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## IBPS (CLERK, PO, RRB, SO)

### Reasoning - Question Papers

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# IBPS Clerk (Preliminary)

## Reasoning

**Directions (Q. 1-5) :** Study the following information to answer the given question.

In a certain code language, 'judge proposed common law' is written as 'mu da pic ki', 'weak law corrupt system' is written as 'phi ra tic da', 'good system common desire' is written as 'tic gi ki mo', 'desire change corrupt judge' is written as 'zo pic phi gi'.

1. What is the code for 'proposed' ?  
(A) da (B) mu  
(C) pic (D) ki  
(E) Cannot be determined
2. Which of the following is the code for 'weak desire common' ?  
(A) zo ra ki (B) ra mu mo  
(C) tic mu ra (D) ki ra gi  
(E) None of these
3. What does 'mo' stand for ?  
(A) common (B) desire  
(C) good (D) corrupt  
(E) Cannot be determined
4. Which of the following is represented by the code 'da phi pic' ?  
(A) corrupt system judge (B) judge law change  
(C) judge law corrupt (D) corrupt weak system  
(E) None of these
5. Which of the following may be the possible code for 'team proposed good law' ?  
(A) mu ye phi da (B) mo gi da mu  
(C) da mu mo ye (D) tic ye mu da  
(E) None of these

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

A, B, C, D, E, F, G, H, K are sitting around a circle facing the center. B is fourth to the left of G who is second to right of C. F is fourth to the right of C and second to the left of K. A is fourth to the right of K. D is immediate neighbor of either K or G, H is third to the right of E.

6. Who is fourth to the right of F ?  
(A) K (B) H  
(C) E (D) B  
(E) None of these

7. In which of the following combinations is the third person sitting in between the first and second persons ?
- (A) EKB (B) CHB  
(C) AGC (D) DAG  
(E) None of these
8. Who is third to the right of A ?
- (A) A (B) D  
(C) G (D) F  
(E) None of these
9. Who is the fourth to the left of K ?
- (A) A (B) C  
(C) G (D) Data inadequate  
(E) None of these
10. Who is second to the right of B ?
- (A) C (B) H  
(C) F (D) E  
(E) Data inadequate

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

Twelve people are sitting in two parallel rows containing 6 people each, in such a way that there is an equal distance between adjacent persons. In row-1 P, Q, R, S, T, and U are seated and all of them are facing south. In row-2 A, B, C, D, E and F are seated and all facing North. Therefore in the given seating arrangement each member seated in a row faces another member of the outer row.

S sits third to right of Q, either S or Q sits an extreme end of line. The one who faces Q sits second to right of E. Two people sits between B and F. Neither B nor F sits at an extreme end of the line. The immediate neighbour of B faces the person who sits third to left of P, R and T are immediate neighbours of the each other. C sits second to the left of A. T does not face the immediate neighbour of D.

11. Who amongst the following sits at the extreme ends of the rows ?
- (A) S, D (B) Q, A  
(C) U, F (D) Q, E  
(E) Q, C
12. Who amongst the following faces T ?
- (A) A (B) B  
(C) E (D) D  
(E) F
13. How many persons are seated between S and Q ?
- (A) One (B) Two  
(C) Three (D) Four  
(E) None

14. T is related to D in the same way as S is related to B based on the given arrangement. To which of the following is P related to, following the same pattern ?
- (A) A (B) D  
(C) E (D) F  
(E) Cannot be determined.
15. Which of the following is true regarding S ?
- (A) F faces S  
(B) P is an immediate neighbour of S  
(C) F faces the one who is immediate right of S  
(D) S sits at one of the extreme ends of the line  
(E) Q sits second to the left of S.
16. How many such pairs of digits are there in the number 5317948, each of which has as many digits between them in the number as when the digits are rearranged in ascending order within the number (in both forward and backward directions) ?
- (A) None (B) One  
(C) Two (D) More than three  
(E) None of these
17. Raju started from point M and walked 2m towards east. Then he took a left turn and walked 6m before taking a right turn and walking 6m. He finally took a left turn, walked 6m, and stopped at a point N. How far is point N from point M ?
- (A)  $3\sqrt{12}$  m (B)  $4\sqrt{11}$  m  
(C)  $4\sqrt{13}$  m (D)  $5\sqrt{13}$  m  
(E) None of these

**Directions (Q.18-22) :** Study the following arrangement carefully and answer the questions given below.

Z 7 3 G # R E \$ 4 F K 1 U % W H 2 N I 5 B Q Y 6 @ H M â 8 V D

18. If all the symbols and numbers are dropped from the above arrangement, which of the following will be the fifteenth from the right end ?
- (A) Z (B) R  
(C) E (D) F  
(E) None of these
19. How many such numbers are there in the above arrangement, each of which is immediately preceded by a symbol and immediately followed by a letter ?
- (A) None (B) One  
(C) Two (D) Three  
(E) More than three
20. Which of the following is seventh to the left of twelfth from the right end of the above arrangement?
- (A) 1 (B) %  
(C) U (D) H  
(E) None of these

21. What will come in place of question mark in the following series based upon the given arrangement ?  
 7#G EF4 1W% 25I ?  
 (A) YH@ (B) Q@6  
 (C) 52N (D) YBQ  
 (E) None of these

22. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group ?  
 (A) EGR (B) K\$F  
 (C) â@M (D) NB2  
 (E) %KU

**Directions (Q. 23-25) :** Study the following information to answer the given questions :

Amongst five friends, A, B, C, D and E, each scored different marks in an examination out of a total of 100 marks. D scored more than only E. C scored less than A. Only one person scored more than B. The one who scored second highest marks scored 87 marks.

23. Who scored the third least marks in the examination ?  
 (A) A (B) B  
 (C) C (D) D  
 (E) E
24. Which of the following is true with regard to the given information ?  
 (A) Only one person scored more than A.  
 (B) No one scored less than E.  
 (C) C scored more than both B and D.  
 (D) Amongst the five friends, D is most likely to have scored 95 marks in the examination.  
 (E) None is true
25. If D scored 23 marks less than the marks scored by B, which of the following could possibly be C's score ?  
 (A) 64 (B) 93  
 (C) 61 (D) 89  
 (E) 78

**Directions (Q. 26-30) :** In these questions, the relationship between different elements is shown in the statements. Give answer

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

26. **Statements :**  $Z = A \geq C < M$ ,  $R > Z$

**Conclusions :** I.  $R > C$

II.  $A < M$

27. **Statements :**  $N > A \geq C, P = N, P \leq L$   
**Conclusions :** I.  $N > C$   
 II.  $L > A$
28. **Statements :**  $S \leq K < M > W \geq Z$   
**Conclusions :** I.  $W < K$   
 II.  $Z = S$
29. **Statements :**  $S \leq L < R, S \geq N, P = N$   
**Conclusions :** I.  $P = S$   
 II.  $R < N$
30. **Statements :**  $L > M \geq P \leq S, Q < P, M < K$   
**Conclusions :** I.  $K = L$   
 II.  $M \geq Q$

**Directions (Q. 31-35) :** In each of the questions below are given four statements followed by three conclusions numbered I, II & III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

31. **Statements :** Some tubes are threads.  
 Some threads are clothes.  
 Some clothes are paints.  
 Some paints are house.  
**Conclusions:** I. Some house are threads.  
 II. Some paints are threads.  
 III. Some clothes are tubes.
- (A) None follows (B) Only I follows  
 (C) Only II follows (D) Only III follows  
 (E) Only I and II follow
32. **Statements :** Some breads are string.  
 Some string are round.  
 All round are shoes.  
 All shoes are cups.  
**Conclusions:** I. Some cups are round.  
 II. Some shoes are string.  
 III. Some round are breads.
- (A) None follows (B) Only I follows  
 (C) Only II follows (D) Only III follows  
 (E) Only I and II follow

