

Directions (Q. 1-5): Each of the questions below consists of a question and two statements numbered, I and II given below it. You have to decide whether the data given in the statements are sufficient to answer the question. Read both statements and choose the most appropriate option.

1. How many persons are standing between Land K in a straight line of 19 persons? (Note: All are standing in a straight line, facing north).

I. Y stands on the extreme left end of the line. Only five persons stand between Y and K. Only six persons stand between K and R. Only four persons stand between R and L.

II. J stands exactly in the middle of the line. Only two persons stand between I and J. Only five persons stand between I and L. I stands to the left of L. K stands third to the left of J.

- (1) The data even in both statements I and II together are not sufficient to answer the question.
- (2) The data in both statements I and II together are necessary to answer the question.
- (3) The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
- (4) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- (5) The data in statement I alone are sufficient to answer the question while the data in statement II alone are not sufficient to answer the question.

2. Among six persons A, B, C, D, E and F standing around a circle, some of them are facing the centre while others are facing outside (ie opposite to the centre.). What is the position of A with respect to E?

(Note: Facing the same direction means, if one is facing the centre then the other is also facing the centre and vice versa. Facing the opposite directions means, if one is facing the centre then the other is facing outside and vice versa).

I. C stands second to the right of E. E faces outside. C is an immediate neighbour of both D and B. F stands second to the left of D. D faces the same direction as E.

II. Only two persons stand between B and E. Both B and E face outside. E is an immediate neighbour of both D and F. B is an immediate neighbour of both C and A. A is not an immediate neighbour of D.

- (1) The data in both statements I and II together are necessary to answer the question.
- (2) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
- (3) The data even in both statements I and II together are not sufficient to answer the question.
- (4) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- (5) The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

3. How is X related to N?

I. X is mother of J. T is married to Z. N is daughter of T. Z is brother of J.

II. X is married to Y. Y is father of J. J is married to L. J is uncle of N.

- (1) The data even in both statements I and II together are not sufficient to answer the question.
- (2) The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (3) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- (4) The data in both statements I and II together are necessary to answer the question.
- (5) The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

4. Among mobiles R, S, T, U, V and W, which is the costliest?

I. T is costlier than only two mobiles. S is costlier than R but not the costliest. V is costlier than only W.

II. R is cheaper than only two mobiles. V is costlier than W but cheaper than T. T is cheaper than R. S is cheaper than U.

- (1) The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (2) The data even in both statements I and II together are not sufficient to answer the question.
- (3) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- (4) The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (5) The data in both statements I and II together are necessary to answer the question.

5. In a six-storey building (consisting of floors number 1 to 6, wherein the topmost floor is number 6 and the ground floor is number 1) each of the six friends, namely M, N, O, P, Q and R, lives on a different floor (not necessarily in the same order). Who amongst them lives on the lowermost floor?

I. M lives on floor number five. Only two persons live between M and N. Q lives immediately above P.

II. P lives on floor number three. Only two persons live between P and O. N lives immediately above R. N lives on an even-numbered floor.

- (1) The data even in both statements I and II together are not sufficient to answer the question.
- (2) The data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
- (3) The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (4) The data either in statement I alone or in statement II alone are sufficient to answer the question.
- (5) The data in both statements I and II together are necessary to answer the question.

Directions (Q. 6-10): In this question are given four statements followed by five conclusions, one of which definitely does not logically follow (or is not a possibility of occurrence) from the given statements. That conclusion is your answer.

(Note: You have to take the four given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically does not follow from the given statements disregarding commonly known facts.)

6. Statements:

No toy is a doll.

All guns are toys.

All houses are dolls.

All dolls are baskets.

Conclusions:

(1) All baskets are toys.

(2) No gun is a house.

(3) All gun's being baskets is a possibility.

(4) All houses are baskets.

(5) No doll is a gun.

7. Statements:

Some logics are reasons.

All reasons are arguments.

All arguments are fights.

No fight is a discussion.

Conclusions:

(1) All discussions being logic is a possibility.

(2) No discussion is an argument.

(3) All logics being discussion is a possibility.

(4) All reasons are fights.

(5) No reason is a discussion.

8. Statements:

All references are mails.

All mentions are references.

All comments are mentions.

No mail is a declaration.

Conclusions:

(1) No reference is a declaration.

(2) All comments are mails.

(3) No mention is a declaration.

(4) All declarations being comments is a possibility.

