

Direction: Read the given information and answer the given question

Few people are sitting in a row facing North. 3 persons are sitting between M and N. K is third to the right of N. K is second to the left of P. Number of people between M and P is same as the number of people between M and L. Only three people sit to the left of L. Six persons sit between L and J. Two people sit between P and R. R is sitting at the second position from one of the ends.

1. How many persons are sitting in the row?

A. 27	B. 28
C. 19	D. 18
E. 26	
2. What is the position of J with respect to M?

A. 2 nd to left	B. 3 rd to right
C. 2 nd to right	D. 3 rd to left
E. Immediate left	
3. **Direction:** Read the given information and answer the given question
 Few people are sitting in a row facing North. 3 persons are sitting between M and N. K is third to the right of N. K is second to the left of P. Number of people between M and P is same as the number of people between M and L. Only three people sit to the left of L. Six persons sit between L and J. Two people sit between P and R. R is sitting at the second position from one of the ends.
 How many persons are sitting between M and P?

A. 9	B. 12
C. 8	D. 7
E. 10	
4. Which of the following statements is true?
 - A. J sits to the right of K.
 - B. Seven people are sitting between N and R.
 - C. Less than 10 people sit between P and L.
 - D. 9 people sit between J and P.
 - E. None of the statements is correct.

5. **Direction :** Read the given information and answer the given question

Few people are sitting in a row facing North. 3 persons are sitting between M and N. K is third to the right of N. K is second to the left of P. Number of people between M and P is same as the number of people between M and L. Only three people sit to the left of L. Six persons sit between L and J. Two people sit between P and R. R is sitting at the second position from one of the ends.

How many people are sitting to the left of K?

- | | |
|-------|-------|
| A. 19 | B. 8 |
| C. 9 | D. 15 |
| E. 12 | |

6. **Direction:** Read the given information and answer the given question.

8 people D, E, F, G, H, I, J and K are sitting around a square table in such a way that four of them sit at the corners while four of them sit in the middle of each of the four sides. The ones sitting in the middle of the sides are facing the centre and the ones sitting at the corners are facing outside.

F sits second to the right of G and only 3 people sit between F and J. Only 1 person sits between J and I (either from left or right). D sits second to the left of K and is neither an immediate neighbour of I nor of J. Only 3 people sit between D and E. E does not sit at any of the corners of the table.

Who sits 3rd to the right of H?

- | | |
|------|------|
| A. D | B. E |
| C. J | D. G |
| E. F | |

7. What is the position of I with respect to E?

- A. 2nd to the right
- B. 3rd to the left
- C. immediate right
- D. immediate left
- E. 2nd to the left

8. **Direction:** Read the given information and answer the given question.

people D, E, F, G, H, I, J and K are sitting around a square table in such a way that four of them sit at the corners while four of them sit in the middle of each of the four sides. The ones sitting in the middle of the sides are facing the centre and the ones sitting at the corners are facing outside.

F sits second to the right of G and only 3 people sit between F and J. Only 1 person sits between J and I (either from left or right). D sits second to the left of K and is neither an immediate neighbour of I nor of J. Only 3 people sit between D and E. E does not sit at any of the corners of the table.

Which of the following statements is/are true as per the given arrangement?

I. G is facing inside.

II. H is an immediate neighbour of J.

III. G is sitting to the immediate left of K.

A. Only I follow.

B. Only II follow.

C. Only III follow.

D. Both I and II follow.

E. Both II and III follow.

9. Four of the following five are alike in a certain way. Which of the following does not belong to the group?

A. F

B. J

C. G

D. I

E. K

10. **Direction:** Read the given information and answer the given question.

8 people D, E, F, G, H, I, J and K are sitting around a square table in such a way that four of them sit at the corners while four of them sit in the middle of each of the four sides. The ones sitting in the middle of the sides are facing the centre and the ones sitting at the corners are facing outside.

F sits second to the right of G and only 3 people sit between F and J. Only 1 person sits between J and I (either from left or right). D sits second to the left of K and is neither an immediate neighbour of I nor of J. Only 3 people sit between

D and E. E does not sit at any of the corners of the table.

How many people sit between K and J when counted from the right of J?

A. Four

B. Five

C. Six

D. None

E. Two

11. **Direction:** Read the given information and answer the given question.

C, D, H, N, P, S and U are seven members of a family. D is the mother of F, N is the son of F. H is the only sister of N and U, S is the father of U. S is the son of C.

If P is the father-in-law of F, then how is C related to U?

A. Grandmother

B. Grandfather

C. Father

D. Mother

E. Can't be determined

12. How is H related to F?

A. Son

B. Daughter

C. Husband

D. Wife

E. Father

13. **Direction:** Read the given information and answer the given question.

C, D, H, N, P, S and U are seven members of a family. D is the mother of F, N is the son of F. H is the only sister of N and U, S is the father of U. S is the son of C.

How is N related to D?

A. Grandson

B. Wife

C. Daughter

D. Granddaughter

E. Son

14. In each question below three statement followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

$A \geq B > F$; $B > M > O$; $F > S$; $R < S$

Conclusion:

- I. $S < A$
- II. $F < O$
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either conclusion I or II follows.
- D. Both conclusions I and II follow.
- E. Neither conclusion I nor II follows.

15. Statement:

$$D \leq R > E \leq B; S \leq M = E > D; G > B$$

Conclusion:

- I. $D > G$
- II. $B < R$
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either conclusion I or II follows.
- D. Both conclusion I and II follows.
- E. Neither conclusion I nor II follows.

16. Statement:

$$E \leq S > F \leq C; T \leq N = F > E; H > C$$

Conclusion:

- I. $T < C$
- II. $C = T$
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either conclusion I or II follows.
- D. Both conclusion I and II follows.
- E. Neither conclusion I nor II follows.

- 17.** In the question below three statements are given followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

$$M = L \geq N \geq Q < P < V \geq S; Q > G$$

Conclusion:

- I. $G \geq S$
- II. $M > G$
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either conclusion I or II follows.
- D. Both conclusion I and II follows.
- E. Neither conclusion I nor II follows.

- 18.** In the question below three statements are given followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

18. Statement:

$$Q > A \geq Z \leq X \leq C; Z \geq H$$

Conclusion:

- I. $Q > H$
- II. $Z \leq C$
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either conclusion I or II follows.
- D. Both conclusions I and II follow.
- E. Neither conclusion I nor II follows.

- 19. Direction:** Read the given information and answer the given question. There are 9 boxes kept one above the other. There are 5 boxes between box P and box R. Box T is kept immediately above R. 3 boxes are kept between box T and box S. Number of boxes between P and S is same as the number of boxes between T and Q. Box U is kept below box Q. Box W is kept somewhere below X. There is only one box kept between U and V. U is above V.

Which of the following statements is not true?

- I. There are two boxes between T and Q.
- II. S is kept below W.
- III. U is kept immediately above P.

- A. Only I
- B. Only II
- C. Only III
- D. Both II and III
- E. All I, II and III

- 20.** V is related P and Q is related to X in certain manner. To which of the following is U related in the same manner?

- A. W
- B. R
- C. S
- D. T
- E. X

21. How many boxes are kept between X and P?
 A. Five B. Two
 C. Three D. Four
 E. None
22. Which of the following pair of box is kept immediately above and below box Q respectively?
 A. XS B. SX
 C. RW D. WR
 E. None of these
23. What is the position of box W in the given arrangement?
 A. Between P and V
 B. Fourth from the top.
 C. Sixth from the bottom.
 D. Fourth from the bottom.
 E. Between R and Q.
24. If it is possible to make a meaningful word from the first, fourth, sixth and the ninth letters of the word **UNDERNEATH**, then what will be the first letter of that word? Mark X if no such word can be formed, mark M if more than one such word can be formed.
 A. T B. U
 C. M D. X
 E. N
25. How many such pairs of letters are there in the word TRANSPORT which has as many letters between them in the word as in the English alphabetical series in both forward and backward direction?
 A. Four B. One
 C. Three D. Two
 E. More than four
26. **Direction:** Read the given information and answer the given question
 8 persons- P, Q, R, S, T, U, V and W were born in different years viz. 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007 but not necessarily in the same order. It is assumed that all of them were born on the same date of different years. All the age calculations are done assuming the present year as 2018.
 S was born in an odd number year. The difference between the present age of S

- and V is 5. Only 3 people were born between V and T. The present age of W is twice the present age of Q. The number of people born between T and Q is the same as the number of people born between T and P. R was born in one of the years before P.
26. What will be the age of S after 4 years?
 A. 50 years B. 61 years
 C. 78 years D. 16 years
 E. 34 years
27. Who was born before W but after U?
 A. R B. V
 C. S D. P
 E. T
28. What is the difference between the ages of S and R?
 A. 16 years B. 11 years
 C. 17 years D. 5 years
 E. 12 years
29. **Direction:** Read the given information and answer the given question
 8 persons- P, Q, R, S, T, U, V and W were born in different years viz. 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007 but not necessarily in the same order. It is assumed that all of them were born on the same date of different years. All the age calculations are done assuming the present year as 2018.
 S was born in an odd number year. The difference between the present age of S and V is 5. Only 3 people were born between V and T. The present age of W is twice the present age of Q. The number of people born between T and Q is the same as the number of people born between T and P. R was born in one of the years before P.
29. What is the age of U?
 A. 57 Years B. 22 Years
 C. 40 Years D. 45 Years
 E. 73 Years
30. **Direction:** Read the given information and answer the given question
 8 persons- P, Q, R, S, T, U, V and W were born in different years viz. 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007 but not necessarily in the same order. It

is assumed that all of them were born on the same date of different years. All the age calculations are done assuming the present year as 2018.

S was born in an odd number year. The difference between the present age of S and V is 5. Only 3 people were born between V and T. The present age of W is twice the present age of Q. The number of people born between T and Q is the same as the number of people born between T and P. R was born in one of the years before P.

30. In which year was R born?
A. 1961 B. 1973
C. 1978 D. 1996
E. 1945
31. **Direction:** The question below consists of a question and two statements numbered I and II given. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this. Six persons A, B, C, D, E and F are sitting in a circle. Some of them are facing the centre and some of them are facing away from the centre. How many of them are facing the centre?
I. F is 2nd to the left of D. C is 2nd to the left of F. C is to the immediate left of B. E is 2nd to the left of B and B is facing away from the centre.
II. B is 2nd to the right of A. E is 2nd to the left of B. C's neighbors are facing opposite directions to each other. B is not a neighbor of F and F is 2nd to the right of C.
A. The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
B. The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
C. The data either in statement I alone or in statement II alone are sufficient to answer the question.

D. The data in both the statements I and II together are not sufficient to answer the question.

E. The data in both the statements I and II together are necessary to answer the question.

32. **Direction:** The question consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this. Six persons A, B, C, D, E and F were born in a different month starting from March to August of the same year, not necessarily in the same order. How many persons were born between D and C?
I. A was born in a month which has 30 days. Two persons were born between A and D. One person was born between D and E.
II. One person was born between E and C. The number of people born before C is the same as after F.
A. The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
B. The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
C. The data either in statement I alone or in statement II alone are sufficient to answer the question.
D. The data in both the statements I and II together are not sufficient to answer the question.
E. The data in both the statements I and II together are necessary to answer the question.
33. **Direction:** A question and two statements numbered I and II are given below. You have to decide whether the data provided in the statements are sufficient to answer the question or not.

