

 UPKAR'S

**CSAT**

**Logical Reasoning**  
&  
**Analytical Ability**



**Dr. M.B. Lal  
&  
Ashok Gupta**

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*By*  
Dr. M. B. Lal  
&  
Ashok Gupta

**UPKAR PRAKASHAN, AGRA-2**

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## Questions and Statements

In such type of test, a question is given followed by two statements. You have to find out that which statements is/are sufficient to answer the question ?

**Example**—Question—Who is brother of B ?

**Statement**—I. B is brother of A.

II. B's father is husband of A's mother.

**Give Answer**—

- (A) If only statement I is sufficient to answer the question.
- (B) If only statement II is sufficient to answer the question.
- (C) If either I or II alone is sufficient to answer the question.
- (D) If both statement I and II are not sufficient to answer the question.
- (E) If both statement I and II are sufficient to answer the question.

**Answer with Explanation (D)**—From the statement I, B is brother of A hence A may be brother of B and A may be sister of B. Therefore, statement I is not sufficient to answer the question from the statement II, B's father is husband of A's mother. Hence, A and B are the children of single parents, but it is not certain that A is daughter or son. Therefore, statement II is also not sufficient to answer the question.

Beside this if we combine both the statements, still there is no answer for the question. Therefore, option 'D' is our answer.

### Exercise

**Directions**—(Q. 1–32) Each question consists of two statements I and II given below it. You have to find out all possible combinations which could be sufficient for answering a question. Read both the statements—

**Give Answer**—

- (A) If only statement I is sufficient to answer the question.

- (B) If only statement II is sufficient to answer the question.

- (C) If either I or II alone is sufficient to answer the question.

- (D) If both the statements I and II are sufficient to answer the question.

- (E) If both the statements I and II are not sufficient to answer the question.

1. Lal is taller than Nand. Jim is taller than Herry. Who is the tallest of them ?

**Statement**— I. Jim is taller than Nand.

II. Lal is taller than Harry.

2. In our school how many students of class V are there, who play chess ?

**Statement**— I. No girl likes to play chess.

II. There are 40 students in Class V.

3. Jay is 10th student in the class. How many students are in class.

**Statement**— I. His friends ranks 58 in that class which is the last rank.

II. Jay ranks 49th from the opposite end (another end).

4. What is Tomar's age ?

**Statement**— I. Tomar could not appear in the last examination. He is two months short than the required age which is 18 years.

II. He will be able to cast his vote this year and the minimum age for voting is 18 years.

5. How many brothers does Ramu have ?

**Statement**— I. Ramu's father has three children.

II. Ramu has two sisters.

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6. Who is the tallest in five friends ?  
**Statement**— I. D is taller than A and C.  
II. B is shorter than E but taller than D.
7. At what time did the train depart ?  
**Statement**— I. Generally the train departs at right time.  
II. The scheduled departure time is 14 : 30.
8. When will be Chandra's birthday this year ?  
**Statement**— I. It occurs between 11 and 13 February.  
(Thursday occurs on 11 February)  
II. It does not occur on Saturday.
9. How many students of science got more than 60% marks ?  
**Statement**— I. 35% from all the students got 60% marks.  
II. The students who got 60% marks are 55% from science.
10. How many matches will be played between A and B in this competition ?  
**Statement**— I. A has already won 3 matches against B.  
Simultaneously it has also won the competition after winning 3rd match.  
II. Fifth match will be played next week.
11. What is relation between D and A ?  
**Statement**— I. B is brother of A.  
II. B is son of D.
12. How many times is Utpal heavier than Vilas ?  
**Statement**— I. Vilas's weight is 65 kilogram.  
II. Amar's weight is 10 kg more than utpal's weight.
13. In which year was Subhash born ?  
**Statement**— I. In 1989 Subhash's mother was 44 years old.  
II. Subhash was born 3 years after his mother's marriage.
14. What is Ashok's height ?  
**Statement**— I. Pranab's height is 5'9" and he is 4" taller than Ashok.  
II. Vikash is 3'' shorter than Pranab.
15. In the game of playing cards there are four members, who is C's partner ?  
**Statement**— I. D is sitting opposite to A.  
II. B is sitting in the the right of A and in the left of C.
16. On which day of January Suhas departed to Germany ?  
**Statement**— I. Suhas has passed 10 years in Germany till now.  
II. Suhas's friend Anil departed to Germany on 15 Feb. and he accompanied Suhas 20 days after Suhas's arrival.
17. On which day Robin met an accident ?  
**Statement**— I. Robin left hospital on Saturday 3 days after the accident.  
II. Robin was going on Scooter on Monday.
18. In which year Rahul was born ?  
**Statement**— I. Rahul is 25 year younger than his mother.  
II. Rahul's brother who was born in 1964 is 35 year younger than his mother.
19. What is monthly salary of Srikant ?  
**Statement**— I. Srikant gets 15% more than Subodh while Subodh get 10% less than Prabhat.  
II. Prabhat's monthly salary is Rs. 2500.
20. How long did a man travel on a particular day ?  
**Statement**— I. His average was 160 km / day in last 10 days.  
II. He walked 8 hours with an average speed of 20 kms.
21. A, B and C left a cinema hall and they forgot the bag. Who forgot the bag there ?  
**Statement**— I. When they were entering into the cinema hall B did not have any bag.  
II. C had his own bag when they came out from the cinema hall.

22. Of three buildings, which is the lowest ?  
**Statement**— I. All buildings follow the rules formed by the corporation.  
 II. Of these two buildings have similar height.
23. What is the weight of a person ?  
**Statement**— I. If the weight of this person is not included the average weight of the group decreases 2 kg while their average weight was 30 kg.  
 II. The weight of this person and his friend is 87 kg.
24. How many cubes of ice can pervade in a vessel whose capacity is 80 C.C. ?  
**Statement**— I. The length, width and height of ice cube is 1/2 cm.  
 II. 640 cubes of ice occupy 320 C.C.
25. What was the total sale of the company ?  
**Statement**— I. The company sold 8000 piece to A @ 25/- per piece.  
 II. This company does not manufacture any other product.
26. What is Raju's age ?  
**Statement**— I. Raju, Vimala and Kishore belong to same age group.  
 II. The sum of the age of Vimala, Kishore and Abhishek is 32 and Abhishek's age is equal to the sum of Vimala and Kishore's age.
27. What is the quantity of the exported rose apple of Jhandoba ?  
**Statement**— I. 80,000 ton of Jamun has been exported to America from Jhandoba which is 10% of the total export of Jamun.  
 II. The export of Jamun is 12.5% against the targeted export 1.9 ton from Jhandoba.
28. Which will be 14th day of a month ?  
**Statement**— I. The last day of that month is Wednesday.
- II. The third Saturday of that month fell on 17th.
29. Is Shridar capable to get entrance in a company ?  
**Statement**— I. Company does not permit the entrance of any unknown person.  
 II. All the workers are capable to get entrance.
30. What is the reason that most of the musicians are muslims ?  
**Statement**— I. Besides Muslim religion no one of the other religions encouraged the fine art.  
 II. Muslim did not study in the western style.
31. Why did Indian Scientists not progress in any field ?  
**Statement**— I. Indian Scientist did not get the facilities for advanced scientific experiments.  
 II. Indian Scientist thinks that the knowledge of western scientific progress is sufficient for the progress of any country.
32. Does coffee drinking cause the headache ?  
**Statement**— I. The stimulating of pancrease causes headache.  
 II. Coffee contains caffein which stimulates pancrease much.
- Directions**—(Q. 33–37) In the followings each question followed by two statement I and II are given. You have to ascertain that the information given in the statement is sufficient or not. Read carefully both the statements and answer—  
 (A) If the information given in statement I is sufficient to answer the question whereas the information given in statement II is not sufficient to answer the question.  
 (B) If the information given in the statement II is sufficient to answer the question whereas the information given in the statement I is not sufficient to answer the question.  
 (C) If either the information given in the statement I or in II is not sufficient to answer the question.

(D) If both the information given in the statements I and II are not sufficient to answer the question.

(E) If both the information given in the statement I and II are sufficient to answer the question.

33. In which direction is Shashidhar facing ?

**Statement**— I. Early morning, Shashidhar was standing on the ground in front of an effigy. The shadow of the effigy was appearing towards the right side of Shashidhar.

II. Early morning Shashidhar was standing on the ground, when he turned towards the left. The shadow was appearing behind him.

34. Who teaches History from P, Q, R, S & T ?

**Statement**— I. From them, each teaches only one subject Q teaches Maths whereas T Teaches Science. P or R does not teach Geography. S or P does not teach English.

II. T and R are the teachers of Science and English. P is the teacher of Math.

35. Facing towards the South, who is just left to Ramakant in a row of the boys ?

**Statement**— I. Suresh is just right of Chandrakant and he is fourth to the left of Ramakant.

II. Suresh is third to the left of Ramakant and Naresh is second to the left of Suresh.

36. Among the six friends A, B, C, D, E and F who got the maximum marks ?

**Statement**— I. B got fewer marks than A and F but not fewer than C, D and E.

II. F did not get more marks than B but not as A.

37. What will the position of hour's hand in the clock at 7.30 P.M. ?

**Statement**— I. English alphabets are placed in the dial of clock in place of number.

II. The position of hour's hand is on P at 7 P.M.

**Direction**—(Q. 38–42) In each of the following given questions there is a question followed by two statements I and II are given. You have to find out that the information given in the statements is sufficient to answer or not. Read both the statements.

**Give Answer**—

(A) If only statement I is sufficient to answer the question.

(B) If only Statement II is sufficient to answer the question.

(C) If either I or II alone is sufficient to answer the question.

(D) If both the Statements I and II are sufficient to answer the question.

(E) If both the Statements I and II are not sufficient to answer the question.

38. What is the meaning of 'come' in a coded language ?

**Statement**— I. The meaning of 'pit na ja' is 'come and go' in that coded language.

II. The meaning of 'na dik sa' is 'you may go' in that coded language.

39. What does the relation P have with M ?

**Statement**— I. P is brother of K and T.

II. T is daughter of Q and sister of M's daughter.

40. Who is the tallest amongst M, T, R, K and Q ?

**Statement**— I. T is taller than R, M and Q but shorter than K.

II. R is shorter than T and M but taller than Q.

41. In which direction is D from P ?

**Statement**— I. S is in the South from P which is in the West of D.

II. P and R is in a straight line and R is in the South from D.

42. In which month of the year Mohan was born ?

**Statement**— I. Mohan was born in the winter.

II. Mohan was born exactly after 14 month of his sister, birth and she was born in the month of October.

**Answers with Explanation**

1. (D) Lal > Nand ... (i)  
Jim > Harry ... (ii)  
We cannot determine the exact answer even after considering both the statements.
2. (D) Both the statements can not derive any conclusion.
3. (B) According to II statement, the number of all the students  

$$= (10 + 49) - 1$$

$$= 58$$
4. (A) Tomar's age = 17 years 10 month.
5. (E) Ramu's father has three children in which two are sisters. Clearly, Ramu is the only son in the family. Thus, we can say, Ramu has no brother.
6. (E)
7. (D) From the Statement I, train Generally leaves at the right time but it is not clear that the train always leaves at right time. It might be possible that the train would not have left at right time. Hence, Statement II is not sufficient to answer.
8. (A) From the Statement I, clearly, it is 12 February.
9. (D) 10. (E)
11. (D) From the Statements, it is not mentioned that A and D are male or female.
12. (D) There is no relation among Utpal and Vilas's weight.
13. (D) 'In which year, Shuhas' mother married, it is not clear.
14. (A) Ashok's height is  $5' 9'' - 4'' = 5' 5''$ .
15. (C) 16. (D) 17. (A) 18. (E) 19. (E)
20. (B) 21. (E) 22. (D)
23. (A) The average weight of 21 persons including the new person = 30 kg  

$$\text{Total weight} = 21 \times 30$$

$$= 620 \text{ kg}$$
  
 Average weight of 20 persons excluding the person = 28 kg  

$$\therefore \text{Total weight} = 28 \times 20$$

$$= 560 \text{ kg}$$

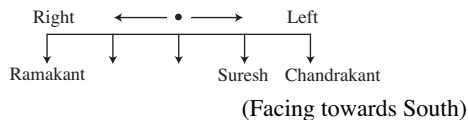
$$\begin{aligned} \text{Weight of new person} &= 620 - 560 \\ &= 60 \text{ kg} \end{aligned}$$

24. (C) 25. (E)
26. (E) In Statement II, Vimala + Kishore + Abhishek = 32  

$$\text{Abhishek} = \text{Vimala} + \text{Kishore}$$

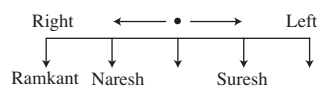
$$\therefore \text{Vimala} + \text{Kishore} = 16$$

$$\therefore \text{The age of Raju, Vimala and Kishore is the same. Hence, the age of Raju is 8 years.}$$
27. (C) 28. (B) 29. (D) 30. (A) 31. (A)
32. (E)
33. (C) From Statement I, since, the shadow of effigy is appearing towards the right side of Shashidhar and the shadow of any object appears towards the West direction in every morning, hence the direction of right side of Shashidhar was West. Hence, Shashidhar was facing towards South.  
 From Statement II, the shadow was appearing in the West when Shashidhar turned towards left, it means that his left is East. Hence, Shashidhar was facing towards South.  
 Thus, we can say that the information given in Statement I or II is sufficient to answer.
34. (A) From Statement I—  
 P—History  
 Q—Mathematics  
 R—English  
 S—Geography  
 T—Science  
 Hence, History is taught by P.  
 From Statement II,  
 History is taught either by Q or R, hence, the information given in Statement I is sufficient to answer.
35. (B) From Statement I



Hence, we cannot determine who is right of Ramakant.

From Statement II,



Hence, Naresh is sitting left of Ramakant.



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36. (E) From Statement I,  
 $A & F > B > C, D$  and E  
 From Statement II,  
 $A > F > B$   
 From both the Statements I and II  
 $A > B > C, D$  and E  
 Hence, it is clear with both the statements that A got maximum marks.
37. (D) By placing letter in place of number in the clock.  
 $1 \rightarrow A, 2 \rightarrow B, 3 \rightarrow C, 4 \rightarrow D, 5 \rightarrow E, 6 \rightarrow F,$   
 $7 \rightarrow G, 8 \rightarrow H, 9 \rightarrow I, 10 \rightarrow J, 11 \rightarrow K,$   
 $12 \rightarrow L$   
 Hence, it is clear that the position of hand of the clock between 7 and 8, or G and H, but the G and H are imaginary letters, therefore, no inference can be drawn by the Statement I. From Statement II.  
 $7 \rightarrow G$   
 But here, no letter is given for 8, hence we cannot determine.
38. (D) From Statement I and II,  
 $'na' \Rightarrow go$   
 $\therefore$  From I,  $9 \Rightarrow$  Either 'pit' or 'ja'
39. (E) From the Statement II, T is M's daughter's sister means T is M's daughter. From the Statement I,  
 P is T's brother  
 $\therefore$  P is M's son.
40. (C) From Statement I, T is taller than R, M and Q, but shorter than K.  
 $\therefore$  K is the tallest.  
 From Statement II R, T and M are shorter than K but taller than Q. Hence, K is the tallest.
41. (A) From the Statement I, S is in South of P and P is in West of D. Hence, D is East of P.
42. (B) From Statement II, Mohan was born exactly 14 month after his sister's birth and his sister was born in October. Hence, Mohan was born in January.



## 2

## Verification of the truth of the Statement

In such type of test, an incident is given and it is to be found that this incident occurs always or never. In some cases, any word or sentence is given and then a question is asked. Which is the most important factor/element in that word or sentence? The questions are based upon Geographical, Scientific, Social, and Sports and Games related information.

**Example 1.** A person is going towards North in the night and he sees Dhruv Tara and sees it on his left side. Which of the following statements justify the fact?

- (A) Always                      (B) Sometimes  
(C) Generally                  (D) Never

**Answer with Explanation (D)**—Since, we know that Dhruv Tara always appears on North and that person is also going towards North, clearly, he faces Dhruv Tara and it never appears on his right side.

**Example 2.** Bewilderness always comprises—

- (A) Difficulty                  (B) Anxiety  
(C) Helpless state              (D) Sharpness

**Answer with Explanation (B)**—Bewilderness always comprises mental tension and mental tension causes anxiety.

### Exercise-1

**Direction**—In each of the following questions, many alternative answers are given for a statement. Out of these alternatives only one answer verifies the statement. Find out the correct alternative.

- If we are going towards South in the morning, we will see the Sun rising on the left side—  
(A) Always  
(B) Sometimes  
(C) Generally  
(D) Never
- A boy is sitting on the back-seat of the car. When the driver of the car starts it suddenly, the boy bends towards the backside—  
(A) Always                      (B) Generally  
(C) Sometimes                (D) Never
- A lady in India can marry with the brother of deceased husband but no man can marry the sister of deceased wife—  
(A) Always                      (B) Generally  
(C) Sometimes                (D) Never
- Yesterday I saw an ice-cube which had been melted in the heat of the hearth—  
(A) Always                      (B) Sometimes  
(C) Generally                  (D) Never
- My 10 year niece is taller than my 12 year son—  
(A) Always                      (B) Generally  
(C) Sometimes                (D) Never
- A boy driving a bicycle put the brake suddenly he bends forward—  
(A) Sometimes                (B) Never  
(C) Generally                  (D) Always
- Sun shines on the pole at midnight—  
(A) Never                        (B) Sometimes  
(C) Always                      (D) Generally
- High tides occurs on Maha-ashtami—  
(A) Sometimes                (B) Never  
(C) Generally                  (D) Always
- The main work of Rajya is to formulate the law—  
(A) Never  
(B) Sometimes  
(C) Always  
(D) Generally

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10. Whenever the warm current and cold current interact with each other, there is always a fog—  
 (A) Never (B) Sometimes  
 (C) Never (D) Always
11. An inferior egg always sinks in water—  
 (A) Never (B) Sometimes  
 (C) Always (D) Generally
12. Ice-cube floats on water—  
 (A) Generally (B) Sometimes  
 (C) Never (D) Always
3. Justice is always related to—  
 (A) Deceit (B) Generosity  
 (C) Just (D) Nobility
4. A Tree always has—  
 (A) Leaves (B) Flowers  
 (C) Roots (D) Fruits
5. An animal always has—  
 (A) Lungs (B) Skin  
 (C) Brain (D) Heart  
 (E) Life
6. A car must have—  
 (A) Driver (B) Bonnet  
 (C) Dicky (D) Bumper  
 (E) Wheels
7. Run must have—  
 (A) Umpire (B) Competitors  
 (C) Spectators (D) Victory  
 (E) Prize
8. A book always comprises—  
 (A) Lessons (B) Pages  
 (C) Figure (D) Content
9. In a dispute there must be—  
 (A) Hatred (B) Injustice  
 (C) Dissent (D) Excitement
10. Bargaining always comprises—  
 (A) Generosity (B) Baseness  
 (C) Give and take (D) Costliness
11. Bravery must have—  
 (A) Courage (B) Intelligence  
 (C) Power (D) Experience
12. Astonishment always has—  
 (A) Crowd (B) Surprise  
 (C) Wastage (D) Rustic
13. Blameless always has—  
 (A) Punishment (B) Blame  
 (C) Prevention (D) Scold
14. Mentality always has—  
 (A) Cruelly (B) Perception vision  
 (C) Indifference (D) Impulse
15. A river must have—  
 (A) Fish (B) Weeds  
 (C) Banks (D) Boats

**Answers with Explanation**

1. (A) Sun rises in the East in the morning. If we go towards South direction in the morning, we face towards South and our left hand's position is on East direction. Hence, going towards Southwards Sun always appears rising from our left side.
2. (A) When car suddenly starts to move, the person who is sitting on the back-seat always bends towards backward.
3. (C) There is no such type of custom, hence it may happen sometimes.
4. (D) The piece of ice is placed near the burning hearth it melts with the heat of the hearth and it never happens that the ice had melted and later we saw the piece of ice.
5. (C) Since, the age of a person does not depend on his/her height, there are many other factors which affect the height.
6. (D) According to the rule of science, a cyclist uses the brakes suddenly he always bend down towards the forward direction.
7. (C) 8. (B) 9. (A) 10. (C)
11. (A) An inferior egg has low density therefore it sinks on the water.
12. (D) Ice is lighter than water hence the piece of ice always float on the water.

**Excercise-2**

1. Election must have—  
 (A) Procession (B) Speech  
 (C) Slogans (D) Candidates
2. Hills always comprise—  
 (A) Trees (B) Animals  
 (C) Water (D) Height

16. A factory must have—  
 (A) Chimney (B) Labour  
 (C) Electricity (D) Seller
17. A paragraph always has—  
 (A) Name System (B) Group of words  
 (C) Expression (D) Structure
18. Women is always—  
 (A) Beautiful (B) Black  
 (C) Charming (D) Fair  
 (E) Lengthy
19. A husband is always ..... than his wife.  
 (A) Taller (B) More handsome  
 (C) Bigger (D) More intelligent  
 (E) None of these
20. Bulky person's life is always—  
 (A) Longer (B) Merry  
 (C) Healthy (D) Short  
 (E) None of these
21. A debate always comprises—  
 (A) Room (B) Speaker  
 (C) Stage (D) Audience  
 (E) Typist
22. A college always comprises—  
 (A) Books (B) Building  
 (C) Black-board (D) Teacher  
 (E) Register
23. Farming always comprises—  
 (A) Cultivator (B) Tractor  
 (C) Spade (D) Land  
 (E) Labour
24. A country comprises—  
 (A) Aeroplane (B) King  
 (C) Army (D) Railway  
 (E) Area
25. Danger always comprises—  
 (A) Enemy (B) Attack  
 (C) Fear (D) Help
26. In management, ..... is always followed.  
 (A) Counselling (B) Rules  
 (C) Encouragement (D) Undue Pressure
27. Disclosure always comprises—  
 (A) Mystery (B) Display  
 (C) Representative (D) Delivering
28. In every singing, it should have—  
 (A) Chorus (B) Musician  
 (C) Drum (D) Words
29. A lotus always comprises—  
 (A) Petals (B) Mud  
 (C) Roots (D) Water
30. Milk always comprises—  
 (A) Cream (B) Oilness  
 (C) Whiteness (D) Water
31. A camera always comprises—  
 (A) Reel (B) Photograph  
 (C) Flash (D) Lens
32. Dispute always comprises—  
 (A) Hatred (B) Opposition  
 (C) Injustice (D) Anger
33. Disease always comprises—  
 (A) Treatment (B) Medicine  
 (C) Germs (D) Reason
34. A motor cycle always comprises—  
 (A) Brake (B) Mirror  
 (C) Engine (D) Horn

### Answers with Explanation

- (D) An election cannot be organised without candidates.
- (D) Hills are always higher than plains.
- (C) Justice is guided by the laws.
- (C) The existence of a tree is not possible without its roots.
- (E) Every animal has life.
- (E) No car can run without wheels.
- (B) In any run, there should be at least two contenders hence there must be a competitor.
- (B) No book can be prepared without the pages.
- (C) The meaning of dispute is ..... Discussion on two different views or opinions. Different views or opinions always comprise disagreement.
- (C) Bargaining always comprises give and take of any thing, commodity or article.
- (A) Bravery must have courage.

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12. (B) Astonishment and surprise are synonyms to each other.
13. (B) The meaning of blameless is to free from blame. Hence, in blameless, there should always be blame.
14. (D) Impulse causes mentality.
15. (C) A river must have its bank.
16. (B) No factory can run without labour.
17. (B) Paragraph is a group of words.
18. (C) Every lady or woman is charming.
19. (E) It is not necessary that a husband must be taller and more handsome, bigger, more intelligent than his wife.
20. (D) The life of bulky person are always short because they are affected by various diseases.
21. (B) There must be a speaker in any debate.
22. (D) No college can run without a teacher.
23. (D) Farming is always done on the land.
24. (E) A country should have area.
25. (C) Danger always comprises fear because of insecurity.
26. (B) Management always gives improvement and for improvement, there should be some rules to follow.
27. (A) Disclosure means to tell a mystery and mystery means a hidden fact or point or topic. Hence, for disclosure there should be a mystery.
28. (D) For every singing , there should be some words.
29. (A) A lotus flower always has petals.
30. (C ) Milk is always white.
31. (D) A camera must have lens.
32. (B)    33. (D)    34. (C)



## 3

## Statement and Conclusion

In such type of test, a statement is given followed by its four conclusion. The candidate is required to find out the correct conclusion, whether it might be wrong.

**Example—Statement**—Some of the football-players are not the teacher of the college.

**Conclusion**—

- (A) No football player is a teacher of the college
- (B) Some teachers of the college may be football player
- (C) Some players of the college, may be teacher
- (D) Shree Rajan who plays the chess, cannot be teacher of the college

**Answer with Explanation (B)**—If some teachers of the college are not football players the remaining teachers of the college may be football-players. Hence, option (B) is correct answer.

### Exercise-1

**Directions**—(Q. 1-5) A statement is given in each of the following questions and it is followed by its four alternatives in which one alternative either support or refute the statement. Find out the alternative from each question.

1. **Statement**—United States of America always favour Israel.

**Conclusions**—

- (A) The headquarter of UNO is in United States of America
- (B) Jewish Lobby in U.S.A. is very powerful
- (C) United States of America agreed to form a committee to investigate the assassination of 18 Palestinians by Israel's soldiers
- (D) Israel is capable to defend itself

2. **Statement**—Industrial development promotes the chances of employment.

**Conclusions**—

- (A) Recession causes unemployment
- (B) The purchasing power of a person decreases on account of unemployment
- (C) Unemployment causes recession
- (D) The life of the people who live in the developed countries is better than that of less developed countries

3. **Statement**—Scientists are the biggest enemy of mankind.

**Conclusions**—

- (A) They have invented many harmful medicines
- (B) They have invented many destructive weapons
- (C) They were unable to prepare a healthy environment for all
- (D) They are serving only for the interest rich nations

4. **Statement**—The family planning programme in India has partly succeeded.

**Conclusions**—

- (A) The population growth rate in India is still very high
- (B) In rural areas, there is no arrangement for proper health care
- (C) The media of Telecommunication are not playing their roles to carry out the messages effectively
- (D) The criticism of limited family is restricted by our religious belief

5. **Statement**—In Hindu Society there is a very much prejudice against a female infant.

**Conclusions**—

- (A) Males are physically stronger than females
- (B) Male infants are supposed to bring prosperity in the family

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- (C) Hindu Society is paternal in nature  
(D) Various methods are being used to detest and abort a female infant in our society
6. **Statement**—Using too much time in T.V. viewing affects on eye-sight. Which of the following four alternatives is true ?  
**Conclusions**—  
(A) T.V. viewing is a wastage of time and energy as well and one can feel fatigue or tiredness if one watches for a longer period  
(B) If one watches T.V. in a bad posture, it affects one's eye-sight  
(C) The persons who have problems with their eye-sight should not watch T.V. programmes  
(D) 60% of the eye's problems are caused by T.V. watching for a longer period
7. **Statement**—To succeed in examination one should work hard. Which of the given four conclusions is true ?  
**Conclusions**—  
(A) Those who work hard always get success  
(B) Examination is closely related with hard work  
(C) No one can get success without hard work  
(D) One who does hard work, always satisfies
- Directions**—(Q. 8–10) In each of the following questions a statement is given and it is followed by its four conclusions A, B, C and D. Find out the conclusion which is correctly derived from the statement.
8. **Statement**—Soldiers serve their country.  
**Conclusions**—  
(A) Those who serve their country, are soldiers  
(B) Women do not serve their country because they are not soldiers  
(C) Generally, men serve their country  
(D) Some men, who are soldiers, serve their country
9. **Statement**—Most of the students are talented.  
**Conclusions**—  
(A) Some students are talented  
(B) No students are there who are not talented  
(C) Some of the students are those who have low standard  
(D) All students are talented
10. **Statement**—Most of the pens of that shop are costly.  
**Conclusions**—  
(A) There are no cheap pens in that shop  
(B) Some pens are costly in that shop  
(C) Some pens are cheap in that shop  
(D) Camlin pens are costly in that shop
11. **Statement**—If a person is a rich, he is very influential.  
**Conclusions**—  
(A) John has much influence, therefore, he is rich  
(B) If a person is not rich, he has no influence  
(C) Kasim is a rich so he is very influential person  
(D) Poor persons have no influence
12. **Statement**—Smokers are affected by cancer.  
**Conclusions**—  
(A) Many of the cancer patients are smokers  
(B) Smoking may cause cancer  
(C) Most of the smokers may be affected by cancer  
(D) Smoking always causes cancer
13. **Statement**—The book which I read yesterday, was the best.  
**Conclusions**—  
(A) The other books which I read, were not excellent  
(B) The book which I read yesterday, was the best book among all the books that I have ever read  
(C) The book of yesterday was as good as other books  
(D) The book of yesterday was excellent
14. **Statement**—Some leaders are corrupt as Nagesh.  
**Conclusions**—  
(A) Nagesh is not corrupt  
(B) Leaders are not corrupt  
(C) Nagesh never be a corrupt  
(D) Some leaders are corrupt

15. **Statement**—Television assures its viewers that they may fall prey to some criminal activity and simultaneously, it is urged T.V. viewers that they should bear the happening silently.

The above-mentioned statement may furnish one of the following conclusions.

**Conclusions**—

- (A) People should not watch T.V. Programme
  - (B) Television intensifies the insecurity feeling among its viewers
  - (C) T.V. viewers are more prone to prey in criminal activities in comparison to other people
  - (D) T.V. viewing is responsible for enhancing of criminal inclination
16. **Statement**—Ignorance is much delighted.
- Conclusions**—
- I. Knowledge is unnecessary.
  - II. Ignorant people are lucky.
- (A) Only I
  - (B) Only II
  - (C) Both I and II
  - (D) Neither I nor II

17. **Statement**—Fortune favours the brave.

**Conclusions**—

- I. The people who endanger themselves are more successful.
  - II. Coward can never be a lucky.
- (A) Only I
  - (B) Only II
  - (C) Both I & II
  - (D) Neither I nor II

**Answers with Explanation**

1. (C) U.S.A. endorsed the formation of a committee for the investigation into the death of 18 Palestines by the soldiers of Israel. It indicates that U.S.A. does not always favour Israel.
2. (D) The living standard of a person in a country depends upon his employment. If a country is developing, the opportunities for the employment will increase. Hence, the fourth alternative confirms the statement.
3. (B) The second alternative confirms the statement that the scientist are the biggest

enemy of mankind because they have invented deadly destructive weapons.

4. (A) The population growth in India is still very high. Hence, the statement that the family planning programme in India has partly succeeded is true.
  5. (B) It is prevalent in Hindu Society that male child extends the family and he enhances the wealth and prosperity. Hence, second alternative confirms the statement.
6. (D)      7. (C)      8. (D)      9. (C)  
 10. (C)     11. (C)     12. (C)     13. (B)  
 14. (D)     15. (C)     16. (B)     17. (A)

**Type II**

In such type of questions, a statement is given followed by two conclusions. The candidate is required to deduce the conclusion based upon this statement. If the conclusion (a) is correct, the answer will be (A) and the conclusion is (b) is correct, the answer will be (B) If both the conclusions are correct, the answer will C and If (a) is correct and (b) wrong and (b) is correct (a) wrong, the answer will (D). If there is no conclusion follows, the answer will be (E).

