateral dialogue between the two countries explored new initiatives to enhance the bilateral relationship, including the commitment to fully implement the Strategic Partnership and to deepen mutual understanding, common interests, and cooperation.



Eight persons live on an eight-floor building such that the ground floor is numbered as 1, the floor just above it is numbered as 2 and so on till the topmost floor is numbered as 8. Each person has different age but neither more than 40 years nor less than 10 years.

A lives on an odd numbered floor and has a perfect square age. A's age is an even number and less than 36 years. B lives two floors below A. The age difference between A and B is 11 years. G lives on an even number floor below B. H lives on the bottommost floor. The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. E lives two floors above the one whose age is 21. H is 6 years younger than B. The age difference between F and B is 16 years. F lives above D. C's age is an even number. E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Q12. What is the sum of the ages of F and C?

- (a) 30 years
- (b) 33 years
- (c) 43 years
- (d) 40 years
- (e) 29 years

Q13. How many persons live between the one whose age is 16 years and H?

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

Q14. Four of the following one

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

Q15. Which of the following statement is true?

- (a) F lives on the 16th floor
- (b) Two persons live between F and H
- (c) B's age is a multiple of 3
- (d) Sum of A's and B's ages is a prime number
- (e) E lives above F

Q16. What is the age of C?

- (a) 25 years
- (b) 16 years
- (c) 11 years
- (d) 33 years
- (e) None of these

Which of the



Directions (17-20): In the following questions, the symbols @, %, \$, # and & used with the following meaning as illustrated below:

'A & B' means 'A is not greater than B'

'A \$ B' means 'A is not smaller than B'

'A @ B' means 'A is neither smaller than nor equal to B'

'A # B' means 'A is neither greater than nor equal to B'

'A % B' means "A is neither greater than nor smaller than B"

Now, in each of the following questions assuming the given statements to be true, find which of the three conclusions I, II and III is/are definitely true and give your answer accordingly.

Q17. Statements: B @ Q \$ T % O & L # M; S \$ G % O

Conclusions: I. T & S II. G \$ Q III. Q @ L

- (a) Either I or II is true
- (b) None is true
- (c) Only II is true
- (d) Only I is true
- (e) Both I and III are true

Q18. Statements: Y \$ O % U \$ R # T; U @ I & M # E

Conclusions:

- (a) Either I or
- (b) Both I and
- (c) Only II is t
- (d) Only III is
- (e) Both I and

Q19. Stateme

Conclusions:

- (a) Only I is tr
- (b) Only II and
- (c) Only II is t
- (d) Only I and
- (e) Both I and

Q20. Stateme

Conclusions:

- (a) Only I is tr
- (b) Only II and
- (c) Only II is t
- (d) Only I and
- (e) Both I and



Directions (21-25): Study the following information carefully and answer the questions given below:

A certain number of persons sit in a row face north. Two persons sit between M and Q. The number of persons sit between M and Q is one more than the number of persons sit between D and M. E sits 3rd to the right of D. The number of persons sit to the right of Q is equal to the number of persons sit to the left of O. Not more than two persons sit between M and E. The number of persons sit between D and E is same as the number of persons sit to the right of Q. Three persons sit between D and N who sits 2nd to the right of A. There are as many persons sit between A and Y is same as the number of persons sit between D and A. U sits 4th from the extreme ends and immediate neighbour of O. One person sits between Y and O.

Q21. How many persons sit in the row?

- (a) Fourteen
- (b) Nineteen
- (c) Twenty
- (d) Eighteen
- (e) None of these

Q22. How many persons sit between Y and the one who sits 5th to the right of U?

- (a) Seven
- (b) More than nine
- (c) Eight
- (d) Three
- (e) Six

Q23. The number of persons sitting between _____ and _____.

- (a) E, Q
- (b) D, N
- (c) U, O
- (d) Y, U
- (e) None of these

Q24. Four of the persons are sitting in a certain way. Which of the following does not follow the same pattern?

- (a) N
- (b) D
- (c) M
- (d) Q
- (e) Y

Q25. What is the position of _____?

- (a) 6th to the left
- (b) 7th to the right
- (c) 5th to the right
- (d) 4th to the left
- (e) None of these



Directions (26-28): Study the following information carefully and answer the given questions.

Eight persons attend the conference in eight consecutive month starts from March. I attends the conference in the month having an even number of days. Two persons attends the conference between I and Q. N attends the conference two months before Q. The number of persons attends the conference between N and Q is same as the number of persons attends the conference between F and I. I attends the conference after F. J attends the conference before M but after P. P attends the conference before N but not the first one to attend the conference. K is one of the persons who attends the conference.

(a) P
(b) N
(c) J
(d) M
(e) F

(a) Three
(b) Four
(c) Five
(d) Six
(e) None of the above

(a) K
(b) P
(c) N
(d) M
(e) Q

Q29. Which of the following is not a benefit of Farm Pond?

- (a) Farm Pond can be used for irrigation.
- (b) It will help in controlling the soil erosion.
- (c) It can be used as intermediate storage which may lead to evaporation loss.
- (d) Both (a) & (b)
- (e) Both (b) & (c)

(a) The problem of lower water table has captivated the entire country.
(b) Farm ponds can help in the process of water control.
(c) Construction of farm ponds hamper the agricultural modification & rural subsistence.
(d) Farm ponds can be a viable investment option
(e) None of these.

Directions (31-35): Study the following information carefully and answer the questions given below:

Eight persons have different designations i.e., General Manager (GM), Deputy General Manager (DGM), Manager, Assistant General Manager (AGM), Assistant Manager (AM), Section Officer (SO), Sr. Accountant and Clerk in a company. The order of seniority is the same as given above i.e., GM is the senior-most designation and Clerk is the junior-most designation. Each of them likes different vegetable- Carrot, Broccoli, Asparagus, Cauliflower, Corn, Cucumber, Eggplant and Green pepper but not necessarily in the same order.

R is senior to the one who likes green pepper and junior to Assistant Manager (AM). D is two posts senior to the one who likes green pepper. The one who likes green pepper is not the one who likes Asparagus. The number of persons senior to the one who likes green pepper is equal to the number of persons senior to the one who likes Asparagus. The one who likes green pepper is not the one who likes Asparagus. The one who likes green pepper is not the one who likes Asparagus. The one who likes green pepper is not the one who likes Asparagus.

Q31. ___ is for

- (a) Y
- (b) M
- (c) R
- (d) U
- (e) None of the above

Q32. How many

- (a) Two
- (b) Six
- (c) More than six
- (d) None
- (e) One

Q33. How many

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

Q34. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

- (a) Assistant General Manager - H
- (b) General Manager - Q
- (c) Manager - Y
- (d) Section Officer - R
- (e) Clerk - M



Q35. The number of persons designated between H and the one who likes carrot is same as the number of persons designated between ____ and the one who likes ____.

- (a) U, Cauliflower
- (b) M, Asparagus
- (c) D, Broccoli
- (d) R, Corn
- (e) None of these

Directions (36-39): A number arrangement machine when given an input line of numbers rearranges them as follows. Step I is the first step of the machine, Step II is the second step of the machine and so on. The last step will be the final step of the machine. The number of steps required to rearrange the input line of numbers to the final step is called the number of steps required to rearrange the input line of numbers.

Input: 365468 425397 276519 732649 954224

Step I: 6546 2539 7651 3264 5422

Step II: 54 37 47 30 24

Step III: 44 47 57 20 14

Step IV: 44 74 75 2 41

Step V: H B C B E

Step V is the final step of given input.

Answer the following questions based on the following input: -

Input: 841782 487156 389573 724739 329454

Q36. Find the number which is the highest number and is the lowest number in the final step.

- (a) 6242
- (b) 5722
- (c) 7494
- (d) 6482
- (e) 6484

Q37. How many numbers are there in the final step?

- (a) Four
- (b) More than four
- (c) Three
- (d) None
- (e) None of these

Q38. Which of the following steps the element "71 117 39" found in the same manner?

- (a) Step III
- (b) Step V
- (c) Step IV
- (d) Step II
- (e) There is no such step

Adda247

- (a) 3rd to the left
- (b) 2nd to the right
- (c) Immediate right
- (d) 3rd to the right
- (e) None of these

[illegible]

(a) 50
(b) 40
(c) 30
(d) 45
(e) 60

(a) W-70
(b) G-20
(c) H-80
(d) L-20
(e) Q-80

(a) Y, H
(b) A, W, X
(c) A, F, W
(d) G, F, Y
(e) None of these

Q43. Which of the following number does X likes?

- (a) 50
- (b) 80
- (c) 70
- (d) 60
- (e) 10

Q44. Who among the following lives with G?

- (a) Q
- (b) Y
- (c) A
- (d) X
- (e) None of the

Directions (43-47): Read the following information carefully and answer the questions given below.

A person starts from point A in the North direction and walks 10m to reach point B. From point B he takes a right turn and walks 4m to reach point C. From point C he takes a left turn and walks 6m to reach point D. From point D he takes a right turn and walks 3m to reach point E. From point E he takes a left turn and walks 6m to reach point F. From point F he takes a right turn and walks 10m to reach point G. From point G he takes a left turn and walks 10m to reach point H. From point H he takes a right turn and walks 10m to reach point I. From point I he takes a left turn and walks 10m to reach point J. From point J he takes a right turn and walks 10m to reach point K. From point K he takes a left turn and walks 10m to reach point L. From point L he takes a right turn and walks 10m to reach point M. From point M he takes a left turn and walks 10m to reach point N. From point N he takes a right turn and walks 10m to reach point O. From point O he takes a left turn and walks 10m to reach point P. From point P he takes a right turn and walks 10m to reach point Q. From point Q he takes a left turn and walks 10m to reach point R. From point R he takes a right turn and walks 10m to reach point S. From point S he takes a left turn and walks 10m to reach point T. From point T he takes a right turn and walks 10m to reach point U. From point U he takes a left turn and walks 10m to reach point V. From point V he takes a right turn and walks 10m to reach point W. From point W he takes a left turn and walks 10m to reach point X. From point X he takes a right turn and walks 10m to reach point Y. From point Y he takes a left turn and walks 10m to reach point Z. From point Z he takes a right turn and walks 10m to reach point A.

Q45. What is the distance between point D and point F?

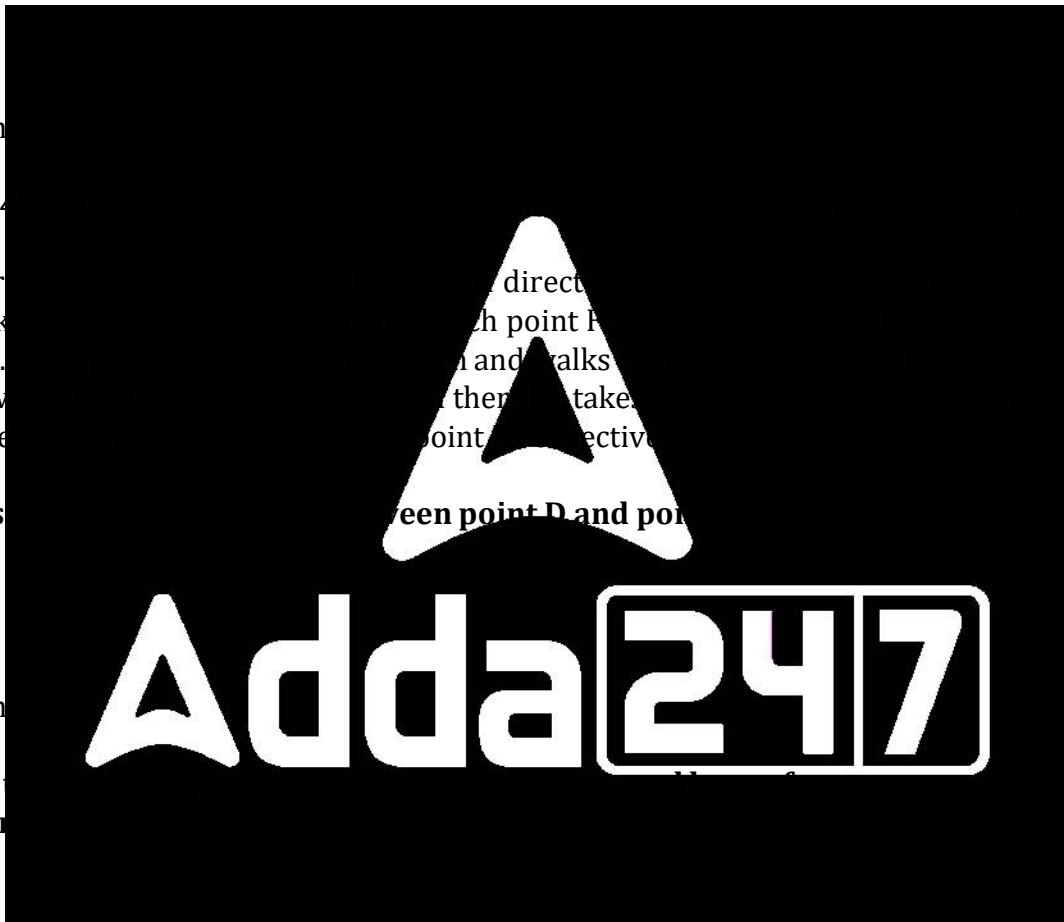
- (a) $3\sqrt{3}$ m
- (b) 45m
- (c) $3\sqrt{5}$ m
- (d) 31m
- (e) None of the

Q46. Four of the following points doesn't belong to the same line. Which one is it?

- (a) PE
- (b) ED
- (c) FG
- (d) BH
- (e) HD

Q47. In which direction is point D with respect to point B?

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



Directions (48-49): Dismissing four petitions challenging the collection of fine in cars when the drivers were found without a mask, the Delhi high court said it is mandatory to wear a mask in a private car even when the driver is alone in the car, as a vehicle is considered a public place. The high court said a mask acts as *Suraksha Kavach*, which would prevent the spread of the deadly virus.

Q48. Which of the following diminish the verdict issued by Delhi High Court?

- (a) There will be penalty if anyone will break the rules to wear mask.
- (b) Delhi government has decided to distribute masks at public places.
- (c) Mask is not necessary for people.
- (d) Delhi Transport Corporation (DTC) and Delhi Metro Rail Corporation (DMRC).
- (e) Both (b) and (c).

Q49. Which of the following statements are correct?

- (I) People will not wear mask if they are alone in a car.
 - (II) Awareness about the importance of mask is not enough. Court has asked for more strict measures.
 - (III) Less car will be on road after verdict.
- (a) Only III
(b) Only I and II
(c) Only II and III
(d) Only II
(e) All I, II & III

Q50. The collection of a great wall of garbage in east Delhi's Chhazipur area, screening people and vehicles into a narrow by-lane, is a stark reminder that India's waste management crisis can have deadly consequences. More than a year after the notification of the new delayed Solid Waste Management and Handling Rules, 2016, the government has not met the stipulations, beginning with the segregation of waste at the source and the timely processing. What may be the reason for this?

- (I) Organic Waste should use to make affordable household biogas plants and production of methane for power generation.
 - (II) Waste materials can worsen air pollution level due to which people will face issue in breathing.
 - (III) Supreme court comes in action after PIL has been filed by group of peoples in Delhi.
- (a) Only I and III
(b) Only II and III
(c) Only II
(d) Only III
(e) None of them

The newspaper industry has been in steady decline triggered by a loss in readership and ad revenue which have been migrating to other media, most notably digital. While the declines have been ongoing for a number of years, the pandemic and ensuing sluggish economy impacted a number of core newspaper advertisers such as retail, movies and promoting community events. These categories cut back on their marketing budgets, accelerating declines in ad revenue. Using a number of industry sources, Pew Research Center in their annual State of the News report, covered the latest newspaper trends. In 2020, the circulation of weekday newspapers was 22.3 million. In contrast, in 1990, the weekday newspaper

Q51. Why is the demand for newspapers significantly decreased in the past few years?

(a) Because of the rise in digital media consumption significantly

(b) Because newspapers are becoming more expensive

(c) A Sharp diminish in the number of newspaper readers has prompted a decrease in newspaper demand

(d) Advertisers are preferring digital platforms to the conventional newspapers for marketing

(e) All of these

Q52. What is/are accountable for downgoing advertisement revenue?

- (a) Indirect impact of a depressed economy is one of the reasons for decreasing ad revenue
- (b) Covid-19 has also worsened the already deteriorated advertisement revenue
- (c) Save tree campaign has been putting off advertisers to use newspapers for promotion
- (d) Increasing cost of advertisement is the reason for the decline in advertisement revenue
- (e) Both (a) and (b)

Q53. Which of the following can be concluded from Pew Research Center's report?

- (a) A huge difference is evident in the circulation of newspapers in English and Hindi languages
- (b) In the second last year, the circulation of newspapers is drastically at its lowest point
- (c) Report exhibits that the distribution of newspapers in 2020 is approximately one-third of the 1990's distribution.
- (d) Only (b) and (c)
- (e) All of these

Q54. What is/are the difference(s) between ad revenue in 2019 and 2020 in the newspaper industry?

- (a) Advertiser's revenue in 2020 is estimated to 48% lower than the 2019's advertising revenue.
- (b) Revenue from ads in 2020 is estimated to be 48% lower than the 2019's advertising revenue. However there was vice versa in 2019.
- (c) The price per ad in 2020 is estimated to be 48% lower than the 2019's advertising revenue.
- (d) In 2020, the number of ads per day is estimated to be 48% lower than the 2019's advertising revenue.
- (e) Only (a) & (b)

Q55. What is/are the difference(s) between newspaper revenue in 2019 and 2020 in the newspaper industry?

- (a) The number of newspaper in 2020 is estimated to be 48% lower than the 2019's advertising revenue. However there was vice versa in 2019.
- (b) The number of newspaper in 2020 is estimated to be 48% lower than the 2019's advertising revenue. However there was vice versa in 2019.
- (c) Employee's revenue in 2020 is estimated to be 48% lower than the 2019's advertising revenue. However there was vice versa in 2019.
- (d) Both (b) & (c)
- (e) None of the above

Q56. Which of the following statements is/are true with reference to the information given in the passage?

- (i) As the result of pandemic and slow economy, companies have reduced the spending on the marketing
- (ii) According to the Pew report, 85 local newsrooms were permanently shut down
- (iii) Employment in the newspaper industry is estimated to be 48% lower than the 2019's advertising revenue.
- (a) Both (i) & (ii)
- (b) Both (iii) & (ii)
- (c) Only (iii)
- (d) Both (i) & (iii)
- (e) Only (i)

Q57. Which of the following words is an antonym of 'temporarily' given in the passage?

- (a) deftly
- (b) impeccably
- (c) perpetually
- (d) effrontery
- (e) None of these

(a) dwindle
(b) rife
(c) perusal
(d) mount
(e) None of these

(a) emerged
(b) reiterate
(c) conducive
(d) both (a) and (b)
(e) None of the above

(a) Pew research found that 70% of Americans get their news from a print newspaper source.
(b) Weekdays, the average American reads 2.23 newspapers.
(c) In 2011, the average American reads 1.73 newspapers, a 17% decline from 2007.
(d) \$8.8 billion is the estimated cost of the newspaper industry.
(e) None of the above.

ASHA

Over the years, ASHAs have played an outstanding role in making India polio free, increasing routine immunisation coverage; reducing maternal mortality; improving new-born survival and in greater access to treatment for common illnesses. India launched the ASHA programme in 2005-06 as part of the National Rural Health Mission. **Initially rolled out in rural areas, with the launch of the National Urban Health Mission in 2013, it was extended to urban settings as well as.** Each of these women-only volunteers work with a population of nearly 1,000 people in rural and 2,000 people in urban areas, with **flexibility** for local adjustments. The core of the ASHA programme has been an intention to build the capacity of community members in taking care of their own health and being partners in health services.