Six persons Abhay, Deepak, Neha, Manik, Poorvi and Hitesh are sitting in a straight line facing north. Who are sitting at the extreme ends?

I. Poorvi is sitting fourth to the right of Deepak. Abhay is sitting third to the left of Neha. Either Abhay or Neha is sitting at an extreme end.

II. Only one person sits between Poorvi and Abhay. Poorvi is third to the right of Manik. Neha is sitting to the immediate right of Poorvi. Neither Abhay nor Poorvi is sitting on the extreme end.

A. If the data in Statement I alone is sufficient to answer the question, while the data in Statement II alone is not sufficient to answer the question.

B. If the data in Statement II alone is sufficient to answer the question, while the data in Statement I alone is not sufficient to answer the question.

C. If the data in either Statement I alone or Statement II alone is sufficient to answer the question.

D. If the data in both the statements I and II together are necessary to answer the question.

E. If the data in both the statements I and II together are not necessary to answer the question.

34. **Direction:** Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the questions. Read both the statements and answer.

Five persons A, B, C, D and E are of different weights. Who is the heaviest?

I. B is heavier than C and D but lighter than E who is not the heaviest.

II. E is heavier than B and C but lighter than A.

A. The data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient in answer the question.

B. The data in statement II alone is sufficient to answer the question, while

the data in statement I alone is not sufficient to answer the question.

C. The data in either in statement I alone or in statement II alone is sufficient to answer the question.

D. The data in both the statements I and II together is not sufficient to answer the question.

E. The data in both the statements I and II is together necessary to answer the question.

35. **Direction:** The question below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.

What is the direction of point M with respect to point T?

I. Point N is 6m to the west of point M. Point O is 3m to the west of point P. Point N is 5m to the north of point O. Point T is 11m to the east of point S.

II. Point P is 4m to the north of point Q. Point S is 2m to the north of point R. Point R is 8m to the west of point Q.

A. The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

B. The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

C. The data either in statement I alone or in statement II alone are sufficient to answer the question.

D. The data in both the statements I and II together are not sufficient to answer the question.

E. The data in both the statements I and II together are necessary to answer the question.

36. Rs. 7000 is divided unequally in two parts and invested in scheme A, which offer 10% p.a. compound interest which compounded annually and in scheme B,

which offer 15% p.a. simple interest for 2 years and 3 years respectively. If the interest earned from scheme A is 84% of that earned from scheme B. Find the sum invested in scheme A.

- A. Rs. 4200 B. Rs. 2700
C. Rs. 3000 D. Rs. 4000
E. Rs. 4500

37. A bag contains X red balls and 5 green balls. 2 balls are picked up randomly one after the other without replacement from the bag, then the probability of both balls being red is $\frac{3}{7}$. What will be the value of X?

- A. 10 B. 15
C. 13 D. 20
E. 22

38. A alone can do a work in 20 days. B is 25% more efficient than A. A and B started working and worked for 4 days, then C alone completed the remaining job in 22 days. In how many days C alone can complete the entire job?

- A. 30 B. 35
C. 40 D. 42
E. 45

Direction (39-43): Study the information carefully and answer the following questions:

A salon distributed 450 vouchers of free haircut and pedicure. The number of haircut vouchers were 130 more than the number of pedicure vouchers. The ratio between the number of male and female redeeming the pedicure vouchers is 13 : 7. The number of vouchers redeemed by male for haircut were 15 more than that of vouchers redeemed by male for pedicure. All the vouchers were redeemed.

39. Number of females redeeming pedicure vouchers are approximately what percent of the number of people redeeming haircut vouchers?

- A. 24% B. 15%
C. 19% D. 22%
E. 17%

40. **Direction:** Study the information carefully and answer the following questions:

A salon distributed 450 vouchers of free haircut and pedicure. The number of haircut vouchers were 130 more than the number of pedicure vouchers. The ratio between the number of male and female redeeming the pedicure vouchers is 13 : 7. The number of vouchers redeemed by male for haircut were 15 more than that of vouchers redeemed by male for pedicure. All the vouchers were redeemed.

If 30 people with pedicure vouchers took a manicure service and 50% of those, who had haircut vouchers took a manicure service, then total how many people took manicure service?

- A. 160 B. 150
C. 170 D. 175
E. None of these

41. How many males redeemed the pedicure voucher?

- A. 94 B. 100
C. 86 D. 104
E. 98

42. **Direction:** Study the information carefully and answer the following questions:

A salon distributed 450 vouchers of free haircut and pedicure. The number of haircut vouchers were 130 more than the number of pedicure vouchers. The ratio between the number of male and female redeeming the pedicure vouchers is 13 : 7. The number of vouchers redeemed by male for haircut were 15 more than that of vouchers redeemed by male for pedicure. All the vouchers were redeemed.

How many males redeemed the haircut vouchers?

- A. 105 B. 110
C. 119 D. 290
E. 120

43. What is the difference between the number of males and females having the pedicure vouchers?

- A. 54 B. 56
 C. 58 D. 48
 E. 62

44. **Direction:** The given table shows the number of shirts produced and percentage of shirts failed the quality test in 4 years by a company. Study the table carefully and answer the given questions.

Year	No. of Shirts produced (in lakh)	% of shirts failed the quality test
2014	3.2	2.5%
2015	4.0	2.25%
2016	2.8	1.25%
2017	3.6	1.25%

Note: Shirts which failed the quality test were not sold.

Average number of shirts that passed the quality test in the year 2016 and 2017 is

- A. 3.16 lakh B. 3.46 lakh
 C. 3.36 lakh D. 2.96 lakh
 E. None of these

45. **Direction:** The given table shows the number of shirts produced and percentage of shirts failed the quality test in 4 years by a company. Study the table carefully and answer the given questions.

Year	No. of Shirts produced (in lakh)	% of shirts failed the quality test
2014	3.2	2.5%
2015	4.0	2.25%
2016	2.8	1.25%
2017	3.6	1.25%

Note: Shirts which failed the quality test were not sold.

The number of shirts that failed quality test reduced by what percent in the year 2017 as compared to the year 2014?

- A. 40.75 % B. 43.75%
 C. 42.75% D. 45.75%
 E. 44.75%

46. **Direction:** The given table shows the number of shirts produced and percentage of shirts failed the quality

test in 4 years by a company. Study the table carefully and answer the given questions.

Year	No. of Shirts produced (in lakh)	% of shirts failed the quality test
2014	3.2	2.5%
2015	4.0	2.25%
2016	2.8	1.25%
2017	3.6	1.25%

Note: Shirts which failed the quality test were not sold.

Out of total shirts produced in 2015, the number of white shirts produced is one-third less than the number of coloured shirts produced, then how many coloured shirts were produced in the year 2015?

- A. 2.5 lakh B. 2.3 lakh
 C. 2.2 Lakh D. 2.4 lakh
 E. None of these

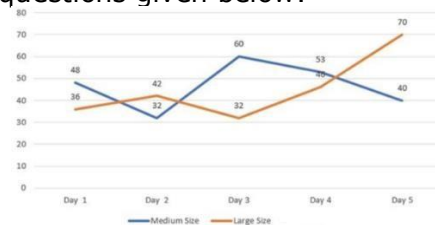
47. In 2015, 10% of the total number of shirts, which passed the quality test was not sold. How many shirts in the year 2015 did not sell despite being passed the quality test?

- A. 37400 B. 39500
 C. 39100 D. 38600
 E. 37500

48. In 2014, all shirts which passed the quality test were sold at an average price of Rs. 500 per shirt. What was the revenue (in Rs. crore) of that year?

- A. 0.156 Cr B. 15.6 Cr
 C. 1.56 Cr D. 1.52 Cr
 E. 1.54 Cr

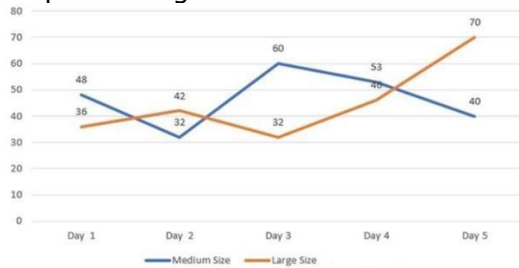
49. **Direction:** The following line graph shows the sales of wax boxes of two sizes medium and large on 5 different days by a company ABC. Study the line graph carefully and answer the questions given below:



How many large size wax boxes were sold together in all the given days?

- A. 245 B. 240
C. 244 D. 226
E. 210

50. **Direction:** The following line graph shows the sales of wax boxes of two sizes medium and large on 5 different days by a company ABC. Study the line graph carefully and answer the questions given below:

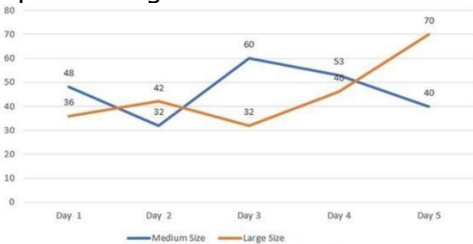


Total number of wax boxes of given two sizes, sold on day 1 is approximately what percent of the total number of wax boxes given two sizes sold on day 4?

- A. 84% B. 84.5%
C. 86% D. 84.3%
E. 84.9%

51. What is the average of the number of wax boxes of medium size, sold on day 1, day 4 and day 5?
A. 44 B. 45
C. 46 D. 47
E. 48

52. **Direction:** The following line graph shows the sales of wax boxes of two sizes medium and large on 5 different days by a company ABC. Study the line graph carefully and answer the questions given below:



Find the ratio between the total number of large size wax boxes sold on day 3 and day 5 together and the number of

medium size wax boxes sold on day 1 and day 2 together.

- A. 3 : 4 B. 4 : 3
C. 5 : 4 D. 4 : 5
E. None of these

53. The number of wax boxes of medium size sold on day 5 is what percent more than the number of wax boxes of large size sold on day 3?

- A. 25% B. 33.33%
C. 20% D. 16%
E. None of these

54. The volume of a cylinder is $500n \text{ cm}^3$ and the radius is 5 cm. The height of the cylinder is equal to the diagonal of a square. Find the perimeter (in cm) of the square.

- A. $40/\sqrt{2}$ B. $40\sqrt{2}$
C. 40 D. 60
E. 10

55. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine relation between X and Y.

- A) $2x^2 + 5x + 3 = 0$
B) $2y^2 - 7y + 6 = 0$
A. $x > y$ B. $x < y$
C. $x \leq y$ D. $x \geq y$
E. $x = y$ or no relation can be established.

56. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine relation between X and Y.

- A) $3x^2 - 7x + 4 = 0$
B) $2y^2 - 3y + 1 = 0$
A. $x > y$ B. $x < y$
C. $x \leq y$ D. $x \geq y$
E. $x = y$ or no relation can be established.

57. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine relation between X and Y.

- A) $x^2 + 12x + 35 = 0$
B) $y^2 + 17y + 72 = 0$
A. $x > y$ B. $x < y$
C. $x \leq y$ D. $x \geq y$
E. $x = y$ or no relation can be established.