33. **Statements :** All stools are water.  
Some water are air.  
All air are paper.  
Some paper are stick.
- Conclusions:** I. Some stick are air.  
II. Some paper are water.  
III. Some air are stools.
- (A) None follows (B) Only I follows  
(C) Only II follows (D) Only III follows  
(E) Only II and III follow

34. **Statements :** All tables are bricks.  
All bricks are balls.  
Some balls are chairs.  
Some chairs are mirror.
- Conclusions:** I. Some mirror are bricks.  
II. Some balls are tables.  
III. Some chairs are tables.
- (A) None follows (B) Only I follows  
(C) Only II follows (D) Only III follows  
(E) Only I and II follow

35. **Statements :** All sticks are hammers.  
No hammer is dress.  
Some dresses are doors.  
All doors are cream.
- Conclusions:** I. Some cream are hammers.  
II. No cream is hammer.  
III. Some dresses are sticks.
- (A) Only I follows (B) Only II follows  
(C) Only III follows (D) Only either I or II follows  
(E) Only either I or II and III follow

### ANSWER KEY

1	2	3	4	5	6	7	8	9	10
B	D	C	C	C	B	D	D	C	A
11	12	13	14	15	16	17	18	19	20
E	C	B	A	C	E	C	C	C	C
21	22	23	24	25	26	27	28	29	30
B	D	C	B	E	A	E	D	D	D
31	32	33	34	35					
A	E	C	C	D					



## SOLUTION

### Directions (1 to 5) :

judge proposed common law ® mu da pic ki ... (1)

weak law corrupt system ® phi ra tic da ... (2)

good system common desire ® tic gi ki mo ... (3)

desire change corrupt judge ® zo pic phi gi ... (4)

From (1) and (2), law ® da

From (1) and (3), common ® ki

From (1) and (4), judge ® pic

From (1), proposed ® mu

From (2) and (3), system ® tic

From (2) and (4), corrupt ® phi

From (2), weak ® ra

From (3) and (4), desire ® gi

From (3), good ® mo

From (4), change ® zo

1. (B) Proposed ® mu

2. (D)
- |      |        |        |
|------|--------|--------|
| Weak | desire | common |
| ↓    | ↓      | ↓      |
| Ra   | gi     | ki     |

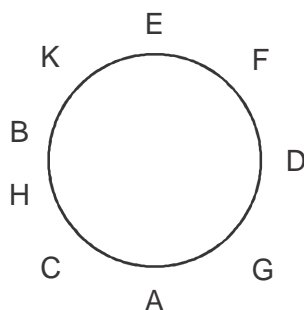
3. (C) good ® mo

4. (C)
- |     |         |         |
|-----|---------|---------|
| da  | phi     | pic     |
| ↓   | ↓       | ↓       |
| Law | corrupt | kijudge |

5. (C)
- |      |          |      |     |
|------|----------|------|-----|
| team | proposed | good | law |
| ↓    | ↓        | ↓    | ↓   |
| Ye   | mu       | mo   | da  |

(A new code for a new word)

### Directions (6-10) :



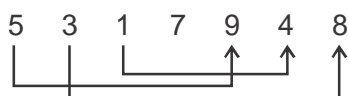
6. (B) H is fourth to the right of F. So, answer will B.
7. (D) D is sitting between F and G. So, answer will D.

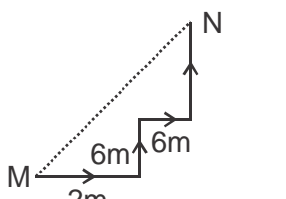
8. (D) F is third to the right of A, So, answer will D.  
 9. (C) G is fourth to the left of K. So, answer will C.  
 10. (A) C is second to the right of B. So, answer will A.

Directions (11-15) :

P U S T R Q  
 C F A E B D

11. (E) Q, C  
 12. (C) E  
 13. (B) Two  
 14. (A) A  
 15. (C) F faces the one who is immediate right of S

16. (E) 

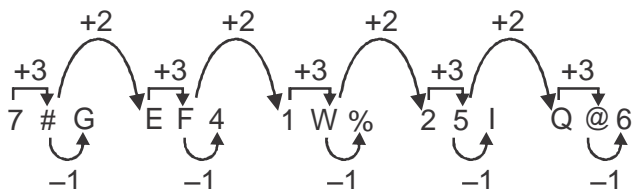
17. (C)   
 $(MN)^2 = (12)^2 + (8)^2$   
 $= 144 + 64 = 208$   
 $MN = \sqrt{208} = 4\sqrt{13} \text{ m}$

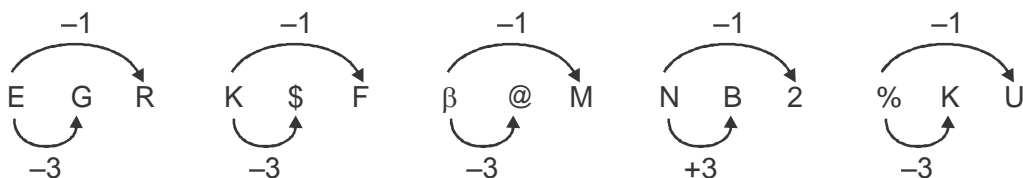
18. (C) If all the symbols and numbers are dropped, the new arrangement is  
 Z G R E F K U W H N I B Q Y H M V D

19. (C) Only two

\$ 4 F      β 8 V

20. (C) Required position is = (7+12)th  
 = 19 th from the right end in the given arrangement.  
 Element at 19th from the right end = U

21. (B) 

22. (D) 

**Directions : (23 to 25) :**

After arranging them in order as per the scored marks in the examination:

$$A > B > C > D > E$$

23. (C) C

24. (B) No one scored less than E.

25. (E) C's score lies between B and D.

Given, B scored 87 marks.

$$D \text{ scored} = 87 - 23 = 64$$

Hence, C's possible score is 78

26. (A) Given:  $Z = A \geq C < M$ ,  $R > Z$

Combining both,

$$R > \underline{Z = A \geq C} < M$$

Combining

$$\underline{R > Z \geq C} < M$$

combining  $R > C$  Thus, I follows. Again,

$$Z = \underline{A \geq C} < M$$

can't compare A and M So, II does not follow.

27. (E) Given:  $N > A \geq C$ ,  $P = N$ ,  $P \leq L$

$$\underline{N > A \geq C}$$

combining

$$N > C$$

Thus, I follows.

Combining all the given expressions,

$$L \geq \underline{P = N} > A \geq C$$

Combining

$$\underline{L \geq P} > A \geq C$$

combining  $L > A \geq C$

Thus, II follows

28. (D) Given,

$$S \leq \underline{K < M} > W \geq Z$$

can't compare K and W Thus, I does not follow.

$$\text{Given, } \underline{S \leq K} < \underline{M} > W \geq Z$$

Combining

$$\underline{S < M} > Z$$

Can't compare S and Z

Thus, II does not follow.

29. (D) Given: Given:  $S \leq L < R$ ,  $S \geq N$ ,  $P = N$   
Combining all the given expression;  
 $\underline{P = N} \leq S \leq L < R$   
 $P \leq S \leq L < R$   
Thus, I does not follow  
Again,  
 $\underline{N \leq S} \leq L < R$   
Combining  
 $\underline{N \leq L} < R$   
Combining  
 $N < R$   
Thus, II does not follow.
30. (D) Given:  $L > M \geq P \leq S$ ,  $Q < P$ ,  $M < K$   
 $L > \underline{M \geq P} > Q$   
Combining  
 $L > M > Q$  Thus, II does not follow.  
Again,  $\underline{L > M} < K$   
can't compare L and K  
Thus, I does not follow.
31. (A) I - type statements can't be combined.
32. (E) All round are shoes + All shoes are cups = A + A = All round are cups ® conversion ® Some cups are round (I). Hence I follows. Some strings are round + All round are shoes = I + A = I = Some strings are shoes ® conversion ® Some shoes are strings (I). Hence II follows. Some breads are strings + Some strings are round = I + I = No conclusion. Hence III does not follow.
33. (C) All air are paper + Some paper are stick = A + I = No conclusion. Hence I does not follow. Some water are air + All air are paper = I + A = I = Some water are paper ® conversion ® Some paper are water (I). Hence II follows. All stools are water + Some water are air = A + I = No conclusion. Hence III does not follow.
34. (C) All bricks are balls + Some balls are chairs = A + I = No conclusion. Hence neither I nor III follows. All tables are bricks + All bricks are balls = A + A = A = All tables are balls ® conversion ® Some balls are tables (I). Hence II follows.
35. (D) Some shirts are gate + All gate are cream = I + A = I = Some shirts are cream. Now, No iron is shirts + Some shirts are cream = E + I = O× = Some cream are not iron. However, I and II form a complementary I-E pair. Hence either I or II follows. All bottles are iron + No iron is shirts = A + E = E = No bottles is dress ® conversion ® No shirts is bottles. Hence III does not follow.