(5) At least some mails are mentions.

9. Statements:

Some moments are flashes.

All moments are seconds.

All flashes are instances.

No instance is an hour.

Conclusions:

(1) All hours being seconds is a possibility.

(2) No second is a flash.

(3) No hour is a flash.

(4) At least some moments are instances.

(5) At least some seconds are instances.

10. Statements:

All circles are spheres.

All spheres are rectangles.

No rectangle is a pyramid.

No pyramid is a triangle.

(1) At least some circles are pyramids.

(2) All triangles being circles is a possibility.

(3) All rectangles being triangles is a possibility.

(4) At least some rectangles are circles.

(5) No pyramid is a sphere.

11. Statements:

No hotel is a motel.

All motels are apartments.

All apartments are inns.

No inn is a guesthouse.

(1) All hotels being inns is a possibility.

(2) No motel is a guesthouse.

(3) All hotels being apartments is a possibility.

(4) No motel is an inn.

(5) No guesthouse is an apartment.

Directions (Q. 12): Read the following statements carefully and answer the given question.

Cocoa and chocolate products have been used as medicine in many cultures for centuries. Chocolate is made from plants, which means it contains many of the health benefits of leafy vegetables.

Which of the following statements weakens the above argument?

(A) Dark chocolate contains a large number of antioxidants which slow down the ageing process.

(B) A small study revealed that regular intake of chocolate increases insulin sensitivity, thus lowering the chances of diabetes.

(C) Green leafy vegetables have substances which protect skin from UV rays.

(D) Chocolates have three types of fats, one of which increases the cholesterol level.

(E) Cocoa increases blood flow to the retina, thus giving a boost to vision.

(1) Only D

(2) Only A and E

(3) Only C

(4) None of the given statements

(5) Both C and D

Directions (Q. 13-18): Study the following information and answer the questions.

Seven friends, namely L, M, N, O, P, Q and R, like different animated movies, namely Finding Nemo, Rio, Frozen, Up, Lion King, Shrek and Cars, but not necessarily in the same order. Each friend also has a presentation on topics of different subjects, namely Civics, History, English, Geography, Chemistry, Physics and Biology but not necessarily in the same order.

Q has a presentation on Civics and likes neither Frozen nor Up. The one who likes Finding Nemo has a presentation on History. L likes Rio and has a presentation neither on Geography nor on Chemistry. The one who likes Cars has a presentation on Biology. M has a presentation on Physics and does not like Up. The one who likes Up does not have a presentation on Chemistry. O likes Lion King. R does not have a presentation on History and does not like Up. P does not like Up.

13. On which of the following subjects does P have a presentation?

- (1) Chemistry
- (2) English
- (3) Biology
- (4) Other than those given as options
- (5) Geography

14. Four of the following five form a group as per the given arrangement. Which of the following does not belong to that group?

- (1) R - Cars
- (2) Q - Shrek
- (3) N - Up
- (4) M - Frozen
- (5) P - Rio

15. Which of the following combinations is definitely correct?

- (1) N - Chemistry
- (2) R - History
- (3) L - English
- (4) All the given combinations are definitely correct
- (5) P - Geography

16. Which of the following combinations of movie and subject is definitely correct with respect to N?

- (1) Up-Chemistry
- (2) Other than those given as options
- (3) Shrek - Geography
- (4) Up - Geography
- (5) Finding Nemo - History

17. Four of the following five form a group as per the given arrangement, Which of the following does not belong to that group?

- (1) Biology - Cars
- (2) Chemistry - Lion King
- (3) Civics - Shrek
- (4) English - Frozen
- (4) Geography - Up

18. Which of the following movies does Q like?

- (1) Shrek
- (2) Other than those given as options
- (3) Finding Nemo
- (4) Lion King
- (5) Cars

Directions (Q. 19): The given information is followed by two statements, Read them carefully and answer the given questions.

Many parents have written a plea to the administration department of school X discontinue the rule of wearing ties to school.

(A) The school has kept different coloured ties for different academic scorers as part of their uniform. Thus the low-scoring children of school feel discriminated.

(B) The sports uniform of the school does not have a tie; it is to be worn only on Wednesdays.

(1) Statement A weakens but Statement B strengthens the argument

(2) Both Statement A and Statement B weaken the argument

(3) Statement B weakens but Statement A strengthens the argument

(4) Both Statement A and Statement B strengthen the argument

(5) Statement A strengthens the argument and Statement B is a neutral statement.

