IBPS RRB Office Assistant Prelim Solved Paper - 2020

Based on Memory

REASONING ABILITY

DIRECTIONS (Qs. 1-5) : *Study the following information carefully and answer the questions given below :*

Eight students i.e. *D, Q, G, H, K, S, E* and *W* are sitting around a square table in such a way that four students sit at the corner side of the table and other four students sit in the middle side of the table. The students who sit at the corner side are facing away from the center and the students who sit in the middle side are facing towards the center. *D* sits at the corner side of the table. One student sits between *D* and *K*. *Q* sits third to the right of *K*. Three students sit between *Q* and *E*. *S* sits second to the right of *E*. *S* is not an immediate neighbour of *D*. *H* sits second to the right of *G*.

1. Who among the following are the immediate neighbours to each other?
    (a) *G, E*
    (b) *Q, H*
    (c) *K, H*
    (d) *W, K*
    (e) None of these

2. Who among the following sits third to the right of *K*?
    (a) *D*   (b) *G*
    (c) *H*   (d) *H*
    (e) None of these

3. Who among the following sits second to the right of *W*?
    (a) *Q*   (b) *E*
    (c) *D*   (d) *S*
    (e) None of these

4. Four of the following five are alike in a certain way and hence from a group. Find the one who does not belong to that group?
    (a) *E*   (b) *D*
    (c) *K*   (d) *G*
    (e) *H*

5. How many students sit between *W* and *S* when counted form the left of *S*?
    (a) Three   (b) Four
    (c) One   (d) Two
    (e) None of these

DIRECTIONS (Qs. 6-9) : *Study the following sequence of numbers and alphabets and answer the given questions :*

M 2 R A Y 7 6 F 9 1 S E 5 2 O 3 5 7 1 B 6 L G P

6. If all the consonants are removed from the given series, then which among the following element is ninth from the left side?
    (a) 2   (b) O   (c) 3   (d) 7
    (e) None of these

7. Which among the following element is fifth to the left of twelfth element from the left end?
    (a) F   (b) 6   (c) 9   (d) 1
    (e) None of these

8. If all the numbers are removed from the given series, then which among the following element is seventh from the right end?
    (a) E
    (b) O
    (c) F
    (d) S
    (e) None of these

9. How many numbers are there which are immediately preceded by a vowel?
    (a) One   (b) None
    (c) Two   (d) Three
    (e) None of these

DIRECTIONS (Qs. 10-12) : *Study the following information carefully and answer the questions given below :*

Five men *A, B, C, D* and *E* have different heights. Less than two men are shorter than *A*. As many men are taller than *A* as shorter than *B*. *D* is taller than *C* but shorter than *E*. *C* is not the shortest man. The height of third tallest man is 97 cm.

10. If the height of shortest man is 57 cm, then what may be the hieght of *C*?
    (a) 67 cm   (b) 85 cm
    (c) 77 cm   (d) All the given heights
    (e) None of these

11. How many men are taller than *B*?
    (a) None   (b) One
    (c) Two   (d) Three
    (e) None of these

12. Who among the following is just shorter than *E*?
    (a) None   (b) *B*
    (c) *D*   (d) *A*
    (e) None of these

DIRECTIONS (Qs. 13-16) : *In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Answer the given questions :*

  (a) If only conclusion I follows.
  (b) If only conclusion II follows.
  (c) If either conclusion I or II follows.
  (d) If neither conclusion I nor II follows.
  (e) If both conclusions I and II follow.

13. **Statements :** All Love are Sweet. No Sweet are Hate.
    Conclusions :
    I.   No Love are Hate.
    II. Some Love are Hate.

14. **Statements :** All Copy are Paper. Only a few Paper are Black. No Black are White.
    Conclusions :
    I.   Some Paper are not Black.
    II. Some Paper are not White.

15. **Statements :** Only a few Banana are Mango. All Mango is Fruits. Only a few Fruits are Sour.
    Conclusions :
    I.   Some Mango is not Sour.
    II. No Banana are Fruits.

16. **Statements :** All Bikes are Cars. Only a few Cars are Trains. No Trains are Aeroplane.
    Conclusions :
    I.   All Aeroplane can never be Cars.
    II. Some Bikes can be Trains.

DIRECTIONS (Qs. 17-21) : *Study the following information carefully and answer the questions given below :*

Some persons *A, B, C, D, E, F* and *G* are sitting in row and all are facing towards north but not necessarily in the same order. *B* sits second from one of the extreme ends. Three persons sit between *E* and *B*. Two persons sit between *E* and *F. D* sits to the immediate left of *F. A* sits to left of *D* but is not an immediate neighbour of *D*. More than two persons sit between *A* and *C*.

17. How many persons sit to the left of *D*?
  (a) Two
  (b) None
  (c) One
  (d) Three
  (e) None of these

18. Who among the following sits third to the left of *F*?
  (a) *C*   (b) *D*
  (c) *B*   (d) *A*
  (e) None of these

19. Who among the following persons sit at the extreme ends?
  (a) *F, A*   (b) *F, C*
  (c) *G, C*   (d) *A, C*
  (e) None of these

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

21. Who among the following sits to the immediate left of *B*?
  (a) *G*   (b) *F*
  (c) *C*   (d) *E*
  (e) None of these

DIRECTIONS (Qs. 22-23) : *Study the following information carefully and answer the questions given below :*

Point *S* is 15 m north of point *T.* Point *R* is 19 m east of point *S.* Point *Q* is 13 m north of point *R*. Point *P* is 25 m west of point *Q.* Point *O* is 13 m south of point *P*.

22. What is the shortest distance between point *O* and point *S*?
  (a) 13 m   (b) 11 m
  (c) 9 m   (d) 15 m
  (e) None of these

23. In which direction is point *T* with respect to point *Q*?
  (a) South east   (b) North west
  (c) South west   (d) North east
  (e) None of these

DIRECTIONS (Qs. 24-27) : *Study the following information carefully and answer the questions given below :*

There are certain number of persons sitting in a row facing towards north direction. *P* sits fifth to the right of *Q*. Two persons sit between *R* and *Q. S* sits fourth to the left of *R*. Four persons sit to the left of *S*. The number of persons sit between *S* and *Q* is same as the number of persons sit between *Q* and *T. T* sits at fourth position from one of the extreme ends.

24. How many persons sit between *Q* and *S*?
  (a) None   (b) Six
  (c) Five   (d) Four
  (e) None of these

25. How many persons sit in the row?
  (a) Twenty   (b) Twenty-one
  (c) Twenty-two   (d) Nineteen
  (e) None of these

26. Who among the following sits fourth to the right of *S*?
  (a) None   (b) *R*
  (c) *Q*   (d) *T*
  (e) None of these

27. How many persons sit to the left of *R*?
  (a) Nine   (b) Ten
  (c) Eight   (d) Eleven
  (e) None of these

28. How many such pairs of letters are there in the meaningful word 'ENGLISH' each of which has as many letters between them in the word as in the English alphabet (From both backward and forward)?
  (a) One   (b) Two
  (c) More than three (d) Three
  (e) None of these

DIRECTIONS (Qs. 29-33) : *Study the following sequence carefully and answer the given questions :*

SOW FOT PEA GOW IMY

29. If we add 'L' after first letter in every word, then how many meaningful words will be formed?
    (a) None   (b) Three
    (c) Two   (d) More than three
    (e) None of these

30. If third letter of each word is replaced by its succeeding letter according to English alphabetical order, then in how many words vowels will appear more than once?
    (a) Two   (b) One
    (c) None   (d) Three
    (e) None of these

31. If all the words are arranged according to English alphabetical order from left to right, then which word will appear fourth from the left end?
    (a) IMY   (b) GOW
    (c) PEA   (d) FOT
    (e) None of these

32. If all the letters are arranged according to English alphabetical order within each word, then in how many words vowel will appear at second position?
    (a) One   (b) None
    (c) Two   (d) Three
    (e) None of these

33. How many letters are there in English alphabetical series between the first letter of the second word from the left end and third letter of the third word from the right end?
    (a) Five   (b) Six
    (c) Seven   (d) Four
    (e) None of these

34. If in the number '45327968', 1 is added to each even digit and 2 is subtracted from each odd digit, then which digits will not appear twice in the number thus obtained?
    (a) Only 1   (b) Only 9
    (c) Both '1' and '9' (d) Only 5
    (e) None of these

DIRECTIONS (Qs. 35-40) : *Study the following information carefully and answer the questions given below :*

Six people Shivam, Sohit, Nikhil, Gaurav, Rahul and Ketan have events on different dates 7th and 12th of different months i.e. January, February and March. Gaurav has event on even numbered date in the month having 31 days. The number of persons have event before Gaurav is same as the number of persons have event after Shivam. One person has event between Shivam and Nikhil. Ketan has event before Nikhil. Sohit has even just before Rahul.

35. How many persons have event between Ketan and Gaurav?
    (a) One   (b) Three
    (c) None   (d) Two
    (e) None of these

36. Rahul has event on which among the following date?
    (a) 12th February   (b) 12th March
    (c) 7th March   (d) 7th January
    (e) None of these

37. Four of the following five are alike in a certain way and hence from a group. Which is the one that does not belong to that group?
    (a) Shivam, Ketan   (b) Rahul, Ketan
    (c) Ketan, Nikhil   (d) Rahul, Sohit
    (e) Nikhil, Sohit

38. How many persons have event before Sohit?
    (a) Two   (b) None
    (c) Three   (d) One
    (e) None of these

39. Who among the following has event just after Gaurav?
    (a) Nikhil   (b) None
    (c) Sohit   (d) Ketan
    (e) None of these

40. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
    (a) Shivam, Nikhil, Gaurav   (b) Sohit, Rahul, Gaurav
    (c) Nikhil, Sohit, Rahul   (d) Ketan, Nikhil, Sohit
    (e) Shivam, Ketan, Nikhil

NUMERICAL ABILITY

DIRECTIONS (Qs. 41-45) : *Line graph given below shows number of passengers travelling in five (C_1, C_2, C_3, C_4 and C_5) different compartment of a Rajdhani Express Train. Read the data carefully and answer the questions.*
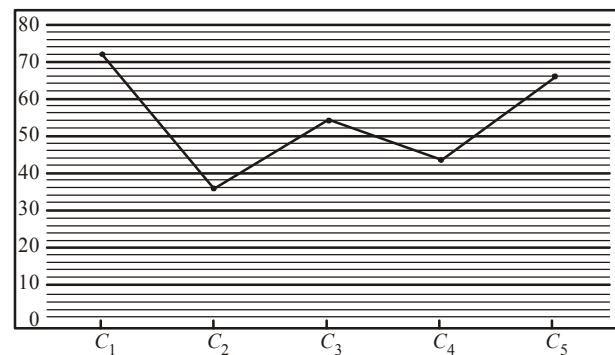
41. Total passengers in C_5 are what percent less than total passengers in C_1?
    (a) $6\frac{1}{4}\%$ (b) $8\frac{1}{3}\%$

    (c) $6\frac{1}{3}\%$ (d) $6\frac{2}{3}\%$

    (e) 5%

42. Find average number of passengers in C_1, C_3 and C_5?
    (a) 64   (b) 60
    (c) 72   (d) 66
    (e) 54

43. Find the ratio of total passenger in C_2 to that of in C_4?
   (a) 7 : 9
   (b) 3 : 10
   (c) 11 : 9
   (d) 10 : 3
   (e) 9 : 11

44. Total passenger in C_3 and C_5 together are what percent more than total passenger in C_1?

   (a) $33\dfrac{1}{3}\%$
   (b) $66\dfrac{2}{3}\%$

   (c) $66\dfrac{1}{3}\%$
   (d) $33\dfrac{2}{3}\%$

   (e) 40%

45. Find total number of passengers travelling in C_2, C_3 and C_4 together?
   (a) 138
   (b) 130
   (c) 134
   (d) 126
   (e) 142

DIRECTIONS (Qs. 46-50) : *What will come in the place of question mark (?) in the following questions :*

46. 6, 12, 48, ?, 2304
   (a) 356
   (b) 288
   (c) 284
   (d) 238
   (e) 311

47. 9, 10.7, 14.1, 20.9, 34.5, ?
   (a) 69.8
   (b) 62.8
   (c) 63.8
   (d) 60.8
   (e) 61.7

48. 8, 5, 6, 10, ?, 53.5
   (a) 58
   (b) 21
   (c) 50
   (d) 57.5
   (e) 56.5

49. 64, 71, 57, 85, ?, 141
   (a) 137
   (b) 127
   (c) 153
   (d) 29
   (e) 139

50. 7, 7, 15, 46, 185, ?
   (a) 973
   (b) 926
   (c) 1010
   (d) 1121
   (e) 1158

51. If the difference between the present age of Puneet and Kapil is three years and the ratio between the age of Puneet and Kapil after two years will be 7 : 6, then find the age of Puneet after two years (in years)?
   (a) 21
   (b) 24
   (c) 11
   (d) 16
   (e) 23

52. Dipak and Shivam both spend 40% of their income together which is equal to ₹ 1,26,00. If income of Dipak is 25% more than that of Shivam, then find the income of Shivam (in ₹).
   (a) 18,000
   (b) 19,000
   (c) 14,000
   (d) 20,000
   (e) 16,000

53. If Sohit invests equal sum at the same rate of interest on simple interest for T and $T + 5$ years and the respective ratio of interest gets by Sohit is 2 : 3 respectively, then find 'T'?
   (a) 6
   (b) 7
   (c) 8
   (d) 3
   (e) 10

54. 12 women can complete a work in 32 days, then find how many women will be required to complete 1/3rd of the same work in 8 days?
   (a) 14
   (b) 12
   (c) 18
   (d) 16
   (e) 24

55. A train running at the speed of 54 kmph crosses a pole in 30 seconds. Find the time taken by the same train to cross the pole with the speed of 90 kmph? (in sec.)
   (a) 23
   (b) 22
   (c) 18
   (d) 17
   (e) 20

56. The upstream speed and downstream speed of a boat is 15 kmph and 28 kmph respectively and boat travelled for T hours and 3 hours in upstream and downstream respectively. If the distance travelled in downstream is 39 km more than upstream, then find the value of 'T'.
   (a) 4
   (b) 3
   (c) 2
   (d) 5
   (e) 1

57. An article was marked up by 70% above cost price and allowed ₹ 40 discount on marked price. If shopkeeper still made a profit of ₹ 100, then find the selling price of the article (in ₹).
   (a) ₹ 315
   (b) ₹ 300
   (c) ₹ 250
   (d) ₹ 275
   (e) ₹ 150

58. Amit and Rahul invested ₹ a and ₹ $(a + 400)$ for same period of time in a business. If Amit gets ₹ 1600 as profit share out of total profit of ₹ 3400, then find 'a'.
   (a) 3500
   (b) 3000
   (c) 4500
   (d) 3600
   (e) 3200

59. A vessel contains mixture of milk and water in the ration of 5 : 2 respectively. If 35 liters mixture taken out from the vessel and now the difference between milk and water in the remaining mixture is 60 liters, then find initial mixture in vessel (in liters)?
   (a) 70
   (b) 105
   (c) 100
   (d) 80
   (e) 125

60. Perimeter of a rectangle is 4 cm more than circumference of a circle and area of circle is 154 cm². If breadth of rectangle is equal to radius of circle, then find length of rectangle (in cm).
   (a) 23
   (b) 33
   (c) 17
   (d) 21
   (e) 27

DIRECTIONS (Qs. 61-65) : *Table given below shows number of orders received by three (X, Y, and Z) shops of their three (A, B and C) items. Read the data carefully and answer the questions.*

Shops	A	B	C
X	160	120	100
Y	80	140	180
Z	160	200	60

61. Total orders of item A and B received by Z is how much more than total orders of item B and C received by Y?
    (a) 25   (b) 10   (c) 60   (d) 40
    (e) 30

62. Find total orders (all three items) received by Z is what percent more than that of total orders (all three items) received by Y?
    (a) 5%   (b) 12.5%
    (c) 7.5%   (d) 15%
    (e) 8.33%

63. Find ratio of total orders of item A and B received by X to total orders of item B and C received by Y.
    (a) 7 : 9   (b) 7 : 8
    (c) 3 : 7   (d) 5 : 6
    (e) 8 : 7

64. Find average number of orders of item B received by Y and Z is what percent of total orders of item A received by X?
    (a) $101\frac{1}{4}\%$ (b) $106\frac{1}{4}\%$

    (c) $108\frac{1}{4}\%$ (d) $102\frac{1}{4}\%$

    (e) $103\frac{1}{4}\%$

65. Find total orders of item A, B and C received by X.
   (a) 300   (b) 220   (c) 380   (d) 360
    (e) 200

DIRECTIONS (Qs. 66-80) : *What should come in place of question mark (?) in following questions?*

66. (24% of 500) ÷ 0.6 = ?
    (a) 600   (b) None of these
    (c) 40   (d) 500
    (e) 200

67. $\dfrac{3^3 + (17)^2}{9^2 + 25 - 27} = ?$
    (a) 1   (b) 5   (c) 4   (d) 6
    (e) 3

68. $(5)^? \times 3 = \dfrac{(15)^2}{\sqrt[4]{81}}$
    (a) 5   (b) 2
    (c) 4   (d) 1
    (e) None of these

69. $7 \times (53 - ?) = 7^3$
    (a) 6   (b) 9
    (c) 4   (d) 4
    (e) None of these

70. $? + 385 - 225 = 433$
    (a) 384   (b) 234
    (c) 224   (d) 276
    (e) 273

71. $15 \times 8 + (?)^2 = (13)^2$
    (a) 7   (b) 12
    (c) 5   (d) 6
    (e) None of these

72. $(30\% \text{ of } 500 + ?\% \text{ of } 400 = 250)$
    (a) 22   (b) 36
    (c) 35   (d) 25
    (e) 20

73. $\sqrt{576} \div 8 = ? - 270$
    (a) 284   (b) 273
    (c) 287   (d) 283
    (e) 285

74. $\sqrt{441} - \sqrt{169} + \sqrt{784} = 34 + ?$
    (a) 1   (b) 4
    (c) 5   (d) 7
    (e) 2

75. $117 + 19 + 8 = ?^2$
    (a) 10   (b) 12
    (c) 15   (d) 8
    (e) None of these

76. $13\% (? + 100) = 13$
    (a) 40   (b) 0
    (c) 7   (d) 13
    (e) 60

77. $\dfrac{\sqrt[3]{729}}{9} + \sqrt{49} + ? = 23$
    (a) 19   (b) 18
    (c) 15   (d) 16
    (e) 23

78. $? + \sqrt{900} = 7^2$
    (a) 20   (b) 19
    (c) 17   (d) 18
    (e) 23

79. $8\frac{1}{2} + 6\frac{1}{3} = ? + 4\frac{1}{6} + 4\frac{1}{2}$
    (a) 3   (b) $4\frac{1}{2}$

    (c) 5   (d) $6\frac{1}{6}$

    (e) 6

80. $(2^4 \times 8^6) \div 16^5 = 2^?$
    (a) 1   (b) 3
    (c) 2   (d) 6
    (e) 4

HINTS & SOLUTIONS

Sols. (1-5) :
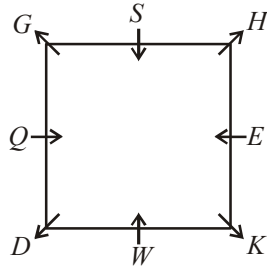
1.　(d)
2.　(e)　Q sits third to the right of K.
3.　(b)　E sits second to the right of W.
4.　(a)　All are facing outside except 'E'.
5.　(a)
6.　(a)　After droping all the consonant, nineth letter from left end is '2'.
7.　(b)　Fifth to the left of twelveth from left end = 12 – 5 = 7th from left end.
　　　　And that is '6'.
8.　(d)　After droping all the numbers, the seventh letter from right end is 'S'.
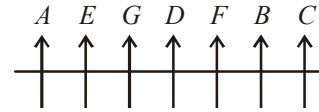9.　(a)　There is only one such pair that is '2'O'.