**Example**—

**Statement**—If you are a refined artist, we have a right job for you to prove your worth.

**Conclusions**—

- (a) You are a refined artist.
  - (b) We a refined artist.
- (A) 1                      (B) 2  
 (C) 3                      (D) 4  
 (E) 5

**Answer with Explanation (B)**—In the given statement the word ‘If’ is given which cannot confirm that you are a refined artist. Hence, the first conclusion can not be followed by the statement. But it is given in the statement, if you are a refined artist and we have a right job to prove your worth. It is clear that we have a requirement of a refined artist. Thus, the second conclusion confirms the statement.

**Exercise—2**

**Directions**—(Q. 1–15) In each of following questions a statement is given followed by two conclusions.

**Give answer**—

- (A) If only conclusion I follows,



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- (B) If only conclusion II follows,  
 (C) If either I or II follows,  
 (D) If neither I nor II follows and  
 (E) If both I and II follows.
- Statements**—Company X has marketed the product, go ahead to purchase if its price and quality are in your consideration.  
**Conclusions**—  
 I. The product must be good in quality.  
 II. The price of the product must be reasonable.
  - Statements**—Vegetables prices are soaring in the market.  
**Conclusions**—  
 I. Vegetables are becoming a rare commodity.  
 II. People cannot eat vegetables.
  - Statements**—This world is neither good nor evil, each man manufactures a world for himself.  
**Conclusions**—  
 I. Some people find this world quite good.  
 II. Some people find this world quite bad.
  - Statements**—Our security investments carry market risk. Consult your investment advisor or agent before investing.  
**Conclusions**—  
 I. One should not invest in securities.  
 II. The investment advisor calculates the market risk with certainty.
  - Statements**—Today out of the world population of several thousand millions the majority of men have to live under Governments which refuse them personal liberty and the right of dissent.  
**Conclusions**—  
 I. People are indifferent to personal liberty and right to dissent.  
 II. People desire personal liberty and right to dissent.
  - Statements**—In diabetes, there is an excess of sugar in the body. Our body needs sugar for energy, the quantity of sugar in excess of body's requirement is excreted through urine.  
**Conclusions**—  
 I. The excessive consumption of sugar is likely to lead to diabetes.  
 II. Consumption of sugar should be avoided.
  - Statements**—Good voice is a natural gift but one has to keep practising to improve and excel in the field of music.  
**Conclusions**—  
 I. Natural gifts need nurturing and care.  
 II. Even though your voice is not good, one keep practising.
  - Statement**—All the organised persons find time for rest. Sunita inspite of her very busy schedule, finds time for rest.  
**Conclusions**—  
 I. Sunita is an organised person.  
 II. Sunita is an industrious person.
  - Statements**—Jade plant has thick leaves it requires little water  
**Conclusions**—  
 I. All plants with thick leaves require little water.  
 II. Jade plants may be grown in places where water is not in abundance.
  - Statements**—Until your country achieves economic equality, political freedom and democracy would be meaningless.  
**Conclusions**—  
 I. Political freedom and democracy go hand in hand.  
 II. Economic equality leads to real political freedom and democracy.
  - Statements**—In case of outstanding candidates, the condition of previous experience of social work may be waived by the Admission Committee for M.A. (Social work).  
**Conclusions**—  
 I. Some of the students for M.A. (Social Work) will have previous experience of social work.  
 II. Some of the students for M.A. (Social Work) will not have previous experience of social work.
  - Statements**—Water supply in wards A and B of the city will be affected about 50% on Friday because repairing work of main lines is to be carried out.  
**Conclusions**—  
 I. The residents in these wards should economise on water on Friday.  
 II. These residents in these wards should store some water on the previous day.
  - Statements**—The government of country X has recently announced several concessions

and offered attractive package tours for foreign visitors.

**Conclusions —**

- I. Now, more number of foreign tourists will visit the country.
- II. The government of country X seems to be serious in attracting tourists.

14. **Statements**—From the next academic year, students will have the option of dropping Mathematics and Science for their school leaving certificate examination.

**Conclusions —**

- I. Students who are weak in Science and Mathematics will be admitted.
- II. Earlier students did not have the choice of continuing their education without taking these subjects.

15. **Statements**—Industrial revolution which first of all started has brought about modern age.

**Conclusions —**

- I. Disparity between rich and poor results in revolution.
- II. Revolution overhauls society.

**Directions**—(Q. 16–22) Symbols @, %, #, \$, © are used with different meanings as explained below—

'P @ Q' means 'P is not greater than Q'.

'P % Q' means 'P is neither greater than nor equal to Q'.

'P # Q' means 'P is neither smaller than nor equal to Q'.

'P \$ Q' means 'P is neither smaller than nor greater than Q'.

'P © Q' means 'P is not smaller than Q'.

In each question, three statements showing relationships have been given, which are followed by **two** conclusions I and II. Assuming that the given statements are true, find out which conclusion(s) is/are **definitely true**.

**Now, mark your answer as—**

- (A) If only conclusion I is true
- (B) If only conclusion II is true
- (C) If either conclusion I or II is true
- (D) If neither I nor II is true
- (E) If both conclusions I and II are true.

16. **Statements**—J # P, P @ B, B % H.

**Conclusions —**

- I. J @ B
- II. J % H

17. **Statements**—W @ V, V # X, Y © V.

**Conclusions —**

- I. X % Y
- II. X \$ W

18. **Statements**—M \$ K, K © F, F % H.

**Conclusions —**

- I. M # F
- II. M \$ F

19. **Statements**—T @ L, L % N, D © N.

**Conclusions —**

- I. N # T
- II. L % D

20. **Statements**—N % R, R @ K, K # F.

**Conclusions —**

- I. R @ F
- II. R # F

21. **Statements**—H © D, D # R, R @ L.

**Conclusions —**

- I. L @ H
- II. H # R

22. **Statements**—E © H, K \$ H, K @ M.

**Conclusions —**

- I. E # K
- II. E \$ M

### Answers with Explanation

1. (E) It has been mentioned in the statement that the person who considers price as well as quality before buying a product should buy the product of company X. Hence, both I and II follow.
2. (D) In the given I Statement, the availability of vegetables is not mentioned. So, I does not follow. For the conclusion II, it is not directly related to the statement and so it also does not follow.
3. (E) In the given statement, it has been mentioned that the world for a man is as he make it himself. So, we can say that some people might find it good, and some quite bad. Hence, both I & II follow.
4. (B) The investment consultants are well acquainted with the market risks. Hence, it has been suggested that one should consult them before investing one's money in securities.
5. (B) It is obvious from the given statement that people desire personal liberty and right to dissent.
6. (A) It is not advisable for avoiding consumption of sugar is not the right

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- approach to avoid diabetes. So, conclusion II does not follow. However in the context of the statement conclusion I follows as excessive sugar is the most likely cause of diabetes.
7. (A) It is clear that conclusion I follows directly from the statement. But, II is not related to the given statement and so it does not follow.
8. (E) Sunita has a very busy schedule. It denotes that she is an industrious but still she spares time for rest. This shows that she is an organised person. Hence, both I and II follow.
9. (B) The given statement talks of jade plants only and not 'all plants with thick leaves. It, therefore I does not follow ? Also, since Jade plants require little water, so they can be grown in the area where water is not in abundance. Hence, II follows.
10. (B) There is nothing mentioned about the relation between political freedom and democracy in the statement. Hence, I does not follow. In case of conclusion II, it is directly followed from the given statement.
11. (E) With the given statement, previous experience is an essential condition for candidates for outstanding candidates, this condition can be waived. It shows that some candidates will have previous experience while some will not.
12. (E) Clearly, the information has been given before hand in order that the residents of that area can collect and store water on the previous day and use less water on Friday. Thus, both I and II follow.
13. (E) It is clear from both the statements that the government has taken the step to attract more tourists. Hence, both I and II follow.
14. (E) The new system provides the students the choice of dropping Science and Mathematics so weak students of these subjects can also be admitted. Hence, I follows. Also, it is mentioned that the new system will come in force from the forthcoming academic year. It shows that this system was not prevalent earlier. Hence, II also follows.
15. (B) The cause of revolution cannot be deduced from the statement. It, therefore I does not follow but the statement describes that Industrial Revolution brought about modern age. It means that revolution overhauls society. Hence, conclusion II follow.
16. (D)  $J \# P \rightarrow J > P, P @ B \rightarrow P \leq B,$   
 $B \% H \rightarrow B < H$   
 $\therefore J > P \leq B < H$   
 I.  $J @ B \rightarrow J \leq B$  (False)  
 II.  $J \% H \rightarrow J < H$  (False)
17. (A)  $W @ V \rightarrow W \leq V, V \# X \rightarrow$   
 $V > X, Y \odot V \rightarrow Y \geq V$   
 $\therefore W \leq V > X$  and  $V \leq Y$   
 I.  $X \% Y \rightarrow X < Y$  (True)  
 II.  $X \$ W \rightarrow X = Y$  (False)
18. (B)  $M \$ K \rightarrow M = K,$   
 $K \odot F \rightarrow K \geq F,$   
 $F \% H \rightarrow F < H$   
 $\therefore M = K \geq F < H$   
 I.  $M \$ F \rightarrow M > F$  (False)  
 II.  $M \# F \rightarrow M = K$  (True)
19. (E)  $T @ L \rightarrow T \leq L, L \% N \rightarrow L < N, D \odot N$   
 $\rightarrow D \geq N, T \leq L < N \leq D.$   
 I.  $N \# T \rightarrow N > T$  (True)  
 II.  $L \% D \rightarrow L < D$  (True)
20. (D)  $N \% R \rightarrow N < R, R @ K \rightarrow R \leq K, K \# F$   
 $\rightarrow K > F$   
 $\therefore N < R \leq K > F$   
 I.  $R @ F \rightarrow R \leq F$  (False)  
 II.  $R \# F \rightarrow R > F$  (False)
21. (B)  $H \odot D \rightarrow H \geq D, D \# R \rightarrow D$   
 $> R, R @ L \rightarrow R \leq L$   
 $\therefore H \geq D > R \leq L$   
 I.  $L @ H \rightarrow L \leq H$  (False)  
 II.  $H \# R \rightarrow H > R$  (True)
22. (D)  $E \odot H \rightarrow E \geq H,$   
 $K \$ H \rightarrow K = H,$   
 $K @ M \rightarrow K \leq M$   
 $E \geq H = K \leq M$   
 I.  $E \# K \rightarrow E > K$  (False)  
 II.  $E \$ M \rightarrow E = M$  (False)



## Syllogism

The word 'Syllogism' is originally a word given by the Greeks. The term 'Syllogism' is used to denote that form of reasoning where conclusion is drawn from two or more statements. Actually it is an inference or deduction of the given statements. This is 'undoubtedly' the most important part of logical reasoning. Syllogism is an indispensable feature of all competitive examinations and tests which determines the candidate's basic intelligence and aptitude. The questions on logic are to be solved as per the information given without any concern of the formal validity or truth of the statements *i.e.*, conclusion should follow directly from the statement given.

In solving the questions of syllogism, some are of the opinion that Venn-diagram can be a great use and, no doubt, a few questions can be solved with the help of Venn-diagrams, but Venn-diagram alone does not help the students to solve the various questions on syllogism.

The problem of syllogism can be solved by using a little intelligence and common sense but we need to have, therefore, a definite and well-defined method to tackle the problem.

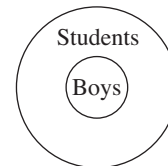
**Proposition**—Any statement is termed as the proposition. The proposition is a sentence that makes a statement and gives a relation between two terms. It comprises a subject, a predicate and a copula. Subject is that which affirms or denies a fact. The predicate is the part of the proposition denoting that which is affirmed or denied about the subject and copula is the part of the proposition which establishes the relation between the subject and the predicate.

Propositions can be classified into four types—

(1) **Universal Affirmative Proposition**—This type of proposition distributes only the subject. The predicate is not interchangeable with

the subject while maintaining the validity of the proposition A universal affirmative proposition is usually denoted by the letter 'A'.

**Example**—All boys are students.

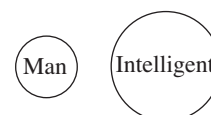


From here, we conclude that in A type proposition, only subject is distributed and we cannot say "All students are boys".

(2) **Universal Negative Proposition**—This type of proposition distributes both the subject and the predicate. It means an entire class of predicate term is denied to the entire class of the subject term.

A universal negative proposition is usually denoted by the letter 'E'.

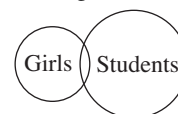
**Example**—No man is intelligent.



We can conclude that Man and Intelligent have nothing in common and hence both subject and predicate are distributed.

(3) **Particular Affirmative Proposition**—This type of proposition distributes neither the subject nor the predicate. Particular affirmative proposition is denoted by the letter 'I'.

**Example**—Some girls are students.



In this type of proposition, subject and predicate have something in common. Particular proposition either only partly include or only partly exclude the subject while making a statement.

(4) **Particular Negative Proposition**—This type of proposition distributes only in the predicate. It is denoted by the letter ‘O’.

**Example**—Some goats are not men.



Here, the subject term ‘some goats’ is only for a part of its class and hence it is undistributed while the predicate term ‘men’ is denied in entirety to the subject term and hence is distributed. Syllogism is concerned with three terms.

(1) **Major Term**—It is the predicate of the conclusion and it is denoted by ‘P’.

(2) **Minor Term**—It is the subject of the conclusion and it is denoted by ‘S’.

(3) **Middle Term**—It is the term common to both the statements and it is denoted by ‘M’.

The Venn diagram.

There is a pictorial way of representing the proposition. Suppose that the proposition is trying to relate the subject (S) with predicate (P). There are four ways in which the relation could be according to the four propositions.

Type–A



All S are P

Type–I



Some S are P

Type–O



Or



Some S are not P

Syllogism is actually a problem of mediate inference but before we proceed to the rules for arriving at valid inferences, it is necessary to have

a clear understanding of difference between Immediate and Mediate inference.

**Immediate inference** : In immediate inference, conclusion is drawn from only one given proposition for example, let a given statement be “All men are wise. Then based on this statement a conclusion could be drawn “that” some men are wise”.

In case of two statements, connected by a common term which is popularly known as Middle Term.

**Statements**— I. Some girls are teacher.

II. No teacher is intelligent.

In the above pair of statements, the term teacher is common both the statements and joins the two statements. Now, if a conclusion is drawn from any one of the two statements without taking consideration the other statement is known as Immediate inference.

**Conclusions**— Some Teacher are girls (From Statement I)

No intelligent is teacher (From Statement II)

**Rules for immediate inference**—There are many aspects or methods of immediate inference and can be drawn with the help of some rules. These rules are divided into four heads.

(A) Conversion

(B) Obversion

(C) Contraposition

(D) Sub-alteration

(A) **Conversion**—In conversion, the subject and the predicate of a given statement are interchanged *i.e.*, the subject becomes the predicate and the predicate becomes the subject but the quality of the proposition remains intact *i.e.*, the affirmative statement remains affirmative and the negative remains negative.

Thus, we can say that A-type proposition can be changed into I-type. E-type can be converted into E-type. I-type can be converted into I-type but O-type proposition can not be converted.

**Examples**—(i) **Statement**—All dogs are cats. (A-Type)

**Conclusion**—Some cats are dogs. (E-type)

(ii) **Statement**—No girl is beautiful. (E-type)

**Conclusion**—No beautiful is girl. (E-type)

(iii) **Statement**—Some bats are crows. (E-type)

**Conclusion**—Some crows are bats. (E-type)

(B) **Obversion**—In obversion, the conclusion is drawn from interchanging the quality of proposition *i.e.*, affirmative to negative and negative to affirmative but its original meaning remains the same. The subject of the given statement remains the subject of the conclusion.

**Example**—(i) **Statement**—No cow is pet. (E-type)

**Conclusion**—All cow are non-pet (A-type)

(C) **Contraposition**—In contraposition, there will be double conversion. First to obverse and then to converse.

**Example**—(i) **Statement**—No women are wise. (E-type)

**Conclusion**—All women are non-wise. (A-type, obversion)

**Conclusion**—Some non-wise are women. (I-type, conversion)

(D) **Sub-alteration**—A proposition can be changed into sub-alteration by retaining the same subject, same predicate and same quality but with changed quantity of proposition. Thus, we can say that A-type will be changed into I-type and E-type will be changed to O-type.

**Examples**—(i) **Statement**—All goats are elephants. (A-type)

**Conclusion**—Some goats are elephants. (I-type)

(ii) **Statement**—No ball is black. (E-type)

**Conclusion**—Some ball are non-black. (O-type)

We display in the below-mentioned table all the possible valid immediate inference drawn from each type of proposition *i.e.*, A. E. I. O. A study of the table given below can help the students to remember all the valid immediate inferences easily without going into details of above rules.

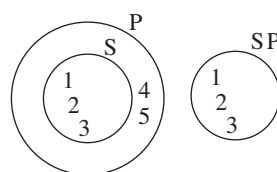
Type	Proposition	Immediate Inference
A	All S are P	Some P are S Some S are P No P is A
E	No S is P	Some S are not P Some P are not A
I	Some S are P	Some P are S
O	Some S are not P	No inference

The inference can also be drawn from logic using Venn-diagram. But the important point is to be noted while drawing such inferences from the Venn diagrams that all possibilities of Venn-diagrams should be drawn.

**(1) Universal Affirmative (A-type)**

All S are P

In A type of proposition, all S are contained in B. The circle representing S will be either inside or equal to circle representing B. Thus, in both the cases conclusions (some P are S) and (some S are P) are true. We can understand by taking two sets in all possible ways.



- (i) S = (1, 2, 3)      P = (1, 2, 3, 4, 5)
- (ii) S = (1, 2, 3)      P = (1, 2, 3)

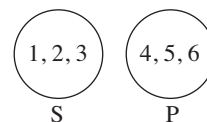
The above two cases show all the possibilities of two different sets S and P which show the relationship between each other as represented by the proposition—All S are P.

In both the cases we observe that set (1, 2, 3) is the part of Set A and Set B. Now, we can say that inference (some S are P) is true from this relationship. In the same way set (1, 2, 3) is the part of set B and also of set A. Therefore, it is also clear that inference (some P are S) is also true.

**(2) Universal Negative (E-type)**

No S is P

In E-type of proposition, there is only one possibility of Venn-diagram. This relationship can be shown by two sets S = (1, 2, 3) & P (4, 5, 6). With the help of these two sets we see that 1, 2, and 3 is the part of set S but not of set P. Similarly 4, 5, 6 is the part of set P but not set of S.



Therefore, on the basis of E-type of proposition we can draw following immediate inferences—

- (i) No P is S
- (ii) Some S are not P
- (iii) Some P are not S

**(3) Particular Affirmative (I-type)**

Some S are P

In this proposition, some part of the circle denoting S as indicated by the shaded area of S (representing 'same S' lies within the circle denoting P). Slightly more attention-seeking is the representation for the 'O' proposition some S are not P'. This proposition gives rise to many possible representations of Venn-diagrams and hence most of the inferences drawn therefrom are invalid and doubtful. The verbal interpretation of this figure would be "there are some 'S' that are definitely not 'P' while there may some S that might be 'P' or might not be 'P'"



"Some 'S' are not 'P'"  
["Some 'S' are 'P'"]

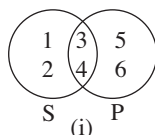


"Some 'S' are not 'P'"  
["No 'S' are 'P'"]

**(4) Particular Negative (O-Type)**

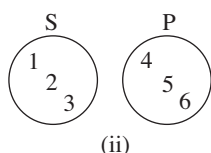
Some S are Not P

This proposition give no clue whether the remaining S are there in P or not and from this proposition no immediate inference can be drawn. We can deduce this proposition in the light of Venn-diagram representation. There may be three possibilities.



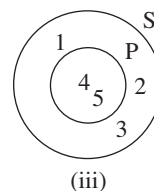
- (i) S = 1, 2, 3, 4  
P = 3, 4, 5, 6

Set (1, 2) is the part of Set S but not Set P, hence this shows the relationship represented by the proposition Some 'S' are not 'P'.



- (ii) S = (1, 2, 3)  
P = (4, 5, 6)

Set (2, 3) is the part of Set S but not set P, hence shows the relation represented by the proposition Some S are not P.



- (iii) S = (1, 2, 3, 4)  
P = (4, 5)

Set (1, 2, 3) is the part of set S but not set P, hence denotes proposition some 'S' are not 'P'.

We can say on behalf of all possible combinations showing relationship between S and P no valid inference can be drawn. Some S are P is true from case (i) and (iii) but not true from case (ii) hence it is an invalid inference. Similarly, some P are not S is true from case (i) and (ii) but not true from case (iii) and hence it is also an invalid inference.

**The Hidden Proposition**

There are some other sentences which are not on the standard patterns. Therefore, we have to find out the hidden proposition in such sentences.

1. Some A type propositions which do not begin with 'All'.
  - (A) All positive sentences which begin with 'every', 'each' 'any' are A-type propositions.

**Examples—**

- (a) Every man loves his country.  
(All men love their country)
- (b) Each of them was present there.  
(All were present there)
- (c) Any one can do this work.  
(All person can do this work)
- (B) A positive sentence with a particular person as its subject is always an A-type proposition.

**Examples—**

- (a) He should be awarded a handsome prize.  
(He who should be awarded a handsome prize.)
- (b) General Suharto is a controversial personality.

(C) A positive sentence with a very definite exception is also a A-type.

**Examples—**

- (a) All girls except Reena have failed.
- (b) All except Reena (are the students) who have failed.

2. Some E-type propositions not beginning with 'No'.

(A) All negative sentences beginning with 'none' 'no one' not a single' etc are called E-type propositions.

**Examples—**

- (a) None can escape from 'death'.  
(No person is one who can escape from death).
- (b) Not a single person was present.  
(No person was present)
- (B) A sentence with a particular person as its subject but a negative sense is an E-type proposition.

**Examples—**

- (a) He does not deserve for a prize.  
He (is not a man) who deserves for a prize.
- (b) General Suharto is not a controversial personality.
- (C) A negative sentence with a very definite exception is also of E-type.

**Examples—**

- No man except David has failed.
- (D) When an interrogative sentence is used to make an assertion, this could be reduced to an E-type proposition.

**Examples—**

- (a) Is there any honesty left in this world ?  
(No honesty is left in this world.)
- (b) Is there any person who can deceive himself ?  
(None can deceive himself).

3. Some I-type propositions which do not begin with 'some'.

(A) Positive propositions which begin with words such as 'most', 'a few', 'mostly', 'generally', 'almost', frequently' 'often' are to be reduced to the I-type proposition.

**Examples—**

- (a) Men are usually masculine.  
(Some men are masculine)
- (b) Students are generally naughty.  
(Some students are naughty)
- (B) Negative proposition which begin with words such as 'often', 'seldom', 'hardly', 'scarcely' 'rarely', 'little' etc, are to be deduced to the I-type.

**Examples—**

- (a) Few men are not honest.  
(Some men are honest)
- (b) Rarely is a rich man content.  
(Some rich are content)

4. Some 'O' type proposition not beginning with some.....not.

(A) All negative proposition beginning with words such as all, every, any, each etc. with not are to be reduced to 'O' type propositions.

**Examples—**

- (a) All women are not rich.  
(Some women are not rich)
- (b) Everyone is not there.  
(Some are not there)
- (c) All that glitters is not gold.  
(Some glittering objects are not gold)
- (B) Negative propositions with words as most 'a few' 'mostly' 'generally' 'almost' 'frequently' with not are to be reduced to the 'O type'.

**Examples—**

- (a) Girls are usually not feminine.  
(Some girls are not feminine)
- (b) Students are not frequently ill-tempered.  
(Some students are not ill-tempered)
- (c) Act all the furniture have not been sold.  
(Some furniture have not been sold)
- (C) Positive proposition with beginning negative sense words such as 'few', 'seldom', 'hardly', 'scarcely', rarely, little etc are to reduced to the 'O' type.

**Examples—**

- (a) Few men are innocent.  
(Some men are not innocent)
- (b) Seldom are people jealous.  
(Some people are not jealous)



- (D) A negative sentence with an exception, which is not are definite are to be reduced to 'O' type.

**Examples—**

- (a) No except one have passed.  
(Some students have not passed)
- (b) No girls except a few are absent.  
(Some girls are not absent)

**Rules for Mediate Inference**

There are certain rules to derive the valid conclusion. These rules should be applied step by step to solve the questions on syllogism. To understand well these rules we can take help of Venn-diagram representation.

**Rule 1—**The conclusion does not contain the middle term.

**Example—**

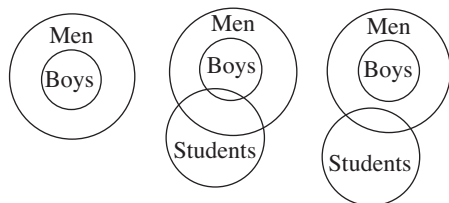
**Statements—**

- I. All boys are men.
- II. Some men are students.

**Conclusions—**

- I. All men are boys.
- II. Some students are men.

Since, both the conclusions 1 and 2 contain the middle term 'men' so neither of them can follow.



**Rule 2—**No term can be distributed in the conclusion unless it is distributed in the premises.

**Example—**

**Statements—**

- I. Some men are women.
- II. All women are cows.

**Conclusions—**

- I. All cows are women.
- II. Some men are cows.

Statement I is an I-type proposition which distributes neither the subject nor the predicate. Statement II is an A-type proposition which distributes the subject women only.

Conclusion I is an A-type proposition which distribute the subject 'cows' only.

Since, the term 'cows' is distributed in conclusion I without being distributed in the premises so conclusion I cannot follow.

**Rule 3—**The middle term must be distributed atleast once in the premises, otherwise conclusion is uncertain or doubtful.

**Example—**

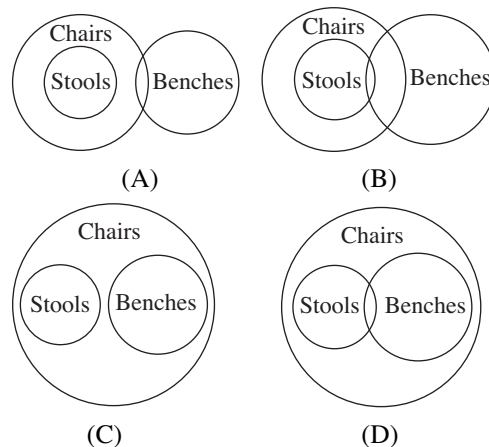
- I. All stool are chairs.
- II. Some chairs are benches.

**Conclusions—**

- I. All stools are benches.
- II. Some benches are stools.
- III. No stool is a table.

**Solution—**The term chair is common to both the statements and hence it is the middle term. Statement is (I) is of A-type proposition and in A-type proposition only subject is distributed, hence chair being the predicate in the statement (I) is not distributed. In the same way, chair is not distributed in the second statement because statement (II) is I-type in wich neither subject nor predicate is distributed. We can analyse that middle term chair is not distributed in anyone of the statements, therefore as per rule 3, no mediate conclusion can be drawn. Thus, none of the conclusions of following statements above is a valid conclusion.

We can also explain this rule with the help of Venn-diagram.



All the four figures (A), (B), (C) and (D) represent the relationship among stool, chairs and benches as given in the statements. We can find

from these four figures that we can not establish any definite relationship between stools and benches.

Though it can be concluded from above analysis that no valid conclusion can be drawn between stool and bench yet we can conclude that either some stools are benches or no stool is a table because both the conclusion pair a complementary pair.

**Rule 4**—If one premises is particular, conclusion is particular.

**Example**—

**Statements**—

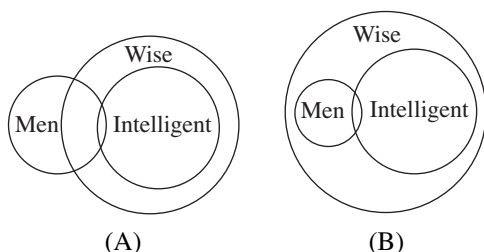
- I. Some men are intelligent.
- II. All intelligent are wise.

**Conclusions**—

- I. All men are wise.
- II. No man is wise.
- III. Some men are wise.

**Solution**—According to this rule, statement I is particular type, therefore, Conclusion (III) is the valid inference. Simultaneously, it does not violate rules (2) and (3).

We can also define this rule with the help of Venn-diagram.



In both the figures (A) and (B) it is clear that some men are wise.

**Rule 5**—If both the premises are particular, no conclusion follows.

**Example**—

**Statements**—

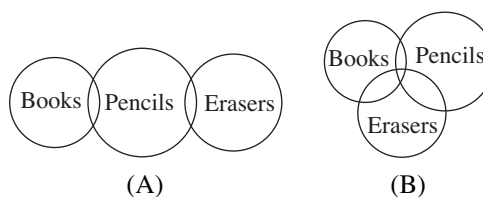
- I. Some books are pencils.
- II. Some pencils are erasers.

**Conclusions**—

- I. All books are erasers.
- II. Some erasers are books.

Since, both the premises are particular, no conclusion follows.

By Venn-diagram, we can check the authenticity of the rule.



With the help of both the figures, we cannot deduce any inference.

**Rule 6**—If both the premises are negative, no conclusion follows.

**Example**—

**Statements**—

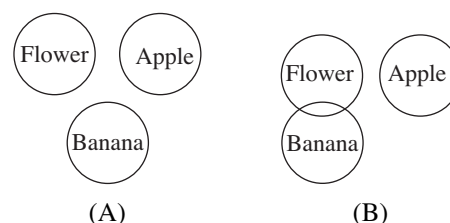
- I. No flower is apple.
- II. No apple is banana.

**Conclusions**—

- I. No flower is banana.
- II. Some bananas are apples.

**Solution**—Since, both the statements are negative, we cannot draw any valid mediate inference from such pair of given statements. Therefore, no conclusion follows.

Venn diagram representation.



The study of both the figures (A) and (B) reveals the fact that in case both the premises are negative, no definite relationship between the terms other than the middle term can be established. Hence, conclusion I is not valid because it is not from figure (A). In the same way conclusion II is also not valid because it is not true from figure (B). Therefore, none of the conclusions is definitely true.

**Rule 7**—If one of the premises is negative, conclusion will always be negative.

**Example**—

**Statements**—

- I. Some cups are bottles.
- II. No bottle is glass.

**Conclusions**—

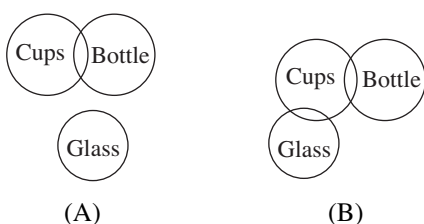
- I. Some cups are glasses.
- II. Some cups are not glasses.

