Quantitative Aptitude

What value should come in the place of (?) in the following number series?

1. 3, 30, 46, 171, 207, ?

A.447

B.478

C.578

D.550

E.490

2. 1, 5, 21, ?, 121

A.57

B.70

C.85

D.101

E.104

3. 124, 62, 62, 93, 186,?

A.284

B.348

C.420

D.465

E.528

4. 8, 17, 53, 134, 278, ?

A.478

B.487

C.496

D.503

E.512

5. 2880, 480, 96, 24, 8, ?

A.4

B.6

C.2

D.16

E.12

In each of the following questions, two equations are given. You have to solve both the equations to find the relation between x and y.

6.

I: $x^2 - 5x + 6 = 0$

II: $y^2 - 9y + 20 = 0$

A. If $x < y$

B. If $x > y$

C. If $x \leq y$

D. If $x \geq y$

E. If relationship between x and y cannot be determined

7.

I) $3x^2 + 30x + 27 = 0$

II) $y^2 - 28y - 29 = 0$

A.$x > y$

B.$x \geq y$

C.$x = y$ or relationship can't be determined.

D.$x < y$

E.$x \leq y$

8.

I. $x^2 + 29x + 210 = 0$

II. $y^2 + 25y + 156 = 0$

A.$x > y$

B.$x \geq y$

C.$x = y$ or relationship can't be determined.

D.$x < y$

E.$x \leq y$

9.

I) $2x^2 - 30x + 112 = 0$

II) $y^2 - 18y + 80 = 0$

A.$x > y$

B.$x \geq y$

C.$x = y$ or relationship can't be determined.

D.$x < y$

E.$x \leq y$

10.

I) $3x^2 - 18x + 15 = 0$

II) $y^2 - 13y + 42 = 0$

A.x > y

B.x ≥ y

C.x = y or relationship can't be determined.

D.x < y

E.x ≤ y

Study the following information carefully and answer the questions given below:

There are 3000 students studied in four different schools A, B, C and D. 15% of students studied in school B. The ratio between number of boys to number of girls in school B is 4: 5. Equal number of boys and girls studied in school C. 30% of students studied in school A and the ratio between number of girls to number of boys in school A is 1: 2. 900 boys and 600 girls studied in school D.

11. What is the respective ratio between number of boys in school C to number of girls in school A?

A.3: 10

B.1: 4

C.2: 3

D.2: 1

E.1: 1

12. Number of boys in school D is how much percentage more than number of boys in school A?

A.50%

B.33 (1/3) %

C.66 (2/3) %

D.150 %

E.75 %

13. What is the difference between total number of boys in school B to total number of students in school C?

A.125

B.175

C.300

D.50

E.100

**14.** What is the average number of students studied in school A, B and D?

A.500

B.700

C.850

D.950

E.800

15. Number of girls studied in school D is what percentage of total number of students studied in all the school together?

A.10 %

B.20 %

C.25 %

D.33 (1/3) %

E.16 (2/3) %

Study the following information carefully and answer the given questions.

The following line graph shows the total number of monthly magazine readers (In thousands) in English and Hindi language in 6 different months in a certain city.
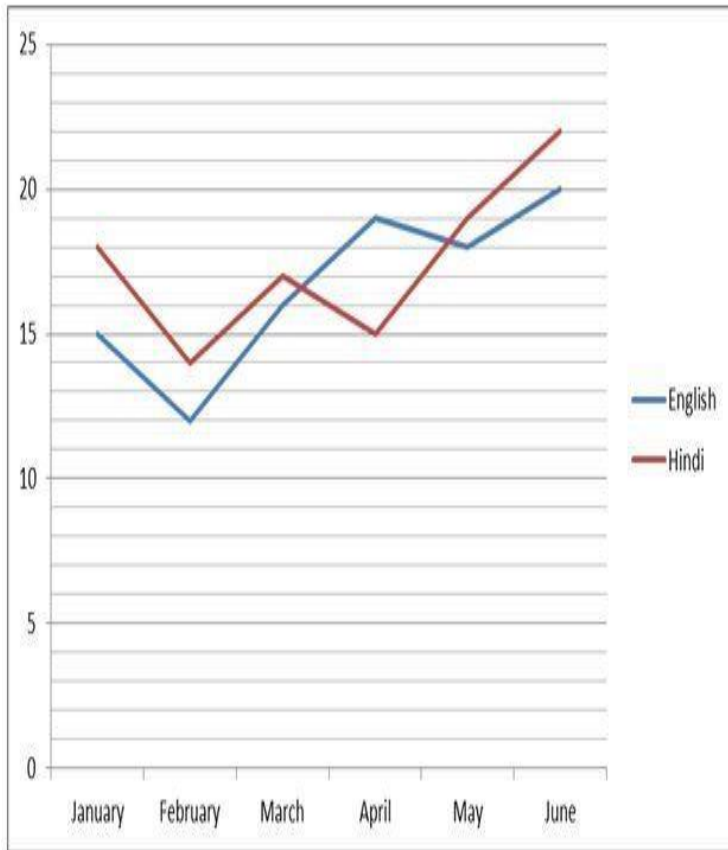
Note: Consider only two magazines

16. Find the difference between the total number of English monthly magazine readers in January and April together to that of total number of Hindi monthly magazine readers in February and June together?

A.4000

B.6000

C.2000

D.5000

E.None of these

17. Find the ratio between the total number of English monthly magazine readers in February and May together to that of total number of Hindi monthly magazine readers in January and March together?

A.6: 7

B.11: 9

C.9: 5

D.15: 23

E.None of these

18. If the ratio between the total number of male to that of female English magazine readers in March and that of Hindi magazine readers in April is 5: 3 and 7: 8 respectively, then find the difference between the total male English magazine readers in March to that of total female Hindi magazine readers in April?

A.5000

B.4000

C.3000

D.2000

E.None of these

19. Find the average number of Hindi magazine readers in all the given months together?

A.18600

B.17500

C.16600

D.15200

E.None of these

20. Total number of English magazine readers in March and June together is approximately what percentage of total number of Hindi magazine readers in April and May together?

A.124 %

B.92 %

C.106 %

D.138 %

E.78 %

Study the following information carefully and answer the question given below.

The following table represents the number of students enrolled in six different colleges, percentage of students left the college and percentage of students who passed out the college among those who continued their study in the college.