Sols. (10-12) :

$$B > E > D\ (97) > C > A$$

10.　(d)　Height of the 'C' can be "97 > O > 57"
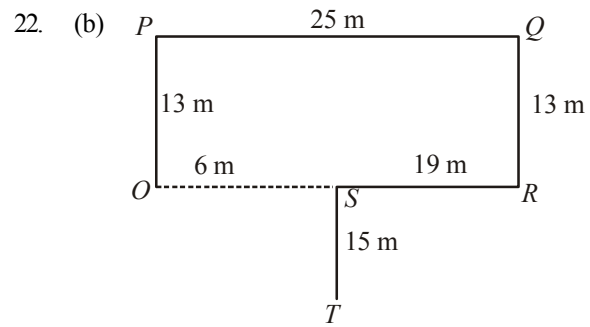11.　(a)
12.　(c)

Sols. (13-16) :

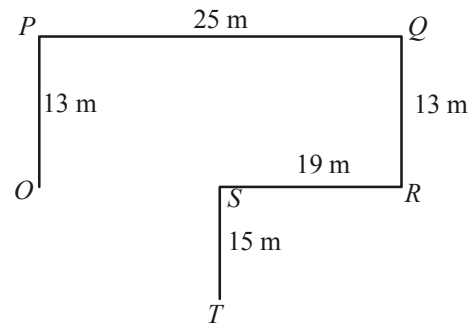13.　(a)

14.　(e)

15.　(d)

16.　(b)

Sols. (17-21) :

17.　(d)　Three persons *A, E* and *G* are left of *D*.
18.　(e)　*E* is third to the left of *F*.
19.　(d)　*A* and *C* are at extreme ends of the line.
20.　(b)　Four persons *G, D, F* and *B* are between *C* and *E*.
21.　(b)　*F* is immediate left of *B*.

22.　(b)

23.　(c)　Point *T* is in south-west of point *Q*.

Sols. (24-27) :

24.　(b)
25.　(c)
26.　(b)
27.　(c)
28.　(c)

E N G L I S H

29.　(b)　Three meaningful words are :
　　　　SLOW, PLEA, GLOW
30.　(b)
31.　(c)
32.　(d)
33.　(d)
34.　(c)　45327968
　　　　53135779

Sols. (35–40) :

Months	7th	12th
January	Shivam	Ketan
February	Nikhil	Sohit
March	Rahul	Gaurav

35. (b) Nikhil, Sohit and Rahul.
36. (c)
37. (b)
38. (c) Shivam, Ketan and Nikhil.
39. (b)
40. (a)
41. (b) Required percentage

$$= \frac{72 - 66}{72} \times 100 = \frac{6}{72} \times 100 = 8\frac{1}{3}\%$$

42. (a) Required average $= \frac{72 + 54 + 66}{3} = \frac{192}{3} = 64.$

43. (e) Required ratio $= 36 : 44 = 9 : 11.$
44. (b) Total passenger in C_3 and $C_5 = 54 + 66 = 120$
    Required percentage

$$= \frac{120 - 72}{72} \times 100 = \frac{48}{72} \times 100 = 66\frac{2}{3}\%.$$

45. (c) Required number of passengers $= 36 + 54 + 44 = 134.$
46. (b) Pattern of series –
    $6 \times 2 = 12$
    $12 \times 4 = 48$
    $48 \times 6 = \mathbf{288}$
    $288 \times 8 = 2304.$
47. (e) Pattern of series –
    $9 + 1.7 = 10.7$
    $10.7 + 3.4 = 14.1$
    $14.1 + 6.8 = 20.9$
    $20.9 + 13.6 = 34.5$
    $? = 34.5 + 27.2 = 61.7.$
48. (b) Pattern of series –
    $8 \times .5 + 1 = 5$
    $5 \times 1 + 1 = 6$
    $6 \times 1.5 + 1 = 10$
    $? = 10 \times 2 + 1 = \mathbf{21}$
    $21 \times 2.5 + 1 = 53.5.$
49. (d) Pattern of series –
    $64 + 7 = 71$
    $71 - 14 = 57$
    $57 + 28 = 85$
    $? = 85 - 56 = \mathbf{29}$
    $29 + 112 = 141.$
50. (b) Pattern of series –
    $7 \times 1 + 1 = 7$
    $7 \times 2 + 1 = 15$
    $15 \times 3 + 1 = 46$
    $46 \times 4 + 1 = 185$
    $185 \times 5 + 1 = 926$

51. (a) Let present age of Kapil $= m$ years
    So, present age of Puneet $= (m + 3)$ years
    According to the question,

$$\frac{m + 2}{(m + 3) + 2} = \frac{6}{7} \Rightarrow 7m + 14 = 6m + 30$$

$$\Rightarrow m = 16 \text{ years}$$

So, age of Puneet after two years
$= (16 + 3) + 2 = 21$ years

52. (c) Let total income of Shivam $= ₹ 100x$
    So, total income of Dipak

$$= 100x \times \left(1 + \frac{25}{100}\right) = ₹125x$$

According to the question,

$$(100x + 125x) \times \frac{40}{100} = 1,26,00$$

$$\Rightarrow 225x \times \frac{40}{100} = 12,600$$

$$\Rightarrow x = ₹140$$

So, income of Shivam $= 140 \times 100 = ₹14,000.$

53. (e) Let sum invested by Sohit $= ₹ x$
    And, rate of interest $= r\%$
    According to the question,

$$\frac{x \times r \times T}{x \times r \times (T + 5)} = \frac{2}{3} \Rightarrow \frac{T}{T + 5} = \frac{2}{3}$$

$$\therefore T = 10.$$

54. (d) Let total work $= 12 \times 32 = 384$ units

$$\text{Required women} = 384 \times \frac{1}{3} \times \frac{1}{8} = 16$$

55. (c) Let length of train be x meters.
    According to the question,

$$54 \times \frac{5}{18} = \frac{x}{30} \Rightarrow x = 450 \text{ meters}$$

$$\text{Required time} = \frac{450}{90 \times \frac{5}{18}} = 18\,\text{sec.}$$

56. (b) According to the question,
    $28 \times 3 - 15 \times T = 39$
    $\Rightarrow 84 - 39 = 15T \Rightarrow T = 3.$

57. (b) Let cost price of article $= ₹100x$
    So, marked price of article

$$= 100x \times \left(1 + \frac{70}{100}\right) = ₹170x$$

And, selling price of article $= ₹(170x - 40)$
According to the question,
$(170x - 40) - 100x = 100$
$70x = 140 \Rightarrow x = ₹2$
So, selling price of article $= (170 \times 2 - 40) = ₹300.$

58. (e) According to the question,

$$\frac{a}{a+400} = \frac{1600}{(3400-1600)} \Rightarrow a = 3200$$

59. (b) Let total initial mixture in vessel $= 7x$
So, milk in vessel $= 5x$
And water in vessel $= 2x$
According to the question,

$$\left(5x - 35 \times \frac{5x}{7x}\right) - \left(2x - 35 \times \frac{2x}{7x}\right) = 60$$

$$5x - 25 - (2x - 10) = 60$$

$$3x - 15 = 60 \Rightarrow 3x = 75 \Rightarrow x = 15$$

So, initial mixture in vessel $= 7x = 7 \times 15 = 105$ liters

60. (c) Let radius of circle be 'r' cm
According to the question,

$$\frac{22}{7} \times r \times r = 154$$

$r = 7$ cm $=$ breath of rectangle
Let length of rectangle be x cm.
Perimeter of rectangle = Circumference of a circle + 4

$$2(7+x) = 2 \times \frac{22}{7} \times 7 + 4$$

$$2(7+x) = 44 + 4$$

$$7 + x = \frac{48}{2} \Rightarrow x = 17 \text{ cm}$$

61. (d) Required difference $= (160+200) - (140+180) = 40$.

62. (a) Total orders (all three items) received by Z
$= (160 + 200 + 60) = 420$.
Total orders (all three items) received by y
$= (80 + 140 + 180) = 400$.

$$\text{Required percentage } = \frac{420 - 400}{400} \times 100 = 5\%.$$

63. (b) Total orders of item A and B received by X
$= 160 + 120 = 280$
Total orders of item B and C received by Y
$= 140 + 180 = 320$
Required ratio $= (280 : 320) = 7 : 8$.

64. (b) Average number of orders of item B received by Y
and $Z = \dfrac{140 + 200}{2} = 170$

$$\text{Required percentage } = \frac{170}{160} \times 100 = 106\frac{1}{4}\%$$

65. (c) Required sum $= 160 + 120 + 100 = 380$.

66. (e) $\dfrac{24}{100} \times 500 \times \dfrac{5}{3} = ? \Rightarrow 200 = ?$

67. (c) $\dfrac{27 + 289}{81 + 25 - 27} = ? \Rightarrow \dfrac{316}{79} = ? \Rightarrow ? = 4$

68. (b) $5^? \times 3 = \dfrac{225}{\sqrt[4]{81}} \Rightarrow 5^? \times 3 = 75$

$$5^? = (5)^2 \Rightarrow ? = 2$$

69. (c) $53 - ? = \dfrac{343}{7} \Rightarrow 53 - 49 = ?$

$? = 4$

70. (e) $? + 385 - 225 = 433$
$? = 433 - 160 \Rightarrow ? = 273$.

71. (a) $(?)^2 = 169 - 120 \Rightarrow (?)^2 = 49 \Rightarrow ? = 7$.

72. (d) $\dfrac{30}{100} \times 500 + ?\%$ of $400 = 250$

$150 + ?\%$ of $400 = 250$

$?\%$ of $400 = 100 \Rightarrow ?\% = \dfrac{1}{4} \Rightarrow ? = 25\%$.

73. (b) $24 \div 8 = ? - 270$
$? = 3 + 270 \Rightarrow ? = 273$.

74. (e) $21 - 13 + 28 = 34 + ?$
$49 - 13 = 34 + ? \Rightarrow ? = 36 - 34 = 2$.

75. (b) $?^2 = 117 + 19 + 8$
$(?)^2 = 144 \Rightarrow ? = 12$.

76. (b) $\dfrac{13}{100} \times (? + 100) = 13 \Rightarrow ? = 100 - 100 \Rightarrow ? = 0$

77. (c) $\dfrac{9}{9} + 7 + ? = 23 \Rightarrow 1 + 7 + ? = 23 \Rightarrow ? = 15$.

78. (b) $? + 30 = 49 \Rightarrow ? = 19$.

79. (d) $8\dfrac{1}{2} + 6\dfrac{1}{3} - 4\dfrac{1}{6} - 4\dfrac{1}{2} = ?$

$$? = 8 + 6 - 4 - 4\left(\frac{1}{2} + \frac{1}{3} - \frac{1}{6} - \frac{1}{2}\right)$$

$$? = 6\left(\frac{3 + 2 - 1 - 3}{6}\right) \Rightarrow ? = 6\frac{1}{6}.$$

80. (c) $\dfrac{2^4 \times 2^{6 \times 3}}{2^{5 \times 4}} = 2^?$

$2^? = 2^{4 + 18 - 20} \Rightarrow 2^? = 2^2$

$\therefore ? = 2$.

IBPS RRB Office Assistant Main Solved Paper-2020

REASONING ABILITY

DIRECTIONS (Qs. 1-5) : *Study the following information carefully and answer the questions given below :*

Eight persons - Rahul, Raj, Ram, Ravi, Rohit, Ritesh, Ranjan and Raju (not necessarily in the same order) are sitting around a circular table in a way such that four of them are facing towards the centre and the others are facing away from the centre. Each of these persons have a different surname - Gaur, Gail, Gopal, Gandhi, Girish, Guman, Garg and Goyal, but not necessarily in the same order.

Ram's surname is Gaur and is facing towards the centre. The immediate neighbours of Ram faces away from the centre and their surnames are Gail and Gopal. Raju faces away from the centre and the immediate neighbours of Raju faces a direction opposite to each other. Ranjan's surname is Garg, is facing towards the centre and sits third to the right of Ravi, whose surname is Gail. The one whose surname is Girish is not neighbouring the one whose surname is Gail or Ranjan. Rahul is sitting opposite to Rohit and neither of them has a surname Gopal but Surname of one of them is Girish. Both Rahul and Rohit are facing in the same direction (for example, if one is facing outside then other is also facing outside). Raju is not neighbouring either the one whose surname is Garg or the one who is neighbouring the one whose surname is Guman but is sitting opposite to the one whose surname is Gandhi, who is neighbouring Rahul. Ritesh's surname is not Goyal and is facing the centre.

1. Who among the following has surname Goyal?
   - (a) Raj
   - (b) Rahul
   - (c) Rohit
   - (d) Raju
   - (e) Ritesh

2. Who among the following sits second to the right of Raju?
   - (a) Raj
   - (b) Rahul
   - (c) Rohit
   - (d) Ravi
   - (e) Ram

3. Who among the following is sitting third to the right of the one, who is sitting second to the left of the one, whose surname is Gandhi?
   - (a) Ritesh
   - (b) Rahul
   - (c) Rohit
   - (d) Raju
   - (e) Ravi

4. Four of the following five are alike in some way and hence form a group. Which of the following is the one that does not belong to the group?
   - (a) Ritesh Gopal
   - (b) Rahul Girish
   - (c) Ravi Gaur
   - (d) Ram Garg
   - (e) Raj Gail

5. Who among the following is the neighbour of Raj?
   - I. Ranjan
   - II. Rohit
   - III. Rahul
   - (a) Only I
   - (b) Only II
   - (c) Only III
   - (d) Both I and II
   - (e) Both I and III

DIRECTIONS (Qs. 6-10) : *Read the following information carefully and answer the questions given below :*

A, B, C, D, E, F, G and H are sitting around a circular table facing the centre but not necessarily in the same order. They all are having discussin on an important topic. C is an immediate neighbour of both A and G, who is an immediate neighbour of E. E sits second to the left of C. Only two persons sit between C and H. B is an immediate neighbour of D. Only one person sits between B and F.

6. What is the position of D with respect to H in the above arrangement?
   - (a) Third to the left
   - (b) Immediate left
   - (c) Second to the right
   - (d) Immediate right
   - (e) None of these

7. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?
   - (a) BH
   - (b) FA
   - (c) CB
   - (d) CE
   - (e) DB

8. Who among the following sits second to the left of the one who is on the immediate right to D?
   - (a) F
   - (b) B
   - (c) D
   - (d) H
   - (e) None of these

9. Which of the following persons sits between B and F?
   - (a) D
   - (b) A
   - (c) C
   - (d) H
   - (e) None of these

10. Who among the following sits third to right of the one who sits opposite of C?
   - (a) A
   - (b) H
   - (c) G
   - (d) D
   - (e) None of these

DIRECTIONS (Qs. 11-15) : *Read the following information carefully and answer the questions given below :*

Seven boxes namely P, Q, R, S, T, U and V are placed one above the other in the rack but not necessarily in the same order. The lowermost rack is numbered as one and above is two and so on.

Box Q is placed immediately below Box T. Only one box is placed between the Box V and Box S. Box T is placed in even numbered rack above the rack three. Box U is placed immediately above Box S. Box R is not placed above Box P. Neither Box P nor Box R is placed in lowermost rack. Only three boxes are placed between Box Q and Box V.

11. Which among the following box is placed exactly between Box T and Box U?
    (a) Box Q   (b) Box U
    (c) Box S   (d) Box V
    (e) None of these
12. How many boxes are placed between Box P and Box R?
    (a) One   (b) Two
    (c) Three   (d) Four
    (e) None of these
13. Which box is placed in the lowermost rack?
    (a) Q   (b) T
    (c) P   (d) V
    (e) None of these
14. Which of the following statement is true?
    (a) There are only two boxes above Box U.
    (b) Box Q is placed in rack 5.
    (c) Box T and Box S are adjacent to each other.
    (d) All of the above
    (e) None of the above
15. How many boxes are there between Box S and Box V?
    (a) None   (b) 1
    (c) 2   (d) 3
    (e) None of these

DIRECTIONS (Qs. 16-20) : *Study the following information carefully and answer the questions given below it:*

Seven friends namely Anil, Vivek, Chandan, Deepak, Eshwar, Farhan and Ganesh are living in a building of seven floors, ground floor numbered 1, first floor numbered 2 and so on till the top most floor which is numbered 7. Each person lives on a single floor. Total number of members in their family including themselves is - one, six, one, two, four, three and two but not necessarily in the same order.
Ganesh's family has 1 more person than Anil's family. Chandan does not live on 6th floor. Vivek with his family lives exactly below one of the couples but above the two people who live alone. There is only one floor between the two people who live alone. Chandan lives three floors above Ganesh. Eshwar lives on 3rd floor with his wife only. There are total 4 persons in Vivek's family including him.

16. Which one of the following lives on fifth floor?
    (a) Chandan   (b) Deepak
    (c) Farhan   (d) Ganesh
    (e) None of these
17. How many members are there in Anil's family
    (a) 3   (b) 2
    (c) 1   (d) 6
    (e) None of these
18. Whose family consists of total three members?
    (a) Anil   (b) Chandan
    (c) Eshwar   (d) Ganesh
    (e) None of these
19. How many person(s) live(s) between Eshwar and Ganesh?
    (a) 3   (b) 2
    (c) 1   (d) 4
    (e) None of these
20. Which one of the following combinations of 'floor number - person - family members' is the correct one?
    (a) 2 - Ganesh - 1   (b) 3 - Eshwar - 5
    (c) 6 - Chandan - 4   (d) 7 - Anil - 2
    (e) None of these

DIRECTIONS (Qs. 21-24) : *Study the following information carefully and answer the questions given below :*

Nine persons David, Ram, Sam, Binod, Ganguly, Kamal, Amar, Kumar and Ajay, have an Exam on either 22nd or 27th of the months of March, April and May of year 2019.
Note : At least one person and not more than two people have an exam on same date.
Amar have exam on odd numbered date, but not immediately before or after David. Neither Amar and Sam, nor Amar and Ganguly, have exam on the same date. Only one person have exam on the date on which Ram had. Sam have exam after Ganguly. David have exam before Ganguly, in the month having even numbered days. Sam have exam in May and immediately after Ajay. Binod and Sam have exam on the same day. Kamal have exam immediately after Ram. Ram have exam immediately after Kumar, who have exam on even numbered date.