- III. All glasses are cups.
- IV. No cup is glass.

As mentioned in above rule (7) if one of the premises is negative, the conclusion will always be negative. From the given conclusions, we can observe that conclusions (II) and (IV) are negative. Therefore, these may be valid inferences. But for the validity of this rule they must not violate any of the other rules.

**Conclusion (IV)** Violate rule because cup is distributed in conclusion but it is not distributed in the statement I. This conclusion also violate rules which stipulates if one of the premises is particular, conclusion will be particular but conclusion (IV) is universal. Conclusion II complies with the rule as term glass which is distributed in the conclusion is also distributed in the statement II and also conclusion (II) being of particular quantity.

Venn-diagram.



From the above-mentioned graphical Venn-diagram representation, we can observe that no valid representation between cups and glass can be established. But we can definitely conclude that part of the cups which is bottle can never be glass because no cup is glass. Therefore, from Venn-diagram also, we draw valid inference that some cups are not glass.

**Rule 8**—If both the premises are affirmative, the conclusions would be affirmative.

**Example**—

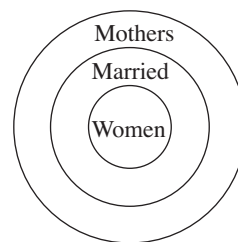
**Statements**—

- I. All women are married.
- II. All married are mothers.

**Conclusions**—

- I. All women are mothers.
- II. Some women are not mothers.

Here, both the premises are affirmative, the conclusion will be affirmative. Venn-diagram representation :



In above-mentioned diagram it is clear that all women are mothers.

**Case of complimentary pair of conclusions**—In drawing mediate inferences from given statements, it is expected to be more attentive to select a complimentary pair of conclusions in which neither of the conclusions is individually true but a combination of both makes a complementary pair. In a complimentary pair, atleast one of the two statements is always true. As we have already discussed in a rule that in the statements where middle term is not distributed no valid inference but there still exists a possibility that a complimentary pair of conclusions follows from the given statement.

**Example**—

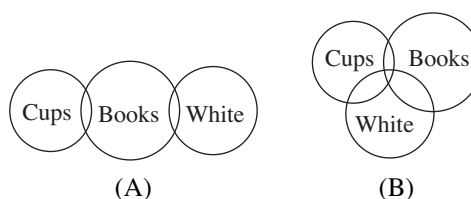
**Statements**—

- I. Some cups are books.
- II. Some books are white.

**Conclusions**—

- I. Some cups are white.
- II. No cup is white.

From the above example, it is clear that neither of the conclusions is definitely true as per rule because middle term is not distributed in the statements. This situation can become more clear with the help of Venn-diagram.



From the these two figures, it is clear that conclusion (I) Some cups are white is wrong because it not true from figure (A). In the same way conclusion (II) No cup is white is also wrong because it is not true from figure (B). However, it is to be noted from the figures that either conclusion (I) or (II) follows from the statement.

## Exercise Type I

**Directions**—In each question below are given two statements followed by two Conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be variance from commonly known facts. Read these two conclusions and then decide which of the given conclusions logically and analytically follows from the given two statements disregarding commonly known facts.

**Give the 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 conclusion I and II follow.

1. **Statements**—

Some pins are forks.  
All forks are keys.  
No key is lock.

**Conclusions**—

- I. Some locks are pins.
- II. No lock is a pin.

2. **Statements**—

Some shirts are trousers.  
Some trousers are jackets.  
All jackets are shawls.

**Conclusions**—

- I. Some shawls are shirts.
- II. Some jackets are shirts.

3. **Statements**—

Some leaves are plants.  
Some plants are trees.  
Some trees are fruits.

**Conclusions**—

- I. Some fruits are trees.
- II. Some trees are plants.

4. **Statements**—

Some rats are dogs.  
Some dogs are horses.  
Some horses are camels.

**Conclusions**—

- I. Some horses are rats.
- II. Some camels are horses.

5. **Statements**—

Some books are dictionaries.  
Some dictionaries are files.  
Some files are papers.

**Conclusions**—

- I. Some papers are files.
- II. Some files are books.

6. **Statements**—

Some stones are rocks.  
All rocks are clouds.  
All clouds are rains.

**Conclusions**—

- I. Some rains are stones.
- II. Some clouds are rocks.

7. **Statements**—

Some keys are holes.  
All holes are folders.  
Some folders are stands.

**Conclusions**—

- I. Some stands are keys.
- II. Some stands are holes.

8. **Statements**—

Some desks are tents.  
Some tents are rivers.  
All rivers are ponds.

**Conclusions**—

- I. Some ponds are tents.
- II. Some ponds are desks.

9. **Statements**—

All chairs are pens.  
Some pens are knives.  
All knives are rats.

**Conclusions**—

- I. Some rats are chairs.
- II. Some rats are pens.

10. **Statements**—

Some forests are huts.  
Some huts are walls.  
Some walls are nets.

**Conclusions**—

- I. Some nets are forests.
- II. Some nets are huts.

11. **Statements**—

All tables are windows.

All windows are rooms.

All rooms are buses.

**Conclusions —**

- I. Some buses are tables.
- II. Some rooms are tables.

12. **Statements—**

Some trees are boxes.

All boxes are bricks.

All bricks are dogs.

**Conclusions —**

- I. Some dogs are trees.
- II. Some bricks are trees.

13. **Statements—**

All goats are flowers.

No flower is branch.

Some branches are roots.

**Conclusions —**

- I. Some roots are goats.
- II. No root is goat.

14. **Statements—**

All pots are rings.

All bangles are rings.

All rings are paints.

**Conclusions —**

- I. Some paints are pots.
- II. Some bangles are paints.

15. **Statements—**

All cars are wheels.

No wheel is chair.

Some chairs are spokes.

**Conclusions —**

- I. Some spokes are cars.
- II. Some spokes are wheels.

16. **Statements—**

Some tapes are trunks.

Some trunks are halls.

All halls are desks.

**Conclusions —**

- I. Some desks are tapes.
- II. Some desks are trunks.

17. **Statements—**

Some books are chairs.

Some chairs are pictures.

Some pictures are pencils.

**Conclusions —**

- I. Some pencils are books.
- II. Some pictures are books.

18. **Statements—**

All tables are pens.

All pens are papers.

All papers are tablets.

**Conclusions —**

- I. All tables are papers.
- II. Some tablets are pens.

19. **Statements—**

All buildings are houses.

Some houses are towers.

All towers are huts.

**Conclusions —**

- I. Some huts are houses.
- II. Some huts are buildings.

20. **Statements—**

Some leaves are branches.

All branches are flowers.

Some flowers are fruits.

**Conclusions —**

- I. Some fruits are leaves.
- II. Some fruits are branches.

21. **Statements—**

Some novels are desks.

No desk is ladder.

Some ladders are chimneys.

**Conclusions —**

- I. Some chimneys are novels.
- II. No novel is chimney.

22. **Statements—**

All beads are rings.

All bangles are rings.

All rings are diamonds.

**Conclusions —**

- I. All beads are diamonds.
- II. All bangles are diamond.

23. **Statements—**

Some cards are plastics.

Some plastics are metals.

All metals are pots.

**Conclusions —**

- I. Some pots are cards.
- II. No pot is a card.

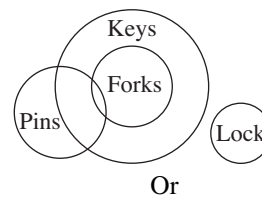
24. **Statements**—  
 All chairs are tables.  
 All tables are trains.  
 All trains are buses.  
**Conclusions**—  
 I. All tables are buses.  
 II. All trains are tables.
25. **Statements**—  
 Some machines are computers.  
 Some computers are calculators.  
 Some calculators are phones.  
**Conclusions**—  
 I. Some phones are computers.  
 II. Some computers are machines.
26. **Statements**—  
 All spoons are bowls.  
 Some bowls are glasses.  
 Some glasses are plates.  
**Conclusions**—  
 I. Some glasses are spoons.  
 II. Some plates are bowls.
27. **Statements**—  
 Some envelopes are packets.  
 Some packets are boxes.  
 All boxes are parcels.  
**Conclusions**—  
 I. Some parcels are packets.  
 II. Some parcels are boxes.
28. **Statements**—  
 Some toys are desks.  
 Some desks are pens.  
 All pens are rods.  
**Conclusions**—  
 I. Some rods are toys.  
 II. Some pens are toys.
29. **Statements**—  
 Some tables are huts.  
 No hut is ring.  
 All rings are bangles.  
**Conclusions**—  
 I. Some bangles are tables.  
 II. No bangle is table.
30. **Statements**—  
 All stars are clouds.

- All clouds are rains.  
 All rains are stones.  
**Conclusions**—  
 I. All rains are stars.  
 II. All clouds are stones.

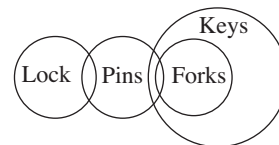
31. **Statements**—  
 All windows are doors.  
 Some doors are building.  
 All buildings are cages.  
**Conclusions**—  
 I. Some cages are doors.  
 II. Some buildings are windows.
32. **Statements**—  
 Some chairs are rooms.  
 All rooms are trees.  
 All trees are poles.  
**Conclusions**—  
 I. Some poles are chairs.  
 II. Some trees are chairs.

### Answers with Explanation

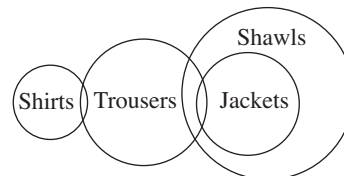
1. (C)



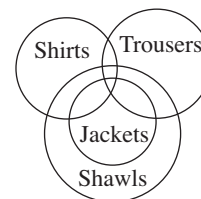
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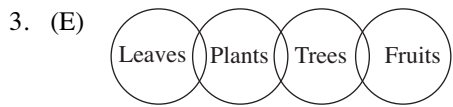
2. (D)



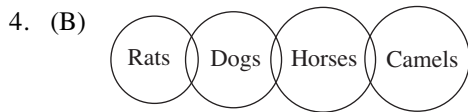
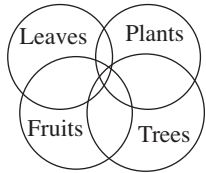
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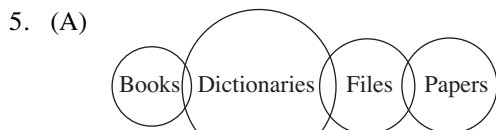
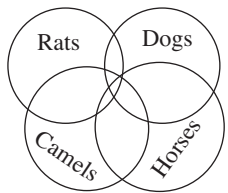
30 | Logical Reasoning & Analytical Ability



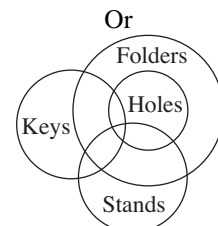
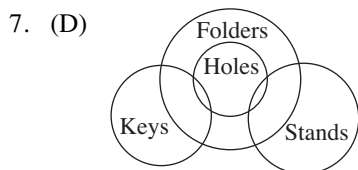
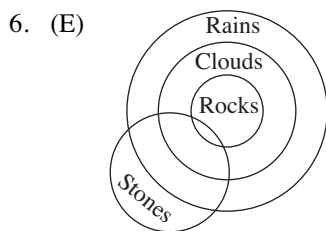
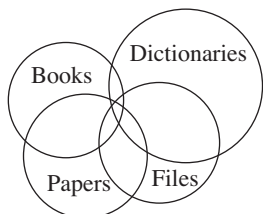
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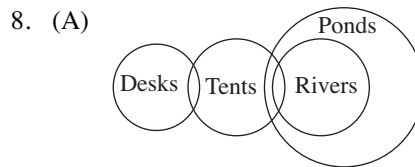
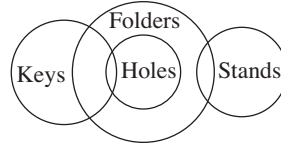
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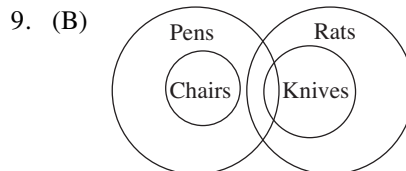
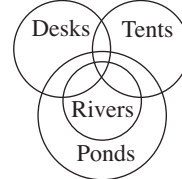
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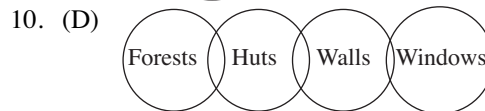
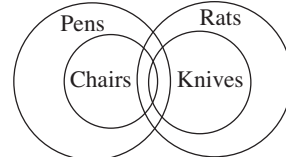
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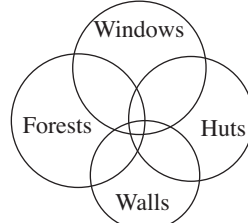
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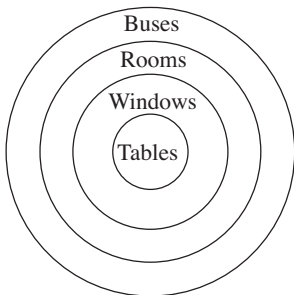
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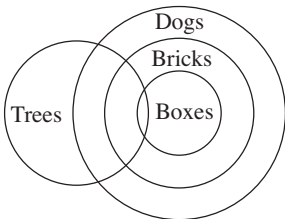
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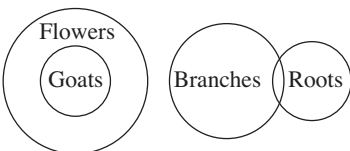
11. (E)



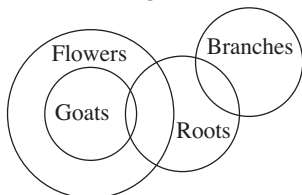
12. (E)



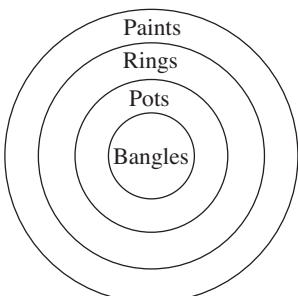
13. (C)



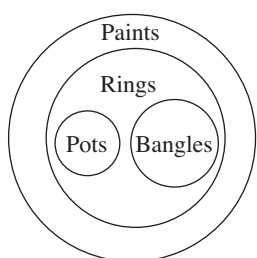
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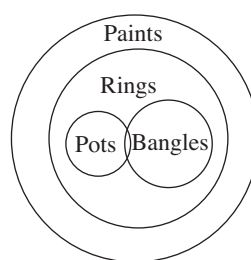
14. (A)



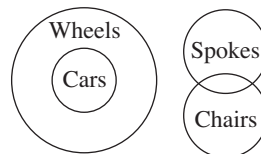
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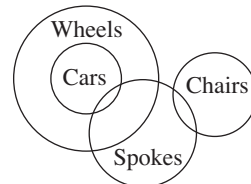
Or



15. (D)

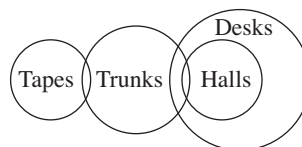


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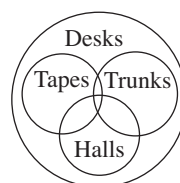


None follows.

16. (B)

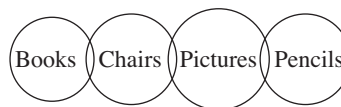


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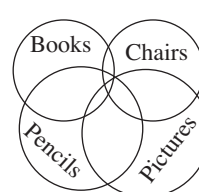


Only II follows.

17. (D)



Or

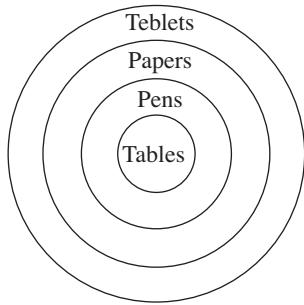


None follows.



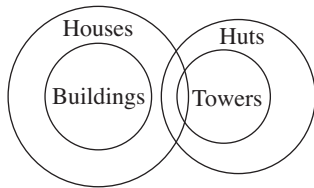
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18. (E)

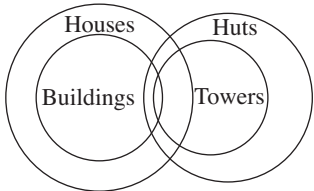


Both follows.

19. (A)

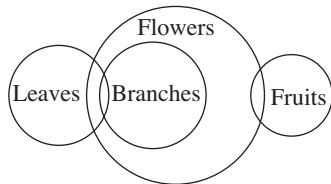


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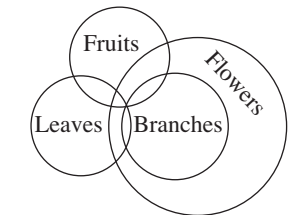


Only I follows.

20. (D)

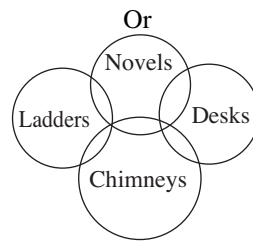
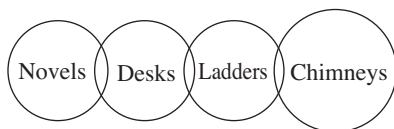


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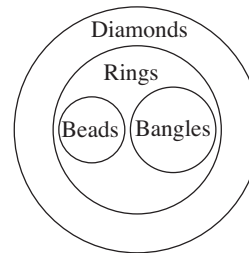
None follows.

21. (C)

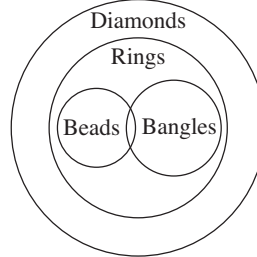


Either I or II follows.

22. (E)

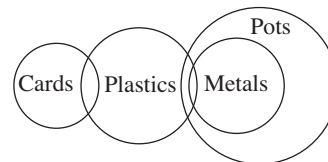


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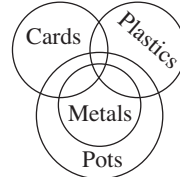


Both follow.

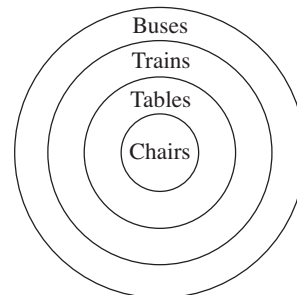
23. (C)



Or



24. (A)

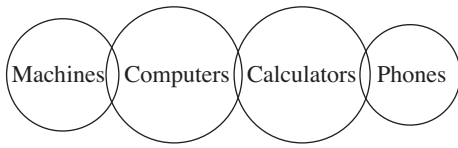


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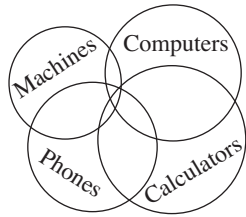
**TONYSTARK**

<http://kat.ph/user/Tonystark/>

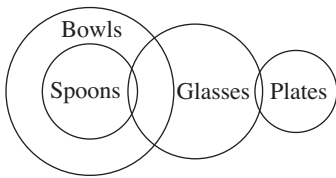
25. (B)



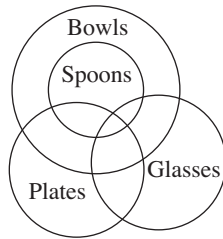
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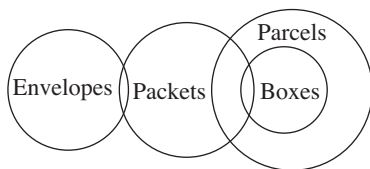
26. (D)



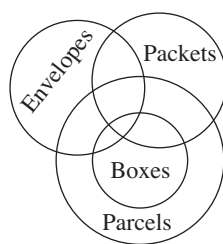
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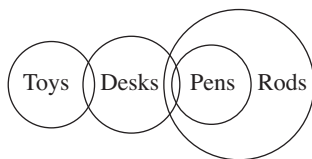
27. (E)



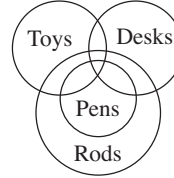
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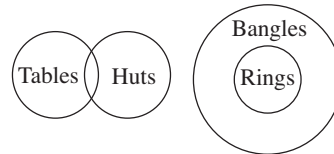
28. (D)



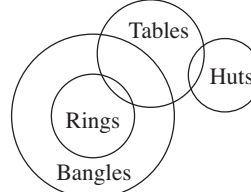
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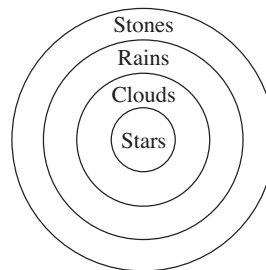
29. (C)



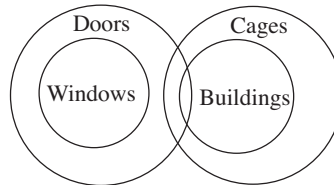
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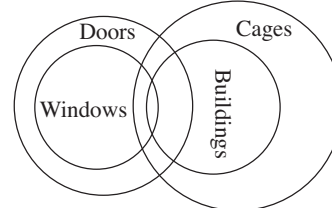
30. (B)



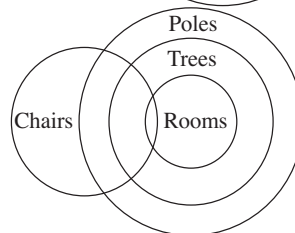
31. (A)



Or



32. (E)



**Type II**

**Directions**—In each of the questions below are given four statements followed by three conclusions **numbered** I, II and III and somewhere IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

1. **Statements**—  
 Some leaves are flowers.  
 No flower is fruit.  
 Some fruits are branches.  
 Some branches are stems.  
**Conclusions**—  
 I. Some leaves are stems.  
 II. All leaves are either stems or fruits.  
 III. All stems are either branches or fruits.  
 (A) Only I follows  
 (B) Only II & III follow  
 (C) Only III follows  
 (D) All follow  
 (E) None follows
2. **Statements**—  
 All lions are tigers.  
 All tigers are leopards.  
 Some leopards are wolves.  
**Conclusions**—  
 I. No elephant is lion.  
 II. Some wolves are lions.  
 III. Some leopards are lions.  
 (A) Only I follows  
 (B) Only II follows  
 (C) Only III follows  
 (D) Only I & III follow  
 (E) All follow
3. **Statements**—  
 Some caps are umbrellas.  
 Some umbrellas are raincoats.  
 All raincoats are trousers.  
 All trousers are jackets.  
**Conclusions**—  
 I. Some raincoats are caps.  
 II. Some trousers are umbrellas.  
 III. All raincoats are jackets.  
 (A) None follows  
 (B) Only I & II follow  
 (C) Only II & III follow  
 (D) Only I & III follow  
 (E) None of these
4. **Statements**—  
 Some fans are coolers.  
 Some coolers are machines.  
 Some machines are computers.  
 All computers are televisions.  
**Conclusions**—  
 I. Some televisions are machines.  
 II. Some machines are fans.  
 III. No machine is fan.  
 (A) None follows  
 (B) Only I follows  
 (C) Only either II or III follows  
 (D) Only I and either II or III follow  
 (E) All follow
5. **Statements**—  
 All keys are staplers.  
 All staplers are blades.  
 Some blades are erasers.  
 Some erasers are sharpners.  
**Conclusions**—  
 I. Some sharpners are keys.  
 II. All keys are blades.  
 III. Some erasers are keys.  
 (A) Only I & II follow  
 (B) Only I follows  
 (C) Only II follows  
 (D) All follow  
 (E) None of these
6. **Statements**—  
 All flowers are fruits.  
 No fruit is juice.  
 Some juices are proteins.  
 All proteins are vitamins.  
**Conclusions**—  
 I. Some vitamins are fruits.  
 II. Some juices are vitamins.  
 III. No flower is juice.  
 (A) Only I and II follow  
 (B) Only I and III follow

- (C) All I, II and III follow
- (D) Only II and III follow
- (E) None of these

7. **Statements—**

Some bags are suits.  
 All suits are trousers.  
 Some trousers are shirts.  
 All shirts are coats.

**Conclusions—**

- I. Some trousers are coats.
- II. Some bags are trousers.
- III. Some suits are coats.
- (A) Only I and II follow
- (B) Only I follows
- (C) Only II and III follow
- (D) All follow
- (E) None of these

8. **Statements—**

All books are novels.  
 Some novels are poems.  
 Some poems are stories.  
 No story is a movie.

**Conclusions—**

- I. Some books are poems.
- II. Some movies are novels.
- III. No movie is a novel.
- (A) Only I follows
- (B) Only I and II follow
- (C) Only either II or III follows
- (D) None follows
- (E) None of these

9. **Statements—**

All cups are bowls.  
 All bowls are trays.  
 Some trays are plates.  
 No plate is spoon.

**Conclusions—**

- I. Some bowls are plates.
- II. Some cups are spoons.
- III. No cup is spoon.
- (A) Only I follows
- (B) Only II follows
- (C) Only II and III follow
- (D) All follow
- (E) None of these

10. **Statements—**

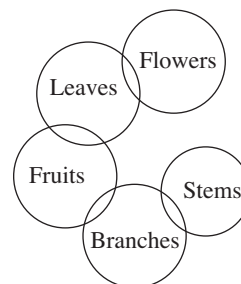
Some towers are pillars.  
 Some pillars are buildings.  
 All buildings are flats.  
 No flat is house.

**Conclusions—**

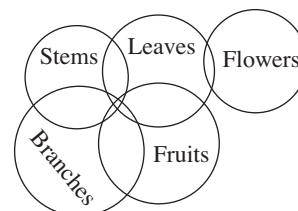
- I. No building is house.
- II. Some towers are houses.
- III. Some towers are flats.
- (A) None follows
- (B) Only I follows
- (C) Only II and III follow
- (D) All follow
- (E) None of these

**Answers with Explanation**

1. (E)

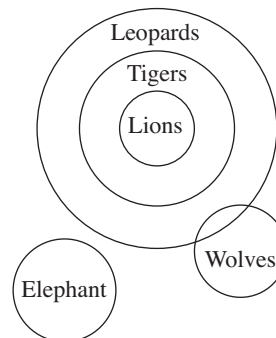


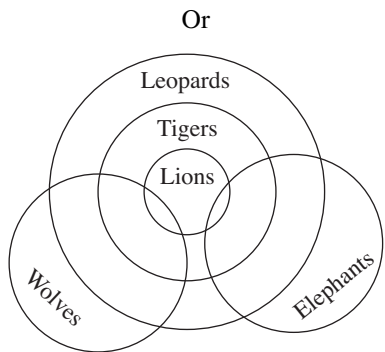
Or



None follows.

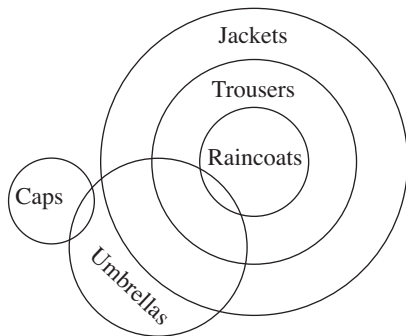
2. (C)





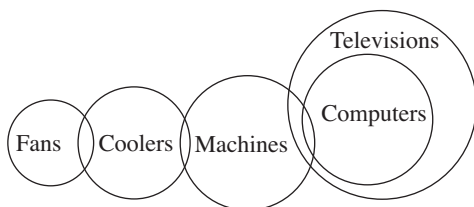
Only III follows.

3. (C)



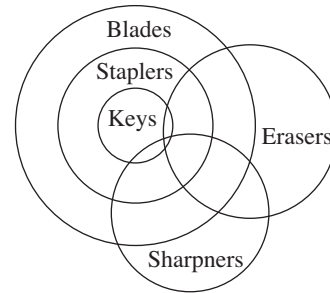
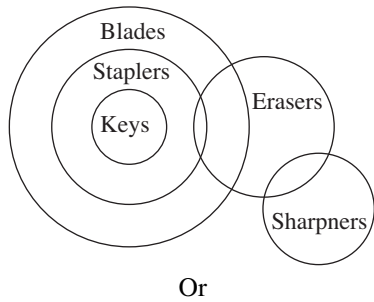
Only II and III follow.

4. (D)



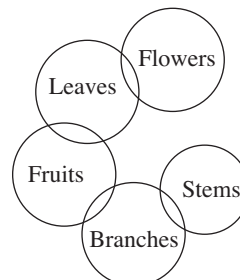
Only I and either II or III follow.

5. (C)

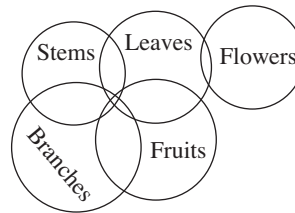


Only II follows.

6. (E)

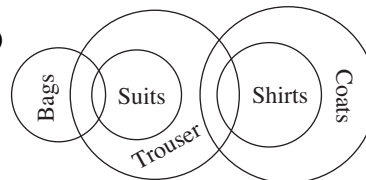


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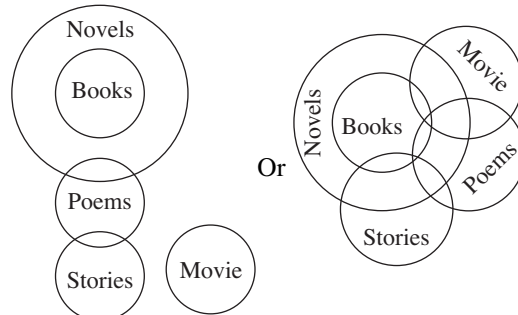
None follows.

7. (A)



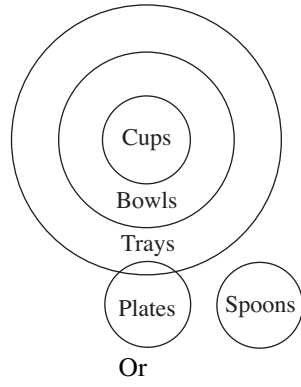
Only I and II follows.

8. (C)

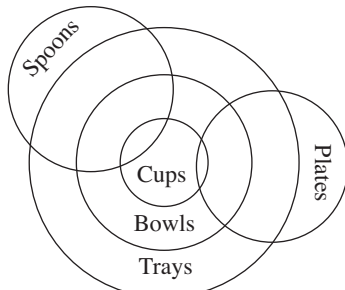


Only Either II and III follows.

9. (C)

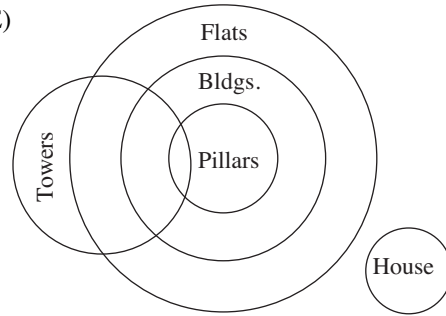


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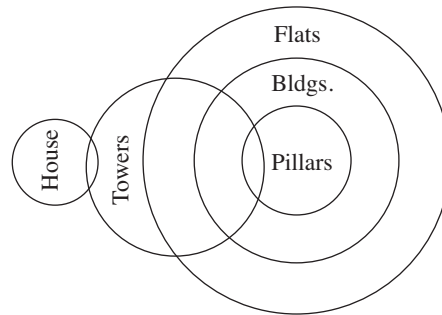


Only II and III follow.