58. A) $x^2 - 10x + 25 = 0$
 B) $y^2 = 25$
 A. $x > y$ B. $x < y$
 C. $x \leq y$ D. $x \geq y$
 E. $x = y$ or no relation can be established.
59. A) $x^2 - 36x + 324 = 0$
 B) $y^2 - 42y + 441 = 0$
 A. $x > y$ B. $x < y$
 C. $x \leq y$ D. $x \geq y$
 E. $x = y$ or no relation can be established.
60. Two trains leave Delhi for Kolkata at 4:00 am and 4:30 am and travel at a speed of 50 Km/h and 75 Km/h respectively, then after how many kilometers from Delhi both trains will be together?
 A. 85 Km B. 75 Km
 C. 45 Km D. 55 Km
 E. None of these
61. John bought a machine for Rs. 50,000 and spent Rs. 2000 on repairs and Rs. 500 on transport and sold it with 20% profit. What price (in Rs.) did he sell the machine?
 A. 62000 B. 60000
 C. 61000 D. 63000
 E. None of these
62. The average age of a group of some persons is 16.75 years. By joining 20 new persons with an average age of 13.25 years, the average age of the group becomes 15 years. Find out the number of persons in the group Initially.
 A. 20 B. 21
 C. 23 D. 24
 E. 26
63. If the ratio of incomes of A and B in 2001 is 2 : 3 and the ratio of incomes of A in 2001 and 2002 is 4 : 5. Find the expenditure of A in 2002, if saving in the same year is Rs. 4000. It is given that in 2001 the sum of income of A and B is Rs. 25000.
 A. Rs. 5000 B. Rs. 10500
 C. Rs. 9500 D. Rs. 7500
 E. Rs. 8500
64. The ratio of ages of Ram and shaym is 2 : 6 and after 5 years the ratio of their age becomes 6 : 8. What will be their average age (in years) after 10 years?
 A. 12 B. 13
 C. 14 D. 15
 E. 16
65. One container contains a mixture of spirit and water in the ratio 2: 3 and another contains the mixture of spirit and water in the ratio 3: 2. How much quantity from the second should be mixed with 10 litres of the first so that the resultant mixture has ratio of 4: 5?
 A. 2.86 litres B. 3.45 litres
 C. 4.31 litres D. 5.67 litres
 E. 8.94 litres
66. **Direction:** Find the wrong term in the following number series?
 0.5 , 2, 1, 4, 32, 512
 A. 0.5 B. 2
 C. 4 D. 32
 E. 512
67. **Direction:** Find the wrong term in the following number series?
 4, 5.1, 7.3, 10.6, 15, 20, 27.1
 A. 7.3 B. 20
 C. 27.1 D. 4
 E. 15
68. **Direction:** Find the wrong term in the following number series?
 2, 3, 8, 31, 154, 924, 6460
 A. 3 B. 31
 C. 154 D. 924
 E. 6460
69. **Direction:** Find the wrong term in the following number series.
 2, 6, 10, 19, 36, 69, 134
 A. 36 B. 19
 C. 10 D. 6
 E. 2
70. **Direction:** Find the wrong term in the following number series?
 251, 252, 254, 227, 243, 118, 154
 A. 251 B. 252
 C. 254 D. 227
 E. 118

71. **Direction:** Read the given passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these.

Advice about the art of interview preparation and how to craft the perfect CV isn't enough to put every student on a path to a career they want. About one in three graduates end up being "mismatched" to the jobs they find after leaving university, research by Universities UK suggests.

These mismatched graduates face poorer prospects and lower earnings than their peers who embark on careers that are a better fit for the knowledge and skills they have acquired through three or four years of study. It suggests that traditional careers advice isn't working.

The problem isn't necessarily that too many students are taking the wrong course. There is little evidence that graduates are studying the "wrong" subjects, according to the UUK research, since most are on courses that offer subject knowledge and employability skills that are very much in demand. Instead, students need better careers advice that will help them define their skills and attributes – and understand how these match different career options. Students also need help finding out which skills they'll need to break into certain industries – particularly in sectors that aren't good at diversifying their recruitment, or when they have no family or social network of contacts to call on for help and advice.

Politicians complain of a skills gap, but graduates face an "experience gap" – with many employers preferring to recruit young people who have spent a couple of years in the workplace rather than raw recruitments from university.

To help graduates find the right jobs for them, lots of universities are experimenting with new ways to make

their careers advice more accessible and meaningful.

At the University of Kent, students can use an online Careers Explorer service to match their skills to career options, and a work-study scheme that provides bursaries for work experience. Students at the University of Dundee can take employability modules in parallel with their academic work, including online and personal career planning sessions. Source:

<https://www.theguardian.com/higher-education-network/2018/jan/25/too-many-graduates-are-mismatched-to-their-jobs-whats-going-wrong>

Which of the following statements is/ are true with respect to the passage?

- I. The graduates who do not end up getting a job best suited to their knowledge and skill end up earning less than their counterparts who pursue their skills.
II. A lot of universities have come forward to address the problem of mismatched jobs.
III. The lack of good pieces of career advice causes graduates to enter into professions that are not in sync with their skill and profession.
A. Only I B. Only II
C. Both I and II D. Both II and III
E. All I, II and III

72. **Direction:** Read the given passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these.

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These mismatched graduates face poorer prospects and lower earnings than their peers who embark on careers

that are a better fit for the knowledge and skills they have acquired through three or four years of study. It suggests that traditional careers advice isn't working.

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Source:

<https://www.theguardian.com/higher-education-network/2018/jan/25/too-many-graduates-are-mismatched-to-their-jobs-whats-going-wrong>

Which of the following myths does the author break in the passage?

- A. The skills acquired by graduates is not equivalent to the degree they have achieved.
- B. Instead of a wrong choice of an academic course, the problem lies in the lack of provision of a good career advice, which is well- matched with the skill and knowledge of a graduate.
- C. The fact that the courses available at universities are not skill oriented, pushes the graduates to be caught up in wrong jobs.
- D. The career advices being provided at the universities do not effectively analyse the potential of a graduate and provide them with good career option.
- E. None of these.

73. With which of the following statements is the author most likely to agree?

- A. Most of the students often enrol in courses that do not offer subject knowledge and employability skills that are in demand.
- B. The initiatives being taken by the Universities to provide accessible career options may not be successful.
- C. The traditional careers advice would work if they are directed towards skill development rather than imparting theoretical knowledge.
- D. The employers have a tendency to recruit recruits from Universities as they can be hired at significantly low remunerations.
- E. Students require help in finding the skills required to get into employment sectors at a time when they do not have access to good careers advice through their family and peers.

74. With reference to the context of the passage, what can be inferred from the line, "Politicians complain of a skills gap, but graduates face an "experience gap""?

- A. The politicians have not been able to properly analyse the root cause of the problem that lands up a student in an undesirable job.

- B. The politicians have rightfully identified the major cause of the unemployment problem.
- C. The problem of "experience gap" is identified and well- addressed by the politicians.
- D. The priority of the politicians is disoriented as they emphasize more on experience than on skills.
- E. None of these.

75. **Direction:** Read the given passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these.

Advice about the art of interview preparation and how to craft the perfect CV isn't enough to put every student on a path to a career they want. About one in three graduates end up being "mismatched" to the jobs they find after leaving university, research by Universities UK suggests.

These mismatched graduates face poorer prospects and lower earnings than their peers who embark on careers that are a better fit for the knowledge and skills they have acquired through three or four years of study. It suggests that traditional careers advice isn't working.

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Source:

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75. Which of the following words is MOST SIMILAR in meaning to the "evidence" as given in the passage?
- A. Result
 - B. Proof
 - C. Feature
 - D. Rustic
 - E. Misnomer
76. Which of the following words is MOST OPPOSITE in meaning to "embark" as given in the passage?
- A. Undertake
 - B. Process
 - C. Reject
 - D. Apprehend
 - E. Deceive
77. **Direction:** In the following question, a word is given that is followed by three statements. All these three statements carry the given word. Identify the sentence(s) in which the word fits to make them grammatically correct and meaningful.
- Hamper
- I. The Centre's move to direct oil marketing companies to lower auto fuel price **hampers** the confidence of oil companies in investments made in India.

II. Metro Railway services were **hampered** for 15 minutes on Monday afternoon.

III. High street retailers, Marks & Spencer and John Lewis & Partners, have also released their own **hampers** which are far more affordable than the luxury offerings.

- A. Only I B. Both I and II
C. Only III D. Both II and III
E. All I, II and III

78. **Direction:** In the following question, a word is given that is followed by three statements. All these three statements carry the given word. Identify the sentence(s) in which the word fits to make them grammatically correct and meaningful.

Tact

I. The kind judge was **tactful** when he informed the dancer of her elimination from the show.

II. They came up with a **tactfully** to reach their destination in the fastest time possible.

III. He had an engaging personality and used **tact** in dealing with his patients.

- A. Only I B. Only III
C. Both I and II D. Both I and III
E. All I, II and III

79. **Direction:** In the following question, a word is given that is followed by three statements. All these three statements carry the given word. Identify the sentence(s) in which the word fits to make them grammatically correct and meaningful.

Adage

I. Despite what that old **adage** says, I like to have my cake, eat it, and then have another piece.

II. Among other things, the writer is famous for **adaging** his philosophical ideals.

III. Tired of all the same old sayings, he **adaged** a new thought.

- A. Only I B. Only II
C. Only III D. Both I and II
E. Both II and III

80. **Direction:** In the following question, a word is given that is followed by three statements. All these three statements carry the given word. Identify the sentence(s) in which the word fits to make them grammatically correct and meaningful.

Malaise

I. After his dog died, he remained **malaised** for several months.

II. Many citizens who live near the contaminated river are complaining of a **malaise** that keeps them bedridden.

III. Weeks before his heart attack, Mr Robbin kept mentioning how he felt **malaiseful** and not like his normal self.

- A. Only I B. Only II
C. Both I and III D. Both II and III
E. All I, II and III

81. **Direction:** In the following questions, two columns I and II, each containing three sentences are given. Column I consists of the first part of three sentences and Column II consists of the remaining part of those three sentences. Match column I with column II, so that the sentences formed are meaningful and grammatically correct.

I.

A) We believe in a circular rather

B) The Rig Veda was written more than 3800 years ago,

C) The word 'Juggernaut' was originally used to denote the Rath Yatra temple car,

II.

D) Veda is superior to Albert Einstein's Theory of Relativity equation.

E) than a linear concept of time.

F) which was so massive it would crush devotees under the wheels.

- A. B-E and C-F
B. A-E, B-F and C-D
C. A-F and C-D
D. B-F
E. A-E and C-F

82. **Direction:** In the following questions, two columns I and II, each containing three sentences are given. Column I

consists of the first part of three sentences and Column II consists of the remaining part of those three sentences. Match column I with column II, so that the sentences formed are meaningful and grammatically correct.

I.

- A) A garbage patch in the Pacific Ocean
- B) There's a mass of floating rubbish in the Pacific Ocean weighing around
- C) About 80 percent of the plastic trash that makes up the Great Pacific Garbage Patch

II.

D) is believed to have originated from land-based activities.

E) to help farmers who depend on weather.

F) has stretched to almost twice the size of France.

A. B-E and C-F

B. A-E, B-F and C-D

C. A-F and C-D

D. B-F

E. A-E and C-F

83. **Direction:** In the following questions, two columns I and II, each containing three sentences are given. Column I consists of the first part of three sentences and Column II consists of the remaining part of those three sentences. Match column I with column II, so that the sentences formed are meaningful and grammatically correct.

I.

- A) Overfishing can wreak havoc to marine ecology and completely
- B) Unsustainable fishing practices over the last few decades have pushed
- C) Oil destroys the insulating and water-repellent properties of

II.

D) eventually accumulating in remote areas of the world's oceans.