The ASHA programme was inspired from the learnings from two past initiatives: one from the late 1970s and the other of the early 2000s. In 1975, a WHO monograph titled 'Health by the people' and then in 1978, an international conference on primary health care in Alma Ata (in the then USSR and now in Kazakhstan), gave emphasis for countries recruiting community health workers to strengthen primary health-care services that were participatory and people centric. Soon after, many countries launched community health worker programmes under different names. In India, they were called community health volunteers. However, within a few years of implementation, the community health volunteer scheme met many hurdles and evaluations which followed, indicating that a key reason for sub-optimal success was a failure of community health volunteers to make a community connect (in fact, people did not perceive them to be any different from outsiders). This was one of the major reasons behind scaling down, before

- Q61.** What is the main purpose of ASHA?
- (a) For facilitating the health care services in the country
 - (b) To appreciate the health workers
 - (c) For helping the health systems
 - (d) All of these
 - (e) None of these
- Q62.** What is the main achievement of ASHA?
- (a) lessened maternal mortality
 - (b) ASHA's main achievement is to sustainably improve the health and wellbeing of people
 - (c) ASHA's main achievement is to improve the health and wellbeing of people
 - (d) Only (b) and (c)
 - (e) All of these
- Q63.** For what purpose the ASHA program was launched?
- (a) ASHA program was launched to improve the health and wellbeing of people
 - (b) To make the health services accessible to the people
 - (c) To inform the people about the health services
 - (d) For spreading awareness about the importance of education in the society
 - (e) None of these
- Q64.** Why did the community health volunteer program fail?
- (a) A lack of funding was the hurdle in the following path of well-being and development
 - (b) Inclination of politicians' induced the failure of the mentioned program
 - (c) Improper administration and supervision were the major reasons for its failure
 - (d) Failure of its volunteers to associate community was also the reason for non-achievement
 - (e) Both (b) and (d)

Q65. Which of the following statements is TRUE with respect to the paragraph?

- (i) World Health Assembly awarded six organizations
- (ii) The title of WHO's monograph programme was 'Health of the people'
- (iii) World Health Assembly was convened in Germany
- (a) Both (i) & (ii)
- (b) Both (iii) & (iii)
- (c) Only (iii)
- (d) Both (i) & (iii)
- (e) Only (i)

Q66. In the given sentence, a word is missing. Choose the option which is the correct word to fill the blank. Choose the option which is the correct word to fill the blank. Choose the option which is the correct word to fill the blank.

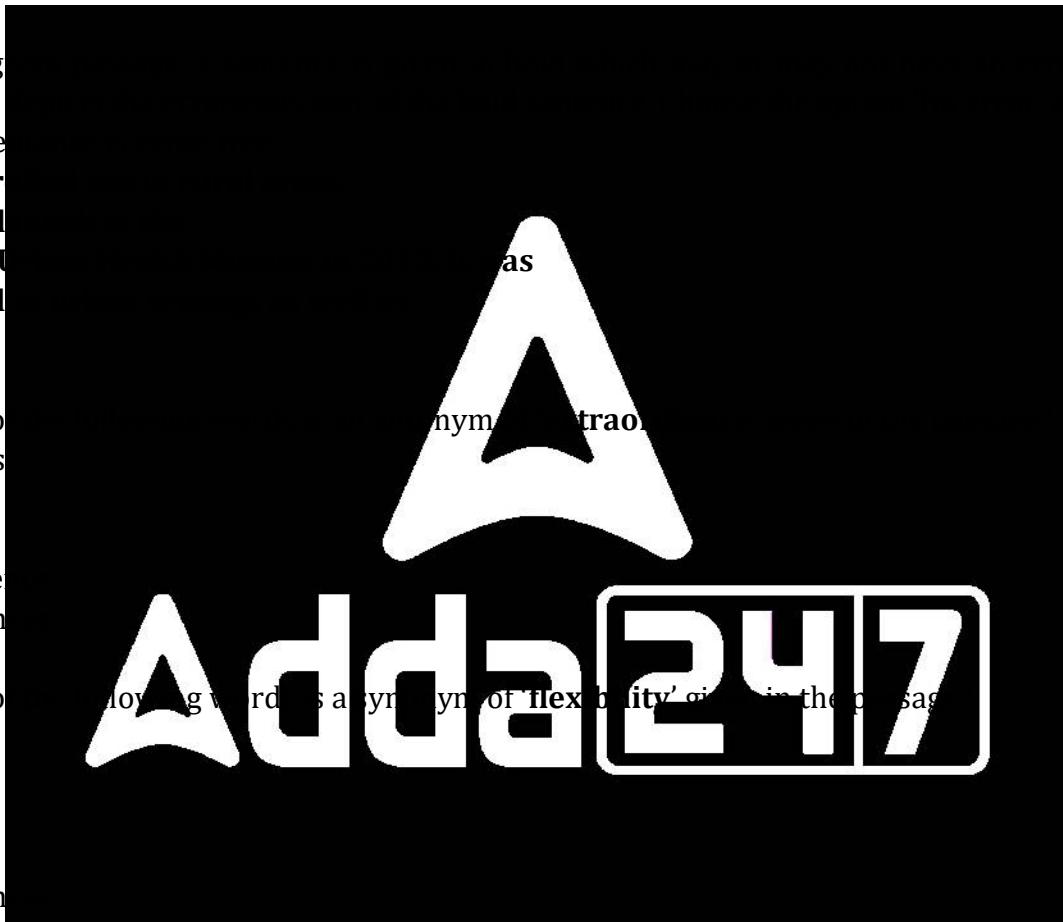
- (a) **Initially** r
- (b) **with the l**
- (c) **National U**
- (d) **extended**
- (e) No error

Q67. Which of the following words is a synonym of 'extraordinary'?

- (a) bodacious
- (b) bounty
- (c) standard
- (d) reminisce
- (e) None of the

Q68. Which of the following words is a synonym of 'flexibility' given in the passage?

- (a) vivid
- (b) nimble
- (c) pliable
- (d) timid
- (e) None of the



Directions (69-76): In the following passage, some of the words have been left out, each of which is indicated by a letter. Find the suitable word from the options given for each blank and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

Americans love to compete. More Americans strongly _____ (A) than any other surveyed country's residents that they like situations where they compete. Praised in various contexts, competition is the _____ (B) of US economic policy. The US Supreme Court observed, 'The heart of our national economic policy long has been _____ (C) in the value of competition.' The belief in competition is not only _____ (D) in the antitrust laws. Every US executive agency, for example, is legally required to have an advocate for competition.

Competition advocacy is _____ (E) internationally. The past 20 years _____ (F) more countries with antitrust laws and the birth and growth of the International Competition Network (ICN), an international organization of governmental competition authorities, with over 100 member countries. Although different constituencies accept to different degrees the benefits of competition and competition policy, the strongest competition advocates, in an ICN survey, were among the academic community, consumer associations, media, and nongovernmental organizations. Within OECD countries, competition is now _____ (G) accepted as the best available mechanism for maximising the things that one can demand from an economic system in most _____ (H).

Q69. Which of the following words will fit in the given blank (A)?

- (a) agreed
- (b) consent
- (c) relinquish
- (d) embellish
- (e) augmented

Q70. Which of the following words will fit in the given blank (B)?

- (a) intensity
- (b) sophistication
- (c) backbone
- (d) alleviation
- (e) cognizant

Q71. Which of the following words will fit in the given blank (C)?

- (a) pervasive
- (b) thought
- (c) enormous
- (d) lament
- (e) faith

Q72. Which of the following words will fit in the given blank (D)?

- (a) rigid
- (b) embodied
- (c) prodigious
- (d) lethargy
- (e) fiasco

Q73. Which of the following words will fit in the given blank (E)?

- (a) clamoring
- (b) renegading
- (c) unravelling
- (d) thriving
- (e) inferencing



Q74. Which of the following words will fit in the given blank (F)?

- (a) ominous
- (b) insinuated
- (c) witnessed
- (d) breather
- (e) dormant

Q75. Which of the following words will fit in the given blank (G)?

- (a) broadly
- (b) unintentional
- (c) proportionate
- (d) amply
- (e) anxiously

Q76. Which of the following words will fit in the given blank (H)?

- (a) permeates
- (b) natives
- (c) circumstances
- (d) ramifications
- (e) exceptions

Directions (74-76): Read the following sentences and choose the correct word from the options given below for each blank. These four words may or may not be used in the sentences. Select the correct options with the correct combination of words that will fit in the blanks to make the sentences grammatically correct. The correct combination of words that will fit in the blanks to make the sentences grammatically correct is it is the correct option for you.

Q77. Education is a right, even with government cripple (A) guarantee (B) mounting (B) debt of education (C) development and public (D).

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

Q78. Every Judge of the Supreme Court shall be appointed (A) by the President by Judges (B) under his hand and seal after consultation (C) with such of the warrant (D) of the Supreme Court.

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

Q79. Ladakh is one of the highest **valley (A)** of the world and its natural **plains (B)** consist mainly of high **features (C)** and deep **regions (D)**.

- (a) (A) – (C) and (B)-(D)
- (b) (C) – (D)
- (c) (B) – (C) and (A)-(D)
- (d) (A) - (D)
- (e) No interchange required

Q80. Though global warming **trend (A)** has been going on for a **burning (B)** time, its pace has **significantly**

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

Q81. Junk Food is a **major harm** to the **health (D)** of the present

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

Directions (82-85): In the questions given below few sentences are given in three column which are grammatically correct and meaningful. Connect them to make the statements in the best possible way without changing the intended meaning while only COLUMN A contains starting phrase of statement. Choose the best possible combination as your answer accordingly from the options to form a correct, coherent sentence.

Q82. COLUMN

- (A) The distin
- (B) Because blue is favored by so many people, it is
- (C) It is going to be a while before the Telangana capital sees

COLUMN (II)

- (1) often viewed as a non-threatening
- (2) be so much legal as it is about the inherent
- (3) becoming a medium of exchange would be

COLUMN (III)

- (D) he interests of investors are protected and the
- (E) characteristic of what is considered an asset or currency
- (F) color that can seem conservative and traditional

-
- (a) CE1 and BF2
 - (b) A2E and B1F
 - (c) AF3
 - (d) B3E and CF2
 - (e) None of these

Q83. COLUMN (I)

- (A) Smoke could be seen billowing from
- (B) Someone has been held right now
- (C) An investigation has been opened into

COLUMN (II)

- (1) committed
- (2) the blaze of
- (3) a collection

COLUMN (III)

- (D) fire has not
- (E) was quick
- (F) parliament

- (a) CE1 and B
- (b) A2E
- (c) AF3
- (d) C2F
- (e) None of th

Q84. COLUMN

- (A) Although I believe that social networking
- (B) This emphasis on restriction corresponds
- (C) There is no doubt that tobacco use is not only

COLUMN (II)

- (1) the promi
- (2) sites are h
- (3) highly det

COLUMN (III)

- (D) but also puts economic burden
- (E) as they were during the last years
- (F) they are also very beneficial.

- (a) C3D and A2F
- (b) A2E
- (c) AF3
- (d) C2F
- (e) None of these



Q85. COLUMN (I)

- (A) More than the question of inequality, the conflict between
- (B) Novak Djokovic was denied entry into Australia after his
- (C) The government introduced the Prohibition of marriages,

COLUMN (II)

- (1) by a late jailor more than two decades ago came
- (2) visa was cancelled following a 10-hour stand-off
- (3) let in after a thorough check at the security gates

COLUMN (III)

- (D) many people have been killed by the
- (E) with the A
- (F) disasters s
- (a) CE1 and B
- (b) A2E
- (c) B2E
- (d) C2F
- (e) None of the

Directions (81-85): Read the following passage and answer the questions. Three statements are given in Column (I) and four in Column (II). Choose the option which is most appropriate for each statement. (More than one option may be correct.)

- Q86.** (i) A joint meeting addressed the crisis.
(ii) A regular meeting addressed the crisis.
(iii) Certain changes in the curriculum have been made to make it more relevant to the needs of the students.
(a) All of these
(b) Both (iii) & (iv)
(c) Only (iii)
(d) Both (i) & (ii)
(e) Only (i)

- Q87.** (i) Jupiter is largest planet in the solar system, named after the king of the gods in Roman mythology.
(ii) World Environment Day has created a platform to raise awareness that the world is facing problems such as air pollution, plastic pollution, etc.
(iii) At a time when an acute heatwave has affected more than half the country, the water level in India's major reservoirs and river basins have fallen to 21% of its average
(a) Both (i) & (ii)
(b) Only (ii)
(c) All of these
(d) Both (i) & (iii)
(e) Only (i)

Q88. (i) Addiction is an inability to stop engaging in a behavior even though it is causing psychological and physical harm.

(ii) This extreme pollution in the form of smog affects our eyes, causing allergies and damage.

(iii) Salads and soups are just a few ideas for increasing the number of tasty vegetables in your meals.

(a) All of these

(b) Both (iii) & (ii)

(c) Only (iii)

(d) Both (i) & (iii)

(e) Only (i)

Q89. (i) Not g

(ii) Programs

75 years of pr

(iii) Cell phon

(a) Both (i) &

(b) Both (iii) &

(c) None of th

(d) Both (i) &

(e) Only (i)

Q90. (i) Intui

right or wron

(ii) Harassme

(iii) Conversa

and uniting al

(a) Both (i) &

(b) Both (ii)

(c) Only (iii)

(d) Both (i) &

(e) All of thes

Q91. What is

(a) 1010

(b) 1011

(c) 1101

(d) 0111

(e) 1001

Q92. What is the function of the Ctrl + V shortcut key?

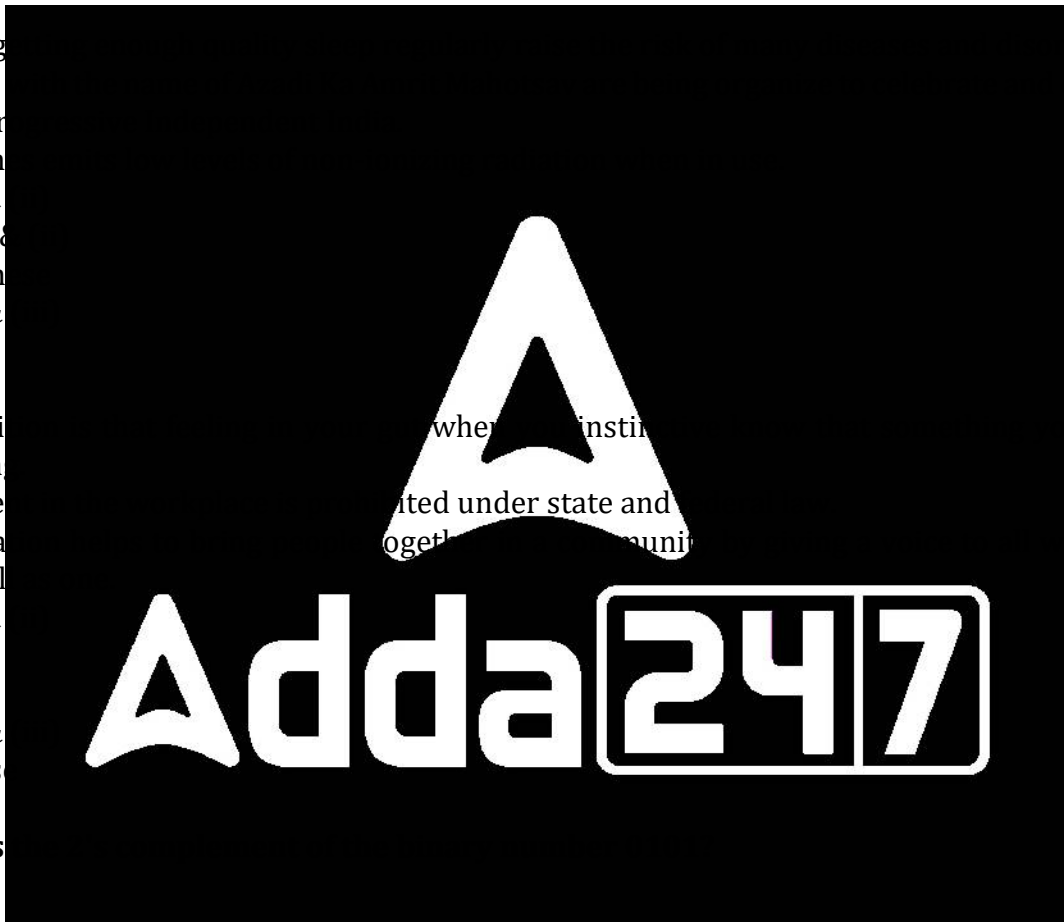
(a) Copy the selected item

(b) Paste the copied or cut item

(c) Cut the selected item

(d) Undo the previous action

(e) Select all items



Q93. In MS PowerPoint, the footer option is located under which tab?

- (a) Home
- (b) Insert
- (c) Design
- (d) View
- (e) Slide Show

Q94. The .xls extension is used for which type of files?

- (a) Word documents
- (b) PowerPoint
- (c) Excel spreadsheets
- (d) Text files
- (e) Image files

Q95. The .wav extension is used for which type of files?

- (a) Video file
- (b) Audio file
- (c) Image file
- (d) Text file
- (e) Spreadsheet

Q96. Cache is

- (a) Volatile memory
- (b) Non-volatile memory
- (c) External memory
- (d) Read-only memory (ROM)
- (e) Flash memory

Q97. In MS PowerPoint, the footer option is located under which tab?

- (a) Home
- (b) Insert
- (c) Design
- (d) View
- (e) Transitions

Q98. Which one does not self-replicate itself?

- (a) Virus
- (b) Worm
- (c) Trojan Horse
- (d) Bacteria
- (e) Spyware



Q99. Which of the following is an output device?

- (a) Keyboard
- (b) Scanner
- (c) Monitor
- (d) Mouse
- (e) Microphone

Q100. Ctrl + J is used for which of the following functions in Word Processing Software?

- (a) Increase font size
- (b) Decrease font size
- (c) Indent paragraph
- (d) Align text
- (e) Open a new document

Q101. What is a security threat that is sent over the internet, and is designed to steal information or damage a system?

- (a) Malware
- (b) Spam
- (c) Phishing
- (d) Adware
- (e) Trojan

Q102. Which operating system is not a mobile OS?

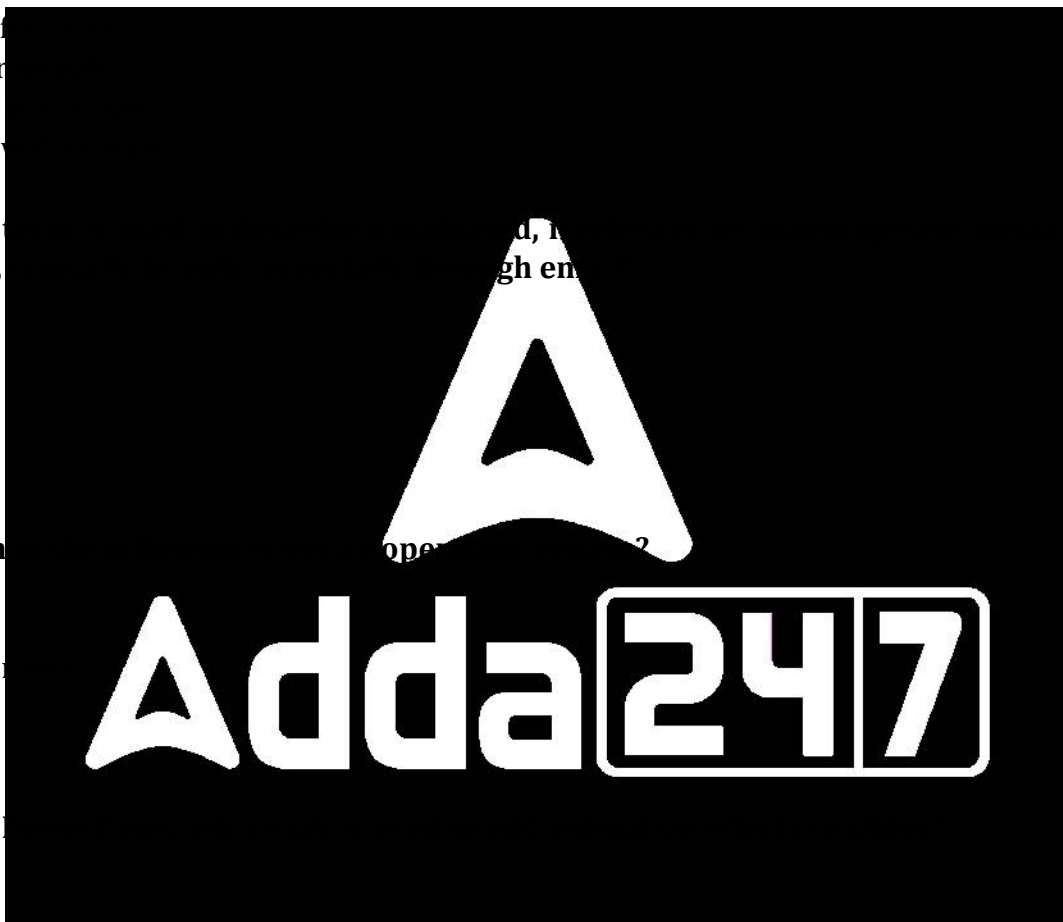
- (a) Windows
- (b) Linux
- (c) Google Chrome OS
- (d) macOS
- (e) Android

Q103. In MS PowerPoint, which of the following is not a transition?