Directions (Q. 20-25): In the given questions, assuming the given statements to be true. Find which of the given four conclusions numbered I, II, III and IV is/are definitely true and give your answer accordingly.

20. Statement:

$$S > M \geq D > H \leq R \leq T < W$$

Conclusions:

I. $S > H$

II. $W > H$

III. $R < W$

IV. $M > T$

(1) Only I, II and III are true.

(2) Only II is true.

(3) Only I and II are true.

(4) Only I and either II or IV are true.

(5) All I, II, III and IV are true.

21. Statements:

$$M > U > L \leq N; L \geq Y > A$$

Conclusions:

I. $Y < N$

II. $M > N$

III. $N = Y$

IV. $M > A$

(1) Only either II or III is true.

(2) Only IV and either I or III are true.

(3) Only IV is true. (4) Only II is true.

(5) Only III is true.

22. Statements:

$$J \geq A > D = E; L < A < M$$

Conclusions:

I. $M < J$

II. $J > L$

III. $D > L$

IV. $E < M$

(1) Only II is true.

(2) Only I and III are true.

(3) None is true

(4) Only II and IV are true.

(5) Only I and II are true.

23. Statements:

$$Y > F \leq O \leq P; F \geq U < T$$

Conclusions:

I. $Y > P$

II. $T < F$

III. $O > T$

IV. $P < U$

(1) Only I is true.

(2) Only II is true.

(3) Only III is true .

(4) None is true.

(5) Only I and IV are true.

24.

Statement:

$$M > H \leq Y \leq R < U = Z \geq E$$

Conclusions:

I. $M > R$

II. $Z \leq R$

III. $R > E$

IV. $Z > H$

(1) Only I and II are true.

(2) Only IV is true.

(3) None is true.

(4) Only II and IV are true.

(5) Only II and III are true.

25.

Statement:

$$P > Q \leq C \leq B = M > D$$

Conclusions:

I. $M > Q$

II. $D \leq Q$

III. $M = Q$

IV. $C > D$

(1) None is true

(2) Only IV is true

(3) Only either I or III is true

(4) Only II and I are true

(5) Only I is true

Directions (Q. 26-32): Study the following information carefully and answer the given questions.

A, B, C, D, E, F, G and H are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the centre of the table while those who sit in the middle of the sides face outside. Each of them likes a different subject, viz Mathematics, Hindi, English, Biology, Chemistry, Physics, History and Geography. (None of the information given is necessarily in the same order.)

- C sits third to the left of the one who likes Geography. The one who likes Geography faces outside. Only two persons sit between C and H.
- The one who likes Mathematics sits on the immediate right of H. The one who likes Chemistry sits second to the right of G. G is neither an immediate neighbour of H nor of C. G does not like Geography.
- Only one person sits between A and the one who likes Chemistry.
- D sits on the immediate left of the one who likes Physics. G does not like Physics.
- E likes History. E is not an immediate neighbour of A. The one who likes Hindi is an immediate neighbour of E.
- The one who likes Biology is an immediate neighbour of F.

26. Who amongst the following sits diagonally opposite the one who likes Mathematics?

- (1) The one who likes Hindi
- (2) D (3) A
- (4) The one who likes English
- (5) The one who likes Biology

27. Who among the following represent the immediate neighbours of the one who likes Chemistry?

- (1) B, F
- (2) C, E
- (3) B, E
- (4) D, F
- (5) F, H

28. Who among the following sits exactly between H and B?

- (1) C
- (2) The one who likes Hindi
- (3) The one who likes English
- (4) G
- (5) A

29. Which of the following is true regarding B?

- (1) B is one of the immediate neighbours of D.
- (2) The one who likes Geography is an immediate neighbour of B.
- (3) B sits second to the left of H.
- (4) B likes History.
- (5) B is an immediate neighbour of the one who likes Mathematics.

30. What is the position of the one who likes Physics with respect to G?

- (1) Second to the left
- (2) Third to the right
- (3) Fourth to the left
- (4) Second to the right
- (5) Third to the left

31. Which of the following subjects does D like?

- (1) Biology
- (2) Mathematics
- (3) Hindi
- (4) Chemistry
- (5) English

32. Who among the following likes Geography?

- (1) B
- (2) F
- (3) H
- (4) A
- (5) D

Direction (Q. 33-35): Read the following information and the sentences (A), (B), (C), (D), (E) and (F) given below it carefully and answer the questions.