# IBPS Clerk (Mains)

## Reasoning

**Directions (1-5) :** Study the following information and answer the given question.

P, Q, R, S, T, U, V and W study in different classes, viz. 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th. All of them are sitting around a circular table facing the center.

R sits third to the right of W. W studies in class 8. U sits second to left of T. T is not an immediate neighbour of either R or W. The one who studies in class 1 is an immediate neighbour of T. Three people sit between W and the student of class 7.

W, R and their immediate neighbours do not study in class 2. Only one person sits between the student of class 2 and V. Students of class 3 and 4 are immediate neighbours of each other. R is neither in class 4 nor in class 3. Only one person sits between P and the student of class 5. P does not study in class 2 or 3. Q does not study in class 2.

1. Which of the following is true regarding U ?
  - (A) U studies in class 5.
  - (B) S and V are immediate neighbours of U.
  - (C) One person sits between U and the student of class 4.
  - (D) U sits second to the right of P.
  - (E) None is true
2. Who among the following studies in class 3 ?
  - (A) R
  - (B) U
  - (C) V
  - (D) Q
  - (E) Cannot be determined
3. How many persons sit between S and the student of class 4 when counted from the left hand side of the student of class 4 ?
  - (A) None
  - (B) One
  - (C) Two
  - (D) Three
  - (E) Four
4. Which of the following is true ?
  - (A) Only one person is sitting between the student of class 4 and that of class 6.
  - (B) S studies in class 2.
  - (C) The one studying in class 3 is an immediate neighbour of W.
  - (D) One person sits between W and the student of class 2.
  - (E) None is true
5. Who among the following represents immediate neighbours of V ?
  - (A) P and Q
  - (B) T and the student of class 2
  - (C) W and the student of class 6
  - (D) T and U
  - (E) P and S

**Directions (6-10) :** Study the following information and answer the given question.

Eight friends A, B, C, D, E, F, G and H live on eight different floors of a building but not necessarily in the same order. The lowermost floor of the building is numbered one, the one above that is numbered two and so on till the topmost floor is numbered eight. A lives on floor numbered 4. Only one person lives between A and C. F lives on the floor immediately below C. Only one person lives between F and G. G lives above F. F lives on floor numbered 5. Only one person live between B and E, D lives on an even numbered floor but does not live on floor numbered 8. B lives immediate below A's floor.

6. Four of the following five are alike as per the given arrangement and thus form a group. Which of the following does not belong to that group ?

- |        |        |
|--------|--------|
| (A) GF | (B) HC |
| (C) DA | (D) CA |
| (E) DE |        |

7. Who lives exactly between the floors on which C and A live ?

- |       |       |
|-------|-------|
| (A) B | (B) G |
| (C) F | (D) E |
| (E) D |       |

8. Who amongst the following lives on floor numbered 2 ?

- |       |       |
|-------|-------|
| (A) D | (B) L |
| (C) F | (D) H |
| (E) G |       |

9. Which of the following is true about D as per given arrangement?

- (A) D lives on the lowermost floor.  
 (B) B lives on one of the floor below D.  
 (C) All the given statements are true.  
 (D) Only two people live between D and F.  
 (E) D lives on an odd numbered floor.

10. If C and H interchange their places and so do D and A, who amongst the following will live between the floors on which D and G live, as per the given arrangement ?

- |                  |                  |
|------------------|------------------|
| (A) Only H       | (B) No one       |
| (C) Only C       | (D) Both G and C |
| (E) Both H and F |                  |

**Directions(11-15) :** Study the following information and answer the given question.

Eight friends H, I, J, K, L, M, N and O are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners faces the centre while those who sit in the middle of the sides face outside. K sits third to the right of H. H faces the centre. O is not an immediate neighbor of H or K. L sits third to the right of J. J does not sit in the middle of any of the sides and also J is not an immediate neighbor of O. Only one person sits between H and M. I is not an immediate neighbor of M.

11. If all the persons are made to sit in alphabetical order in clockwise direction, starting from H, the positions of how many (excluding H) will remain unchanged as compared to their original seating positions ?
- (A) None (B) One  
(C) Two (D) Three  
(E) Four
12. Which of the following is true regarding O ?
- (A) L is not immediate neighbor of O  
(B) O sits in the middle of one of the sides  
(C) J sits second to left of O  
(D) H and M are immediate neighbors of O  
(E) None is true
13. Who amongst the following sits fourth to the left of M ?
- (A) O (B) J  
(C) L (D) I  
(E) N
14. What is the position of I with respect to J ?
- (A) Immediately to the left (B) Second to the left  
(C) Third to the left (D) Third to the right  
(E) Immediately to the right
15. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to the group ?
- (A) L (B) N  
(C) M (D) K  
(E) I

**Directions (Ques. 16-20) :** Study the following information and answer the given question.

In each of the question-sets below are two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

16. **Statements :** All players are strong.

All men are strong.

**Conclusions:** I. All players are men.

II. Some men are players.

III. No one men are players.

IV. All strong are men.

- (A) Only (1) conclusion follows (B) Only (2) conclusion follows  
(C) Either (1) or (2) follows (D) Neither (1),(2),(3) nor (4) follows  
(E) Both (1) and (2) follow

17. **Statements** : No dear is red.

All the red are hot.

**Conclusions:** I. No dear is hot.

II. No hot is dear.

III. Some hot are red.

IV. All the hot are red.

(A) Only (2) and (4)

(B) Only (1) and (3)

(C) Only (3) and (4)

(D) Only (3)

(E) All the four are true

18. **Statements** : All tree are plants.

All plants are small.

**Conclusions:** I. Some plants are tree.

II. Some small are tree.

III. Some tree are not small.

IV. All small are plants.

(A) Only (1) and (2)

(B) Only (1) and (3)

(C) Only (1) and (4)

(D) Only (2) and (4)

(E) None of these

19. **Statements** : All women are queen.

Some girls are queen.

**Conclusions:** I. All women are girls.

II. All girls are women.

III. Some queen are girls.

IV. All queen are women.

(A) Only (4)

(B) Only (2)

(C) Only (3)

(D) Only (1)

(E) Only (1) and (3)

20. **Statements** : All the guitar are piano.

All the piano are drum.

**Conclusions:** I. All the drum are piano.

II. All the guitar are drum

III. All the piano are guitar.

IV. Some drum are guitar.

(A) Only (1) and (4)

(B) Only (3) and (4)

(C) Only (2) and (4)

(D) Only (1) and (2)

(E) Only (1) and (3)



**Directions (Q.21 - 25) :** In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Give Answer

- (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 Conclusion I nor II is true
- (E) If both conclusions I and II is true

21. **Statements :**  $P \geq T = C > O \leq V$

**Conclusions :** I.  $O < P$

II.  $V \geq T$

22. **Statements :**  $D > Q \geq A, R < Q$

**Conclusions :** I.  $A < R$

II.  $D > R$

23. **Statements :**  $Z = S \leq X, Z > G$

**Conclusions :** I.  $S > G$

II.  $G < X$

24. **Statements :**  $M > I \leq G, L < G$

**Conclusions :** I.  $M > L$

II.  $I < L$

25. **Statements :**  $F < D > H, P \geq D$

**Conclusions :** I.  $P > F$

II.  $H < P$

**Directions (Q. No. 26-30) :** Study the following digit-letter-symbol sequence carefully and answer the questions given below:

K 7 4 A G H K # 5 Q R % 2 3 D F \* L M 6 B E 8 @ I \$ P Z 9

26. If the positions of first ten elements are interchanged with the positions of last ten positions of last ten elements in such a way that the left becomes the first from the right and so on, which element will be the fourth to the left of the eight element from the left end after rearrangement ?