COLLEGE	Total number of students enrolled	% of students left the college	% of students passed who continued study in the college
A	1400	5	80
B	1250	8	76
C	1550	12	75
D	900	10	60
E	1300	15	80
F	1500	4	90

21. Find the sum of total number of students from all the colleges, who continued their study.

A.7432

B.7223

C.7199

D.7351

E.None of these

22. Number of students passed from college B is approximately what percent of the number of students passed from college D?

A.152

B.180

C.187

D.125

E.None of these

23. Total number of students enrolled in A and B together is what percent more than the number of students enrolled in C and D together?

A.6.134%

B.8.163%

C.9.156%

D.4.146%

E. 178%

24. Find the ratio of number of failed students of college C and college F respectively.

A.1137 : 450

B.960 : 1457

C.341 : 144

D.450 : 137

E.None of these

25. Passed students of college A is approximately what percent of failed students of college C?

A.121 %

B.184 %

C.211 %

D.312 %

E.None of these

26. A Jar contains 90 litres of the mixture of milk and water in the ratio of 5: 4 and 45 litres of the mixture is taken out. Then added x liters of the water in the remaining mixture, the ratio of the milk and water becomes 2: 3. Find the value of x?

A.18 litres

B.17.5 litres

C.16 litres

D.15.5 litres

E.14.5 litres

27. A boat takes two hours more to travel upstream than travel the same distance in downstream. If the distance travelled by the boat is 120 km and the ratio of the speed of stream to boat in still water is 5: 1, then what is the speed of the boat in still water?

A.20 kmph

B.25 kmph

C.30 kmph

D.35 kmph

E.None of these

28. A and B invests in the ratio of 2: 3 and the investment period of x months and y months respectively. If the total profit of the business is 3500 and B's share is Rs.1500, then what is the ratio of x: y?

A.2: 1

B.3: 4

C.4: 3

D.1: 2

E.None of these

29. Ratio of the length to breadth of the rectangular floor is 2:1. If Rs.1440 is required to paint the floor at the rate of Rs.5 per square meter, then what is the difference between the length and breadth of the rectangular floor?

A.10 cm

B.12 cm

C.14 cm

D.16   cm

E.None of these

30. Shon invests Rs.8000 in scheme A which offer simple interest at 15% per annum for x years. After 8 years Shon received the total amount is Rs.17600. Find the value of x?

A.6 years

B.7 years

C.8 years

D.10   years

E.None of these

31. Ratio of the cost price to marked price of the article is 4: 5. A shopkeeper offer a discount of 15% and the marked price of the article is Rs.720. What is the profit percentage of the article?

A.6.25%

B.4.75%

C.5.5%

D.3.40%

E.None of these

32. A and B together can complete the work in 30 days. If B alone complete 20% of the work in 16 days. In how many days A alone complete 75% of the work?

A.40 days

B.36 days

C.32 days

D.28   days

E.None of these

33. Rahul spends 12% of the salary on transport, 20% on shopping, 40% on house rent and 50% of the remaining on education fee. Now he left with him is Rs.2800. Find Rahul's salary?

A.Rs.30000

B.Rs.20000

C.Rs.40000

D.Rs.50000

E.None of these

34. A is 8 years older than B and B is 12 years younger than C. If the sum of the ages of A, B and C is 80 years, then what is B's age after 10 years?

A.20 years

B.30 years

C.28 years

D.22 years

E.None of these

35. Two trains 160 meters and 140 meters in length are running towards each other on parallel tracks, one at the rate of 75 kmph and another at 45 kmph. In how many seconds will they be clear of each other from the moment they meet?

A.6 seconds

B.9 seconds

C.12 seconds

D.15 seconds

E.4 seconds

1) Answer: D

$3 + 3^3 = 30$

$30 + 4^2 = 46$

$46 + 5^3 = 171$

$171 + 6^2 = 207$

$207 + 7^3 = 550$

2) Answer: A

$1 + 4(2^2) = 5$

$5 + 16(4^2) = 21$

$21 + 36(6^2) = \textbf{57}$

$57 + 64(8^2) = 121$

3) Answer: D

$124 * 0.5 = 62$

$62 * 1 = 62$

$62 * 1.5 = 93$

$93 * 2 = 186$

$186 * 2.5 = \textbf{465}$

4) Answer: D

$8 + 3^2 = 17$

$17 + 6^2 = 53$

$53 + 9^2 = 134$

$134 + 12^2 = 278$

$278 + 15^2 = 503$

5) Answer: A

$2880/6 = 480$

$480/5 = 96$

$96/4 = 24$

$24/3 = 8$

$8/2 = 4$

6) Answer: A

From I =>$x^2 - 5x + 6 = 0$

=>$x^2 - 3x - 2x + 6 = 0$

=> $x(x - 2) -3(x - 2) = 0$

=> $(x - 2) (x - 3) = 0$

=> x = 2, 3

From II =>$y^2 - 9y + 20 = 0$

=>$y^2 - 5y - 4y + 20 = 0$

=>$y (y - 5) - 4 (y - 5) = 0$

=> $(y - 5) (y - 4) = 0$

=> y = 4, 5

Hence, x < y

7) Answer: E

$3x^2 + 30x + 27 = 0$

$3x^2 + 27x + 3x + 27 = 0$

$3x(x + 9) + 3(x + 9) = 0$

$(3x + 3)(x + 9) = 0$

x = - 1, -9

$y^2 - 28y - 29 = 0$

$y^2 - 29y + y - 29 = 0$

$y(y - 29) + 1(y - 29) = 0$

$(y + 1)(y - 29) = 0$

y = -1, 29

x ≤ y

8) Answer: D

$x^2 +29x + 210 = 0$

$x^2 +14x +15x + 210 = 0$

$x(x+14)+15(x+14) = 0$

$(x+15)(x+14) = 0$

x = -14, -15

$y^2 + 25y +156 = 0$

$y^2 + 13y + 12y +156 = 0$

$y(y+13) +12(y+13) = 0$

$(y+12)(y+13) = 0$

y= -12, -13

Hence, x < y

9) Answer: E

$2x^2 - 30x + 112 = 0$

$2x^2 - 16x - 14x + 112 = 0$

$2x(x - 8) - 14(x - 8) = 0$

$(2x - 14)(x - 8) = 0$

$x = 8, 7$

$y^2 - 18y + 80 = 0$

$y^2 - 10y - 8y + 80 = 0$

$y(y - 10) - 8(y - 10) = 0$

$(y - 8)(y - 10) = 0$

$y = 8, 10$

$x \leq y$

10) Answer: D

$3x^2 - 18x + 15 = 0$

$3x^2 - 15x - 3x + 15 = 0$

$3x(x - 5) - 3(x - 5) = 0$

$(3x - 3)(x - 5) = 0$

$x = 1, 5$

$y^2 - 13y + 42 = 0$

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

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

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

$y = 7, 6$

$x < y$

Direction (11-15):