Scientists are worried that using very high concentration of repellents, a fogging agent is rendering mosquitoes more and more resistant. This is making the repellent ineffective overtime.

(A) Resistance development among mosquitoes is higher than all other insects. This shows that mosquitoes are more adaptive than other insects.

(B) If the increase in concentration of repellent does not stop, it would end up becoming so toxic that it would endanger the health of humans as well as the ecosystem as a whole.

(C) In places where increased concentration of mosquito repellents are used, mosquito control is more effective than in other areas.

(D) While regular-concentration mosquito repellent must be sold at a subsidised price on government orders, the one with high concentration only helps make good profits.

(E) The government should make a policy regarding the limits to concentration of mosquito repellents and ensure its strict implementation.

(F) Development of resistance against repellent drugs is naturally present in mosquitoes and does not depend on the amount of repellent used.

33. Which of the given statements weakens the given information?

- (1) A
- (2) D
- (3) E
- (4) B
- (5) F

34. The development of resistance amongst mosquitoes may be purposefully done by the mosquito-repellent-producing companies. - An industry expert Which of the given statements substantiates the expert's comment?

- (1) Both C and D
- (2) Only C
- (3) Only B
- (4) Only D
- (5) Only A

35. Which of the following represents a consequence of the increased concentration of repellents?

- (1) F
- (2) D
- (3) A
- (4) B
- (5) C

Direction's (Q. 36): Read the given information and answer the question.

Recently a youth was shifted to another hospital from hospital ABC due to food poisoning. The patient had been admitted in hospital ABC for Malaria. "Because no outside food is allowed in the hospital premises, we are very sure that it was the food provided by the hospital staff that led to the food poisoning." - A statement by the parents of the youth.

Which of the following can be a course of action to avoid such a mishap?

- (1) The parent of the patients should be given a compensation to ensure that the hospital is not criticised in any way.
- (2) The reason for the food poisoning should be identified and the food provided in the hospital should be inspected regularly.
- (3) Local vendors which provide fruits, vegetables and other eatables to the hospital must be questioned.
- (4) CCTV cameras should be installed in the hospital cafeteria to ensure that spoilt food is not provided to the patients.
- (5) Patients should be asked to bring food from their houses rather than provide it at the hospital so that if such a case occurs again the hospital will not be responsible.

Directions (Q. 37-42): Read the given information and answer the questions.

When a word and number arrangement machine is given an input line of words and numbers it arranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two-digit numbers)

Input: left 46 burn 82 95 part 72 vibe bold 49 mint 59

Step I. 95 left 46 bum 82 part 72 vi be 49 mint 59 bold

Step II. 82 95 left 46 part 72 vi be 49 mint 59 bold burn

Step III. 72 82 95 46 part vibe 49 mint 59 bold burn left

Step IV. 59 72 82 95 46 part vibe 49 bold bum left mint

Step V. 49 59 72 82 95 46 vibe bold burn left mint part

Step VI. 46 49 59 72 82 95 bold bum left mint part vibe

Step VI is the last step of the above arrangement as the intended output of arrangement is obtained.

As per the rules followed in the given steps, find the appropriate steps for the given input.

Input: 29 cone 42 pale fear 39 67 fame 32 weld 77 turn.

37. Which step number is the following output?

77 29 42 pale fear 39 67 fame 32 weld turn cone

- (1) I
- (2) III
- (3) VI
- (4) IV
- (5) There is no such step

38. What is the position of 'fame' from the right of '67' in the second-last step?

- (1) Eighth
- (2) Third
- (3) Fifth
- (4) Ninth
- (5) Seventh

39. Which of the following is the fifth element to the right of "29" in Step II?

- (1) cone
- (2) turn
- (3) fame
- (4) 39
- (5) 32

40. How many elements are there between '77' and 'weld' in the last step?

- (1) Five
- (2) Three
- (3) One
- (4) Four
- (5) Two

41. In step II, which element(s) appear(s) exactly between 'pale' and '32'?

- (1) Only 'weld'
- (2) Both 'weld' and '42'
- (3) Both 'fear' and '39'
- (4) Only 'fear'
- (5) Only '39'

42. Which of the following represents the first two and the last two elements in the third-last step?

- (1) 32, 39, pale, weld
- (2) 39, 42, fear, pale
- (3) 29, 32, pale, turn
- (4) 29, 32, pale, weld
- (5) 32, 39, fear, pale

Directions (Q. 43-44): Read the given information carefully and answer the given question.