10. (E)



Or



## 5

## Statement and Argument

In such type of test, a statement is given which is followed by two arguments. Candidates are required to distinguish between these two arguments and find out which one is strong ?

A argument may be strong in the following conditions—

- (1) A strong argument should give the realistic diagnosis of the situation described in the statement.
- (2) A strong argument should relate with the statement and be supported up by the facts or established notions.
- (3) A strong argument should be guazed by the previous experiences and it can be predicted that the result will follow.
- (4) A strong argument should not be mere reiteration of the situation given in the statement.

No argument should be based on emotion, feeling etc., because a weak argument is very simple, superflous, ambiguous and long drawn one.

### Example 1.

**Statement**—Will Suresh get second class in the examination ?

**Argument**—Yes, he always stands second.

**Explanation**—He always stands second, it does not mean that he will come second this year also. Hence, we can say that this argument is not strong.

### Example 2.

**Statement**—Are human cultures developing into savage and unsound way ?

**Argument**—Yes, man is an uncivilized animal.

**Explanation**—We know that man is a social animal while in this argument, it has been stated against the social belief. Hence, this is a weak argument.

### Example 3.

**Statement**—Should prohibition on alcohol be banned ?

**Argument**—Yes, Prohibition on alcohol should be banned.

**Explanation**—This argument is merely repetition of the statement. Hence, this is not a strong argument.

### Example 4.

**Statement**—Should luxury hotels be banned in India ?

**Argument**—Yes, these are the places from where international criminals operate.

**Explanation**—The luxury hotels are symbol of country's standard and places for staying the affluent foreign tourists and it is not confirmed that the criminals always stay there. Hence, this is not a strong argument.

### Example 5.

**Statement**—Should State Government ban on Lottery ?

**Argument**—Yes, to spend money aimlessly is not a proper thing.

**Explanation**—It is not clear that the money is being spent on lottery or on other things. Hence, it is not a strong argument.

### Example 6.

**Statement**—Should we encourage computerization ?

**Argument**—Yes, America is also doing this.

**Explanation**—Any argument cannot be taken with the context of a person, incident of a country or some examples. We cannot compare certain qualities with the other country. Hence, it is not a strong argument.

### Example 7.

**Statement**—Will the political activities go on this year ?

**Argument**—Yes, many of the newspapers endorse the statement.

**Explanation**—If the newspaper write this, it does not mean that the political activities will go on. Hence, it is not a strong argument.

### Exercise

Each of the following questions consists of a statement followed by two arguments I and II.

**Give Answer**—

- (A) if only argument I is strong ,
- (B) if only argument II is strong,
- (C) if either I or II is strong,
- (D) if neither I nor II is strong and
- (E) if both I & II are strong.

1. **Statement**—Should there be reservation of seats and posts on communal basis ?

**Arguments**—

- I. Yes, it will check most of the inter communal biases.
- II. No, ours is a secular state.

2. **Statement**—Government stop spending huge amounts of money on international sports.

**Arguments**—

- I. Yes, this money can be utilised for upliftment of the poor.
- II. No, sport persons will be frustrated and will not get international exposure.

3. **Statement**—Should there be a ban on product advertising ?

**Arguments**—

- I. No, it is an age of advertising. Unless your advertisement is better than your other competitors, the product will not be sold.
- II. Yes, the money spent on advertising is very huge and it inflates the cost of the product.

4. **Statement**—Should we scrap the Public Distribution System in India ?

**Arguments**—

- I. Yes, protectivism is over everyone must get the bread on his/her own.
- II. Yes, the poor do not get any benefit because of corruption.

5. **Statement**—Should non-vegetarian food be totally banned in country ?

**Arguments**—

- I. Yes, it is expensive and therefore, beyond the means of most people in our country.
- II. No, nothing should be banned in a democratic country.

6. **Statement**—Should India go for computerization in Industry ?

**Arguments**—

- I. No, computerization demands a lot of money. We should not waste money on it.

- II. Yes, when advanced countries are introducing computers in various areas, how can we afford to lag behind.

7. **Statement**—Should personal tax be abolished in India ?

**Arguments**—

- I. Yes, it will motivate people to earn more.
- II. No, individual must learn to share their wealth with other people.

8. **Statement**—Should high chimneys be installed in industries ?

**Arguments**—

- I. Yes, it reduces pollution at ground level.
- II. No, it increases pollution in upper atmosphere.

9. **Statement**—Should judiciary be independent of the executive ?

**Arguments**—

- I. Yes, this would help curb the unlawful activities of the executive.
- II. No, the executive would not be able to take hold measures.

10. **Statement**—Should an organization like UNO be dissolved ?

**Arguments**—

- I. Yes, with cold war coming to an end, such organizations have no role to play.
- II. No, in the absence of such organizations there may be a world war.

11. **Statement**—Should there be a complete ban on strike by government employees in India ?

**Arguments**—

- I. Yes, this is the only way to teach discipline to the employees.
- II. No, this deprives the citizens of their democratic rights.

12. **Statement**—Should luxury hotels be banned in India ?

**Arguments**—

- I. Yes, they are places from where international criminals operate.
- II. No, Affluent foreign tourists will have no place to stay.

13. **Statement**—Should internal assessment in college be abolished ?

**Arguments**—

- I. Yes, this will help in reducing the possibility of favouritism.



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- II. No, teaching faculty will lose control over students.
14. **Statement**—Should we impart sex education in schools.  
**Arguments**—  
I. Yes, all the progressive nations do so.  
II. No, no we cannot impart it in co-educational schools.
15. **Statement**—Should fashionable dresses be banned ?  
**Arguments**—  
I. Yes, fashions keeps changing and hence consumption of cloth increases.  
II. No, fashionable clothes are a person's self-expression and therefore, his/her fundamental right.
16. **Statement**—Should family planning be made compulsory in India ?  
**Arguments**—  
I. Yes, looking to the miserable conditions in India, there is no other go.  
II. No, in India there are people of various religions and family planning is against the tenets of some of the religions.
17. **Statement**—Should there be a world government ?  
**Arguments**—  
I. Yes, it will help in eliminating tensions among the nations.  
II. No, then, only the developed countries will dominate in the government.
18. **Statement**—Should we scrap the system of formal education beyond graduation ?  
**Arguments**—  
I. Yes, it will mean taking employment at an early date.  
II. No, it will mean lack of depth of knowledge.
19. **Statement**—Should Central Government well equipped hospital for every sub-division of every district ?  
**Arguments**—  
I. Yes, health and well being of every citizen is the primary responsibility of the government.  
II. No, it is not possible society must come forward to help the government.
20. **Statement**—Should the age of retirement in government services be increased in view of longer life span in India ?  
**Arguments**—  
I. Yes, other countries have already taken such decision.
- II. Yes, it is a genuine demand of lakh of employees.
21. **Statement**—Should there be a restriction on number of one-day international cricket match to be played by any country within a calendar year ?  
**Arguments**—  
I. No, each country should have the freedom to play as many matches as they want.  
II. Yes, otherwise the top ranking players will burn out in quick time.
22. **Statement**—Should there be only one type of schools upto matriculation in the entire country ?  
**Arguments**—  
I. Yes, this exists in some of the western countries.  
II. No, schools in rural and urban areas need to be different.
23. **Statement**—Should there be a complete ban on use of pesticides for maintaining fruit-growing plants and trees ?  
**Arguments**—  
I. No, all these plants and trees will get destroyed by the attacks of the pests causing severe financial loss to the farmers.  
II. Yes, the hazardous chemicals used in the pesticides find their way into the fruits causing serious health hazard to all those who consume these fruits.
24. **Statement**—Should gambling be made legally allowed in India ?  
**Arguments**—  
I. Yes, Government can earn huge amount of money by imposing tax on the amount involved in gambling as people otherwise gamble illegally.  
II. No, people belonging to poorer sections of the society will spend their entire earnings on gambling if it is made legal which will lead them and their family to starve.
25. **Statement**—Should all the small shops selling household commodities be closed down in big cities in India ?  
**Arguments**—  
I. No, all those people engaged in running these small shops will be jobless and will be left with no earning to manage their livelihood.

- II. Yes, people prefer to carry out all their purchases under one roof in big shopping malls in the big cities and hence these small shops may not get customers to survive.
26. **Statement**—Should there be a complete ban on use of chemical pesticides in the agricultural fields ?  
**Arguments**—
- I. No, the crops will get damaged by the pests as almost each crop is attacked by pests during its life cycle.
- II. Yes, this pollutes environment and also contaminates ground water, instead biological pesticides should be used.
27. **Statement**—Should there be only one entrance test for all the medical colleges—both Govt. and private in India ?  
**Arguments**—
- I. No, each college has unique requirement and decisions on admissions should be left to the concerned colleges.
- II. Yes, this will bring in uniformity in the standard of students at the time of admissions and will reduce multiplicity.
28. **Statement**—Should the maintenance of all roads in the big cities be entrusted to private companies ?  
**Arguments**—
- I. Yes, this is the only way to ensure good conditions of the roads throughout the year.
- II. No, the private companies are not capable of maintaining all the roads.
29. **Statement**—Should India stop exploring presence of hydrocarbons in both onshore and offshore locations ?  
**Arguments**—
- I. Yes, this leads to wastage of precious resources as the hydrocarbon reserves are scanty.
- II. No, we must try to become less dependent on foreign countries for our energy needs by exploring all possibilities.
30. **Statement**—Should there be a complete ban on sale of soft drinks within the premises of all the schools in India ?  
**Arguments**—
- I. Yes, this will considerably decrease the consumption of such drinks by the school children as these contain harmful chemicals.
- II. No, the authorities do not have right to impose such restrictions in a democratic country.
31. **Statement**—Should all the villages in India be compulsory given training on use of modern techniques of cultivation ?  
**Arguments**—
- I. No, the training should be given on selective basis depending upon the land holding and crop pattern.
- II. Yes, this is the only way to improve the economic situation in the rural areas.
32. **Statement**—Should day to day management of all the government hospitals in the country be handed over to the private companies on operate and maintain basis ?  
**Arguments**—
- I. Yes, this will considerably improve the quality of services of these hospitals benefiting both the patient and the private companies.
- II. No, the poor people may not be able to afford high charges fixed by the private companies and they will be deprived of medical facilities.
33. **Statement**—Should the tuition fees in all schools—both Govt. aided and unaided upto class X be completely waived for all children ?  
**Arguments**—
- I. Yes, this will improve the literacy rate in our country.
- II. No, particularly the unaided schools should be allowed to charge tuition fees to meet the regular expenses.
34. **Statement**—Should there be no entertainment tax levied by the Govt. on the movie shows in India ?  
**Arguments**—
- I. No, the Govt. must levy entertainment tax on movie shows.
- II. Yes, the common people should not be taxed for movie shows.
35. **Statement**—Should there be a complete ban on registration of new vehicles in the big cities in India ?  
**Arguments**—
- I. Yes, this is the only way to reduce air pollution and traffic congestion significantly in the big cities.
- II. No, Govt. cannot put such restrictions as people can buy new vehicles as and when they need and can afford.

**Answers with Explanation**

1. (B) Clearly, reservations on communal basis will widen inter communal biases. So, argument I is not clear. Also, it will be against our secular policy, According to which no communal group is given preference over the others. So, only argument II is strong.
2. (B) Clearly, the spending of money on sports cannot be avoided merely because it can be spent upon our various other problems. Therefore, argument I is not valid. In case the expenses on sports are curtailed, the sport persons would face lack of facilities and training. Our country will lag behind in international sports competitions.
3. (E) Clearly, it is the advertisement which makes the customer aware of the qualities of the product and customer leads to buy it. So, argument I is valid, But on the contrary advertising of any product on various media has become a costly matter and the expenses on it add to the price of product. So, argument II is also strong.
4. (D) The PDS is indeed necessary to provide basic amenities to the poorer sections of society. So, argument is not clear. Also, if the objectives and purposes of any system are not fulfilled because of corruption then getting rid of the system is not a proper solution, efforts should be made to end corruption and we should extend its benefit to the needful people. So, argument II is also not valid.
5. (B)      6. (D)      7. (B)      8. (A)      9. (C)
10. (B) UNO is meant to maintain peace and harmony all over the world and it will always serve to prevent conflicts and wars among member countries. So, its role never ends. So, argument I is not strong. Lack of such type of organisation may in future lead to increased mutual conflicts and international wars. So, argument II is strong.
11. (B) Clearly, strike is not a means of indiscipline but only a practice and tool in which the citizens of any particular country exercise their fundamental rights. So, argument I is not clear and argument II is valid.
12. (B) Clearly, the luxury hotels of any country, are a mark of country's standard and place for staying the affluent people of that country as well as foreign tourists. So, argument II is strong. But, on the contrary, argument I is not strong because ban on hotel is not a proper way to end the success of international criminals.
13. (A) Abolishing the internal assessment would surely reduce favouritism on personal grounds because the teachers of that college would not be involved in examination system so that they cannot extend personal benefit to anyone whom they like. So, argument I is strong. But it will not affect the control of teaching faculty on students because still the teachers would be teaching them. So, argument II is not clear.
14. (B) Clearly, the pursuance of any policy in India cannot be based on the ground that it is followed in other countries. Basically, every country has its own environments, culture and values. So, argument I is not clear. Also, imparting sex education in co-educational schools where boy and girls study together, would spoil the atmosphere and hinder the studies. So, argument II is strong.
15. (B) Clearly, imposing ban on fashionable dresses will a restriction on the personal choice and it violates the right to freedom of an individual. Therefore, only argument II is strong.
16. (C) Family planning is an essential and important step to curb population growth. So, argument I is strong. Also family planning being against the beliefs of some of the Indian religions, it is not necessary to make it compulsory or mandatory. It would be better if it is enforced by creating public awareness of the benefits of family planning. Therefore, argument II is also valid.
17. (B) It is clear that a world government cannot remove tensions and liability among nations because it will also have the ruling group and the opposition groups. Simultaneously, the more powerful and diplomatic shall rule the world to their interests. So, only argument II is strong.
18. (B) Clearly, argument I is not clear because at present too many fields are open to all after graduation. However, eliminating the post graduation courses would abolish higher and specialised studies which provide to understanding thing better and deeply. So, argument II is valid.
19. (A) Clearly, health care services must be cared by the government and opening well-

- equipped hospitals in each and every area would surely provide better health services to every citizen. So, argument I is valid and strong. Also, it is not an impractical task and can be achieved by the government. So, argument II is vague.
20. (B) Clearly, the pursuance of a policy in India cannot be based on the pretext that it is followed in other countries because each and every country has its own environment and situations. So, argument I is not clear. But increasing the age of retirement is indeed a genuine demand of most of the employees to be self dependent throughout. So, argument II is valid and strong.
  21. (B) Being an unlimited number of one-day international matches will be a cause of extra labour, therefore, if any work is done beyond the limit be the cause of harmfulness. Therefore, a limited number of matches will be significance of proper controlling, mentality and healthfulness.
  22. (D) Neither I nor II argument is strong.
  23. (C) One of these two arguments will be strong necessarily, because it is impossible to happen both together because these two arguments are opposite to each other.
  24. (E) Both the arguments are strong. Argument I is therefore, strong because when the gambling will be legalized and tax will be imposed and the Government revenue will increase, but II is therefore, strong, because the people of poorer section will gamble beyond their earning limit.
  25. (A) Only the argument I is strong, because if the shops are closed the people of poorer sections will get suffer and the effect of money centralization will be strong.
  26. (E) I and II both arguments are strong, if there is no ban on the use of pesticides, the whole crop will be damaged by pests and if there is ban on the use of pesticides then it will pollute the environment.
  27. (B) Only argument II is strong because by only one entrance test it will bring uniformity in the standard of students which is necessary.
  28. (D) In argument I, it is not necessary that private companies are capable to do better service throughout the year. In argument II, we cannot blame that these companies are not capable of maintaining all the roads.
  29. (C)
  30. (A) Argument I is strong because soft drinks contain some harmful chemicals which are harmful to school children. But II is not strong because it is not the meaning of democratic country that we cannot ban on wrong things.
  31. (B) Argument I is not valid, because it emphasizes on selection on the basis of land holding and crop pattern, which is not fair and justified. Argument II asserts the importance of training particularly in rural area.
  32. (B) Argument I is not valid, because it is not necessary that private companies will care for the service benefitting for the patients. On the other hand, they will think over only for their personal and monetary benefit. In argument II, it is clearly given that the poor people may not be able to afford high charges fixed by the private companies and the poor people will not get proper medical facilities.
  33. (C) The improvement in the literacy rate is the first necessity of our country. Therefore, argument I is strong. The argument II is also strong because unaided schools are in need of income source to look after and manage the school. Hence, either argument I or argument II is strong because these are opposite to each other.
  34. (A) Argument I is strong and valid, if the government pass the order to waive the tuition fees on all the aided and un-aided school upto class, it will improve literacy rate in India.
  35. (B) Argument I is not valid because government cannot ban on registration of new vehicles. One has right to purchase whatever one wants if one has able to purchase. Argument II is valid because it supports the idea of the right of any person who lives in a country.



## 6

## Statement and Assumptions

An assumption is the hidden part of an argument and it is something taken for granted. It means a fact that can be supposed as considering the contents of the given statement. In these questions, a statement is followed by two or more assumptions. The candidate is required to assess the given statement and decide which of the given assumptions is implicit in the statement ?

**Direction**—In each question below a statement (or a passage) followed by assumptions numbered I and II. An assumption is something supposed or taken granted. Consider the statement and decide which of the given assumptions is implicit ?

**Give Answer**—

- (A) if only assumption I is implicit.
- (B) if only assumption II is implicit.
- (C) if either assumption I or II is implicit.
- (D) if neither assumption I or II is implicit.
- (E) if both the assumptions are implicit.

**Example 1.**

**Statement**—The Chairman and the Secretary of the Housing Society have requested society members to use water economically to help society to save water on tax.

**Assumptions**—

- I. Majority of members of society are likely to follow the request.
- II. It is desirable to reduce expenditure wherever possible.

**Solution**—In assumption I, nothing about the society members to the society's request can be deduced from the statement. So, assumption I is not implicit. But from assumption II, if it is possible the expenditure can be reduced. So, assumption II is implicit.

**Example 2.**

**Statement**—We must settle all the payment due to our suppliers within three working days.

**Assumptions**—

- I. We will always have necessary funds in our account to settle the bills.
- II. We are capable of verifying and clearing the bills in less than three working days.

**Solution**—Since, the statement says for making all payment within three days, it is clear that the company has the necessary funds and the bills can be verified and cleared within the stipulated period. So, both the assumptions I and II are implicit.

**Example 3.**

**Statement**—The patient condition would improve after this operation.

**Assumptions**—

- I. The patient can be operated upon this condition.
- II. The patient cannot be operated upon this condition.

**Solution**—It is very much clear in the statement that the patient is in a position to be operated upon. Hence, assumption I is implicit second assumption is contrast to the I assumption. It will not implicit.

**Example 4.**

**Statement**—It is desirable to put the child in school at the age of 5 or so.

**Assumptions**—

- I. At the age the child reaches appropriate level of development and is ready to learn.
- II. The schools do not admit children after six years of age.

**Solution**—The statement I talks of putting the child in school at the age of 5, it means that the child is mentally prepared for the same at this age. So, assumption I is implicit. But nothing about admission after six years of age is said in the statement. So, assumption II is not implicit.

**Example 5.**

**Statement**—As there is a great demand, every person seeking tickets of the programme will be given only five tickets.

**Assumptions**—

- I. The organisers are not keen on selling the tickets.
- II. No one is interested in getting more than five tickets.

**Solution**—Clearly, the organisers are adopting the policy not to reduce the sale but to cope with great demand in order that everyone get the ticket. So, I is not implicit. Also, due to great demand, the maximum number of tickets one person has been reduced to five. So, II is also not implicit.

**Exercise**

**Directions**—In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to find out from the following assumptions which one is implicit in the statement.

**Give Answer**—

- (A) if only assumption I is implicit.
- (B) if only assumption II is implicit.
- (C) if either I or II is implicit.
- (D) if neither I nor II is implicit.
- (E) if both I and II are implicit.

1. **Statement**—Opening a library in Rambali will be a wastage.

**Assumptions**—

- I. Inhabitants of Rambali are illiterate.
- II. Inhabitants of Rambali are not interested in reading.

2. **Statement**—“A car is required on rent”—an advertisement.

**Assumptions**—

- I. All types of vehicles are available on rent.
- II. People will respond to the advertisement.

3. **Statement**—A’s advice to B—“If you want to study computer, join Institute X”.

**Assumptions**—

- I. Institute X provides good computer education.
- II. B listen to A’s advice.

4. **Statement**—Like a mad man, I decided to follow him.

**Assumptions**—

- I. I am not a mad man.
- II. I am a mad man.

5. **Statement**—If it is easy to become an engineer, I don’t want to be an engineer.

**Assumptions**—

- I. An individual aspires to be professional.
- II. One desires to achieve a thing which is hard earned.

6. **Statement**—All the employees are notified that the organisation will provide transport facilities at half the cost from the nearby railway station to the office except those who have been provided with travelling allowance.

**Assumptions**—

- I. Most of the employees will travel by the office transport.
- II. Those who are provided with travelling allowance will not read such notice.

7. **Statement**—An advertisement of a Bank “Want to open a bank account ! Just dial our ‘room service’ and we will come at your doorsteps.”

**Assumptions**—

- I. There is a section of people who require such service at their home.
- II. Now a days banking has become very competitive.

8. **Statement**—I can take you quickly from Kanpur to Lucknow by my cab but then you must pay me double the normal charges.

**Assumptions**—

- I. Normally, it will take more time to reach Lucknow from Kanpur.
- II. People want to reach quickly but they will not pay extra money for it.

9. **Statement**—Patient’s condition would improve after this operation.

**Assumptions**—

- I. The patient can be operated upon in this condition.
- II. The patient cannot be operated upon in this condition.

10. **Statement**—Even with the increase in the number of sugar factories in India, we still continue to import sugar.

- Assumptions—**
- I. The consumption of sugar per capita has increased in India.
  - II. Many of the factories are not in a position to produce sugar to their fullest capacity.
11. **Statement—**Unemployed allowance should be given to all unemployed youths above 18 years of age.
- Assumptions—**
- I. There are unemployed youths in India who need monetary support.
  - II. The government has sufficient funds to provide allowance to all unemployed youth.
12. **Statement—**The leader of main opposition asserted that the call for chakka jam turned out to be a great success in the entire state.
- Assumptions—**
- I. The people in future will support the main opposition party.
  - II. People probably are convinced about the reason behind the chakka jam strike call.
13. **Statement—**A sentence in the letter to the candidates called for written exams—you have to bear your expenses on travel etc.
- Assumptions—**
- I. If not clarified, all the candidates may claim reimbursement of expenses.
  - II. Many organisations reimburse expenses on travel to candidates called to written examination.
14. **Statement—**In case of any difficulty about this case you may contact our company's lawyer.
- Assumptions—**
- I. Each company has lawyer of his own.
  - II. The company's lawyer is thoroughly briefed about this case.
15. **Statement—**A good executive has to be task oriented as well as people-oriented.
- Assumptions—**
- I. Some executives are people oriented.
  - II. Some people are not people-oriented.
16. **Statement—**Read this book to get detailed and most comprehensive information on this issue.
- Assumptions—**
- I. The person who wants this information can read.
  - II. There are other books available on this issue.
17. **Statement—**Why don't you invite Anthony for the Christmas party this year ?
- Assumptions—**
- I. Anthony is not from the same city.
  - II. Unless invited, Anthony will not attend the party.
18. **Statement—**If you offer peanuts, you get only monkeys.
- Assumptions—**
- I. Money is not a good motivation.
  - II. Money cannot buy everything.
19. **Statement—**"Best way to solve this problem of workers dissatisfaction is to offer them cash reward. If this type of incentive can solve the problem in CIDCO company than why not here". A personnel manager tells the Chairman of a company.
- Assumptions—**
- I. The reason for worker's dissatisfaction in both company was similar.
  - II. Monetary incentives have universal appeal.
20. **Statement—**"We need to appoint more teachers"—Principal informs the school staff.
- Assumptions—**
- I. Teachers are available.
  - II. Present teachers are not good.
21. **Statement—**We should use detergents to clean objects.
- Assumptions—**
- I. Detergents help to dislodge grease and dirt.
  - II. Detergents form more lather.
22. **Statement—**Every year doctors, scientists and engineers migrate from India to greener pastures.
- Assumptions—**
- I. Brain drain has affected adversely.
  - II. Better scales and better standards of living act as a bait to lure them.
23. **Statement—**The government is making efforts boost tourism in J & K.
- Assumptions—**
- I. Tourism in J&K dropped during last couple of years.

- II. Special discount in the railway fare has been announced.
24. **Statement**—Government should deploy army to rehabilitate the people displaced due to earthquake.  
**Assumptions**—  
 I. Army can be used purposed other than war also.  
 II. Only army can rehabilitate the displaced victims of earth quake.
25. **Statement**—The railway authorities have decided to increase the freight charges by 10 per cent in view of the possibility of incurring losses in the current financial year.  
**Assumptions**—  
 I. The volume of freight during the remaining period may remain same.  
 II. The amount so obtained may set off a part or total of the estimated deficit.
26. **Statement**—The government has decided to reduce the custom duty on computer peripherals.  
**Assumptions**—  
 I. The domestic price of computer peripherals may go in near future.  
 II. The domestic manufactures may oppose the decision.
27. **Statement**—Helping the poor is the real service to the humanity.  
**Assumptions**—  
 I. Poor people are in need of help from others.  
 II. If we do not help poor, we will not be called human being.
28. **Statement**—The police in India have to cope with tremendous stress and strain, while maintaining security and order.  
**Assumptions**—  
 I. In other countries the police do not have to undergo stress and strain while doing their duties.  
 II. The police are expected to do their duties without stress and strain.
- Answers with Explanation**
1. (D) None is implicit in the statements. The statement only says that opening a library would be wastage but it does not mention why? Assumptions I and II are only guessess.
- It may be possible that opening a library in Rambali is a wastage because there is already a library there.
2. (B) This statement says that a car is required for rent and it does not say that any vehicle is required. So, it cannot be assumed that any vehicle is available for rent. But assumption II clearly implicit. Whenever any advertisement is published, it is assumed that people will respond to the advertisement.
3. (B) Since, 'A' advises 'B' to join institute X to study computer, hence it is assumed that institute X provides good coaching for computer. Secondly, it is also assumed that B listens 'A' advice.
4. (A) In the statement, it is said like a mad man. It means 'not a mad man'. Hence, assumption I is implicit.
5. (B) It is not given in the statement, an individual always aspires to be a professional but we can deduce that the a person desires those things which are hard earned.
6. (D) From the statement, both the assumptions are not implicit.
7. (E) Both the assumptions are implicit. There is a section of people who can be benefitted by such type of service. This type of advertisement has been given by the bank because now-a-days banking has become competitive.
8. (A) The word quickly shows in the statement that normally, it takes more time to reach Lucknow to Kanpur and the cab-drivers promises to save the time. Assumption II does not implicit in the statement.
9. (A) It is very much implied in the statement that the patient is in a position to be operated soon. Hence, assumption I is implicit.
10. (D) Neither of the assumptions is implicit in the statement as there may various reasons for importing sugar.
11. (A) Assumption I says that Indian unemployed youths need monetary support is solid reason for providing allowance to all unemployed youths. However, assumption II that government has sufficient funds does not valid deduction. Hence, only assumption I is implicit.
12. (B) Since, the Chakka jam call was accepted by and large by the entire state. It means that



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people are convinced about the reasons behind the Chakka jam strike call. Hence, assumption I is implicit. However, it is not necessary that people will support the main opposition party in future without knowing any strong and valid reason.

13. (E) In the letter, specific instruction has been given in writing to prevent chance of claim of reimbursement of travelling expenses. Moreover, it can also be assumed that instruction has been given because expenses are paid by other organisation. Therefore, both the assumptions are implicit.
14. (B) It is not necessary that every company has a lawyer. Hence, assumption I is not implicit. As it is advised in the statement that for any difficulty about the case, consult company's lawyer. It is, therefore assumed that company's lawyer has been thoroughly briefed about the case. Therefore, assumption II is implicit.
15. (D) The statement explains that an executive should be task oriented as well as people oriented. It is based upon the assumptions that some executives are task oriented while some are people-oriented. Therefore, none of the assumptions follows.
16. (A) It can be assumed that the person instructed is capable of reading the book. However, we cannot say anything about the other sources of information. Hence, the information I is implicit.
17. (B) We cannot say that Anthony is not from the same city. However, it is assumed that unless invited, Anthony will not attend the party as invitation has been emphasised in the statement. Therefore, only assumption II is implicit.
18. (D) None of the assumptions is implicit because they are not related with the statement.
19. (E) It is clear that the reasons given for workers' dissatisfaction in both the companies are similar, that is why the same solution has been recommended for their problems. Secondly, it assumed in the context of the statement that monetary incentives have universal appeal.
20. (A) The school requires more teachers. It is assumed in the context of statement that teachers are available but it is not clear that present staff of teachers of that school is not good. Therefore, only assumption I is implicit.
21. (A) It is assumed that detergents generally help to clear grease and dirt, that is why it has been recommended in the statement. Hence, assumption I is implicit.
22. (B) The statement is based on the assumption that the lucrative offers of any organisation tempt the scientists to migrate abroad. Hence, assumption II is implicit.
23. (A) It has been assumed that the government is making efforts to boost the tourism in J&K during last couple of years due to some reasons. Therefore, assumption I is implicit.
24. (A) It is given in the statement that army should be deployed to rehabilitate people. It means that army can be used for purposes other than war. Hence, assumption I is implicit.
25. (B) Nothing is said about volume of freight during the remaining period. So, assumption I is not implicit in the statement. Secondly, it is given in the statement that fare has been increased in view of the possibility of incurring losses. Hence, assumption II is implicit.
26. (D) None of the assumption is implicit in the statement.
27. (A) The statement tells that the poor are in need of help from others which is a quality of being of a good human being. Assumption I is implicit.
28. (D) None of the assumptions is implicit.



## 7

## Passage

In such type of questions, a passage is given which is usually a part of report or an economic essay or any other similar thought-provoking topic or subject some inferences are given followed by the passage. Generally, there are five inferences the candidate is asked to decide whether the a given inference follows or not in the context of the passage.

The pattern of the passage is given below :

**Directions**—Given below a passage followed by five inferences based on it. The candidate has to examine the passage carefully and then decide the validity of the each inference.