Total number of students = 3000

15% of students studied in school B = 15/100 × 3000

Students studied in school B = 450

The ratio between number of boys to number of girls in school B is 4: 5

Number of boys in school B = 4/9 × 450 =200

Number of girls in school B = 5/9 × 450 =250

30% of students studied in school A = 30/100× 3000

Students studied in school A = 900

Ratio between number of girls to number of boys in school A is 1: 2

Number of boys in school A = 2/3 × 900 =600

Number of girls in school A = 1/3 × 900 =300

900 boys and 600 girls studied in school D

Total number of students in school D = 900 + 600 =1500

Total number of students in school C = 3000 − (900 + 450 +1500)

Total number of students in school C = 150

Ratio between the number of girls to number of boys in school C is 1: 1

Number of boys in school C = 75

Number of girls in school C = 75

	Total students	Number of boys	Number of girls
School A	900	600	300
School B	450	200	250
School C	150	75	75
School D	1500	900	600

11) Answer: B

Ratio between number of boys in school C to number of girls in school A = 75: 300 => **1: 4**

12) Answer: A

Number of boys in school D = 900

Number of boys in school A = 600

Percentage = (900-600)/600× 100 = **50 % more**

13) Answer: D

Total number of boys in school B = 200

Total number of students in school C = 150

Required difference = **50**

14) Answer: D

Average number of students studied in school A, B and D = (900 + 450 + 1500)/3

Average number of students studied in school A, B and D = **950**

15) Answer: B

Number of girls studied in school D = 600

Total number of students studied in all the school together = 3000

Required percentage = 600/3000 ×100

Required percentage **= 20%**

16) Answer: C

The total number of English monthly magazine readers in January and April together

= > 15000 + 19000 = 34000

The total number of Hindi monthly magazine readers in February and June together

= > 14000 + 22000 = 36000

Required difference = 36000 – 34000 = 2000

17) Answer: A

The total number of English monthly magazine readers in February and May together

= > 12000 + 18000 = 30000

The total number of Hindi monthly magazine readers in January and March together

= > 18000 + 17000 = 35000

Required ratio = 30000: 35000 = 6: 7

18) Answer: D

The total male English magazine readers in March

= > 16000 * (5 / 8) = 10000

The total female Hindi magazine readers in April

= > 15000 * (8/ 15) = 8000

Required difference = 10000 - 8000 = 2000

19) Answer: B

The average number of Hindi magazine readers in all the given months together

= > (18000 + 14000 + 17000 + 15000 + 19000 + 22000) / 6

= > 105000 / 6

= > 17500

20) Answer: C

Total number of English magazine readers in March and June together

= > 16000 + 20000 = 36000

Total number of Hindi magazine readers in April and May together

= > 15000 + 19000 = 34000

Required % = (36000 / 34000) * 100 = 105.88 % = 106 %

21) Answer: C

A = (100 - 5)/100 x 1400 = 1330

B = (100 - 8)/100 x 1250 = 1150

C = (100 - 12)/100 x 1550 = 1364

D = (100 - 10)/100 x 900 = 810

E = (100 - 15)/100 x 1300 = 1105

F = (100 - 4)/100 x 1500 = 1440

Required No of students = 1330 + 1150 + 1364 + 810 + 1105 + 1440 = 7199

22) Answer: B

Number of students who continued study in B = (100 - 8)/100 x 1250 = 1150

Passed Students = 76/100 x 1150 = 874

Number of students who continued study in D = (100 - 10)/100 x 900 = 810

Passed Students = 60/100 x 810 = 486

Required percentage = (874/486) x 100 = 179.83% = 180 %

23) Answer: B

Total number of students enrolled in A and B together = 1400 + 1250 = 2650

Total number of students enrolled in C and D together = 1550 + 900 = 2450

Required percentage = (2650 - 2450)/2450 x 100 = 8.163%

24) Answer: C

Number of students who continued study in C = (100 - 12)/100 x 1550 = 1364

Failed = (100-75)/100 x 1364 = 341

Number of students who continued study in F = (100 - 4)/100 x 1500 = 1440

Failed = (100 - 90)/100 x 1440 = 144

Required ratio = 341 : 144

25) Answer: D

Number of students who continued their study from college A = (100 - 5)/100 x 1400 = 1330

Passed = 80/100 x 1330 = 1064

Number of students who continued their study from college C

= (100 - 12)/100 x 1550 = 1364

Failed = (100 - 75)/100 x 1364 = 341

Required percentage = (1064/341) x 100 = 312.023%

= 312 %

26) Answer: B

Milk = 5/9 * 90 = 50 litres

Water = 4/9 * 36 = 40 litres

Milk in 45 litres = 5/9 * 45 = 25 litres

Water in 18 litres = 4/9 * 45 = 20 litres

(50 - 25)/(40 - 20 + x) = 2/3

40 + 2x = 75

2x = 35

x = 17.5 litres

27) Answer: B

Distance = speed * time

120/4x - 120/6x = 2

(30 - 20)/x = 2

10 = 2x

= > x = 5

Speed of the boat in still water = 5 * 5 = 25 kmph

28) Answer: A

A's profit = 3500 - 1500 = 2000

(2 * x)/(3 * y) = 2000/1500

2x/3y = 4/3

x/y = 2/1

29) Answer: B

Area of the rectangle = l * b

2x * x = 1440/5

X = 12 m

Length = 2 * 12 = 24 m

Breadth = 12 cm

Difference = 24 - 12 = 12 cm

30) Answer: C

SI = (P * N * R)/100

SI = 17600 - 8000 = Rs.9600

9600 = (8000 * 15 * N)/100

N = 8 years

31) Answer: A

CP = 4/5 * 720 = Rs.576

SP = 720 * 85/100 = Rs.612

Profit percentage = (612 - 576)/576 * 100

= 6.25%

32) Answer: B

A + B = 1/30

B = 5/1 * 16 = 80 days

A = 1/30 - 1/80

A = (8 - 3)/240 = 5/240

A = 1/48

A complete the 75% of the work in = 48 * ¾ = 36 days

33) Answer: B

Salary =100x

Transport + Shopping + House rent = 12x + 20x + 40x

= 72x

Remaining = 100x - 72x = 28x

28x * 50/100 = 2800

x = 200

Salary = 100 * 200 = 20000

34) Answer: B

A - B = 8

C - B = 12

A + B + C = 80

B + 8 + B + 12 + B = 80

3B = 60

B = 20 years

After 10 years B's age = 20 + 10 = 30 years

35) Answer: B

Distance = speed * time

$(160 + 140) = (75 + 45) \times T \times 5/18$

Time = 9 seconds

Resoning Ability

Directions (1-5): Study the following information carefully and answer the below question:

Eight Person P, Q, R, S, A, B, C, and D are sitting around the square table but not necessarily in the same order. One person sits at each corner and facing inside and one person sits at the middle of the edges and facing outside.

