1. P, Q, R, S and T are five speakers who have to speak on a particular day, not necessarily in the same order. R is neither the first nor the last speaker. There are three speakers after S and three speakers ahead of T. If P speaks after Q, then who is the last speaker to speak?

A. S B. T C. P D. Q E. Cannot be determined.

Answer: Option C

Explanation:

There are three speakers after S. So, S is the 2nd speaker.

There are three speakers before T. So, T is the 4th speaker.

R is neither the 1st nor the 5th. So, R is the 3rd speaker.

P speaks after Q, So P is the 5th and Q is the 1st speaker. So, P is the last speaker.

2. Five persons - A, B, C, D and E are being compared in weight and height. The second heaviest person. D is the shortest. A is the 2nd tallest and shorter than E, The heaviest person is the third tallest
person. There is only one person shorter than B, who is lighter than E and A respectively.

Who is the heaviest person?
A. A  B. B  C. C  D. D  E. E

Answer: Option C

3. 15 people entered a theater before Sujit. 7 people entered the theater between Sujit and Suraj and 20 people entered the theater after Suraj.

How many people are there in the theater?
A. 28  B. 36  C. 44  D. 40  E. Cannot be determined.

Answer: Option E

Explanation:

If Sujit entered before Suraj then the number of people will be 15 + 1(Sujit) + 7 + 1(Suraj) + 20 = 44.
If Suraj entered before Sujit then number of people will be $7 + 1(\text{Suraj}) + 7 + 1(\text{Sujit}) + 12 = 28$.

So, the number of people in the theater cannot be determined.

4. A, B, C, D, E and F are six cities which are collinear in the same order. The distance between any two adjacent cities is equal. A bus starts at A for city F. It takes 25 minutes for the bus to travel from one city to another and stops for 5 minutes at each place. If the bus reaches E at 8:55, then at what time did it reach station B?

A. 7:25 B. 7:30 C. 7:35 D. 7:40 E. 7:50

Answer: Option A

Explanation:

Between B and E there are two intermediary stations C and D. For traveling from B to C, from C to D and from D to E it takes $3 \times 25 = 75$ minutes. At each of C and B it halts of 5 minutes. Hence, the time taken to reach E after starting at B is 85 minutes. i.e. one hour 25 minutes. Hence, it started at 7:30 at B. => it reached B at 7:25.

5. P, Q, R, S, T and U are six cities which are in a row in the same order. A bus, b1 travels from P to U and another bus b2 travel from U to P. The
bus b1 reaches S at 10:40 and bus b2 reaches Q at 10:35 if the travel time between any two adjacent cities is 40 minutes and the stoppage time at each city is 15 minutes, then at what time do they start at their respective destinations?

A. 8:00, 7:00 B. 8:00, 7:10 C. 8:10, 7:10 D. 8:15, 7:25 E. 8:10, 7:00

Answer: Option C

Explanation:

The bus b1, which started at P, reached S at 10:40, passing through the intermediary cities Q and R.

The time taken to travel from P to S

= 3 * 40 + 2 * 15 = 150 minutes

(journey) + (stoppage) = 2 hrs 30 minutes.

Hence, b1 started at 10:40 - 2:30 = 8:10 at P.

b2 reached Q, starting at U, through the city T, S and R.

The time taken by it to reach S = 4 * 40 + 3 * 15 = 205 minutes = 3 hr 25 minutes.

Hence, b2 started at, 10:35 - 3:25 = 7:10, at U.
6. 36 31 29 24 22 17 15

A. 13 11 B. 10 5 C. 13 8 D. 12 7 E. 10 8

Answer: Option E

Explanation:

This is an alternating subtraction series, which subtracts 5, then 2, then 5, and so on.

7. 3 5 35 10 12 35 17

A. 22 35 B. 35 19 C. 19 35 D. 19 24 E. 22 24

Answer: Option C

Explanation:

This is an alternating addition series, with a random number, 35, interpolated as every third number. The pattern of addition is to add 2, add 5, add 2, and so on. The number 35 comes after each “add 2” step.
8. 7 9 66 12 14 66 17
A. 19 66 B. 66 19 C. 19 22 D. 20 66 E. 66 20

Answer: Option A

Explanation:

This is an alternating addition series with repetition, in which a random number, 66, is interpolated as every third number. The regular series adds 2, then 3, then 2, and so on, with 66 repeated after each “add 2” step.

9. 16 26 56 36 46 68 56
A. 80 66 B. 64 82 C. 66 80 D. 78 68 E. 66 82

Answer: Option C

Explanation:
Here, every third number follows a different pattern from the main series. In the main series, beginning with 16, 10 is added to each number to arrive at the next. In the alternating series, beginning with 56, 12 is added to each number to arrive at the next.