- (A) @
- (B) \$
- (C) 1
- (D) P
- (E) None of these

27. If KQ : R3; LB : ? On the basis of their position in the above arrangement ?

- (A) E1
- (B) E@
- (C) 81
- (D) 8\$
- (E) None of these

28. Four of the following five are alike in a certain way on the basis of their position in the above arrangement, and so form a group. Which is the one that does not belong to the group ?
- (A) GK# (B) Q%2  
(C) 3F\* (D) 6E8  
(E) IPZ
29. How many such symbols are there each of which is immediately followed by a numeral but not immediately preceded by a numeral ?
- (A) None (B) One  
(C) Two (D) three  
(E) More than three
30. How many such consonants are there in the above arrangement each of which immediately preceded by a numerical ?
- (A) None (B) one  
(C) Two (D) three  
(E) More than three

**Directions (31-35) :** Study the following information to answer the given questions:

In a certain code 'bring a cell' is written as '5 8 2', 'did not bring' is written as '3 5 9' and 'not a reason' is written as '7 2 9'.

31. Which of the following represents 'did not' ?
- (A) '2 3' (B) '2 9'  
(C) '3 5' (D) '5 2'  
(E) '9 3'
32. What is the code for 'cell' ?
- (A) 5 (B) 8  
(C) 2 (D) 7  
(E) cannot be determined
33. What does '2' stand for ?
- (A) bring (B) a  
(C) cell (D) reason  
(E) not
34. What does '7' stand for ?
- (A) not (B) a  
(C) bring (D) reason  
(E) either 'a' or 'not'
35. What is the code for 'bring' ?
- (A) 8 (B) 2  
(C) 5 (D) 3  
(E) 9

36. How is X related to Y ?

**Statements :**

I. Y and U are children of E who is wife of X.

II. J's sister X is married to Y's father.

- (A) 1 alone is sufficient while 2 alone is not sufficient
- (B) 2 alone is sufficient while 1 alone is not sufficient
- (C) Either 1 or 2 is sufficient
- (D) Neither 1 nor 2 is sufficient
- (E) Both 1 and 2 are sufficient

37. Is X the grandmother of V ?

**Statements :** I. X is the mother of A. A is the brother of V's father.

II. E is the mother of T. T is the sister of V. J, the aunt of T is the only daughter of X.

- (A) 1 alone is sufficient while 2 alone is not sufficient
- (B) 2 alone is sufficient while 1 alone is not sufficient
- (C) Either 1 or 2 is sufficient
- (D) Neither 1 nor 2 is sufficient
- (E) Both 1 and 2 are sufficient

38. Among P, Q, R, S, T and U, who is the heaviest ?

**Statements :** I. P and S are heavier than Q, T and U but none of them is the heaviest.

II. P is heavier than S but lighter than R.

- (A) I alone is sufficient while II alone is not sufficient
- (B) II alone is sufficient while I alone is not sufficient
- (C) Either I or II is sufficient
- (D) Neither I nor II is sufficient
- (E) Both I and II are sufficient

39. Starting from the point, Ajay walked 12 m North, he turned right and walked 10 m, he again turned right and walked 12 m, then he turned left and walked 5 m. How far is he now and in which direction from the starting point ?

- (A) 27m towards East
- (B) 5m towards East
- (C) 10m towards west
- (D) 15m towards East

40. Jay and Aryan start walking in opposite directions. Jay walked 4 km and Aryan walked 3 m. Then Jay turned right and walked 3 km and Aryan turned left and walked 4 km. How far each of them the starting point ?

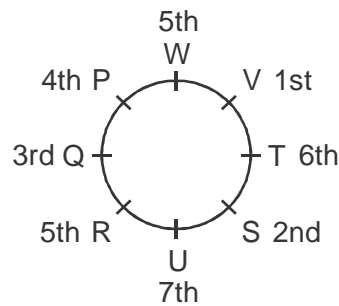
- (A) 4.5km
- (B) 6km
- (C) 5km
- (D) 8km

**ANSWER KEY**

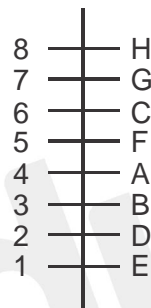
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
E	D	D	D	C	E	C	A	D	E
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
A	C	A	E	C	D	D	A	C	C
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
A	B	E	D	E	B	A	B	C	D
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
A	B	B	D	C	C	A	A	D	C



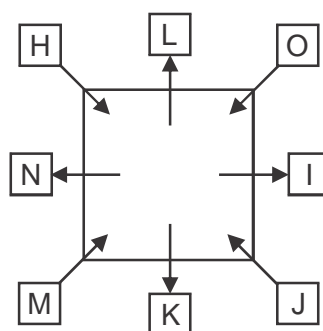
## SOLUTION



1. (E) None is true
2. (D) Q
3. (D) Three
4. (D) studies in class 2.
5. (C) W and T, who is the student of class 6<sup>th</sup>

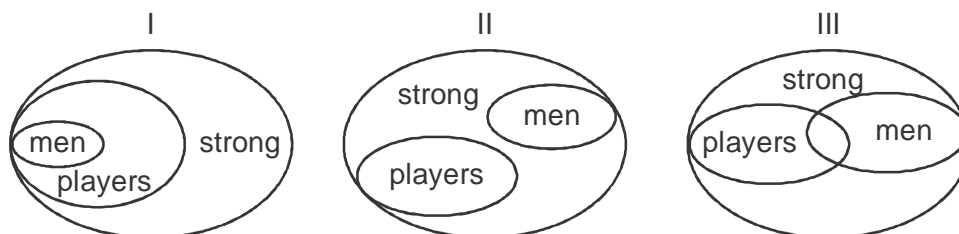


6. (E) DE
7. (C) F
8. (A) D
9. (D) Only two people live between D and F.
10. (E) Both H and F



11. (A) None
12. (C) J sits second to left of O
13. (A) O
14. (E) Immediately to the right
15. (C) M

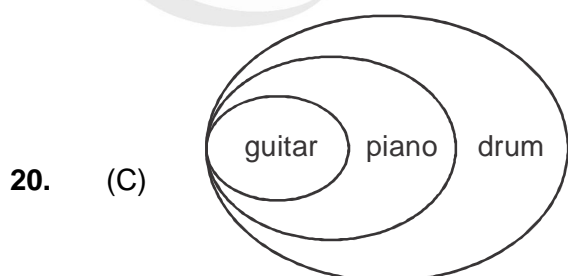
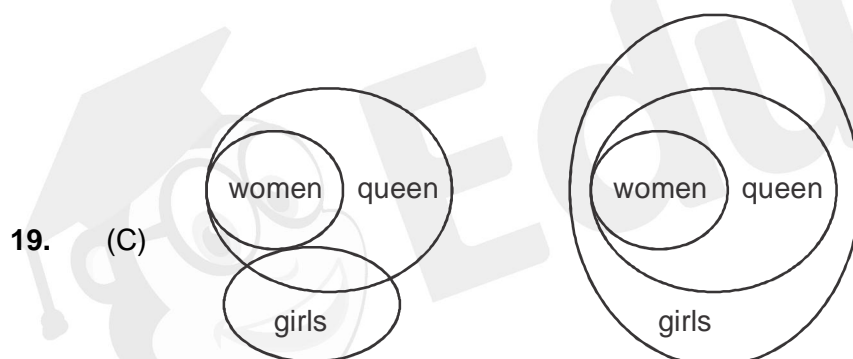
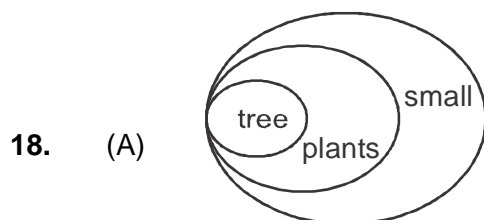
16. (D) Explanation :



As given statements we can draw three diagrams according to these as given.