Q sits at one of the corners. Two persons sit between Q and B. B sits second to the right of P. R sits second to the left of P. D sits second to the right of A but not an immediate neighbour of B. S sits immediate left of C but doesn't sits at the corner.

1) Who sits third to the left of R?

a) C

b) B

c) D

d) Q

e) P

2) Which of the following statements is/are true?

a) Two persons sit between Q and P when counted from right of Q

b) None of the statements are true

c) R sits second to the left S

d) A sits immediate right of B

e) Q and C are immediate neighbours

3) What is the position of A with respect to S?

a) Second to the right

b) Second to the left

c) Third to the left

d) Fourth to the left

e) None of the above

4) Who among the following persons are immediate neighbours of B?

a) DA

b) AC

c) SA

d) QR

e) CP

5) Four of the following five are alike in a certain way thus forms a group. Find the odd one which does not belong to the group?

a) CQ

b) AB

c) DR

d) QS

e) BA

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

Six Persons are sitting in a linear row facing north. They all have different weights.

M sits third from the extreme end of the row. Two persons sit between M and the one whose weight is 78kg. Three persons sit between P and the one whose weight is 78kg.The weight of S is 58kg and sits either immediate left or right of P. The sum of the weight of S and R is 127kg.T sits second to the left of R. The one whose weight is 80kg sits second to the right of O. The sum of Weight of M and P is 153kg. Difference between the weight of O and P is 27kg.

6) Who sits second to the right of O?

a) The one whose weight is 80kg

b) S

c) The one who sits immediate right of M.

d) The one whose weight is 78kg

e) None of those given options

7) Which of the following statements is/are true?

a) S and O are immediate neighbours

b) All the statements are true

c) Three person sits between T and the one whose weight is 73kg.

d) The number of persons to the right of P is the same as to the left of the second lightest person.

e) R sits at one of the ends

8) The sum of the weight of M and T is____kg?

a) 168

b) 148

c) 158

d) 127

e) 109

9) The number of persons sit between O and P is the same as between____?

a) R and S

b) T and R

c) O and S

d) P and T

e) M and P

10) What is the position of O with respect to S?

a) Fourth to the left

b) Second to the left

c) Third to the left

d) Immediate right

e) Fourth to the right

Directions (11-15): Study the following information carefully and answer the below question:

In a certain code language,

"The diamond two set" is written as "luch mi pa"

"Pure one black set" is written as "mi kl bcsa"

"Lite white diamond set" is written as "ct pa to mi"

"Two black lite work" is written as "saludnct"

11) What is the code for 'work' in the given code language?

a) ct

b) sa

c) dn

d) lu

e) None of these

12) Which among the following word is coded as 'to' in the given code language?

a) Set

b) Diamond

c) Lite

d) White

e) Other than the given option

13) What is the code for 'The' in the given code language?

a) pa

b) lu

c) ch

d) mi

e) Other than the given option

14) What is the code for "black diamond" in the given code language

(a) pa kl

(b) sa mi

(c)sa pa

(d) Either a or b

(e)Either b or c

15) What is the code for "Pure black white"? if "One more pure work" is written as "jwbcdn kl".

a) bc to sa

b) tosa kl

c) mibc kl

d) Cannot be determined

e) None of these

Directions (16-20): Study the following information carefully and answer the below questions.

Nine boxes namely – A, B, C, D, E, F, G, H, and I are kept one above the other in the form of a stack but not necessarily in the same order.

Three boxes are kept between D and F, either of them kept at the bottommost position. Only one box is kept

between F and C. The number of boxes below C is one less than the number of boxes above B. The box adjacent to B is kept three places above box A. Box D neither kept adjacent to box B nor A. The number of boxes between H and A is the same as the number of boxes between G and E. Box E is kept immediately below box I, which is kept below box G.

16) Which of the following box is kept just above box B?

a) C

b) E

c) D

d) H

e) None of these

17) Which of the following statement is/are not true?

a) Three boxes are kept between D and F.

b) Box H is kept just below box C.

c) Two boxes are kept between box G and B.

d) Box F is kept three places below I.

e) All of the above statements are true.

18) How many boxes are kept between D and C?

a) As many as between H and F.

b) Four

c) As many as between A and B.

d) Three

e) None of these

19)Which of the following pair is odd among all the five?

a) HF

b) AD

c) IF

d) BG

e) CE

20) Which of the following box is kept four places below E?

a) F

b) G

c) H

d) C

e) None of these

21) If a meaningful word can be formed by using the second, third, and sixth and seventh letters of the word "ERECTING" then what is the last letter of the newly formed word? Mark X as your answer if more than one word is formed. Mark Z if no meaningful word can be formed.

a) N

b) I

c) E

d) X

e) Z

Directions (22-24): Study the following information carefully and answer the below questions.

Six persons A, B, C, D, E, and F are arranged in the order based on their weights. F is heavier than E and D. A is lighter than C. B is lighter than D but not the lightest. The second-lightest person is 31kg and the second heaviest person is 83kg. C is heavier than F. A is just heavier than D.

22) What is the possible weight of A. If the difference between the weight of F and D is 27kg?

a) 47kg

b) 51kg

c) 84kg

d) 62kg

e) None of these

23) Sum of the weights of B and A is 105kg and the difference between the weight of D and F is 22kg, then what is the sum of the weight of A and D?

a) 95kg

b) 115kg

c) 135kg

d) 145kg

e) None of these

24) Who among the following is the fourth lightest person?

a) D

b) A

c) F

d) B

e) None of these

25. How many such pairs of numbers are there in the number "68517429361" which has as many numbers between them as in the number series (Both forward and backward)?

a) One

b) Two

c) Three

d) More than three

e) None

Directions (26-30): Read both the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give Answer:

a) If Only conclusion I follows.

b) If Only conclusion II follows.

c) If either conclusion I or II follows.

d) If Neither conclusion I nor II follows.

e) If both conclusions I and II follow.