- (a) Home
- (b) Insert
- (c) Transitions
- (d) Animations
- (e) Design

Q104. Which of the following is not a product of MS Office?

- (a) Word
- (b) Excel
- (c) Photoshop
- (d) PowerPoint
- (e) Outlook



Q105. Which of the following is an antivirus?

- (a) Microsoft Word
- (b) Google Chrome
- (c) Adobe Photoshop
- (d) Norton
- (e) VLC Media Player

Q106. In order to stop the Slide Show in PowerPoint, which of the following buttons is used?

- (a) Esc
- (b) Ctrl + S
- (c) Shift + F5
- (d) Alt + Tab
- (e) F11

Q107. Which of the following operating systems is not a mobile OS?

- (a) iOS
- (b) Linux
- (c) macOS
- (d) Android
- (e) Windows

Q108. An external device that is connected to a computer's motherboard with which of the following is not a storage device?

- (a) Printer
- (b) Processor
- (c) RAM
- (d) Hard disk
- (e) Graphics card

Q109. Which of the following is not a type of memory?

- (a) PROM cannot be reprogrammed
- (b) PROM can be reprogrammed
- (c) PROM is a type of volatile memory
- (d) PROM is primarily used for temporary data storage
- (e) PROM stores data even when the power is turned off, but is rewritable

Q110. Why are drafts used in email?

- (a) To store emails that have been sent
- (b) To store emails that are deleted
- (c) To save unfinished or unsent emails
- (d) To automatically reply to emails
- (e) To store spam emails



Directions (111-115): Read the following information carefully and answer the questions given below.

Total number of bottles manufactured by three (A, B and C) different companies in two (2022 and 2023) different years.

Total bottles manufactured by C in 2022 is 26 and total bottles manufactured by A in 2023 will be $\frac{100}{3}\%$ more than bottles manufactured by B in 2022. Total bottles manufactured by A in 2022 is 25 more than that of in 2023. The bottles manufactured by C in 2023 are 20% less than the bottles manufactured by A in 2022. The average number of bottles manufactured by all three companies in 2022 is 52.

Q111. If bottles manufactured by C in 2022 is 26 and total bottles manufactured by A in 2023 will be $\frac{100}{3}\%$ more than bottles manufactured by B in 2022. Total bottles manufactured by A in 2022 is 25 more than that of in 2023. The bottles manufactured by C in 2023 are 20% less than the bottles manufactured by A in 2022. The average number of bottles manufactured by all three companies in 2022 is 52.

- (a) 5:3
- (b) 1:2
- (c) 3:5
- (d) 2:5
- (e) 7:4

Q112. Bottle manufactured by C in 2022 is 26 and total bottles manufactured by A in 2023 will be $\frac{100}{3}\%$ more than bottles manufactured by B in 2022. Total bottles manufactured by A in 2022 is 25 more than that of in 2023. The bottles manufactured by C in 2023 are 20% less than the bottles manufactured by A in 2022. The average number of bottles manufactured by all three companies in 2022 is 52.

- (a) 36%
- (b) 29%
- (c) 43%
- (d) 51%
- (e) 18%

Q113. Find the difference between bottles manufactured by B in 2022 and bottles manufactured by C in 2023.

- (a) None of the above
- (b) 24
- (c) 35
- (d) 16
- (e) Can't be determined

Q114. Bottles manufactured by B in 2021 and bottles manufactured by C in 2023 are in the ratio of 3:4 respectively. Find the sum of bottles manufactured by B in 2022 and 2021.

- (a) 78
- (b) 102
- (c) 84
- (d) 96
- (e) 68



Q115. Selling price of each bottle sold by C in 2022 is Rs.8. If half of the bottles are sold out of the total bottles manufactured by C in 2022, then find the total revenue generated by C (in Rs).

- (a) 178
- (b) 104
- (c) 184
- (d) 126
- (e) 166

Directions (116-120): Find the missing number in the given series.

Q116. ?, 4, 8,

- (a) 24
- (b) 12
- (c) 48
- (d) 30
- (e) None of the above

Q117. 27, 40,

- (a) 100
- (b) 10
- (c) 92
- (d) 96
- (e) 79

Q118. 101, 10

- (a) 311
- (b) 227
- (c) 301
- (d) 324
- (e) 326

Q119. 1110, 1

- (a) 1145
- (b) 1182
- (c) 1122
- (d) 1190
- (e) 1130

Q120. 22, 30, 57, 182, 525, ?

- (a) 1830
- (b) 1821
- (c) 1856
- (d) 1857
- (e) 1525



Directions (121-125): The table shows the total people travelling from different means of transportation and the ratio of male to females using transportation on Friday. Read the table and answer the questions given below.

Transportations	Total people travelling	Males: females
Metros	330	5:6
Autos	360	2:1
Cars	300	13:17
Buses	450	4:5

Q121. Males travelling from Autos on Friday. If the total people travelling from Autos is 360, then find the number of females travelling from Autos on Friday.

- (a) 116
- (b) 124
- (c) 108
- (d) 112
- (e) 104

Q122. The fare of Autos is Rs 20 per person. If the total revenue generated by Autos on Friday is Rs 7200, find the number of males travelling from Autos on Friday.

- (a) 8000
- (b) 7500
- (c) 2500
- (d) 4000
- (e) 5000

Q123. The number of school-going and office-going females using cars is 110 and 130, respectively. If the number of office-going males using cars is 130 less than the number of office-going females, then find the ratio of the number of office-going males to school-going females by car.

- (a) 10:7
- (b) 13:9
- (c) 8:13
- (d) 11:7
- (e) 17:22

Q124. The average number of females travelling from Metros, Autos, and Rickshaws is 240, and the ratio of the males travelling from buses to Rickshaws is 5:3, respectively. The number of males travelling from Rickshaws is what percentage of the number of females travelling from Rickshaws?

- (a) $28\frac{4}{7}\%$
- (b) 66.67%
- (c) $14\frac{1}{7}\%$
- (d) 8.33%
- (e) 25%

Q125. If the difference between the number of males travelling from metros and autos together and the number of females travelling from cars and buses is X, then find the square of X.

- (a) 1600
- (b) 900
- (c) 3600
- (d) 4900
- (e) 8100

Directions (1 to 10):
solve both the equations and find the relation

You have to

Q126.

I. $x^2 + 10x - 75 = 0$

II. $y^2 + 13y + 22 = 0$

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

Q127.

I. $y^2 + 16y + 55 = 0$

II. $2x^2 - 3x - 14 = 0$

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

Q128.

I. $y = \sqrt{169}$

II. $4x^2 = 676$

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

Q129.

I. $3x^2 - 5x - 28 = 0$

II. $y^2 - 10y + 25 = 0$

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

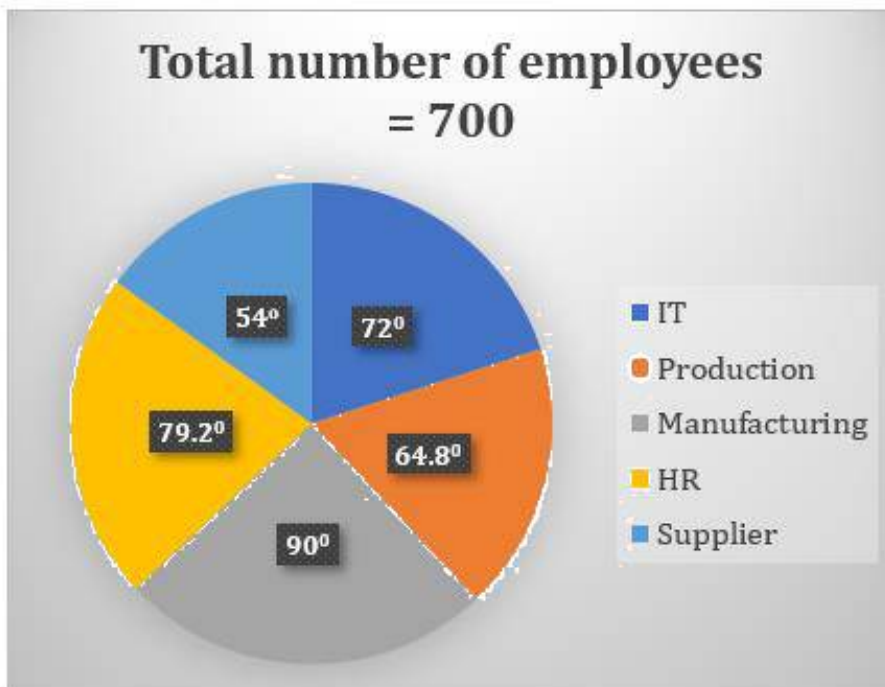
Q130.

I. $x^2 + 7x - 18 = 0$

II. $y^2 - y - 42 = 0$

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

Directions (131-135): Read the following pie chart carefully and answer the questions given below. The pie chart shows the degree distribution of people working in five departments (IT, production, manufacturing, HR and supplier) in a company.



47

Q131. If the number of female employees in IT is 50 more than that of male employees, then find the number of male employees in IT are how many more/less than total employees in HR.

- (a) 104
- (b) 150
- (c) 106
- (d) 109
- (e) 105

Q132. Find the ratio of the number of employees in IT and in production together to that of employees in

- (a) 31 :37
- (b) 35 :37
- (c) 38 :39
- (d) 38 :35
- (e) 38 :37

Q133. Find the percentage of employees in

- (a) 10%
- (b) 18%
- (c) 24%
- (d) 25%
- (e) 16%

Q134. Find the difference between the number of employees in supplier and manufacturing together and the number of employees in production and HR together.

- (a) 12
- (b) 0
- (c) 5
- (d) 6
- (e) 8

Q135. If the number of employees in marketing is 25% more than that in IT, then the number of employees in supplier is how much percentage more or less than the number of employees in marketing?

- (a) 40%
- (b) 45%
- (c) 25%
- (d) 50%
- (e) 75%

Q136. B alone can complete a piece of work in 36 days, while the efficiency of C is 50% more than B. If the efficiency of A is 20% less than that of C and three all starts working together, then find in how many days (approximately) the whole work will be completed?

- (a) 12 days
- (b) 18 days
- (c) 15 days
- (d) 6 days
- (e) 10 days

Q137. The time taken by a boat to travel 100 km upstream is 250% of the time taken by the same boat to travel 100 km downstream. If the speed of the boat in still water is 10 km/hr and the speed of the stream is 2 km/hr, then find the time taken by the boat to travel 100 km upstream.

- (a) 13
- (b) 15
- (c) 16
- (d) 17
- (e) 18

Q138. A investment of Rs. 10000 is made in a bank at an annual interest rate of 10% compounded annually. Find the interest received after 3 years.

- (a) 30%
- (b) 15%
- (c) 10%
- (d) 12.5%
- (e) 44%

Q139. There are three numbers, the second number is three times of the first number, while third number is six times the second number. If the average of these three numbers is 66 and a fourth number, which is four more than the average of these three numbers, then find the average of first and fourth number.

- (a) 38.5
- (b) 38
- (c) 39
- (d) 39.5
- (e) 40



Q140. Three points A, B and C are in a straight line. Car X travels from A to B at a speed of 50 km/hr and car Y travels from A to C at a speed of 60 km/hr. If the time taken by both the cars to reach their destination is same and the distance of B from A is 100 km, then find the distance between C and B (in km).

- (a) 30 km
- (b) 12 km
- (c) 24 km
- (d) 20 km
- (e) 15 km

Q141. Ram and Shyam are partners in a business. Ram invests Rs.2700 as a profit share and Shyam invests Rs.3600 as a profit share. If the profit is Rs.2700, then find the share of Shyam in the profit.

- (a) 6 months
- (b) 3 months
- (c) 9 months
- (d) 12 months
- (e) 15 months

Q142. The ratio of the ages of a man and his wife is 5:4. The man is 30 years older than his wife. If the man is 100 years old, then find the age of the wife.

- (a) 50 years
- (b) 45 years
- (c) 40 years
- (d) 35 years
- (e) 48 years

Q143. A merchant marks an article X% above its cost price and allows a discount of 20% on the marked price. If the profit is 12.5% on the cost price, then find the value of X.

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

Q144. 60 liters mixture of water and milk is in the ratio of 5:7 respectively. 24 liters of mixture is replaced with the syrup and 10 liters of pure milk is added in the remaining mixture. Find the ratio of milk, water and syrup in the resultant mixture respectively.

- (a) 7: 5: 18
- (b) 31: 15: 24
- (c) 17: 5: 7
- (d) 7: 3: 2
- (e) 9: 5: 8

Q145. A train of X meter long crosses the man standing on a platform in 9 sec. and same train crosses the $(X + 50)$ meters bridge in 19 sec. Find time taken by train to cross another train of $(X - 200)$ meters running in opposite direction with the speed of 72 km/hr.

- (a) 8 sec.
- (b) 14 sec.
- (c) 12 sec.
- (d) 15 sec.
- (e) 10 sec.

Directions (1 to 5): Choose the correct mark (?) in the following questions.

Q146. $2549.1 \div 12.8 = ?$

- (a) 1310
- (b) 1260
- (c) 1220
- (d) 1340
- (e) 1280

Q147. $1089.8 \div 12.8 = ?$

- (a) 4675
- (b) 4825
- (c) 4725
- (d) 4875
- (e) 4775

Q148. $61.98 \div 12.8 = ?$

- (a) 10
- (b) 1
- (c) 4
- (d) 14
- (e) 7

Q149. $1728.011 \div 11.99^3 + 10.96^3 = ?$

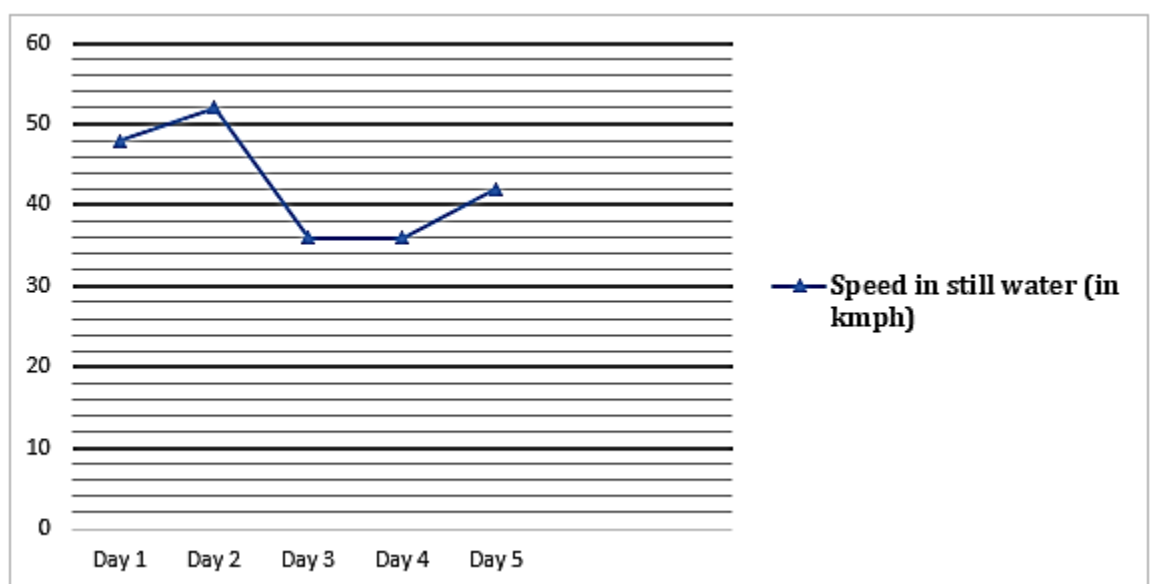
- (a) 1221
- (b) 1332
- (c) 1728
- (d) 1421
- (e) 1561



Q150. $100.99 \times 20.09 - 19.94 \times 99.97 + 55.02 = ?$

- (a) 75
- (b) 67
- (c) 81
- (d) 71
- (e) 85

Directions (151-156): Line chart given below shows speed of boat in still water in five different days & table shows time taken to cover certain distance downstream. It also shows distance travelled in upstream by the boat in five different days. Study the data carefully and answer the following questions.



Days	Time taken in downstream (in hours)	Distance travelled in upstream (in km)
Day 1	---	56
Day 2	1.5	---
Day 3	---	40
Day 4	1.25	---
Day 5	---	48

Q151. If time taken by boat on day1 in upstream is 1.4 hours which is 12% more than the time taken by the same boat on day1 in downstream, then what is the distance travelled by boat on day1 in downstream?

- (a) 30 km
- (b) 40 km
- (c) 50 km
- (d) 70 km
- (e) 60 km

Q152. If the speed of stream on day3 is 12 kmph and the ratio of the time taken by the boat to cover certain distances in upstream to downstream is 10:7, then what is the difference between the distance travelled by boat in upstream and that of in downstream on day3?

- (a) 16 km
(b) 18 km
(c) 24 km
(d) 32 km
(e) 42 km

Q153. On day 1, a boat travelled 100 km in upstream and 100 km in downstream in 16:15. What is the speed of the boat in still water?

- (a) 9
(b) 8
(c) 4
(d) 5
(e) 6

Q154. If time [REDACTED] there and the [REDACTED].

- (a) 12 kmph
(b) 16 kmph
(c) 18 kmph
(d) 14 kmph
(e) none of these

Answer

- (a) 23 km
(b) 44 km
(c) 24 km
(d) 32 km
(e) 42 km

Q156. On day 3, downstream distance travelled is 8 km more than 5 times the upstream distance. If total upstream and downstream time is 6 hours, then find the speed of current.

- (a) 16 kmph
(b) 24 kmph
(c) 11 kmph
(d) 8 kmph
(e) None of these

Directions (157-160): The following questions are accompanied by two statements i.e. statement (I) and statement (II). You have to determine which statement (s) is/are sufficient to answer the questions.

Q157. Find the ratio of present age of A to age of B three years hence.

- I. Two years hence the age of A will be $\frac{2}{3}$ rd of the present age of B.
II. The average of present age of A, B and C is 20 years.

- (a) Only I alone
(b) Both I and II alone
(c) Either I alone or II alone
(d) Only II alone
(e) Both I and II alone

Q158. Find the value of x.

- I. 40% of x is 120
II. $x - y = 50\%$

- (a) Either I alone or II alone
(b) Both I and II alone
(c) Only I alone
(d) Both I and II alone
(e) Only II alone

Q159. The ratio of length with breadth of a rectangle is 2 : 5, find the perimeter of the rectangle.

- I. The diagonal of the rectangle is 12 cm
II. The area of the rectangle is 60 cm².

- (a) Only II alone
(b) Both I and II alone
(c) Only I alone
(d) Both I and II alone
(e) Either I alone or II alone

Q160. Find the total employees in the company.

- I. The ratio of male employees to female employees in the company is 1 : 2
II. Total female employees are 560 and total male employees are 75% of female employees.

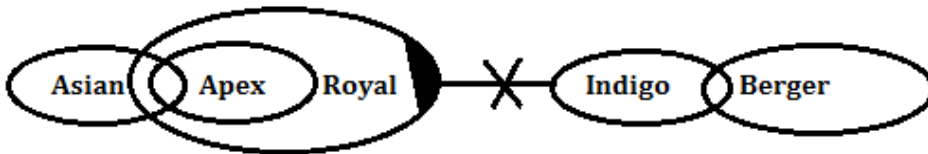
- (a) Both I and II are together sufficient
(b) Only statement I
(c) Only statement II
(d) Both I and II together are not sufficient
(e) Either I or II alone



Solutions

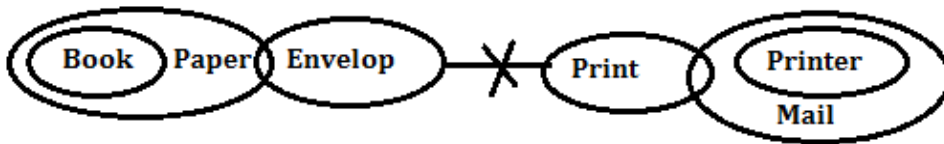
S1. Ans.(c)

Sol.



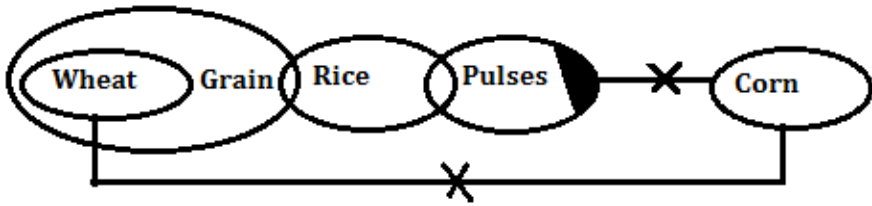
S2. Ans.(e)

Sol.