21. Who among the following having exam on 22nd April?
    (a) David   (b) Kamal
    (c) Ajay   (d) Ganguly
    (e) Both (a) and (b)
22. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
    (a) Ram   (b) Ajay
    (c) Amar   (d) Sam
    (e) Ganguly
23. Binod attempts exam on which of the following date?
    (a) 22 March   (b) 22 April
    (c) 22 May   (d) 27 May
    (e) None of these
24. Who among the following attempts exam immediately before Amar?
    (a) David   (b) Binod
    (c) Sam   (d) Both (b) and (c)
    (e) None of these

DIRECTIONS (Qs. 25-29) : *Read the following information carefully and answer the questions given below :*

"Music is natural medicine" is coded as "5#U 2^I 7&A 8*E".
"Eating vegetable makes healthy" is coded as "6$E 9=E 5#A 7&E".
"Health and balance" is coded as "6$E 3%A 5#O 7&A".
"Life extra beautiful now" is coded as "4@I 5#E 9=E 3%O".

25. What is the code for "Remember Disha"?
    (a) 8*E 5@E   (b) 7&A 5@I
    (c) 8*E 5#I   (d) 8*B 4@E
    (e) Can't be determined

26. What would be the code for "Wealth"?
    (a) 6&E   (b) 7&A
    (c) 7&E   (d) 6$A
    (e) None of these

27. What would be the code for "Climatic condition"?
    (a) 8 * J 9 = O   (b) 9 * I 8 = O
    (c) 8 * J 9 = P   (d) 8 * I 9 = O
    (e) Can't be determined

28. What is the code for "Comedy"?
    (a) 6$O   (b) 5°
    (c) 6%E   (d) 7&O
    (e) None of these

29. What would be the code for "East"?
    (a) 4@W   (b) 3@O
    (c) 4$O   (d) 6$O
    (e) None of these

30. How many such pair(s) of letters are there in the word "POCKETBOOK' which has as many letters between them as in the alphabetical series as we move from left to right or right to left?
    (a) One   (b) Two
    (c) Three   (d) Four
    (e) Five

DIRECTIONS (Qs. 31-32) : *Read the given information carefully and answer the given questions :*

Deepak walked 70 m towards north then turned left and walked 70 m. He then turned to south and walked 30 m then he took a left turn and walked 50 m. After that he turned right and walked 10 m and finally he turned to left and walke 60 m.

31. What is shortest distance between starting and end point and in which direction is Deepak from the starting point?
    (a) 60 m, Northeast   (b) 50 m, Northwest
    (c) 60 m, Southwest   (d) 50 m, Northeast
    (e) 50 m, Southeast

32. What is the total distance travelled by Deepak in south direction during the entire journey?
    (a) 44 m   (b) 40 m
    (c) 50 m   (d) 56 m
    (e) 28 m

33. Metro train moved 12 km in north direction from Rajiv Chowk to reach Patel Chowk. From there is took a right turn and moved 20 km to reach Udyog Bhawan. Then it moved 6 km after taking a left turn and reached Central Sec. From there it again took a left turn and moved a distance of 8 km to reach INA. Then it covered 13 km in south direction to reach AIIMS. From there it took a right turn and moved 7 km to reach Saket, where metro terminates. If Metro yard is 5 km to the south of Saket, then Patel Chowk is how far in which direction from Metro Yard?
    (a) 12 km, North-east (b) 10 km, North-west
    (c) 13 km, South-east (d) 13 km, North-west
    (e) None of these

34. Find the wrong term in the given series.
    639   657   675   693   712   720
    (a) 657   (b) 675
    (c) 639   (d) 712
    (e) 720

DIRECTIONS (Qs. 35-37) : *Study the following information carefully and answer the questions given below :*

Seven persons - Komal, Bharat, Manu, Kiara, Rimpu, Prakash and Shipra have different height and weight such that the tallest one is not heaviest one.
Kiara is taller than Komal but not heavier than Shipra. Bharat is heavier than Rimpu but not as much tall as Manu. Prakash is heavier than Bharat and Rimpu but shorter than Manu and Bharat. Kiara is not taller than Prakash. Shipra is not taller than Komal and also not heavier than Rimpu. Komal is not lighter than Manu who is heavier than Bharat. Manu is shorter than only one person. Prakash is not the second heaviest and is lighter than Manu.

35. Who among the following is the second lightest?
    (a) Prakash   (b) Rimpu
    (c) Komal   (d) Shipra
    (e) None of these

36. How many person(s) are heavier than the one who is second shortest?
    (a) None   (b) One
    (c) Two   (d) Three
    (e) More than three

37. Who among the following is the heaviest?
    (a) Shipra   (b) Manu
    (c) Komal   (d) Prakash
    (e) None of these

DIRECTIONS (Qs. 38-40) : *Read the given information carefully and answer the following questions :*

A family of nine members - Bala, Shalu, Honey, Chand, Geet, Gopi, Jassi, Kinjal and Bittu distributed along 3 generations. Such that :
Bala is Bittu's grandmother. Chand is Kinjal's mother. Gopi is Shalu's son in law. Honey is Geet's husband. Jassi is Bittu's sister. Chand has a brother, a niece and a nephew. Only couples have children.

38. How is Kinjal related to Bittu's grandmother?
    (a) Daughter   (b) Son
    (c) Grandson   (d) Son in law
    (e) Can't be determined

39. How is Shalu's son in law related to Geet's husband?
    (a) Father   (b) Father in law
    (c) Brother in law   (d) Uncle
    (e) Can't be determined

40. Four of the following five are alike in a certain way and hence form a group. Which of the following is the one that does not belong to the group?
    (a) Gopi   (b) Chand
    (c) Honey   (d) Geet
    (e) Bala

QUANTITATIVE APTITUDE

DIRECTIONS (Qs. 41-45) : *Simplify the following given equations.*

41. $\sqrt[3]{(126 + 392 \div 7 - 162 + 14^2)} = ?$
    (a) 2   (b) 5
    (c) 6   (d) 11
    (e) None of these

42. $140\% \text{ of } 200 + \dfrac{16^2 - 12^2}{2} - 7 = ?$
    (a) 496   (b) 376
    (c) 281   (d) 329
    (e) None of these

43. $\dfrac{63}{7 \times 3} \times \sqrt{576} - \sqrt{729} = \sqrt{?}$
    (a) 4016   (b) 2025
    (c) 2861   (d) 2179
    (e) None of these

44. $3\dfrac{1}{6} + 7\dfrac{2}{3} - 4\dfrac{1}{4} = ? + 2\dfrac{1}{6}$
    (a) $5\dfrac{4}{11}$ (b) $7\dfrac{3}{10}$
    (c) $6\dfrac{5}{12}$ (d) $8\dfrac{7}{15}$
    (e) None of these

45. 1366 + 336 – 666 – 33 + 333 = ?
    (a) 1196   (b) 1456
    (c) 1238   (d) 1336
    (e) None of these

DIRECTIONS (Qs. 46-50): *The following information is about the production of cars by 3 different companies from Monday to Friday in a specific week. Read the information carefully and answer the following question:*

The total production by 3 companies on Monday was 540 out of which 100/3% cars were produced by Tata. The number of cars produced by Renault on Monday is less than the cars produced by Tata on Monday by the same extent as the number of cars produced by Maruti on Monday is more than the cars produced by Tata on Monday. The difference between cars produced by Renault and Maruti on Monday is 40.150 cars are produced by Tata on Tuesday, which is 100 less than the cars produced by the same company on Wednesday. A total of 910 cars were produced by Tata from Monday to Friday. The ratio between cars produced by Tata on Thursday to cars produced by the same company on Friday is 5 : 6. 220 cars were produced by Renault on Tuesday, which is 80 less than the cars produced by Maruti on Wednesday. A total of 570 cars were produced on Tuesday, which is 76% of the total cars produced on Wednesday. The number of cars produced by Maruti on Thursday is 200/3% more than cars produced by Tata on the same day. Total 580 cars were produced

on Thursday. The number of cars produced by Maruti on Friday is same as that on Monday. 140 cars were produced by Renault on Friday.

46. Find the ratio between total cars produced on Monday to that on Wednesday.
    (a) 18 : 29   (b) 18 : 25
    (c) 18 : 31   (d) 3 : 5
    (e) None of these

47. Find the total number of cars produced by Renault from Monday to Friday.
    (a) 900   (b) 980
    (c) 950   (d) 960
    (e) None of these

48. Find the average number of cars produced per day by Maruti from Monday to Friday. (approximate)
    (a) 250   (b) 220
    (c) 270   (d) 240
    (e) 230

49. On which pair of days out of the following, the number of cars produced by Tata is the same?
    (a) Tuesday and Wednesday
    (b) Wednesday and Thursday
    (c) Tuesday and Thursday
    (d) Monday and Wednesday
    (e) Monday and Tuesday

50. On which day the total number of cars produced was the maximum?
    (a) Monday   (b) Tuesday
    (c) Wednesday   (d) Thursday
    (e) Friday

DIRECTIONS (Qs. 51-55) : *In the following number series, which number will come at the question mark (?).*

51. 13   15   21   33   53   ?
    (a) 82   (b) 83
    (c) 81   (d) 92
    (e) 102

52. 2   4   12   60   420   ?
    (a) 4020   (b) 4620
    (c) 4540   (d) 4650
    (e) 3760

53. 9   13   22   36   55   ?
    (a) 79   (b) 75
    (c) 80   (d) 94
    (e) 93

54. 7   13   25   49   97   ?
    (a) 178   (b) 191
    (c) 203   (d) 193
    (e) 188

55. 50   67   33   84   16   ?
    (a) 101   (b) 131
    (c) 133   (d) 93
    (e) 108

DIRECTIONS (Qs. 56-60) : *Study the following bar chart carefully and answer the questions given beside.*

In the following figure, the bar graph shows the speeds (in km/h) of five different ships in a river and the speed of the water (in km/h) and the live graph shows the percentage of distance (in %) travelled by all the five ships.
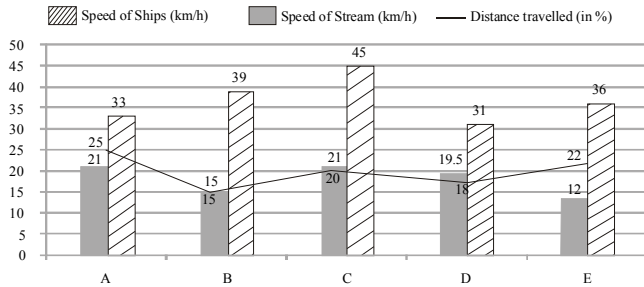
Note : The total distance is 3000 km.

56. Two friends Deepak and Shivam decided to travel 675 km till point O in downstream. Deepak is on ship B and Shivam is on ship D. After 510 km, Shivam's ship broke down but immediately he got help from Nishan, who is travelling in the same direction as Shivam and is on Ship E.
    Case I : Time taken by Deepak to reach point O.
    Case II : Time taken by Shivam to reach on point O.
    (a) Case I $\geq$ Case II   (b) Case I $\leq$ Case II
    (c) Case I = Case II or No relation
    (d) Case I > Case II   (e) Case I < Case II

57. The speed of another ship, F is 11.11% more than the speed of ship C and speed of stream (for ship F) is 25% more than the speed of stream for ship E.
    Case I : Find the time taken by ship F to cover a distance of 2625 km in upstream direction.
    Case II : Find the time taken by ship C to cover a distance of 1860 km in upstream direction.
    (a) Case I $\geq$ Case II   (b) Case I < Case II
    (c) Case I = Case II or No relation
    (d) Case I > Case II   (e) Case I $\leq$ Case II

58. The total distance is increased by 25%.
    Case I : The time taken by ship C to cover the new distance in upstream.
    Case II : The time taken by ship A to cover old distance in downstream.
    (a) Case I $\geq$ Case II   (b) Case I $\leq$ Case II
    (c) Case I = Case II or No relation
    (d) Case I > Case II   (e) Case I < Case II

59. Time taken by Ship A and B together to travel their respective destinations in downstream is approximately _____ percent more or less than time taken by ship t to travel its destination in upstream.
    (a) 23.76% Less   (b) 23.76% More
    (c) 19.2% Less   (d) 19.2% More
    (e) None of these

60. Case I : The average time taken by all the ships to cover their respective distances in upstream.
    Case II : Time taken by ship E to travel 1728 km in still water.

(a) Case I $\geq$ Case II
(b) Case I $\leq$ Case II
(c) Case I = Case II or No relation
(d) Case I > Case II
(e) Case I < Case II

61. I. $5p^2 + 11p - 12 = 0$

    II. $4q^2 - 13q - 12 = 0$

    (a) if $p > q$ (b) if $p \leq q$
    (c) if $p \geq q$ (d) if $p < q$
    (e) if $p = q$ or relationship between p and q can't be established

62. I. $3p^2 + 19p + 30 = 0$

    II. $3q^2 - 20q - 32 = 0$

    (a) if $p > q$ (b) if $p \leq q$
    (c) if $p \geq q$ (d) if $p < q$
    (e) if $p = q$ or relationship between p and q can't be established

63. I. $p^2 - 4\sqrt{7}p + 21 = 0$

    II. $2q^2 - 8\sqrt{5}q - 50 = 0$

    (a) if $p > q$ (b) if $p \leq q$
    (c) if $p \geq q$ (d) if $p < q$
    (e) if $p = q$ or relationship between p and q can't be established

64. I. $p^2 - 52p + 667 = 0$

    II. $q^2 + 8q - 33 = 0$

    (a) if $p > q$ (b) if $p \leq q$
    (c) if $p \geq q$ (d) if $p < q$
    (e) if $p = q$ or relationship between p and q can't be established

65. I. $p^2 - 13\sqrt{2}p + 60 = 0$

    II. $q^2 + 3\sqrt{5}q - 20 = 0$

    (a) if $p > q$ (b) if $p \leq q$
    (c) if $p \geq q$ (d) if $p < q$
    (e) if $p = q$ or relationship between p and q can't be established

66. A tank can be filled by pipe x in 20 minutes and by pipe y in 30 minutes. A person left the tank with both the pipes open and returned just when the tank should have been full. Finding however, the waste pipe z was open, he closes it. In 2.4 minutes more, the tank is full. In what time the waste pipe can empty the tank?
    (a) 30 minutes   (b) 60 minutes
    (c) 45 minutes   (d) 90 minutes
    (e) None of these

67. Three persons *M, N* and *T* decided to work in such a way that *M* and *N* work together on first day, *T* alone works on second day, again *M* and *N* on third day and so on, on alternate days till the work completed. *N* and *T* together can complete the work in 10 days and efficiency of *N* is twice the efficiency of *T*. Number of days taken by *M* to complete the work is five more than that of *N*. Find the number of days in which the work will be completed.
    (a) 9 3/7 days   (b) 10 4/7 days
    (c) 11 5/7 days   (d) 12 6/7 days
    (e) 13 days

68. With motor boat in off condition, the boat moves 400 m in 360 seconds. The same boat travel from *A* to *B* and come back in 9 minutes. The distance between the two points is 1.44 km. Find the speed of the boat in still water.
    (a) 20 m/sec   (b) 50/9 km/hr
    (c) 50/18 m/sec   (d) 36 km/hr
    (e) 20 km/hr

69. A boat takes 14 hours for travelling downstream from *x* to *z* and coming back to *y* which is midway between *x* and *z*. If velocity of the stream is 10 kmph and speed of the boat in still water is 15 kmph. What is the distance between *x* and *z*?
    (a) 125   (b) 100
    (c) 165   (d) 200
    (e) None of these

70. There are two Plans.
    Plan 1 : Simple interest at 50% per annum for one and half years.
    Plan 2 : Compound interest compounded half-yearly at 50% per annum for one and half years.
    Which plan is better and approximately by how much percent?
    (a) Plan 2 is better by 15%
    (b) Plan 1 is better by 15%
    (c) Plan 1 is better by 20%
    (d) Both plans give same amount
    (e) Plan 2 is better by 20%

71. A shopkeeper bought two shirts *P* and *Q* at two different rates. He marked the shirt *P* 50% more and sold it by giving *x*% of discount. The marked price of the shirt *P* is equal to the cost price of *Q*. He sold the shirt *Q* at a rate twice that of the article *P*. The total profit percent is 50%. Find the value of *x*.
    (a) 20%   (b) 16.67%
    (c) 25%   (d) 13.33%
    (e) 15%

72. Rahul and Vijay started a business. Vijay invested Rs.300 more than Rahul. After three and half months, Rahul left. After 6 months from starting of the business Lalit joined with an investment of 50% more than Rahul. After 10 months from starting of the business, Vijay left. After one year, Lalit got 36% of profit. Find how much Vijay would have invested.
    (a) 900   (b) 1200
    (c) 1500   (d) 1000
    (e) 1600

73. A vessel is full of alcohol. One quarter of the alcohol is replaced with water. Again 20 litres of mixture is taken out and 15 litres of alcohol is added. The concentration of alcohol in the final mixture is 80%. Find the quantity of alcohol initially.
    (a) 60 litres   (b) 20 litres
    (c) 80 litres   (d) 75 litres
    (e) 15 litres

74. The average of present ages of members of a family (father, mother and daughter) is 34. 4 years hence, the daughter's age is half of the mother's age. 10 years ago, the ratio of ages of father and daughter is 17 : 4. Find the sum of ages of father and mother at the time of Daughter's birth.
    (a) 45 years   (b) 50 years
    (c) 52 years   (d) 48 years
    (e) None of these

75. An urn consists of some green, red and black balls. Total number of balls in the urn is 15. If two balls are picked, probability that the two balls are green is 2/21. Now one ball is picked from the urn, find the probability that the ball is either red or black.
    (a) Cannot be determined   (b) 2/15
    (c) 1/5   (d) 1/10
    (e) 2/3

DIRECTIONS (Qs. 76-80) : *Study the table carefully to answer the questions that follow :*

Candidates who appeared and passed in the text from four states in six different years

Year	School							
	Bihar		Rajasthan		TN		Kerala	
	Appeared	Passed	Appeared	Passed	Appeared	Passed	Appeared	Passed
2016	124	78	445	354	454	343	546	345
2017	234	124	545	435	732	567	565	456
2018	456	235	664	454	693	456	235	112
2019	398	156	345	144	645	545	546	234
2020	546	346	584	354	354	258	656	564
2021	547	435	704	347	578	313	456	252

76. What was the total number of failed candidates from states TN in the year 2020 and the number of candidates who appeared in the exam from state Kerala in the year 2018?
    (a) 335
    (b) 325
    (c) 322
    (d) 332
    (e) None of these

77. In which year was the difference between the number of candidates who appeared and passed in the exam from state Rajasthan second lowest?
    (a) 2019
    (b) 2016
    (c) 2017
    (d) 2018
    (e) 2021

78. What was the respective ratio between the number of candidates who appeared from state TN in the year 2018 and the number of candidates who passed in the exam from state Kerala in the year 2021?
    (a) 11 : 4
    (b) 11 : 5
    (c) 5 : 11
    (d) 9 : 11
    (e) None of these

79. Number of candidates who passed in the exam from state Raj. in the year 2017 was approximately, what percent of number of candidates who appeared from state Bihar in the year 2020?
    (a) 86
    (b) 87
    (c) 92
    (d) 84
    (e) 80