26) Statement

Only Walnut is Almond

Some Walnut are Pine nut

Only a few Pine nuts are Cashews

Conclusions:

I. Some Almonds are Cashews

II. All Walnut are Pine nut is a possibility

27) Statement

Only a few Diesel is Gasoline

Some Gasoline is Kerosene

All Kerosene is Natural gas

Conclusion

I. All Diesels are Kerosene is a possibility

II. Some Gasoline is Natural gas

28) Statement

Only a few TOI is Statesman

All Statesman are Telegraph

No Statesman is Hindu

Conclusion

I. Some Telegraphs are Hindu is a possibility

II. All TOI is Hindu is a possibility

29. Statements:

All Words are Phrase.

Only a few Words are Text.

All Poems are Poetry.

Only a few Texts are poems.

Conclusions:

I) Some Texts are not Poetry

II) Some Phrases are not Text

30. Statements:

Only a few Huts are Home.

No Den is Hut.

Some Cages are Den.

All Cages are Mount.

Conclusions:

I) Some Huts are neither Home nor Den

II) Few Mount are not Home

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

Six persons are living in two different flats viz. Flat P and Flat Q of a three-storey building, but not necessarily in the same order. Flat Q is to the east of Flat P. They like different color. The lowermost floor is numbered 1 and the floor above is numbered 2 and so on. Not more than one person lives in the same flat on the same floor.

A lives one of the floors in flat P. The one who likes Green lives immediately above the flat of A. Only one floor between the one who likes orange and yellow. D lives exactly to the east of the one who likes orange. A doesn't like orange or yellow. E lives immediately above the flat of the one who likes red. F lives exactly to the east of E. The one who likes Black lives immediately above the flat of the one who likes white. B lives exactly to the west of the one who likes white. F doesn't like white. C is one of the persons in the group.

31) F lives immediately above the flat of the one who likes___?

a) Black

b) Orange

c) Red

d) White

e) None of those given options

32) Who lives exactly to the west of C?

a) A

b) B

c) D

d) E

e) F

33) Which of the following statements is/are true?

a) Flat name of B and D are the same.

b) A lives immediately above B's flat

c) There is only one floor between E and C

d) B like red

e) None is true

34) Four of the following five are alike in a certain way thus forms a group. Find the odd one which does not belong to the group?
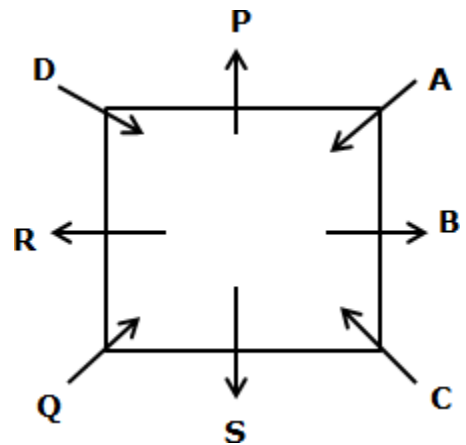
a) E - Black

b) A - White

c) B - Black

d) D - Red

e) F - Yellow

35) Who lives immediately above the flat of D?

a) C

b) A

c) E

d) F

e) B

Answers:
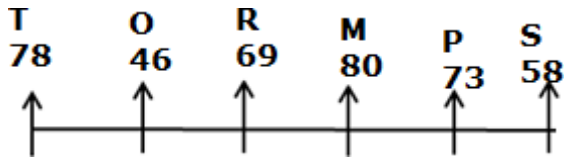
Directions (1-5):

1) Answer: A

2) Answer: B

3) Answer: C

4) Answer: B

5) Answer: A

Directions (6-10):

T	O	R	M	P	S
78	46	69	80	73	58

6) Answer: A

7) Answer: C

8) Answer: C

9) Answer: A

10) Answer: A

Directions (11-15):

Words	Codes
the	ch
diamond	pa
two	lu
set	mi
black	sa
lite	ct
white	to
work	dn
pure/one	kl/bc

11) Answer: C

12) Answer: D

13) Answer: C

14) Answer: C

15) Answer: D

Directions (16-20):

16. Answer: B

17. Answer: E

18. Answer: C

19. Answer: E

20. Answer: D

G
I
E
B
F
A
C
H
D
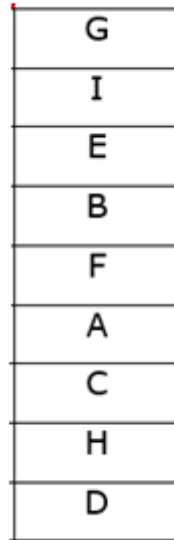
21) Answer: D

Rein, Rine

Directions (22-24):

No	Persons	Weight
1	C	
2	F	83
3	A	
4	D	
5	B	31
6	E	

22) Answer: D

F-D=27, So, D=56.

Then, the possible weight of A is 62kg.

23) Answer: C
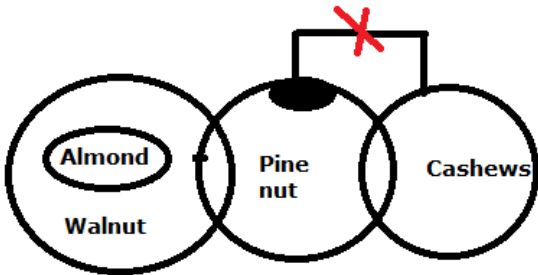
B+A=105, A=74. F-D=22, D= 61

A+D= 135kg

24) Answer: B
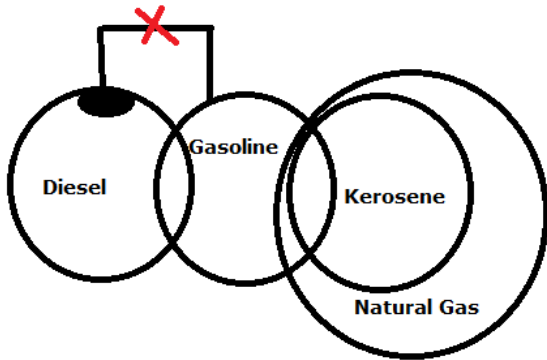
25) Answer: D

6 8 5 1 7 4 2 9 3 6 1
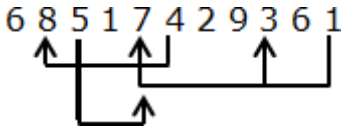
Therefore, 5 pairs are there.

4-8,1-3,1-7,3-7,5-7. Hence, Option D is correct.