**Mark Answer** —

- (A) if the inference is ‘definitely true’ *i.e.*, it properly follows from the statement of facts given.
- (B) if the inference is ‘probably true’ though not ‘definitely true’ in the light of the facts given.
- (C) if the data are inadequate *i.e.*, from the facts given you cannot say whether the inference is likely to be true or false.
- (D) if the inference is ‘probably false’ though not ‘definitely false’ in the light of the facts given.
- (E) if the inference is ‘definitely false’ *i.e.*, it cannot possibly be drawn from the facts given or it contradicts the given facts.

We can solve the passage in three steps —

- (i) Directly follows from the given passage.
- (ii) Can be inferred from the given passage.
- (iii) Can be inferred with the help of some key words in the given passage.

In the first step try the easy questions where an inference is more or less a restatement of some thing which is already stated in the passage. In the second step we check if the inference can be derived from the facts mentioned in the passage

and in the third if step, we see if some key words justify the given inference.

**Example of Passage**—The immediate challenge is on the food front. Shortfalls in production have been allowed to affect supplies and hence prices. The Government is planning to focus on investment in irrigation and even revival of agricultural extension system what is probably needed is a fresh dose of Green Revolution strategy. It appears that the Green Revolution instruments to encourage farmers to invest are no longer effective. The Green Revolution strategy was based on the state taking out the risk of collapse in prices. Farmers were offered remunerative prices and a guaranteed procurement of their produce in case the open market could not absorb it. Farmers could then borrow from banks, acquire the Green Revolution Technology and produce as much as they could. The pressure on the food subsidy was manageable as long as there was a food shortage. Prices in the open market then tended to be above the procurement prices. But with the food surpluses the situation has changed. The situation was unsustainable not merely because of the magnitude of this subsidy. It was also inefficient. It meant farmers were being led to produce crops based just on the prices Government fixed and not in relation to any real demand. In these circumstances, the Government was reluctant to keep increasing procurement prices at the pace that used to be the norm in earlier years.

1. The Government is planning to make crucial changes in the Green Revolution strategies.
2. The Government is no longer in a position to provide subsidy to farmers.
3. As the open market prices are lower, all the burden of procurement of crops in on the Government.
4. Demand is much higher than the quantity of crops produced by the farmers.

5. The farmers tend to produce the crops as per their convenience and not consonant with the demand.

### Answers with Explanation

- (B) The statement is probably true though not definitely true in the light of the facts given as according to the passage. "The Government is planning to focus on investment in irrigation and revival of agriculture extension which is probably needed in green revolution strategies."
- (C) Nothing is said about it in the passage so the data are inadequate".
- (A) The given statement is definitely true as it is given in the passage that the farmers were offered remunerative prices and a guaranteed procurement of their produce in case the open market could not absorb it.
- (E) The given statement is definitely true because it is mentioned in the passage that the farmer were being led to produce crops based just on the prices government fixed and not in relation to any real demand.
- (A)

### Exercise

**Directions**—(Q. 1–5) Below given a passage followed by several possible inferences which can be drawn from the facts stated in the passage. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

#### Mark Answer —

- if the inference is 'definitely true', *i.e.*, it properly follows from the statement of facts given.
- if the inference is 'probably true' though not 'definitely true' in the light of the facts given.
- if the 'data are inadequate', *i.e.*, from the facts given you cannot say whether the inference is likely to be true or false.
- if the inference is 'probably false', though not 'definitely false' in the light of the facts given.
- if the inference is 'definitely false', *i.e.*, it cannot possibly be drawn from the facts given or it contradicts the given facts.

Growth through acquisitions and alliances has become a critical part of creating value for pharma

and biotech manufacturers and their shareholders. However, companies and their investors may risk value destruction if they acquire rights to a drug that suddenly poses unanticipated safety risks for patients. Similarly, safety related compliance violations committed by an acquired company could significantly impair the ultimate value of the transaction and the reputation of the acquirer. The pace of deal making between pharma and biotech companies continued to accelerate in 2006, increasing 17% to about \$ 18 billion. Pharma companies were typically the buyers, and the premiums they paid increased substantially as competition intensified, to secure access to novel drugs and biologics. The stakes increase everyday as competition pushes up prices and drives deal-making to earlier development stages with greater uncertainty and less time to complete thorough due diligence—

- Acquisitions of biotech companies was preferred among pharmaceutical companies in the recent past.
- Biotech companies are not capable to acquire pharmaceutical companies.
- Pharmaceutical companies at times may incur loss after acquisition of biotech companies.
- Safety related issues are prime concerns for the pharmaceutical companies while negotiating acquisitions of biotech companies.
- Stiff competitions among the prospective buyers have resulted into erosion of value of the biotech companies.

**Directions**—(Q. 6–10) Below is given a passage followed by several possible inferences which can be drawn from the facts stated in the passage. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

#### Mark Answer —

- if the inference is 'definitely true', *i.e.*, it properly follows from the statement of facts given.
- if the inference is 'probably true' though not 'definitely true' in the light of the facts given.
- if the 'data are inadequate', *i.e.*, from the facts given you cannot say whether the inference is likely to be true or false.
- if the inference is 'probably false', though not 'definitely false' in the light of the facts given.

- (E) If the inference is ‘definitely false’ *i.e.*, it cannot possibly be drawn from the facts given or it contradicts the given facts.

The latest data to show that the overall power situation has gotten worse, with the ratio for peak-load shortages now the highest in a decade. In absolute terms, the power deficit has hit record levels and seems almost certain to further deteriorate without real reforms on the ground. Even as aggregate technical and commercial losses in the power system remain much high at over a third of total generation, pan-India capacity addition is now well below target. A shortage of equipment and skills is blamed for the marked slow down in augmenting power capacity. But the dearth of resources can only be relative. In fact, the real bane of the sector is continuing revenue leakage in the state power utilities and unacceptably high aggregate technical and commercial losses, much of it plain theft of electricity. Given the preponderance of state utilities in power supply, the fact that they remain very much in red does affect investor comfort and return funds flow.

6. Indian power generation is largely controlled by private sector.
7. Reforms in power sector in India has not yet attained its desired level.
8. Indian power sector is yet to attain status comparable to developed countries.
9. Power theft is one of the major components of revenue losses in power sector.
10. Aggregate technical and commercial loss is much less than thirty per cent of the total power generation.

**Directions**—(Q. 11–15) Below is given a passage followed by several possible inferences which can be drawn from the facts stated in the passage. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

**Now, mark your answer as—**

- (A) if the inference is ‘**definitely true**’ *i.e.*, it properly follows from the statement of facts given.
- (B) if the inference is ‘**probably true**’ though not ‘definitely true’ in the light of the facts given.
- (C) if the ‘**data are inadequate**’, *i.e.*, from the facts given you cannot say whether the inference is likely to be true or false.

- (D) if the inference is ‘**probably false**’, though not ‘definitely false’ in the light of the facts given.

- (E) if the inference is ‘**definitely false**’, *i.e.*, it cannot possibly be drawn from the facts given or it contradicts the given facts.

The main benefit to the economy from an active stock market is the ready availability of risk capital for investment in equities through the primary market. For that risk capital be readily available. Investors need to have an easy exit route. A liquid secondary market provides an easy exit route through the active involvement of buyers and sellers. It does not matter whether these buyers and sellers have short or long term investment horizons. Liquidity in the market is enhanced by leveraged players who either borrow to play the market or achieve a similar result through futures contracts whose economic value includes financing costs. Short sellers confer a similar benefit by borrowing stock or achieving the same result through futures contracts.

11. Nature of activity of the longterm players in the secondary market has significant effect on the health of stock market.
12. Players in the primary market generally borrow funds and earn money by quick disposal in the secondary market.
13. Active secondary market provides liquidity to the transactions in primary market.
14. Passive stock market enhances availability of capital.
15. Only short term buyers or sellers provide effective exit route to the primary market.

### Answers with Explanation

1. (A) The inference is definitely true because according to the given passage “The pace of deal making between pharma and biotech in 2006 is increasing accelerately”.
2. (C) According to the passage Pharma companies were typically the buyers out it is not necessary that Biotech companies are not capable to acquire pharmaceutical companies. Hence, data is inadequate.
3. (A) The inference is definitely true as it is clearly mentioned in the passage. However, companies and their investor may risk value destruction if they acquire rights to a drug

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- that suddenly poses unanticipated safety risks for patients.
4. (B)
  5. (E) The inference is definitely false as it is given in the passage that competition pushes up prices.
  6. (C) In this passage, nothing is mentioned regarding Indian power generation. Hence, data are inadequate.
  7. (B) As the whole passage narrates for the power situation, it can be inferred that reforms in power sector in India has not yet attained its desired level. Hence, the inference is probably true.
  8. (C)
  9. (A) Given in the passage much of it plain theft of electricity. Hence, 'definitely true.'
  10. (E) Given in the passage aggregate technical and commercial losses in the power system remain much high at over a third of total generation and the inference contradicts the given facts. Hence, definitely false.
  11. (B) Because the role of long term players has significant effect on the health of stock market and this inference can be probably true. We can only infer in the light of the facts given.
  12. (C) No data are given in the passage.
  13. (D)
  14. (A)
  15. (E) It contradicts the statement in the passage. The statement says that a liquid secondary market provides an easy exit route through the active involvement of buyers and sellers.



## 8

## Statement and Course of Action

In many of the competitive examinations this type of questions has become a regular feature. In such type of questions, a situation is presented and some courses of action are suggested in the context of the situation.

To solve this type of questions, students are advised to keep in mind various points.

- (A) Correct course of action should either lessen the problem or improve the situation created by the problem.
- (B) Course of action should be feasible and should relate with the practical aspect of life.
- (C) Decide quickly whether the problem involves a problem solution relationship or a fact improvement relationship.
- (D) Simple problem must have simple course of action and not a complex one which may create more problem than to solve or reduce it.

**Direction**—In each question below is given a statement followed by two courses of action numbered I and II. The candidates is required to grasp the statement analyse the problem and then decide which of courses of action logically follow.

**Give Answer**—

- (A) if only I follows.
- (B) if only II follows.
- (C) if either I or II follows.
- (D) if neither I nor II follows.
- (E) if both I and II follow.

**Example 1.**

**Statement**—An increased number of credit/debit card forgery cases have been recorded recently.

**Courses of Action**—

- I. The banks should make stricter verification to ensure the access to credit/debit card by the authorized person.

- II. The banks should advise their customers to be more careful in dealing with the plastic money.

**Solution**—The course of action I follows because according to the statement, an increased number of credit/debit and forgery have been recorded recently. Hence, the banks should make stricter verification to ensure the access to credit/debit by the authorised person. Simultaneously the banks should advise their customers to be more careful in dealing with the plastic money. Hence, both I and II courses of action follow. Therefore, our answer is (E).

**Example 2.**

**Statement**—Drinking and rave parties have become fashion among the present college youth which divert from their studies.

**Courses of Action**—

- I. The State Government should make it a rule to disallow the students from entering Pubs and Bars.
- II. The parents as well as the colleges should impose strict discipline among the college going youth.

**Solution**—In order to stop the present college youth from drinking and attending the rave parties the State Government, the parents as well as the college should impose strict discipline among them. Hence, I and II both follow. Therefore, our answer is (E).

**Example 3.**

**Statement**—Increasing competition on various fronts is putting children and youth under tremendous pressure leading them to take extremely drastic steps.

**Courses of Action**—

- I. Children and youth alongwith their parents should be counselled for facing the competition in right spirit.

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- II. Parents and teachers should be advised not to bring pressure on children.

**Solution**—Increasing competition on various fronts is putting children and youth under tremendous pressure leading them to take extremely drastic steps. In order to avoid, children alongwith their parents should be counselled for facing the competition in right spirit. Hence, I action follows II is not proper. Therefore, our answer is (A).

### Exercise

**Directions**—(Q. 1–5) In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

**Give Answer**—

- (A) if only I follows.  
 (B) if only II follows.  
 (C) if either I or II follows.  
 (D) if neither I nor II follows.  
 (E) if both I and II follow.
1. **Statement**—Misuse of subsidies offered to the farmers was observed and brought to the notice of the concerned authorities.  
**Courses of Action**—  
 I. Government should issue orders to the concerned officials to be stricter and more careful while verifying the required documents while granting subsidy.  
 II. Government should take stringent action against those making false claim of subsidy.
2. **Statement**—Expensive clothes and accessories are becoming a growing need among college going teenage children of middle-income group.  
**Courses of Action**—  
 I. Colleges should introduce a dress code.  
 II. Children should be counseled emphasizing the importance of many other things.

3. **Statement**—People in the locality were agitated as more than thirty people died in a building collapse.

**Courses of Action**—

- I. Government should immediately announce compensations for the affected families.  
 II. Authorities should take a stringent action against builders tending to compromise over quality of material used.
4. **Statement**—With the onset of monsoon all the hospitals are getting increased number of patients due to various epidemics.

**Courses of Action**—

- I. Civic authorities should educate the public the need for observing minimum required hygiene.  
 II. Civic authorities should make arrangements to equip the hospitals with required medicines and other facilities.
5. **Statement**—More number of students passing SSC examination has resulted into frustration among children for not getting admissions into colleges of their choice.

**Courses of Action**—

- I. Government should permit the colleges to increase the number of seats.  
 II. Children and their parents should be counselled for being flexible on the choice of college.

**Directions**—(Q. 6–10) In each questions below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

**Give Answer**—

- (A) if only I follows.  
 (B) if only II follows.  
 (C) if either I or II follows.  
 (D) if neither I nor II follows.  
 (E) if both I and II follow.
6. **Statement**—The local college principal has ordered that all the students must strictly adhere to the dress code stipulated by the college authority in the admission brochure.

**Courses of Action—**

- I. Those students who are found to violate the dress code should be terminated from the college.
  - II. Those students who are found to violate the dress code for the first time should be reprimanded and be warned against further violation.
7. **Statement**—The railways have decided to repair the main tracks within the city on the following Sunday and has decided to suspend operations for the whole day.

**Courses of Action—**

- I. The railway authority should issue public notification well in advance to ease inconvenience to the passengers.
  - II. All the long distance trains at the time of repair hours should be terminated outside the city limit.
8. **Statement**—Many motorists driving on the highway within the city are found to be driving much beyond the permissible speed limit.

**Courses of Action—**

- I. The traffic police officials should personally monitor the movement of vehicles on the highway within the city.
  - II. The Govt. should immediately put in place a mechanism to identify and punish erring drivers.
9. **Statement**—Majority of the city employees in the renowned BPO company has left their jobs to protest against inhuman treatment meted out to them by the company.

**Courses of Action—**

- I. The Govt. should immediately order the BPO company to close down its operation.
  - II. The BPO company should shift its operations to some other place to continue its operations.
10. **Statement**—The management of the organization has issued a circular to all its employees stating that each employee must report for duty at 10.00 a.m. sharp and should remain in his/her work place till 5.30 p.m. everyday.

**Courses of Action—**

- I. The management should evolve a mechanism to identify such employees

who may not adhere to the time schedule.

- II. All such employees who are found to be failing to maintain time schedule should be summarily suspended.

**Directions**—(Q. 11–15) In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

**Give Answer—**

- (A) if only I follows.
- (B) if only II follows.
- (C) if either I or II follows.
- (D) if neither I nor II follows.
- (E) if both I and II follows.

11. **Statement**—A speeding truck has seriously injured many persons sleeping on the roadside early in the morning.

**Courses of Action—**

- I. The local administration should immediately put a complete ban on people sleeping on the roadsides.
- II. The driver of the speeding truck should be nabbed and tried for the crime he committed.

12. **Statement**—There has been an unprecedented increase in the number of students applying for admission to first Std. in a local school making it difficult for the school authority to convince the parents of rejected applicants.

**Courses of Action—**

- I. There has been an unprecedented increase in the number of students applying for admission to first Std. in a local school making it difficult for the school authority to convince the parents of rejected applicants.
- II. The school authority should open another school in the area to accommodate the remaining students.

13. **Statement**—The apex court has directed that there is a need to bring in mechanism in the Govt. functions to make it transparent.



**Courses of Action—**

- I. The Govt. should immediately appoint a task force to work out the modalities.
- II. The Government should appeal to the apex court to reconsider its directive.

14. **Statement**—Many people in the coastal town are suffering from respiratory diseases during past few months.

**Courses of Action—**

- I. The Government should immediately send a team of health professional to provide medical care to the affected people.
- II. The people suffering from such diseases should be kept in a special ward and put through proper medication.

15. **Statement**—There has been a substantial drop in number of people opting for new telephone connection from the public sector telephone company in the recent months.

**Courses of Action—**

- I. The public sector telephone company should immediately set up a committee to identify the reasons for the drop.
- II. The public sector telephone company should offer new schemes with value added services to woo the new clients.

**Directions**—(Q. 16–20) In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

**Give Answer—**

- (A) if only I follows.
- (B) if only II follows.
- (C) if either I or II follows.
- (D) if neither I nor II follows.
- (E) if both I and II follow.

16. **Statement**—The parents of majority of the students of the local public school have decided to withdraw their wards from the schools to protest against the sharp fee hike.

**Courses of Action—**

- I. The school authority should start a dialogue with the parents and explain to

them the circumstances under which the fees had to be hiked.

- II. The school authority should immediately scout for new students to fill the vacancy if large number of students are withdrawn from the school.

17. **Statement**—The prices of mangoes in the local market have dropped substantially due to supply-demand mismatch.

**Courses of Action—**

- I. The Govt. should encourage the wholesale fruit suppliers to sell the mangoes to the markets of other states.
- II. The Govt. should encourage the farmers to extract pulp and sell the pulp to the wholesalers.

18. **Statement**—A large mob gathered outside the local police station to protest the recent harassment of local people by some police personnel.

**Courses of Action—**

- I. The officer in charge of the police station should be instructed to persuade the mob to disburse immediately.
- II. The police authority should immediately initiate an enquiry into the allegations and inform the public accordingly.

19. **Statement**—The prices of crude oil in the international market have risen by about 40 per cent in a month's time and show no downward trend.

**Courses of Action—**

- I. The petrol prices in the domestic retail market should immediately be increased by about 30 per cent to absorb the cost escalation.
- II. The Govt. should provide subsidy to the oil marketing companies to absorb the cost escalation.

20. **Statement**—Many students were caught red handed while using unfair means during the recent university examinations.

**Courses of Action—**

- I. All these students should be debarred from taking university examination in future.
- II. The students apprehended while using unfair means should be handed over to the police.

**Directions**—(Q. 21–25) In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

**Give Answer**—

- (A) if only I follows.  
 (B) if only II follows.  
 (C) if either I or II follows.  
 (D) if neither I nor II follows.  
 (E) if both I and II follow.
21. **Statement**—With the arrival of monsoon, the condition of roads in the city has begun to deteriorate.
- Courses of Action**—
- I. The Road-Development Authorities should be directed by the State Govt. to take up regular up-keeping of the roads.  
 II. People should be encouraged to use the pooled/public transport by improving the system to take care of their needs and expectations.
22. **Statement**—Despite consistent economic growth, our country has not been able to eradicate poverty.
- Courses of Action**—
- I. The Government should focus their attention towards the below poverty line strata of society.  
 II. People in the high income group should volunteer and contribute to the Government's plan of poverty eradication.
23. **Statement**—Incidence of terror attacks are on a constant rise since last few years.
- Courses of Action**—
- I. Strict control should be imposed on immigrants across the states.  
 II. Commuters should not be allowed to carry baggage in shared public transport.
24. **Statement**—Every year there is an increasing number of students committing suicide due to fear of failure.

**Courses of Action**—

- I. Parents and teachers should not put pressure on children for high achievement, rather they should help children face the situation as it comes.  
 II. School/college authorities should appoint counsellors for regular counselling of students.
25. **Statement**—Quite a few cases of post calamity false claims have been noticed by the concerned Govt. authorities.

**Courses of Action**—

- I. Government should ensure stricter verification of identity by the concerned officials.  
 II. Government should deploy more number of officials to handle the situation.

### Answers with Explanation

1. (E)    2. (B)    3. (A)    4. (B)    5. (E)  
 6. (A)    7. (C)    8. (D)    9. (B)    10. (B)
11. (E) Both action I and II follows.  
 12. (D) Neither I nor II action follows, because after rejecting the application, there is no importance of objective criteria. And it is not possible to open another school recently.  
 13. (A) Only action I follows.  
 14. (B) Only action II follows because it contains cause to check the diseases with medical care.  
 15. (E) To put both the actions successively is necessary.  
 16. (A) Only the course of action I follows because parents can change their decisions just knowing the circumstances. But the course of action II cannot be done quickly. By the way, if the course of action II is imposed quickly the mentality of forth-coming parents will be same also.  
 17. (E) Both the actions follow, because Government has rights to take the decision of proper consumption of mangoes, which can check the destruction of natural material. Being the higher supply it is possible that the excess mangoes out of consumption may be rotten. Therefore, both the courses of actions are legal.  
 18. (B) The course of action II follows, because giving faith of immediately initiate an

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- enquiry, it is possible to give the peace to the mob. If the policeforce is used to disturb the mob, in such a position the mob may be more infuriated of which result will not be good.
19. (C) Either course of action I or II follows. If the cost are to be increased in the domestic retail market, then it is not good to provide subsidy to the oil marketing companies and if the subsidy is to be provided to the marketing companies then the price should be remain constant in the retail market.
20. (A) The course of action I follows, because when the students were caught red handed while using unfair means in the examinations *i.e.*, the students are in blame. Keeping the education level in view they should be punished by an education means, so that all other students will change their mind not to do so. The second course of action is not so proper.
21. (A) Only (I) follows because Road Development authorities are made by the State Government to take care regular up-keeping of the roads. But II does not follow because it is not possible to use public transport to go everywhere.
22. (E) Both I and II follow. If the Government make some employment plans for the people below the poverty line then their poverty can be removed. If the people in the high income group, help with money volunteerly to plans made by Government, it be helpful in the development of the poor.
23. (E) Both the actions follow. By strict control on immigrants, we should focus and observe each and every immigrant across the State. Commuters should not be allowed to carry baggage in shared public transport, because it is be possible that they carry some bombastic things.
24. (E) Both I and II follow. The I.Q. of all students are different. Hence, parents and teachers should not pressure on children for high achievement otherwise the students commit suicide due to fear of failure. Besides school authorities should appoint counsellors for regular counselling of students.
25. (A) Only I follows. If the verification of identity of the concerning man is done correctly then false claims can be ruled out. II does not follow because there is no use to deploy more number of officials to handle the situation.



## 9

## Decision Making

This chapter deals with questions in which you have to decide upon the course of action to be taken upon a candidate who has applied for a vacancy or allotment or membership to an institution. It is an indispensable process in one's personal and official life. A decision is the final outcome of the process of evaluating and analysing the given data. Systematic analysis of facts and figures reduces the chances of inaccuracy and ensures speedy decision-making. Students are required to match personal data of a candidate with the conditions given to select him/her to the job or admission. The decision about each candidate has to be made from amongst the five choices named (a), (b), (c), (d) (e) which state the courses of action to be taken as per the candidate's potentials.

**Example—**

**Directions—**(Q. 1–10) Study the following information carefully and answer the questions given below—

Following are the conditions for selecting Assistant General Manager-HR in an organization.

The candidate must—

- I. Be at least 40 years and not more than 50 years old as on 1.5.2010.
- II. Be post graduate in Personnel Management/HR with at least 60 per cent marks.
- III. Have post qualification work experience of at least fifteen years out of which at least five years as Senior Manager-HR in an organization.
- IV. Have successfully implemented HR system in his/her organization some time during the past three years.
- V. Have secured at least 45 per cent marks in the selection process.

In the case of a candidate who satisfies all the conditions **except** at—

- (a) At (II) above but has secured at least 50 per cent marks in post graduation and at least 65 per cent marks in the selection process, the case is to be referred to Executive Director.
- (b) At (III) above but has at least twelve years post qualification work experience out of which at least eight years as Senior Manager-HR in an organization, the case is to be referred to Chairman.

In each question below details of one candidate are given. You have to take one of the courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.5.2010.

**Mark Answer—**

- (A) If the candidate is to be selected
  - (B) If the candidate is not to be selected
  - (C) If the data provided are not adequate to take a decision
  - (D) If the case is to be referred to Executive Director
  - (E) If the case is to be referred to Chairman.
1. Pranab Ghosh was born on 8th March 1968. He has been working for the past eighteen years in an organization out of which last seven years as Senior Manager-HR after completing his post graduation in HR with 68 per cent marks. He had successfully implemented HR System last year in his organization. He has secured 50 per cent marks in the selection process.
  2. Sheetal Jha has been working in an organization for the past twenty years out of which ten years as Senior Manager-HR after

completing her post-graduation in Personnel Management with 70 per cent marks. She was born on 2nd December 1965. She has secured 45 per cent marks in the selection process.

3. Prabir Sengupta was born on 8th May 1963. He has secured 65 per cent marks in the selection process. He has been working for the past fifteen years in an organization out of which twelve years as Senior Manager-HR after completing his post graduation in HR with 55 per cent marks. He has successfully implemented HR system in his organization during the last two years.
4. Shailesh Kumar has been working in an organization for the past thirteen years out of which nine years as Senior Manager-HR after completing his Post graduation in HR with 68 per cent marks. He was born on September 15, 1968. He has secured 48 per cent marks in the selection process. He has successfully implemented HR-System in his organization two years back.
5. Navin Chopra was born on 12 June, 1967. He has been working for the past sixteen years out of which seven years as Senior Manager-HR after completing his post graduation in Personnel Management with 75 per cent marks. He has secured 44 per cent marks in the selection process. He has successfully implemented HR-System in his organization last year.
6. Meera Kulkarni has been working for the past seventeen years out of which eight years as Senior Manager-HR after completing her post graduation in Personnel Management with 66 per cent marks. She has successfully implemented HR-System in her organization during the last two years. She has secured 49 per cent marks in the selection process. She was born on December 14, 1971.
7. Akash Shastri was born on April 12, 1967. He has been working for the past sixteen years out of which six years as Senior Manager-HR in an organization after completing his post graduation in HR with 58 per cent marks. He has successfully implemented HR-System in his organization last year. He has secured 65 per cent marks in the selection process.
8. Shekhar Jena has been working for the past fifteen years out of which last seven years as Senior Manager-HR in an organization after completing his post graduation in HR with 68

per cent marks. He has secured 60 per cent marks in the selection process. He was born on August 16, 1965. He has successfully implemented HR-System in his organization in past three years.

9. Suneeta Govil was born on April 5, 1964. She has been working for the past seventeen years out of which nine years as Senior Manager-HR in an organization . She has secured 48 per cent marks in the selection process. She has also secured 69 per cent marks in post graduation in Personnel Management. She has successfully implemented HR-System in her organization last year.
10. Mohit Saxena was born on July 27, 1963. He has been working for the past thirteen years out of which nine years as Senior Manager-HR after completing his post graduation in HR with 67 per cent marks. He has secured 49 per cent marks in the Selection process. He has successfully implemented HR-System in his organization during the past three years.

#### Answers with Explanation

1. (A) Pranab Ghosh fulfils all the conditions so he is to be selected.
2. (C) Nothing is said for Sheetal Jha about the condition IV. So the data provided are not adequate to take a decision.
3. (D) Prabir Sengupta does not satisfy the condition II but he fulfils the condition (a). So his case is to be referred to Executive Director.
4. (E) Shailesh Kumar does not satisfy the condition III but he fulfils the condition (b). So his case is to be referred to Chairman.
5. (B) Navin Chopra does not satisfy the condition V. Hence he is not to be selected.
6. (B) Meera Kulkarni is younger than 40 years. Hence she is not to be selected.
7. (D) Akash Shastri does not satisfy the condition II but he fulfils the condition (a). So his case is to be referred to Executive Director.
8. (A) Shekhar Jena fulfils all the conditions so he is to be selected.
9. (A) Suneeta Govil fulfils all the conditions so she is to be selected.
10. (E) Mohit Saxena does not satisfy the condition III but he fulfils the condition (b). So his case is to be referred to Chairman.

### Exercise

**Directions**—(Q. 1–10) Study the following information carefully and answer the questions given below.

An organization wants to recruit System Analysts. The following conditions apply.

The candidate must .....

- (i) be an engineering graduate in Computer/IT with atleast 60% marks.
- (ii) have working experience in the field of Computer atleast for 2 years after acquiring the requisite qualification.
- (iii) have completed minimum 25 years and maximum 30 years of age as on 1.12.2005.

In each question below, detailed information of candidate is given. You have to carefully study the information provided in each case and take one of the following courses of actions based on the information and the conditions given above. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.12.2005. You have to indicate your decision by marking answers to each question as follows.

**Mark Answer**—

- (A) if the case is to be referred to VP.
  - (B) if the case is to be referred to GM.
  - (C) if the data provided are not sufficient to take a decision.
  - (D) if the candidate is to be selected.
  - (E) if the candidate is not to be selected.
1. Ms. Suneeta is an IT Engineer with 60% marks at graduation as well as in selection test. She is working as a Software Engineer for last 3 years after completing engineering degree and has completed 27 years of age. She is willing to sign the bond of Rs. 50,000.
  2. Rakesh Rao is a Computer Engineer Graduate and thereafter is working as a Software Manager for past 6 years. He has secured 72% marks at graduation and 67% marks in selection test. His date of birth is 5th December 1976. He is not willing to sign the bond for Rs. 50,000.
  3. Ram Kumar is an Engineering Graduate in Computers with 78% marks passed out in 1999 at the age of 23 years. Since then he is working as a Software Manager in an

engineering firm. He doesn't want to sign the bond for Rs. 50,000. He has cleared the selection test with 72% marks.

4. Nishant is an Electronics Engineer passed out in June 2002 at the age of 22 years. Since then he is working as a Programmer in a software company. He has passed the selection test with 66% marks and is willing to sign the bond.
5. Kalyani is an engineer with 72% marks in Telecommunication. She has just completed 27 years of age. She has cleared the selection test with 59% marks. She is willing to sign the bond.
6. Sangita is an IT Engineer and is working as an EDP Officer in a bank for past 5 years. She has completed 28 years of age and is willing to sign the bond of Rs. 50,000. She has obtained 65% marks in the selection test.
7. Abhijit is a Computer Engineer with 65% marks passed out in 2001 at the age of 22 years. Since then he is working as a Software Engineer in a private firm. He is willing to sign the bond for the required amount. He has secured 63% marks in the selection test.
8. Giridhar is working as a Software Engineer in a reputed company for past 4 years after completing Computer Engineering with 68% marks. He has cleared the selection test with 75% marks and is willing to sign the bond. His date of birth is December 17, 1978.
9. Nikita has just completed 26 years of age. She has passed IT Engineering examination in 2002 with 66% marks and is working as a Sr. Programmer since then. She has no problem in signing the bond of Rs. 50,000. She has secured 53% marks in the selection test.
10. Mr. Rajan is working as a Programmer for the last 6 years in an engineering firm after passing engineering examination. He has passed Electronics Engineering with 76% marks. His date of birth is 16.05.78. He has cleared the selection test with 62% marks and is willing to sign the bond for Rs. 50,000.