80. What was the approximate percent increase in the number of candidates who passed in the exam from state Bihar in the year 2021 as compare to the previous year?
    (a) 18
    (b) 39
    (c) 26
    (d) 36
    (e) 34

COMPUTER KNOWLEDGE

81. Compatibility in regard to computers refers to _____
    (a) the software doing the right job for the user
    (b) it being versatile enough to handle the job
    (c) the software being able to run on the computer
    (d) software running with other previously installed software
    (e) None of the above

82. What is a file?
    (a) A file is a section of main storage used to store data
    (b) A file is a collection of information that has been given a name and is stored in secondary memory
    (c) A file is the part of a program that is used to describe what the program should do
    (d) A file is another name for floppy disk
    (e) None of the above

83. In Excel _____ contains one or more worksheets.
    (a) Template
    (b) Workbook
    (c) Active cell
    (d) Label
    (e) None of these

84. The _____ tells the computer how to use its components.
    (a) utility
    (b) network
    (c) operating system
    (d) application program
    (e) None of these

85. To access a mainframe or supercomputer, users often use a _____ .
    (a) terminal
    (b) node
    (c) desktop
    (d) handheld
    (e) None of these

86. What characteristic of Read-Only Memory (ROM) makes it useful?
    (a) ROM information can be easily updated
    (b) ROM provides very large amounts of inexpensive data storage
    (c) Data in ROM is nonvolatile, that is, it remains there even without electrical power
    (d) ROM chips are easily swapped between different brands of computers
    (e) None of these

87. Which of the following is the communications protocol that sets the standard used by every computer that accesses Web-based information?
    (a) XML
    (b) DML
    (c) HTTP
    (d) HTML
    (e) None of these

88. Computers manipulate data in many ways, and this manipulation is called _____
    (a) utilizing
    (b) batching
    (c) upgrading
    (d) processing
    (e) None of these

89. An adhoc query is a _____
    (a) pre-planned question
    (b) pre-scheduled question
    (c) spur-of-the-moment question
    (d) question that will not return any results
    (e) None of these

90. Digital photos and scanned images are typically stored as _____ graphics with extensions such as. bmp, .png, .jpg, .tif, or .gif.
    (a) vector
    (b) bitmap
    (c) either vector or bitmap
    (d) neither vector nor bitmap
    (e) None of these

91. The simultaneous execution of two or more instructions is called _____.
    (a) sequential access
    (b) reduced instruction set computing
    (c) multiprocessing
    (d) disk mirroring
    (e) None of these

92. Which of the following menu types is also called a drop-down menu?
    (a) fly-out
    (b) cascading
    (c) pop-up
    (d) pull-down
    (e) None of these

93. In an information system, alphanumeric data normally takes the form of _____.
    (a) Sentences and paragraphs
    (b) Numbers and alphabetical characters
    (c) Graphic shapes and figures
    (d) Human voice and other sounds
    (e) None of these

94. The first step in the transaction processing cycle is _____.
    (a) database operations   (b) audit
    (c) data entry   (d) use inquiry
    (e) None of these

95. The process of a computer receiving information from a server on the Internet is known as –
    (a) Pulling   (b) Pushing
    (c) Downloading   (d) Transferring
    (e) None of these

96. A computer's type, processor, and operating system define its _____
    (a) brand   (b) size
    (c) platform   (d) speed
    (e) None of these

97. The trend of digital electronic devices becoming smaller and increasingly powerful has fully supported the move to an increasingly _____ workforce.
    (a) desktop   (b) intelligent
    (c) server   (d) mobile
    (e) None of these

98. Distributed processing involves _____.
    (a) solving computer component problems from a different computer
    (b) solving computing problems by breaking them into smaller parts that are separately processed by different computers
    (c) allowing users to share files on a network
    (d) allowing users to access network resources away from the office
    (e) None of these

99. A kiosk _____
    (a) is data organized and presented in a manner that has additional value beyond the value of the data itself.
    (b) combines microscopic electronic components on a single integrated circuit that processes bits according to software instructions.
    (c) is a computer station that provides the public with specific and useful information and services.
    (d) describes a computer's type, processor, and operating system.
    (e) None of these

100. In order to save an existing document with a different name you need to _____
    (a) Retype the document and give it a different name.
    (b) Use the Save as command.
    (c) Copy and paste the original document to a new document and then save.
    (d) Use Windows Explorer to copy the document to a different location and then rename it.
    (e) None of these

101. A series of instructions that tells a computer what to do and how to do it is called a
    (a) program   (b) command
    (c) user response   (d) processor
    (e) None of these

102. The time for the actual data transfer after receiving the request for data from secondary storage is referred to as the disk's
    (a) transfer time   (b) movement time
    (c) access time   (d) data input time
    (e) None of these

103. What happens when we try to delete the files on the floppy?
    (a) The files get moved to the Recycle Bin
    (b) Files on a floppy cannot be deleted
    (c) The files get deleted and can be restored again from Recycle Bin.
    (d) The files get deleted and cannot be restored again
    (e) The file gets copied on the Hard disk

104. Any data or instruction entered into the memory of a computer is considered as
    (a) storage   (b) output
    (c) input   (d) information
    (e) None of these

105. The storage element for a Static RAM is the _____.
    (a) diode   (b) resistor
    (c) capacitor   (d) flip-flop
    (e) None of these

106. Which media has the ability to have data/information stored (written) on them by users more than once?
    (a) CD-R disks   (b) CD-RW disks
    (c) Zip disks   (d) Opti-Disks
    (e) Both CD-RW disks and Zip disks

107. What is correcting error in a program called?
    (a) Compiling   (b) Debugging
    (c) Grinding   (d) Interpreting
    (e) None of these

108. To be able to "boot", the computer must have a(n)
    (a) Compiler   (b) Loader
    (c) Operating System   (d) Assembler
    (e) None of these

109. By firmware we understand _____.
    (a) physical equipment used in a computer system.
    (b) a set of instructions that causes a computer to perform one or more tasks.
    (c) the people involved in the computing process.
    (d) a set of programs that is pre-installed into the read only memory of a computer during the time of manufacturing.
    (e) None of these

110. A complete electronic circuit with transistors and other electronic components on a small silicon chip is called a (n)–
    (a) workstation   (b) CPU
    (c) magnetic disk   (d) integrated circuit
    (e) None of these

111. Dr. E.F. Codd represented _____ rules that a database must obey if it has to be considered truly relational
    (a) 10   (b) 8   (c) 12   (d) 6
    (e) 5

112. A collection of conceptual tools for describing data, relationships, semantics and constraints is referred to as
    (a) ER model   (b) Database
    (c) Data Model   (d) DBMS
    (e) None of these

113. When a computer is switched on, the booting process performs
    (a) Integrity Test
    (b) Power-On-Self-Test
    (c) Correct Functioning Test
    (d) Reliability Test
    (e) Shut-down

114. How do businesses protect their databases?
    (a) Security guards are hired to watch the databases at all times.
    (b) Databases are protected by file swapping.
    (c) Databases are naturally protected.
    (d) Databases are kept physically and electronically secure.
    (e) The computer room is kept locked after office hours.

115. Each cell in a Microsoft Office Excel document is referred to by its cell address, which is the
    (a) cell's column label
    (b) cell's column label and worksheet tab name
    (c) cell's row label
    (d) cell's row and column labels
    (e) cell's contents

116. Where is RAM located ?
    (a) Expansion Board   (b) External Drive
    (c) Mother Board   (d) All of above
    (e) None of these

117. The shortcut key Ctrl+F in Word is used for
    (a) To view document in full view
    (b) To open the Formula dialog box
    (c) To save the file
    (d) To open the Find and Replace dialog box
    (e) None of these

118. A _____ is used to read handwritten or printed text to make a digital image that is stored in memory.
    (a) printer   (b) laser beam
    (c) scanner   (d) touchpad
    (e) keyboard

119. _____ search engine sends request for information to several search engines simultaneously and compiles the results
    (a) Meta   (b) Individual
    (c) Directory   (d) Subject directory
    (e) None of these

120. Unsolicited commercial email is commonly known as
    (a) spam   (b) junk
    (c) hoaxes   (d) hypertext
    (e) None of these

GENERAL AWARENESS

121. Hiroshima Day is celebrated on _____
    (a) 6 August   (b) 6 July
    (c) 6 September   (d) 6 December
    (e) 12 January

122. Who is the Prime Minister of Iceland?
    (a) Bjarni Benediktsson   (b) Benedikt Jóhannesson
    (c) Katrin Jakobsdottir   (d) Micheál Martin
    (e) Jacinda Kate Laurell Ardern

123. K S Chitra has been conferred with Padma Bhushan award for 2021. She was awarded for distinguished service in which of the following fields?
    (a) Literature and Education   (b) Dance
    (c) Social Worker   (d) Art and Music
    (e) Trade and Industry

124. ASHA is a trained female community health activist. What is the full form of ASHA?
    (a) Association of Social and Health Agencies
    (b) Accredited Social Health Activist
    (c) Affiliated Social Help Agency
    (d) Accord of Social and Health association
    (e) None of the above

125. What is the deposit limit of Payment Banks?
    (a) Rs 5 Lakhs   (b) Rs 3 Lakhs
    (c) Rs 1 Lakh   (d) Rs 10,000
    (e) Rs 50,000

126. What is the full form is OTT?
    (a) Over-The-Top
    (b) On-The-Top
    (c) Over-The-Transformation
    (d) On-The-Transition
    (e) None of the above

127. Which of the following is not a G7 nation?
    (a) Canada   (b) China
    (c) Japan   (d) UK
    (e) US

128. When will India host G20 summit?
    (a) 2021   (b) 2022
    (c) 2023   (d) 2024
    (e) 2025

129. Singapore Central Bank is known as _____
    (a) Developmental Bank of Singapore
    (b) United Bank of Singapore
    (c) OCBC Bank
    (d) Monetary Authority of Singapore
    (e) None of the above

130. Which company does not come under Hinduja group?
    (a) Ashok Leyland
    (b) IndusInd Bank
    (c) NxtDigital Ltd
    (d) Cyqurex Systems Private Limited
    (e) HSBC

131. What is the highest denomination note ever printed by the RBI?
    (a) Rs. 1,00,000   (b) Rs. 10,000
    (c) Rs. 5,000   (d) Rs. 1,000
    (e) Rs 2,000

132. Which of the following ministries has constituted the National Council for Transgender Persons, a requirement under the Transgender Persons (Protection of Rights) Act, 2019?
    (a) Ministry of Personnel, Public Grievances and Pensions
    (b) Ministry of Prime Minister's Office
    (c) Ministry of Skill Development and Entrepreneurship
    (d) Ministry of Social Justice and Empowerment
    (e) Ministry of Women and Child Development

133. What is the revised overdraft limit under Pradhan Mantri Jan Dhan Yojana?
    (a) Rs 5,000   (b) Rs 20,000
    (c) Rs 10,000   (d) Rs 2,000
    (e) Rs 1,000
134. If two parallel lines are drawn on the front part of a cheque, it is called ___.
    (a) Crossed Cheque   (b) Open Cheque
    (c) Slate Cheque   (d) Traveller Cheque
    (e) Self cheque
135. The Public Provident Fund is savings-cum-tax-saving instrument in India, introduced by the National Savings Institute of the Ministry of Finance in 1968. What is the minimum amount to be invested in PPF account?
    (a) Rs. 100   (b) Rs. 500
    (c) Rs. 1000   (d) Rs. 200
    (e) None of these
136. Which of the following young mathematicians has been awarded the Ramanujan Award, 2020?
    (a) Franklin James   (b) Carolina Araujo
    (c) Neelmani Pandey   (d) Ramesh Kumar
    (e) None of the above
137. In which state Hornbill Festival is celebrated?
    (a) Sikkim   (b) Mizoram
    (c) Assam   (d) Nagaland
    (e) Karnataka
138. In which year the National Dairy Development Board (NDDB) was established through an act of parliament with the headquarters at Anand (Gujarat) ?
    (a) 1961   (b) 1965
    (c) 1967   (d) 1968
    (e) 1970
139. Bharat Sanchar Nigam Limited (BSNL) has launched a Unified Payments Interface (UPI) based payment platform, Bharat InstaPay in partnership with which bank?
    (a) State Bank of India   (b) Canara Bank
    (c) Union Bank of India   (d) Bank of Baroda
    (e) Punjab National Bank
140. Which of the following states hosted India's first Seaplane Project?
    (a) Maharashtra   (b) Gujarat
    (c) Odisha   (d) Goa
    (e) None of the above/More than one of the above
141. What is the full form of MSP?
    (a) Minimum support prices
    (b) Maximum support prices
    (c) Market support prices
    (d) Minimum supporting prices
    (e) None of these
142. According to Census 2011, India has a rural population of-
    (a) 21.96 %   (b) 31.16 %
    (c) 35.22 %   (d) 68.84 %
    (e) None of these
143. The Full form of FCCB is
    (a) Foreign currency convertible bonds
    (b) Foreign countries convertible bonds
    (c) Foreign companies convertible bonds
    (d) None of the above
    (e) None of these
144. What is the maximum deposit allowed in India Post Payment Bank (IPPB)?
    (a) Rs. 10,000   (b) Rs. 50,000
    (c) Rs. 1 lakh   (d) Rs. 5 lakh
    (e) No limit
145. Under Pradhan Mantri Fasal Bima Yojana (PMFBY) what percentage of the premium has to be paid by a farmer, for Kharif crops?
    (a) 5%   (b) 3%
    (c) 1.5%   (d) 2%
    (e) 0.5%
146. International Tiger Day is celebrated on-
    (a) 16 September   (b) 19 July
    (c) 29 July   (d) 12 August
    (e) None of the above/More than one of the above
147. Who is the author of the book 'Overdraft: Saving the Indian Saver'?
    (a) S Jaishankar   (b) Viral Acharya
    (c) BP Kanungo   (d) Urjit Patel
    (e) None of the Above
148. What is the capital of Hungary?
    (a) Sofia   (b) Budapest
    (c) Tirana   (d) Brussels
    (e) None of the Above
149. F stands for in IFSC?
    (a) Fiscal   (b) Forex
    (c) Foreign   (d) Financial
    (e) None of the Above
150. Soumit Chatterjee related to which field?
    (a) Writer   (b) Film
    (c) Sports   (d) Painter
    (e) Politics
151. Global Trust Bank (GTB) merged with which bank?
    (a) Oriental Bank of Commerce
    (b) Indian Overseas Bank
    (c) Dena Bank
    (d) Bank of Baroda
    (e) SBI
152. In RERA, second R is stand for—
    (a) Rural   (b) Regulation
    (c) Regulatory   (d) Regional
    (e) Reform
153. A two piece note pasted together wherein both the pieces presented belong to the same note, and form the entire note is called—
    (a) Mismatch note   (b) Imperfect note
    (c) Issuable note   (d) Clean note
    (e) Soiled note
154. Who wins Nobel for Chemistry in 2020?
    (a) Jennifer Doudna (b) Akira Yoshino
    (c) Gregory Winter   (d) Fraser Stoddart
    (e) Joachim Frank
155. Srikanth Kidambi related to which sport?
    (a) Kabaddi   (b) Tennis
    (c) Badminton   (d) Hockey
    (e) Volleyball

156. In UPI, U refers to—
    (a) Union   (b) Universal
    (c) Unified   (d) Under
    (e) None of the Above

157. A wholly owned subsidiary of Reserve Bank of India (RBI) is——
    (a) HDFC   (b) IDBI
    (c) NHB   (d) SEBI
    (e) NABARD

158. A type of Home loan for older homeowners that requires no monthly mortgage payments is known as—
    (a) Jumbo Mortgage
    (b) Interest Mortgage
    (c) Adjustable Rate Mortgage
    (d) Conventional Mortgage
    (e) Reverse Mortgage

159. Chhilchhila Wildlife Sanctuary (Seonthi Reserve forest) located in which state?
    (a) Rajasthan
    (b) Uttrakhand
    (c) Tamilnadu
    (d) Haryana
    (e) Madhya Pradesh

160. The first tri-service Armed forces exercise INDRA 2017 between—
    (a) India & Russia   (b) India & USA
    (c) India & Sri-Lanka (d) India & Afghanistan
    (e) India & Romania

ENGLISH LANGUAGE

DIRECTIONS (Qs. 161-167): *Read the passage and answer the questions that follow:*

Research from the Indiana University Kelley School of Business found that emotional intelligence - the ability to understand, use and manage emotions to relieve stress - may be more vital to a business' survival than previously thought. The paper, 'What matters more for entrepreneurship success? A meta-analysis comparing general mental ability and emotional intelligence in entrepreneurial settings,' appears in Strategic Entrepreneurship Journal.

"We found that entrepreneurs benefit much more from emotional competences than other competencies -- such as IQ -- due to high uncertainty and **ambiguity** that comes with the world of entrepreneurship and even more applicable in a crisis," said Regan Stevenson, assistant professor of entrepreneurship and management and the John and Donna Shoemaker Faculty Fellow in Entrepreneurship. "Being an entrepreneur is not a 'traditional workplace setting.' If you are an entrepreneur, you know that managing your business can often feel like you are screaming alone on an emotional rollercoaster," Stevenson said. "The extreme nature of this setting makes one's ability to manage emotions and social connections critically more important, especially so during times of major disruption and crisis," Stevenson added. According to the recent US Bureau of Labor Statistics, about a fifth of all new businesses fail within their

first two years and nearly half are shuttered within five years. More than a million US companies with employees were shuttered in 2020, in large part due to the COVID-19 pandemic. The number of bankruptcies in 2020 and those expected this year likely will approach levels last seen during the worst quarter of the 2008-09 financial crises.

"The extreme nature of the pandemic has made one's ability to manage emotions and social connections critically more important, especially so during these times of major disruption and crisis," said Ernest O'Boyle, associate professor of management and entrepreneurship and the Dale M Coleman Chair in Management. The research found that those with higher emotional intelligence are better able to be self-motivated and have higher social skills - even under more normal circumstances.

"Emotional Intelligence is linked to social skills such as accurately perceiving other's needs, making good first impressions, and influencing others in interpersonal interactions. These skills are important for developing business networks, which can aid in signaling **legitimacy** and in acquiring resources," researchers wrote. "These skills can enhance creativity and opportunity recognition; aid decision making in emotionally turbulent situations and enable adaptive responses to unpredictable events," researchers further wrote.

Previous research has suggested that cognitive intelligence was a greater predictor of success among entrepreneurs. The two factors are seldom studied together. "While IQ is unquestionably the better predictor of job performance and career success across all jobs and careers, within the domain of entrepreneurship, emotional intelligence was the stronger predictor of success," O'Boyle said. "Those with high emotional intelligence tended to be more successful as business leaders and enjoy success than in more typical jobs and careers," added O'Boyle. Their findings are based on an **empirical** study of nearly 40 previous studies and a meta-analysis of 65,826 entrepreneurs observed through that research.