26) Answer: D

27) Answer: E

28) Answer: E
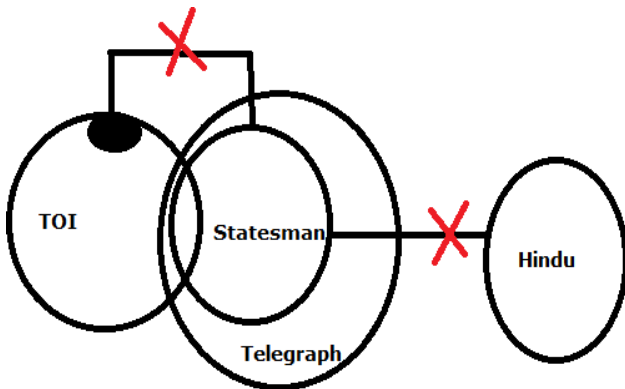
29) Answer: B
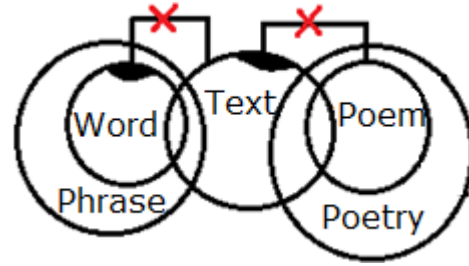
30) Answer: A
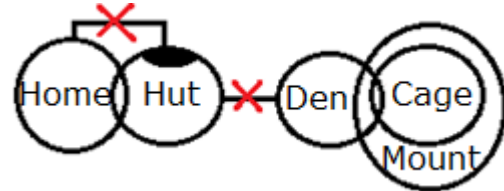
Directions (31-35):

31.Answer: A

32. Answer: A

33. Answer: B

34. Answer: E

35. Answer: A

Floor /Flat	P	Q
3	E, green	F, Yellow
2	A, Red	C, Black
1	B, Orange	D, White

English language

Directions (1-5) Read the given passage carefully and answer the questions that follow.

We would not want to kill the planet we live on. We would not want to exhaust all the natural resources. We would not want to leave a dead planet for our future generations. Ethical practices and sustainability are not **mutually** exclusive terms but remain inherent in each other. What is ethical remains sustainable and vice versa.

Cutting trees and tinkering with natural resources, unethical as it is, remains an inevitable fallout of development, needed for human sustenance. But every now and then, catastrophes such as the flash floods in Uttarakhand in 2016 remind humans that what is unethical is also unsustainable

Ethical practices and sustainability are the buzz-words of the day. It hence becomes essential to unravel their true meaning and in the process, attempt to formulate an equation between the two.

'Ethical practices' refer to the moralistic codes of conduct and the just conventions which a human being, in his or her social, professional and personal spheres must adhere to. These practices shape the true character of an individual and enable to establish a context for an individual's worldly existence. 'Sustainability' refers to a continuous process of well-being, a process which does not compromise upon anything but takes everything in its stride, even the harshest of circumstances, in order to endure the test of time.

These two concepts are inextricably intertwined – sustainability cannot exist without ethical practices. Generally, in the present scenario, sustainabilitydirectly motions towards an approach which ensures the preservation of the environment, of nature, yet at the same time, it ensures credible human

development and progress also. And ethical practices refer to the practices that organizations and institutions must adopt in order to ensure sustainable development of the human race. For instance, it is alright to hope to gain the maximum profits in a business venture, but if the blueprint of its success plan compromises upon the health of the planet, then the approach may not really be worth it. The need in such cases, then becomes, to go back to the drawing board and start from square one and develop innovative ideas which do not leave anybody or anything in the lurch!

1. According to the passage which of the following is a continuous process of well-being, a process which does not compromise upon anything but takes everything in its stride, even the harshest of circumstances, in order to endure the test of time?
a) Ethical practices
b. Sustainability
c. compromises
d. only a and b
e. none of the above

2. According to the passage which of the following is/are referred to as unethical?
a) tinkering with natural resources
b. cutting trees
c. Imagination
d. Both a and b
e. none of the above

3. According to the passage which of the following is/are not true?
I. Ethical practices and sustainability are mutually exclusive terms but remain inherent in each other.

II. Ethical practices refer to the practices that organizations and institutions must adopt in order to ensure sustainable development of the human race.

III. Sustainability directly motions towards an approach which ensures the preservation of the environment, of nature, yet at the same time, it ensures credible human development and progress also

a) only I

b. only II

c. only III

d. both II and III

e. none of the above

4. Which of the following is similar in meaning to the word **mutually** as given in the passage?

a) cooperatively

b. split

c. biased

d. differ

e. none of the above

5. Which of the following is opposite in meaning to the word **ensures** as given in the passage?

a) confirm

b. affirm

c. verify

d. neglect

e. none of the above

Direction (6-10): Read the paragraph thoroughly and completely. There are five blanks in the paragraph. Fill the blanks with the following options to make the coherent paragraph.

The development of nationalism in the third world countries, as is well known, followed a very different**(6)** from that in the advanced capitalist countries. In the latter it was a part of the process of the **(7)** of the bourgeois order in opposition to feudalism, while in the former it was a part of the anti-colonial struggle. The impact of colonialism,

though it differed across countries, had on the whole been in the direction of **(8)** localism and unifying supra-local economic structures through the introduction of market relations. The struggle against colonialism, consequently, took the form of a national struggle in each instance in which people belonging to different tribes or linguistic communities participated. And the colonial power in each instance attempted to break this emerging national unity by**(9)**people.

The modus operandi of this splitting was not just through political manipulation as happened for instance in Angola, South Africa and a host of other countries; an important part of this modus operand was through the **(10)** of a historiography that just denied the existence of any overarching national consciousness. The national struggle, the national movement were given a tribal or religious character, they were portrayed as being no more than the movement of the dominant tribe or the dominant religious group for the achievement of narrow sectional ends. But the important point in this colonialism, while, on the one hand, it objectively created the condition for the coming into being of a national consciousness at a supra-tribal, supra-local and suprareligious level, on the other hand it sought deliberately to subvert this very consciousness by using the same forces which it had objectively undermined.

6.

a) perception

b) trajectory

c) way

d) perspective

e) None of the above

7.

a) growing

b) develop

c) emergence

d) evolve

e) None of the above

8.

a) switch over

b) descend

c) transcending

d) traverse

e) None of the above

9.

a) divide

b) correlating

c) concealing

d) splitting

e) None of the above

10.

a) nurturing

b) excelled

c) expelled

d) hovered

e) None of the above

Directions (11-15): A set of statements is given, all the statements are jumbled in random order. Rearrange the statements in the right order and answer the questions.