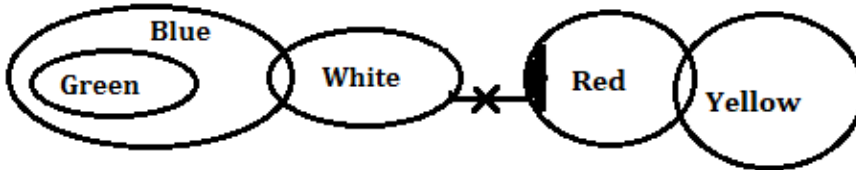
S3. Ans.(b)

Sol.



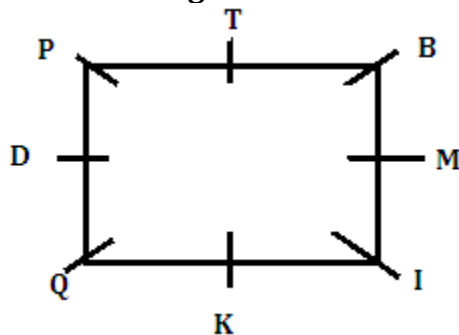
S4. Ans.(e)

Sol.



S5. Ans.(b)

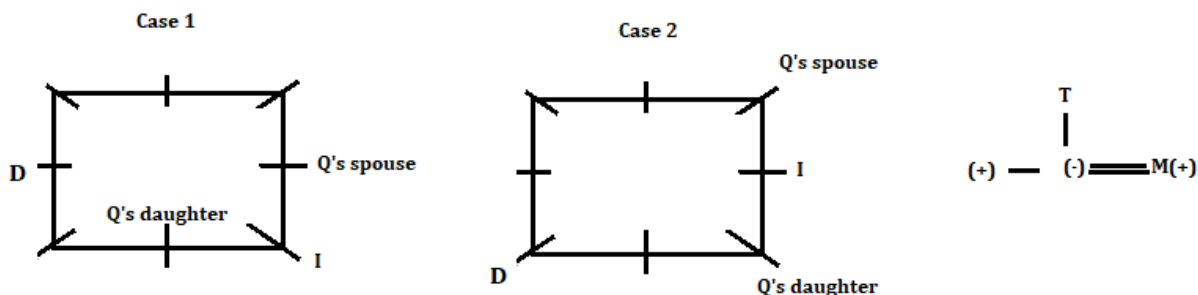
Sol. Final arrangement -



$$\begin{array}{c}
 (-)I = T(+) - D(+) \\
 | \\
 (+)P - Q(-) = M(+) \\
 | \\
 (+)B - K(-)
 \end{array}$$

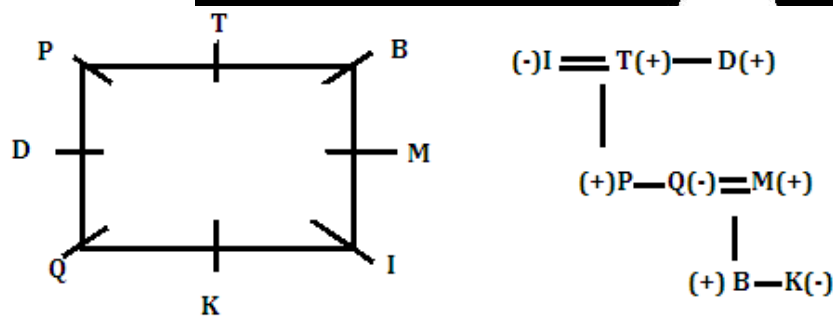
Clues- M is son in law of T. Q's only daughter sits second to the right of D. One person sits between Q's spouse and the one who is Q's daughter. D is unmarried and brother-in-law of I. T's only son sits opposite to I. I sits to the immediate right of Q's daughter.

Inference- Here we have 2 possible cases.



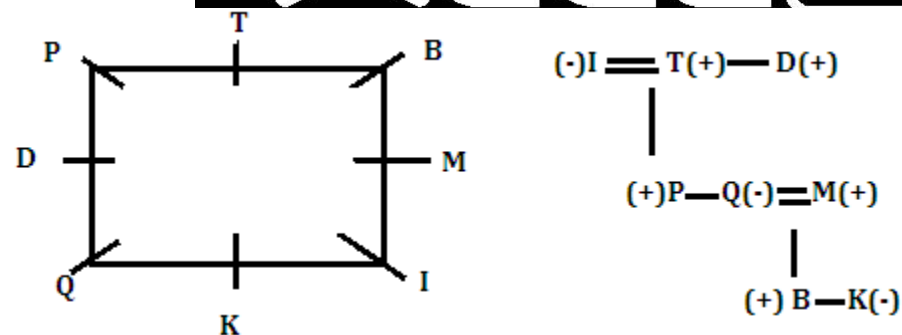
Clues- P sits opposite to T. B sits to the immediate left of the side. K is child of M who is brother of I. Q's only daughter sits to the immediate right of B. I's

Inference- Here we have 2 possible cases.



S6. Ans.(c)

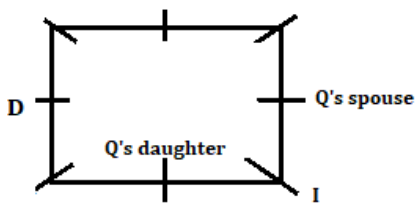
Sol. Final arrangement-



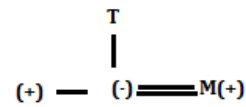
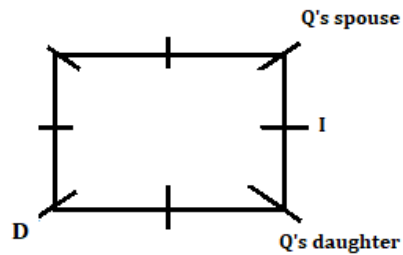
Clues- M is son in law of T. Q's only daughter sits second to the right of D. One person sits between Q's spouse and the one who is Q's daughter. D is unmarried and brother-in-law of I. T's only son sits opposite to I. I sits to the immediate right of Q's daughter.

Inference- Here we have 2 possible cases.

Case 1

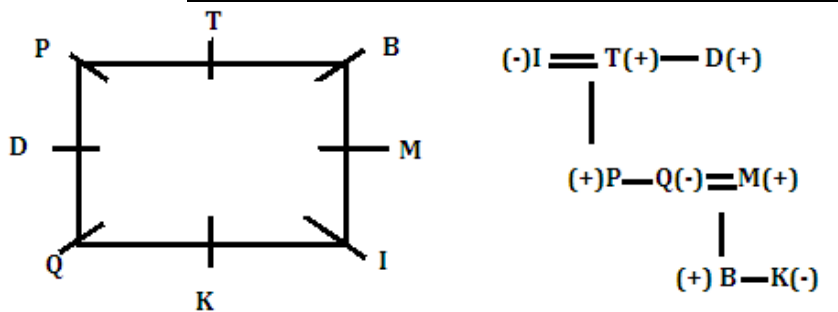


Case 2



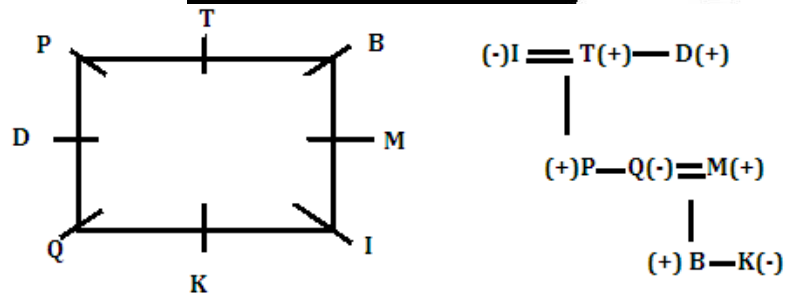
Clues- P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits

Inference- Here we have 2 possible cases.



S7. Ans.(e)

Sol. Final arrangement

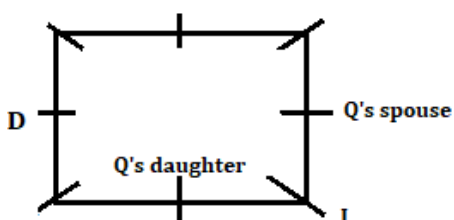


247

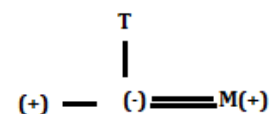
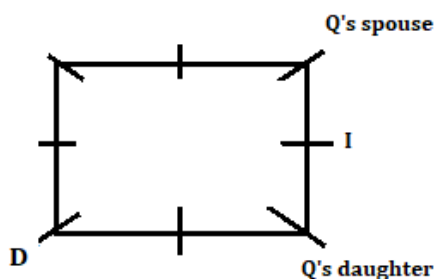
Clues- M is son of Q's spouse and the daughter of Q's spouse sits opposite to I. I sits to the immediate right of Q's daughter.

Inference- Here we have 2 possible cases.

Case 1

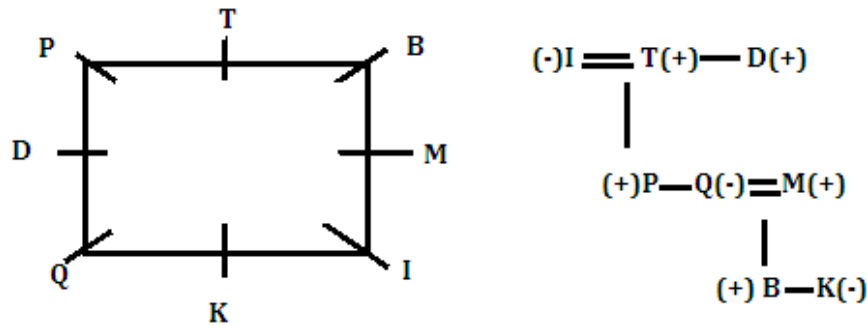


Case 2



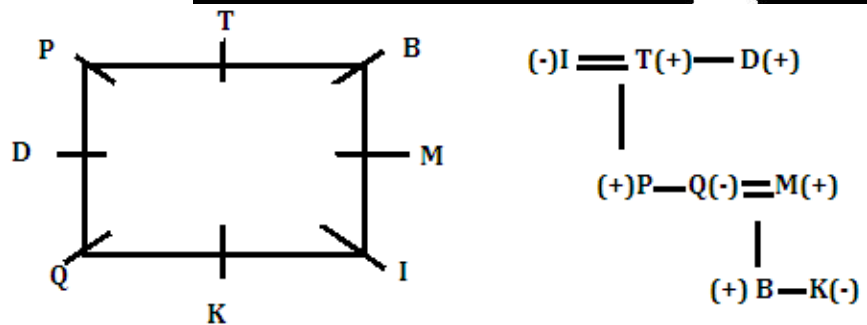
Clues- P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits opposite to B. Gender of B and T is same.

Inference- Here case 2 is ruled out now. So, the final arrangement is-



S8. Ans.(e)

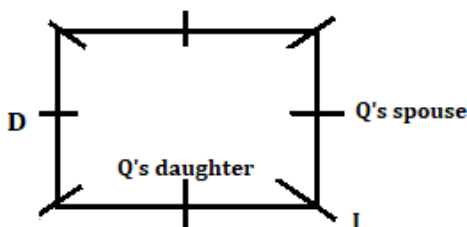
Sol. Final arr



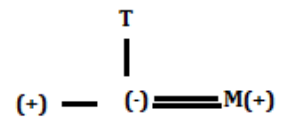
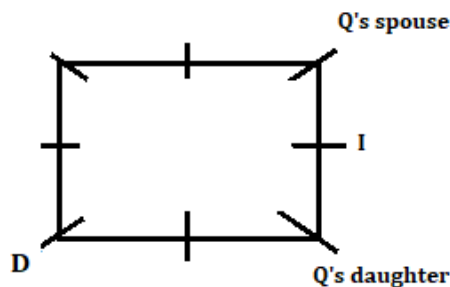
Clues- M is spouse of Q's daughter. D is unmarried and T's daughter sits opposite to I. I sits to the immediate right of Q's daughter.

Inference- Here we have 2 possible cases.

Case 1

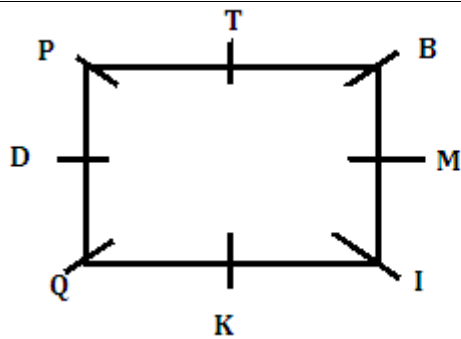


Case 2



Clues- P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits opposite to B. Gender of B and T is same.

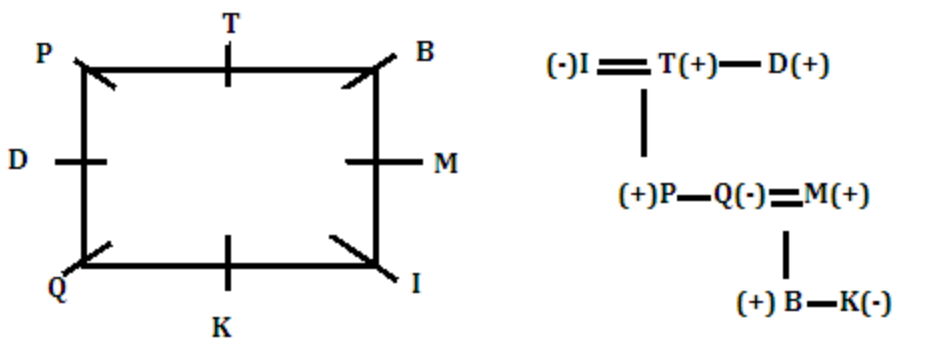
Inference- Here case 2 is ruled out now. So, the final arrangement is-



$(-)I \equiv T(+) - D(+)$
 $|$
 $(+)P - Q(-) \equiv M(+)$
 $|$
 $(+)B - K(-)$

S9. Ans.(a)

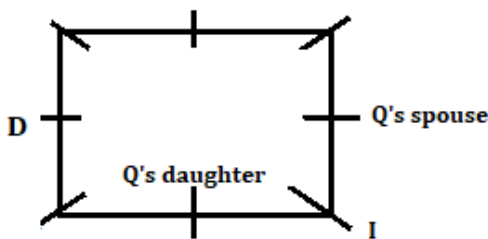
Sol. Final arrangement



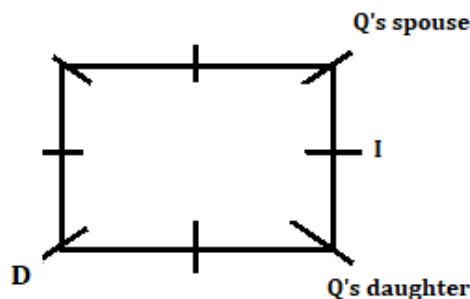
Clues- M is son of P and Q. P's daughter sits second to the right of T. T sits between Q's spouse and the daughter of M. D is married and brother of I. I sits to the left of Q. S sits between Q's spouse and D.

Inference- Here we have 2 possible cases.

Case 1



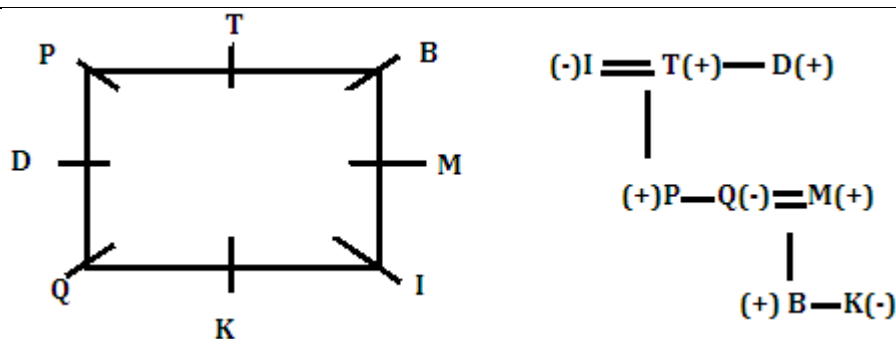
Case 2



$(+) \quad T$
 $|$
 $(-) \equiv M(+)$

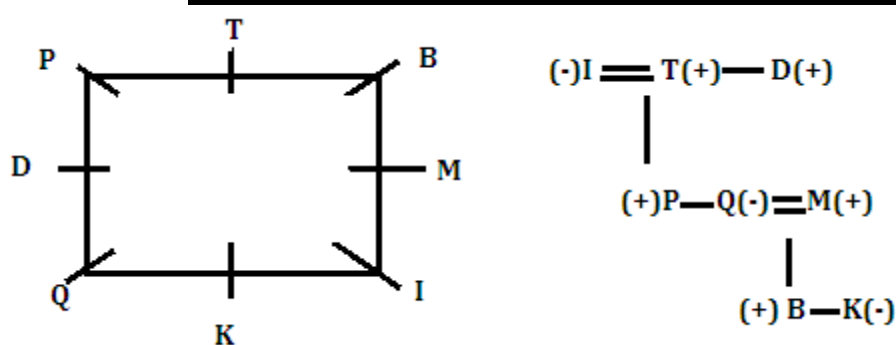
Clues- P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits opposite to B. Gender of B and T is same.

Inference- Here case 2 is ruled out now. So, the final arrangement is-



S10. Ans.(b)

Sol. Final arrangement

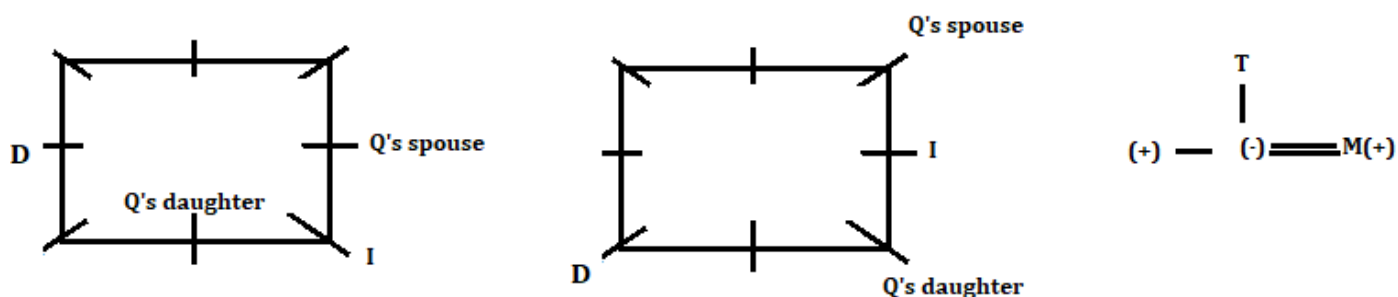


Clues- M is son of P and Q. M's mother sits second to the right of P. M sits between Q's spouse and the daughter of M. Q is sister of I. I's brother sits opposite to I. I sits to the left of S. S's sister sits adjacent to K.

Inference- Here we have 2 possible cases.

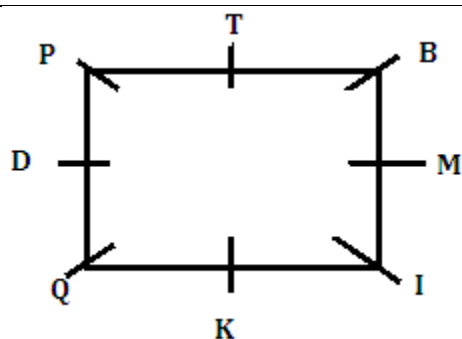
Case 1

Case 2



Clues- P sits adjacent to D. P neither sits adjacent to Q's daughter nor sits at the middle of the side. K is child of M who has two children. K sits adjacent to I and is unmarried. T sits immediate right of B. I's daughter sits opposite to B. Gender of B and T is same.

Inference- Here case 2 is ruled out now. So, the final arrangement is-



$$\begin{array}{c}
 (-)I = T(+) - D(+) \\
 | \\
 (+)P - Q(-) = M(+) \\
 | \\
 (+)B - K(-)
 \end{array}$$

S11. Ans.(b)

Sol. In the first

We will consider

relationship b

Thus, only co

to improve the

S12. Ans.(b)

Sol. Final arr

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Clues- A lives

an even num

number floor

Inference- H

square age. K lives two floor

Now A. A's age is

es on an even

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8						
7	A	16			A	16
6						
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H		H		H	

Clues- The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. H is 6 years younger than B.