E) our oceans to a point where they may now be on the verge of collapse.

F) the marine animals, exposing them to harsh environment.

A. B-E and C-F

B. A-E, B-F and C-D

C. A-F and C-D

D. B-F

E. A-E and C-F

84. **Direction:** In the following questions, two columns I and II, each containing three sentences are given. Column I consists of the first part of three sentences and Column II consists of the remaining part of those three sentences. Match column I with column II, so that the sentences formed are meaningful and grammatically correct.

I.

A) At Harvard, Sheryl founded a group meant to encourage women

B) Sheryl Sandberg is responsible for spearheading several successful Facebook projects

C) In the hall of fame of women breaking the glass ceiling and painting their name on it,

II.

D) and ended up becoming the first Indian woman to obtain a degree in Western medicine in the late 1800s.

E) to know so much about them as possible.

F) that have made the social networking site the market giant it is today.

A. B-E and C-F

B. A-E, B-F and C-D

C. A-F and C-D

D. B-F

E. A-E and C-F

85. **Direction:** In the following questions, two columns I and II, each containing three sentences are given. Column I consists of the first part of three sentences and Column II consists of the remaining part of those three sentences. Match column I with column II, so that the sentences formed are meaningful and grammatically correct.

I

A) Elephants prefer one tusk over the other,

- B) Elephants use their feet to listen, they can pick up
 C) Elephants herds are matriarchal, with older females taking
 II.
 D) care of the calves and protecting them while travelling from place to place.
 E) just as humans are mostly either left or right-handed.
 F) sub-sonic rumblings made by other elephants, through vibrations in the ground.
 A. B-E and C-F
 B. A-E, B-F and C-D
 C. A-F and C-D
 D. B-F
 E. A-E and C-F

86. **Direction:** In the given question, a part of the sentence is printed in bold. Below the sentence, three alternatives to the bold part are given which may help improve the sentence. Choose the option that reflects the correct use of the phrase in the context of the sentence. In case the given sentence is correct, your answer is (E), i.e., "No correction required".
 No other region in the world illustrates the **chronic nature of displacing caused by extreme whether** events and climate change more than Asia and the Pacific.
 i. Chronic nature of displacement caused by extreme weather.
 ii. Chronic nature of displacement caused by extreme whether.
 iii. Chronic nature of displace caused by extreme weather.
 A. Only i B. Only ii
 C. Only iii D. Both ii and iii
 E. No correction required

87. **Direction:** In the given question, a part of the sentence is printed in bold. Below the sentence, three alternatives to the bold part are given which may help improve the sentence. Choose the option that reflects the correct use of the phrase in the context of the sentence. In

case the given sentence is correct, your answer is (E), i.e., "No correction required".

The recent incidents of drug **overdose-related deaths has brought the spotlight back in the drug** menace in the state and on the role of the Punjab Police in curbing it.

- i. Overdosing-related deaths have brought the spotlight back over the drug
 ii. Overdose-related deaths have brought the spotlight back on the drug
 iii. Overdose-related deaths having brought the spotlight back on the drug
 A. Only i B. Only ii
 C. Only iii D. Both ii and iii
 E. No correction required

88. **Direction:** In the given question, a part of the sentence is printed in bold. Below the sentence, three alternatives to the bold part are given which may help improve the sentence. Choose the option that reflects the correct use of the phrase in the context of the sentence. In case the given sentence is correct, your answer is (E), i.e., "No correction required".
 More than anything, it is **the human cost of disasters that are the most compelling** argument for action.
 i. the human cost of disasters that the most compelling
 ii. the human cost of disasters that is the more compelling
 iii. the human cost of disasters that is the most compelling
 A. Only i B. Only ii
 C. Only iii D. Both ii and iii
 E. No correction required

89. **Direction:** In the given question, a part of the sentence is printed in bold. Below the sentence, three alternatives to the bold part are given which may help improve the sentence. Choose the option that reflects the correct use of the phrase in the context of the sentence. In case the given sentence is correct, your answer is (E), i.e., "No correction required".

Our Integrated Child Development Services, meant to provide nutrition and childcare up to six **year of age, lack greatly in qualitatively and coverage.**

i. years of age, lack greatly in quality and coverage

ii. years of age, lack greatly in qualitatively and coverage

iii. year of age, lack greatly in quality and coverage

A. Only i

B. Only ii

C. Only iii

D. Both i and ii

E. No correction required

90. **Direction:** In the given question, a part of the sentence is printed in bold. Below the sentence, three alternatives to the bold part are given which may help improve the sentence. Choose the option that reflects the correct use of the phrase in the context of the sentence. In case the given sentence is correct, your answer is (E), i.e., "No correction required".

The role of meritocracy in Chinese history, **focused on the so-called examining system, have** been a matter of long scholarly scrutiny.

i. focused on the so-called examination system, has

ii. focused on the so-said examination system, has

iii. focuses on the so-called examining system, have

A. Only i

B. Only ii

C. Only iii

D. Both ii and iii

E. No correction required

91. **Direction:** In the question, one sentence is given, and four words have been given in bold denoted by (A), (B), (C) and (D). You have to decide which of the following is inappropriate in the context. If all the words are appropriate in the context then mark 'All correct' as your answer.

Indigestion (A) is often a sign of an **underline** (B) problem, such as an **ulcer** (C), rather than a **condition** (D) on its own.

A. A

B. B

C. C

D. D

E. All are correct

92. **Direction:** In the question, one sentence is given, and four words have been given in bold denoted by (A), (B), (C) and (D). You have to decide which of the following is inappropriate in the context. If all the words are appropriate in the context then mark 'All correct' as your answer.

A microwave heats food by **causing** (A) the molecules to **vertebrate** (B) but it certainly does not make food **radioactive**, (C) as a **misconception** (D) suggests.

A. A

B. B

C. C

D. D

E. All are correct

93. **Direction:** In the sentence given below, four words printed in bold are given. These are numbered (1), (2), (3) and (4). One of these words may either be wrongly spelt or inappropriate in the context of the sentence. Find out the word that is inappropriate or wrongly spelt, if any. The number of that word is your answer. If all the words printed in bold are correctly spelt and appropriate in the context of the sentence then mark option E, i.e. 'All are correct', as your answer.

She saw a **fleet** (A)/ of **sheeps** (B)/ in the **nearby** (C)/ sea **shore**. (D)

A. 1

B. 2

C. 3

D. 4

E. All are correct

94. **Direction:** In the question, one sentence is given, and four words have been given in bold denoted by (A), (B), (C) and (D). You have to decide which of the following is inappropriate in the context. If all the words are appropriate in the context then mark 'All correct' as your answer.

The prices of electronic goods have **declined** (A)/ **dew** to the (B)/ **reduction** in (C)/ **import** duty rates. (D)

Solutions

1. Ans. E.

- 1) 3 persons are sitting between M and N.
- 2) K is third to the right of N.
- 3) K is second to the left of P.

Case-1 M _ _ _ N _ _ K _ P

Case-2 N _ _ K M P

4) The number of people between M and P is the same as the number of people between M and L.

(Here case - 2 will gets neglected as there is no space for L to sit.)

5) Only three people sit to the left of L.

6) Six people sit between L and J.

7) Two people sit between P and R.

8) R is sitting at the second position from one of the ends.

_ _ _ L _ _ _ _ _ J _ M _ _ _ N _ _ K _ P
_ _ R _

The above arrangement will be the final arrangement.

Hence, there are a total of 26 persons in the row.

2. Ans. A.

- 1) 3 persons are sitting between M and N.
- 2) K is third to the right of N.
- 3) K is second to the left of P.

Case-1 M _ _ _ N _ _ K _ P

Case-2 N _ _ K M P

4) The number of people between M and P is the same as the number of people between M and L.

(Here case - 2 will gets neglected as there is no space for L to sit.)

5) Only three people sit to the left of L.

6) Six people sit between L and J.

7) Two people sit between P and R.

8) R is sitting at the second position from one of the ends.

_ _ _ L _ _ _ _ _ J _ M _ _ _ N _ _ K _ P
_ _ R _

The above arrangement will be the final arrangement.

Hence, there are a total of 26 persons in the row.

Hence, J sits 2nd to the left of M.

3. Ans. C.

- 1) 3 persons are sitting between M and N.
- 2) K is third to the right of N.
- 3) K is second to the left of P.

Case-1 M _ _ _ N _ _ K _ P

Case-2 N _ _ K M P

4) The number of people between M and P is the same as the number of people between M and L.

(Here case - 2 will gets neglected as there is no space for L to sit.)

5) Only three people sit to the left of L.

6) Six people sit between L and J.

7) Two people sit between P and R.

8) R is sitting at the second position from one of the ends.

_ _ _ L _ _ _ _ _ J _ M _ _ _ N _ _ K _ P
_ _ R _

The above arrangement will be the final arrangement.

Hence, there are a total of 26 persons in the row.

Eight people sit between M and P.

4. Ans. B.

- 1) 3 persons are sitting between M and N.
- 2) K is third to the right of N.
- 3) K is second to the left of P.

Case-1 M _ _ _ N _ _ K _ P

Case-2 N _ _ K M P

4) The number of people between M and P is the same as the number of people between M and L.

(Here case - 2 will gets neglected as there is no space for L to sit.)

5) Only three people sit to the left of L.

6) Six people sit between L and J.

7) Two people sit between P and R.

8) R is sitting at the second position from one of the ends.

_ _ _ L _ _ _ _ _ J _ M _ _ _ N _ _ K _ P
_ _ R _

The above arrangement will be the final arrangement.

Hence, there are a total of 26 persons in the row.

A) J sits to the right of K. ⇒ False

B) Seven people are sitting between N and R. ⇒ True

C) Less than 10 people sit between P and L.

⇒ False

D) 9 people sit between J and P. ⇒ False

5. Ans. A.

1) 3 persons are sitting between M and N.

2) K is third to the right of N.

3) K is second to the left of P.

Case-1 M _ _ _ N _ _ _ K _ P

Case-2 N _ _ _ K M P

4) The number of people between M and P is the same as the number of people between M and L.

(Here case - 2 will get neglected as there is no space for L to sit.)

5) Only three people sit to the left of L.

6) Six people sit between L and J.

7) Two people sit between P and R.

8) R is sitting at the second position from one of the ends.

___ L _ _ _ _ _ J _ M _ _ _ N _ _ K _ P
_ _ R _

The above arrangement will be the final arrangement.

Hence, there are a total of 26 persons in the row.

19 people are sitting to the left of K.

6. Ans. D.

People: D, E, F, G, H, I, J and K.

Note - 1: 4 sit at the corner facing outside and 4 sit in the middle of the sides facing the centre.

1) E does not sit at any of the corners of the table.

(Therefore, E sit at the middle of the side)

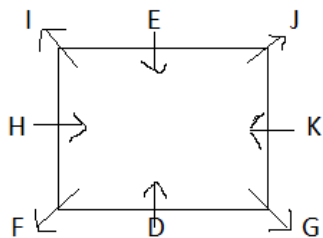
2) Only 3 people sit between D and E.

3) D is not an immediate neighbour of I or J and sits second to the left of K.

4) F sits second to the right of G only 3 people sit between F and J.

5) Only 1 person sits between J and I (either from left or right).

(Now the only leftover person is H and will sit in the only left place)



The above arrangement will be the final arrangement.

G sit 3rd to the right of H.

7. Ans. C.

People: D, E, F, G, H, I, J and K.