A. The society over the years has recognized women's need to legal and financial independence.

B. Women work force now constitutes a significant percentage of the total work force in any organization today.

C. Women executives have to deal with- running a home, doing daily chores like cooking/cleaning, raising family and handle the tight deadlines at home and work.

D. But the transition to motherhood still continues to have practical and emotional consequences.

E. It also affects their professional stature when they return to work.

11) Which is the FIRST sentence after rearranging?

a) A

b) B

c) C

d) D

e) E

12) Which is the SECOND sentence after rearranging?

a) B

b) D

c) C

d) A

e) E

13) Which is the THIRD sentence after rearranging?

a) E

b) B

c) C

d) D

e) A

14) Which is the LAST sentence after rearranging?

a) A

b) B

c) C

d) D

e) E

15. Which is the fourth sentence after rearranging?

a) A

b)B

c) C

d) D

e) E

Directions (16-20): Pick out the most effective word from the given words to fill in the blanks to make the sentence meaningfully complete.

16. This leaf has been taken out before. Both in 2015, when the Chinese PLA_____into Chumar in Ladakh during Xi's visit to India, the Indian side repeated one sentence, again and again: You must return to the status quo ante, otherwise all the fruits of the Chinese president's visit will be wasted.

a) insidious

b) void

c) intruded

d) glean

e) None of these

17. The first is the careful_____of the law to determine whether the government's proposal addresses a particular problem or not and simultaneously ensure that in the process of fixing one problem, it doesn't create another.

a) praise

b) scrutiny

c) prudent

d) veritable

e) No correction required

18. From a macroeconomic perspective, would these measures help generate revenue for J&K and contain the_____fiscal deficit?

a) ominous

b) derive

c) wanton

d) subtle

e) No correction required

19. The objectives of the J&K's Fiscal Responsibility and Budget Management Act, 2006 are absolutely clear: that the government is responsible in ensuring inter-generational equity in fiscal management, to ensure that its borrowing is not reckless and doesn't crowd out private investment; and that prudent house-keeping must be balanced with development and _____perspectives.

a) vilify

b) malevolent

c) circumspect

e) sustainability

e) No correction required

20. The machinery of the government has to be _____and not reactive while making laws.

a) vituperate

b) heedful

c) laud

d) fraught

e) None of these

Direction (21-25): in each of the following questions a grammatically correct and meaningful sentence is given with four words given in bold in each. Which of the following words should replace each other to form a meaningful and grammatically correct sentence. The meaning can be different from the one in question.

21. Additionally, the **punishments(A)** changed the **illicit(B)** of **amendment(C)** and rehabilitation, which now treated **scheme(D)** drug users differently from sellers, manufacturers etc.

a) A-D

b) C-D

c) A-C, B-D

d) A-B, C-D

e) B-D

22. Indian and Chinese military commanders **diplomat(A)** for another round of talks at the Chushul-Moldo point on the Chinese side of the Line of Actual Control Monday, joined for the first time by the Indian **met(B)** who **echoing(C)** the China desk in the ministry of external affairs, Naveen Srivastava – and **heads(D)** the presence of a political commissar who has always been present in the Chinese delegation.

a) A-D

b) C-D

c) A-C, B-D

d) A-B, C-D

e) B-D

23. A serological survey report **published(A)** in the Journal of Public Health by Oxford University, **revealed(B)** that 36 per cent of the population in the city of Karachi are believed to have been **infected(C)** to the virus, which means 6 million people were **exposed(D)** with Covid in Karachi itself.

a) A-D

b) C-D

c) A-C, B-D

d) A-B, C-D

e) B-D

24. Many scientists have **compared (A)** that connectivity in the human brain is **superior (B)** higher **assumed (C)** to other animals, as a possible explanation for the **significantly (D)** functioning of the 'human animal.

a) A-D

b) A-D, B-C

c) B-C

d) A-C, B-D

e) No Interchange is required.

25. Linda Davidoff defines emotion as a feeling that is **behaviors (A)** through physiological functions such as facial **covering** (B) faster heartbeat, and **expressed (C)** such as aggression, crying, or **expressions (D)** the face with hands.

a) A-D

b) A-D, B-C

c) B-C

d) A-C, B-D

e) No Interchange is required.

Directions (26-30):Some sentences are given below, find out the part or parts of the sentences that has or have any error. If the sentence is correct, mark '5' i.e. "all correct" as your answer.

26. Privatization would help these banks/(A) to overcome restraints placed by State ownership such as/(B) low pay, short tenures, political interfere and/(C) the fear of being pursued by investigation agencies. /(D)

a) B and D

b) C and D

c) B and C

d) A and C

e) All correct.

27. The Reserve Bank of India's (RBI) reported suggestion/(A) to the government to low/(B) the government's equity stake in the banks/(C) it owns to 26% make eminent sense. /(D)

a) A and C

b) Band C

c) B and D

d) Only A

e) All correct

28. Regulatory oversight should see/(A) banks not just separate,/(B) but and in relation with one another /(C)and non-banking financial companies (NBFCs). /(D)

a) Only C

b) Only B

c) B and C

d) all are wrong

e) all correct

29. Bank boards must be fully professionalized, /(A) empowered with taking all/(B) bank-related decisions and hold/(C) accountable for their performance. /(D)

a) Only C

b) Only B

c) A and C

d) Only D

e) all correct

30. Another vital reform is to create/(A) a thriving debt market to let long-gestation infrastructure/(B) projects be funded through bonds /(C) and prevent the future build-up of bad loans. (D)

a) B and D

b) Only A

c) Only D

d) C and D

e) all correct

Answers:

1) Answer: B

From the lines, "'Sustainability' refers to a continuous process of well-being, a process which does not compromise upon anything but takes everything in its stride, even the harshest of circumstances, in order to endure the test of time." this question can be answered.

2) Answer: D

From the lines, "Cutting trees and tinkering with natural resources, unethical as it is, remains an inevitable fallout of development, needed for human sustenance." this question can be answered.

3) Answer: A

From the lines, "Ethical practices and sustainability are not mutually exclusive terms but remain inherent in each other.

Ethical practices refer to the practices that organizations and institutions must adopt in order to ensure sustainable development of the human race.

Sustainability directly motions towards an approach which ensures the preservation of the environment, of nature, yet at the same time, it ensures credible human development and progress also." this question can be answered.

4) Answer: A

Mutually – experienced or done by each of two or more parties towards the other or others.

Other options B, C & D are antonyms of the given word.