Inference- Here we get fix numbers of ages of A and B.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29		
7	A	16			A	16
6						29
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H	21	H	21	H	21

Clues- E lives above D. F is 16 years. F lives above D.

Inference- Here we can't place E. because we can't place E.

Floors	Case 1		Case-2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29	F	11
7	A	16			A	16
6	F	11			D/	29
5	B	27	A	16	B	27
4	D				G	
3	E		B	27	E	
2	G		G		D/	
1	H	21	H	21	H	21

Clues- C's age is even number.

Inference- Here

Floors	Case-1		Case 3	
	Persons	Ages	Persons	Ages
8	G	29	F	11
7	A	16	A	16
6	F	11	D	29
5	B	27	B	27
4	D		G	
3	E		E	
2	G		C	
1	H	21	H	21

Clues- E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Inference- E's age is 33 years.

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

33 years is the

S13. Ans.(e)

Sol. Final arrangement

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Clues- A lives on an odd number floor and has a perfect square age. B lives on a floor below A. A's age is an even number less than 36 years. The age difference between D and H is 18 years. C lives on an even number floor.

Inference- H

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8						
7	A	16			A	16
6						
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H		H		H	

Clues- The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. H is 6 years younger than B.

Inference- Here we get fix numbers of ages of A and B.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29		
7	A	16			A	16
6						29
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H	21	H	21	H	21

Clues- E lives on 3rd floor. F is 16 years. F lives above D.

Inference- H lives on 1st floor because we can't place E.

Floors	Case 1		Case-2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29	F	11
7	A	16			A	16
6	F	11			D/	29
5	B	27	A	16	B	27
4	D				G	
3	E		B	27	E	
2	G		G		D/	
1	H	21	H	21	H	21

Clues- C's age is even number.

Inference- Floor 1 is ruled out now because C's age is odd number.

Floors	Case-1		Case 3	
	Persons	Ages	Persons	Ages
8	G	29	F	11
7	A	16	A	16
6	F	11	D	29
5	B	27	B	27
4	D		G	
3	E		E	
2	G		C	
1	H	21	H	21

Clues- E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Inference- E's age is 33 years.

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Five persons live

S14. Ans.(c)

Sol. Final arrangement

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Clues- A lives on an even numbered floor and has a perfect square age. Lives on a floor below A. A's age is an even number less than 6 years. The age difference between A and B is 1 year. B lives on an even number floor. B. H lives on the bottommost floor.

Inference- Here we get

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8						
7	A	16			A	16
6						
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H		H		H	

Clues- The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. H is 6 years younger than B.

Inference- Here we get fix numbers of ages of A and B.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29		
7	A	16			A	16
6						29
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H	21	H	21	H	21

Clues- E lives on an even number floor. F is 16 years. F lives above D.

Inference- H lives on the top floor because we can't place E.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29	F	11
7	A	16			A	16
6	F	11			D/	29
5	B	27	A	16	B	27
4	D				G	
3	E		B	27	E	
2	G		G		D/	
1	H	21	H	21	H	21

Clues- C's age is a prime number.

Inference- H lives on the 1st floor because C's age is odd.

Floors	Case 1		Case 3	
	Persons	Ages	Persons	Ages
8	G	29	F	11
7	A	16	A	16
6	F	11	D	29
5	B	27	B	27
4	D		G	
3	E		E	
2	G		C	
1	H	21	H	21

Clues- E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Inference- E's age is 33 years.

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Only C lives on

S15. Ans.(d)

Sol. Final arrangement

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Clues- A lives on an even numbered floor and has a perfect square age. Lives on a floor below A. A's age is an even number less than 6 years. The age difference between A and B is 1 year. B lives on an even number floor. B. H lives on the bottommost floor.

Inference- Here we get

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8						
7	A	16			A	16
6						
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H		H		H	

Clues- The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. H is 6 years younger than B.

Inference- Here we get fix numbers of ages of A and B.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29		
7	A	16			A	16
6						29
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H	21	H	21	H	21

Clues- E lives on an even number floor. F is 16 years. F lives above D.

Inference- H lives on floor 1 because we can't place E.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29	F	11
7	A	16			A	16
6	F	11			D/	29
5	B	27	A	16	B	27
4	D				G	
3	E		B	27	E	
2	G		G		D/	
1	H	21	H	21	H	21

Clues- C's age is even number.

Inference- H lives on floor 1 is rule out because C's age is odd number.

Floors	Case 1		Case 3	
	Persons	Ages	Persons	Ages
8	G	29	F	11
7	A	16	A	16
6	F	11	D	29
5	B	27	B	27
4	D		G	
3	E		E	
2	G		C	
1	H	21	H	21

Clues- E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Inference- E's age is 33 years.

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Sum of A's age

S16. Ans.(a)

Sol. Final arr

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

Clues- A lives on an even numbered floor and has a perfect cube age. Lives on a floor below A. A's age is an even number less than 6 years. The age difference between A and B is 1 year. B lives on an even number floor. B. H lives on the bottommost floor.

Inference- H

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8						
7	A	16			A	16
6						
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H		H		H	

Clues- The number of persons lives below G is one more than the number of persons lives above the one whose age is 29 years. H is 6 years younger than B.

Inference- Here we get fix numbers of ages of A and B.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29		
7	A	16			A	16
6						29
5	B	27	A	16	B	27
4					G	
3			B	27		
2	G		G			
1	H	21	H	21	H	21

Clues- E lives on an even number floor. F is 16 years. F lives above D.

Inference- H lives on floor 1 because we can't place E.

Floors	Case 1		Case 2		Case 3	
	Persons	Ages	Persons	Ages	Persons	Ages
8		29		29	F	11
7	A	16			A	16
6	F	11			D/	29
5	B	27	A	16	B	27
4	D				G	
3	E		B	27	E	
2	G		G		D/	
1	H	21	H	21	H	21

Clues- C's age is even number.

Inference- H lives on floor 1 is rule out because C's age is odd number.

Floors	Case 1		Case 3	
	Persons	Ages	Persons	Ages
8	G	29	F	11
7	A	16	A	16
6	F	11	D	29
5	B	27	B	27
4	D		G	
3	E		E	
2	G		C	
1	H	21	H	21

Clues- E's age is multiple of 11 and more than D's age. One of the persons age is 22 years which is 3 years less than G's age.

Inference- E's age is 33 years.

Floors	Persons	Ages
8	F	11
7	A	16
6	D	29
5	B	27
4	G	25
3	E	33
2	C	22
1	H	21

G is 25 years old

S17. Ans.(d)

S18. Ans.(b)

S19. Ans.(b)

S20. Ans.(c)

S21. Ans.(c)

Sol. Final arrangement

Y O U A N D M E Q

Clues- Two persons sit between M and Q. The number of persons sit between M and Q is one more than the number of persons sit between D and E. E sits 3rd to the right of D. No more than two persons sit between M and Q.

Inference- Here case 1 is ruled out.

D M E Q
| | | |
Case 1

Q D M E
| | | |
Case 2

Clues- The number of persons sit between D and E is same as the number of persons sit to the right of Q.

Inference- Here case 2 is ruled out now.

D M E Q
| | | |
Case 1

Q D M E
| | | |
~~Case 2~~

Clues- Three persons sit between D and N who sits 2nd to the right of A. There are as many persons sit between A and Y is same as the number of persons sit between D and A.

Inference-



Clues- U sits 4th from the extreme ends and immediate neighbour of O. One person sits between Y and O. The number of persons sit to the right of Q is equal to the number of persons sit to the left of O.

Inference- So, the final arrangement is-



Twenty persons

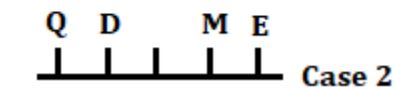
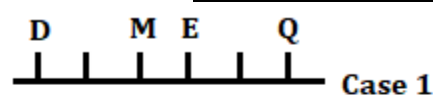
S22. Ans.(a)

Sol. Final arrangement



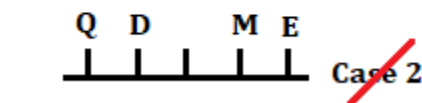
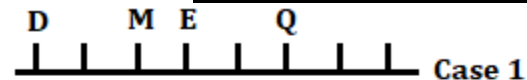
Clues- Two persons sit between D and N who sits 3rd to the right of A. There are more than one persons sit between M and E.

Inference- Hence,



Clues- The number of persons sit between D and E is same as the number of persons sit to the right of Q.

Inference- Hence,



Clues- Three persons sit between D and N who sits 2nd to the right of A. There are as many persons sit between A and Y is same as the number of persons sit between D and A.

Inference-



Clues- U sits 4th from the extreme ends and immediate neighbour of O. One person sits between Y and O. The number of persons sit to the right of Q is equal to the number of persons sit to the left of O.

Inference- So, the final arrangement is-

Y O U A N D M E Q

Seven persons sit between Y and the one who sits 5th to the right of U

S23. Ans.(c)

Sol. Final arrangement -

Y O U A N D M E Q

Clues- Two persons sit between M and E. One more than the number of persons sit between M and E. No persons sit between M and E.

Inference- Hence,

D M E Q
Case 1

Q D M E
Case 2

Clues- The number of persons sit to the right of D and E is same as the number of persons sit to the right of Q.

Inference- Hence,

D M E Q
Case 1

Q D M E
Case 2

Clues- Three persons sit between A and N. Any persons sit between A and N.

Inference-

Y A N D M E Q
Case 1

Clues- U sits 4th from the extreme ends and immediate neighbour of O. One person sits between Y and O. The number of persons sit to the right of Q is equal to the number of persons sit to the left of O.

Inference- So, the final arrangement is-

Y O U A N D M E Q

The number of persons sit between M and E is same as the number of persons sit between U and O

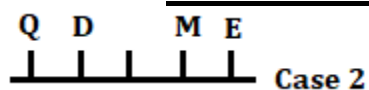
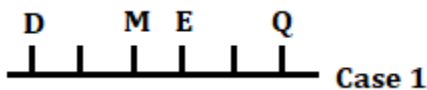
S24. Ans.(e)

Sol. Final arrangement -



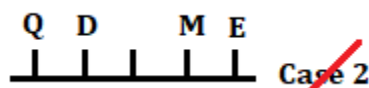
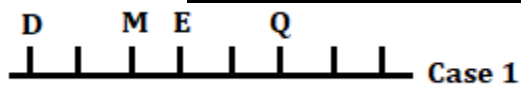
Clues- Two persons sit between M and Q. The number of persons sit between M and Q is one more than the number of persons sit between D and M. E sits 3rd to the right of D. Not more than two persons sit between M and E.

Inference- Here we have 2 possible cases.



Clues- The number of persons sit to the right of Q.

Inference- Here we have 2 possible cases.



Clues- Three persons sit between A and N who sits 2nd to the right of U. Any persons sit between Y and O.

Inference- Here we have 2 possible cases.



Clues- U sits at one of the extreme ends and immediate neighbour of O. On the other side of O, there are 6 persons sit between Y and O. The number of persons sit between Y and O is 6.

Inference- So, Y sits at extreme end.



Only Y sits at extreme end

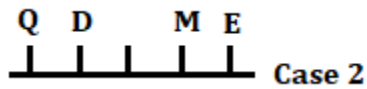
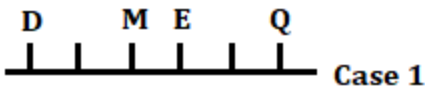
S25. Ans.(b)

Sol. Final arrangement -



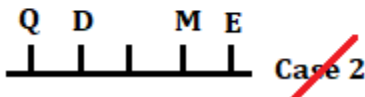
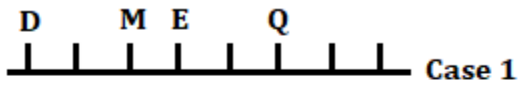
Clues- Two persons sit between M and Q. The number of persons sit between M and Q is one more than the number of persons sit between D and M. E sits 3rd to the right of D. Not more than two persons sit between M and E.

Inference- Here we have 2 possible cases.



Clues- The number of persons sit between D and E is same as the number of persons sit to the right of Q.

Inference- Here case 2 is ruled out now.



Clues- Three persons sit between A and N. Three persons sit between Y and O.

Inference-



Clues- U sits immediately next to O. The number of persons between Y and O is equal to the number of persons between D and E.

Inference- So



7th to the right

S26. Ans.(b)

Sol. Final arr

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

Clues- I attends the conference in the month having an even number of days. Two persons attend the conference between I and Q. N attends the conference two months before Q.

Inference- Here we have 3 possible cases.

Months	Case 1	Case 2	Case 3
	Persons	Persons	Persons
March			
April	I		N
May	N		
June		I	Q
July	Q	N	
August			
September		Q	I
October			

Clues- The number of persons who attend the conference is more than 10 but after P. P attends the conference before M

Inference- Hence, the final arrangement is

Months	Case 1 Persons	Case 2 Persons	Case 3 Persons
March			
April	I	F	N
May	N	P	
June	F	I	Q
July	Q	N	F
August		J	
September		Q	I
October		M	

Clues- K is one of the persons who attend the conference

Inference- So, the final arrangement is

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

S27. Ans.(c)

Sol. Final arrangement -

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

Clues- I attends the conference in the month having an even number of days. Two persons attends the conference before I.

Inference- Hence,

Months	Case 1	Case 2	Case 3
	Persons	Persons	Persons
March			
April	I		N
May	N		
June		I	Q
July	Q	N	
August			
September		Q	I
October			

Clues- The number of persons who attend the conference before N and Q is same as the number of persons attends the conference after F and I attend the conference. After J attends the conference before M but after P. P attends the conference before Q but not the first person to attend the conference.

Inference- Hence, case 1 and case 3 are ruled out now.

Months	Case 1	Case 2	Case 3
	Persons	Persons	Persons
March			
April	I	F	N
May	N	P	
June	F	I	Q
July	Q	N	F
August		J	
September		Q	I
October		M	

Clues- K is one of the persons who attends the conference.

Inference- So, the final arrangement is-

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

S28. Ans.(e)

Sol. Final arrangement

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

Clues- I attends the conference between N and Q. N attends the conference before M. J attends the conference after F. J attends the conference before M but after P. P attends the conference before N but not the first one to attend the conference.

Inference- Here we have 3 possible cases.

Months	Case 1	Case 2	Case 3
	Persons	Persons	Persons
March			
April	I		N
May	N		
June		I	Q
July	Q	N	
August			
September		Q	I
October			

Clues- The number of persons attends the conference between N and Q is same as the number of persons attends the conference between F and I. I attends the conference after F. J attends the conference before M but after P. P attends the conference before N but not the first one to attend the conference.

Inference- Here case 1 and case 3 are ruled out now.

Months	Case-1	Case 2	Case-3
	Persons	Persons	Persons
March			
April	I	F	N
May	N	P	
June	F	I	Q
July	Q	N	F
August		J	
September		Q	I
October		M	

Clues- K is one of the persons who attends the conference.

Inference- So

Months	Persons
March	K
April	F
May	P
June	I
July	N
August	J
September	Q
October	M

S29. Ans.(c)

Sol. Option (a) is incorrect because of the presence of farm ponds. Option (b) is incorrect because of the mention farm ponds. Option (c) is correct because of the mention of farm ponds. Option (d) is incorrect because of the mention of farm ponds. It is clearly

S30. Ans.(c)

Sol. The problem of water level has attracted the attention of the country. Farm ponds can help in water control and is cost effective and beneficial for rural livelihoods, so it is an ideal investment option. Only option (c) is false in context of the statement.

S31. Ans.(d)

Sol. Final arrangement

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Clues- R is senior to the one who likes green pepper and junior to Assistant Manager (AM). D is two posts senior to the one who likes Cauliflower. The number of persons junior to R is one less than the number of persons senior to the one who likes cauliflower. Q is senior to D. Even number of persons designated between Q and the one who likes green pepper.

Inference-

Designation	Person	Vegetables
General Manager (GM)	Q	
Deputy General Manager (DGM)	D	
Manager		
Assistant General Manager (AGM)		cauliflower
Assistant Manager (AM)		
Section Officer (SO)	R	
Sr. Accountant		
Clerk		green pepper

Clues- F is not senior to the one who likes eggplant. H is just senior to the one who likes carrot. One post gap between Y and the one who likes Broccoli. M is one of the persons who likes Broccoli.

Inference- So

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

S32. Ans.(d)

Sol. Final arrangement –

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Clues- R is senior to the number of persons designated between Q and S.
S is two posts senior to the number of persons designated between Q and R.

Inference-

Designation	Person	Vegetables
General Manager (GM)	Q	
Deputy General Manager (DGM)	D	
Manager		
Assistant General Manager (AGM)		cauliflower
Assistant Manager (AM)		
Section Officer (SO)	R	
Sr. Accountant		
Clerk		green pepper



Clues- F is not a Sr. accountant. U likes eggplant. H is just senior to the one who likes corn. One post gap between Y and F who likes asparagus. The one who likes carrot is just senior to the one who likes Broccoli. M is one of the persons.

Inference- So, the final arrangement is-

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

S33. Ans.(a)

Sol. Final arrangement -

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Clues- R is senior to the one who likes green pepper and junior to Assistant Manager (AM). D is two posts senior to the one who likes Cauliflower. The number of persons junior to R is one less than the number of persons senior to the one who likes cauliflower. Q is senior to D. Even number of persons designated between Q and the one who likes green pepper.

Inference-

Designation	Person	Vegetables
General Manager (GM)	Q	
Deputy General Manager (DGM)	D	
Manager		
Assistant General Manager (AGM)		cauliflower
Assistant Manager (AM)		
Section Officer (SO)	R	
Sr. Accountant		
Clerk		green pepper

Clues- F is not a General Manager. I must see the person who likes Broccoli. One post gap between Y and the person who likes Broccoli. M is one of the persons who likes Broccoli.

Inference- So

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Sol. Final arrangement –

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Clues- R is senior to the number of persons designated between Q and S.
 S is senior to the number of persons designated between Q and R.
 Q is senior to the number of persons designated between R and S.
 P is senior to the number of persons designated between R and S.
 D is two posts senior to the number of persons designated between Q and R.
 The number of persons senior to P is equal to the number of persons senior to Q.
 The number of persons senior to R is equal to the number of persons senior to S.

Inference-

Designation	Person	Vegetables
General Manager (GM)	Q	
Deputy General Manager (DGM)	D	
Manager		
Assistant General Manager (AGM)		cauliflower
Assistant Manager (AM)		
Section Officer (SO)	R	
Sr. Accountant		
Clerk		green pepper

Clues- F is not a Sr. accountant. U likes eggplant. H is just senior to the one who likes corn. One post gap between Y and F who likes asparagus. The one who likes carrot is just senior to the one who likes Broccoli. M is one of the persons.

Inference- So, the final arrangement is-

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

S35. Ans.(a)

Sol. Final arr

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

Clues- R is senior to the one who likes green pepper and junior to Assistant Manager (AM). D is two posts senior to the one who likes Cauliflower. The number of persons junior to R is one less than the number of persons senior to the one who likes cauliflower. Q is senior to D. Even number of persons designated between Q and the one who likes green pepper.

Inference-

Designation	Person	Vegetables
General Manager (GM)	Q	
Deputy General Manager (DGM)	D	
Manager		
Assistant General Manager (AGM)		cauliflower
Assistant Manager (AM)		
Section Officer (SO)	R	
Sr. Accountant		
Clerk		green pepper

Clues- F is not a General Manager. I must be a General Manager. One post gap between Y and D. The person who likes carrot is not the person who likes Broccoli. M is one of the Assistant Managers.

Inference- So

Designation	Person	Vegetables
General Manager (GM)	Q	Carrot
Deputy General Manager (DGM)	D	Broccoli
Manager	F	Asparagus
Assistant General Manager (AGM)	H	Cauliflower
Assistant Manager (AM)	Y	Corn
Section Officer (SO)	R	Cucumber
Sr. Accountant	U	Eggplant
Clerk	M	Green pepper

S36. Ans.(e)

Sol.

Logic:

Step I: First and last digit of the numbers removed.

Step II: Sum of the product of first half number and second half number

Step III: 10 is subtracted from even number and 10 is added to odd number added

Step IV: Numbers written in reverse order

Step V: Add all the digits with in the number till the unit digit and replace the number with it place value in alphabet

Input: 841782 487156 389573 724739 329454

Step I: 4178 8715 8957 2473 2945

Step II: 60 61 107 29 38

Step III: 50 71 117 39 28

Step IV: 5 17 711 93 82

Step V: E H I C A

S37. Ans.(c)

Sol.