Note - 1: 4 sit at the corner facing outside and 4 sit in the middle of the sides facing the centre.

1) E does not sit at any of the corners of the table.

(Therefore, E sit at the middle of the side)

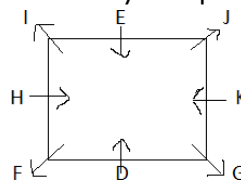
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3) D is not an immediate neighbour of I or J and sits second to the left of K.

4) F sits second to the right of G only 3 people sit between F and J.

5) Only 1 person sits between J and I (either from left or right).

(Now the only leftover person is H and will sit in the only left place)



The above arrangement will be the final arrangement.

I sits to the immediate right of E.

8. Ans. C.

People: D, E, F, G, H, I, J and K.

Note - 1: 4 sit at the corner facing outside and 4 sit in the middle of the sides facing the centre.

1) E does not sit at any of the corners of the table.

(Therefore, E sit at the middle of the side)

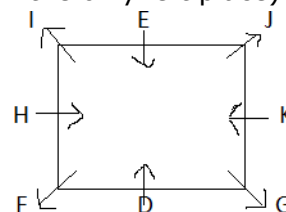
2) Only 3 people sit between D and E.

3) D is not an immediate neighbour of I or J and sits second to the left of K.

4) F sits second to the right of G only 3 people sit between F and J.

5) Only 1 person sits between J and I (either from left or right).

(Now the only leftover person is H and will sit in the only left place)



The above arrangement will be the final arrangement.

I. G is facing inside. ⇒ False (as G faces outside)

II. H is an immediate neighbour of J. ⇒ False (H is 3rd to left of J)

III. G is sitting to the immediate left of K. ⇒ True

Hence, Only conclusion III follows.

9. Ans. E.

People: D, E, F, G, H, I, J and K.

Note - 1: 4 sit at the corner facing outside and 4 sit in the middle of the sides facing the centre.

1) E does not sit at any of the corners of the table.

(Therefore, E sit at the middle of the side)

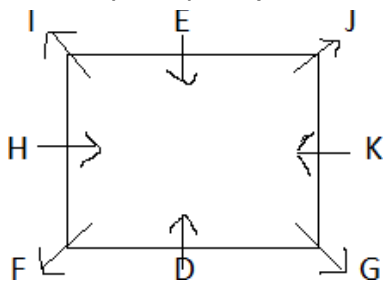
2) Only 3 people sit between D and E.

3) D is not an immediate neighbour of I or J and sits second to the left of K.

4) F sits second to the right of G only 3 people sit between F and J.

5) Only 1 person sits between J and I (either from left or right).

(Now the only leftover person is H and will sit in the only left place)



The above arrangement will be the final arrangement.

F, J, G, I → Group of people sitting at the corners.

K → sits at the middle of the side.

Hence, K does not belong to the group.

10. Ans. D.

People: D, E, F, G, H, I, J and K.

Note - 1: 4 sit at the corner facing outside and 4 sit in the middle of the sides facing the centre.

1) E does not sit at any of the corners of the table.

(Therefore, E sit at the middle of the side)

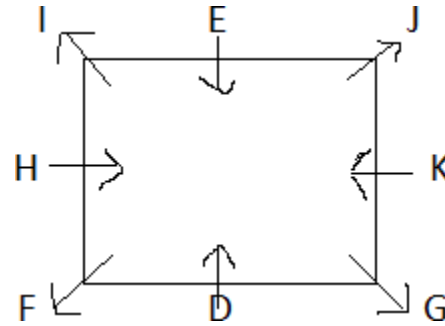
2) Only 3 people sit between D and E.

3) D is not an immediate neighbour of I or J and sits second to the left of K.

4) F sits second to the right of G only 3 people sit between F and J.

5) Only 1 person sits between J and I (either from left or right).

(Now the only leftover person is H and will sit in the only left place)

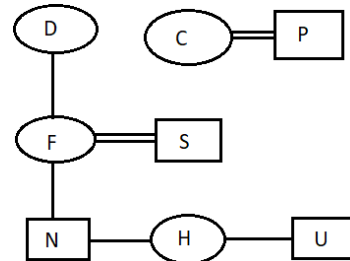


The above arrangement will be the final arrangement.

When we count from the right of J, K is an immediate neighbour of J.

Hence, none sits between J and K when counted from the right of J.

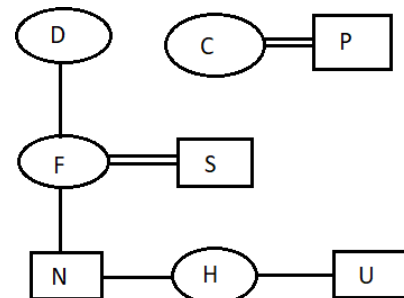
11. Ans. A.



If P is the father-in-law of F, then C is the wife of F.

C is the grandmother of U.

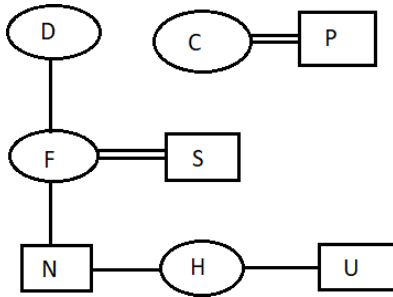
12. Ans. B.



H is the daughter of F.

13. Ans. A.

Member: C, D, H, N, P, S and U



Hence, N is the grandson of D.

14. Ans. A.

Given: $A \geq B > F$; $B > M > O$; $F > S$; $R < S$

Conclusion:

I. $S < A \Rightarrow$ True (as $A > F > S$)

II. $F < O \Rightarrow$ False (as $B > F$; $B > O$ therefore we can't find exact relationship between them)

Hence, only conclusion I follows.

15. Ans. E.

Given: $D \leq R > E \leq B$; $S \leq M = E > D$; $G > B$

Conclusion:

I. $D > G \Rightarrow$ False (as $E \leq B$; $E > D$ and $G > B \rightarrow G > B \geq E > D \rightarrow G > D$)

II. $B < R \Rightarrow$ False ($D \leq R > E$ and $B \geq E > D \rightarrow B \geq E > D \leq R$)

Hence, Neither I nor II follows.

16. Ans. C.

Given: $E \leq S > F \leq C$; $T \leq N = F > E$; $H > C$

Conclusion:

1) $T < C \Rightarrow$ False (as $F \leq C$; $T \leq N = F \Rightarrow T \leq F \leq C$ therefore $T \leq C$)

2) $C = T \Rightarrow$ False (as $F \leq C$; $T \leq N = F \Rightarrow T \leq F \leq C$ therefore $T \leq C$)

As $T \leq C$ therefore either $T < C$ or $T = C$.

Hence, either I or II follows.

17. Ans. B.

Given: $M = L \geq N \geq Q < P < V \geq S$; $Q > G$

On Combining: $M = L \geq N \geq Q > G$; $G < P < V \geq S$

Conclusion:

1) $G \geq S \Rightarrow$ False (as $G < P < V \geq S$ therefore we can't find any relationship between G and S)

2) $M > G \Rightarrow$ True (as $M = L \geq N \geq Q > G$)

Hence, Only conclusion II follows.

18. Ans. D.

Given: $Q > A \geq Z \leq X \leq C$; $Z \geq H$

On combining: $Q > A \geq Z \geq H$; $H \leq Z \leq X \leq C$

Conclusion:

1) $Q > H \Rightarrow$ True (as $Q > A \geq Z \geq H$)

2) $Z \leq C \Rightarrow$ True (as $H \leq Z \leq X \leq C$)

Hence, both conclusions I and II follow.

19. Ans. B.

1) There are 5 boxes between box P and box R.

2) Box T is kept immediately above R.

3) 3 boxes are kept between box T and box S.

Case - 1	Case - 2
	T
P	R
S	
	S
T	
R	P

4) Number of boxes between P and S is same as the number of boxes between T and Q.

Case - 1	Case - 2
	T
P	R
S	
	Q
	S
Q	
T	
R	P

5) Box U is kept below box Q.

6) There is only one box kept between U and V.

(Therefore Case - 1 will get eliminated)

6) Box W is kept somewhere below X.

Case - 2
T
R
X
Q
S
W
U
P
V

Above arrangement is final.

I. Two boxes between T and Q. \Rightarrow True

II. S is kept below W. \Rightarrow False (S is kept above W)

III. U is kept immediately above P. \Rightarrow True

Hence, only II is not true.

20. Ans. A.

- 1) There are 5 boxes between box P and box R.
- 2) Box T is kept immediately above R.
- 3) 3 boxes are kept between box T and box S.

Case - 1	Case - 2
	T
P	R
S	
	S
T	
R	P

4) Number of boxes between P and S is same as the number of boxes between T and Q.

Case - 1	Case - 2
	T
P	R
S	
	Q
	S
Q	
T	
R	P

5) Box U is kept below box Q.

6) There is only one box kept between U and V.

(Therefore Case - 1 will get eliminated)

6) Box W is kept somewhere below X.

Case - 2
T
R
X
Q
S
W
U
P
V

Above arrangement is final.

V is related P \Rightarrow V is immediately below P.

Q is related to X \Rightarrow Q is immediately below X.

Similarly, U is immediately below W.

Hence, U is related to W.

21. Ans. D.

- 1) There are 5 boxes between box P and box R.
- 2) Box T is kept immediately above R.
- 3) 3 boxes are kept between box T and box S.

Case - 1	Case - 2
	T
P	R
S	
	S
T	
R	P

4) Number of boxes between P and S is same as the number of boxes between T and Q.

Case - 1	Case - 2
	T
P	R
S	
	Q
	S
Q	
T	
R	P

- 5) Box U is kept below box Q.
 6) There is only one box kept between U and V.
 (Therefore Case - 1 will get eliminated)
 6) Box W is kept somewhere below X.

Case - 2
T
R
X
Q
S
W
U
P
V

Above arrangement is final.
 Four boxes kept between P and X.
 22. Ans. A.

- 1) There are 5 boxes between box P and box R.
 2) Box T is kept immediately above R.
 3) 3 boxes are kept between box T and box S.

Case - 1	Case - 2
	T
P	R
S	
	S
T	
R	P

4) Number of boxes between P and S is same as the number of boxes between T and Q.

Case - 1	Case - 2
	T
P	R
S	
	Q
	S
Q	
T	
R	P

- 5) Box U is kept below box Q.
 6) There is only one box kept between U and V.
 (Therefore Case - 1 will get eliminated)
 6) Box W is kept somewhere below X.

Case - 2
T
R
X
Q
S
W
U
P
V

Above arrangement is final.
 Box immediately above Q \Rightarrow X
 Box immediately below Q \Rightarrow S
 Hence, XS is the pair of boxes kept immediately above and below box Q respectively

23. Ans. D.
 1) There are 5 boxes between box P and box R.
 2) Box T is kept immediately above R.
 3) 3 boxes are kept between box T and box S.

Case - 1	Case - 2
	T
P	R
S	
	S
T	
R	P

4) Number of boxes between P and S is same as the number of boxes between T and Q.

Case - 1	Case - 2
	T
P	R
S	
	Q
	S
Q	
T	
R	P

5) Box U is kept below box Q.

6) There is only one box kept between U and V.

(Therefore Case - 1 will get eliminated)

6) Box W is kept somewhere below X.

Case - 2
T
R
X
Q
S
W
U
P
V

Above arrangement is final.

Position of box W is fourth from bottom.