**Directions**—(Q. 11–18) Study the following information carefully and answer the questions given below :

Following are the conditions for admitting students for Graduate course in Architecture in a college :

The student must :

- (i) be at least 17 years old as on 1.7.2006.
- (ii) have secured at least 50 per cent overall marks in XII Std. final examination.
- (iii) have secured at least 60 per cent aggregate marks in Physics, Chemistry and Mathematics in XII Std. final examination.
- (iv) have secured at least 55 per cent marks in the entrance examination.
- (v) Pay Rs. 60,000 annual fee at the time of admission.

If a student satisfies alone above conditions **except—**

- (a) at (iii) above but as secured at least 70 per cent overall marks in XII Std. final examination, his /her case is to be referred to Principal of the college.
- (b) at (v) above but can pay at least 60 per cent of the annual fee at the time of admission and the remaining amount within six months, his/her case is to be referred to Vice-Principal of the college.

In each of the questions given below, detailed information about one student is given. You have to take one of the following courses of actions based on the information provided and the above conditions and sub-conditions. You are not to assume anything other than the information provided in each questions.

All these cases are given to you as on 1.7.2006. **Now, mark your answer as—**

- (A) if the data provided are not adequate to take a decision.
  - (B) if the student is to be omitted.
  - (C) if the case is to be referred to the Principal.
  - (D) if the student is not to be omitted.
  - (E) if the case is to be referred to Vice-Principal.
11. Anirban Mandal has passed his XII Std. final examination with 75 per cent overall marks. He was born on 20th October 1988. He has secured 56 per cent marks in the entrance test and 62 per cent overall marks in Physics, Chemistry and Mathematics in XII Std. final examination. He can pay Rs. 40,000 at the time of admission.
  12. Arvind Gogoi has secured 75 per cent overall marks in XII Std. final examination. He has secured 60 per cent marks in the entrance test. He was born on 8th January 1987. He can pay Rs. 60,000 at the time of admission. He has secured 58 per cent average marks in

Physics, Chemistry and Mathematics in XII Std. final examination.

13. Malini Sawant was born on 19th April, 1988. She has secured 60 per cent marks in the entrance test. She can pay Rs. 60,000 at the time of admission. She has secured 55 per cent overall marks and 62 per cent average marks in Physics, Chemistry and Mathematics in XII Std. final examination.
14. Shikha Gupta has secured 60 per cent average marks in Physics, Chemistry and Mathematics and 58 per cent overall marks in XII Std. final examination. She was born on 14th February, 1988. She has secured 60 per cent marks in the entrance test. She can pay Rs. 38,000 at the time of admission and the remaining amount within two weeks of admission.
15. Samir Malhotra was born on 5th March, 1986. He can pay Rs. 60,000 at the time of admission. He has secured 65 per cent average marks in Physics, Chemistry and Mathematics in XII Std. final examination. He has also secured 65 per cent marks in the entrance test.
16. Joseph D'Silva has secured 62 per cent average marks in Physics, Chemistry and Mathematics and 55 per cent overall marks in XII Std. final examination. He was born on 5th July, 1986. He can pay Rs. 60,000 at the time of admission. He has secured 65 per cent marks in the entrance test.
17. Sudha Ghosal was born on 8th August, 1989. She can pay Rs. 60,000 at the time of admission. She has secured 65 per cent overall marks in XII Std. final examination and 55 per cent marks in Physics, Chemistry and Mathematics. She has also secured 75 per cent marks in the entrance test.
18. Mohan Awasthi was born on 25 October, 1980. He can pay Rs. 40,000 at the time of admission and the remaining amount within two months. He has secured 65 per cent marks in the entrance test. He has also secured 60 per cent average marks in Physics, Chemistry and Mathematics and 56 per cent overall marks in XII Std. final examination.

**Directions—**(Q. 19–26) For recruiting Agriculture Officers in an organization, the following conditions apply. The candidate must—

- (i) be an Agriculture Graduate with at least 65% marks.

- (ii) clear the selection test with atleast 50% marks.
- (iii) secure atleast 45% marks in the interview.
- (iv) be born on or after 1.11.1975 but not after 1.11.1984.
- (v) be willing to work in rural area.

If the candidate satisfies all of the above mentioned conditions **except**—

- (a) at (i) above but has passed post graduation in Agriculture, the case may be referred to the Vice-President.
- (b) at (iii) above but has secured 60% or more marks in selection test and has secured at least 40% marks in interview, the case may be referred to the Chief General Manager.

In each question below, detailed information of one candidate is provided. You have to read the information provided carefully and decide which of the following courses of actions you will adopt as regarding status of the candidate based on the conditions stated above. You are not to assume anything other than the information provided in each question. All these case are given as on 1.11.2005. Study the information of candidate in each question and decide the course of action.

**Give Answer—**

- (A) if the candidate is to be selected.
  - (B) if the case is to be referred to the Vice-President.
  - (C) if the case is to be referred to the Chief General Manager.
  - (D) if the candidate is not to be selected.
  - (E) if the information in the question is not adequate to take the decision.
19. Sahil has passed B.Sc. Agriculture in 2003 at the age of 21 years with 68% marks. He is doing post-graduation in Agriculture and will complete in May 2006. He has secured 58% marks in selection test and has secured 50% marks in the interview. He is willing to work in rural area.
  20. Milind is an Agriculture Graduate with 70% marks. His date of birth is 11.7.1984. He scored 68% marks in the selection test and 42% marks in the interview. He is willing to work in rural area.
  21. Pravin is a post-graduate in Agriculture with 58% marks. He is working for last 2 years after completing post-graduation at the age of 25 years. He had scored 56% marks at graduation in Agriculture. He secured 60%

- marks in the selection test and 52% marks in interview. He is willing to work in rural area.
  - 22. Nikhil, a young boy of 22 years has just passed B.Sc. Agriculture with 78% marks. He is a resident of a village in rural area of Maharashtra state and would like to live in rural area in future as well. He cleared the selection test with 66% marks and the interview with 58% marks.
  - 23. Raj Barua is working as an Agriculture Officer for past three years after completing B.Sc. Agriculture with 62% marks at the age of 23 years. He has cleared the selection test with 48% marks and interview with 47% marks. He is willing to work in rural area.
  - 24. Avinash is 24 years of age and has passed graduation and post graduation in Agriculture with 67% and 69% marks respectively. He has secured 70% marks in the selection test and 42% marks in interview.
  - 25. Ramesh is an Agri Graduate with 60% marks and has just completed post-graduation in Agriculture with 56% marks. He has secured with 62% and 58% marks in the selection test and interview. His date of birth is 26.4.1982. He has no problem in working in urban or rural area.
  - 26. Rajesh is an Agriculture graduate with 75% marks passed out in 1996 at the age of 22 years. Thereafter, he is working for last 7 years as Agriculture Assistant. He has secured more than 55% marks in selection test as well as interview. He prefers to work in rural area.
- Directions—**(Q. 27–36) Following are the criteria laid down for the selection of Jr. Executives in an Organisation.
- The candidate must—
- (i) have scored atleast 70% marks in SSC examination.
  - (ii) have obtained graduation degree in any discipline with atleast 65% marks and first class.
  - (iii) have cleared the selection test with atleast 55% marks.
  - (iv) have cleared the interview with atleast 50% marks.
  - (v) be not less than 21 years of age and not more than 28 years of age as on 1.9.2008.
  - (vi) have completed atleast a certificate / diploma course in Computers.
- However, if a candidate satisfies all the above mentioned criteria **except**—
- (a) at (ii) above, but has completed post-graduation in any discipline; the case



may be referred to the Vice-President of the company.

- (b) at (iii) above, but has secured atleast 50% marks in the selection test and atleast 60% marks in the interview, the case may be referred to the General Manager (Recruitment) of the company.

In each of the questions below, information of one candidate is given. You have to take one of the following five decisions based on the information provided and the criteria and conditions given above. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.09.2008. You have to indicate your decision by marking answers to each question as follows.

**Mark Answer —**

- (A) if the candidate is to be selected.  
 (B) if the candidate is not to be selected.  
 (C) if the data are inadequate to take a decision.  
 (D) if the case is to be referred to the Vice President of the company.  
 (E) if the case is to be referred to the General Manager (Recruitment) of the company.
27. Shamika is a Science Graduate passed in first class with 69% marks. She had passed SSC exam securing 83% marks. She has cleared the selection test with 53% marks and interview with 63% marks. Her date of birth is 1.8.1983. She has completed a six months certificate course in computers.
28. Vivek is presently pursuing post-graduation in Economics. He has passed graduation in first class with 72% marks. He had scored 78% marks in SSC. His date of birth is 21.8.1985. He has secured 58% marks in the selection test and 62% marks in interview. He has passed a 6 months diploma course in Computers.
29. Abhijit is a graduate with 60% marks and a post-graduate with 65% marks. He has completed one year diploma course in Computers. He had scored 85% marks in SSC. He has cleared the selection test and interview with 58% and 56% marks respectively. His date of birth is 17.5.1986.
30. Sujay Chaudhary has passed SSC with distinction and 81% marks and B. Com. in first class with 68% marks. He has completed a certificate course in Computers. He has cleared the selection test with 51% marks and

interview with 61% marks. He has completed 23 years of age on 21.2.2008.

31. Ankita is a Commerce Graduate passed in first class with 68% marks. She has completed a two years diploma course in Computers after graduation. Her SSC score was 85%. She has cleared the selection test with 64% marks and interview with 58% marks. Her date of birth is 27.8.1985.
32. Manisha has scored 73% marks in SSC and 62% marks in graduation. After graduation she is working in a private firm. She has cleared the selection test with 58% marks and interview with 62% marks. Her date of birth is 11.5.1983. She has completed a certificate course in Computers.
33. Nikita is a graduate in Engineering passed in first class with 72% marks. She has cleared the selection test and interview with 63% and 65% marks respectively. She has done one year diploma course in Computers. Her date of birth is 16.7.1984.
34. Jyotika Basu is B.Sc. passed out in 2004 in first class with 68% marks. She scored 67% marks in SSC. She is pursuing M.Sc. at present. She has cleared the selection test and interview with 56% and 53% marks respectively. She has completed a certificate course in Computers. Her date of birth is 15.5.1985.
35. Nandan Savla is a B.Com. passed in first class with 66% marks. He had secured 75% marks in HSC. He has completed 25 years of age of July 25, 2008. He has cleared the selection test and interview each with 56% marks. He has completed one year certificate course in Computers in grade 'A'.
36. Rajesh Chavan is an Arts Graduate passed in first class with 61% marks. He has also completed M.A. in English with 62% marks. His SSC score was 78%. He has cleared the selection test with 56% and interview with 54% marks. His date of birth is 25.3.1984. He has completed a diploma course in Computers.

#### Answers with Explanation

- (D) Ms. Suneeta fulfils all the conditions. Hence, she is to be selected.
- (A) Rakesh Rao fulfils all the conditions except (iv) but he has been working as a software manager for the last 6 years so according to (b) his case is to be referred to V.P.

3. (A) Ram Kumar fulfils all the conditions except (iv) but he has been working as a software manager for the last 6 years so according to (b) his case is to be referred to V.P.
4. (C) Since the marks obtained by Nishant in graduation are not given. So, the data are not sufficient to take a decision.
5. (E) Kalyani is a Telecommunication Engineer. Hence, she is not to be selected.
6. (C) The marks of graduation are not given. So, data are inadequate to take the decision.
7. (D) Abhijit fulfils all the conditions. Hence, he is to be selected.
8. (D) Girdhar fulfils all the conditions. Hence, he is to be selected.
9. (E) Nikita does not fulfil the condition V. Hence, she is not to be selected.
10. (D) Mr. Rajan does not fulfil the condition (i) But he passed the Electronics Engineering more than 65%. Hence, according to (a) his case is to be referred to G.M.
11. (A) Anirban Mandal satisfies all the conditions except (V). But he can pay 60% of the annual fee, but he will he pay the rest is unknown. Therefore, the given data are not sufficient to take a decision.
12. (C) Arvind Gogoi does not satisfy the condition (iii), but he has secured 75 per cent marks in XII Std. final examination. Therefore, his case is to be referred to the principal.
13. (B) Malini Sawant satisfies all of the given conditions. Therefore, she is to be admitted.
14. (E) Shikha Gupta does not fulfil the condition (v), but she can pay 60 per cent of the annual fee and she can also pay the rest fee within six months. Therefore, her case should be referred to the Vice-Principal.
15. (A) Samir Malhotra has not shown the marks of XII Std. final examination. Therefore, the provided data are not adequate to take a decision.
16. (B) Joseph D'Silva satisfies all the given conditions. Therefore, he is to be admitted.
17. (D) The age of Sudha Ghosal is less than required age. Therefore, she is not to be admitted.
18. (E) Mohan Awasthi satisfies all the conditions except (v) and he can pay more than 60 per cent of annual fee at the time of admission and he can pay the rest amount of annual fee within two months. Therefore, his case is to be referred to the Vice-Principal.
19. (A) Sahil satisfies all the conditions, hence he is to be selected.
20. (C) Milind does not satisfy the condition (iii). But according to (b) his case is to be referred to the Chief-General Manager.
21. (B) Pravin does not satisfy the condition (i) but according to (a) his case is to be referred to the Vice-President.
22. (A) Nikhil satisfies all the conditions so he is to be selected.
23. (D) Raj Barua does not satisfy the conditions (i) and (ii). So, he is not to be selected.
24. (E) Information in the question is not adequate to take decision.
25. (B) Ramesh does not satisfy the condition (i) but according to (a) his case is to be referred to the Vice-President.
26. (D) Rajesh does not satisfy the condition (iv) so he is not to be selected.
27. (E) Shamika does not fulfil the condition (iii). Hence, according to (b) her case is to be referred to the General Manager (Recruitment officer of the company).
28. (A) Vivek fulfils all the conditions. So he is to be selected.
29. (D) Abhijit does not fulfil the condition (ii) but he has completed post-graduation. Hence, his case will be referred to the Vice President.
30. (E) Sujay Chaudhary does not fulfil the condition (iii). But he has secured more than 50% marks in selection and more than 60% in interview. So, his case is to be referred to the General Manager.
31. (A) Ankita fulfils all the conditions. So, she is to be selected.
32. (B) Manisha does not fulfil the condition (ii) and she has not completed Post-graduation. Hence, she is not to be selected.
33. (C) Nothing is said about Nikita's S.S.C. Hence, the data is inadequate to take a decision.
34. (B) Jyotika Basu does not fulfil the condition (i). She is not to be selected.
35. (C) Nothing is said about S.S.C. of Nandan Savla. Hence, the data is adequate to take a decision.
36. (D) Rajesh Chavan does not fulfil the condition (ii). But he has completed post-graduation. So, his case is to be referred to the Vice President.



This types of question are frequently asked these days usually. In such type of questions the candidates are asked to determine whether a given event is the cause or the effect of some other event. These questions are to ascertain the analytical and logical reasoning ability of the aspirants.

Relation between cause and effect—Every event happens because it has a cause behind it. This cause is the condition under which any event happens.

In our day to day life we may come across many situations which are more subjective and require an initiative skill. It is not necessary all the time can a cause be so scientifically accurate and precise. Thus, we can say that a necessary condition for the occurrence of a specific event is a circumstance in whose absence for event can not occur or a necessary condition for occurrence of a specific event is a circumstance in whose presence the event must occur.

### Example

**Directions**—(Q. 1–5) Below in each question is given two statements I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choices correctly depicts the relationship between these two statements.

**Mark Answer** —

- (A) If statement I is the cause and statement II is its effect.
- (B) If statement II is the cause and statement I is effect.
- (C) If both the statements I and II are independent causes.
- (D) If both the statements I and II are effects of independent causes.

- (E) If both the statements I and II are effects of some common cause.
1. I. This year, the cut off percentage for admission to junior colleges have increased over the last year.  
II. This year performance of students in Xth final exam was considerably higher than that of the previous year.
  2. I. The conditions of most of the national highways are very bad.  
II. Govt. has now sanctioned a huge amount of money to maintain the national highways.
  3. I. Many students of the local school have failed in English Language paper in the annual examination.  
II. Many students of the local school have failed in Mathematics paper in the annual examination.
  4. I. Rain and thunder showers bashed the city during the past three days.  
II. Many people stayed indoor during the past three days.
  5. I. There has been a considerable increase in the sale of fat free food articles.  
II. Now, people have become more conscious about their health condition and food habits.

### Answers with Explanation

1. (D) Both the statements are effects of independent causes they do not have any relation between them.
2. (A) In the I statement, the cause is given and in II statement, the effect it is given.
3. (E) There may be a common cause for both the statements.
4. (A) II is effect of the I statement. It is only reason that many people stayed indoor during the past three days.

5. (B) Statement II is the cause and Statement I shows the effect. It is clearly mentioned in Statement I that there has been a considerable increase in the sale of fat free food article.

### Type I Exercise

**Directions**—(Q. 1–5) Below in each question are given two statements (I) and (II). These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements. Now, mark your answer as—

- (A) If statement (I) is the cause and statement (II) is its effect.  
 (B) If statement (II) is the cause and statement (I) is its effect.  
 (C) If both the statements (I) and (II) are independent causes.  
 (D) If both the statements (I) and (II) are effect independent causes.  
 (E) If both the statements (I) and (II) are effects of some common cause.
1. **Statements**—
    - I. Majority of the residents of the housing society participated in the dinner hosted by one of the members of the society.
    - II. Most of the people living in the housing society invite other members for the functions at their house.
  2. **Statements**—
    - I. Many shops in the locality remained closed throughout the day.
    - II. Many offices in the locality closed during the day.
  3. **Statements**—
    - I. The school authority has decided to increase tuition fees by 30 per cent from the next academic year.
    - II. The Govt. has urged the local public to enroll all their children to schools in the area.
  4. **Statements**—
    - I. The train services in the suburban areas of the city were disrupted for four hours.
    - II. The overhead electrical wire snapped between two stations in suburban area of the city.

5. **Statements**—
- I. A recent tiger census in the tiger reserve in the state has reported significant reduction over the last census.
  - II. The Govt. has initiated an enquiry to ascertain the facts relating the tiger population in the state.

**Directions**—(Q. 6–10) Below in each question are given two statements (I) and (II). These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

#### Mark Answer —

- (A) If statement (I) is the cause and statement (II) is its effect.  
 (B) If statement (II) is the cause and statement (I) is its effect.  
 (C) If both the statements (I) and (II) are independent causes.  
 (D) If both the statements (I) and (II) are effects of independent causes.  
 (E) If both the statements (I) and (II) are effects of some common cause.
6. I. Government of state 'X' imposed a higher sales tax on petroleum products compared to the neighbouring states.  
 II. All the petrol pumps in the state observed 'bandh' in protest.
  7. I. Attendance for the All India examination held in July 2006 was poor at all the centres.  
 II. Western States of the country were affected by heavy floods during July 2006.
  8. I. High Court has declared stay on construction of residential buildings on the land under dispute.  
 II. A large number of middle class salaries people had booked flats in the buildings under dispute.
  9. I. Residents in the locality have now decided to launch a cleanlines drive.  
 II. Civic authorities in the city have recorded many cases of Cholera and gastro.
  10. I. Senior citizens of the city have complained about the late night disturbance caused due to loudspeakers used during festivals.

- II. Though, the Government has issued a directive banning late night celebrations involving use of loudspeakers, it is not being strictly followed in some of the areas.

**Directions**—(Q. 11–15) Below in each question are given two statements I and II. These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

**Mark Answer** —

- (A) if statement (I) is the cause and statement (II) is its effect.  
 (B) if statement (II) is the cause and statement (I) is its effect.  
 (C) if both the statements (I) and (II) are independent causes.  
 (D) if both the statements (I) and (II) are effects of independent causes.  
 (E) if both the statements (I) and (II) are effects of some common cause.
11. I. Many people in the area are reported to be suffering from Malaria.  
 II. Private Medical Practitioners in the area have decided to close their clinics for few days.
12. I. The State Govt. has announced special tax package for the new industries to be set up in the state.  
 II. Last year the State Govt. had hiked the taxes for all industrial activities in the State.
13. I. The vegetable prices in the local market have increased manifold during the past few days.  
 II. Incessant rains have created flood like situation in most rural parts of the state.
14. I. Police authority has recently increased vigil during the evening hours in the locality.  
 II. There has been considerable reduction in the incidents of petty crimes in the locality.
15. I. There was a huge rush of people to the temple last Sunday the 15th of the month.  
 II. The temple authority had decided to close down the temple for repairs from 17th of the month.

## Type II Exercise

1. **Cause**—All the major rivers in the state have been flowing way over the danger level for the past few weeks.  
 Which of the following is / are possible effect(s) of the above cause ?  
 (1) Many villages situated near the river-banks are sub-merged forcing residents to flee.  
 (2) Govt. has decided to provide alternate shelter to all the affected villagers residing near the river banks.  
 (3) The entire state has been put on high flood alert.  
 (A) Only (1)  
 (B) Only (1) and (2)  
 (C) Only (2) and (3)  
 (D) All (1), (2) and (3)  
 (E) None of these
2. **Effect**—This year majority of the final year students of the management institute have opted for finance specialization.  
 Which of the following can be a probable cause of the above effect ?  
 (A) Last year most of the students with HR specialization got better job offers than other specializations.  
 (B) The management institute offers only finance specialization to its final year students.  
 (C) Last year the students with finance specialization bagged most of the lucrative offers vis-a-vis students with other specializations.  
 (D) The management institute has recently started its finance specialization in addition to Marketing and HR being offered earlier.  
 (E) None of these
3. **Effect**—Govt. has allowed all the airlines to charge additional amount as peak time congestion charges for the flights landing between 6.00 a.m. to 10.00 a.m.  
 Which of the following is a probable cause of the above effect ?  
 (A) All the airline companies had threatened to suspend their services during peak hours.

- (B) The Govt. has increased its tax for peak time flights.
- (C) The aircrafts are routinely put on hold over the airports while landing during peak time causing extra fuel consumption.
- (D) The airlines companies can now charge unlimited additional charge for peak time flights.
- (E) None of these
4. **Cause**—The cement manufacturing companies have increased the price of cement by about fifteen per cent with immediate effect. Which of the following is/are possible effects(s) of the above cause ?
- (1) Govt. will direct the cement manufacturing companies to reduce the price increase to five per cent.
- (2) The prices of residential flats and commercial companies will see an upward trend.
- (3) The construction companies may stop all on going construction projects with immediate effect.
- (A) Only (2)                      (B) Only (1)  
(C) Only (3)                      (D) Only (2) and (3)  
(E) None of these
5. **Effect**—There has been unprecedented increase in the number of institutions training spoken phonetic English in all the major cities of India during the last few years. Which of the following can be a probable cause of the above effect ?
- (A) Many parents want their children to speak fluent English.
- (B) Various activities being outsourced to India by many European and North American countries.
- (C) English is no longer being taught in the schools and colleges in India.
- (D) India has highest number of English speaking educated youth compared to any other country.
- (E) None of these
2. (D) Both the statements (A) and (B) are effects of some independent causes because the shops and offices in the locality were closed due to other causes.
3. (E) Both the statements (A) and (B) are effects of some common causes because the urge of government for the enroll and the decision to increase tuition fee, together are the effects of common causes.
4. (B) Statement (B) is cause and statement (A) is its effects because on account of snapping of overhead electrical wire there was a result of disruption of train services.
5. (C) These both statements are independent causes.
6. (C)      7. (A)      8. (D)      9. (E)      10. (B)
11. (D) Both the statement I and II are effects of independent causes. Because spreading malaria or to be suffering from malaria may because mosquitoes and dirtiness. But the decision of private medical practitioners to close the clinics may be other causes.
12. (B) Because due to hike of taxes last year the State Government has announced special tax package for the new industries to be set up in the state.
13. (B) The transportation get effect due to the flood created by incessant rains in the most rural part of the state, therefore, on account of this, it is possible to increase the vegetable prices in the local market.
14. (A) Statement I is the cause and statement II is its effect.
15. (B)

### Answers with Explanation Type II

1. (B) Statement (B) is the cause and statement (A) is its effect because the people participated in the dinner on account of the invitation.
1. (C) Only III follows. After finding the cause of the sickness, necessary action should be taken.
2. (E) To improve the standard in English Language, all the courses of action are necessary.
3. (D) In order to save the people from getting drowned all the courses of action are necessary.
4. (A) Such institutes should immediately be derecognised by the university. Hence, I course of action follows.
5. (B) Only II follows because providing relief supplies to the affected areas is necessary.



In this type of a question followed by two or more information is given. Questions are designed to test candidates ability to relate given information with that of required one based on the question asked. The questions consist of any topic such Coding-Decoding, Puzzle Test, Blood Relations, Mathematical calculation etc. The candidates is required to find out which of the given statements is/are sufficient to answer the given question. Sometimes single information is sufficient to answer the question though other information may also include relevant information. In such case that triangle information is our answer. Sometimes single information is not sufficient to answer the question a combination of information, which can help to answer the question, will be one answer.

**Example—**

**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 provided in the statements are sufficient to answer the question. Read both the statements and give the answer—

- (A) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (B) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
- (C) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
- (D) If the data given in both the statements I and II together are not sufficient to answer the question, and
- (E) If the data in both the statements I and II together are necessary to answer the question.

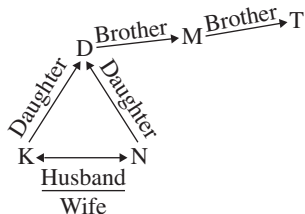
- Among M, N, T, Q and D, who is the youngest ?
  - T and D are younger than M.
  - Q is older than T, but younger than D and N.
- How is 'steel' written in a code language ?
  - 'steel container more costly' is written as 'ho na pa da' in that code language.
  - 'buy more steel vessels' is written as 'na ka ta da' in that code language.
- How many sons does K have ?
  - M and T are brothers of D.
  - D is the only daughter of N and K.
- How is M related to P ?
  - M's sister is married to R.
  - R's brother is married to P's sister.
- Who among Naveen, Mohan, Prakash and Kishore reached office first ?
  - Mohan reached office before Naveen and Kishore, but was not the first to each office.
  - Kishore reached office after Mohan, but before Naveen.

**Answers with Explanation**

- (C) According to the question,  
From statement I.  
 $M > T/D$  ... (i)  
and from statement II  
 $D/N > Q > T$  ... (ii)  
 $\therefore$  Data given in both the statements I and II together are not sufficient to answer the question.
- (D) According to the question,  
From statement I.  
steel container more costly  $\rightarrow$  ho na pa da.  
From II.  
Buy more steel vessels  $\rightarrow$  na ka ta da.  
 $\therefore$  From both I and II.  
steel more  $\rightarrow$  na da

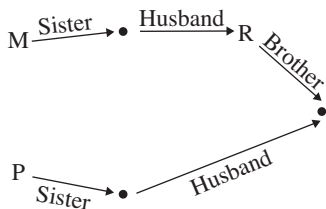
Therefore, data in both the statement I and II together are not sufficient to answer the question.

3. (E) According to question,



∴ K has two sons 'M' and 'T'. Therefore, to answer the question data given in both the statements I and II together are necessary.

4. (E) According to the question,



Therefore, 'M' is the brother of 'P', Hence, data in both the statements, I and II are necessary to answer the question.

5. (A) According to the question,  
From statement I.

Prakash > Mohan > Naveen > Kishore

Therefore, 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.

### Exercise

**Directions—**(Q. 1–2) In the following questions each of the questions below consists of a question and two statements **numbered** I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer—

- (A) If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.  
(B) If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

- (C) If the data either in statement I alone or in statement II alone is sufficient to answer the question.  
(D) If the data in both the statement I and II together are not sufficient to answer the question.  
(E) If the data in both the statements I and II together are necessary to answer the question.

1. How is M related to F ?

**Statements—**

- I. F is sister of N who is mother of R.  
II. M has brothers of which son is R.

2. On which date in March was Pravin's father's birthday ?

**Statements—**

- I. Pravin correctly remembers that his father's birthday is after 14th but before 19th March.  
II. Pravin's sister correctly remembers that their father's birthday is after 17th but before 21st March.

3. Among M, N, T, R and D each having different age who is the youngest ?

**Statements—**

- I. N is younger than only D among them.  
II. T is older than R and younger than M.

4. Village D is in which direction of village H ?

**Statements—**

- I. Village H is to the South of village A which is to the South-East of village D.  
II. Village M is to the East of village D and to the North-East of village H.

5. How is 'food' written in a code language ?

**Statements—**

- I. 'Always eat good food' is written as 'ha na pa ta' in that code language.  
II. 'Enjoy eating good food' is written as 'ni ha ja pa' in that code language.

6. 'F' is in which direction with respect to 'M' ?

**Statements—**

- I. F is to the West of Q which is to the West of M.  
II. M is to the East of Q, F, M and Q are on the straight line.

7. What is Samir's rank from the top in the class of 30 students ?

**Statements—**

- I. Sudhir, who is four ranks above Samir, is fifteenth in rank from the bottom.  
II. Samir is three ranks below Neeta who is eighteenth from the bottom.

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8. In the code language what is the code for 'fat' ?  
**Statements—**  
 I. In the code language 'she is fat' is written as 'he ra ca'.  
 II. In the same code language 'fat boy' is written as 'ra ka'.
9. How many children are there in the group ?  
**Statements—**  
 I. Sangita has scored more marks than 12 children in the group.  
 II. Reena has scored less than Sangita.
10. Who among L, N, F, G and Q was the first to reach the college ?  
**Statements—**  
 I. F reached before L and G but not before Q who was not the first to reach.  
 II. N reached before F and G and L reached after F.
11. How is Nikhil related to Rama ?  
**Statements—**  
 I. Nikhil is the only grandson of Rama's father-in-law.  
 II. Rama has no siblings.
12. What is the value of  $36\$4\star 8$ ?  
**Statements—**  
 I.  $P\$Q$  means divide P by Q.  
 II.  $A\star B$  means multiply A by B.
13. On which day of the week was Joseph born ?  
**Statements—**  
 I. Joseph's birthday was one day after his sister's birthday.  
 II. Joseph was born on the third day of the week.
14. M, P, D, K and R are sitting around a circle facing at the centre. Who is to the immediate right of P ?  
**Statements—**  
 I. D is sitting between M and R.  
 II. K is not to the immediate left of R.
15. How is D related to M ?  
**Statements—**  
 I. D has two sisters K and N.  
 II. K's father is brother of M.
16. How is 'go' written in a certain code language ?  
**Statements—**  
 I. 'go home now' is written as 'ja ho na' in that code language.  
 II. 'come home later' is written as 'pa ta ho' in that code language.
17. What is Samir's rank from the top in class of 40 students ?  
**Statements—**  
 I. Nikhil who is five ranks below Samir is tenth from the bottom.  
 II. Suresh who is six ranks above Samir is twentieth from the top.
18. Who among P, Q, R, T and W is the oldest ?  
**Statements—**  
 I. R and T are older than P and W.  
 II. Q is older than P but younger than R.
19. What is T's position with respect to W when T, W, R, J and M are sitting around a circle facing at the center ?  
**Statements—**  
 I. R is second to the left of M and second to the right of W.  
 II. J is not an immediate neighbour of M.
20. How is 'come' written in a code language ?  
**Statements—**  
 I. 'come and go' is written as 'pit ka ja' in that code language.  
 II. 'go and tell' is written as 'ja ma ka' in that code language.
21. How is P related to N ?  
**Statements—**  
 I. P's mother is sister of N's father.  
 II. N's uncle is grandfather of P's brother.
22. On which day of the week did Mohan visit Bangalore ?  
**Statements—**  
 I. Mohan took leave on Wednesday.  
 II. Mohan visited his brother on Friday the previous day of his visit to Bangalore.
23. What is the code for 'health' in that code language.  
**Statements—**  
 I. In the code language 'go for walk' is written as 'he ta ja'.  
 II. In the same code language 'morning walk improves health' is written as 'pa ra ta ko'.
24. How is Shubhada related to Ravindra ?  
**Statements—**  
 I. Shubhada's mother is the only daughter of Ravindra's father.  
 II. Shubhada is the only grand-daughter of Ravindra's father.