Logic:

Step I: First and last digit of the numbers removed.

Step II: Sum of the product of first half number and second half number

Step III: 10 is subtracted from even number and 10 is added to odd number added

Step IV: Numbers written in reverse order

Step V: Add all the digits with in the number till the unit digit and replace the number with it place value in alphabet

Input: 841782 487156 389573 724739 329454

Step I: 4178 8715 8957 2473 2945

Step II: 60 61 107 29 38

Step III: 50 71 117 39 28

Step IV: 5 17 711 93 82

Step V: E H I C A

S38. Ans.(a)

Sol.

Logic:

Step I: First and last digit of the numbers removed.

Step II: Sum of the product of first half number and second half number

Step III: 10 is subtracted from even number and 10 is added to odd number added

Step IV: Numbers written in reverse order

Step V: Add all the digits with in the number till the unit digit and replace the number with it place value in alphabet

Input: 841782 487156 389573 724739 329454

Step I: 4178 8715 8957 2473 2945

Step II: 60 61 107 29 38

Step III: 50 71 117 39 28

Step IV: 5 17 711 93 82

Step V: E H I C A

S39. Ans.(e)

Sol.

Logic:

Step I: First and last digit of the numbers removed.

Step II: Sum of the product of first half number and second half number

Step III: 10 is subtracted from even number and 10 is added to odd number added

Step IV: Numbers written in reverse order

Step V: Add all the digits with in the number till the unit digit and replace the number with it place value in alphabet

Input: 841782 487156 389573 724739 329454

Step I: 4178 8715 8957 2473 2945

Step II: 60 61 107 29 38

Step III: 50 71 117 39 28

Step IV: 5 17 711 93 82

Step V: E H I C A

S40. Ans.(b)

Sol. Final arr

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

Clues- K lives with L but not in Patiala and Jaipur. Y lives in Chandigarh with W. W and Y nor live in Mysore. W and L live in the same city. H lives in Jaipur.

Inference- H

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q	Y	W
L	F	H	X
	G		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q
L	X	H	F
	A		G

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q	Y	K
X	F	H	L
A	G		

Clues- H likes the number which is a perfect square of even number. F likes the number which is four times of G likes and half of the number which is Q likes.

Inference-

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q (80)	Y	W
L	F (40)	H (100)	X
	G (10)		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q (80)
L	X	H (100)	F (40)
	A		G (10)

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q (80)	Y	K
X	F (40)	H (100)	L
A	G (10)		

Clues- The number which A likes is equal to the sum of the numbers liked by W and L. The number which is W likes is equal to the sum of the numbers liked by Q and L. The number which is thrice of the number liked by A and twice of the number liked by A. Y likes the number which is equal to the number liked by X. The number which is equal to the number liked by X.

Inference- H

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

S41. Ans.(e)

Sol. Final arrangement -

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

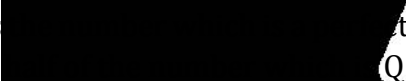
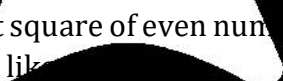
Clues- K lives only with L but not in Patiala and Jaipur. Y lives in Jaipur. Q neither live with Y nor live in Mysore. W and X live in the same city but not live with Q and Y. F live with G and one more person in the same city. H lives in Jaipur. A and W are live in the same city.

Inference- Here we have 3 possible cases.

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q	Y	W
L	F	H	X
	G		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q
L	X	H	F
	A		G

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q	Y	K
X	F	H	L
A	G		

Clues- H likes  it square of even number  is four times of G likes and  Q likes 

Inference-

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q (80)	Y	W
L	F (40)	H (100)	X
	G (10)		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q (80)
L	X	H (100)	F (40)
	A		G (10)

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q (80)	Y	K
X	F (40)	H (100)	L
A	G (10)		

47

Inference- Here case 1 and case 2 are ruled out now. So, the final arrangement is-

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

Sol. Final arr

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

Inference- Ho

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q	Y	W
L	F	H	X
	G		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q
L	X	H	F
	A		G

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q	Y	K
X	F	H	L
A	G		

Clues- H likes the number which is a perfect square of even number. F likes the number which is four times of G likes and half of the number which is O likes.

Inference-

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q (80)	Y	W
L	F (40)	H (100)	X
	G (10)		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q (80)
L	X	H (100)	F (40)
	A		G (10)

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q (80)	Y	K
X	F (40)	H (100)	L
A	G (10)		

Clues- The number of people who like the sum of the number which is W likes is equal to the number which Q and Y like thrice of the number likes by Y. Y likes by X. The number in Chandigarh and the number likes by X. The number in Chandigarh and the number likes by X.

Inference- Here we have 3 possible cases. So, the final arrangement is

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

S43. Ans.(c)

Sol. Final arrangement is

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

Clues- K lives only with L but not in Patiala and Jaipur. Y lives in Jaipur. Q neither live with Y nor live in Mysore. W and X live in the same city but not live with Q and Y. F live with G and one more person in the same city. H lives in Jaipur. A and W are live in the same city.

Inference- Here we have 3 possible cases.

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q	Y	W
L	F	H	X
	G		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q
L	X	H	F
	A		G

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q	Y	K
X	F	H	L
A	G		

Clues- H likes the number which is four times of G likes and

Inference-

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q (80)	Y	W
L	F (40)	H (100)	X
	G (10)		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q (80)
L	X	H (100)	F (40)
	A		G (10)

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q (80)	Y	K
X	F (40)	H (100)	L
A	G (10)		

Clues- The number which is Q likes is equal to the sum of the numbers like by K and L. The number which is W likes is equal to the sum of the numbers like by Q and G. L likes the number which is thrice of the number likes by K and twice of the number likes by A. Y likes the number which is less than the number likes by X. The one who likes 90 doesn't live in Chandigarh and Patiala.

Inference- Here case 1 and case 2 are ruled out now. So, the final arrangement is-

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

47

S44. Ans.(a)

Sol. Final arrangement -

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

Clues- K lives only with L but not in Patiala and Jaipur. Y lives in Jaipur. Q neither live with Y nor live in Mysore. W and X live in the same city but not live with Q and Y. F live with G and one more person in the same city. H lives in Jaipur. A and W are live in the same city.

Inference- H

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q	Y	W
L	F	H	X
	G		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q
L	X	H	F
	A		G

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q	Y	K
X	F	H	L
A	G		

Clues- H likes of G likes and is four times

Inference-

Case 1			
Mysore	Patiala	Jaipur	Chandigarh
K	Q (80)	Y	W
L	F (40)	H (100)	X
	G (10)		A

Case 2			
Mysore	Patiala	Jaipur	Chandigarh
K	W	Y	Q (80)
L	X	H (100)	F (40)
	A		G (10)

Case 3			
Mysore	Patiala	Jaipur	Chandigarh
W	Q (80)	Y	K
X	F (40)	H (100)	L
A	G (10)		

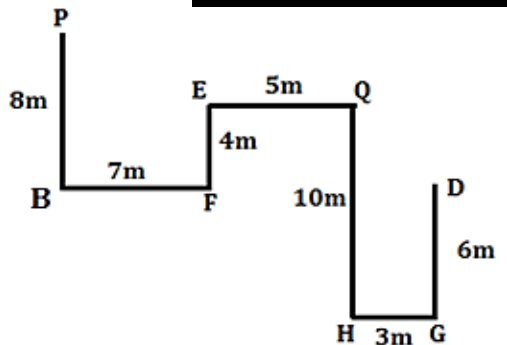
Clues- The number which is Q likes is equal to the sum of the numbers like by K and L. The number which is W likes is equal to the sum of the numbers like by Q and G. L likes the number which is thrice of the number likes by K and twice of the number likes by A. Y likes the number which is less than the number likes by X. The one who likes 90 doesn't live in Chandigarh and Patiala.

Inference- H

Mysore	Patiala	Jaipur	Chandigarh
A (30)	Q (80)	Y (50)	K (20)
W (90)	F (40)	H (100)	L (60)
X (70)	G (10)		

S45. Ans.(c)

Sol.

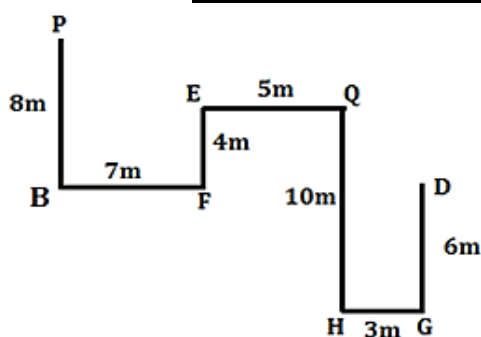


shortest distance between point D and point H = $3\sqrt{5}$ m.

$DH = \sqrt{6^2 + 3^2} = 3\sqrt{5}$ m.

S46. Ans.(e)

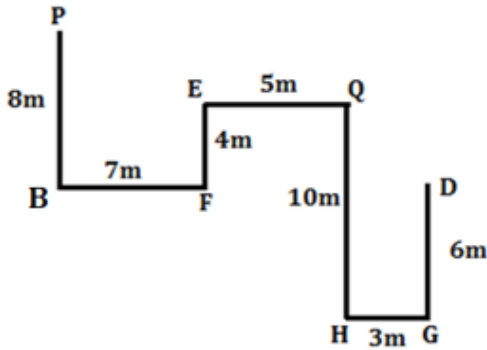
Sol.



In all options, first point is in north-west direction with respect to second point except in option e.

S47. Ans.(b)

Sol.



Point D is in B

S48. Ans.(c)

Sol. Option (a) - The government has to take steps to ensure that there will be no spread of the virus. Option (b) - Failure to take steps to ensure that there will be no spread of the virus. Option (c) - The government has to take steps to ensure that there will be no spread of the virus. Option (d) - Failure to take steps to ensure that there will be no spread of the virus.

S49. Ans.(b)

Sol. Option (a) - The government has to take steps to ensure that there will be no spread of the virus. Option (b) - Failure to take steps to ensure that there will be no spread of the virus. Option (c) - The government has to take steps to ensure that there will be no spread of the virus. Option (d) - Failure to take steps to ensure that there will be no spread of the virus.

S50. Ans.(b)

Sol. Option (I) may be the effective course of action, it's not the fallout. Option (II) may be the fallout as management is careless, they are not taking appropriate steps. Option (III) may be the fallout as after a year there is no improvement in case and if PIL will be filed, Supreme court may look into the matter.

S51. Ans.(e)

Sol. To validate the answer, refer to the first paragraph which mentions, "The newspaper industry has been in steady decline triggered by a loss in readership and ad revenue which have been migrating to other media, most notably digital."

S52. Ans.(e)

Sol. To validate the answer, refer to the first paragraph which mentions, " While the declines have been ongoing for a number of years, the pandemic and ensuing sluggish economy impacted a number of core newspaper advertisers such as retail, movies and promoting community events. These categories cut back on their marketing budgets, accelerating declines in ad revenue"

S53. Ans.(d)

Sol. To validate the answer, refer to the first paragraph which mentions, " Using a number of industry sources, Pew Research Center in their annual State of the News report, covered the latest newspaper trends. In 2020, the circulation of weekly newspapers fell 2.2% from 1.4 billion in 2019, the weekday newspaper circulation fell 2.3% from 1.1 billion in 2019, reaching an all-time low in 2020"

S54. Ans.(e)

Sol. Refer to the last paragraph which mentions, " Newspaper ad revenue fell 1.9% in 2020. For the year, ad revenue fell 1.9% from \$1.1 billion in 2019. In a first, newspaper ad revenue fell more from general advertising than from classified advertising."

S55. Ans.(d)

Sol. Refer to the last paragraph which mentions, " As newsroom employment fell 1.9% in 2020, the industry numbered 30,820 in 2020, down from 31,410 in 2019. Sadly, the employment decline was not uniform. While large newspapers were more likely to retain staff, smaller newspapers were more likely to lay off staff."

S56. Ans.(e)

Sol. Only statement (i) is correct with reference to the passage. For statement (ii), refer to the first paragraph which mentions, " While the declines have been ongoing for a number of years, the pandemic and ensuing sluggish economy impacted a number of core newspaper advertisers such as retail, movies and promoting community events. These categories cut back on their marketing budgets, accelerating declines in ad revenue" For statement (iii), refer to the last paragraph which mentions, " As newspaper revenue declines so has employment."

S57. Ans.(c)

Sol. 'Perpetually' is an antonym of 'temporarily'
deftly means in a way that is neatly skilful and quick in movement.
impeccably means in accordance with the highest standards; faultlessly.
perpetually means in a way that never ends or changes; constantly.
effrontery means insolent or impertinent behaviour.

S58. Ans.(d)

Sol. 'Mount' is a synonym of 'climbing'

dwindle means diminish gradually in size, amount, or strength.

rife means of common occurrence; widespread

perusal means the action of reading or examining something.

mount means grow larger or more numerous.

S59. Ans.(a)

Sol. The corre

emerged mea

reiterate mea

conducive me

S60. Ans.(e)

Sol. All the giv

For (i), refer t

Center in thei

For (ii), refer t

22.3 million."

For (iii), refer

steadily **climb**

For (iv), refer

billion, down

S61. Ans.(d)

Sol. Refer to

recognition o

special focus o

S62. Ans.(e)

Sol. Refer to the first paragraph which mentions," Over the years, ASHAs have played an outstanding role in making India polio free, increasing routine immunisation coverage; reducing maternal mortality; improving new-born survival and in greater access to treatment for common illnesses."

S63. Ans.(b)

Sol. To validate the answer, refer to the second paragraph which mentions," The core of the ASHA programme has been an intention to build the capacity of community members in taking care of their own health and being partners in health services."

S64. Ans.(d)

Sol. To validate the answer, refer to the second paragraph which mentions, "However, within a few years of implementation, the community health volunteer scheme met many hurdles and evaluations which followed, indicating that a key reason for sub-optimal success was a failure of community health volunteers to make a community connect. The lack of political will was another factor behind scaling down, before the community health volunteer programme was forgotten."

S65. Ans.(e)

Sol. Only statement first is correct with reference to the paragraph.

For (i) and (iii) refer to the first paragraph which mentions "The ASHAs were among the six awardees announced at [REDACTED]"

For (ii), refer to the *Health by the people*”

S66. Ans.(d)

Sol. The error is in the use of the word 'also'. It is not correct to say 'also' when the error is in the use of the word 'also'. The error is in the use of the word 'also'.

S67. Ans.(c)

Sol. ‘Standard’ means ‘ordinary’
extraordinary means very unusual or remarkable.
bodacious means excellent, admirable, or attractive.
bounty means a sum paid by the state to encourage trade.
standard means used or accepted as normal or average.
reminiscence means a story told about a past event remembered by the narrator.

S68. Ans.(c)

Sol. 'Pliable' is the ability to be easily modified.
vivid means producing powerful feelings or strong, clear images in the mind
nimble means able to think and understand quickly.
pliable means easily bent; flexible.
timid means showing a lack of courage or confidence; easily frightened.

S69. Ans.(a)

Sol. The correct word for the given blank is 'agreed'

- (a) agreed means have the same opinion about something; concur.
- (b) consent means permission for something to happen or agreement to do something.
- (c) relinquish means voluntarily cease to keep or claim; give up.
- (d) embellished means make (something) more attractive by the addition of decorative details or features.
- (e) augmented means having been made greater in size or value

S70. Ans.(c)

Sol. The correct word for the given blank is 'backbone'

- (a) intensity means the quality of being intense.
- (b) sophistication means the quality of being sophisticated.
- (c) backbone means the chief support of a system or organization.
- (d) alleviation means the action or process of making suffering, deficiency, or a problem less severe.
- (e) cognizant means having knowledge or awareness.

S71. Ans.(e)

Sol. The correct word for the given blank is 'faith'

- (a) pervasive means spreading over a wide area.
- (b) thought means a mental concept or idea.
- (c) enormous means very large in size or extent.
- (d) lament means to express grief or sorrow.
- (e) faith means belief or trust in something or someone.

S72. Ans.(b)

Sol. The correct word for the given blank is 'embodied'

- (a) rigid means not able to bend or change.
- (b) embodied means to give a visible form to an idea, quality, or feeling).
- (c) prodigious means excessively great in extent or degree.
- (d) lethargy means a lack of enthusiasm.
- (e) fiasco means a complete failure or humiliation.

S73. Ans.(d)

Sol. The correct word for the given blank is 'thriving'

- (a) clamoring means shouting loudly and insistently.
- (b) renegading means to become a person who deserts and betrays an organization, country, or set of principles.
- (c) unravelling means to come apart or to be destroyed.
- (d) thriving means growing or prospering.
- (e) inferencing means to draw conclusions from known facts.

S74. Ans.(c)

Sol. The correct word for the given blank is 'witnessed'

- (a) ominous means giving the worrying impression that something bad is going to happen; threateningly inauspicious.
- (b) insinuated means suggest or hint (something bad) in an indirect and unpleasant way.
- (c) witnessed means see (an event, typically a crime or accident) happen.
- (d) breather means a brief pause for rest.
- (e) dormant means having normal physical functions suspended or slowed down for a period of time; in or as if in a deep sleep.

S75. Ans.(a)

Sol. The correct word for the given blank is 'broadly'

- (a) broadly means in general and without considering minor details.
- (b) unintentionally means not on purpose.
- (c) proportionally means in a way that corresponds in size or amount to something else
- (d) amply means enough or more than enough; plentifully.
- (e) anxiously means in a manner resulting from or revealing anxiety.

S76. Ans.(c)

Sol. The correct

- (a) permeates
 - (b) natives mean
 - (c) circumstances
 - (d) ramifications
 - (e) exceptions
- follow a rule.

S77. Ans.(d)

Sol. (A)-(C) should be interchanged in order to make sentence meaningful. Therefore the sentence will be," Educational loan should be collateralized by guaranties of development and educational loan should be of development and

S78. Ans.(a)

Sol. (B)-(D) should be interchanged in order to make sentence meaningful. Therefore the sentence will be," Every Judge of the Supreme Court shall be appointed by the President by warrant under hand and seal after consultation with such of the Judges of the Supreme Court"

S79. Ans.(c)

Sol. (B)-(C) and (D)-(A) should be interchanged in order to make sentence meaningful. Therefore the sentence will be," The high plains of the West consist mainly of high plains

S80. Ans.(a)

Sol. (B)-(D) should be interchanged in order to make sentence meaningful. Therefore the sentence will be," Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels"

S81. Ans.(c)

Sol. (A)-(B) and (D)-(C) should be interchanged in order to make sentence meaningful. Therefore the sentence will be," Junk Food is very harmful that is slowly eating away the health of the present generation."

S82. Ans.(b)

Sol. The correct combinations to form contextually and grammatically correct sentences are 'A2E' and 'B1F'. Therefore, the correct sentences will be "The distinction between an asset and currency may not be so much legal as it is about the inherent characteristic of what is considered an asset or currency" and "Because blue is favored by so many people, it is often viewed as a non-threatening color that can seem conservative and traditional"

S83. Ans.(d)

Sol. The correct combination to form contextually and grammatically correct sentence is 'C2F'. Therefore, the correct sentence will be "The parliament has decided to demolish the old parliament complex's old building"

S84. Ans.(a)

Sol. The correct combinations to form contextually and grammatically correct sentences are '3D' and 'A2F'. Therefore, the correct sentences will be "The government has decided to demolish the old parliament complex's old building" and "All the working sites are harmful in the long run."

S85. Ans.(c)

Sol. The correct combinations to form contextually and grammatically correct sentences are 'E'. Therefore, the correct sentence will be "The government has decided to demolish the old parliament complex's old building" following a 10-year-old Australian Border Force decision.

S86. Ans.(e)

Sol. Only statement (i) is error-free. In statement (ii), 'importance' (noun) should be replaced with 'important' (adjective) to modify noun 'framework'. In statement (iii), 'can' will be 'can't' because 'can' is a modal verb and followed by V.

S87. Ans.(b)

Sol. Only statement (i) is error-free. When we use a superlative adjective, we use 'has' because it has been used here for 'water level' which is singular.

S88. Ans.(d)

Sol. Both sentences (i) and (iii) are error-free. In sentence (ii), 'effects' (noun) should be affects (verb).

S89. Ans.(c)

Sol. None of the given sentences is error-free. In statement (i), 'raise' should be 'raises' for singular noun. In sentence (ii), 'organize' should be 'organized' as the given sentence is in passive voice and its correct structure is 'is: am / is / are + past participle (3rd form of the verb)'. In sentence (iii), 'emits' should be 'emit' for noun 'cell phones' which is plural.