24. Ans. A.

Given Word: **UNDERNEATH**

first, fourth, sixth and ninth letters are U, E, N, T

Word formed \Rightarrow TUNE

First letter of word is 'T'.

25. Ans. A.

Letter	T	R	A	N	S	P	O	R	T
Number	20	18	1	14	19	16	15	18	20

Pairs \rightarrow PO, NR, PR, NP

Hence, there are four such pairs.

26. Ans. B.

Person: P, Q, R, S, T, U, V and W

Birth year: 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007

1) S was born in an odd number year.

2) The difference between the present age of S and V is 5.

(as a difference of 5 years is between the person born in 1956 and 1961 and person born in 1973 and 1978 as S born in an odd-numbered year, therefore, S born either in 1961 or 1973 and V born in 1956 and 1978)

3) Only 3 people were born between V and T.

		Case - 1	Case - 2
Year	Age	Person	Person
1945	73		T
1956	62	V	
1961	57	S	
1973	45		S
1978	40		V
1989	29	T	
1996	22		
2007	11		

4) The number of people born between T and Q is the same as the number of people born between T and P.

(As we can see in the above table it is the only possibility that P and Q born just before and after T or only one person between born between P and T and T and Q)

(here case - 2 will get eliminated as in this case it is not possible that people born between T and P is the same as T and Q)

5) The present age of W is twice the present age of Q.

(This is only possible if Q's age is 11 years and W's age is 22 years)

Case – 1		
Year	Age	Person
1945	73	
1956	62	V
1961	57	S
1973	45	P
1978	40	
1989	29	T
1996	22	W
2007	11	Q

5) R was born in one of the years before P.
(Now only U is left and the only birthyear left is 1978. Therefore, U born in 1978)

Year	Age	Person
1945	73	R
1956	62	V
1961	57	S
1973	45	P
1978	40	U
1989	29	T
1996	22	W
2007	11	Q

Above combination will be the final combination.

S was born in 1961. Therefore, the current age of S (wrt 2018) ⇒ 57 years
Age of S after 4 years = 57 + 4 = 61 years.

27. Ans. E.

Person: P, Q, R, S, T, U, V and W
 Birth year: 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007

- 1) S was born in an odd number year.
- 2) The difference between the present age of S and V is 5.
(as a difference of 5 years is between the person born in 1956 and 1961 and person born in 1973 and 1978 as S born in an odd-numbered year, therefore, S born either in 1961 or 1973 and V born in 1956 and 1978)
- 3) Only 3 people were born between V and T.

		Case – 1	Case – 2
Year	Age	Person	Person
1945	73		T
1956	62	V	
1961	57	S	
1973	45		S
1978	40		V
1989	29	T	
1996	22		
2007	11		

4) The number of people born between T and Q is the same as the number of people born between T and P.

(As we can see in the above table it is the only possibility that P and Q born just before and after T or only one person between born between P and T and T and Q)

(here case – 2 will get eliminated as in this case it is not possible that people born between T and P is the same as T and Q)

5) The present age of W is twice the present age of Q.

(This is only possible if Q's age is 11 years and W's age is 22 years)

Case – 1		
Year	Age	Person
1945	73	
1956	62	V
1961	57	S
1973	45	P
1978	40	
1989	29	T
1996	22	W
2007	11	Q

5) R was born in one of the years before P.
(Now only U is left and the only birthyear left is 1978. Therefore, U born in 1978)

Year	Age	Person
1945	73	R
1956	62	V
1961	57	S
1973	45	P
1978	40	U
1989	29	T
1996	22	W
2007	11	Q

Above combination will be the final combination.

T born before W and after U.

28. Ans. A.

Person: P, Q, R, S, T, U, V and W

Birth year: 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007

- 1) S was born in an odd number year.
- 2) The difference between the present age of S and V is 5.
(as a difference of 5 years is between the person born in 1956 and 1961 and person born in 1973 and 1978 as S born in an odd-numbered year, therefore, S born either in 1961 or 1973 and V born in 1956 and 1978)
- 3) Only 3 people were born between V and T.

		Case – 1	Case – 2
Year	Age	Person	Person
1945	73		T
1956	62	V	
1961	57	S	
1973	45		S
1978	40		V
1989	29	T	
1996	22		
2007	11		

4) The number of people born between T and Q is the same as the number of people born between T and P.

(As we can see in the above table it is the only possibility that P and Q born just before and after T or only one person between born between P and T and T and Q)

(here case – 2 will get eliminated as in this case it is not possible that people born between T and P is the same as T and Q)

5) The present age of W is twice the present age of Q.

(This is only possible if Q's age is 11 years and W's age is 22 years)

		Case – 1
Year	Age	Person
1945	73	
1956	62	V
1961	57	S
1973	45	P
1978	40	
1989	29	T
1996	22	W
2007	11	Q

5) R was born in one of the years before P.
(Now only U is left and the only birth year left is 1978. Therefore, U born in 1978)

Year	Age	Person
1945	73	R
1956	62	V
1961	57	S
1973	45	P
1978	40	U
1989	29	T
1996	22	W
2007	11	Q

Above combination will be the final combination.

S was born in 1961. Therefore, the age of S ⇒ 57 years

R born in 1945. Therefore, the age of R ⇒ 73 years

Difference between the ages of S and R = 73 – 57 = 16 years

29. Ans. C.

Person: P, Q, R, S, T, U, V and W

Birth year: 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007

- 1) S was born in an odd number year.
- 2) The difference between the present age of S and V is 5.

(as a difference of 5 years is between the person born in 1956 and 1961 and person born in 1973 and 1978 as S born in an odd-numbered year, therefore, S born either in 1961 or 1973 and V born in 1956 and 1978)

3) Only 3 people were born between V and T.

		Case – 1	Case – 2
Year	Age	Person	Person
1945	73		T
1956	62	V	
1961	57	S	
1973	45		S
1978	40		V
1989	29	T	
1996	22		
2007	11		

4) The number of people born between T and Q is the same as the number of people born between T and P.

(As we can see in the above table it is the only possibility that P and Q born just before and after T or only one person between born between P and T and T and Q)

(here case - 2 will get eliminated as in this case it is not possible that people born between T and P is the same as T and Q)

5) The present age of W is twice the present age of Q.

(This is only possible if Q's age is 11 years and W's age is 22 years)

Case - 1		
Year	Age	Person
1945	73	
1956	62	V
1961	57	S
1973	45	P
1978	40	
1989	29	T
1996	22	W
2007	11	Q

5) R was born in one of the years before P. (Now only U is left and the only birth year left is 1978. Therefore, U born in 1978)

Year	Age	Person
1945	73	R
1956	62	V
1961	57	S
1973	45	P
1978	40	U
1989	29	T
1996	22	W
2007	11	Q

Above combination will be the final combination.

Age of U is 40 years.

30. Ans. E.

Person: P, Q, R, S, T, U, V and W

Birth year: 1945, 1956, 1961, 1973, 1978, 1989, 1996 and 2007

1) S was born in an odd number year.

2) The difference between the present age of S and V is 5.

(as a difference of 5 years is between the person born in 1956 and 1961 and person born in 1973 and 1978 as S born in an odd-numbered year, therefore, S born either in 1961 or 1973 and V born in 1956 and 1978)

3) Only 3 people were born between V and T.

		Case - 1	Case - 2
Year	Age	Person	Person
1945	73		T
1956	62	V	
1961	57	S	
1973	45		S
1978	40		V
1989	29	T	
1996	22		
2007	11		

4) The number of people born between T and Q is the same as the number of people born between T and P.

(As we can see in the above table it is the only possibility that P and Q born just before and after T or only one person between born between P and T and T and Q)

(here case - 2 will get eliminated as in this case it is not possible that people born between T and P is the same as T and Q)

5) The present age of W is twice the present age of Q.

(This is only possible if Q's age is 11 years and W's age is 22 years)

Case - 1		
Year	Age	Person
1945	73	
1956	62	V
1961	57	S
1973	45	P
1978	40	
1989	29	T
1996	22	W
2007	11	Q

5) R was born in one of the years before P.

(Now only U is left and the only birth year left is 1978. Therefore, U born in 1978)

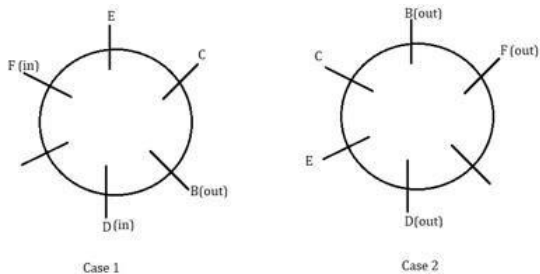
Year	Age	Person
1945	73	R
1956	62	V
1961	57	S
1973	45	P
1978	40	U
1989	29	T
1996	22	W
2007	11	Q

Above combination will be the final combination.

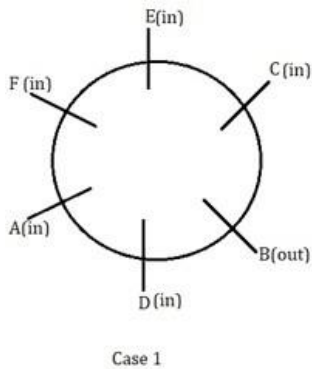
Hence, R was born in 1945.

31. Ans. E.

From I and II,
 F is 2nd to the left of D. C is 2nd to the left of F. C is to the immediate left of B. E is 2nd to the left of B and B is facing away from the centre.



B is not a neighbor of F so case 2 gets rejected. B is 2nd to the right of A. C's neighbors are facing opposite directions to each other. F is 2nd to the right of C.



Clearly, five persons are facing the centre. So I and II together are necessary to answer the question. Hence, option E.

32. Ans. E.

From I and II,
 A was born in a month which was having 30 days so A either born in April or June.

If A was born in June: Two persons were born between A and D. One person was born between D and E then D was born in March and E was born in May. One person was born between E and C then C was born in July. Now three persons were born between D and C.

If A was born in April: Two persons were born between A and D. One person was born between D and E then D was born in July and E was born in May. One person was born between E and C then C was born in March. Now three persons were born between D and C.

So statement I and II are together necessary to answer the question.

Hence, option E.

33. Ans. D.

From **Statement I:**

Either Neha or Abhay is sitting at one of the ends. Abhay is third to the left of Neha.

Deepak is fourth to the left of Poorvi. The possible scenarios can be

- I. Deepak _ Abhay _ Poorvi Neha
- II. Abhay Deepak _ Neha _ Poorvi

So, we can't find who are sitting at the extreme ends.

From **Statement II:**

Abhay _ Poorvi or Poorvi _ Abhay and neither of them is sitting at the ends.

The possible scenarios can be

- I. Manik Abhay _ Poorvi Neha
- II. Poorvi Neha _ Abhay Manik

So, we can't find who are at the extreme ends.

From Statements I and II

The only possible scenario is Deepak Manik Abhay Hitesh Poorvi Neha.

Thus, Deepak and Neha are sitting at the extreme ends.

34. Ans. A.

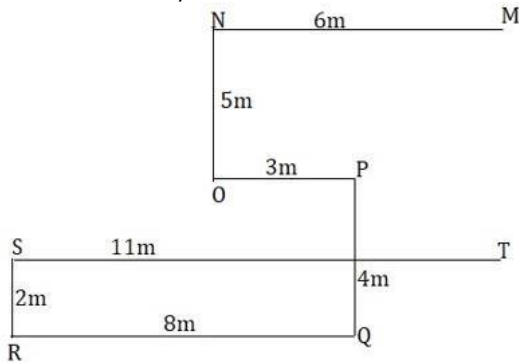
From statement 1, $E > B > C$, D (In weight) but E is not the heaviest that means A is the heaviest.