Point N is 8m to the west of Point O. Point P is 4m to the south of Point O. Point Q is 4m to the east of Point P. Point R is 6m to the north of Point Q. Point S is 8m to the west of Point R. If Point T is 2m to the south of Point S.

43. How far and in which direction is Point T from Point N?

- (1) 4m to the east
- (2) 8m to the west
- (3) 4m to the west
- (4) 8m to the east
- (5) 6m to the south

44. If point T is 4m to the north of point E, then what is the distance between E and Q?

- (1) 11m
- (2) 8m
- (3) 15m
- (4) 5m
- (5) 9m

45. Read the given information carefully and answer the question:

“People do not prefer working in private organisations today as private organisations do not provide any kind of job security.”--Statement by a citizen of Country A. Which of the following negates the statement made by the citizen?

- (1) Some private companies in country A are very good paymasters and pay their employees well as long as their employees have good performance.
- (2) Many private organisations expect employees to work for them in order to ensure that the work-is compared with others.
- (3) Private companies can take the liberty of firing employees based on their performance.
- (4) It has been noticed recently that private organisations take a lot of effort to retain their employees to get benefit from their experience.
- (5) Some private organisations prefer recruiting fresh graduates to extract more work in comparatively lesser pay.

46. Read the given information and answer the question:During peak hours the local trains of city M are chaotic. Generally, peak hours are a specific time period in the morning when every one goes to work and in the evening when people return. Some people feel that the state government has not taken any measures in the past two years to deal with the situation.

Which of the following weakens the perceptions of the people?

- (1) In the past one year the state government has increased the frequency of trains in peak hours and has also increased the number of passengers per train.
- (2) In the past two years the state government has received many petitions signed by the locals of city M travelling by trains, suggesting that much improvement is required in the current condition of the trains.
- (3) The first-class passengers of the local trains feel that their plight is worse than that of the second-class passengers in the trains.
- (4) As the population of the city is ever increasing due to high rate of migration and better job opportunity, there is a surge in the number of people travelling by trains.
- (5) A passenger has given a statement that 20 years ago it was possible to get inside the train.

Directions (Q. 47-50): Study the following information to answer the given questions.

A, B, C, D, E, F, G and H are sitting in a straight line equidistant from each other (but not necessarily in the same order). Some of them are facing south while some are facing north.

(Note: Facing the same direction means, if one is facing north then the other is also facing north and vice versa.

Facing the opposite directions means if one is facing north then the other is facing south and vice versa.)

H faces north. C sits at one of the extreme ends of the line. A sits third to the left of C. D is not an immediate neighbour of C. G sits third to the right of A. B sits on the immediate right of G. B does not sit at any of the extreme ends of the line. Only one person sits between F and D. G sits second to the left of F. E sits second to the right of B. Both the immediate neighbours of G face the same direction. Both the immediate neighbours of A face the opposite directions. E faces the same direction as B.

47. Who amongst the following sits second to the right of F?

- (1) H
- (2) D
- (3) C
- (4) G
- (5) A

48. Which of the following is true with respect to the given information?

- (1) G sits at one of the extreme ends of the line.
- (2) B sits exactly between A and F.
- (3) B sits third to the right of E.
- (4) A faces north.
- (5) A sits second to the left of B.

49. How many persons in the given arrangement are facing North?

- (1) Four
- (2) One
- (3) Three
- (4) Two
- (5) More than four

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

- (1) B, A
- (2) D, C
- (3) E, B
- (4) A, E
- (5) G, F

Answers

1. (3) 2. (5) 3. (3) 4. (3) 5. (2) 6. (1) 7. (3) 8. (4) 9. (2) 10. (1) 11. (4) 12. (1) 13. (4) 14. (5) 15. (3) 16. (4) 17. (4) 18. (1) 19. (5) 20. (1) 21. (2) 22. (4) 23. (4) 24. (2) 25. (3) 26. (1) 27. (3) 28. (5) 29. (5) 30. (5) 31. (1) 32. (2) 33. (5) 34. (1) 35. (4) 36. (2) 37. (1) 38. (3) 39. (5) 40. (1) 41. (3) 42. (2) 43. (1) 44. (2) 45. (4) 46. (1) 47. (2) 48. (5) 49. (1) 50. (2)