5) Answer: D

Ensures - make certain that (something) will occur or be the case.

Other options A, B & C are synonyms of the given word.

6) Answer: B

Trajectory - the curved path of something that has been fired, hit or thrown into the air

The other options A , C & D are incorrect as these options do not make the sentence correct both grammatically and contextually.

7) Answer: C

Emergence - to become known

The other options A , B & D are incorrect as these options do not make the sentence correct both grammatically and contextually.

8) Answer: C

Transcending - to be or go beyond the usual limits of something

The other options A , B & D are incorrect as these options do not make the sentence correct both grammatically and contextually.

9) Answer: D

Splitting - the action of dividing or being divided into parts.

The other options A , B & C are incorrect as these options do not make the sentence correct both grammatically and contextually.

10) Answer: A

Nurturing - to have a feeling, an idea, a plan, etc. for a long time and encourage it to develop

The other options D , B & C are incorrect as these options do not make the sentence correct both grammatically and contextually.

11) Answer: B

The correct form of rearrangement is BCADE

12) Answer: C

The correct form of rearrangement is BCADE

13) Answer: E

The correct form of rearrangement is BCADE

14) Answer: E

The correct form of rearrangement is BCADE

15) Answer: D

The correct form of rearrangement is BCADE

B. Women work force now constitutes a significant percentage of the total work force in any organization today.

C. Women executives have to deal with- running a home, doing daily chores like cooking/cleaning, raising family and handle the tight deadlines at home and work.

A. The society over the years has recognized women's need to legal and financial independence.

D. But the transition to motherhood still continues to have practical and emotional consequences.

E. It also affects their professional stature when they return to work.

16) Answer: C

Solution:

In the given sentence, only 'intruded' makes it grammatically as well as contextually correct.

Option A is incorrect as insidious means proceeding in a gradual, subtle way, but with very harmful effects which is contextually wrong.

Option B is incorrect as void means not valid or legally binding which does not make any sense here.

Option C is the correct alternative among the following as intruded means put oneself deliberately into a place or situation where one is unwelcome or uninvited which is both grammatically and contextually correct.

Option D is incorrect as glean means obtain (information) from various sources, often with difficulty which does not fit here according to the context.

17) Answer: B

Solution:

In the given sentence, 'scrutiny' makes the sentence both grammatically and contextually correct.

Option A): is incorrect because praise means express warm approval or admiration of which does not fit here.

Option B): is the correct alternative among the following as scrutiny means critical observation or examination which fit here both grammatically and contextually

Option C): is incorrect as prudent meansacting with or showing care and thought for the future.

Option D): is incorrect as veritable means used for emphasis, often to qualify a metaphor which does not fit here contextually.

18) Answer: A

Solution:

In the given sentence, 'ominous' makes the sentence both grammatically and contextually correct.

Option A): is the correct alternative among the following as 'ominous' means giving the worrying impression that something bad is going to happen; threateningly inauspicious which fits here both grammatically and contextually.

Option B): is incorrect as derive does not make any sense here.

Option C): is incorrect as wanton means (of a cruel or violent action) deliberate and unprovoked.

Option D): is incorrect as 'subtle' does not fit here contextually.

19) Answer: D

Solution:

In the given sentence, 'sustainability' makes the sentence both grammatically and contextually correct.

Option A): is incorrect because vilify means speak or write about in an abusively disparaging manner which does not fit here.

Option B): is incorrect as malevolent means having or showing a wish to do evil to others which does not make any sense here.

Option C): is incorrect as 'circumspect' does not fit here.

Option D): is the correct alternative among the following as 'sustainability' fits here both grammatically and contextually.

20) Answer: E

Solution:

In the given sentence, 'proactive' is both grammatically and contextually correct.

Option A): is incorrect because vituperate means blame or insult (someone) in strong or violent language which does not fit here.

Option B): is incorrect as heedful means aware of and attentive to which does not make any sense here.

Option C): is incorrect as 'laud' which does not fit here.

Option D): is incorrect as fraught does not fit here contextually.

21) Answer: C

Solution:

In the first bold position 'amendment' makes perfect sense. So A-C will be a pair. This follows option C. The other pair also makes the sentence grammatically and contextually correct.

After rearrangement, the correct sentence will be " Additionally, the amendment changed the scheme of punishments and rehabilitation, which now treated illicit drug users differently from sellers, manufacturers etc."

22) Answer: D

Solution:

In the first bold position we need a verb in the past form. 'Met' fulfills that. So A-B will be a pair. This follows option D. The other pair also makes the sentence grammatically and contextually correct.

After rearrangement correct sentence will be "Indian and Chinese military commanders met for another round of talks at the Chushul-Moldo point on the Chinese side of the Line of Actual Control Monday, joined for the first time by the Indian diplomat who heads the China desk in the ministry of external affairs, Naveen Srivastava – and echoing the

presence of a political commissar who has always been present in the Chinese delegation. "

23) Answer: B

Solution:

'Exposed' takes 'to' preposition and 'infected' takes 'with' preposition. So C-D will be the correct pair.

After rearrangement, the correct sentence will be "A serological survey report published in the Journal of Public Health by Oxford University, revealed that 36 per cent of the population in the city of Karachi are believed to have been exposed to the virus, which means 6 million people were infected with Covid in Karachi itself. "

24) Answer: D

Many scientists have **assumed** that connectivity in the human brain is **significantly** higher **compared** to other animals, as a possible explanation for the **superior** functioning of the 'human animal.

25) Answer: D

Correct sentence is ꓺLinda Davidoff defines emotion as a feeling that is **expressed** through physiological functions such as facial **expressions**, faster heartbeat, and **behaviors** such as aggression, crying, or **covering** the face with hands.

26) Answer: C

Part B is incorrect, 'to' should be omitted.

Rule: HELP + V1 (WITHOUT 'TO')

Part C is incorrect; 'interfere' should be replaced with 'interference' as we need a noun.

27) Answer: C

Part B is incorrect; here "low" should be replaced with "lower" as after "to" a verb(lower) should be used.

Part D is incorrect; here "make" should be replaced with "makes" as with a singular subject "suggestion" a V5(makes) should be used.

28) Answer: C

Part B is incorrect; here "separate" should be replaced with "separately" as to describe a Verb ("see") we should use an adverb("separately").

Part C is incorrect; "and" should be omitted from this part as the pair of "not just" is "but/But that".

29) Answer: A

Part C is incorrect; here "hold" should be replaced with "held" as after "must be" we should use V3 ("held").

30) Answer: E

All the parts are grammatically correct.