$A > E > B > C$, D

From statement 2, $A > E > B, C$. So, D could be either the heaviest or the lightest. Statement 2, does not clarify Hence, statement 1 alone is sufficient to answer the question.

35. Ans. E.

From I and II,



So point M is north of point T.

So I and II together are necessary to answer the question.

Hence, option E.

36. Ans. E.

Amount invested in scheme A be Rs. X and amount invested in scheme B be Rs. $(7000 - X)$

Interest earned from scheme A = $X \times [10 + 10 + (10 \times 10)/100]\% = X \times (21/100)$

Return from Scheme B = $(7000 - X) \times (3 \times 15/100) = (7000 - X) \times 45/100$

ATQ

$X \times (21/100) = [(7000 - X) \times 45/100] \times (84/100)$

$\Rightarrow X = (7000 - X) \times 1.8$

$\Rightarrow 2.8X = 7000 \times 1.8$

$\Rightarrow X = 7000 \times (18/28) = 4500$

Hence, answer is option E.

37. Ans. A.

Let the number of red balls be X , then Probability of getting 1st ball red = $X/(X+5)$

Probability of getting 2nd ball red (Without replacement) = $(X-1)/(X+4)$

Probability of getting both balls red = $[X/(X+5)] \times [(X-1)/(X+4)] = 3/7$

On solving, we get

$X = 10$

38. Ans. C.

A alone can do = 20days

Efficiency ratio of A & B = 4 : 5

Time required will be in ratio = 5:4

Hence B alone will do it in = 16 days

LCM of (16,20) = 80, Assume work size of 80 units

1 day work of A = 4 units

1 day work of B = 5 units

Work done by both in 4 days = $4 \times (5+4) = 36$ units

Work left = $80 - 36 = 44$ units

Now C takes 22 days to complete = 44 units.

Therefore, the efficiency of C = $44/22 = 2$

Hence time taken by C alone to complete the work = $80/2 = 40$ days

39. Ans. C.

Say haircut voucher = H pedicure voucher P

$H + P = 450$

$H = 290, P = 160$

Male getting pedicure = $160 \times (13/20) = 104$

Female Getting Pedicure = $160 \times (7/20) = 56$

Male Haircut = $104 + 15 = 119$

Female haircut = $290 - 119 = 171$

	Male	Female	Total
Haircut	119	171	290
Pedicure	104	56	160
Total	223	227	450

Required % = $(56/290) \times 100 = 19\%$

approximately

40. Ans. D.

Say haircut voucher = H pedicure voucher P

$H + P = 450$

$H = 290, P = 160$

Male getting pedicure = $160 \times (13/20) = 104$

Female Getting Pedicure = $160 \times (7/20) = 56$

Male Haircut = $104 + 15 = 119$

Female haircut = $290 - 119 = 171$

	Male	Female	Total
Haircut	119	171	290
Pedicure	104	56	160
Total	223	227	450

Total for manicure = $30 + 50\%$ of 290

= $30 + 145 = 175$

41. Ans. D.

Say haircut voucher =H pedicure voucher P =H-130

H+P= 450,

H=290, P=160

Male getting pedicure= $160 \times (13/20) = 104$

Female Getting Pedicure= $160 \times (7/20) = 56$

Male Haircut= $104 + 15 = 119$

Female haircut= $290 - 119 = 171$

Males redeemed pedicure voucher= 104

	Male	Female	Total
Haircut	119	171	290
Pedicure	104	56	160
Total	223	227	450

42. Ans. C.

Say haircut voucher =H pedicure voucher P =H-130

H+P= 450,

H=290, P=160

Male getting pedicure= $160 \times (13/20) = 104$

Female Getting Pedicure= $160 \times (7/20) = 56$

Male Haircut= $104 + 15 = 119$

Female haircut= $290 - 119 = 171$

Males redeemed pedicure voucher= 104

	Male	Female	Total
Haircut	119	171	290
Pedicure	104	56	160
Total	223	227	450

43. Ans. D.

Say haircut voucher =H pedicure voucher P =H-130

H+P= 450,

H=290, P=160

Male getting pedicure= $160 \times (13/20) = 104$

Female Getting Pedicure= $160 \times (7/20) = 56$

Male Haircut= $104 + 15 = 119$

Female haircut= $290 - 119 = 171$

Males redeemed pedicure voucher= 104

	Male	Female	Total
Haircut	119	171	290
Pedicure	104	56	160
Total	223	227	450

Required Difference= $104 - 56 = 48$

44. Ans. A.

Required average= $\{98.75\% \text{ of } (2.8 + 3.6)\} / 2 = 3.16 \text{ lakh.}$

45. Ans. B.

Shirts failed test in 2014= 2.5% of 3.2lakh= 8000

Shirts failed test in 2017= 1.25 % Of 3.6 lakh= 4500

Decrease in percentage= $(8000 - 4500) \times (100/8000) = 43.75\%$

46. Ans. D.

In the year 2015:

No. of coloured shirts : No. of white shirts = 3 : (3 - 1) = 3 : 2

Hence, answer = $(3/5) \times 4 = 2.4 \text{ lakh}$

47. Ans. C.

Number of shirts, which passed the quality test in 2015 = 97.75% of 4.0 lakh

Hence, answer= 10% of (97.75% of 4.0 lakh) = 39100.

48. Ans. B.

Total no. of shirts passed the quality test = $3,20,000 \times (1 - 2.5/100) = 3,20,000 \times 97.5/100 = 3,12,000$

Hence, the total revenue = $3,12,000 \times 500 = \text{Rs.}15.6 \text{ Crore.}$

49. Ans. D.

Required number of large size woxx boxes = $36 + 42 + 32 + 46 + 70 = 226$

50. Ans. E.

Total number of sold woxx boxes on day 1 = $48 + 36 = 84$

Total number of sold woxx boxes on day 4 = $53 + 46 = 99$

Hence, the required percent = $(84/99) \times 100 = 84.84 \approx 84.9\%$.

51. Ans. D.

Total number of woxx box of medium size, sold on Day 1, Day 4 and Day = $48 + 53 + 40 = 141$

Hence, the required average = $141/3 = 47$

52. Ans. C.

Hence required ratio= $(60 + 40) : (48 + 32) = 100 : 80 = 5 : 4.$

53. Ans. A.

Required percentage = $[(40 - 32)/32] \times 100 = 25\%$

54. Ans. B.

Given, $r = 5$ cm and volume of cylinder =

$$\pi r^2 h = 500\pi$$

$$\Rightarrow h = 20 \text{ cm}$$

So, the diagonal of square = 20 cm

$$\Rightarrow \text{Side of the square} = \text{Diagonal} / \sqrt{2} = 20 /$$

$$\sqrt{2} = 10\sqrt{2} \text{ cm}$$

$$\therefore \text{Perimeter of square} = 4 \times \text{side} = 4 \times 10$$

$$\sqrt{2} = 40\sqrt{2} \text{ cm}$$

55. Ans. B.

$$A \quad 2x^2 + 5x + 3 = 0$$

$$\text{So } 2x^2 + 2x + 3x + 3 = 0$$

$$\text{So } 2x(x+1) + 3(x+1) = 0$$

$$\text{So } (2x+3)(x+1) = 0$$

$$\text{So } x = -3/2 \text{ or } x = -1$$

$$B. \quad 2y^2 - 7y + 6 = 0$$

$$2y^2 - 4y - 3y + 6 = 0$$

$$\text{So } y = +2 \text{ or } y = +3/2$$

Thus $x < y$

56. Ans. D.

$$A. \quad 3x^2 - 7x + 4 = 0$$

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

$$X = 4/3 \text{ or } 1$$

$$B. \quad 2y^2 - 3y + 1 = 0$$

$$2y^2 - 2y - y + 1 = 0$$

$$Y = 1 \text{ or } 1/2$$

Thus D is correct

57. Ans. A.

$$A. \quad x^2 + 12x + 35 = 0$$

$$x^2 + 7x + 5x + 35 = 0$$

$$x = -7 \text{ or } -5$$

$$B. \quad y^2 + 17y + 72 = 0$$

$$y^2 + 8y + 9y + 72 = 0$$

$$Y = -8 \text{ or } -9$$

So $x > y$

58. Ans. D.

$$A. \quad x^2 - 10x + 25 = 0$$

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

$$x = +5$$

$$B. \quad y^2 = 25$$

$$Y = +5, -5$$

So $x \geq y$

59. Ans. B.

$$A. \quad x^2 - 36x + 324 = 0$$

$$x^2 - 18x - 18x + 324 = 0$$

$$x = 18$$

$$B. \quad y^2 - 42y + 441 = 0$$

$$y^2 - 21y - 21y + 441 = 0$$

$$y = 21$$

$$x < y$$

60. Ans. B.

In 30 minutes the train with 50 Km speed reach at a distance of 25 Km

And their relative speed is 25 Km/h

$$\text{So, Time take} \rightarrow 25/25 = 1 \text{ Hr}$$

Distance from Delhi the two trains will be together $\rightarrow 75 \times 1 = 75 \text{ KM}$

61. Ans. D.

$$\text{Cost Price} = \text{Rs. } (50000 + 2000 + 500) =$$

$$\text{Rs. } 52,500$$

$$\text{Profit} = 20\%$$

Hence, selling price = 120% of 52500 = Rs.

$$\text{Rs. } 63,000$$

62. Ans. A.

Let the number of persons in the group

Initially be x , then

$$x \times 16.75 + 20 \times 13.25 = (x + 20) \times 15$$

$$\Rightarrow 1.75x = 20 \times (15 - 13.25)$$

$$\Rightarrow 1.75x = 20 \times 1.75$$

$$\Rightarrow x = 20$$

63. Ans. E.

$$A_{2001}:A_{2002} = 4:5$$

$$A_{2001}:B_{2001} = 2:3$$

We have to make A_{2001} same in both cases.

$$A_{2001}:B_{2001} = 4:6$$

$$\text{Let A's income in 2001} = 4x$$

$$\text{Let B's income in 2001} = 6x$$

$$\text{A and B income in 2001} = 25000 [\text{Given}]$$

$$10x = 25000$$

$$x = 2500$$

$$\text{A's income in 2001} = 4x = 4 \times 2500 =$$

$$\text{Rs } 10000$$

$$\text{B's income in 2001} = 6x = 6 \times 2500 =$$

$$\text{Rs } 15000$$

$$\text{A's income in 2002} = 5x = 5 \times 2500 =$$

$$\text{Rs } 12500$$

$$\text{Savings of A in 2002} = \text{Rs } 4000$$

$$\text{Expenditure} = \text{Income} - \text{Savings} = 12500 -$$

$$4000 = \text{Rs } 8500$$

64. Ans. A.

Let the current ages be y and $3y$

Their ages after 5 years $\rightarrow y+5$ & $3y+5$

$$\rightarrow (y+5)/(3y+5) = 3/4 \rightarrow y = 1$$

So, their current ages are 1 & 3 years and after 10 years the average age be 12 years.