And can check that our conclusions.

After checked out that no one conclusion fulfill. So, our answer will (D).



All the drum are piano

Wrong

All the guitar are drum

Right

All the piano are guitar

Wrong

Some drum are guitar

Right

21. (A) Conclusions

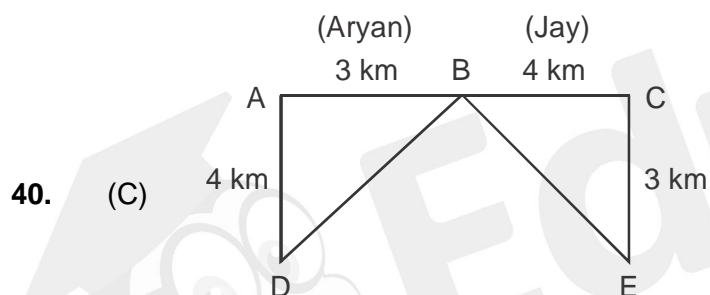
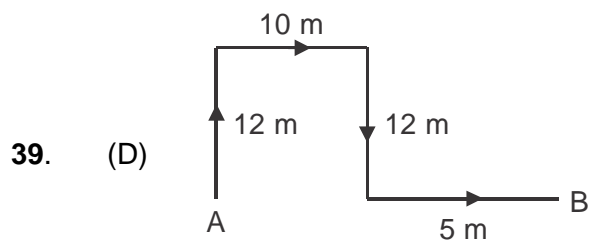
I.  $K < H$  is True

II.  $L \geq I$  is False

Only Conclusion I is True hence answer is Option A.

22. (B) Conclusions  
I.  $O < P$  is False  
II.  $S > P$  is True  
Only Conclusion II is True hence answer is Option B.
23. (E) Given that,  $A = B \leq C$   
and  $A > R$   
On combining the statement we will get:  $R < A = B \leq C$   
Conclusions  
I.  $B > R$  is True  
II.  $R < C$  is True  
Both the conclusions are True hence answer is Option E.
24. (D) Given that,  $D > E \leq F$   
and  $J < F$   
On combining the statement we will get :  $D > E \leq F > J$   
Conclusions  
I.  $D > J$  is False  
II.  $E < J$  is False  
Both Conclusions are False hence answer is Option D.
25. (E) Given that,  $P < Q > T$   
and  $R \geq Q$   
On combining the statement we will get :  
 $P < Q \leq R$  and  $R \geq Q > T$   
Conclusions  
I.  $R > P$  is True  
II.  $T < R$  is True  
Both Conclusions are True hence answer is Option E
26. (B) 4<sup>th</sup> to the left of 8<sup>th</sup> from the left =  $(8-4)= 4^{\text{th}}$  from the left  
Now, 4<sup>th</sup> from the left after rearrangement = 4<sup>th</sup> from the right in the given arrangement  
= \$
27. (A)  $K + 3 = Q + 1 = R + 3 = 3$   
 $L + 3 = B + 1 = E + 3 = 1$
28. (B) In all other the second element is obtained after skipping one after the first element while the third element is the one just after the second.
29. (C) # and %
30. (D) Q, D and B  
 $K + 1$  L  
 $K - 1$  J  
 $I + 1$  J  
 $M - 1$  L  
So in the same way TRAINING will be UQBHOHOF
31. (A) did = 3; not = 9
32. (B) bell = 8
33. (B) 2 = a
34. (D) 7 = reason

35. (C) bring = 5
36. (C) From 1, we conclude that Y is the child of E who is wife of X i.e. X is Y's father.  
From 2, X is married to Y's father. This implies that X is Y's mother.
37. (A) From statement I  
A is the uncle of V.  
Therefore, X is the grandmother V.  
From statement II  
J is the aunt of T and V.  
Therefore, X is the grandfather of grandmother of V.
38. (A) From I, we conclude that since none of P and S is the heaviest and each one of Q, T and U is lighter than both P and S, so R is the heaviest.



B → Starting Point

Hence, required distance =  $BD = BE = \sqrt{4^2 + 3^2} = \sqrt{25} = 5 \text{ km}.$



# IBPS PO (Preliminary)

## Reasoning

1. If A means x, B means +, C means + and D means - , then what is the value of 3105 A 459 B 13.5 C 3105 A 3 D 3105 ?
- (A) 111780 (B) 121780  
(C) 111450 (D) 111760  
(E) None of these
2. How many pairs of letters are there in the word HYPERTHYROIDISM which have the same number of letters between them as in English alphabet ?
- (A) More than two but less than four (B) More than three but less than five  
(C) More than four but less than six (D) More than six but less than eight  
(E) None of these
3. If it is possible to make a meaningful word from the 1st, 6th, 7th and 9th letters of the word VULCANIZATION, using each letter only once, the third letter of the word would be your answer. If more than one such word can be formed, your answer would be M. If no such word can be formed, your answer is X.
- (A) M (B) X  
(C) 1 (D) A  
(E) None of these

**Directions (Q. 4-8) :** Study the following information carefully and answer the questions given below.

There are twelve friends sitting in two parallel rows containing six people each. In row 1, A, B, C, D, E and F are seated and all of them are facing south. In row 2, U, T, S, R, Q and P are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. E faces R, who does not sit at extreme ends. U sits third to the right of R. U does not sit at extreme ends. F does not face U, and he does not sit at either of the extreme ends. F is not an immediate neighbor of E. T sits at one of the extreme ends. Only two persons sit between T and Q. Q does not face F. Two persons sit between C and B. C is not an immediate neighbor of E. S does not face F. A is not at an immediate neighbor of C.

4. Who among the following faces U ?
- (A) A (B) B  
(C) C (D) D  
(E) E
5. How many persons are sitting between E and D ?
- (A) Two (B) Three  
(C) Four (D) None  
(E) None of these

6. Who among the following sit at the extreme ends of the rows ?  
 (A) F, D (B) A, C  
 (C) S, U (D) C, F  
 (E) T, Q
7. C is related to B in the same way as D is related to E. Which of the following is P related to, following the same pattern ?  
 (A) F (B) R  
 (C) S (D) T  
 (E) None of these
8. Who among the following sits exactly between Q and U ?  
 (A) R (B) P  
 (C) T (D) Can't be determined  
 (E) None of these

**Directions (Q. 9-13) :** In each question below are either two or three statements followed by two conclusions I and II. You have to take the two or three given statements to be true and then decide which of the given conclusions logically follows from the two/ three given statements, disregarding the commonly known facts.

- (A) If only conclusion I follows.  
 (B) If only conclusion II follows.  
 (C) If either conclusion I or II follows.  
 (D) If neither conclusion I nor II follows.  
 (E) If both conclusions I and II follows.
9. **Statements :** Some taps are pipes.  
 All pipes are mirror.  
**Conclusions:** I. All pipes which are taps are mirrors.  
 II. Some pipes are taps.
10. **Statements :** 10% eraser are glass.  
 5% glass are bottle.  
 99% bottle are water.  
**Conclusions:** I. Some eraser are bottle.  
 II. Some eraser are water.
11. **Statements :** All P are Q. All Q are A.  
 All B are P.  
**Conclusions:** I. All P are B.  
 II. All B are A.
12. **Statements :** Some paper is book.  
 No book is page.  
 Some page is paper.  
**Conclusions:** I. Some paper that is book is page.  
 II. Some page that is paper is book

13. **Statements :** Some car is black.  
Some black is bike.  
Some bike is car.
- Conclusions:** I. Some car which is black is bike.  
II. Some bike is neither car nor black.