161. According to the author, what are the traits of emotional intelligence?
    (i) Ability of understanding and using one's emotions
    (ii) Mental ability is the key to gain emotional intelligence
    (iii) An emotionally intelligent person knows to manage his business
    (iv) Manage emotions to relieve stress
    (a) Only ii   (b) Both i and ii
    (c) Both i and iv   (d) Both ii and iii
    (e) Only iii

162. Why the report suggests that entrepreneurs benefit from emotional competencies than other competencies?
    (a) The entrepreneurship world is full of uncertainties where emotional competencies are beneficial.
    (b) Emotional competencies are highly applicable during crisis times.
    (c) Both (a) and (b)
    (d) The entrepreneurship is full of challenges and there is a need of peace of mind to deal with those challenges.
    (e) A calm and composed entrepreneur takes his business to new heights.

163. What it's like to be managing a business being an entrepreneur?
    (a) It quite hard being an entrepreneur and manage a business all by yourself.
    (b) Managing a business becomes hard with lack of emotional intelligence.
    (c) There is a lot of emotional stress taking a toll on you.
    (d) It's just like a traditional workplace setting.
    (e) Screaming alone on an emotional rollercoaster .

164. How the extreme nature of managing a business affects one's emotional ability?
    (a) It enhances one's ability of managing emotions.
    (b) It boosts the management of social connections during major disruption and crisis.
    (c) It helps to prevent the companies from being shuttered.
    (d) It checks bankruptcies of companies and brings them out of the financial crises.
    (e) Both (a) and (b)

165. What are the findings of the research report about people with higher emotional intelligence?
    (a) They tend to self-motivate people.
    (b) Both (a) and (c)
    (c) People with higher emotional intelligence possess higher social skills.
    (d) Emotionally intelligent people have better decision making.
    (e) People with better emotional intelligence are best entrepreneurs.

166. What are the skills that emotional intelligence gives birth to?
    (a) Development of social skills to perceive what others need.
    (b) It helps to cast first good impression.
    (c) It brings an influence while having interpersonal interactions.
    (d) The social skills enhance creativity and recognition of opportunities.
    (e) All of the above

167. What are the two factors studied that the author talks about when predicting success among entrepreneurs?
    (i) IQ
    (ii) Emotional Intelligence
    (iii) Success in different field
    (a) i, ii   (b) ii, iii
    (c) i, ,iii   (d) only i
    (e) None of these

DIRECTIONS (Qs. 168-169): *Which of the following words is most similar in meaning with the given words as highlighted in the passage?*

168. **Ambiguity**
    (a) Transparency   (b) Ignorance
    (c) Enigma   (d) Destitute
    (e) Truism
169. **Empirical**
    (a) Absurdity   (b) Pragmatic
    (c) Placid   (d) Obdurate
    (e) Indurated

170. Which of the following words is the most opposite in meaning with LEGITIMACY as highlighted in the passage?
    (a) Disestablish   (b) Misrepresent
    (c) Wrongly   (d) Illegality
    (e) Warrant

DIRECTIONS (Qs. 171-175): *In the questions given below, a sentence has been broken down into four fragments labeled (A), (B), (C) and (D) and arranged, not necessarily in the correct order. You have to find the correct order of arrangement from the options given below. In case, the sentence is correct in its original form, please select (E) as your answer.*

171. Moving from one room in your house (A)/ a change of scenery, even if it's just (B)/to another, combined with movement helps (C)/to clear your mind and help you reset your focus (D)
    (a) CBAD   (b) BACD
    (c) BADC   (d) DACB
    (e) No rearrangement required

172. Many mountains to climb as they (A)/battle to introduce successful vehicles (B)/ new and established carmakers have (C)/in an increasingly crowded marketplace (D)
    (a) CABD   (b) CBAD
    (c) DBCA   (d) DABC
    (e) No rearrangement required

173. Yourself and your resources to it (A)/ out if you have the right startup (B)/ it's imperative to try to figure (C)/ idea before fully committing (D)
    (a) ACBD   (b) BCDA
    (c) CABD   (d) CBDA
    (e) No rearrangement required

174. One of the most prevalent myths (A)/ or sunblock on cold or cloudy days (B)/ that you don't need to apply sunscreen (C)when it comes to sun protection is (D)
    (a) BCAD   (b) CDBA
    (c) ADCB   (d) DCAB
    (e) No rearrangement required

175. Through them obviously does not have any benefit (A)/ and taking breaks, as simply putting (B)/them on your schedule and constantly working (C)/ be diligent about both scheduling (D)/
    (a) DACB   (b) DBCA
    (c) CBDA   (d) BCAD
    (e) No rearrangement required

DIRECTIONS (Qs. 176-180): *In this question, a sentence is divided into four fragments. One of the fragments may or may not have an error with respect to context or grammar. You have to identify that part and mark it as your answer. If all the parts are error free mark option 'e' as your answer.*

176. It is important to (A)/look to the political (B)/and cultural context in (C)/which the novel was written. (D)/ No Error (E)
    (a) A   (b) B
    (c) C   (d) D
    (e) No Error

177. The film itself is (A)/preceded by an elaborately (B)/ironic but nervy disclaimer (C)/about being just a joke.(D)/ No Error (E)
     (a) A (b) B (c) C (d) D
     (e) No Error
178. For myself, I hope to (A)/accomplish it without much too (B)/pain, and with present-day drug (C)/developments this seems probable. (D)/ No Error (E)
     (a) A (b) B (c) C (d) D
     (e) No Error
179. His account showed all (A)/money being withdrawn (B)/that was credited as his account (C)/from his friend's account in Vishakhapatnam. (D)/ No Error (E)
     (a) A (b) B (c) C (d) D
     (e) No Error
180. No sooner had the European Union (A)/conclude a long-negotiated investment (B)/ agreement with China late (C)/last year than criticism poured in. (D)/ No Error (E)
     (a) A (b) B (c) C (d) D
     (e) No Error

DIRECTIONS (Qs. 181-185): *Rearrange the paragraph and answer the following questions.*

(A) In a deeply patriarchal society, generations of women have had their own battles to fight.
(B) It would be derogatory to affix a monetary amount to the labour, services and sacrifices of homemakers.
(C) Now it is the turn of the present generation of women to provide for themselves and demand unemployment allowance if, owing to circumstances, they need to stay at home.
(D) But at the same time, the romanticization of the burden that is put on the woman to demonstrate her love must stop.
(E) Pioneering women in the 1950s broke the glass ceiling to a great extent to pursue careers.
(F) The next generation established themselves as the second bread earners in their families.

181. What is the THIRD sentence after rearrangement?
     (a) F (b) D (c) E (d) A
     (e) B
182. What is the SECOND sentence after rearrangement?
     (a) F (b) A (c) C (d) E
     (e) D
183. What is the FIFTH sentence after rearrangement?
     (a) D (b) F (c) C (d) A
     (e) B
184. What is the FOURTH sentence after rearrangement?
     (a) E (b) D (c) C (d) F
     (e) B
185. What is the SIXTH sentence after rearrangement?
     (a) D (b) E (c) C (d) D
     (e) F

DIRECTIONS (Qs. 186-190): *In the given question, a word has been mentioned and there are three ways in which the word has been used in either similar or different ways. You are required to check which of the sentences have correctly used the highlighted word, and mark that as your answer.*

186. **Proximity**
     (I) The state government will add farmers, farm workers and those in food processing who work in close **proximity** with others to the vaccine priority list.
     (II) For the best performance, large numbers of drives can be connected and their data **proximity** into a larger host interface.
     (III) The launch of the world's smallest **proximity** sensor gives manufacturers new ways to deliver a more differentiated and higher value product to the consumer.
     (a) Only I (b) Only I and III
     (c) Only I and II (d) Only III
     (e) All are correct
187. **Predate**
     (I) Prior to the operation, the government promulgated a special **predate** to speed up legal proceedings.
     (II) Brilliantly blue beads from Europe unearthed by archaeologists in Arctic Alaska may **predate** Christopher Columbus' arrival in the New World.
     (III) None of them earn enough to afford household basics for a family of four and these economic struggles long **predate** COVID-19.
     (a) Only II (b) Only I and II
     (c) Only I and III (d) Only II and III
     (e) All are correct
188. **Vagueness**
     (I) Her extensive understanding of war's horror contrasts with the ridiculous **vagueness** of her father's telegram announcing Victor's wounding.
     (II) As is usually the case with UFO surroundings, there is enough intrigue and mystery and **vagueness** surrounding the incident to create a buzz.
     (III) The **vagueness** exists notwithstanding the fact that government has from time to time suggested that is does not consider digital currency to be legal.
     (a) Only II (b) Only I and II
     (c) Only III (d) Only I and III
     (e) All are correct
189. **Volatile**
     (I) Gold prices have been highly **volatile** off late with gains on one day and decline the other day.
     (II) Bitcoin doesn't behave like a payment instrument as it's too **volatile** and takes too long to transact.
     (III) Rejecting the quest for absolute **certainty**, it takes a meliorist attitude that human action sometimes can improve the world.
     (a) Only I (b) Only II
     (c) Both I and II (d) Both I and III
     (e) All the above

190. **Ambiguity**
    (I) The amendment concerns an **ambiguity** regarding the age of a person to be adopted for the purposes of an adoption.
    (II) Chinese gardens typically included a building for scholarly **ambiguity** and meditation.
    (III) Toshiba's November progress report has a key **ambiguity** that leaves shareholders scratching their heads.
    (a) Both I and III   (b) Only III
    (c) Both II and III   (d) Only II
    (e) All the above

DIRECTIONS (Qs. 191-195): *In each of the question below, there is a word given in bold which is followed by the five options. In each of the option, a pair of words is given which is either the pair of synonyms or antonyms or synonym & antonym of the word given in bold. Choose that pair as your answer.*

191. **Vigilance**
    (a) Observant, Fascinate (b) Perspective, Attitude
    (c) Wariness, Distracted (d) Terminate, Watchful
    (e) Include, Caution
192. **Reiterate**
    (a) Yield, Permit   (b) Solidify, Separate
    (c) Approve, Encourage   (d) Prominent, Obvious
    (e) Repeat, Retell
193. **Welter**
    (a) Differ, Disagree   (b) Stormy, Unstable
    (c) Concealed, Hidden   (d) Deny, Confirm
    (e) Scorn, Praise
194. **Undergird**
    (a) Harmonious, Disguise (b) Beguile, Repel
    (c) Acclaimed, Ionized   (d) Support, Strengthen
    (e) Competitive, Inexpensive
195. **Resilience**
    (a) Enviable, Elasticity (b) Durability, Deadlock
    (c) Fragility, Liberal   (d) Pliability, Rigidity
    (e) Vulnerability, Unrestricted

DIRECTIONS (Qs. 196-200): *Select the phrase/connector out of three phrases/connectors given as (i), (ii) and (iii) which can be used in the beginning (to start the sentence) to form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences.*

196. (I) Human rights is the next area where India and the U.S. could be at odds both on the bilateral front and in the region.
    (II) Mr. Biden is committed to put human rights "at the centre of Foreign Policy".
    (i) Before Human rights is………….
    (ii) Given Mr. Biden's commitment to…………….
    (iii) Though Mr. Biden is……….
    (a) Only iii   (b) Only ii
    (c) Only i   (d) Both i and ii
    (e) Both ii and iii
197. (I) Washington has stepped up sanctions and called for the Suu Kyi-NLD government to be reinstated.

(II) New Delhi has spoken only for the "rule of law" and democratic processes to be upheld.
    (i) While Washington has ………...
    (ii) Although Washington has……...
    (iii) Meanwhile Washington has……….
    (a) Only ii   (b) Both i and iii
    (c) Only i   (d) Both ii and iii
    (e) Both i and ii
198. (I) National Science Day, on February 28, is a moment to celebrate the progress that India has made in science and technology research.
    (II) It is also an opportunity to ponder about the problems that we face in research.
    (i) Besides being an opportunity………….
    (ii) Notwithstanding the National………..
    (iii) An opportunity to ponder……….
    (a) Only i   (b) Only ii
    (c) Only iii   (d) Both i and iii
    (e) Both i and ii
199. (I) The Centre has saved itself from continuing embarrassment at the international level.
    (II) It has withdrawn the Education Ministry's ill-thought-out guidelines for holding online conferences, seminars and training sessions.
    (i) However, the Centre has saved………
    (ii) Withdrawing the Education Ministry's………….
    (iii) Saving itself from……….
    (a) Only i   (b) Only iii
    (c) Both ii and iii   (d) Both i and iii
    (e) Both i and ii
200. (I) It was quite obvious that the claim of a global conspiracy behind the unsavoury and violent incidents that took place on January 26 in New Delhi lacked credence.
    (III) The order of bail is still notable for subjecting the specific charges to strict judicial scrutiny at a fairly early stage.
    (i) Even though it was………..
    (ii) While it was……….
    (iii) Since the claim…………….
    (a) Only i   (b) Only ii
    (c) Both i and ii   (d) Both i and iii
    (e) Both iii and ii

HINDI LANGUAGE

निर्देश (प्र. सं. 201–205): *नीचे दिए गए गद्यांश को पढ़कर पूछे गए प्रश्नों के सही/सबसे उचित उत्तर वाले विकल्प को चुनिए:*

शिक्षा आज दुविधा के अजब दोराहे पर खड़ी है। एक रास्ता चकाचौंध का है, मृगतृष्णा का है। बाज़ार की मृगतृष्णा शिक्षार्थी को लोभ–लालच देकर अपनी तरफ दौड़ाते रहने को विवश करने को उतारू खड़ी है। बाज़ार के इन ललचाने वाले रास्तों पर आकर्षण है, चकाचौंध है और सम्मोहित कर देने वाले सपने हैं। दूसरी तरफ शिक्षा का साधना मार्ग है जो शांति दे सकता है, संतोष दे सकता है और हमारे आत्मतत्व को प्रबल करता हुआ विमल विवेक दे सकता है। निश्चित ही वह मार्ग श्रेयस्कर है, मगर अपनी ओर

आकर्षित करने वाले बाज़ार का मार्ग प्रेयस्कर है। इस दोराहे पर खड़ा शिक्षार्थी बाज़ार को चुन लेता है। लाखों-करोड़ों लोग आज इसी रास्ते के लालच में आ गए हैं और शिक्षा के भँवरजाल में फँस गए हैं। बाज़ार की खूबी यही है कि वह फँसने का अहसास किसी को नहीं होने देता और मनुष्य लगातार फँसता चला जाता है। किसी को यह महसूस नहीं होता कि वह दलदल में है बल्कि महसूस यह होता है कि बाज़ार द्वारा दिए गए पैकेज के कारण वह सुखी है। अब यह अलग बात है कि सच्चा सुख क्या है? और सुख का भ्रम क्या है? ज़रूरत विचार करने की है। सवाल यह है कि बाज़ार विचार करने का भी अवकाश देता है या कि नहीं।

201. लेखक ने शिक्षा के संदर्भ में किस बात को महत्व दिया है?
(a) साधना को   (b) विवेक को
(c) शिक्षार्थी को   (d) बाज़ार को
(e) इनमें से कोई नहीं

202. "दूसरी तरफ शिक्षा का साधना मार्ग है" – तो पहली तरफ क्या है?
(a) एक अच्छा पैकेज और सुख-शांति
(b) दलदल में फँसे होने का अहसास
(c) दुविधा का दोराहा और भटकाव
(d) बाज़ार की चकाचौंध, सम्मोहन और सपने
(e) इनमें से कोई नहीं

203. निम्न में से कौन-सी विशेषता बाज़ार की नहीं है?
(a) बाज़ार सुखी होने का भ्रम पैदा करता है।
(b) बाज़ार लोगों को सुख-शांति देता है।
(c) बाज़ार लोगों को अपने आकर्षण से बाँधता है।
(d) बाज़ार एक दलदल की तरह है।
(e) इनमें से कोई नहीं

204. गद्यांश के अनुसार लोग बाज़ार को चुनते हैं, क्योंकि:
(a) लोगों के पास धन-संपत्ति की कमी है
(b) लोग बाज़ार से प्रेम करते हैं
(c) सभी लोग लालची हैं
(d) बाज़ार में आकर्षण है
(e) इनमें से कोई नहीं

205. गद्यांश के आधार पर कहा जा सकता है कि :
(a) लोग सांसारिक जीवन जीना पसंद करते हैं
(b) लोग दूसरों को ठगने में आनंदित होते हैं
(c) भौतिकतावादी सोच हावी नहीं हो रही है
(d) भौतिकतावादी सोच हावी हो रही है
(e) इनमें से कोई नहीं

निर्देश (प्र.सं. 206–210): *दिए गए गद्यांश को ध्यानपूर्वक पढ़िए और नीचे दिए गए प्रश्नों का उत्तर दीजिए।*

जहां तक मैं समझता हूँ, मेरी आत्मिक शक्तियों के विकास में बार्सिलोना और उसके निवासियों का सबसे सुंदर चित्रण भी सहायक नहीं हो सकता था। स्योम्का और फेद्का को पीटर्सबर्ग के जलमार्गों को जानने की क्या जरूरत है, अगर जैसी कि संभावना है, वे वहां कभी नहीं जा पाएंगे? अगर स्योम्का का वहां कभी जाना हुआ भी, तो उसे इससे कोई फर्क नहीं पड़ेगा कि उसने स्कूल में पढ़ा था या नहीं, क्योंकि इन जलमार्गों को वह व्यवहार में जान ही जाएगा और अच्छी तरह जान जाएगा। मैं नहीं समझ सकता कि उसकी आत्मिक शक्तियों के विकास में इस बात की जानकारी से कोई मदद मिल सकती है कि वोल्गा में सन से लदे जहाज नीचे की ओर जाते हैं और अलकतरे से लदे जहाज ऊपर की ओर; कि दुबोव्का नाम का एक

बंदरगाह है; कि फलाँ भूमिगत परत फलाँ जगह तक जाती है; कि सामोयेद लोग बारहसिंगा गाड़ियों पर सफर करते हैं, वगैरह-वगैरह।

206. स्योम्का और फेद्का हैं
(a) कर्मचारियों के नाम   (b) शहरों के नाम
(c) शिक्षकों के नाम   (d) जानवरों के नाम
(e) विद्यार्थियों के नाम

207. लेखक के अनुसार वह पढ़ाई निरर्थक है
(a) जिसमें जलमार्गों के बारे में नहीं पढ़ाया जाता
(b) जानकारी नहीं दी जाती
(c) जो बंदरगाहों के बारे में न बताए
(d) जिसका उपयोग बच्चे हमेशा करते हों
(e) जिसका उपयोग बच्चे अपने रोजमर्रा के जीवन में न करते हों

208. 'निवासी' का बहुवचन रूप है
(a) निवासों   (b) निवासी
(c) निवासिएँ   (d) निवासें
(e) निवासियों

209. निम्नलिखित में से कौन-सा 'चित्रण' के लिए उपयुक्त विशेषण नहीं है?
(a) सौंदर्य   (b) कलात्मक
(c) सुंदर   (d) मनोहारी
(e) कोई त्रुटि नहीं

210. 'फर्क' का समानार्थी है
(a) हानि   (b) प्रभावकारी
(c) असरदार   (d) लाभ
(e) अंतर