25. 'H' is in which direction with respect to 'L' ?  
**Statements—**  
 I. 'L' is to the East of 'M' which is to the North of 'H'.  
 II. 'L' is to the North of 'J' which is to the East of 'H'.

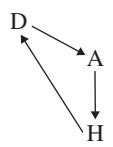
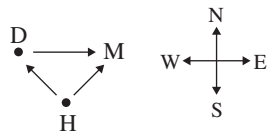
26. Who was the first person to board the train among P, Q, R, S and T ?

- Statements—**  
 I. Q boarded after P and T but not after S.  
 II. R was not the last person to board.

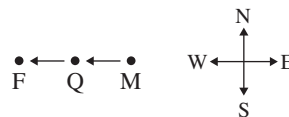
27. How many children are there in the group ?

- Statements—**  
 I. In descending order of height, Radha is tenth from the top in the group.  
 II. In ascending order of height Radha is 20th from the top in the group.

**Answers with Explanation**

1. (E)  $F \xleftarrow{\text{Sister}} N \xleftarrow{\text{Mother}} R$   
 $\uparrow$   
 Brother  
 M  
 $\therefore$  F is the maternal aunt of M.
2. (E) From I, His father's birthday is on 15 or 16 or 17 or 18th March.  
 From II, His father's birthday is on 18th or 19th or 20th March.  
 $\therefore$  Father's birthday is on 18th March.
3. (E) From I,  $D > N > T, R, M$   
 From II,  $M > T > R$   
 $\therefore$  The youngest is R.
4. (C) From I,   
 D is in N-W of H.  
 From II,   
 D is in N-W of H.
5. (D) From I, Always eat good food  $\rightarrow$  ha na pa ta  
 From II, Enjoy eating good food  $\rightarrow$  ni ha ja pa  
 $\therefore$  Code for 'food' cannot be known.

6. (A) From I,



$\therefore$  F is in west of M.

From II,



$\therefore$  The answer is from only I.

7. (C) From I,  $\bullet \bullet \bullet \bullet + 14$   
 $\downarrow$   $\downarrow$   
 Sudhir Samir

$\therefore$  Samir's rank from the top  
 $= 30 - 15 + 1$   
 $= 16$ th

From II,  $\bullet \bullet \bullet \bullet + 17$   
 Neeta Samir

Neeta's rank from the top  
 $= (30 - 17) = 13$ th

$\therefore$  Samir's rank from the top  
 $= 13 + 3 = 16$ th

$\therefore$  The answer of the question can be obtained from only I or from only II.

8. (E) From I, she is fat  $\rightarrow$  he ra ca  
 From II, fat boy  $\rightarrow$  ra ka  
 $\therefore$  From I and II, Fat  $\rightarrow$  ra

9. (D)

10. (A) From I,  $N > Q > F > L$  and G  
 $\therefore$  From I, N reached the college first.  
 From II,  $N > F$  and G  
 and  $F > L$   
 Hence, answer is obtained only from I.

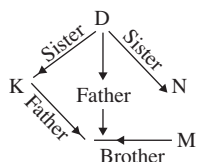
11. (A) From I, Only grandson of father-in-law  
 $\bullet \leftarrow \bullet$   
 $\downarrow$   $\downarrow$   
 Nikhil Rama

Hence, Nikhil is the son of Rama From II, the answer of question is not obtained.

12. (E) From I,  $36 \$ 4 \rightarrow 36 \div 4 = 9$   
 From II,  $6 \star 8 \rightarrow 9 \times 8 = 72$   
 $\therefore$  From I and II together,  
 $36 \$ 4 \star 8 = 72$

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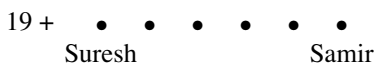
13. (B) From II Joseph was born on 'Tuesday' because third day of the week is Tuesday.  
 14. (D)  
 15. (D) From I and II,



As D may be female or male. Hence, the relation between D and M cannot be known.

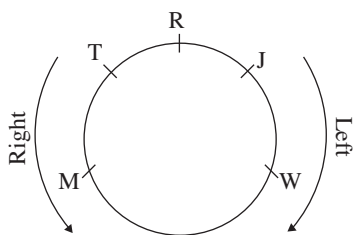
16. (D) From I, go home now → ja ho na  
 From II, come home later → pa ta ho  
 ∴ go → ja or na

17. (C)  $\bullet \bullet \bullet \bullet \bullet \bullet + 9$   
 Samir Nihil  
 ∴ From I, rank of Samir from the top =  $40 - 14 = 26$ th  
 From II, Samir rank from the top =  $6 + 19 + 1 = 26$ th



18. (D) From I,  $(R, T) > (P, W)$   
 From II,  $R > Q > P$

19. (E)

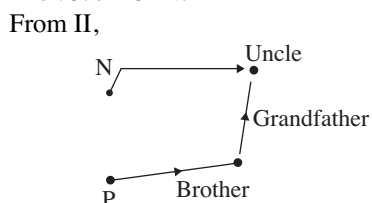


Hence, T is second to the left of W.

20. (E) From I, come and go → pit ka ja  
 From II, go and tell → ja ma ka  
 ∴ From I and II, come → pit

21. (C) From I,

P is cousin of N.



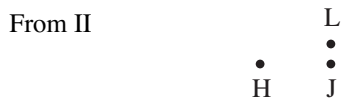
P is niece or nephew of N.

22. (B) From II, Mohan visited his brother on Friday. Previous day of his visit to Bangalore. Thus, Mohan visited Bangalore as Saturday.

23. (D) From I and II  
 ta → walk  
 ∴ The data in both I and II are not sufficient to answer the question.

24. (C) From I Shubhada is the niece of Ravindra. From II Shubhada is the daughter or niece of Ravindra.

25. (C) From I



∴ H is in South-West with respect to L.

26. (D) From I : (P, T), Q, S  
 From II : R was not the last person to board. Hence, the data in both the statements I and II together are not sufficient to answer the question.

27. (E) From I : In descending order of height. Radha is 10th from the top in the group.  
 From II : In descending order of height Radha is 20th from the top.  
 ∴ Total No. of Children =  $9 + 1 + 19 = 29$



# 12

## Analytical Reasoning or Problem Solving

Question based upon analytical reasoning are undoubtedly the longest and most time consuming of all types of question that can be asked in various examinations. However, their importance in exams cannot be underestimated as these questions decide merit of a Test.

**Example**—Read the following information carefully and answer the questions that follow.

There are six cities A, B, C, D, E and F.

A is not a hill station.

B and E are not historical places.

D is not an industrial city.

A and D are not historical places.

A and B are not alike.

- Which two cities are industrial centres ?  
 (A) A and B                      (B) E and F  
 (C) C and D                      (D) B and F  
 (E) A and D
- Which two cities are historical places ?  
 (A) A and C                      (B) B and F  
 (C) C and F                      (D) B and E  
 (E) A and D
- Which two cities are hill stations ?  
 (A) A and B                      (B) C and A  
 (C) B and D                      (D) A and F  
 (E) None of these
- Which city is a hill station and an industrial centre but not a historical place ?  
 (A) E                                  (B) F  
 (C) A                                  (D) B  
 (E) C
- Which two cities are neither historical places nor industrial centres ?  
 (A) A and B                      (B) D and E

- (C) F and C                      (D) B and D  
 (E) None of these

Some important steps to solve such type of questions.

Read the question carefully by keeping in mind every point or detail. It will take a few seconds. After reading the question, you will get the general idea as to what the general theme of the problem is. Determine the usefulness of each of the information and classify all the information into (A) Actual information (B) Useful secondary information and finally (C) Negative information. Refer to example given below :

**Detailed Explanation—**

**Step I**—The informations can be analysed in the following manner.

	A	B	C	D	E	F	G
Historical							
Industrial							
Hill Station							

**Step II**—In above mentioned example, we see that the first and last sentences have useful secondary information whereas all the remaining have negative information. By studying the second, third, fourth and fifth sentences we put  mark.

	A	B	C	D	E	F
Historical	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Industrial	<input checked="" type="checkbox"/>			<input type="checkbox"/>		
Hill Station	<input type="checkbox"/>			<input checked="" type="checkbox"/>		

We can observe that above table gives some definite information about A and D. When A is neither a historical city nor a hill station. It is, therefore, an industrial city. In the same way D is neither historical nor industrial so it must be a hill station. We can  mark at the appropriate places.

**Step III**—Finally we come to useful secondary information and negative information. For instance, A and B are not alike. This means that B is not an industrial city. As B is not a historical place. So, it must be hill station. Now, all the remaining information are negative. A lack of negative information about a city would mean that the city does have the quality whose absence is not mentioned.

Here in the example, there are no negative information about C and F and partly about E. We can assure that C and F are hill station, industrial and historical cities and E is industrial as well as hill station.

Now, our final Table is as below :

	A	B	C	D	E	F
Historical	×	×	√	×	×	√
Industrial	√	×	√	×	√	√
Hill Station	×	√	√	√	√	√

On the basis of above table, the answers can be drawn.

1. (B)    2. (C)    3. (C)    4. (A)    5. (D)

The problems can be classified into the following (1) Classification or categorization (2) Question based on blood relation (3) Seating and placing arrangements (4) Comparison type test (5) Sequential order of things (6) Selection based on certain given pre-conditions.

## 1. Classification or Categorization

In this type of test, the questions are asked based upon the given data belonging to different groups or possessing different qualities. You would be supposed to analyse these data by placing the different items or concepts in different categories with the help of given information. These problems can be easily solved by constructing a proper table or chart.

**Example 1.** Six friends P, Q, R, S, T and U are the members of a club. They play Football, Cricket, Tennis, Basketball, Badminton and Volleyball.

- T, who is taller than P and S, plays football.
- The tallest member plays basketball.
- The shortest member plays volleyball.
- Q and S neither play volleyball nor play basketball.
- R plays volleyball.
- According to height T is in between Q, who plays football, and P is shorter than T.

Who plays Basketball ?

- (A) Q                                  (B) R  
(C) S                                  (D) U  
(E) None of these

**Answer with Explanation**—Writing these information on a chart.

Member	Name of the game	Height
P		Shorter than T
Q	Football	Taller than T
R	Volleyball	Shortest
S		Shorter than T
T	Tennis	Shorter than U
U	Basketball	Tallest

**Example 2.** Six students P, Q, R, S, T and U are studying different subjects for their Master Degree. The subjects are English, History, Philosophy, Physics, Statistics and Mathematics.

- In these students, two live in hostel, two are paying guests and remaining two are living in their home.
- R is not a paying guest and study Philosophy.
- The students who are studying History and Statistics are not paying guests.
- T and S study Mathematics and Statistics respectively.
- U and S live in the hostel.
- T is a paying guest and Q lives in his home.

Find out who is in study of English ?

- (A) S                                  (B) T  
(C) U                                  (D) R  
(E) None of these

**Answer with Explanation**—Writing the information on a chart.

Name of the students	Subjects	Residence
P	English	Paying guest
Q	History or Statistics	Home
R	Philosophy	Home
S	Physics	Hostel
T	Mathematics	Paying guest
U	Statistics or History	Hostel

From the above chart it is clear that P studies English which is not given in options.

**Exercise**

**Directions**—(Q. 1-5) Study the following information carefully and answer the questions that follow.

- (i) Madhu and Shobha are good in Dramatics and Computer Science.
  - (ii) Anjali and Madhu are good in Computer Science and Physics.
  - (iii) Anjali, Poonam and Nisha are good in Physics and History.
  - (iv) Nisha and Anjali are good in Physics and Mathematics.
  - (v) Poonam and Shobha are good in History and Dramatics.
1. Who is good in Computer Science, History and Dramatics ?  
(A) Anjali (B) Madhu  
(C) Shobha (D) Nisha
  2. Who is good in Physics, Dramatics and Computer Science ?  
(A) Shobha (B) Poonam  
(C) Madhu (D) Anjali
  3. Who is good in Physics, History and Dramatics ?  
(A) Poonam (B) Shobha  
(C) Madhu (D) Anjali
  4. Who is good in History, Physics, Computer Science and Mathematics ?  
(A) Poonam (B) Nisha  
(C) Madhu (D) Anjali
  5. Who is good in Physics, History and Mathematics but not in Computer Science ?  
(A) Madhu (B) Poonam  
(C) Nisha (D) Anjali

**Directions**—(Q. 6-9) Read the following information carefully and answer the question that follow :

Four young men Raj, Prem, Ved and Ashok are friendly with four girls Shushma, Kusum, Vimla and Poonam. Shushma and Vimla are friends. Ved's girl friend does not like Shushma and Vimla. Kusum does not care for Ved. Prem's girls friend is friendly with Shushma. Shushma does not like Raj.

6. Who is Raj's girl friend ?  
(A) Shushma (B) Kusum  
(C) Vimla (D) Poonam
7. With whom Shushma is friendly ?  
(A) Raj (B) Prem  
(C) Ved (D) Ashok

8. Who is Poonam's boy friend ?  
(A) Ashok (B) Ved  
(C) Prem (D) Raj
9. Who does not like Shushma and Vimla ?  
(A) Poonam (B) Raj  
(C) Ashok (D) Ved

**Directions**—(Q. 10-14) Read the following information carefully and answer the questions that follow—

- (i) P.Q.R.S.T and U are six students procuring their Master's Degree in six different subjects—English History, Philosophy, Physics, Statistics and Mathematics.
  - (ii) Two of them stay in hostel, two stay as paying guest (PG) and the remaining two stay at their home.
  - (iii) R does not stay as PG and studies Philosophy.
  - (iv) The students studying Statistics and History do not stay as PG.
  - (v) T studies Mathematics and S studies, Physics. U and S stay in Hostel. T stays as PG and Q stays at home.
10. Who studies English ?  
(A) R (B) S  
(C) T (D) U  
(E) None of these
  11. Which of the following combination of subjects and place of stay is not correct ?  
(A) English-Hostel  
(B) Mathematics-PG  
(C) Philosophy-Home  
(D) Physics-Hostel  
(E) None of these
  12. Which of the following pairs of students stay one each at hostel and at home ?  
(A) QR (B) SR  
(C) US (D) Data inadequate  
(E) None of these
  13. Which subject does Q study ?  
(A) History (B) Statistics  
(C) History or Statistics  
(D) Data inadequate  
(E) None of these
  14. Which of the following pairs of students stay at home ?  
(A) PQ (B) QR  
(C) RS (D) ST  
(E) None of these

**Answers with Explanation****For Question No. 1 to 5.**

From the given information we can make a chart as follows :

	Dramatics	Compt. Sci.	Physics	History	Mathematics
Madhu	√	√	√	×	×
Shobha	√	√	×	√	×
Anjali	×	√	√	√	√
Poonam	√	×	√	√	×
Nisha	×	×	√	√	√

1. (C)                      2. (C)                      3. (A)                      4. (D)                      5. (C)

**For Question No. 6 to 9.**

As per information Shushma and Vimla are friends and Prem's girl friend is friendly with Shushama. It is clear that Prem's girl friend is Vimla. Ved's girl friend does not like Shushma and Vimla. Hence, she may be Kusum or Poonam. But Kusum dislikes Ved. Therefore, Ved's girl friend is Poonam. Shushma does not like Raj. So, Raj's girl friend is Kusum. Clearly, Shushma is Ashok's girl friend.

6. (B)                      7. (D)                      8. (B)                      9. (A)

**For Question No. 1 to 14.**

	P	Q	R	S	T	U
Subject	English	Statistics	Philosophy	Physics	Mathematics	Statistics
		History				History
Accommodation	Paying guest	Home	Home	Hostel	Paying Guest	Hostel

10. (E) P studies English.                      11. (A)  
 12. (B) S stays at hostel and R stays at home.                      13. (C) History or Statistics.  
 14. (B)

## 2. Blood Relations with their Relationship and Professions

For solving this type of questions where persons engaged in different professions and they are also relatives to one another in which some clues are also given regarding relationship among different members of a family and their professions, qualities, dresses, preferences etc. On the basis of given informations, students are advised to draw a family tree of the generations and analyse the whole information and then answer the given questions accordingly.

**Example 1.** Read the following information carefully and answer the questions that are given below.

- (i) P, Q, R, S, T and U are travelling in a bus.

- (ii) There are two reporters, two technicians, one photographer and one writer in the group.  
 (iii) The photographer P is married to S who is a reporter.  
 (iv) The writer is married to Q who is in the same profession as that 'U'.  
 (v) P, R, Q, S are two married couples and nobody in the group has same profession.  
 (vi) U is brother of R.

1. Which is the following is a pair of technicians?

- (A) RS                      (B) SU  
 (C) PT                      (D) QU

2. Which of the following is a pair of reporters ?  
 (A) PQ (B) RT  
 (C) ST (D) SU
3. How is R related to U ?  
 (A) Brother  
 (B) Sister  
 (C) Uncle  
 (D) Cannot be determined
4. Which of the followings is a couple ?  
 (A) PQ (B) QR  
 (C) QS (D) PT
5. Which of the following is a pair of husbands ?  
 (A) PQ  
 (B) PR  
 (C) QS  
 (D) Cannot be determined

**Answers with Explanation**

From the statement (iii), The Photographer is married to S who is reporter. It means one couple is PS and another is (RQ) From statement (V) in six persons P's profession is photographer and S's profession is reporter, it means that in remaining four members, there are two technicians one writer and one reporter. The writer is married to B who is in same profession as that of U. Another couple is RQ is which R is writer and Q and U have same profession because there are two technicians. Now, only T is there and his profession is reporter because there are two reporters and we have known one reporter which has been given in the statement (iii). It is clear that T must be the second reporter.

P	Q	R	S	T	U
↓	↓	↓	↓	↓	↓
Photo- grapher	Tech- nician	Writer	Reporter	Repor- ter	Tech- nician

P + S — First couple.

R + Q — Second couple.

1. (D)    2. (C)    3. (D)    4. (B)    5. (D)

**Example 2.** Study the following information carefully and answer the questions given below it.

- (1) P, Q, R, S, T and U are six members in a family in which there are two married couple.
- (2) T, a teacher, is married to the doctor who is mother of R and U.

- (3) Q, the lawyer, is married to P
- (4) P has one son and one grandson.
- (5) Of the two married ladies one is housewife.
- (6) There is one student and one male engineer in the family.

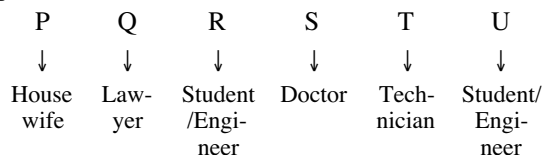
1. How is P related to R ?  
 (A) Grand father (B) Mother  
 (C) Sister (D) Grand mother  
 (E) None of these
2. Who among the following is housewife ?  
 (A) P (B) Q  
 (C) S (D) T  
 (E) None of these
3. How R related to U ?  
 (A) Brother  
 (B) Sister  
 (C) Brother or Sister  
 (D) Data inadequate  
 (E) None of these
4. Which of the following represents the group of females in the family ?  
 (A) PSR (B) PSU  
 (C) QTR (D) Data inadequate  
 (E) None of these
5. Which of the following is true about the grand daughter in the family ?  
 (A) She is a lawyer  
 (B) She is a student  
 (C) She is an engineer  
 (D) Data inadequate  
 (E) None of these

**Answers with Explanation**

There are two couples in six members as mentioned in statement 3. One couple is PQ and another couple is T and S and their two children in which one is student or another is male engineer. They are R and U. When T teacher married to S doctor and Q lawyer is married to P who is housewife because one married lady S is housewife. P the housewife has one son who is married to T teacher and a grandson who is a male engineer from R and U. B between R and U sex cannot be determined.



The following chart can well elaborate the professions and their relations.



- (1) Couple P + Q
- (2) Couple S + T

**Answers**

1. (D) P is the grand mother of R.
2. (E) P is the houswife
3. (C) R may be brother or Sister of U
4. (D) Since, the sex of R and U is not given so the set of three females cannot be determined.
5. (B) The grand daughter is a student.

**Exercise**

**Directions—(Q. 1-5)** Read carefully the following information for answering the given questions.

- (i) A, B, C, D, E and F are the six members of a group. In this group, there are two married couples.
  - (ii) There are two teachers, one doctor, one lawyer and two engineers. Both the teachers are of same sex.
  - (iii) A and C are in the same profession.
  - (iv) Doctor is married to teacher. One engineer is married to female lawyer.
  - (v) A is an engineer. E is a male teacher. Both are unmarried.
  - (vi) F is the husband of 'B'.
1. Which of the following is a pair of two married couples ?
    - (A) CD, FB
    - (B) CB, DF
    - (C) ED, CB
    - (D) Cannot be determined
    - (E) None of these
  2. What is the profession of B ?
    - (A) Lawyer
    - (B) Doctor
    - (C) Teacher
    - (D) Cannot be determined
    - (E) None of these

3. How many male members are in the group ?
  - (A) More than three
  - (B) Two
  - (C) Three
  - (D) Cannot be determined
  - (E) None of these
4. Who is the lawyer in the group ?
  - (A) C
  - (B) F
  - (C) B
  - (D) Cannot be determined
  - (E) None of these
5. Who is married to Doctor ?
  - (A) B
  - (B) D
  - (C) F
  - (D) Cannot be determined
  - (E) None of these

**Directions—(Q. 6-10)** P, Q, R, S, T, V and W are the members of a family. In this family there are three ladies and four gents. In this group two members are managers, two lawyers one teacher, one engineer and one doctor. Neither of the ladies is a teacher or an engineer. R is a lawyer who is married with P, the teacher. Engineer V is married to S who is neither lawyer nor doctor. Now, two ladies have same profession. W, who is a manager and his sister is Q.

6. What is the profession of T ?
  - (A) Manager
  - (B) Lawyer
  - (C) Manager or Lawyer
  - (D) Data inadequate
  - (E) None of these
7. What is the profession of Q ?
  - (A) Doctor
  - (B) Manager
  - (C) Lawyer
  - (D) Data inadequate
  - (E) None of these
8. Which of the following is a group of males ?
  - (A) PQVW
  - (B) TVSW

- (C) PRTV  
 (D) PTVW  
 (E) None of these
9. Which of the following pairs have same profession ?  
 (A) PS (B) RS  
 (C) TP (D) WT  
 (E) None of these
10. Which of the following has the same profession which D belongs to ?  
 (A) R  
 (B) T  
 (C) S  
 (D) Data inadequate  
 (E) None of these

**Directions**—(Q. 11-15) All the questions are based on the following information. Five men A, B, C, D and E and their wives P, Q, R, S and T join a dance party, but it is not necessary that the order of husbands, and wives are the same. This is the information that—

- (i) Husbands dance only with their wives.  
 (ii) C has a sister T and has only a brother A.  
 (iii) If D has danced with T, It means that he danced with another's wife.  
 (iv) B does not dance with Q or T or S.  
 (v) P is wife of A's brother.  
 (vi) Q did not dance with D.
11. With whom R danced ?  
 (A) B (B) C  
 (C) D (D) E
12. If 'B' and 'D' interchange their partners who will dance with 'B' ?  
 (A) P (B) Q  
 (C) R (D) S
13. If E is the D's son, how is B related to Q ?  
 (A) Brother-in-law  
 (B) Son  
 (C) Son-in-law  
 (D) Cannot be determined
14. How many members are from the same family since birth ?

- (A) 2  
 (B) 7  
 (C) 4  
 (D) Minimum 3
15. If such type of dance is organized, how many dances are possible that each man dance with opposite sex ?  
 (A) 8 (B) 16  
 (C) 25 (D) 20

**Answers with Explanation**

**For Question No. 1 to 5.**

Member	Profession	Sex and Relation
A	Engineer	Unmarried, Male/Female
B	Doctor	Female, Teacher's wife
C	Engineer	Male, Lawyer's husband
D	Lawyer	Female, Engineer's wife
E	Teacher	Male, Unmarried.
F	Teacher	Male, Doctor's husband

1. (A) 2. (B) 3. (D) 4. (E) 5. (C)

**For Question No. 6 to 10.**

Members of the family	Sex	Profession
P	Gent	Teacher
Q	Lady	Doctor
R	Lady	Lawyer
S	Lady	Manager
T	Gent	Lawyer
V	Gent	Engineer
W	Gent	Manager

6. (B) T is a lawyer.  
 7. (A) Q is a doctor.  
 8. (D) The group of gents is PTVW.  
 9. (E) From the given pairs, no one has the same profession.  
 10. (C) W is a manager as well as S is the manager.

**For Question No. 11 to 15.**

The pair of Husband and Wife.

Husband	Wife
A	Q
B	R
C	P
D	S
E	T

11. (A) 12. (D) 13. (D) 14. (D) 15. (C)

### 3. Seating and Placing Arrangements

In this type of questions, some information or facts are given regarding seating or placing arrangements, whether the sequence may be linear or circular in which either the persons or objects are given. The candidate is required to solve these questions in proper sequence and he/she can use various clues and information given in the question.

There are few examples which describe the seating or placing arrangement.

**Example**—Study the following (for question 1-5) information carefully and answer the given question below it. Five friends A, B, C, D and E are sitting on a bench.

- (i) A is sitting next to B.
  - (ii) C is sitting next to D.
  - (iii) D is not sitting with E.
  - (iv) E is on the left end of the bench.
  - (v) C is on the second position from the right.
  - (vi) A is on the right of B and E.
  - (vii) A and C sitting together.
1. Where is A sitting ?  
 (A) Between B and D  
 (B) Between D and C  
 (C) Between E and D  
 (D) Between C and E  
 (E) Between B and C
  2. Who is sitting in the centre ?  
 (A) A (B) B  
 (C) C (D) D  
 (E) E
  3. C is sitting between—  
 (A) B and D (B) A and E  
 (C) D and E (D) A and D  
 (E) A and B
  4. What is the position of D ?  
 (A) Extreme left (B) Extreme right  
 (C) Third from left (D) Second from left  
 (E) None of these
  5. What is the position of B ?  
 (A) Second from right  
 (B) Centre  
 (C) Extreme left  
 (D) Second from left  
 (E) None of these

#### Answers with Explanation

From the given information first of all, we see which one is positive information and we find that 4th and 5th sentences constitute definite and positive information. 1st, 2nd, 6th and 7th are comparative information and remaining 3rd is a negative information. We start from the definite information and draw the following diagram

E ... .. C ...

and now with the help of comparative information which tells about E and C from the 7th, 2nd and 6th sentences which lead to

EBAC ... and finally with the help of 2nd sentence—

E    B    A    C    D

#### Answers

1. (E)    2. (A)    3. (D)    4. (B)    5. (D)

#### Exercise

1. There are five different houses A to E in a row. A is to the right of B and E is to the left of C and right of A. B is to the right of D. Which of the houses is in the middle ?  
 (A) A (B) B  
 (C) D (D) E

**Directions**—(Q. 2-4) Read the following information carefully and answer the questions given below it.

- (A) There are five friends.
  - (B) They are standing in a row facing South.
  - (C) Jayesh is immediate right of Alok.
  - (D) Pramod is between Bhagat and Subodh.
  - (E) Subodh is between Jayesh and Pramod.
2. Who is at the extreme left end ?  
 (A) Alok (B) Bhagat  
 (C) Subodh (D) Data inadequate  
 (E) None of these
  3. Who is in the middle ?  
 (A) Bhagat (B) Jayesh  
 (C) Pramod (D) Subodh  
 (E) Alok
  4. To find answers to the above mentioned two questions, which of the given statements can be dispensed with ?  
 (A) None (B) A only  
 (C) B only (D) C only

**Directions**—(Q. 5-9) Read the following information carefully and answer the questions given below it.

- (i) Eight persons E, F, G, H, I, J, K and L are seated around a square table—Two on each side.
  - (ii) There are three lady members and they are not seated next to each other.
  - (iii) J is between L and F.
  - (iv) G is between I and F.
  - (v) H, a lady member, is second to the left of J.
  - (vi) F, a male member, is seated opposite E, a lady member.
  - (vii) There is a lady member between F and I.
5. Who among the following is seated between E and H ?  
(A) F  
(B) I  
(C) J  
(D) Cannot be determined  
(E) None of these
  6. How many persons are seated between K and F ?  
(A) One  
(B) Two  
(C) Three  
(D) Cannot be determined  
(E) None of these
  7. Who among the following are three lady members ?  
(A) E, J and G  
(B) E, H and G  
(C) G, H and J  
(D) Cannot be determined  
(E) None of these
  8. Who among the following is to the immediate left of F ?  
(A) G  
(B) I  
(C) J  
(D) Cannot be determined  
(E) None of these
  9. Which of the following is true about J ?  
(A) J is a male member  
(B) J is a female member  
(C) Sex of J cannot be determined

- (D) Position of J cannot be determined
- (E) None of these

**Directions**—(Q. 10-12) Study the given information carefully and answer the questions that follows.

- (i) There are seven books, one each of Psychology, Hindi, English, Sociology, Economics, Education and Accountancy lying on a table one above the others.
  - (ii) Sociology is on the top of all books.
  - (iii) Accountancy is immediately below Education which is immediate below Sociology.
  - (iv) Economics is immediately above Psychology but not in the middle.
  - (v) Hindi is immediately below Psychology.
10. Economics is between which of the following books ?  
(A) Accountancy and Education  
(B) Psychology and Hindi  
(C) English and Psychology  
(D) Psychology and Sociology  
(E) None of these
  11. Which three books are between Accountancy and Hindi ?  
(A) English, Economics and Psychology  
(B) Economics, Psychology and Education  
(C) Economics, Psychology and Hindi  
(D) Cannot be determined  
(E) None of these
  12. If Sociology and English, Accountancy and Hindi and Education and Psychology interchange their position, which book will be between Psychology and Sociology ?  
(A) Accountancy      (B) Psychology  
(C) Hindi                (D) Economics  
(E) None of these

**Directions**—(Q. 13-17) Read the following information carefully and answer the questions given below it.

Seven friends Kamala, Manish, Rohit, Amit, Gaurav, Pritam and Priya are sitting in a circle. Kamla, Manish, Rohit, Amit, Pritam and Priya are sitting at equal distance from each other. Rohit is sitting two places right of Pritam, who is sitting one place right of Amit. Kamala forms an angle of 90 degree from Gaurav and angle of 120 degree from Manish. Manish is just opposite Priya and is sitting on the left of Gaurav.