**Directions (Q. 14-18) :** Study the following information carefully and answer the questions given below:

There is a group of eight persons P, Q, R, S, T, U, V and W, including two families. All of them are sitting around a circular table, facing the center. Three members of this group belong to one family and the remaining five belong to another family. There are four females in the group. T sits second to the right of V, who is a female. S is wife of W and second to the left of Q. S sits on the immediate right of her husband. U is sister of W and is not exactly between V and T. Q sits on the immediate left of V, who is wife of T. R sits opposite her sister and second to the left of P, who is son of W. Q is son of T.

14. Who among the following sits second to the right of P ?  
(A) S (B) U  
(C) R (D) T  
(E) None of these
15. Who among the following sits exactly between V and T ?  
(A) Wife of T (B) Sister of S  
(C) Sister of W (D) Brother of P  
(E) None of these
16. How many members are there in the family of T (including T) ?  
(A) two (B) three  
(C) four (D) can't be determined  
(E) none of these
17. What is the relation between S and R ?  
(A) brother (B) son  
(C) sister (D) brother-in-law  
(E) none of these
18. Who among the following is third to the right of U ?  
(A) R (B) P  
(C) Q (D) V  
(E) None of these

**Directions (Q. 19-20) :** Read the following information and answer the questions given below it :

19. If 'J \$ K' means 'J is father of K'; 'J # K' means 'J is mother of K', 'J × K' means 'J is sister of K', then how is T related to V in V#X\$Y×T ?  
(A) Nephew (B) Grandson  
(C) Grand daughter (D) Data inadequate  
(E) None of these

20. If 'A × B' means 'A is the daughter of B'; 'A + B' means 'A is the father of B'; 'A @ B' means 'A is the mother of B' and 'A - B' means 'A is the brother of B', then in the expression T @ U + V - W × X, how is T related to X ?
- (A) Mother (B) Aunt  
(C) Daughter-in-law (D) Sister-in-law  
(E) None of these

**Directions (Q. 21-25) :** Study the following information carefully and answer the questions given below.

P, Q, R, S, T and U are six boys each belonging to a different city, viz Chandigarh, Agra, Nagpur, Lucknow, Jodhpur and Udaipur, not necessarily in the same order. Each of them got selected in a different bank, viz Canara Bank, Syndicate Bank, UCO Bank, Vijaya Bank, Dena Bank and Central Bank, not necessarily in the same order.

Q belongs to Udaipur but did not get selected in either Dena Bank or Canara Bank. S doesn't belong either to Chandigarh or to Lucknow, but got selected in Syndicate Bank. The one who got selected in Dena Bank doesn't belong to Udaipur. The one who got selected in Central Bank belongs to Lucknow. U did not get selected in Dena Bank. Either R or U got selected in UCO Bank but neither of them belongs to Jodhpur or Lucknow. P belongs to Nagpur and he got selected in either Canara Bank or UCO Bank. U doesn't belong to Chandigarh.

21. Who among the following belongs to Jodhpur ?
- (A) P (B) Q  
(C) R (D) S  
(E) Can't be determined
22. Who among the following got selected in Dena Bank ?
- (A) P (B) Q  
(C) R (D) S  
(E) Can't be determined
23. The one who got selected in Vijaya Bank belongs to which of the following cities ?
- (A) Delhi (B) Udaipur  
(C) Jodhpur (D) Agra  
(E) None of these
24. The one who belongs to Agra got selected in which of the following banks ?
- (A) UCO Bank (B) Dena Bank  
(C) Either UCO Bank or Dena Bank (D) Vijaya Bank  
(E) Can't be determined
25. Which of the following combinations of person-city-bank is definitely false ?
- (A) P- Nagpur -Canara Bank (B) S- Jodhpur -Syndicate Bank  
(C) U-Lucknow-Central Bank (D) R- Chandigarh -Dena Bank  
(E) None of these

26. Ram started from point P and walked 2m towards east. Then he took a left turn and walked 4m before taking a right turn and walking 4m. He finally took a left turn, walked 4m, and stopped at a point Q. How far is point Q from point P ?
- (A) 2m (B) 6m  
(C) 8m (D) 10m  
(E) 100m
27. Among five friends P, Q, R, S and T, each having a different height, S is taller than T and shorter than only P. Q is not the shortest. Who among them is definitely the shortest ?
- (A) R (B) S  
(C) Either R or S (D) T  
(E) Data inadequate

**Directions (Q. 28-32):** Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Give answer

- (A) If only I and III are sufficient to answer the question.  
(B) If all I, II and III are required to answer the question.  
(C) If only II and III are sufficient to answer the question.  
(D) If the question cannot be answered even with all I, II and III.  
(E) If only I and II are sufficient to answer the question.
28. How is 'tun' coded in a code language ?
- I. 'tun sa za' is coded as 'cheap dark dog' and 'dog is black' is the code of 'sa ga ma'.  
II. 'su la zo' is coded as 'sun is yellow' and 'da sa pa' is coded as 'dog run fast'.  
III. 'tun pa lo' is coded as 'run dark night' and 'zo ga pi' is coded as 'yellow black cold'.
29. In which direction is point A with respect to point J ?
- I. Point K is to the west of point J. Point L is to the north of point J. Point A is to the south of point L.  
II. Point O is to the south of point A. Point O is 6m from point J. Point A is 9m from point J.  
III. Point K is to the west of point J. Point J is exactly midway between point K and point T. Point X is to the south of point T. Point A is to the west of point X.
30. How many daughters does X have ?
- I. Y's father Z is husband of X.  
II. Out of the three children Z has, only one is a boy.  
III. J and K are sisters of L.
31. On which day of the week did Vijay visit Kerala ? (Assume that the week starts from Monday.)
- I. Vijay took leave on Wednesday.  
II. Vijay visited Kerala the day after his mother's visit to his house.  
III. Vijay's mother visited Vijay's house neither on Monday nor on Thursday.

32. Who among A, B, C, D, E and F, each having different heights, is the tallest ?
- B is taller than A but shorter than E.
  - Only two of them are shorter than C.
  - D is taller than only F.
33. In which of the following expressions the expression ' $Z \leq J$ ' holds definitely true ?
- $B \geq N = J \leq G < P \leq Z$
  - $Q \geq J < G > Z \leq F < E$
  - $B \geq Q = G \geq Z \leq R > J$
  - $Q \geq J \geq N = W \geq Z < F$
  - $E > F < J = G \geq Q > Z$
34. In which of the following expressions,  $R \geq P$  is false ?
- $R \geq T = P \geq Q \leq M$
  - $Q \geq P = M \leq R < T$
  - $Q > R = T < M \leq P$
  - $S \geq T \geq M = P \leq R$
  - None of these
35. Which of the following symbols should replace the question mark in the given expression to make  $R \leq Q$  definitely true?  $X = Q = L ? P ? R$
- $<, <$
  - $\leq, =$
  - $\leq, <$
  - $<, \leq$
  - none of these

### ANSWER KEY

1	2	3	4	5	6	7	8	9	10
D	D	C	D	A	B	C	B	E	D
11	12	13	14	15	16	17	18	19	20
B	D	D	A	B	B	C	A	D	E
21	22	23	24	25	26	27	28	29	30
D	C	B	A	C	B	E	A	A	D
31	32	33	34	35					
D	B	D	C	E					