निर्देश (प्र.सं. 211–215) : *नीचे दिए गए परिच्छेद में कुछ रिक्त स्थान छोड़ दिए गए हैं तथा उन्हें प्रश्न संख्या में दर्शाया गया है। ये संख्याएँ परिच्छेद के नीचे मुद्रित हैं, और प्रत्येक के सामने (a), (b), (c), (d) और (e) विकल्प दिए गए हैं। इन चार में से कोई एक इस रिक्त स्थान को पूरे परिच्छेद के संदर्भ में उपयुक्त ढंग से पूरा कर देता है। आपको वह विकल्प ज्ञात करना है, और इसका क्रमांक ही उत्तर के रूप में दर्शाना है। दिए गए में से उपयुक्त विकल्प का चयन करना है।*

ईश्वर की सर्वश्रेष्ठ मानव जब पृथ्वी पर अवतरित हुआ तो यह लोक उसके लिए कौतूहल और आश्चर्य का विषय था लेकिन मानव की आवश्कताएँ सीमित थीं। खाने-पीने के लिए भरपूर (211) और जल पृथ्वी पर उपलब्ध था। धीरे-धीरे मानव समूह अलग-अलग अनेक परिवारों के रूप में परिणित हो गया। विकास का पहिया आगे बढ़ता रहा। कई परिवारों के मिलने से ग्रामों ने बड़े-बड़े ग्रामों की शक्ल लेना शुरू कर दिया। मानव का सरल जीवन जटिल बनता गया। अधिकारिक (212) की इच्छा ने स्पर्द्धा को जन्म दिया। अब मानव भौतिक साधनों की प्राप्ति के लिए आपस में लड़ने लगे जो कभी-कभी बड़ी लड़ाइयों के रूप में सामने आने लगी। जब इस तरह की घटनाएँ बढ़ती गई तो कहा जाता है कि समाज के कुछ बुद्धिमान लोग ब्रह्मा जी के पास पहुँचे। ब्रह्मा जी ने इस (213) से मुक्ति के लिए उन्हें अपने बीच से एक राजा का चुनाव करने सुझाव दिया। इस तरह राजा का जन्म हुआ। मानव किसी खास व्यक्ति के आदेशों और निर्देशों का पालन करने लगा। अब मानव का परिचय विशेष क्षेत्र और (214) के साथ जुड़ता गया। नागरिकता का जन्म हुआ लेकिन इसे ठीक ढंग से समझने का कार्य आधुनिक युग में ही संभव हो सका। मनुष्य एक सामाजिक प्राणी है अत: उसमें एक सभ्य नागरिक के गुण अवश्य होने चाहिए। (215) का मूल मंत्र है-जियो और जीने दो। प्रत्येक नागरिक को इस मंत्र को अपने जीवन में अवश्य उतारना चाहिए।

211. (a) फल-फूल   (b) मांस-मछली
     (c) कन्द-मूल   (d) मेवा-मिष्ठान
     (e) साग-सब्जी
212. (a) आराम-तलब   (b) सुख-समृद्धि
     (c) भोग-विलास   (d) आदर-सम्मान
     (e) काम-क्रोध
213. (a) विडंबना   (b) असहयोग
     (c) संक्रमण   (d) अराजकता
     (e) सहयोग
214. (a) मनुष्य   (b) परिवार
     (c) समाज   (d) शासक
     (e) संस्कृत
215. (a) नागरिकता   (b) सामाजिकता
     (c) व्यक्तिवादिता   (d) सच्चाई
     (e) बुराई

निर्देश (प्र. सं 216-220): *वाक्य के अशुद्ध भाग का चयन करें।*

216. भारतीय शान्ति सेना के सैनिकों में से (a)/ सभी ने अपने कर्त्तव्य का पालन (b)/ बड़ी ईमानदारी से किया है। (c) / कोई त्रुटि नहीं (d) / उपरोक्त सभी में (e)

217. राष्ट्रीय विचारधारा का उन्नत रूप (a)/ हमें द्विवेदी युग की (b)/ कविता में मिलता है। (c) / कोई त्रुटि नहीं (d) / उपरोक्त सभी में (e)

218. डॉक्टर के कहने पर (a)/ मैंने शाम सुबह लम्बी सैर (b)/ पर जाना शुरू कर दिया। (c) / कोई त्रुटि नहीं (d) / उपरोक्त सभी में (e)

219. मैं और मेरा मित्र (a)/ संध्याकाल के समय (b)/ उससे मिलने जायेंगे। (c) / कोई त्रुटि नहीं (d) / उपरोक्त सभी में (e)

220. हम मंदिर (a)/ के अंदर गये (b)/ तो वहाँ बहुत भीड़ थी। (c) / कोई त्रुटि नहीं (d) / उपरोक्त सभी में (e)

निर्देश (प्र.सं. 221-225): *नीचे (A), (B), (C), (D), (E) और (F) में छ: कथन दिए गए हैं। इन छहों कथनों को इस तरह व्यवस्थित करिए कि उनसे एक अर्थपर्ण परिच्छेद बन जाए। फिर उसके बाद दिए गए प्रश्नों के उत्तर दीजिए ।*

(A) उसने कॉफी वाले को कुछ कहा और दस का नोट दिया।
(B) बच्ची ने इशारे से कुछ कहा।
(C) कॉफी वाले ने अजीब सी मुस्कान फेंकी और बड़बड़ाया अब देखना, सारा कुनबा आ धमकेगा।
(D) नजर घुमाई तो एक छोटी सी बच्ची थी, भोला चेहरा, उलझे बाल और फटे कपड़े।
(E) स्टेशन पर उसके कॉफी वाले से कॉफी खरीदी और खड़े खड़े पीने लगा।
(F) उसने महसूस किया कि किसी ने बगल से उसके कुर्ते को खींचा
221. पुनर्व्यवस्था के बाद पहला वाक्य कौन सा होगा?
     (a) A   (b) F   (c) E   (d) D
     (e) E
222. पुनर्व्यवस्था के बाद तीसरा वाक्य कौन-सा होगा?
     (a) D   (b) B   (c) F   (d) D
     (e) A

223. पुनर्व्यवस्था के बाद दूसरा वाक्य कौन-सा होगा?
     (a) D   (b) B   (c) C   (d) F
     (e) E
224. पुनर्व्यवस्था के बाद पांचवां वाक्य कौन-सा होगा?
     (a) D   (b) A   (c) B   (d) C
     (e) C
225. पुनर्व्यवस्था के बाद चौथा वाक्य कौन-सा होगा?
     (a) D   (b) F   (c) C   (d) B
     (e) A

निर्देश (प्र. सं. 226-230): *नीचे दिए गए प्रत्येक प्रश्न में एक रिक्त-स्थान छूटा हुआ है और उसके नीचे चार शब्द सुझाए गए है। इनमें से कोई एक उस रिक्त-स्थान पर रख देने से वह वाक्य एक अर्थपूर्ण वाक्य बन जाता है। सही शब्द ज्ञात कर उसको उत्तर के रूप में अंकित कीजिए। दिए गए शब्दों में से सर्वाधिक उपयुक्त का चयन करना है।*

226. रामानन्द जी .... हैं।
     (a) सज्जान पुरुष   (b) सज्जन पुरुष
     (c) बड़े सज्जन   (d) बड़े सज्जान
     (e) बहुत सज्जन
227. इस ....परिस्थिति में आपकी सहायता करना कठिन है।
     (a) विषम   (b) गम्भीर
     (c) तीक्ष्ण   (d) कठिन
     (e) अनुकूल
228. पवन .... है
     (a) बहता   (b) चलता
     (c) चलती   (d) आती
     (e) आता
229. निर्धनता से पीड़ित बेचारे मोहन के प्राण निकल ....।
     (a) गए   (b) गया
     (c) सका   (d) आया
     (e) पाया
230. महात्मा बुद्ध ने लोगों को अहिंसा का ....दिया।
     (a) संदेश   (b) शिक्षा
     (c) कूट   (d) उपदेश
     (e) मार्ग

निर्देश (प्र. सं. 231-233): *नीचे कुछ शब्द दिए गए हैं। प्रत्येक की वर्तनी के लिए चार विकल्प दिए गए हैं। इनमें से एक विकल्प में शब्द की शुद्ध वर्तनी दी गई। आपकों उस शुद्ध वर्तनी का चयन करना है।*

231. (a) अनयथा   (b) अंयथा
     (c) अन्यथा   (d) आन्यथा
     (e) अनायथा
232. (a) दुन्दुभी   (b) दून्दुभि
     (c) दुन्दूभी   (d) दून्दुभी
     (e) दून्दूभी
233. (a) महामहिम   (b) माहामहिम
     (c) महामहीम   (d) माहामहीम
     (e) माहामाहीम

निर्देश (प्र. सं. 234-236) : *नीचे लिखे प्रश्नों में दिये गये शब्दों के विलोम बताइये।*

234. दुर्जन
    (a) सुजन   (b) सज्जन
    (c) परिजन   (d) साजन
    (e) अर्जन

235. 'कृपण' का उपयुक्त विलोम शब्द चुनें।
    (a) परोपकारी   (b) दानी
    (c) भिखारी   (d) स्वार्थी
    (e) अर्पण

236. 'लघिमा' का उपयुक्त विलोम होगा:
    (a) लघुत्व   (b) गुरुत्व
    (c) महिमा   (d) गरिमा
    (e) उपरोक्त में से कोई नहीं

निर्देश (प्र. सं. 237-238): *निम्नलिखित प्रश्नों में प्रत्येक मुहावरे के अर्थ के लिए चार विकल्प दिए गए हैं। इनमें से उचित विकल्प का चयन कीजिए:*

237. गागर में सागर भरना
    (a) सरस दोहों की रचना करना
    (b) मूर्खतापूर्ण कार्य करना

    (c) असम्भव काम करना
    (d) थोड़े शब्दों में अधिक कहना
    (e) उपरोक्त में से कोई नहीं

238. गीदड़ भभकी देना
    (a) डींग हाँकना
    (b) झूठा डर दिखाना
    (c) बड़ा-चढ़ा कर बताना
    (d) क्षमता से बाहर कार्य करना
    (e) उपरोक्त में से कोई नहीं

निर्देश (प्र. सं. 239-240): *निम्नलिखित अनेक शब्दों के लिए एक शब्द देना है। प्रत्येक के लिए चार विकल्प शब्द दिए गए हैं, उपयुक्त शब्द का चयन करें।*

239. जो सदा दूसरों पर संदेह करता है।
    (a) झगड़ालू   (b) दयालु
    (c) ईर्ष्यालु   (d) शंकालु
    (e) उपरोक्त में से कोई नहीं

240. आयु में बड़ा व्यक्ति।
    (a) कनिष्ठ   (b) वरिष्ठ
    (c) ज्येष्ठ   (d) पूजनीय
    (e) उपरोक्त में से कोई नहीं

HINTS & SOLUTIONS

Sol (1-5) :
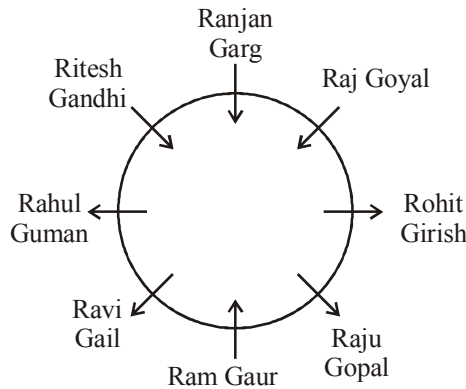
1. (a) We can say that Raj has surname Goyal.
2. (d) We can say that Ravi sits second to the right of Raju.
3. (b) We can say that Rahul is sitting third to the right of the one, who is sitting second to the left of the one, whose surname is Gandhi.
4. (c) We can say that Ravi Gaur is the one that does not belong to the group because of all the options Ravi Gaur is the only option in which name and surname is of adjacent persons.

5. (d) We can say that both Ranjan and Rohit are the neighbours of Raj.

Sol. (6-10) :
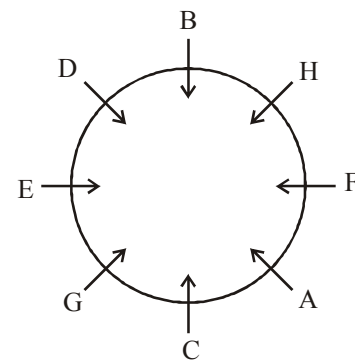
6. (c) D is second to the right of H.
7. (c) CB does not belong to the group.
8. (b) B sits second to the left of the one who is on the immediate right of D.
9. (d) In the following common explanation it is clear that H sits between B and F.
10. (c) In the following common explanation it is clear that G sits third to right of the one who sits opposite of C.

Sol. (11-15) :

Rack	Box
7	Box P
6	Box T
5	Box Q
4	Box U
3	Box S
2	Box R
1	Box V

11. (a) Box Q is placed exactly between Box T and Box U.
12. (d) 4 boxes are placed between Box P and Box R.
13. (d) Clearly, Box V is placed in the lowermost rack.
14. (b) Following common explanation, it's evident that statement given as option (b) (Box Q) is placed in rack 5 is true.
15. (b) Clearly, there is only one box between S and V.

So. (16-20) :

Floor No.	Person	No. of members
7	Anil	2
6	Vivek	4
5	Chandan	6
4	Deepak/ Farhan	1
3	Eshwar	2
2	Deepak/ Farhan	1
1	Ganesh	3

16. (a) Chandan lives on fifth floor.
17. (b) Anil's family consists of 2 members including him.
18. (d) Ganesh's family consists of total three members.
19. (c) Only 1 person between Eshwar and Ganesh.
20. (d) 7-Anil-2 is the only correct combination here.

Sol. (21-24) :

Month	22nd	27th
March (31)	Kumar	Ram
April (30)	David, Kamal	Ajay, Ganguly
May (31)	Sam, Binod	Amar

21. (e) David and Kamal both have exams on 22nd April.
22. (d) Ram, Ajay, Ganguly and Amar all of have exams on 27th but Sam has on 22nd.
23. (c) Binod attempts exam on 22nd May.
24. (d) Sam and Binod attempts exam just before Amar.

Sol. (25-29) :

1. The digit in the code represents the no. of letters in the word.
2. Symbols & code -

No. of letter in the word	Symbols
2	^
3	%
4	@
5	#
6	$
7	&
8	*
9	=

3. The letter in the code represents the first vowel from left end in the given word.

25. (c) "Remember Disha" will be coded as "8*E 5#I".
26. (e) The code of "Wealth" is "6$E".
27. (d) "Climatic condition" will be coded as "8*I 9=O".
28. (a) "Comedy" will be coded as "6$O".
29. (e) "East" will be coded as "4@E".
30. (c) We have, the given word = POCKETBOOK

P O C K E T B O O K

31. (d) Using the given information we can draw a following figure :
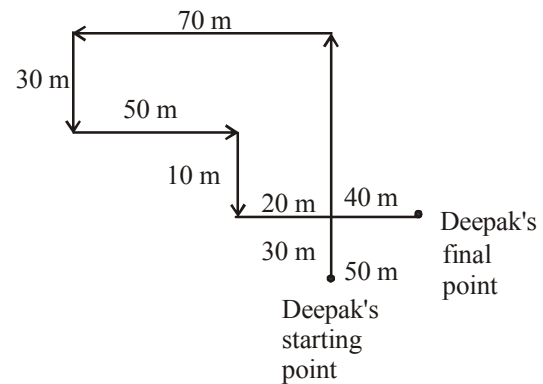
Here, the shortest distance of Deepak's starting point and final point

$$= \sqrt{(30)^2 + (40)^2} = 50 \text{ m},$$

and Deepak is in northeast direction with respect to his starting point.

32. (b) Using the figure of previous solution's :
Here, the total distance travelled by Deepak in south direction during the entire journey is
(30 + 10) m = 40 m.

33. (d)
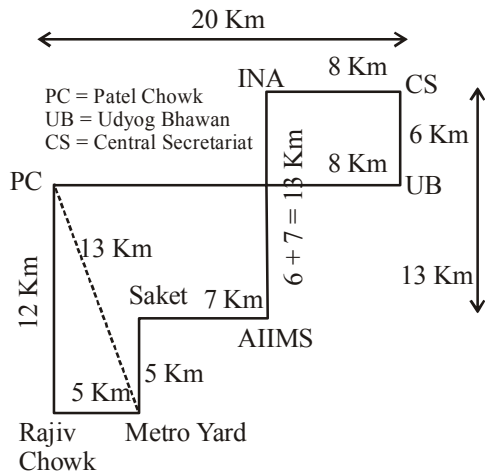
Distance between Metro Yard and PC

$$= \sqrt{(5)^2 + (12)^2} = 13 \text{ Km}, \text{ North west.}$$

34. (d) Series Pattern   Given Series
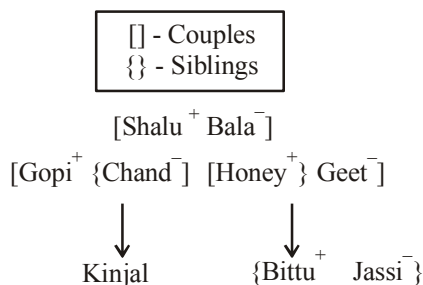639   639
639 + (6 + 3 + 9) = 657
657 + (6 + 5 + 7) = 675
675 + (6 + 7 + 5) = 693
693 + (6 + 9 + 3) = 711
711 + (7 + 1 + 1) = 720

Sol. (35-37) :

Highests & Oldest	Height	Weight
↑	Rimpu	Komal
	Manu	Manu
	Bharat	Prakash
	Prakash	Bharat
	Kiara	Rimpu
	Komal	Shipra
Lowest & Youngest	Shipra	Kiara

35. (d) We can say that Shipra is the second lightest.
36. (a) We can say that no one is heavier than the one who is second shortest.
37. (c) We can say that Komal is the heaviest.

Sol. (38-40) :

[ ] - Couples
{ } - Siblings

$[\text{Shalu}^+ \ \text{Bala}^-]$

$[\text{Gopi}^+ \ \{\text{Chand}^-\} \ [\text{Honey}^+\} \ \text{Geet}^-]$

↓   ↓

Kinjal $\{\text{Bittu}^+ \ \text{Jassi}^-\}$

38. (e) We can say that we cannot determine the relation between Bala and Kinjal as Kinjal can be either grandson or granddaughter of Bala.

39. (c) According to the above given final solution we can say that Shalu's son in law is the Brother in law of Geet's husband.

40. (e) According to the above given final solution we can say that Bala is the one that does not belong to the group because all the members in the other options belong to the second generation of the family, but Bala belongs to first generation of the family.