10. 13 29 15 26 17 23 19
A. 21 23 B. 20 21 C. 20 17 D. 25 27 E. 22 20

Answer: Option B

Explanation:

Here, there are two alternating patterns, with every other number following a different pattern. The first pattern begins with 13 and adds 2 to each number to arrive at the next; the alternating pattern begins with 29 and subtracts 3 each time.

11. Glucose : Carbohydrate :: Soyabean : ?
A. Proteins B. Vitamins C. Minerals D. Legumes

Answer: Option A
Explanation:

Glucose is rich in carbohydrates and soyabeen is rich in proteins.

12. Jeopardy : Peril :: Jealousy : ?

A. Envy  B. Insecurity  C. Lust  D. Sin

Answer: Option A

Explanation:

First is a more intense form of the second.

13. Pigeon : Peace :: White flag : ?

A. Friendship  B. Victory  C. Surrender  D. War

Answer: Option C

Explanation:
Pigeon is a symbol of peace and white flag is symbol of surrender.

14. Teheran : Iran :: Beijing : ?
A. China  B. Japan  C. Turkey  D. Malaysia

Answer: Option A

Explanation:

Teheran is the capital of Iran and Beijing is the capital of China.

15. Enough : Excess :: Sufficiency : ?
A. Adequacy  B. Surplus  C. Competency  D. Import

Answer: Option B

Explanation:

Sufficiency indicates 'enough' and surplus indicates 'excess',
16. Squint : Eye :: Squeeze : ?

A. Tongue  B. Cloth  C. Throat  D. Hand

Answer: Option D

Explanation:

To squint is to constrict the eyes and squeeze is to constrict the hands.

17. Hermit : Solitude :: Intruder : ?

A. Thief  B. Privary  C. Burglar  D. Alm

Answer: Option C

Explanation:

The words in each pair are synonyms.

18. Tea : Cup :: Tobacco : ?

A. Leaves  B. Hookah  C. Toxin  D. Cheroot
Answer: Option D

Explanation:

Tea is contained in the cup. Similarly, tobacco is contained in cheroot.

19. Market : Demand :: Farming : ?
A. Farmer B. Monsoons C. Foodgrain D. Supply

Answer: Option B

Explanation:

Market depends on demand, farming depends on monsoons.

20. Skirmish : War :: Disease : ?
A. Medicine B. Patient C. Epidemic D. Infection

Answer: Option C
Explanation:

Second is a more intense form of the first.

21. Which day of the last week did Satish meet Kapil, at Kapil's residence?

I. Kapil was out of town from Monday to Wednesday. He returned on Thursday morning.

II. On Friday night Satish telephoned his friend to inform that only yesterday he had got approval of Kapil after personally explaining to him all the details.

A. if the data in statement I alone are sufficient to answer the question; B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option B

Explanation:
Statement II reveals that Satish met his friend Kapil on the day prior to Friday i.e., Thursday. Thus, only II is needed.

22. What is Gagan’s age?

I. Gagan, Vimal and Kunal are all of the same age.

II. Total age of Vimal, Kunal and Anil is 32 and Anil is as old as Vimal and Kunal together.

A. if the data in statement I alone are sufficient to answer the question; B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option E

Explanation:

As given in statements I and II, we have

\[ G = V = K, \quad V + K + A = 32 \quad \text{and} \quad A = V + k. \]
Putting $V + K = A$ in second, we get $2A = 32$ or $A = 16$. Thus, $V + K = 16$ and $V = K$. So, $V = K = 8$. Thus, $R = 8$.

23. How is Rakesh related to Keshav?

I. Tapan's wife Nisha is paternal aunt of Keshav.
II. Rakesh is the brother of a friend of Nisha.

A. if the data in statement I alone are sufficient to answer the question; B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option D

Explanation:

Clearly, both the statements together are not sufficient to answer the question.

24. Manoj, Prabhakar, Akash and Kamal are four friends. Who among them is the heaviest?
I. Prabhakar is heavier than manoj and Kamal but lighter than Akash.

II. Manoj lighter than Prabhakar and Akash but heavier than Kamal.

A. if the data in statement I alone are sufficient to answer the question;
B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option A

Explanation:

From I we have, P > M, P > K, A > P.

From II we have, M > K, P > M, A > P.

Combining the above two, we have: A > P > M > K. Thus, Akash is the heaviest.

So, both the atatements are required.

25. Hemanth ranks tenth in a class. How many students are there in the class?
I. His friend got 58th rank which is the last.

II. Hemanth's rank from the last is 49th.

A. if the data in statement I alone are sufficient to answer the question;
B. if the data in statement II alone are sufficient answer the question;
C. if the data either in I or II alone are sufficient to answer the question;
D. if the data even in both the statements together are not sufficient to
   answer the question; E. If the data in both the statements together are
   needed.