## REASONING

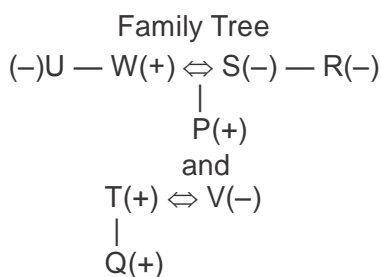
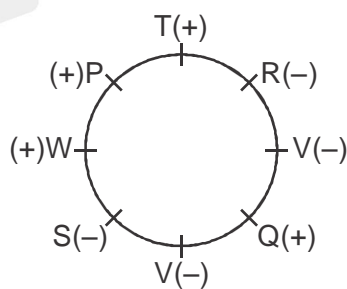
1. (D)  $3105 \times 459 \div 13.5 + 3105 \times 3 - 3105 = 111780$
2. (D) There are seven such pairs in the word.
3. (C) VAIN

**Direction (4-8) :**

Row 1	A	E	B	F	D	C
Row 2	S	R	Q	P	U	T

4. (D) D
5. (A) Two
6. (B) A, C
7. (C) S
8. (B) P
9. (E) Some taps are pipes (I)  $\rightarrow$  conversion  $\rightarrow$  Some pipes are taps (I). Hence II follows. Again, from II and the second statement, I also follows.
10. (D) The given statements are of I-type and hence can't be combined.
11. (B) All B are P (A)  $\rightarrow$  conversion  $\rightarrow$  Some P are B (I). Hence I does not follow. All B are P + All P are Q + All Q are X = (P + P) + P = P + P = P = All B are A. Hence II follows.
12. (D) If neither conclusion I nor II follows.
13. (D) If neither conclusion I nor II follows.

**Direction (14 to 20) :**



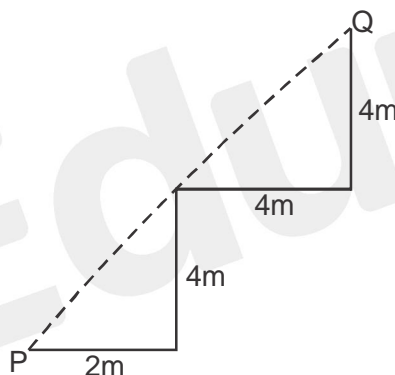
14. (A) S
15. (B) Sister of S
16. (B) three
17. (C) sister
18. (A) R

19. (D) Data inadequate, because gender of T is not mentioned in the above question, therefore T could be either 'Granddaughter' or 'Grandson' of V who is the Grandmother of T.
20. (E) T is mother-in-law of X who is the wife of U.

**Direction (21-25) :**

Person	Bank	City
P	Canara	Nagpur
Q	Vijaya	Udaipur
R	Dena	Chandigarh
S	Syndicate	Jodhpur
T	Central	Lucknow
U	UCO	Agra

21. (D) S
22. (C) R
23. (B) Udaipur
24. (A) UCO Bank
25. (C) U–Lucknow–Central Bank
26. (B)

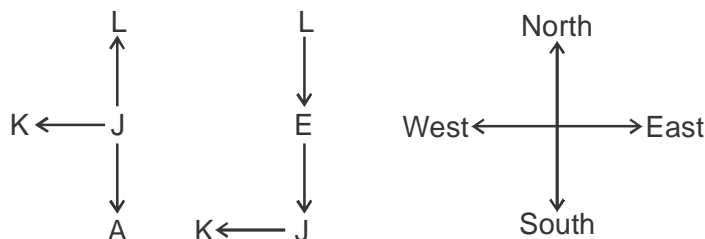


$$\begin{aligned}
 (PQ)^2 &= (8)^2 + (6)^2 \\
 &= 64 + 36 \\
 &= \sqrt{100} \\
 &= 10.
 \end{aligned}$$

27. (E) Either R or T
28. (A) From I.  
tun sa za → cheap dark dog ... (i)  
sa ga ma → dog is black ... (ii)  
From (i) and (ii) we have,  
dog → sa  
From III.  
tun pa lo → run dark night ... (iii)  
zo ga pi → yellow black cold ... (iv)  
Now combining (i) and (iii) we have,  
tun → dark  
Thus, I and III together are sufficient but II is not required.

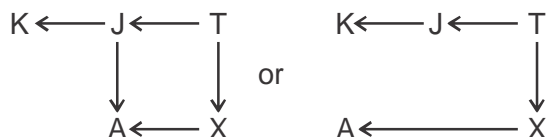


29. (A) From I



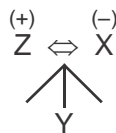
From II. Directions are not given in statement.

From III.



From I and III we have point A is to the south of point J.

30. (E) From statement I and II.



31. (D) Even by combining all the statements we can't find the day of the week on which Vijay's mother visited Vijay's house.

32. (B) From I.  $E > B > A$

From II.  $\_ > \_ > \_ > C > \_ > \_$

From III.  $\_ > \_ > \_ > \_ > \_ > D > F$

Now, combining all the statements, we have

$E > B > A > C > D > F$

Thus, T is the tallest.

**Direction (33-35) :**

33. (D) Check for (1):

$B \geq N = J \leq G < P \leq Z$

So,  $J < Z$  is true.

Thus option (i) is not the right choice.

Check for (2):

$Q \geq J < G > Z \leq F < E$

Can't compare J and Z.

Thus option (2) is not right choice.

Check for (3):

$B \geq Q = G \geq Z \leq R > J$

Can't compare Z and J.

Thus option (3) is not right choice.

Check for (4):

$Q \geq J \geq N = W \geq Z < F$

So,  $J \geq Z$  or  $Z \leq J$ .

Thus option (4) is the right choice

$$E > F < J = G \geq Q > Z$$

So,  $J \geq Z$

Thus option (5) is not the right choice

34. (C) Check for (1)

$$R \geq T = P \geq Q \leq M$$

So  $R \geq P$  Option (1) is not the right choice.

Check for (2)

$$Q \geq P = M \leq R < T$$

$R \geq P$  or  $P \leq R$  is true.

Option (2) is not the right choice.

Check for (3):  $Q > R = T < M \leq P$

$R < P$ . Hence option (3) is the right choice.

Check for (4):  $S \geq T \geq M = P \leq R$

So,  $R \geq P$  is true.

Hence option (4) is not the right choice.

35. (E) Check for (1) :  $X = Q = L < P < R$

So,  $Q < R$ . Hence  $R \leq Q$  is not true.

Thus, option (1) is not the right choice.

Check for (2) :  $X = Q = L \leq P = R$

So,  $Q \leq R$ . Hence  $R \leq Q$  is not definitely true.

Thus option (2) is not the right choice.

Check for (3):  $X = Q = L \leq P < R$

Hence  $R \leq Q$  is not definitely true. Option (3) is not the right choice.

Check for (4):  $X = Q = L < P \leq R$

So,  $Q < R$ . Hence  $R \leq Q$  is not true.

Hence option (4) is not the right choice.

# IBPS PO (Mains)

## Reasoning

1. If ACCEPT is coded as 255980 and EXCEL is coded as 93596 then how would you encoded PAINT.  
(A) 82140 (B) 83214  
(C) 82144 (D) 82113  
(E) None of these
2. If in a certain code, SWITCH is written as TVJSDG, which word would be written as CQFZE ?  
(A) BRAED (B) BRADE  
(C) BRDAE (D) BREAD  
(E) None of these
3. Arrange the following words will come in middle if all of them are arranged alphabetically as in a dictionary ?  
(A) Savere (B) Save  
(C) Savour (D) Santro  
(E) Savage
4. Q's mother is sister of P and daughter of M. S is daughter of P and sister of T. How is M related to T ?  
(A) Mother (B) Father  
(C) Grandfather or Grandmother (D) Grandfather  
(E) None of these
5. CAT : DDY :: BIG : ?  
(A) CLL (B) CLM  
(C) CML (D) CEP  
(E) None of these
6. Choose or find odd letter group  
AEC , PTR , FJH , UYW , KPM  
(A) AEC (B) PTR  
(C) FJH (D) UYW  
(E) KPM
7. Kamini goes 40 m North, then turns right and walks 40 m, then again turns right and walks 20 m, then again turns right and walks 40 m. How much far is she from his original position ?  
(A) 10 m (B) 20 m  
(C) 0 m (D) 40 m  
(E) None of these

8. If '+' is 'x', '-' is '+', 'x' is '÷' and '÷' is '-', then answer the following questions based on this information.  
 $9 - 3 + 2 \div 16 \times 2 = ?$   
 (A) 7 (B) 5  
 (C) 9 (D) 6  
 (E) None of these
9. A, B, C, D are playing a game of carom. A, C and B, D are partners. D is to the right of C who is facing west. Then, B is facing  
 (A) East (B) West  
 (C) South (D) North  
 (E) None of these
10. Which letter will be 8th to the left of 13th letter from the right in the following series of letters?  
 F D Q A Z Y R G B T H N U J M K I L O P E S X C W R  
 (A) E (B) J  
 (C) Y (D) R  
 (E) None of these

**Direction (Q. 11-15) :** In each of the questions below are given four statements followed by four conclusions numbered I, II, III & IV. You have to take the given statements to be true even if they seem to be at given conclusions logically follows from the given statements disregarding commonly known facts.