41. (c) $\sqrt[3]{(126 + 392 \div 7 - 162 + 14^2)} = ?$

$\Rightarrow \sqrt[3]{(126 + 56 - 162 + 196)} = ?$

$\Rightarrow \sqrt[3]{(378 - 162)}$

$\Rightarrow \sqrt[3]{216}$

$\Rightarrow ? = 6$

42. (d) 140% of $200 + \dfrac{16^2 - 12^2}{2} - 7 = ?$

$= 280 + \dfrac{256 - 144}{2} - 7 = ?$

$= 280 + 56 - 7 = ?$

$\Rightarrow 336 - 7 = ?$

$\Rightarrow ? = 329.$

43. (b) $\dfrac{63}{7 \times 3} \times \sqrt{576} - \sqrt{729} = \sqrt{?}$

$\Rightarrow \sqrt{?} = \dfrac{63}{7 \times 3} \times 24 - 27$

$\Rightarrow \sqrt{?} = (72 - 27) \Rightarrow \sqrt{?} = 45$

$\therefore ? = (45)^2 = 2025.$

44. (e) $3\dfrac{1}{6} + 7\dfrac{2}{3} - 4\dfrac{1}{4} = ? + 2\dfrac{1}{6}$

$= 3\dfrac{1}{6} + 7\dfrac{2}{3} - 4\dfrac{1}{4} - 2\dfrac{1}{6} = ?$

$\Rightarrow ? = (3 + 7 - 4 - 2) + \left(\dfrac{1}{6} + \dfrac{2}{3} - \dfrac{1}{4} - \dfrac{1}{6}\right)$

$\Rightarrow ? = 4 + \dfrac{2 + 8 - 3 - 2}{12}$

$\therefore ? = 4 + \dfrac{5}{12} = 4\dfrac{5}{12}.$

45. (d) $1366 + 336 - 666 - 33 + 333 = ?$
$\therefore 1336 = ?$

Sol. (46-50):

	Monday	Tuesday	Wednesday	Thursday	Friday
Tata	180	150	250	150	180
Renault	160	220	200	180	140
Maruti	200	200	300	250	200
	540	570	750	580	520

46. (b) Required ratio $= \dfrac{540}{750} = 18:25$

47. (a) Total number of cars produced by Renault from monday to Friday = 900

48. (e) Required average $= \dfrac{1150}{5} = 230$

49. (c) No. of cars produced on Tuesday and Thursday is same i.e. 150.

50. (c) Maximum number of cars produced = 750, on Wednesday.

51. (b) Series pattern of the given series :

    13,   15,   21,   33,   53,   83

    $+(1\times2)$ $+(2\times3)$ $+(3\times4)$ $+(4\times5)$ $+(5\times6)$

52. (b) Series Pattern   Given Series

    2   2

    2×2 4

    4×3 12

    12×5 60

    60×7 420

    420×11 4620

53. (a) Series Pattern

    Series I :   9   13   22   36   55   79

    Series II :   +4   +9   +14   +19   +24

    Series III :   +5   +5   +5   +5

54. (d) Series Pattern   Given Series

    7   7

    $7 \times 2 - 1$ 13

    $13 \times 2 - 1$ 25

    $25 \times 2 - 1$ 49

    $49 \times 2 - 1$ 97

    $97 \times 2 - 1$ 193

55. (a) Series Pattern   Given Series

    50   50

    $50 + 17$ 67

    $67 - 34$ 33

    $33 + 51$ 84

    $84 - 68$ 16

    $16 + 85$ 101

56. (e) Case I :
    Time taken by Deepak (using Ship B)

    $= \dfrac{675}{39+15} = \dfrac{675}{54} = 12.5$ hrs.

    Case II:
    Time taken by Shivam (using Ship D + Ship E)

    $= \dfrac{510}{31+19.5} + \dfrac{165}{36+12} = 10.01 + 3.437 = 13.447$ hrs.

    Here Case I < Case II.

57. (b) Case I :
    Speed of Ship F = 45 × 111.11% = 50 km/hr.
    Speed of stream for Ship F = 12 × 12.5% = 15 km/hr.
    Time taken by ship F to cover 1860 km (upstream)

    $= \dfrac{2625}{50-15} = \dfrac{2625}{35} = 75$ hours

    Case II :
    Time taken by Ship C to cover 1860 km (upstream)

    $= \dfrac{1860}{24} = 77.5$ hours

58. (d) New distance = 3000 × 125% = 3750 km.
    Case I :
    Time taken by Ship C to cover new distance (Upstream)

    $= \dfrac{3750 \times 20\%}{24} = \dfrac{750}{24}$ hours

    Case II :
    Time taken by Ship A to cover old distance (downstream)

    $= \dfrac{750}{54} = \dfrac{125}{9}$ hours

59. (c) Time taken by Ship B (in downstream)

    $= \dfrac{450}{54} = \dfrac{150}{18}$ hours

    Time taken by Ship A (in downstream)

    $= \dfrac{750}{54} = \dfrac{250}{18}$ hours

    Time taken by Ship B + Ship A

    $= \dfrac{250}{18} + \dfrac{150}{18} = \dfrac{400}{18}$ hours = 22.22 hours

    Time taken by Ship E (in upstream)

    $= \dfrac{660}{24} = \dfrac{55}{2}$ hours = 27.5 hours.

    Time taken by Ship B and A (in downstream) is perfect more or less than time taken by Ship E (in upstream)

    $= \dfrac{22.22 \times 27.5}{27.5} \times 100 = -19.2\%$

60. (e) Case I :
    Time taken by Ship A (upstream)

    $= \dfrac{750}{12} = \dfrac{125}{2}$ hours

    Time taken by Ship B (upstream)

    $= \dfrac{450}{24} = \dfrac{75}{4}$ hours

Time taken by Ship C (upstream)

$= \dfrac{600}{24} = 25$ hours

Time taken by Ship D (upstream)

$= \dfrac{540}{11.5} = 25$ hours

Time taken by Ship E (upstream)

$= \dfrac{660}{24} = \dfrac{55}{2}$ hours

After adding all the times we get $= 180.70$ hours

Average time $= \dfrac{180.70}{5} = 36.14$ hours

61. (e)

I. $5p^2 + 11p - 12 = 0$

$\Rightarrow 5p^2 + 15p - 4p - 12 = 0$

$\Rightarrow 5p(p + 3) - 4(p + 3) = 0$

$\Rightarrow (5p - 4)(p + 3) = 0$

$\Rightarrow p = \dfrac{4}{5}, -3$

II. $4q^2 - 13q - 12 = 0$

$\Rightarrow 4q^2 - 16q + 3q - 12 = 0$

$\Rightarrow 4q(q - 4) + 3(q - 4) = 0$

$\Rightarrow (4q + 3)(q - 4) = 0$

$\Rightarrow q = -\dfrac{3}{4}, 4$

While comparing the root values of p and q, we find that one root value of q lies betwen the root values of p. Therefore, relationship between p and q can't be determined.

62. (d)

I. $3p^2 + 19p + 30 = 0$

$\Rightarrow 3p^2 + 9p + 10p + 30 = 0$

$\Rightarrow 3p(p + 3) + 10(p + 3) = 0$

$\Rightarrow (3p + 10)(p + 3) = 0$

$\Rightarrow p = -\dfrac{10}{3}, -3$

II. $3q^2 - 20q - 32 = 0$

$\Rightarrow 3q^2 - 24q + 4q - 32 = 0$

$\Rightarrow 3q(q - 8) + 4(q - 8) = 0$

$\Rightarrow (3q + 4)(q - 8) = 0$

$\Rightarrow q = -\dfrac{4}{3}, 8$

While comparing the root values p and q, we find that root values p is less than q's. Therefore, $p < q$.

63. (e)

I. $p^2 - 4\sqrt{7}p + 21 = 0$

$\Rightarrow p^2 - \sqrt{7}p - 3\sqrt{7}p + 21 = 0$

$\Rightarrow p(p - \sqrt{7}) - 3\sqrt{7}(p - \sqrt{7}) = 0$

$\Rightarrow (p - \sqrt{7})(p - 3\sqrt{7}) = 0$

$\Rightarrow p = \sqrt{7}, 3\sqrt{7}$

II. $2q^2 - 8\sqrt{5}q - 50 = 0$

Taking 2 as a common term, we get

$\Rightarrow q^2 - 4\sqrt{5}q - 25 = 0$

$\Rightarrow q^2 + \sqrt{5}q - 5\sqrt{5}q - 25 = 0$

$\Rightarrow q(q + \sqrt{5}) - 5\sqrt{5}(q + \sqrt{5}) = 0$

$\Rightarrow (q + \sqrt{5})(q - 5\sqrt{5}) = 0$

$\Rightarrow q = -\sqrt{5}, 5\sqrt{5}$

While comparing the root values of p and q, we find that root values of q lies between the q's root values. Therefore, relation between p and q can't be determined.

64. (a)

I. $p^2 - 52p + 667 = 0$

$\Rightarrow p^2 - 23p - 29p + 667 = 0$

$\Rightarrow p(p - 23) - 29(p - 23) = 0$

$\Rightarrow (p - 23)(p - 29) = 0$

$\Rightarrow p = 23, 29$

II. $q^2 + 8q - 33 = 0$

$\Rightarrow q^2 - 3q + 11q - 33 = 0$

$\Rightarrow q(q - 3) + 11(q - 3) = 0$

$\Rightarrow (q - 3)(q + 11) = 0$

$\Rightarrow q = 3, -11$

Therefore, $p > q$.

65. (a)

I. $p^2 - 13\sqrt{2}p + 60 = 0$

$\Rightarrow p^2 - 10\sqrt{2}p - 3\sqrt{2}p + 60 = 0$

$\Rightarrow p(p - 10\sqrt{2}) - 3\sqrt{2}(p - 10\sqrt{2}) = 0$

$\Rightarrow (p - 3\sqrt{2})(p - 10\sqrt{2}) = 0$

$\Rightarrow p = 3\sqrt{2}, 10\sqrt{2}$

II. $q^2 + 3\sqrt{5}q - 20 = 0$

$\Rightarrow q^2 + 4\sqrt{5}q - \sqrt{5}q - 20 = 0$

$\Rightarrow q(q + 4\sqrt{5}) - \sqrt{5}(q + 4\sqrt{5}) = 0$

$\Rightarrow (q - \sqrt{5})(q + 4\sqrt{5}) = 0$

$\Rightarrow q = -4\sqrt{5}, \sqrt{5}$

While comparing the root values of p and q, we find that the p's root values are greater than q's.

66. (b) Let, time taken by pipe X and pipe Y to fill the tank = n minutes

$n \times \left(\dfrac{1}{20} + \dfrac{1}{30} \right) = 1$

$\Rightarrow n \times \dfrac{3 + 2}{60} = 1 \Rightarrow \dfrac{5n}{60} = 1$

$\Rightarrow n = \dfrac{60}{5} \Rightarrow n = 12$ minutes

Let the waste pipe can empty the tank in t minutes. According to the question,

$\dfrac{12}{20} + \dfrac{12}{30} - \dfrac{12}{t} + \dfrac{2.4}{20} + \dfrac{2.4}{30} = 1$

$\Rightarrow \dfrac{14.4}{20} + \dfrac{14.4}{30} - \dfrac{12}{t} = 1$

$\Rightarrow \dfrac{43.2 + 28.8}{60} - \dfrac{12}{t} = 1$

$\Rightarrow \dfrac{72}{60} - 1 = \dfrac{12}{t} \Rightarrow \dfrac{6}{5} - 1 = \dfrac{12}{t}$

$\Rightarrow \dfrac{6 - 5}{5} = \dfrac{12}{t} \Rightarrow \dfrac{1}{5} = \dfrac{12}{t}$

$\Rightarrow t = 60$ minutes

67. (d) LCM of 20, 15 and 30 = 60
Total work = 60 units

$M = \dfrac{60}{20} = 3$ units per day

$N = \dfrac{60}{15} = 4$ units per day

$T = \dfrac{60}{30} = 2$ units per day

Work completed in 2 days = 3 + 4 + 2 = 9 units
Part of the work completed in (2 × 6 = 12 days)
= 9 × 6 = 54 units.
Remaining = 60 – 54 = 6 units

Remaining work completed by M and $N = \dfrac{6}{7}$

Total number of days $= 12 + \dfrac{6}{7} = 12\dfrac{6}{7}$ days

(Or)

$\dfrac{1}{N} = \dfrac{2}{T}$ ...(i)

$\dfrac{1}{N} + \dfrac{1}{T} = \dfrac{1}{10}$ ...(ii)

From (i) and (ii)

$\dfrac{2}{T} + \dfrac{1}{T} = \dfrac{1}{10} \Rightarrow \dfrac{3}{T} = \dfrac{1}{10}$

$\Rightarrow \dfrac{1}{T} = \dfrac{1}{30}$

From (i)

$\dfrac{1}{N} = \dfrac{2}{30} \Rightarrow \dfrac{1}{N} = \dfrac{1}{15}$ And $\dfrac{1}{M} = \dfrac{1}{20}$

Part of the work completed in 2 days

$= \left(\dfrac{1}{20} + \dfrac{1}{15} \right) + \dfrac{1}{30} = \dfrac{3 + 4 + 2}{60} = \dfrac{9}{60} = \dfrac{3}{20}$

Part of the work completed in (2 × 6 = 12 days)

$= \dfrac{3}{20} \times 6 = \dfrac{18}{20}$

Remaining work $= 1 - \dfrac{18}{20} = \dfrac{20 - 18}{20} = \dfrac{2}{20} = \dfrac{1}{10}$

Let, time taken by M and N to complete remaining part of the work = n days

$n \times \left(\dfrac{1}{20} + \dfrac{1}{15} \right) = \dfrac{1}{10}$

$\Rightarrow n \times \dfrac{3 + 4}{60} = \dfrac{1}{10} \Rightarrow n = \dfrac{60}{7} \times \dfrac{1}{10}$

$\Rightarrow n = \dfrac{6}{7}$ days

Required number of days $= 12 + \dfrac{6}{7} = 12\dfrac{6}{7}$ days

68. (e) Boat in off condition, ship moves due to stream,

Speed of stream $= \dfrac{400}{360} = \dfrac{100}{90}$ m/s = 4 km/hr

Distance between A and B = 1.44 km
Total time = 9 minutes

Downstream + Upstream $= \dfrac{9}{60} = \dfrac{3}{20}$ hr.

$\left(\dfrac{1.44}{S + 4} \right) + \left(\dfrac{1.44}{S - 4} \right) = \dfrac{3}{20}$

By solving, $10S^2 - 192S - 160 = 0$

$\Rightarrow 10S^2 + 8S - 200S - 160 = 0$

$\Rightarrow S(10S + 8) - 20(10S + 8) = 0$

$\Rightarrow (S - 20)(10S + 8) = 0$

$\Rightarrow S = 20$ km/hr.

69. (b) Let us take the speed of boat and speed of stream be S_1 and S_2 respectively.

$S_1 + S_2 = 25$

$S_1 - S_2 = 5$

Say, distance between X and Y is 'D' and so distance between Y and Z is $\dfrac{D}{2}$

X goes to Y downstream and comeback from Y to Z upstream

$\dfrac{D}{25} + \dfrac{D/2}{5} = 14 \Rightarrow \dfrac{D}{25} + \dfrac{D}{10} = 14$

$\Rightarrow D = 100$ km

70. (e) Let the principle be P.
Plan 1 : SI at 50% p.a. for one and half years

Amount $= P + (P \times 50 \times \dfrac{3}{2} \times 100)$

$= P(1 + 0.75) = 1.75P = 175\%$ of P

Plan 2 : CI at 50% per annum for one and half years compounded half yearly.
R = 25%; $n = 3$ (since compounded half yearly)
Amount $= P [1 + (r/100)]n = P[1+(25/100)]3$
$= 1.95P = 195\%$ of P
So Plan 2 is better and we are getting 20 percent more.

71. (b) Let the cost price of shirt P be x.
So marked price of shirt $P = 1.5x$ = Cost price of Q
Let selling price of P be y
So, selling price of $Q = 2y$
Total profit percent = 50%
(SPA + SPB)/(CPA + CPB) = 150 / 100

$\Rightarrow \dfrac{(y + 2y)}{(x + 1.5x)} = \dfrac{3}{2} \Rightarrow \dfrac{y}{x} = \dfrac{2.5}{2}$

$\Rightarrow y = 1.25x$

So, selling price of $P = 1.25x$
Discount offered
$= (MP - SP)/MP \times 100 = 0.25/1.5 \times 100 = 16.67\%$.

72. (c) Let X be the amount invested by Rahul
Vijay $= X + 300$

Lalit $= \left(\dfrac{3}{2}\right) \times x = 1.5X$

Profit share of Rahul $= (X \times 3.5) = 3.5X$
Profit share of Vijay $= 10 \times (X+300) = 10X + 3000$

Profit share of Lalit $= 6 \times 1.5X = 9X$

Lalit's share $= \dfrac{36}{100} \times$ Total

$9X = \left(\dfrac{36}{100}\right) \times (3.5X + 10X + 3000 + 9X)$

$X = \left(\dfrac{1}{25}\right) \times (22.5X + 3000)$

$25X = 22.5X + 3000$
$2.5X = 3000 \Rightarrow X = 1200$
Vijay $= X + 300 = 1500$

73. (c) Let x be the quantity of pure alcohol initially.
From this, one quarter is replaced with water.
Alcohol $= 3x/4$; Water $= x/4$
From this, 20 litres taken out in which 15 litres is pure Alcohol and 5 litres is water.
Alcohol $= (3x/4) - 15$; Water $= x - 5$
Now 15 litres of water is added.
Alcohol $= 3x/4$; Total $= x - 5$
Percentage of Alcohol = 80%

$\dfrac{3x/4}{x-5} = \dfrac{80}{100} \Rightarrow x = 80$ litres.

74. (d) Let F, M and D be the ages of father, mother and daughter respectively.
By data, F + M + D = 3 × 34 = 102
(D + 4) = (M + 4)/2
$\Rightarrow 2D + 8 = M + 4 \Rightarrow M = 2D + 4$
Applying in above equation,
F + 2D + 4 + D = 102
F + 3D = 98   ....(1)
Also,
(F – 10) / (D – 10) = 17/4
4F – 40 = 17D – 170
17D – 4F = 130   ...(2)
(1) × 4; 4F + 12D = 392
Adding both, 17D + 12D = 130 + 392
$29D = 522 \Rightarrow D = 18$ years
F = 98 – (3 × 18) = 44
M = 40
At the time of daughter's birth father's age
= 44 – 18 = 26
Mother's age = 40 – 18 = 22
Sum = 26 + 22 = 48

75. (e) Let G, R and B be the number of green, red and black balls respectively.
G + R + B = 15
P (two balls are green) = 2/21
G × (G – 1)/(15×14) = 2/21
$G^2 - G = 20$

$G^2 - G - 20 = 0$

$G^2 - 5G + 4G - 20 = 0$

$G(G-5)+4(G-5)=0$

$(G+4)\times(G-5)=0$

G = 5, –4 (-ve value will be neglected)

G = 5

R + B = 10

P (Either red or black) = 10/15 = 2/3

76. (e) Required answer = (354 – 258) + 235 = 96 + 235 = 331.

77. (b) Unsuccessful candidates (state Rajasthan)

Year 2016 $\Rightarrow$ 445 – 354 = 91

Year 2017 $\Rightarrow$ 545 – 435 = 110

Year 2018 $\Rightarrow$ 664 – 454 = 210

Year 2019 $\Rightarrow$ 345 – 144 = 201

Year 2020 $\Rightarrow$ 584 – 354 = 230

Year 2021 $\Rightarrow$ 704 – 347 = 357

78. (a) Required ratio = 693 : 252 = 11 : 4.