S90. Ans.(b)

Sol. Only statement (ii) is error-free. In statement (i), 'instinctive' (adjective) should be 'instinctively' (adverb) to modify noun 'know'. In sentence (iii), 'is' should be 'are' for 'people'.

S91. Ans.(b)

Sol. To find the 2's complement of a binary number, follow these steps:

1. Invert all the bits of the binary number (flip 0 to 1 and 1 to 0).

o The given binary number is 0101.

o After inverting, it becomes 1010.

2. Add 1 to the result.

o $1010 + 1 = 1011$

Important Knowledge

1. The 2's complement

2. To calculate

o First, invert

o Then add 1

3. The 2's complement

Knowledge Booster

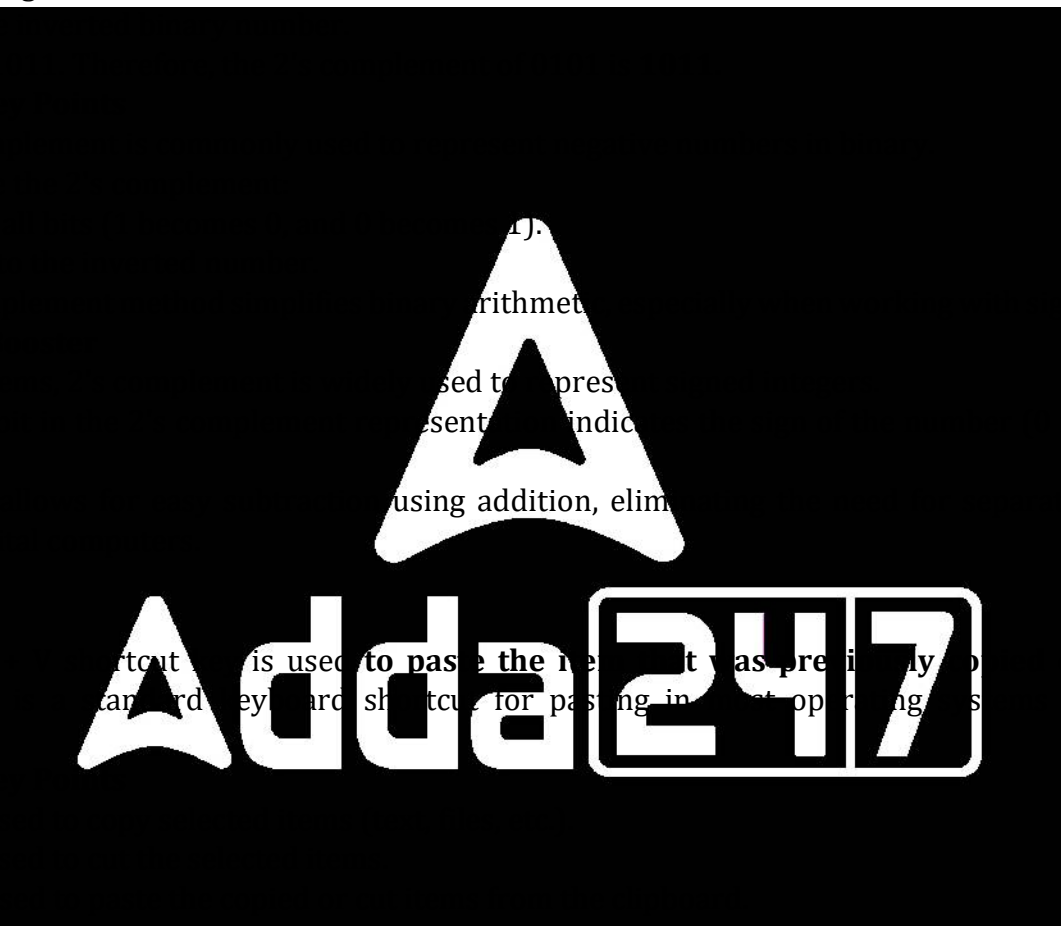
In binary system,

The leftmost bit

for negative).

This method

circuits in dig



S92. Ans.(b)

Sol. The Ctrl + V shortcut is used to paste the text that was previously copied or cut to the clipboard. It is a standard keyboard shortcut for pasting in most operating systems and software applications.

Important Knowledge

1. Ctrl + C is used

2. Ctrl + X is used

3. Ctrl + V is used

4. Keyboard shortcuts help improve efficiency in handling text and file management.

5. Many software applications, including word processors, spreadsheets, and file explorers, support the Ctrl + V shortcut.

Knowledge Booster

Clipboard: The clipboard is a temporary storage area for items that have been cut or copied. The data remains on the clipboard until new data is copied or the system is restarted.

Efficiency: Using keyboard shortcuts like Ctrl + C, Ctrl + X, and Ctrl + V can significantly speed up the process of copying, cutting, and pasting data.

Multitasking: These shortcuts are commonly used in various applications, from word processors to graphic design software, making tasks more streamlined.

S93. Ans.(b)

Sol. In MS PowerPoint, the footer option is located under the **Insert** tab. From this tab, you can add headers, footers, dates, and slide numbers to your slides by selecting the "Header & Footer" option.

Important Key Points

1. The **Insert** tab allows you to add various elements to your slides, including text boxes, images, tables, and footers.
2. The **Header & Footer** option lets you insert footers, dates, and slide numbers on all or selected slides.
3. You can customize the content of the footer, such as adding text or a slide number.

Knowledge Booster

Footers in PowerPoint allow you to display additional information, such as dates, slide numbers, or author names, at the bottom of each slide.

Headers & Footers are used to provide consistent information across all slides in a presentation.

Adding footers can include details like slide numbers and dates, helping with navigation and organization.

S94. Ans.(c)

Sol. The **.xlsx** format is used by Microsoft Excel for saving spreadsheets. It is the newer format, replacing the older **.xls** format.

The **.xlsx** format supports multiple worksheets, complex formulas, and advanced formatting options.

Important Key Points

1. **.xls** is a file format used by Microsoft Excel for saving spreadsheets.
2. Files with **.xls** extension store data in rows and columns, supporting formulas, charts, and formatting.
3. The newer version of Excel uses the **.xlsx** extension, which offers better data compression and supports more features like better data compression and more features like better data compression.
4. **Excel files** can be opened using Microsoft Excel or other compatible spreadsheet software, allowing for editing, saving, and sharing charts and graphs.

Knowledge Booster

Excel is widely used in business, finance, and data analysis for creating and managing spreadsheets.

The **.xls** format supports features such as multiple worksheets, complex formulas, and advanced formatting options like cell colors and borders.

With the introduction of **.xlsx**, Excel improved its ability to handle larger data sizes and offered better performance.

S95. Ans.(b)

Sol. The **.wav** extension is associated with **audio files**. It stands for **Waveform Audio File Format** and is commonly used for storing uncompressed audio data, providing high-quality sound. The format was developed by Microsoft and IBM.

Important Key Points

1. **.wav** files store audio data in a raw, uncompressed format, resulting in large file sizes but high sound quality.
2. This format is often used in professional audio editing and recording due to its lossless nature.
3. Other common audio file formats include **.mp3**, which uses compression to reduce file size at the cost of some audio quality.

Knowledge Booster

WAV files are lossless, meaning they preserve all the audio data, making them ideal for sound engineers and audio editors who require the highest quality.

Unlike **.mp3** or other compressed formats, **.wav** files do not lose data during the compression process, but they require more storage space.

.wav files are supported on most media players and are often used for short sound effects or loops in multimedia applications.

S96. Ans.(a)

Sol. Cache is a type of **volatile memory**, which means it loses its stored data when the power is turned off.

Cache memory is used to store frequently accessed data, making it much faster to retrieve than data stored in main memory by the CPU, making it much faster than main memory.

Important Key Points

1. Cache memory is a type of volatile memory.
2. It stores copies of data from main memory for a short time.
3. Cache is classified into different levels, such as L1, L2, and L3.

Knowledge Booster

Volatile memory is a type of memory that loses its stored data when power is turned off. Once power is lost, the data is lost.

Cache memory is a type of volatile memory that stores frequently accessed data to speed up processing by the CPU, ensuring faster execution of instructions.

Non-volatile memory is a type of memory that retains its stored data even when power is off, unlike cache memory.

S97. Ans.(c)

Sol. The **Theme** feature in Microsoft PowerPoint allows you to apply a consistent look and feel to your slides, including background designs, font styles, and colors.

Important Key Points

1. The **Design** tab shows users to apply themes, customize slide size, and background styles.
2. Themes in PowerPoint help in maintaining uniformity in design across all slides in a presentation.
3. You can customize themes to match your presentation's purpose.

Knowledge Booster

Themes in PowerPoint are pre-designed layouts and color schemes that you can apply to your slides, making it easier to create a professional presentation by applying pre-designed layouts and color schemes.

You can switch themes anytime during the creation of the presentation, and it will automatically update the entire slide deck.

Customizing themes allows you to adapt the default themes to align with corporate branding or personal preferences.

S98. Ans.(c)

Sol. A **Trojan Horse** does not self-replicate. Unlike viruses and worms, a Trojan Horse relies on users to execute it by disguising itself as legitimate software. Once activated, it can cause harm to the system but does not spread itself to other files or systems automatically.

Important Key Points

1. **Viruses** and **worms** can replicate themselves and spread to other systems or files without user intervention.
2. A **Trojan Horse** requires human action to activate, typically by being downloaded or executed.
3. **Bacteria** is a biological organism that can self-replicate, but this is outside the realm of computer systems.
4. **Spyware** is designed to secretly monitor and collect data from users but generally does not replicate itself.

Knowledge Booster

Viruses attach themselves to files or programs and spread when the infected file is opened or executed.

Worms are self-replicating programs that spread across networks without the need for a host file.

Trojan Horse is a type of malware that disguises itself as a legitimate program, but they do not spread independently.

Spyware is designed to secretly monitor and collect data from users and is not designed to replicate itself.

S99. Ans.(c)

Sol. A **Monitor** is a visual input device that allows users to see and interact with the computer. It receives data from the computer and displays it on the screen.

Important Key Points

1. Output devices convert digital data from the computer into a form that is usable by humans, such as visual, auditory, or printed form.
2. Examples of output devices include monitors, speakers, and printers.
3. Input devices allow users to provide data and control signals to the computer.

Knowledge Booster

Monitor: Displays visual output, such as text, images, and videos.

Printer: An output device that produces hard copies of digital documents or images.

Speakers: Output devices that convert digital audio signals into sound waves.

Input Device: Devices that allow users to provide data and commands to the computer, such as keyboards, mice, and touchscreens.

S100. Ans.(a)

Sol. The **Ctrl +]** keyboard shortcut is used to **increase the font size** of the selected text in applications like Microsoft Word. Each press increases the font size by one point.

Important Key Points

1. **Ctrl +]** increases the font size, while **Ctrl + [** decreases the font size in applications like Microsoft Word and PowerPoint.
2. These shortcuts provide a quick way to adjust the size of text without needing to use the mouse or navigate through menus.
3. Changing the font size can improve readability and emphasize specific parts of a document.

Knowledge Booster

Keyboard shortcuts like **Ctrl +]** and **Ctrl + [** can save time and increase productivity when formatting documents.

Font size adjustments are useful in presentations, reports, and documents to emphasize headings or make the content more legible.

Understanding and using various keyboard shortcuts allows users to work more efficiently across different applications.

S101. Ans.(b)

Sol. Spam refers to unsolicited, irrelevant, or inappropriate messages sent over the internet, typically in bulk, especially email. It can be an annoyance to recipients and can be an

Important Key

1. **Spam** is unsolicited and often found in social media, forums, and email.
2. Spam can be used for phishing, malware distribution, and other malicious activities.
3. Email providers use filters to detect and block spam, but it can still reach users' inboxes.

Knowledge B

Phishing is a type of cyber attack where attackers attempt to steal sensitive information by disguising as a legitimate email or website.

Adware refers to software that displays or downloads additional content, often bundled with free programs or services.

Malware is a broad term for malicious software, including viruses, worms, and trojans.

Spam not only refers to unsolicited messages but also to potential security risks when users click on malicious links or download attachments.

S102. Ans.(c)

Sol. Google Chrome is not an operating system; it is a web browser developed by Google. The operating system developed by Google is **Android**.

Windows, **Linux**, and **macOS** are other operating systems.

Important Key

1. **Windows**, **Linux**, and **macOS** are operating systems, while **Android** is a mobile operating system.
2. **Chrome** is a web browser, while **Chrome OS** is an operating system designed primarily for Chromebooks.
3. Operating systems are responsible for managing files, executing applications, and controlling hardware resources.

Knowledge Booster

Windows is the most widely used operating system for personal computers.

Linux is an open-source operating system often used in servers and desktops.

macOS is the operating system used in Apple's Macintosh computers.

Android is a mobile operating system primarily used in smartphones and tablets.

S103. Ans.(d)

Sol. The **Animations** tab in MS PowerPoint is used to add animation effects to slides. This tab allows you to apply various entrance, exit, and emphasis animations to text and objects, as well as motion paths.

Important Key Points

1. The **Animations** tab provides tools for applying and customizing animations to objects, such as text, images, or charts.
2. You can control the sequence and timing of animations to create dynamic presentations.
3. There are different types of animations, including **entrance**, **exit**, **emphasis**, and **motion paths**.

Knowledge Booster

Animations

Appear, move, or disappear on a slide. In addition to animations, you can control the sequence and timing of animations.

Transitions, which control the way one slide changes when moving from one slide to the next.

S104. Ans.(c)

Sol. Photoshop is a product of Adobe, primarily for image editing. Other options—Microsoft Excel, Microsoft PowerPoint, and Microsoft Word—all part of the Microsoft Office suite.

Important Key Points

1. Microsoft Office is a productivity software that includes Word, Outlook, and other applications.
2. Photoshop is a software developed by Adobe, not Microsoft, for image editing.
3. MS Office products are used for tasks like document creation, spreadsheets, and presentations, and email communication.

Knowledge Booster

Microsoft Word is a word processing software used for creating and editing documents.

Microsoft Excel is a spreadsheet software used for data analysis.

Microsoft PowerPoint is a presentation software used for creating and delivering presentations.

Microsoft Outlook is an email client software used for managing emails and calendars.

Adobe Photoshop is a powerful tool for graphic design, image editing, and photo manipulation.

Microsoft Office is a suite of productivity applications including Word, Excel, PowerPoint, Outlook, and Access.

Microsoft Word is used for creating and editing text documents.

Microsoft Excel is used for creating and editing spreadsheets.

Microsoft PowerPoint is used for creating and delivering presentations.

S105. Ans.(d)

Sol. Norton is an antivirus software that helps protect computers and devices from viruses, malware, and other security threats. It scans, detects, and removes harmful software to keep systems safe.

Important Key Points

1. **Antivirus software** is designed to detect, prevent, and remove malicious software (malware) from computers and networks.
2. Examples of popular antivirus software include **Norton**, **McAfee**, **Avast**, and **Kaspersky**.
3. Antivirus programs provide real-time protection and regular system scans to keep devices secure.

Knowledge Booster

Antivirus software not only detects and removes viruses but also provides protection against malware, spyware, and ransomware.

Regular updates are essential for antivirus software to stay effective against new and emerging threats. Some antivirus programs offer additional features like firewall protection, web browsing security, and parental controls.

S106. Ans.(a)

Sol. Pressing the **Esc** (Escape) key on the keyboard stops the slide show in Microsoft PowerPoint and returns the user to the normal view or editing mode.

Important Key

1. The **Esc** key stops the slide show and returns the user to the normal view or editing mode.
2. **Shift + F5** starts the slide show from the beginning.
3. Other keyboard shortcuts like **F5**, **F6**, **F7**, **F8**, **F9**, **F10**, **F11**, and **F12** do not stop the slide show.

Knowledge Booster

The **Esc** key is used to stop various applications, such as presentations, video playback, and games. In Microsoft PowerPoint, it is used to stop the slide show and return to the normal view or editing mode. Other keyboard shortcuts for navigating through slides, such as **F5** (start slide show), **F6** (previous slide), **F7** (next slide), **F8** (previous slide show), **F9** (next slide show), **F10** (previous slide show), **F11** (next slide show), and **F12** (stop slide show), are also available.

S107. Ans.(c)

Sol. macOS is an operating system developed by Apple Inc. for its Macintosh line of computers. It is a Unix-like operating system that runs on Intel and Apple Silicon processors.

Important Key

1. macOS is the operating system for Apple's desktop and laptop computers, such as the iMac, MacBook, and Mac Mini.
2. **Windows** is a family of operating systems developed by Microsoft for PCs, while **Linux** is an open-source operating system used across various platforms.
3. **iOS** is the operating system for Apple's iPhone and iPad, while **Android** is the most widely used mobile operating system.

Knowledge Booster

macOS provides a variety of features, including Spotlight, Siri, and Apple Pay.

Windows is the most widely used operating system for personal computers globally.

Linux is known for its flexibility and is widely used in servers and specialized systems.

iOS and **Android** are mobile operating systems, each dominating different segments of the smartphone market.

S108. Ans.(a)

Sol. An external port, such as a **USB port** or **parallel port**, connects the motherboard to external devices like a **printer**. These ports provide an interface for external peripherals to communicate with the computer.

Important Key Points

1. External ports like **USB**, **parallel**, and **Ethernet** ports connect peripherals such as printers, external drives, and networking equipment to the computer.
2. Internal components like the **processor**, **RAM**, and **hard disk** are connected directly to the motherboard via internal slots and ports.
3. Printers are usually connected through **USB** ports in modern computers, although some may use wireless connections or older parallel ports.

Knowledge Booster

External ports allow communication between the computer and peripherals, providing a flexible interface for connecting multiple devices.

Common external ports include USB, parallel, and Ethernet. Older printers may be connected via parallel ports, while modern printers often use USB or connect wirelessly over a network.

S109. Ans.(b)

Sol. PROM (Programmable Read-Only Memory) is a type of non-volatile memory that stores data permanently. It is used for storing firmware or boot code. Unlike volatile memory, the data remains even when the power is turned off.

Important Key Points

1. **PROM** is non-volatile memory that stores data permanently.
2. Once a **PROM** is programmed, the data cannot be changed.
3. **EPROM** (Erasable Programmable Read-Only Memory) is a type of non-volatile memory that can be erased and reprogrammed.

Knowledge Booster

PROM is used for storing firmware or boot code. It is a type of non-volatile memory that stores data permanently. Unlike volatile memory, the data remains even when the power is turned off. **EPROM** and **EEPROM** can be erased and reprogrammed. **PROM** is programmed using a special device known as a **PROM programmer**.

S110. Ans.(c)

Sol. Drafts are emails that are partially written or not yet ready to be sent. They are stored in the **Drafts** folder and can be edited, completed, and sent later when the user is ready.

Important Key Points

1. The **Drafts** folder stores emails that are partially written or not yet ready to be sent.
2. Drafts can be edited, completed, and sent later when the user is ready.
3. Saving an email as a draft ensures that work on the email isn't lost if the user needs to close the email client or take a break.

Knowledge Booster

Drafts are particularly useful for lengthy emails or emails that require input or attachments that may not be immediately available.

Most email services automatically save drafts periodically to ensure no content is lost in case of interruptions (such as loss of power or closing the email application).

Once a draft email is completed and sent, it moves from the **Drafts** folder to the **Sent** folder.

S111. Ans.(c)**Sol.**Let bottles manufactured by B in 2022 be $3x$ Bottles manufactured by A in 2023 = $3x \times \frac{4}{3} = 4x$ Bottles manufactured by A in 2022 = $4x+25$ The bottles manufactured by C in 2023 = $\frac{4}{5} \times (4x + 25)$

$$(4x + 25) + 3x + 26 = 52 \times 3$$

$$7x + 51 = 156$$

$$7x = 105$$

$$x = 15$$

Companies	Bottles manufactured in 2022	Bottles manufactured in 2023
A	85	60
B	45	
C	26	68

Bottles manufactured by B in 2023 = $\frac{5}{4} \times 60 = 75$ Required ratio = $45 : 75 = 3 : 5$ **S112. Ans.(c)****Sol.**Let bottles manufactured by B in 2022 be $3x$ Bottles manufactured by A in 2023 = $3x \times \frac{4}{3} = 4x$ Bottles manufactured by A in 2022 = $4x+25$ The bottles manufactured by C in 2023 = $\frac{4}{5} \times (4x + 25)$

$$(4x + 25) + 3x + 26 = 52 \times 3$$

$$7x + 51 = 156$$

$$7x = 105$$

$$x = 15$$

Companies	Bottles manufactured in 2022	Bottles manufactured in 2023
A	85	60
B	45	
C	26	68

Required percentage = $\frac{26}{60} \times 100 = 43.33 \approx 43\%$ **S113. Ans.(e)****Sol.**Let bottles manufactured by B in 2022 be $3x$ Bottles manufactured by A in 2023 = $3x \times \frac{4}{3} = 4x$

Bottles manufactured by A in 2022 = $4x+25$

The bottles manufactured by C in 2023 = $\frac{4}{5} \times (4x + 25)$

$$(4x + 25) + 3x + 26 = 52 \times 3$$

$$7x + 51 = 156$$

$$7x = 105$$

$$x = 15$$

Companies	Bottles manufactured in 2022	Bottles manufactured in 2023
A	85	60
B	45	
C	26	68

Bottles manu

We no data ab

So, can't be de

S114. Ans.(d)

Sol.