13. Who is the only person sitting between Rohit and Manish ?  
 (A) Pritam (B) Amit  
 (C) Gaurav (D) Kamala
14. Gaurav is not sitting at equal distance from—  
 (A) Rohit and Pritam  
 (B) Amit and Kamala  
 (C) Manish and Pritam  
 (D) All of these
15. Gaurav is sitting ..... of Priya.  
 (A) To the left  
 (B) To the right  
 (C) Two places right  
 (D) None of these
16. The angle between Gaurav and Manish in the clockwise direction is—  
 (A) 150° (B) 180°  
 (C) 210° (D) None of these
17. Which of the following statements is not correct ?  
 (A) Pritam is between Manish and Kamala  
 (B) Manish is two places away from Priya  
 (C) Gaurav is sitting opposite Pritam  
 (D) All of the above

**Answers with Explanation**

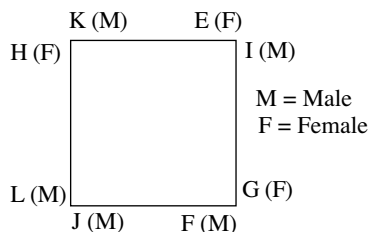
1. (A) B is the right of D. A is to the right of E is to the right of A and left of C. Therefore, the order is—

D B A E C

Clearly, A'S house is in the middle position.

**For Question No. 2 to 4.**

On the basis of information we can draw the following diagram displaying the seating arrangement on a square table.



E is seated opposite F. Since G is between F and I. So G is a female member.

5. (E)    6. (C)
7. (B) The three lady members are E, H and G.

8. (C)
9. (A) Clearly, J is a male member.

**For Question No. 10 to 12.**

The book of Sociology is on the top of all books. Education is below Sociology. Accountancy is below Education. Economics is above Psychology and Psychology is above Hindi. In the statement that the Economics is not in the middle, It is clear that the remaining book English must be in middle.

Thus, the sequence of books from top to bottom is

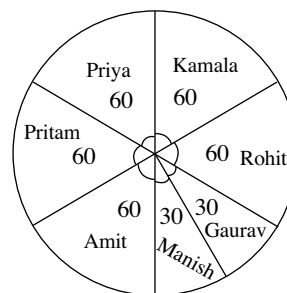
Sociology, Education, Accountancy, English, Economics, Psychology, Hindi.

10. (C) Economics is between English and Psychology.
11. (A) There are three books between Accountancy and Hindi viz., English, Economics and Psychology.
12. (C) The new sequence will be English, Psychology, Hindi, Sociology, Economics, Education and Accountancy.

Clearly, Hindi is between Psychology and Sociology.

**For Question No. 13 to 17.**

From the information the sitting arrangement in a circle is as follows.



13. (C) Gaurav is sitting between Rohit and Manish.
14. (A) Gaurav is not at equal distance from Rohit and Pritam or Amit and Kamala or Manish and Pritam.
15. (D) Gaurav is three places left or four places right of Priya.
16. (D) The angle between Gaurav and Manish in clockwise direction is 30°.
17. (D) Clearly, all the statements follow the diagram above mentioned.

## 4. Comparison Type Test

In Such type of questions, comparison of different objects or person has to be made with respect to one or more qualities. The candidates are required to analyse the information and form either ascending or descending sequence. There may be comparison of heights, marks and age etc.

These can be illustrated through the given example :

**Example**—Read the information given below and answer the questions that follow—

- (i) There is a group of five girls.
  - (ii) Kamini is second in height but younger than Rupa.
  - (iii) Pooja is taller than Monika but younger in age.
  - (iv) Rupa and Monika are of the same age but Rupa is tallest among them.
  - (v) Neelam is taller than Pooja and elder to Rupa.
1. If they are arranged in the ascending order of height who will be in third position ?  
(A) Monika (B) Rupa  
(C) Monika or Rupa (D) Data inadequate  
(E) None of these
  2. If they are arranged in the descending order of their ages who will be in fourth position ?  
(A) Monika or Rupa  
(B) Kamini  
(C) Monika  
(D) Data inadequate  
(E) None of these
  3. To answer the question, “Who is the youngest person in the group”, which of the given statements is superfluous ?  
(A) Only (i) (B) Only (ii)  
(C) Only (v) (D) Either (i) or (iv)  
(E) None of these

### Answers with Explanation

We have to determine the sequence of height as well as sequence of age.

By (iii), We have  $M < P$

By (v), We have  $P < N$

It is clear that Rupa is the tallest and Kamini is second in height.

Hence, the sequence of height is

$$M < P < N < K < R$$

For Age sequence

By (ii) we have  $K < R$

(iii) we have  $P < M$

(iv) we have  $R = M$

(v) we have  $R < N$

There are two possibilities

I is  $N < R = M < K < P$

II is  $N < R = M < P < K$

1. Clearly, in the increasing order of height Neelam is in third position.  
Hence, the answer is (E).
2. Clearly in the descending order of ages, Neelam will be in fourth position (because Monika and Rupa both lie at third position).
3. Clearly I statement is not necessary. Hence, the answer is (A).

### Exercise

**Directions**—(Q. 1-5) Read the following information and answer the questions given below it :

- (i) Seven students P, Q, R, S, T, U and V take a series of tests.
  - (ii) No two students get similar marks.
  - (iii) V always scores more than P.
  - (iv) P always scores more than Q.
  - (v) Each time either R scores the highest and T gets the least, or alternatively S scores the highest and U or Q scores the least.
1. If S is ranked sixth and Q is ranked fifth which of the following can be true ?  
(A) V is ranked first or fourth  
(B) R is ranked second or third  
(C) P is ranked second or fifth  
(D) U is ranked third or fourth  
(E) T is ranked fourth or fifth
  2. If R gets the most, V should be ranked not lower than—  
(A) Second (B) Third  
(C) Fourth (D) Fifth  
(E) Sixth

3. If R is ranked second and Q is ranked fifth, which of the following must be true ?  
 (A) S is ranked third  
 (B) T is ranked sixth  
 (C) P is ranked sixth  
 (D) V is ranked fourth  
 (E) U is ranked sixth
4. If S is ranked second, which of the following can be true ?  
 (A) U gets more than V  
 (B) V gets more than S  
 (C) P gets more than R  
 (D) P gets more than V  
 (E) T gets more than Q
5. If V is ranked fifth, which of the following must be true ?  
 (A) S scores the highest  
 (B) R is ranked second  
 (C) T is ranked third  
 (D) Q is ranked fourth  
 (E) U scores the least

**Answers**

1. (D)    2. (C)    3. (B)    4. (A)    5. (A)

**5. Sequential Order of Things**

In this type of question, some hints are given regarding the occurrence of certain events. The candidate is required to go through the given information and make the right sense and then answer the pertaining questions accordingly.

**Example**—Read the following information carefully and answer the questions given below it.

- (i) Eight doctors P, Q, R, S, T, U, V and W visit a charitable dispensary every day except on a holiday *i.e.*, Monday.
- (ii) Each doctor visits for one hour from Tuesday to Sunday except Saturday. The timings are 9 A. M. to 1 P. M. and 2 P.M. to 6 P.M., 1 P.M. to 2 P.M. is lunch break.
- (iii) On Saturday it is opened only in the morning *i.e.*, 9 A.M. to 1 P.M. and each doctor visits for only half an hour.
- (iv) No other doctor visits the dispensary before doctor Q and after U.
- (v) Doctor W comes immediately after the lunch break and is followed by R.
- (vi) S comes in the same order as P in the afternoon session.
1. Doctors P visits in between which of the following pairs of doctors ?  
 (A) S and V                      (B) U and W  
 (C) R and W                      (D) R and U  
 (E) None of these
2. At what time the visit of doctor R is over Sunday ?  
 (A) 1 P.M.                      (B) 3 P.M.  
 (C) 4 P.M.                      (D) 5 P.M.  
 (E) None of these
3. At what time the visit of Doctor T would be over on Sunday ?  
 (A) 10 A.M.                      (B) 11 A.M.  
 (C) Either 10 A.M. or 11 A.M.  
 (D) Data inadequate  
 (E) None of these
4. If the lunch break and subsequent visiting hours are reduced by 15 minutes. At what time doctor U is expected to attend the dispensary ?  
 (A) 3:15 P.M.                      (B) 4 P.M.  
 (C) 4:15 P.M.                      (D) 4:45 P.M.  
 (E) None of these

**Answers with Explanation**

We can make the time sequence by their visits using (iv), (v) and (vi).

It is clear that Q visits first and R visits last from (iv)

From (v), It is also clear that W visits first after break and is followed by R.

From (vi) We know that P visits after break means after W and R's visits.

Thus, the sequence of visits after lunch break will be WRPU.

Also, S has the same position in morning session as P in afternoon session means third in morning session.

The morning session sequence will be Q, T/V, S, V/T because the position of V and T is not clear.

1. (D) P visits between R and U.

2. (C) W visits between 2 to 3 P.M. and R visits between 3 P.M. to 4 P.M. Hence, the visits of R is over at 4 P.M.
3. (C) Clearly T visits either second or fourth. The time of visit on Saturday will be either 9-30 A.M. or 10-30 A.M. It means that T's visit will be over at either 10 A.M. to 11 A.M.
4. (B) As mentioned the time of lunch break is over and doctor W visits at 1-45 P.M., Doctor R will visit at 2-30 P.M., Doctor will visit at 3-15 P.M. and U will visit at 4 P.M.

### Exercise

1. Five boys took part in a race. Raj finished before Mohit but behind Gaurav. Ashish finished before Sanchit but behind Mohit. Who won the race ?  
(A) Raj (B) Gaurav  
(C) Mohit (D) Ashish

**Directions**—(Q. 2-4) Read the following information carefully and answer the questions that follow—

Five plays A, B, C, D and E are to be staged from Monday to Friday of a week. On each day, only one play will be staged. D or E should not be either the first or last to be staged. E should be immediately followed by C. B should be staged immediately after D. One play is staged between A and B.

2. Which is the first play to be staged ?  
(A) A  
(B) B  
(C) C  
(D) Cannot be determined  
(E) None of these
3. Which of the following is the correct sequence of staging all the plays ?  
(A) ADBCE (B) AECDB  
(C) BDAEC (D) DBECA  
(E) None of these
4. Which play was staged on Wednesday ?  
(A) A  
(B) B  
(C) Either B or C  
(D) Cannot be determined  
(E) None of these

**Directions**—(Q. 5-9) Read the following information carefully and answer the questions that follow.

Six lectures A, B, C, D, E and F are to be organised in a span of seven days from Sunday to Saturday. Only one lecture on each day in accordance with the following—

- (i) A should not be organised on Thursday.
  - (ii) C should be organised immediately after F.
  - (iii) There should be a gap of two days between E and D.
  - (iv) One day there will be no lecture (Friday is not that day), just before that day D will be organised.
  - (v) B should be organised on Tuesday and should not be followed by D.
5. On which day there is no lecture ?  
(A) Monday  
(B) Friday  
(C) Sunday  
(D) Cannot be determined  
(E) None of these
  6. How many lectures are organised between C and D ?  
(A) None (B) One  
(C) Two (D) Three  
(E) None of these
  7. Which day will the lecture F be organised ?  
(A) Thursday (B) Friday  
(C) Saturday (D) Sunday  
(E) None of these
  8. Which of the following is the last lecture in the series ?  
(A) A  
(B) B  
(C) C  
(D) Cannot be determined  
(E) None of these
  9. Which of the following informations is not required in finding the complete sequence of organisation of lectures ?  
(A) (i) only  
(B) (ii) only  
(C) (i) and (ii) only  
(D) (v) only  
(E) All are required

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**Answers with Explanation**

- (B) The order is Gaurav, Raj, Mohit, Ashish, Sanchit. Hence, Gaurav won the race.

**For Question No. 2 to 4.**

Monday    Tuesday    Wednesday    Thursday    Friday  
 A            D            B            E            C

- (A) A is the first play to be staged.
- (E) The proper sequence is ADBEC.
- (B) B was staged on Wednesday.

**For Question No. 5 to 9.**

From the statement, B is organised on Tuesday. B can not be followed by D. It means there are two days before B in which any lecture can be possible but D is followed by the day with no lecture. It is clear that D will be organised on

Sunday. There is a gap of two days between D and E. So E will be organised on Wednesday because A cannot be organised on Thursday and C should be organised immediately after. Clearly F and C will be organised on Thursday and Friday respectively. Hence, A will be organised on Saturday. So, the correct sequence is

Sun-day	Mon-day	Tues-day	Wednes-day	Thurs-day	Fri-day	Satur-day
D		B	E	F	C	A

- (A) No lecture on Monday.
- (C) There are three lectures between C and D *i.e.*, B.E.F.
- (A) F is organised on Thursday.
- (A) A is the last lecture.
- (E) All the statements are required.

**6. Selection Based on Certain Given Pre-conditions**

This type of question is solved by keeping in mind various given pre-conditions and a few essential criteria for selection of group items. The candidate has to make the required selection as per the directions given in each question.

**Example**

**Directions**—(Q. 1-5) Study the following information carefully and answer the questions below.

A team of five is to be selected from amongst five boys A, B, C, D and E and four girls P, Q, R and S. Some criteria for selection are—

- A and S have to be together
- P cannot be put with R
- D and Q cannot go together
- C and E have to be together
- R cannot be put with B

Unless otherwise stated, these criteria are applicable to all questions below.

- If two of the members have to be boys, the team will consist of—  
 (A) ABSPQ                      (B) ADSQR  
 (C) BDSRQ                      (D) CESPQ
- If R be one of the members, the other members of the team are—  
 (A) PSAD                      (B) QSAD  
 (C) QSCE                      (D) SACE

- If two of the members are girls and D is one of the members, the members of the team other than D are—

- (A) PQBC                      (B) PQCE
- (C) PSAB                      (D) PSCE

- If A and C are the members, the other members of the team cannot be—

- (A) BES                      (B) DES
- (C) ESP                      (D) PQE

- If including P at least three members are girls, the members of the team other than P are—

- (A) QSAB                      (B) QSBD
- (C) QSCE                      (D) RSAD

**Answers with Explanation**

- (A) If A is selected naturally S has to be selected.

If B is selected R cannot be selected.

If D is selected Q cannot be selected.

So, the options ADSQR and BDSRQ are wrong and CESPQ is not possible because S has to be accompanied with A.

- (D) If R is selected P cannot be selected, therefore option PSAD is wrong.

D and Q cannot go together. So, QSAD is wrong.

S and A have to be together. So, QSCE is wrong. Now, the team combination will be SACE

3. (C) If D is selected Q cannot be selected. therefore PQBC and PQCE are not correct. S and A have to be always together. Therefore, PSCE is wrong.
4. (D) If A and C are the members, S and E have to be selected. Therefore, option (D) PQE is not the correct combination.
5. (A)

### Exercise

**Directions—**(Q. 1-5) Read the following information carefully and answer the questions given below it.

Eight students A, B, C, D, E, F, G and H are planning to enjoy car racing. There are only two cars and following are the conditions.

- (i) One car can accommodate maximum five and minimum four students.
  - (ii) A will sit in the same car in which D is sitting but H is not in the same car.
  - (iii) B and C cannot sit in the same car in which D is sitting.
  - (iv) F will sit in the car of four people only along with A and E but certainly not with G.
1. If H and G are sitting in the same car, who are other two students sitting in the same car ?  
(A) B and C                      (B) C and D  
(C) B and D                      (D) E and B  
(E) None of these
  2. If E and A are sitting in the same car, which of the following statements is true ?  
(A) Five students are sitting in the same car  
(B) B is sitting in the same car  
(C) F is not sitting in the same car  
(D) G is not sitting in the same car  
(E) None of these
  3. Which of the following statements is superfluous for the above sitting arrangements ?  
(A) Only (i)                      (B) Only (ii)  
(C) Only (iii)                      (D) Only (iv)  
(E) None of these

**Directions—**(Q. 4-8) Study the following information carefully and answer the questions that follow.

At an electric Data Processing Unit five out of the eight program sets P, Q, R, S, T, U, V and W are to be operated daily. On any one day except for the first day of the month only three of the program sets must be the ones that were operated on the previous day. The program operating must also satisfy the following conditions.

- (i) If program P is to be operated on a day, V cannot be operated on that day.
- (ii) If Q is to be operated on a day, T must be one of the programs to be operated after Q.
- (iii) If R is to be operated on a day, V must be one of the programs to be operated after R.
- (iv) The last program to be operated on any day must be either S or U.

4. Which of the following could be the set of program to be operated on the first day of the month ?  
(A) V Q R T S                      (B) U Q S T W  
(C) T U R V S                      (D) Q S R V U  
(E) P R V S U
5. Which of the following is true of any day's a valid program set operation ?  
(A) P cannot be operated at third place  
(B) Q cannot be operated at third place  
(C) R cannot be operated at fourth place  
(D) T cannot be operated at third place  
(E) U cannot be operated at fourth place
6. If R is operated at third place in a sequence, which of the following cannot be the second program in that sequence ?  
(A) Q                                      (B) S  
(C) T                                      (D) U  
(E) W
7. If the program sets R and W are to be operated on the first day which of the following could be the other programs on that day ?  
(A) P, T, V                              (B) Q, V, S  
(C) Q, T, V                              (D) T, S, U  
(E) T, S, V
8. If the program sets operated on a day is P, Q, W, T, U each of the following could be the next day's program set except.  
(A) W, T, U, V, S                      (B) W, T, S, P, U  
(C) W, R, V, T, U                      (D) Q, T, V, W, S  
(E) Q, R, V, T, U

**Answers with Explanation**

**For Question No. 1 to 3.**

There are two cars I and II.

A and D sit in the same car, means, in I car H cannot sit in the same car *i.e.*, H will sit in car II B and C are not in the same car in which D is sitting *i.e.* B and C will sit in car II.

G is also in other car, means car II.

Now, we have

Car I – ADEF

Car II – BCGH

1. (A) B and C are in the same car in which G and H are there.
2. (D) Clearly G is not sitting.
3. (A) State I is superfluous, it is not necessary.

**For Question No. 4 to 9.**

4. (C)
5. (C) R cannot be operated at fourth place.
6. (A)
7. (E) Since R is operated, so V must also be operated.

Also, S or U is to be taken at the end. Therefore, the possible combinations are QSV and TSV.

Now, Q must have also T as one of the program after it which is not possible. Hence, Q, S, V is incorrect.

8. (B)

**7. Jumbled Problems**

**Example I**

**Direction**—(Q. 1-3) Read the following information carefully and answer the questions mentioned below.

- (i) Five friends Amar, Kapil, Sarvesh, Rohan and Nagesh put on five shirts of different colours *i.e.*, Red, Yellow, Blue, White and Green, while they were going to attend a party. These colours are not in order.
- (ii) They have different hobbies as Reading, Playing, Outing, Singing and Writing.
- (iii) Kapil, who likes singing, does not wear yellow shirt. Sarvesh wears red shirt and he does not like reading or writing. Nagesh likes playing and he does not wear blue or yellow shirt. Amar likes writing and Rohan does not wear yellow or green shirt.

1. What is the colour of Kapil’s shirt ?  
(A) White (B) Green  
(C) Blue (D) Data inadequate  
(E) None of these
2. Who likes reading ?  
(A) Rohan (B) Amar  
(C) Kapil (D) Data inadequate  
(E) None of these
3. Which is the following combination of Person-Colour-Hobby is correct ?  
(A) Rohan - Blue - Reading  
(B) Nagesh - White - Playing  
(C) Amar - Yellow - Writing  
(D) Nagesh - Green - Playing  
(E) None of these

**Answers with Explanation**

	Hobbies					Colour of Shirt				
	Reading	Playing	Outing	Singing	Writing	Red	Yellow	Blue	White	Green
Amar	x	x	x	x	√	x	√	x	x	x
Kapil	x	x	x	√	x	x	x			
Sarvesh	x	x	√	x	x	√	x	x	x	x
Rohan	√	x	x	x	x	x	x			x
Nagesh	x	√	x	x	x	x	x	x		

1. (D) The colour of Kapil's shirt may be either Blue or White or Green. Hence, data are inadequate.
2. (A) Rohan's hobby is reading.
3. (C) The combination Amar-yellow-writing is correct.

**Example II**

**Directions**—(Q. 1-4) Read the following information carefully and answer the questions.

Neha, Charulata, Vaidehi, Yogita and Smita are five friends. They have five different occupations—Doctor, Lawyer, Architect, Beautician and Computer Engineer. All the five friends have different hobbies—Drama, Reading, Dancing, Cooking and Singing (It is not necessary that the name of the persons, their hobbies and occupations are in same order.)

Neha is a lawyer whose hobby is cooking. Vaidehi is neither a doctor nor a beautician. She likes dancing. Yogita is neither a architect nor a doctor. She does not like drama nor sing a song. Charulata is a Computer engineer who does not like Drama.

1. Who is doctor among these friends ?  
 (A) Data inadequate  
 (B) Neha  
 (C) Yogita  
 (D) Smita  
 (E) None of these
2. What is the hobby of Yogita ?  
 (A) Drama (B) Reading  
 (C) Dancing (D) Singing  
 (E) None of these
3. What is the occupation of Vaidehi ?  
 (A) Doctor  
 (B) Computer Engineer  
 (C) Architect  
 (D) Data insufficient  
 (E) None of these
4. Who likes Singing ?  
 (A) Charulata (B) Vaidehi  
 (C) Yogita (D) Neha  
 (E) None of these

**Answers with Explanation**

S.N.	Name of the Person	Occupation					Hobby				
		Doctor	Lawyer	Architect	Beautician	Computer Engineer	Drama	Reading	Dancing	Cooking	Singing
1.	Neha	x	√	x	x	x	x	x	x	√	x
2.	Charulata	x	x	x	x	√	x	x	x	x	√
3.	Vaidehi	x	x	√	x	x	x	x	√	x	x
4.	Yogita	x	x	x	√	x	x	√	x	x	x
5.	Smita	√	x	x	x	x	√	x	x	x	x

1. (D)    2. (B)    3. (C)    4. (A)

**Example III**

**Directions**—(For question 1-4) Study the following information carefully and answer the questions below mentioned.

- (i) Seven subjects viz., Sociology / Psychology / English / History / Geography / Economics / Hindi are taught by persons A, B, C, D and E from Monday to Friday.
- (ii) Each person teaches at least one subject. At least one subject is taught each day. No one teaches two subjects in one day. B teaches Sociology on Wednesday, History is taught by E but not on Monday or Thursday. English is taught by A on Monday. Geography and Economics are taught on Monday and Tuesday respectively. D teaches only Psychology on Tuesday. Geography is not taught by E or B.

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1. Who teaches Economics ?  
 (A) E (B) A (C) B  
 (D) Cannot be determined (E) None of these
2. Who teaches Geography ?  
 (A) C (B) E (C) B  
 (D) Cannot be determined (E) None of these
3. Which subject is taught on Thursday ?  
 (A) History (B) Economics (C) Geography  
 (D) Cannot be determined (E) None of these
4. Which subject is taught on Friday ?  
 (A) Hindi (B) Economics (C) History  
 (D) Cannot be determined (E) None of these

**Answers with Explanation**

	Sociology	Psychology	English	History	Geography	Economics	Hindi
Monday	×	×	√	×	√	×	×
Tuesday	×	√	×	×	×	√	×
Wednesday	√	×	×	×	×	×	×
Thursday	×	×	×	×	×	×	√
Friday	×	×	×	√	×	×	×
A			√	×			
B	√			×	×		
C				×	√		
D	×	√	×	×	×	×	×
E				√	×		

1. (D) 2. (A) 3. (E) 4. (C)

**Exercise**

**Directions**—(Q. 1-5) Study the following information and answer the questions below mentioned.

P, Q, R, S, T, V and Z are seven employees in a call centre. These people work in three shifts *i.e.*, I, II and III. Any shift comprises at least one but not more than three employees. Each gets one day holiday in a week from Monday to Sunday. Q works in II shift with T and he gets weekly holiday immediate after P's holiday. S avails holiday on Sunday but he is not engaged in his duty with R and Q's shift. P along with R is in shift I. R's holiday is immediate after Q's holiday and immediate before T's holiday. V's holiday is immediate after T's holiday but not on Saturday. The employee who works in shift III, gets holiday

on Friday and the person who avails holiday on Saturday does not work with T. Z works neither in II nor in III shift.

1. On which day is the holiday of Q ?  
 (A) Wednesday (B) Thursday  
 (C) Tuesday (D) Saturday  
 (E) None of these
2. Which of the following three work in the shift ?  
 (A) I (B) II  
 (C) III (D) I or III  
 (E) Data inadequate
3. Which of the following gets the holiday immediate after V's holiday ?  
 (A) P (B) Z  
 (C) T (D) Data inadequate  
 (E) None of these

4. In which shift does V work ?  
 (A) II (B) III  
 (C) II or III (D) Data insufficient  
 (E) None of these
5. Which of the following combination of Employee-holiday-shift is not correct ?  
 (A) T – Thursday – II  
 (B) B – Friday – III  
 (C) P – Wednesday – I  
 (D) T – Saturday – I  
 (E) All are correct

**Directions**—(Q. 6-10) Study the following information carefully and answer the questions given below it.

There are five friends A, B, C, D and E. Two of them are businessmen while the other three belong to different occupations *viz.*, medical, engineer and legal. One businessman and the lawyer stay in the same locality while the other three stay in three different localities P, Q and R. Two of these five persons are Hindu while remaining three come from three different communities *viz.*, Muslim, Christian and Sikh. The lawyer is the oldest in age while one of the businessmen who runs a factory is the youngest. The other businessman is a cloth merchant and age-wise lies between the doctor and the lawyer. D is a cloth merchant and stays in locality S while E is a Muslim and stays in locality R. The doctor is a Christian and stays in locality P, B is a Sikh while A is Hindu and runs a factory.

6. Who stays in locality Q ?  
 (A) A (B) B  
 (C) C (D) E
7. What is E's occupation ?  
 (A) Business (B) Engineer  
 (C) Lawyer (D) Doctor
8. Age-wise who among the following lies between A and C ?  
 (A) Lawyer (B) Doctor  
 (C) Cloth Merchant (D) Engineer
9. What is B's occupation ?  
 (A) Business (B) Engineer  
 (C) Lawyer (D) Doctor
10. What is C's occupation ?  
 (A) Doctor (B) Lawyer  
 (C) Engineer (D) Business

**Directions**—(Q. 11-15) Study the following information carefully and answer the question given below it.

Of the five boys A, B, C, D and E two are good, one is poor and two are average in studies. Two of them study in post-graduate classes and three in under graduate classes. One comes from a rich family, two from middle class families and two from poor families. One of them is interested in music, two in acting and one in sports. Of those studying in under graduate classes, two are average and one is poor in studies. Of the two boys interested in acting, one is a post-graduate student. The one who is interested in music comes from a middle class family. Both of the boys interested in acting are not industrious, good in studies, come from a middle-class families are average in studies and one of them is interested in acting. The boy interested in sports comes from a poor family, while the one interested in music is industrious. E is industrious, good in studies comes from a poor family and is not interested in acting, music or sports. C is poor in studies in spite of being industrious. A comes from a rich family is not industrious but good in studies. B is industrious and comes from a middle class family.

11. Name of the boy interested in sports.  
 (A) A (B) B  
 (C) C (D) D
12. Name of the boy interested in music.  
 (A) A (B) B  
 (C) C (D) D
13. Name of middle class family boy interested in acting.  
 (A) A (B) B  
 (C) C (D) D
14. Name of the boys studying in post-graduate class.  
 (A) A, D (B) A, E  
 (C) B, C (D) D, E
15. Name of the boy who is not industrious and is average in studies.  
 (A) A (B) B  
 (C) C (D) D

**Directions**—(Q. 16-19) Read the following information and answer the question given below.

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- (i) Seven friends P, Q, R, S, T, U and W have gathered at Mumbai airport. Five of them are scheduled to go to five different places Delhi, Chennai, Lucknow, Bangalore and Calcutta.
  - (ii) Five of them are executives, each specialising in Administration, Human Resource Management, Marketing, System and Finance.
  - (iii) T, an executive, is going to Chennai and neither is from Finance nor Marketing.
  - (iv) W is a System Specialist and is leaving for Delhi. U is an executive but is not going to one of the five places.
  - (v) Q is an executive from HRM but has come to the airport to see his friends.
  - (vi) P is an executive but not from Marketing and is flying to one of the destinations but not to Bangalore or Calcutta.
16. The one who is going to fly Chennai is—  
 (A) Not an Executive  
 (B) From Administration  
 (C) From Management  
 (D) From Finance  
 (E) None of these
17. Who among the following specializes in Marketing ?  
 (A) S  
 (B) P  
 (C) U  
 (D) Data inadequate  
 (E) None of these
18. 'R' has specialization in which of the following fields ?  
 (A) Finance  
 (B) Marketing  
 (C) Either marketing or Finance  
 (D) None of these  
 (E) Cannot be determined
19. Who is going to fly Bangalore ?  
 (A) Data inadequate  
 (B) R  
 (C) S  
 (D) P  
 (E) None of these

**Answers with Explanation**

**For Question No. 1 to 5.**

Employee	Shift			Holiday
	I	II	III	
P	√	×	×	Monday
Q	×	√	×	Tuesday
R	√	×	×	Wednesday
S	×	×	√	Sunday
T	×	√	×	Thursday
V	×	×	√	Friday
Z	√	×	×	Saturday

1. (C)    2. (A)    3. (B)    4. (B)    5. (C)

**For Question No. 6 to 10.**

	A	B	C	D	E
Profession	Factory owner	Lawyer	Doctor	Cloth Merchant	Engineer
Religion	Hindu	Sikh	Christian	Hindu	Muslim
Locality	Q	S	P	S	R
Age ranking in descending order	5	1	3	2	4

- 6. (A) A stays in locality Q.
- 7. (B) E is an engineer.
- 8. (D) E lies between A and C. E is an Engineer.
- 9. (C) B is a lawyer.
- 10. (A) C is a doctor.

**For Question No. 11 to 15.**

Performance in Studies	A	B	C	D	E
	Good	Ave.	Poor	Ave.	Good
Class (Studying)	PG	UG	UG	UG	PG
Family Status	Rich	Middle	Poor	Middle	Poor
Interest	Acting	Music	Sports	Acting	□
Industrious/Not Industrious	Not Industrious	Industrious	Industrious	Not Industrious	Industrious

11. (C) C interested in Sports.
12. (B) B is interested in Music.
13. (D) D is middle class family boy interested in Acting.
14. (B) A & E study in Post Graduate classes.
15. (D) D is not Industrious and average in studies.

**For Question No. 16 to 19.**

Destination	P	Q	R	S	T	U	W
		Lucknow	□	Bangalore/ Calcutta	Bangalore/ Calcutta	Chennai	□
Executives in their specialized	Finance	HRM	□	□	Administration	Not confirmed	System

16. (B)
17. (D) Data inadequate.
18. (A) None of these
19. (A) Data inadequate.