79. (e) In year 2017, no. of candidates who passed the exam in Rajasthan = 435

In year 2020, no. of candidates who appeared in exam in Bihar = 546

Required % = 435 / 546 × 100 = 80

80. (c) In year 2021, no. of candidates who passed the exam in Bihar = 435

In year 2020 (previous year), no. of candidates who passed the exam in Bihar = 346

Required increase %

$$=\frac{435-346}{346}\times100=\frac{89}{346}\times100$$

$$=\frac{9000}{350}\approx26\%.$$

81. (c)	82. (b)	83. (b)	84. (a)	85. (a)	86. (c)
87. (c)	88. (d)	89. (c)	90. (b)	91. (c)	92. (d)
93. (b)	94. (c)	95. (c)	96. (d)	97. (d)	98. (b)
99. (c)	100.(b)	101.(a)	102.(c)	103.(d)	104.(a)
105. (d)	106.(b)	107.(b)	108.(c)	109.(d)	110.(d)
111. (c)	112.(c)	113.(b)	114.(d)	115.(b)	116.(c)
117. (d)	118.(c)	119.(a)	120.(a)		

121. (a)
• Hiroshima Day is observed on August 6 every year to promote "peace politics".
• The day is a reminder of the bombing attack on Hiroshima and Nagasaki by the United States during World War II in 1945.

122. (c)
• Katrin Jakobsdottir is the Prime Minister of Iceland
• She is the current prime minister of Iceland since 2017.
• Iceland is a Nordic island country in the North Atlantic Ocean.
• Capital of Iceland: Reykjavík.

123. (d)
• Popular playback singer KS Chithra has been conferred with Padma Vibhushan in 2021 for her contribution to Indian film music.

• She won the Padma Shri, one of the highest civilian honour in 2005.

124. (b)
• Full form of ASHA is Accredited Social Health Activist.
• The ASHA scheme is presently in place in 33 states (except Goa, Chandigarh & Puducherry).

125. (c)
• Payments banks is a new Indian model of banks conceptualised by the Reserve Bank of India (RBI).
• It can have restricted deposit of ₹100,000.

126. (a)
• Full form of OTT: Over-The-Top
• It refers to the delivery of content over the internet rather than through a traditional cable or broadcast provider.

127. (b)
• China is not a G7 nation
• Group of Seven (G7) is an intergovernmental organization consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

128. (c)
• G20 summit of 2020 was hosted by Saudi Arabia recently.
• G20 summits are to be held in Italy in 2021, Indonesia in 2022, India in 2023 and Brazil in 2024.

129. (d)
• Monetary Authority of Singapore (MAS) is the central bank and financial regulatory authority of Singapore.
• It administers the various statutes pertaining to money, banking, insurance, securities and the financial sector in general, as well as currency issuance.
• It was established in 1971.

130. (e) Ashok Leyland, IndusInd Bank, NxtDigital Ltd and Cyqurex Systems Private Limited are the part of Hinduja Groups.

131. (b)
• Rs. 10,000 is the highest denomination note ever printed by the RBI.
• RBI was established in 1935.
• The first RBI governor was Osborne Smith and First Indian RBI governor was CD Deshmukh.

132. (d)
• The national council for transgender persons has been set up by the Centre under the Transgender Persons (Protection of Rights) Act, 2019 to assist the community with better facilities.
• The Ministry of Social Justice and Empowerment has set up this council to cater to the transgender community with various essential needs.
• The Union Minister of social justice will be the head of the commission.

- The commission will have representatives from ten central departments, five states, and members of the transgender community.
- The council will also have joint secretary-level members from various ministries like health, home, minority affairs, education, rural development, etc.

133. **(c)** To make the Pradhan Mantri Jan Dhan Yojana (PMJDY) scheme more attractive, the finance ministry decided to double the overdraft facility from Rs 5,000 to Rs 10,000.

The PMJDY was launched by Prime Minister Narendra Modi on 15 August 2014 as a national mission for financial inclusion to ensure access of financial services like bank accounts, insurance and pensions to the masses.

134. **(a)** If two parallel lines are drawn on the front part of a cheque, it is called a 'Crossed' Cheque. In this type of a cheque, the payee cannot withdraw money in cash but money can transfer in payee account. This type of cheque is endorsable.

135. **(b)** A minimum yearly deposit of Rs. **500** is required to open and maintain a PPF account. A PPF account holder can deposit a maximum of Rs **1.5 lacs** in his/her PPF account (including those accounts where he is the guardian) per financial year. There must be a guardian for PPF accounts opened in the name of minor children. Parents can act as guardians in such PPF accounts of minor children. Any amount deposited in excess of Rs 1.5 lacs in a financial year won't earn any interest. The amount can be deposited in lump sum or in a maximum of 12 installments per year.

The current interest rate will be 7.1% and effective from April 2020 to June 2020.

136. **(b)** Brazilian mathematician Dr Carolina Araujo was awarded the 'Ramanujan Award for Young Mathematician of the year 2020' at a ceremony organized through video conference by the Department of Science and Technology on 9 December 2020. His scope focuses on 'Birational Geometry', which aims to classify and describe the structure of algebraic varieties. He is a mathematician of the Institute for Pure and Applied Mathematics (IMPA) of Rio de Janeiro (Brazil).

137. **(d)**
- The Hornbill Festival is celebrated every year in the Naga Heritage village of Kisama, Nagaland.
- The festival coincides with the Statehood Day of Nagaland which is observed on December 1.
- It is tourism promotional extravaganza to revive, protect and preserve the richness and uniqueness of the Naga heritage. It is also called as the 'Festival of Festivals'.

138. **(b)**

139. **(a)**
- Bharat Sanchar Nigam Limited (BSNL) in partnership with the State Bank of India (SBI) has launched a Unified Payments Interface (UPI) based payment platform, Bharat InstaPay to enable all types of channel partners of BSNL to digitize their payment transactions on a round the clock basis/ real- time basis.
- In particular it will help the prepaid sellers to buy the services immediately for sale.
- It will improve BSNL's credibility towards partners, & will help in growth of partners' business at a faster pace.

140. **(b)**
- India's first seaplane service was started in Gujarat from 31 October on the birth anniversary of Sardar Vallabhbhai Patel.
- It connects Sabarmati Riverfront in Ahmedabad to the Statue of Unity in Kevadia.
- The service has been operated by Spicejet Airlines.

141. **(a)** The full form of MSP is given in the first line of the passage and it is minimum support prices. Hence, option A is correct.

142. **(d)** According to Census 2011, Urban Distribution Persons (in %):
- Rural: 68.84 %
- Urban: 31.16 %

143. **(a)** The Full form of FCCB is Foreign currency convertible bonds FCCB is a simple way traversed by several companies to aggregate their capital.

144. **(c)** The maximum deposit allowed in India Post Payment Bank (IPPB) is Rs. 1 lakh.

According to the guidelines, payments banks can open small savings accounts and accept deposits of up to **Rs.1 lakh** per individual customer and provide remittance services.

145. **(d)** There will be a uniform premium of only 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops. In case of annual commercial and horticultural crops, the premium to be paid by farmers will be only 5%. The premium rates to be paid by farmers are very low and balance premium will be paid by the Government to provide full insured amount to the farmers against crop loss on account of natural calamities.

Objectives
- To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.
- To stabilise the income of farmers to ensure their continuance in farming.
- To encourage farmers to adopt innovative and modern agricultural practices.

To ensure flow of credit to the agriculture sector.

146. (c) Since 2010, International Tiger Day is celebrated on 29 July every year. It is an annual celebration to raise awareness about tiger conservation.
On 29 July 2019, Tiger Census Report 2018 was released which numbered the total tigers as 2,967 which is 75% of the total tigers in the world. Madhya Pradesh in India accounts for largest tiger state.

147. (d) Former RBI governor Urjit Patel has authored a book titled 'Overdraft: Saving the Indian Saver'. The book will be published by HarperCollins India.

148. (b) **149.** (d) **150.** (b) **151.** (a) **152.** (c) **153.** (e)

154. (a) **155.** (c) **156.** (c) **157.** (c) **158.** (e) **159.** (d)

160. (a)

161. (c) Refer to the first paragraph, the hint can be drawn from the lines, Research from the Indiana University Kelley School of Business found that emotional intelligence - the ability to understand, use and manage emotions to relieve stress - may be more vital to a business' survival than previously thought.
Hence, **option (c)** is the right answer choice.

162. (c) Refer to the second paragraph, the hint can be drawn from the lines,
"We found that entrepreneurs benefit much more from emotional competences than other competencies -- such as IQ -- due to high uncertainty and ambiguity that comes with the world of entrepreneurship and even more applicable in a crisis," Hence, **option (c)** is the right answer choice.

163. (e) Refer to the second paragraph, the hint can be drawn from the lines,
"Being an entrepreneur is not a 'traditional workplace setting.' If you are an entrepreneur, you know that managing your business can often feel like you are screaming alone on an emotional rollercoaster," Stevenson said.
Hence, **option (e)** is the right answer choice.

164. (e) Refer to the third paragraph, the hint can be drawn from the lines,
The extreme nature of this setting makes one's ability to manage emotions and social connections critically more important, especially so during times of major disruption and crisis," Stevenson added. According to the recent US Bureau of Labor Statistics, about a fifth of all new businesses fail within their first two years and nearly half are shuttered within five years.
Hence, **option (e)** is the right answer choice.

165. (b) Refer to the fourth paragraph, the hint can be drawn from the lines,
The research found that those with higher emotional intelligence are better able to be self-motivated and have higher social skills - even under more normal circumstances.
Hence, **option (b)** is the right answer choice.

166. (e) Refer to the fifth paragraph, the hint can be drawn from the lines,
These skills are important for developing business networks, which can aid in signaling legitimacy and in acquiring resources," researchers wrote. "These skills can enhance creativity and opportunity recognition; aid decision making in emotionally turbulent situations and enable adaptive responses to unpredictable events," researchers further wrote.
Hence, **option (e)** is the right answer choice.

167. (a) Refer to the last paragraph of the given passage, the hint can be drawn from the lines,
The two factors are seldom studied together. "While IQ is unquestionably the better predictor of job performance and career success across all jobs and careers, within the domain of entrepreneurship, emotional intelligence was the stronger predictor of success," O'Boyle said.
Hence, **option (a)** is the right answer choice.

168. (c) Ambiguity: the quality of being open to more than one interpretation; inexactness.
Enigma: a person or thing that is mysterious or difficult to understand.
Ignorance: lack of knowledge or information.
Transparency: the condition of being transparent.
Destitute: extremely poor and lacking the means to provide for oneself.
Truism: a statement that is obviously true and says nothing new or interesting.
Hence, **option (c)** is the right answer choice.

169. (b) Empirical: based on, concerned with, or verifiable by observation or experience rather than theory or pure logic.
Pragmatic: dealing with things sensibly and realistically in a way that is based on practical rather than theoretical considerations.
Absurdity: the quality or state of being ridiculous or wildly unreasonable.
Placid: not easily upset or excited.
Obdurate: stubbornly refusing to change one's opinion or course of action.
Indurated: hardened
Hence, **option (b)** is the right answer choice.

170. (d) Legitimacy: conformity to the law or to rules.
Illegality: The state of being contrary to or forbidden by law, especially criminal law.
Hence, **option (d)** is the right answer choice.

171. (b) The correct sequence of the given fragments is **BACD**. The sentence after rearrangement is, A change of scenery, even if it's just moving from one room in your house to another, combined with movement helps to clear your mind and help you reset your focus.
Hence, **option (b)** is the right answer choice.

172. (a) The correct sequence of the given fragments is **CABD**. The sentence after rearrangement is,
New and established carmakers have many mountains to climb as they battle to introduce successful vehicles in an increasingly crowded marketplace.
Hence, **option (a)** is the right answer choice.

173. (d) The correct sequence of the given fragments is **CBDA**. The sentence after rearrangement is,
It's imperative to try to figure out if you have the right startup idea before fully committing yourself and your resources to it.
Hence, **option (d)** is the right answer choice.

174. (c) The correct sequence of the given fragments is **ADCB**. The sentence after rearrangement is,
One of the most prevalent myths when it comes to sun protection is that you don't need to apply sunscreen or sunblock on cold or cloudy days.
Hence, **option (c)** is the right answer choice.

175. (b) The correct sequence of the given fragments is **DBCA**. The sentence after rearrangement is,
Be diligent about both scheduling and taking breaks, as simply putting them on your schedule and constantly working through them obviously does not have any benefit.
Hence, **option (b)** is the right answer choice.

176. (b) Here, the error lies in part (B) of the sentence. 'to' should be replaced with 'at' to make the sentence c
Look at: to think about a situation or subject carefully, especially in order to make a decision.
Loot to: to hope or expect to get help, advice etc from someone
Hence, **option (b)** is the right answer choice.

177. (d) Here, the error lies in part (D). 'It' should be used before 'being' as there is a subject of reference given before every participle but that's not the case here. Hence, **option (d)** is the right answer choice.

178. (b) Here, the error lies in part (B) of the sentence. It should be 'too much' instead of 'much too' to make the sentence grammatically correct and contextually meaningful. Hence, **option (b)** is the right answer choice.

179. (c) Here, the error lies in part (C). 'to' will be used instead of 'as' to make the sentence grammatically correct and contextually meaningful. Hence, **option (c)** is the right answer choice.

180. (b) Here, the error lies in part (B) of the given sentence. Third form of verb of used with 'No sooner had' so it should be 'concluded' instead of 'conclude' to make the sentence grammatically correct and contextually meaningful. Hence, **option (b)** is the right answer choice.

181. (d) The correct sequence of the given sentences is **BDAEFC**.
Third sentence will be A. Hence, **option (d)** is the right answer choice.

182. (e) The correct sequence of the given sentences is **BDAEFC**.
Second sentence will be D. Hence, **option (e)** is the right answer choice.

183. (b) The correct sequence of the given sentences is **BDAEFC**.
Fifth sentence will be F. Hence, **option (b)** is the right answer choice.

184. (a) The correct sequence of the given sentences is **BDAEFC**.
Fourth sentence will be E. Hence, **option (a)** is the right answer choice.

185. (d) The correct sequence of the given sentences is **BDAEFC**.
Sixth sentence will be C. Hence, **option (d)** is the right answer choice.

186. (b) Proximity: Nearness in space, time, or relationship
Synonyms: adjacency, closeness, contiguity, immediacy, nearness.
In the II statement, **'aggregated'** will be more suitable instead of **'proximity'**. Hence, **option (b)** is the right answer choice.

187. (d) Predate: Exist or occur at a date earlier than (something), (of an animal) act as a predator of; catch and eat (prey)
Synonyms: antecede, antedate, forego, precede, pre-exist
In statement I, **'ordinance'** will be more suitable instead of **'predate'**. Hence, **option (d)** is the right answer choice.

188. (e) Vagueness: Lack of certainty or distinctness
Synonyms: fuzzy, indefinite, inexplicit, muzzy, unclear
Hence, **option (e)** is the right answer choice.

189. (c) Volatile: Liable to change rapidly and unpredictably, especially for the worse
Synonyms: capricious, changeable, changeful, fickle, flicker
In statement III, **'certainty'** will be more suitable instead of **'volatile'**. Hence, **option (c)** is the right answer choice.

190. (a) Ambiguity: The quality of being open to more than one interpretation; inexactness
Synonyms: ambiguousness, darkness, equivocalness, equivocation, inscrutability
In the statement II, 'contemplation' will be more suitable instead of 'ambiguity'. Hence, **option (a)** is the right answer choice.

191. (c) Vigilance: the action or state of keeping careful watch for possible danger or difficulties.
Wariness: caution about possible dangers or problems.
Distracted: unable to concentrate because one is preoccupied by something worrying or unpleasant.
Hence, **option (c)** is the right answer choice.

192. (e) Reiterate: say something again or a number of times, typically for emphasis or clarity.
　　　Hence, **option (e)** is the right answer choice.

193. (b) Welter: move in a turbulent fashion.
　　　Stormy: characterized by turmoil and unpredictable outbursts
　　　Unstable: likely to change or fail; not firmly established.
　　　Hence, **option (b)** is the right answer choice.

194. (d) Undergird: secure or fasten from the underside, especially by a rope or chain passed underneath.
　　　- provide support or a firm basis for.
　　　Hence, **option (d)** is the right answer choice.

195. (d) Resilience: the capacity to recover quickly from difficulties; toughness.
　　　Pliability: the quality of being easily bent; flexibility.
　　　Rigidity: inability to be changed or adapted.
　　　Hence, **option (d)** is the right answer choice.

196. (b) Only starter ii can be used to form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences. The sentence thus formed is:
　　ii. Given Mr. Biden's commitment to put human rights 'at the centre of Foreign Policy', Human rights is the next area where India and the U.S. could be at odds both on the bilateral front and in the region.
　　　Hence, **option (b)** is the right answer choice.

197. (e) Both i and ii starters can be used form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences. The sentences thus formed are:
　　i. While Washington has stepped up sanctions and called for the Suu kyi-NLD government to be reinstated, New Delhi has spoken only for the "rule of law" and democratic processes to be upheld.
　　ii. Although Washington has stepped up sanctions and called for the Suu kyi-NLD government to be reinstated, New Delhi has spoken only for the "rule of law" and democratic processes to be upheld.
　　　Hence, **option (e)** is the right answer choice.

198. (d) Both i and iii starters can be used form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences. The sentences thus formed are:
　　i. Besides being an opportunity to ponder about the problems that we face in research, National Science Day, on February 28, is a moment to celebrate the progress that India has made in science and technology research.
　　iii. An opportunity to ponder about the problems that we face in research, National Science Day, on February 28, is a moment to celebrate the progress that India has made in science and technology research.
　　　Hence, **option (d)** is the right answer choice.

199. (c) Both ii and iii starters can be used form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences. The sentences thus formed are:
　　ii. Withdrawing the Education Ministry's ill-thought-out guidelines for holding online conferences, seminars and training sessions, the Centre has saved itself from continuing embarrassment at the international level.
　　iii. Saving itself from continuing embarrassment at the international level, the Centre has withdrawn the Education Ministry's ill-thought-out guidelines for holding online conferences, seminars and training sessions.
　　　Hence, **option (c)** is the right answer choice.

200. (c) Both i and ii starters can be used form a single sentence from the two or three statements given while implying the same meaning as expressed in the statement sentences. The sentences thus formed are:
　　i. Even though it was quite obvious that the claim of a global conspiracy behind the unsavoury and violent incidents that took place on January 26 in New Delhi lacked credence, the order of bail is still notable for subjecting the specific charges to strict judicial scrutiny at a fairly early stage.
　　ii. While it was quite obvious that the claim of a global conspiracy behind the unsavoury and violent incidents that took place on January 26 in New Delhi lacked credence, the order of bail is still notable for subjecting the specific charges to strict judicial scrutiny at a fairly early stage.
　　　Hence, **option (c)** is the right answer choice.

201. (b)	202. (d)	203. (b)	204. (d)	205. (d)
206. (e)	207. (e)	208. (e)	209. (a)	210. (e)
211. (c)	212. (b)	213. (d)	214. (d)	215. (a)
216. (a)	217. (a)	218. (b)	219. (b)	220. (b)
221. (c)	222. (a)	223. (d)	224. (d)	225. (d)
226. (b)	227. (a)	228. (a)	229. (a)	230. (d)
231. (c)	232. (a)	233. (a)	234. (b)	235. (b)
236. (d)	237. (d)	238. (b)	239. (d)	240. (c)