65. Ans. A.

Ratio of mixture of spirit and water in Container 1 = 2: 3

Amount of mixture taken = 10 litres

Amount of spirit = $\frac{2}{5} \times 10 = 4$ litres

Amount of water = $\frac{3}{5} \times 10 = 6$ litres

Ratio of mixture of spirit and water in Container 2 = 3: 2

Amount of mixture taken = x litres

Amount of spirit = $\frac{3}{5} \times x = \frac{3x}{5}$ litres

Amount of water = $\frac{2}{5} \times x = \frac{2x}{5}$ litres

Ratio of mixture of spirit and water in resultant mixture = 4: 5

Therefore, $\frac{4 + \frac{3x}{5}}{\frac{6 + 2x}{5}} = \frac{4}{5}$

$\frac{20 + 3x}{30 + 2x} = \frac{4}{5}$

$\frac{20 + 3x}{30 + 2x} = \frac{4}{5}$

$100 + 15x = 120 + 8x$

$7x = 20; x = 2.86$ litres

So option (1) is the correct answer.

66. Ans. B.

0.5, 2, 1, 4, 32, 512

taking from opposite side

$512 \div 2^4 = 32$

$32 \div 2^3 = 4$

$4 \div 2^2 = 1$

$1 \div 2^1 = 0.5 \neq 2$

$0.5 \div 2^0 = 0.5$

hence 2 is wrong term.

67. Ans. B.

$5.1 = 4 + 1.1$

$7.3 = 5.1 + 2.2$

$10.6 = 7.3 + 3.3$

$15 = 10.6 + 4.4$

$20.5 = 15 + 5.5$ (Hence, 20 is the wrong term)

$27.1 = 20.5 + 6.6$

68. Ans. D.

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

$8 = (3 \times 3) - 1$

$31 = (8 \times 4) - 1$

$154 = (31 \times 5) - 1$

$923 = (154 \times 6) - 1$ (Hence, 924 is the wrong term)

$6460 = (923 \times 7) - 1$

69. Ans. D.

$134 - 69 = 65$ further $65 - 33 = 32$

$69 - 36 = 33$ $33 - 17 = 16$

$36 - 19 = 17$ $17 - 9 = 8$

$9 - 10 = 9$ $9 - 5 = 4$

$10 - 5 = 5$

70. Ans. B.

$251 - 1^3 = 250$ ---- (Hence, 252 is the wrong term)

$250 + 2^2 = 254$

$254 - 3^3 = 227$

$227 + 4^2 = 243$

$243 - 5^3 = 118$

$118 + 6^2 = 154$

71. Ans. E.

Refer to the following sentences from the passage:

I. "These **mismatched graduates** face poorer prospects and lower earnings than their peers who embark on careers that are a better fit for the knowledge and skills they have acquired through three or four years of study. It suggests that traditional careers advice isn't working." The mismatched graduates are those who do not end up getting the job that they are skilled in. Thus, alternative I is correct.

II. "To help graduates find the right jobs for them, lots of universities are experimenting with new ways to make their careers advice more accessible and meaningful." This means that many universities are addressing the problem of mismatched jobs.

III. "The problem isn't necessarily that too many students are taking the wrong course. There is little evidence that graduates are studying the "wrong" subjects, according to the UUK research, since most are on courses that offer subject knowledge and employability skills that are very much in demand...Instead, students need better careers advice that will help them define their skills and attributes." The passage discusses how graduates end up being mismatched to the jobs they find after university. He/ She finds that the lack of a good career is the root cause of this problem.

All the statements are correct and option E is the correct answer.

72. Ans. B.

The third and the fourth paragraphs of the passage suggest that students are not opting for the wrong courses, but they have not been

counselled appropriately to get the job that matches their knowledge and skills. Thus, option B is the correct answer.

73. Ans. E.

The author of the passage supports the university graduates need to be provided professional advice with respect to the career they must opt for. This would save them from making unsuitable career choices. According to the passage, "Students also need help finding out which skills they'll need to break into certain industries - **particularly in sectors that aren't good at diversifying their recruitment, or when they have no family or social network of contacts to call on for help and advice.**" Thus, option E is the most suitable answer.

74. Ans. A.

Option A is the correct answer. The author of the passage points out that many employers prefer recruiting young people who have spent a couple of years in the workplace rather than raw recruitments from university. This implies that the problem lies in the lack of experience as opposed to the lack of skills, something which the politicians complain of. Thus the mentioned sentence implies that the politicians have not been able to properly analyse the root cause of the problem that lands up a student in an undesirable job. Option A is the correct answer.

75. Ans. B.

"Evidence" means proof. Thus, option B is the correct answer.

Rustic- made in a plain and simple fashion.
Misnomer- a wrong or inaccurate use of a name or term.

76. Ans. C.

"Embark" means to begin (a course of action). Thus, option A is the synonym of "embark". "Reject" is the correct antonym of the given word.

Apprehend- understand or perceive.

77. Ans. E.

All the three statements use the word "hamper" in the correct form. In the first and the second sentence, the word has been used as a verb in the present and the past tense respectively. "Hamper" means to cause

hindrance. The third sentence uses the word as a noun which means a basket or a container. The word fits appropriately in the given question. Since the word has been used correctly in all the sentences, option E is the correct answer.

78. Ans. D.

Tact— skill and sensitivity in dealing with others or with difficult issues
Tactfully— with skill and sensitivity in dealing with others or with difficult issues
Tactful— having or showing skill and sensitivity in dealing with others or with difficult issues

"Tactful" fits in statement I as an adjective is required to define the judge.
"Tact" fits in statement III as it has been correctly used as a noun in the sentence.
"Tactfully" is an adverb which can modify a verb, an adjective or another adverb. The word does not fit in the second sentence as one cannot come up with a "tactfully", but with a tact.

Since only statements I and III are correct, option D is the correct answer.

79. Ans. A.

"Adage" is a noun which means a proverb or short statement expressing a general truth. The word cannot be used in the verb or a gerund form, thus, statements II and III are incorrect. The word has been used correctly only in statement I. Thus, option A is the correct answer.

80. Ans. B.

"Malaise" (noun) means uneasiness or restlessness. The word has been correctly used only in statement II. The other two sentences use the forms of the word which do not exist in the Standard English language. Thus, option B is the correct answer.

81. Ans. E.

When we use 'rather', we mention the opposite of that action in the next phrase. Since circular and linear are opposite, A & E go together. C and F also connect appropriately.

82. Ans. C.

All the given sentences are about oceans. Nothing is related to farmers. B ends with

'around' which indicates there must be a location mentioned in the next part of the statement. None of the segments in column II does that. Both D & F can follow A. But none of the options mentions A- D as a pair. So, D will follow C and F will follow A. Hence, the correct answer is C.

83. Ans. A.

Statement A ends with 'completely', an adverb. This means the part following it must start with a main verb. None of the clauses in column II do so. Statement C ends with 'of' which indicates that the next part must describe an attribute of the subject (Unsustainable fishing practices). Grammatically, both E & F can do that. But, none of the options has C- E as a pair. So, F would be more appropriate after C. B & E can be joined correctly. Hence, the correct answer is A.

84. Ans. D.

There is only one 'social media market giant' in column I, i.e. is Facebook. So, B goes with F. No other combinations can be formed correctly. Hence, the correct answer is option D.

85. Ans. B.

Care of calves and humans cannot be picked up for listening. So, B goes with F. Preferring one appendage over another, is a habit also seen, in humans i.e. being right or left handed. So, A & E go together. Older females do care of the young ones. so, C goes with D. Hence, the correct answer is option B.

86. Ans. A.

"Displacing" is a continuous verb which does not make much sense here. Thus, the noun "displacement" should be written instead of "displacing". Also, the sentence talks about climatic changes, thus, the word "weather" should be used instead of "whether". Since only (i) is correct, thus, option A is the correct answer.

Note that "weather" (alternative i) and whether (alternative ii) are two different words carrying different meanings.

87. Ans. B.

The subject here is "incidents" which is plural, thus, the verb should be plural too. Hence,

"have" should be used instead of "has". Moreover, 'spotlight in' will get replaced by the 'spotlight on' as there should be a proper use of preposition. 'To put the spotlight on' something means to highlight it. Thus, option B is the correct answer.

88. Ans. C.

"Cost" is a singular subject, thus the auxiliary verb "is" should be used. Thus, option C is the correct answer.

"More" represents comparative degree, hence, "the" cannot be used before it, hence, (ii) is incorrect. Thus, option C is the correct answer.

89. Ans. A.

"Six" is a plural number, thus, 'years' should be in plural as the preposition "of" is used after it. In contrast, in compound nouns, the singular forms are used. E.G. I saw a **ten year** old boy steal from the shop. Additionally, in the highlighted part, the phrase "in qualitatively" is incorrect as "qualitatively" is an adverb. To make the sentence correct, the noun "quality" should be used. Since (i) makes both the corrections, option A is the correct answer.

90. Ans. A.

The subject here is "meritocracy", hence, the singular verb "has" should be used instead of "have". "Examining" as given in alternative (iii) is not a word in Standard English, hence incorrect. Thus, option A is the answer.

91. Ans. B.

The error is in part B of the sentence, which means the word "underline" has been used wrongly here. Note that the word mentioned after "underline" is "problem", which is a noun. So, we need an adjective to modify this noun. Thus, "underlined" should replace the highlighted word mentioned in B. An underlined problem means an emphasised problem.

92. Ans. B.

The error is in part B of the sentence, which means the word "vertebrate" has been used wrongly here. Note that the sentence mentions that the heat causes some action in the molecules, which means we need a verb instead of the noun "vertebrate" (an animal of

a large group distinguished by the possession of a backbone or spinal column). Thus, the word "vibrate" must be used which means move continuously and rapidly to and fro.

93. Ans. B.

Fleet is the collective noun used for ships. Here, 'sheeps' has been used in the first part, which needs to be replaced with 'ships'.

94. Ans. B.

Dew should be replaced by due. Dew means tiny drops of water that form on cool surfaces at night, when atmospheric vapour condenses. Due to means owing to something or because of something.

95. Ans. A.

Here "creating" should be used in place of "created" in order to make sentence context appropriate.

96. Ans. B.

The usage of "however" in one of the segments suggests that a contradiction to a mentioned clause will be presented in the other clause. The sentence cannot start with the conjunction, "however". This eliminates options D and E. Part C cannot begin the sentence either as it would fail to make a logical sentence. E cannot immediately follow C, thus, the correct sequence is DBCAE and option B is the correct answer.

97. Ans. B.

The sentence should start with the main subject, which in this case is "Harry and

Meghan's little one". The little one's objective is given by segment B and hence that should follow A. Of all the options, it is option B which has AB as the opening pair. Option B is the correct answer and the correct sequence is ABCDE.

98. Ans. C.

The segments cannot be arranged in any of the given sequences as there are grammatical errors in it.

99. Ans. D.

The theme of the sentence is centred around the given words, "resilient" "resilience" and "resiliency". Thus, A and D can be used to start the sentence. Of the two, A must be followed by D. Now E tells us about the use of the words, which is applied to victims. Thus, the sequence so far is ADE. The option with the same sequence is D and the correct sequence is ADEBC.

100. Ans. E.

The sentence is about Lauren Mayberry. Thus, segment A should start the sentence. Frontwoman means the leading singer in a band, thus, logically she got on to the stage must follow A. She took the stage in something that was pastel coloured. This inadvertently means that she was dressed up in a dress which was pastel in colour. What must follow E is D. The option with the sequence AED is option E and AEDBC is the correct order.