Answer: Option C

Explanation:

I reveals that 58th is the last rank in the class. This means that there are
58 students in the class. So, I alone is sufficient.

Also, from II, we find that Hemanth's rank in the class is 10th from the
top and 49th from the last. So, there are (10 + 49 - 1) = 58 students in
the class.

Thus, II alone is also sufficient.

26. Vipin's and Javed's salaries are in the proportion of 4:3 respectively.
What is Vipin's salary?
I. Javed's salary is 75% that of Vipin's salary.

II. Javed's salary is Rs.4500.

A. if the data in statement I alone are sufficient to answer the question; 
B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option B

Explanation:

Statement I is merely an interpretation of the information contained in the question.

However, Vipin's salary can be determined from statement II as follows:

Let Vipin's and Javed's salaries be 4x and 3x respectively.

Then, 3x = 4500 or x = 1500.

Vipin's salary = 4x = Rs.6000.

Thus, II alone is sufficient.
27. At what time did Sonali leave her home for office?

I. Sonali received a phone call at 9.15 a.m. at her home.

II. Sonali's car reached office at 10.15 a.m., 45 minutes after she left her residence.

A. if the data in statement I alone are sufficient to answer the question;
B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option B

Explanation:

From statement II, we conclude that Sonali left her home 45 minutes before 10.15 a.m. i.e., 9.30 a.m.

Thus, only II is needed.

28. How many sons does D have?
I. A's father has three children.

II. B is A's brother and son of D.

A. if the data in statement I alone are sufficient to answer the question;
B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option D

Explanation:

From both I and II together, we can conclude that A and B are the children of D, but the sex of A and the third child of D is not known. So, both the statements together are also not sufficient to answer the question.

29. A, B, C, D and E are sitting in a row. B is between A and E. Who among them is in the middle?

I. A is left of B and right of D.

II. C is at the right end.
A. if the data in statement I alone are sufficient to answer the question; 
B. if the data in statement II alone are sufficient answer the question; C. if the data either in I or II alone are sufficient to answer the question; D. if the data even in both the statements together are not sufficient to answer the question; E. If the data in both the statements together are needed.

Answer: Option E

Explanation:

Clearly, we have the order : A, B, E.

From I, we have the order : A, B, E.

From II, we get the complete sequence as D, A, B, E, C. Clearly, B is in the middle.

So, both I and II are required.

30. How many gift boxes were sold on Monday?

I. It was 10% more than the boxes sold on the earlier day i.e., Sunday.

II. Every third visitor to the shop purchased the box and 1500 visitors were there on Sunday.
A. if the data in statement I alone are sufficient to answer the question;  
B. if the data in statement II alone are sufficient answer the question;  
C. if the data either in I or II alone are sufficient to answer the question;  
D. if the data even in both the statements together are not sufficient to answer the question;  
E. If the data in both the statements together are needed.

Answer: Option E

Explanation:

From II, we can conclude \((1500/3)\) i.e., 500 boxes were sold on Sunday.

From I, we find that number of boxes sold on Monday = 500 + 10% of 500 = 550.

31. Ecology : Environment :: Histology : ?

A. Fossiles B. History C. Tissues D. Hormones

Answer: Option C

Explanation:
Ecology deals with the study of environment. Similarly, Histology deals with the study of tissues.

32. On which of the following days Mr. X spends the least amount for buying all the five types of vegetables?
   A. Monday  B. Tuesday  C. Thursday  D. Sunday

   Answer: Option A

   Explanation:

   Amount spent on Monday = Rs(32 + 75 + 120 + 140) = Rs. 367

   Amount spent on Tuesday = Rs(37.5 + 98 + 144 + 144) = Rs. 423.50

   Amount spent on Thursday = Rs(76.5 + 123.75 + 180 + 155) = Rs. 535.25

   Amount spent on Sunday = Rs(84 + 159.5 + 147 + 187) = Rs. 577.5

   Least amount was spent on Monday.
33. Total expense on Thursday for buying D type of vegetables is approximately what percent of the expense for buying C types of vegetables on Sunday?

A. 105% B. 106% C. 104% D. 107%

Answer: Option A

Explanation:

Amount Spent on D type on Thursday = Rs. 155

Amount spent on C type on Sunday = Rs. 147

Required % = \( \frac{155}{147} \times 100 \approx 105\% \)

34. The expense on B type of vegetables on Saturday is equal to that on which type of vegetables on any day?

A. A B. B C. C D. D

Answer: Option D

Explanation:
Amount spent on B type on Saturday = Rs. 155

Also amount spent on D type of Thursday is Rs. 155

35. What is the ratio of the rate of the costliest vegetables to that of the cheapest on Friday?

A. 4:63  B. 17:36  C. 21:1  D. None of these

Answer: Option D

Explanation:

Required ratio = 19:7