Let bottles manufactured by B in 2022 be $3x$

Bottles manufactured by A in 2023 = $3x \times \frac{4}{3} = 4x$

Bottles manufactured by A in 2022 = $4x+25$

The bottles manufactured by C in 2023 = $\frac{4}{5} \times (4x + 25)$

$$(4x + 25) + 3x + 26 = 52 \times 3$$

$$7x + 51 = 156$$

$$7x = 105$$

$$x = 15$$

Companies	Bottles manufactured in 2022	Bottles manufactured in 2023
A	85	60
B	45	
C	26	68

Bottles manufactured by B in 2021 = $\frac{68}{4} \times 3 = 51$

Required sum = $51 + 45 = 96$

S115. Ans.(b)

Sol.

Let bottles manufactured by B in 2022 be $3x$

Bottles manufactured by A in 2023 = $3x \times \frac{4}{3} = 4x$

Bottles manufactured by A in 2022 = $4x+25$

The bottles manufactured by C in 2023 = $\frac{4}{5} \times (4x + 25)$

$$(4x + 25) + 3x + 26 = 52 \times 3$$

$$7x + 51 = 156$$

$$7x = 105$$

$$x = 15$$

Companies	Bottles manufactured in 2022	Bottles manufactured in 2023
A	85	60
B	45	
C	26	68

$$\text{Required revenue} = \frac{1}{2} \times 26 \times 8 = \text{Rs. } 104$$

S116. Ans.(e)

Sol. The patte

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$8 \times 3 = 24$$

$$24 \times 4 = 96$$

$$96 \times 5 = 480$$

S117. Ans.(c)

Sol. The patte

$$13 \times 2 + 1 = 2$$

$$13 \times 3 + 1 = 4$$

$$13 \times 4 + 1 = 5$$

$$13 \times 5 + 1 = 6$$

$$13 \times 6 + 1 = 7$$

$$13 \times 7 + 1 = 9$$

S118. Ans.(e)

Sol. The patte

$$101 + 1^3 = 10$$

$$102 + 2^3 = 11$$

$$110 + 3^3 = 13$$

$$137 + 4^3 = 201$$

$$201 + 5^3 = 326$$

S119. Ans.(b)

Sol. The pattern of the series:

$$1110 + (12 \times 1) = 1122$$

$$1122 + (12 \times 2) = 1146$$

$$1146 + (12 \times 3) = \mathbf{1182}$$

$$1182 + (12 \times 4) = 1230$$

$$1230 + (12 \times 5) = 1290$$



S120. Ans.(c)

Sol. The pattern of the series:

$$22 + 2^3 = 30$$

$$30 + 3^3 = 57$$

$$57 + 5^3 = 182$$

$$182 + 7^3 = 525$$

$$525 + 11^3 = \mathbf{1856}$$

S121. Ans.(c)

Sol.

For metro,

Total people travelling from metro = 330

$$\text{Males travelling from metro} = \frac{5}{11} \times 330 = 150$$

$$\text{Females traveling from metro} = 330 - 150 = 180$$

Similarly,

Transportations	Total people travelling	Males	Females
Metro	330	150	180
Autos	360	240	120
Cars	300	130	170
Buses	450	200	250

$$\text{Males traveling from autos on Sunday} = \frac{65}{100} \times 180 = 117$$

$$\text{Total people travelling from Autos on Sunday} = \frac{450}{2} = 225$$

$$\text{Females travelling from autos on Sunday} = 225 - 117 = 108$$

S122. Ans.(d)

Sol.

For metro,

Total people travelling from metro = 330

$$\text{Males travelling from metro} = \frac{5}{11} \times 330 = 150$$

$$\text{Females traveling from metro} = 330 - 150 = 180$$

Similarly,

Transportations	Total people travelling	Males	Females
Metro	330	150	180
Autos	360	240	120
Cars	300	130	170
Buses	450	200	250

ATQ,

$$240 \times Y + 6000 \times 120 = 330Y$$

$$720000 = 90Y$$

$$8000 = Y$$

$$\text{Required value} = 8000 \times 0.5 = 4000$$

S123. Ans.(e)**Sol.**

For metro,

Total people travelling from metro = 330

Males travelling from metro = $\frac{5}{11} \times 330 = 150$ Females traveling from metro = $330 - 150 = 180$

Similarly,

Transportations	Total people travelling	Males	Females
Metro	330	150	180
Autos	360	240	120
Cars	300	130	170
Buses	450	200	250

School going females using cars = $170 \times \frac{11}{17} = 110$ Office going females using cars = $170 \times \frac{6}{17} = 60$

Office going males using cars = 75% of 60 = 45

School going males using cars = $130 - 45 = 85$

Required ratio = 85: 110 = 17:22

S124. Ans.(a)**Sol.**

For metro,

Total people travelling from metro = 330

Males travelling from metro = $\frac{5}{11} \times 330 = 150$ Females traveling from metro = $330 - 150 = 180$

Similarly,

Transportations	Total people travelling	Males	Females
Metro	330	150	180
Autos	360	240	120
Cars	300	130	170
Buses	450	200	250

Females travelling from Rickshaws = $240 \times 3 - (180 + 120) = 420$ The males traveling from Rickshaws = $\frac{3}{5} \times 200 = 120$ Required percentage = $\frac{120}{420} \times 100 = 28\frac{4}{7}\%$ **S125. Ans.(b)****Sol.**

For metro,

Total people travelling from metro = 330

Males travelling from metro = $\frac{5}{11} \times 330 = 150$ Females traveling from metro = $330 - 150 = 180$

Similarly,

Transportations	Total people travelling	Males	Females
Metro	330	150	180
Autos	360	240	120
Cars	300	130	170
Buses	450	200	250

$$X = (170+250)-(150+240)$$

$$X = 30$$

$$X^2 = 900$$

S126. Ans.(e)

Sol.

$$\text{I. } x^2 + 10x - 75 = 0$$

$$x^2 + 15x - 5x - 75 = 0$$

$$x(x + 15) - 5(x + 15) = 0$$

$$(x - 5)(x + 15) = 0$$

$$x = 5, -15$$

$$\text{II. } y^2 + 13y + 22 = 0$$

$$y^2 + 11y + 2y + 22 = 0$$

$$y(y + 11) + 2(y + 11) = 0$$

$$(y + 2)(y + 11) = 0$$

$$y = -2, -11$$

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

S127. Ans.(a)

Sol.

$$\text{I. } y^2 + 16y + 55 = 0$$

$$y^2 + 11y + 5y + 55 = 0$$

$$y(y + 11) + 5(y + 11) = 0$$

$$(y + 5)(y + 11) = 0$$

$$y = -5, -11$$

$$\text{II. } 2x^2 - 3x - 14 = 0$$

$$2x^2 - 7x + 4x - 14 = 0$$

$$x(2x - 7) + 2(2x - 7) = 0$$

$$(x + 2)(2x - 7) = 0$$

$$x = -2, \frac{7}{2}$$

So, $x > y$

S128. Ans.(d)

Sol.

$$\text{I. } y = \sqrt{169}$$

$$y = 13$$

$$\text{II } 4x^2 = 676$$

$$x^2 = 169$$

$$x = -13, 13$$

So, $x \leq y$

S129. Ans.(c)

Sol.

$$\text{I. } 3x^2 - 5x - 28 = 0$$

$$3x^2 - 12x + 7x - 28 = 0$$

$$3x(x - 4) + 7(x - 4) = 0$$

$$(3x + 7)(x - 4) = 0$$

$$x = -\frac{7}{3}, 4$$

$$\text{II. } y^2 - 10y + 25 = 0$$

$$y^2 - 5y - 5y + 25 = 0$$

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

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

$$y = 5, 5$$

So, $x < y$

S130. Ans.(e)

Sol.

$$\text{I. } x^2 + 7x - 18 = 0$$

$$x^2 + 9x - 2x - 18 = 0$$

$$x(x + 9) - 2(x + 9) = 0$$

$$(x + 9)(x - 2) = 0$$

$$x = -9, 2$$

$$\text{II. } y^2 - y - 42 = 0$$

$$y^2 - 7y + 6y - 42 = 0$$

$$(y + 6)(y - 7) = 0$$

$$y = -6, 7$$

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

S131. Ans.(d)

Sol.

Departments	Employees
IT	$\frac{72}{360} \times 700 = 140$
Production	$\frac{64.8}{360} \times 700 = 126$
Manufacturing	$\frac{90}{360} \times 700 = 175$
HR	$\frac{79.2}{360} \times 700 = 154$
Supplier	$\frac{54}{360} \times 700 = 105$

Let female employees in IT = x

Male employees in IT = $x - 50$

ATQ.

$$x + x - 50 = 140$$

$$2x = 190$$

$$x = 95$$

$$\text{Required answer} = 154 - 45 = 109$$

S132. Ans.(e)

Sol.

Departments	Employees
IT	$\frac{72}{360} \times 700 = 140$
Production	$\frac{64.8}{360} \times 700 = 126$
Manufacturing	$\frac{90}{360} \times 700 = 175$
HR	$\frac{79.2}{360} \times 700 = 154$
Supplier	$\frac{54}{360} \times 700 = 105$

Required ratio

$$266 : 259 = 38$$

S133. Ans.(d)

Sol.

Departments	Employees
IT	$\frac{72}{360} \times 700 = 140$
Production	$\frac{64.8}{360} \times 700 = 126$
Manufacturing	$\frac{90}{360} \times 700 = 175$
HR	$\frac{79.2}{360} \times 700 = 154$
Supplier	$\frac{54}{360} \times 700 = 105$

$$\text{Required percentage} = \frac{90}{360} \times 100 = 25\%$$

S134. Ans.(b)

Sol.

Departments	Employees
IT	$\frac{72}{360} \times 700 = 140$
Production	$\frac{64.8}{360} \times 700 = 126$
Manufacturing	$\frac{90}{360} \times 700 = 175$
HR	$\frac{79.2}{360} \times 700 = 154$
Supplier	$\frac{54}{360} \times 700 = 105$

Required difference

$$= 280 - 280 = 0$$

S135. Ans.(a)

Sol.

Departments	Employees
IT	$\frac{72}{360} \times 700 = 140$
Production	$\frac{64.8}{360} \times 700 = 126$
Manufacturing	$\frac{90}{360} \times 700 = 175$
HR	$\frac{79.2}{360} \times 700 = 154$
Supplier	$\frac{54}{360} \times 700 = 105$

$$\text{Number of employees in marketing} = 140 \times \frac{125}{100} = 175$$

$$\text{Required percentage} = \frac{(175 - 105)}{175} \times 100 = 40\%$$

S136. Ans.(e)

Sol.

$$\text{Time taken by C} = \frac{2}{3} \times 36 = 24 \text{ days}$$

$$\text{Time taken by A} = \frac{5}{4} \times 24 = 30 \text{ days}$$

$$\text{Total work} = 360 \text{ (LCM of 24, 30 and 36)}$$

$$\text{Efficiency of C} = \frac{360}{24} = 15 \text{ units/days}$$

$$\text{Efficiency of A} = \frac{360}{30} = 12 \text{ units/days}$$

$$\text{Efficiency of B} = \frac{360}{36} = 10 \text{ units/days}$$

$$\text{Required days} = \frac{360}{(15+12+10)} = 9.729 \approx 10 \text{ days}$$

S137. Ans.(e)

Sol.

Let speed of stream be $2x$ km/hr.

So, speed of boat in still water $= 2x \times \frac{250}{100} = 5x$ km/hr.

ATQ,

$$\frac{126}{(5x-2x)} - \frac{126}{(5x+2x)} = 4$$

$$\frac{126}{3x} - \frac{126}{7x} = 4$$

$$x = 6$$

Required answer $= 5x - 2x = 3x = 18$ km/hr

S138. Ans.(b)

Sol.

ATQ,

$$R\% = \frac{3rd\ year\ C.I. - 2nd\ year\ C.I.}{2nd\ year\ C.I.} \times 100$$

$$= \frac{3967.5 - 3450}{3450} \times 100$$

$$= 15\%$$

S139. Ans.(d)

Sol.

Let the four numbers be a, b, c, d

ATQ,

$$b = 3a; \quad c = 6b$$

$$a : b : c = 1 : 3 : 18 \text{ or } x : 3x : 18x$$

$$\frac{a+b+c}{3} = 66$$

$$x = 9$$

$$d = 4 + 66 = 70$$

$$\text{Required average} = \frac{a+d}{2} = \frac{9+70}{2} = 39.5$$

S140. Ans.(d)

Sol.

Time taken by car X to travels from A to B $= \frac{100}{50} = 2$ hours

Total distance travel by car Y from A to C $= 2 \times 60 = 120$ km

Distance between C and B $= 120 - 100 = 20$ km

S141. Ans.(c)

Sol. Let the investment of Ram and Shyam be Rs. $3P$ and Rs. $4P$ respectively.

Let Ram and Shyam invested for ' a ' months and ' b ' months respectively

ATQ -

$$\frac{3P \times a}{4P \times b} = \frac{2700}{5100 - 2700}$$

$$\frac{3a}{4b} = \frac{9}{8}$$

$$a : b = 3m : 2m$$

ATQ,

$$3m - 2m = 3$$

$$m = 3$$

Investment period of Ram = 9 months

S142. Ans.(c)

Sol. Let the present age of father = x years

Present age of son = $8x + 3$ years

Present age of mother = $11x + 8$ years

Now,

Sum of ages of father and mother = 57 years

Sum of present ages of father and mother = 57 years

$$11x + 8x + 3 = 57$$

$$19x = 57$$

$$x = 3$$

Present age of father = 3 years

When son is 1 year old, father's age = 4 years

Age of father = 4 years

S143. Ans.(b)

Sol.

Let cost price be Rs.100a

$$\text{Selling price} = 100a \times \frac{112.5}{100} = \text{Rs. } 112.5a$$

$$\text{Marked price} = \frac{112.5a}{75} \times 100 = \text{Rs. } 150a$$

$$\text{Mark up percentage} = \frac{150a - 100a}{100a} \times 100 = 50\%$$

Value of X = 50

$$\text{Required value} = \frac{50}{2} = 25$$

S144. Ans.(b)

Sol.

$$\text{Quantity of water} = 60 \times \frac{5}{12} = 25 \text{ liters}$$

$$\text{Quantity of milk} = 60 - 25 = 35 \text{ liters}$$

$$\text{Now water left after replacement} = 25 - 24 \times \frac{5}{12} = 25 - 10 = 15 \text{ liters}$$

$$\text{Milk left after replacement} = 35 - 24 \times \frac{7}{12} = 35 - 14 = 21 \text{ liters}$$

$$\text{New quantity of milk} = 21 + 10 = 31 \text{ liters}$$

$$\text{Required ratio} = 31 : 15 : 24$$

S145. Ans.(e)

Sol.

Let the speed of the train be a m/s.

ATQ,

$$\frac{x+50+x}{19} = \frac{x}{9}$$

$$18x + 450 = 19x$$

$$x = 450 \text{ m}$$

$$a = \frac{450}{9} = 50 \text{ m/s}$$

$$\text{Required time} = \frac{450+250}{50+72 \times \frac{5}{18}} = \frac{700}{70} = 10 \text{ sec.}$$

S146. Ans.(e)

Sol. ? = 2549

$$? = 5105 - 38$$

$$? = 1280$$

S147. Ans.(b)

Sol. ? = 1090

$$? = 10900 - 6$$

$$? = 4825$$

S148. Ans.(e)

Sol. 62 / (31 ×

$$? + 1 = 8$$

$$? = 7$$

S149. Ans.(b)

Sol. 1728/1728

$$? = 1332$$

S150. Ans.(a)

Sol. ? = 2020

$$? = 75$$

S151. Ans.(d)

Sol.

Let speed of current be x kmph

$$\text{Time taken in upstream} = \frac{56}{48-x} = 1.4$$

$$(48 - x) \times 1.4 = 56$$

$$x = 8$$

$$\text{Time taken in downstream} = 1.4 \times \frac{100}{112} = 1.25$$

Let the distance covered in downstream be D km

$$\frac{D}{48+8} = 1.25$$

$$D = 70 \text{ km}$$



S152. Ans.(a)

Sol.

$$\text{Time taken in upstream on day3} = \frac{40}{36-12} \times 60 = 100 \text{ minutes}$$

$$\text{Time taken in downstream on day3} = \frac{7}{10} \times 100 = 70 \text{ minutes}$$

$$\text{Distance travelled by boat on day3 in downstream} = (36 + 12) \times \frac{70}{60} = 56 \text{ km}$$

$$\text{Required difference} = 56 - 40 = 16 \text{ km}$$

S153. Ans.(e)

Sol.

Let Speed of stream be x kmph

$$\text{Distance travelled by boat in downstream on day5} = \frac{125}{100} \times 48 = 60 \text{ km}$$

$$\frac{\frac{48}{(42-x)}}{\frac{60}{42+x}} = \frac{16}{15}$$

$$960/(42+x) = 720/(42-x)$$

$$30240 + 720x = 40320 - 960x$$

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

S154. Ans.(c)

Sol.

$$\text{Upstream speed} = \frac{48}{2} = 24 \text{ kmph}$$

$$\text{Speed of the current} = 42 - 24 = 18 \text{ kmph}$$

S155. Ans.(d)

Sol.

$$\text{Speed of stream on day2} = x \text{ kmph}$$

$$\text{Speed of stream on day4} = y \text{ kmph}$$

$$\frac{84}{52+x} = 1.5$$

$$x = 4 \text{ kmph}$$

$$\frac{50}{36+y} = 1.25$$

$$y = 4 \text{ kmph}$$

$$\text{Distance travelled in upstream on day2} = (52 - 4) \times 1.5 = 72 \text{ km}$$

$$\text{Distance travelled in upstream on day4} = (36 - 4) \times 1.25 = 40 \text{ km}$$

$$\text{Required distance} = 72 - 40 = 32 \text{ km}$$

S156. Ans.(a)

Sol.

$$\text{Downstream distance} = 5 \times 40 + 8 = 208 \text{ km}$$

Let speed of the current be y kmph

$$\text{ATQ, } \frac{208}{36+y} + \frac{40}{36-y} = 6$$

Using options

$$y = 16 \text{ kmph}$$

S157. Ans.(b)

Sol.

Let present age of A be 'a' and B be 'b'

$$\text{Form I. } (a+2) = \frac{2b}{3}$$

$$3a + 6 = 2b$$

$$2b - 3a = 6$$

From II. Let present age of C = c

$$\text{So, } a + b + c = 60$$

We have no in

S158. Ans.(d)

Sol.

$$\text{From I. } \frac{40}{100} \times x = \frac{125}{100} \times y$$

$$40x = 125y$$

$$8x = 25y$$

$$x : y = 25 : 8$$

$$\text{From II. } x - y = \frac{x}{2} + 36$$

$$x = 2y + 72$$

From I and II. Let x and y be 25a & 8a respectively

$$25a = 16a + 72$$

$$9a = 72$$

$$a = 8$$

$$\text{So, } x = 200$$

$$\text{And } y = 64$$

So, both I and II together sufficient

S159. Ans.(e)

Sol. Let the length of rectangle be 12x and breadth of the rectangle 5x

$$\text{From I. } \sqrt{144x^2 + 25x^2} = 13$$

$$13x = 13$$

$$x = 1$$

$$\text{Required perimeter} = 2(12+5) = 34 \text{ cm}$$

$$\text{From II. } 12x \times 5x = 60$$

$$x = 1$$

$$\text{Required perimeter} = 2(12+5) = 34 \text{ cm}$$

So, either I alone or II alone

S160. Ans.(c)

Sol. From I. Let male employees and female employees in the company be x and $2x$ respectively

From II. Female employees = 560

$$\text{Male employees} = 560 \times \frac{75}{100} = 420$$

$$\text{Total employees in the company} = 560 + 420 = 960$$

So, we can answer from II only