11. **Statements :** All the Plates are Cups.  
 All the Cups are Glasses.  
**Conclusions :** I. All the Glasses are Cups.  
 II. All the Plates are Glasses.  
 III. All the Cups are Plates.  
 IV. Some Glasses are Plates.  
 (A) Only I and IV (B) Only III and IV  
 (C) Only II and IV (D) Only I and II  
 (E) Only I and III
12. **Statements :** All the pens are tube.  
 No tube is a blue.  
**Conclusions :** I. Some pens are blue.  
 II. No blue is a tube.  
 (A) Only I conclusion follows (B) Only II conclusion follows  
 (C) Either I or II follows (D) Neither I or II follows  
 (E) Both I and II follow
13. **Statements :** All caps are bottles.  
 All bottles are water.  
**Conclusions :** I. Some caps are not water.  
 II. Some water are caps.  
 III. Some bottles are not water.  
 (A) Only I conclusion follows (B) Only II conclusion follows  
 (C) Either I or II follows (D) Neither I nor II follows  
 (E) Both I and II follow

14. **Statements** : All the bowls are pad.  
All the pad are bats.  
Some wickets are bats.
- Conclusions** : I. Some bats are bowls.  
II. Some wickets are pad.  
III. All the pad are bowls.  
IV. Some pad are not wickets.
- (A) Only I and II (B) Only I  
(C) Only II (D) Only I and III  
(E) Both I and III follow

15. **Statements** : All Birds are Crow.  
No Crow is black.
- Conclusions** : I. No Birds is black.  
II. All Crow are black.  
III. Some Crow are bird.
- (A) Only I conclusion follows (B) Only I conclusion follows  
(C) Either I or II follows (D) Neither I nor II follows  
(E) Both I and III follow

**Direction (Q. 16-20)** : Study the following information carefully and answer the questions given below :

A, B, C, D, E, F, G are travelling in three different vehicles. There are at least two passengers in each vehicle — I, II, III and each vehicle has passengers of both the sexes. There are two engineers, two doctors and three teachers among them. C is a lady doctor and she does not travel with the pair of sisters A and F. B, a male engineer, travels with only G a teacher in vehicle I. D is a male doctor. Two persons belonging to same profession do not travel in the same vehicle. A is not an engineer and travels in vehicle II.

16. In which vehicle does C travel ?  
(A) I (B) II  
(C) III (C) II or III  
(E) None of these
17. How many lady members are there among them ?  
(A) Three (B) Four  
(C) Three or Four (D) Data inadequate  
(E) None of these
18. What is F's profession ?  
(A) Doctor (B) Engineer  
(C) Teacher (D) Data inadequate  
(E) None of These
19. Which of the following is not correct ?  
(A) A - Female Teacher (B) B - Male Engineer  
(C) E- Male Teacher (D) F – Female – Teacher  
(E) G- Female Teacher

20. Which of the following represents the three teachers ?
- |                   |                     |
|-------------------|---------------------|
| (A) AEG           | (B) EFG             |
| (C) AEG or EFG    | (D) Data inadequate |
| (E) None of these |                     |

**Directions (Q. 21-25) :** Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

21. Six friends A, B, C, D, E and F are sitting around a circular table facing the centre. What is the position of C with respect to A ?
- A is between D and B.
  - D sits second to the left of F.
  - E does not sit on the immediate right of D.
- |                                |                     |
|--------------------------------|---------------------|
| (A) Only I and II              | (B) Only II and III |
| (C) Only III                   | (D) Only I and III  |
| (E) All I, II and III together |                     |
22. What is the code for 'hot' in a code language ?
- 'pizza is hot' is written as 'tic jic lic'.
  - 'flowers are red' is written as 'mic fic eic'.
  - 'red is pizza' is written as 'jic mic lic'.
- |                   |                    |
|-------------------|--------------------|
| (A) Only I        | (B) Only II        |
| (C) Only I and II | (D) Only III and I |
| (E) None of these |                    |
23. Among A, B, C, D, E and F, whose rank is first in a class test ?
- A scored more than only C and D.
  - E's rank is 3rd highest.
  - F did not score the highest marks.
- |  |  |
|--|--|
| (A) Only I   |  |
| (B) Only II  |  |
| (C) Only III   |  |
| (D) I, II and III even together are not sufficient to answer the question. |  |
| (E) All I, II and III  |  |
24. Five persons Rajesh, Rajveer, Rajendra, Raju and Raj sit on a straight line, facing north, but not necessarily in the same order. How many persons sit between Rajesh and Raj ?
- Rajendra sits second to the right of Rajesh. Raj is not an immediate neighbour of Rajesh.
  - Raju sits on the extreme end of the line.
  - Rajendra sits on the immediate right of Rajveer.
- |                                |                    |
|--------------------------------|--------------------|
| (A) Only II                    | (B) Only III       |
| (C) Only I and II              | (D) Only I and III |
| (E) All I, II and III together |                    |

25. How is N related to X ?
- I. M is brother of N; M is grandson of W.
  - II. S is sister of N.
  - III. X is mother of M's father.
- (A) Only I
  - (B) Only II
  - (C) Only III
  - (D) All I, II and III together
  - (E) Even I, II and III together are not sufficient

**Direction (Q. 26-30) :** Read the following information carefully to answer these questions. The conditions for selecting candidates for interview for recruitment of Medical Representative for a company:

The candidate must :

- (A) Be a graduate in science with Chemistry and Botany and/or Zoology.
- (B) Have 60% and above at SSC and 50% and above at graduation
- (C) Not be more than 25 years of age as on 1st Jan, 1997
- (D) Have at least represented school/college in any inter school/college competitions
- (E) Have passed the selection test with 55% and above marks
- (F) Enclose recommendation of two persons who are not his/her relatives.

However, in the case of a candidate who fulfills all other criteria except:

- (I) A above, but has passed MSc in Chemistry with 60% or above marks, should be considered for waiting list for interview
- (II) B above, should be referred to Manager Administration
- (III) F above, should be called to meet Manager HRD.

Based on these criteria and information provided below, decide the course of action in each case. You are not to assume anything. If the data provided is not adequate to decide the course of action, your answer will be data inadequate. These cases are given to you as on 1st Dec, 1996.

26. Narendra Meena has represented his school and college in Cricket and Chess. He has passed his BSc with Chemistry, Physics and Mathematics at the age of 20 years in 1994. He came 2nd in the merit list in the selection test with 78% marks and has enclosed two recommendations. He has scored 62% and 65% in SSC and BSc, respectively.
- (A) Not to be called the interview
  - (B) Data inadequate
  - (C) To be called for interview
  - (D) Refer to Manager - Administration
  - (E) To be waitlisted
27. Ms. Shweta Sharma, a Kathak dancer, who has won inter-University prizes, is a brilliant student holding 1st rank in MSc (Chemistry) in 1996 as well as selection test. She has had more than 75% marks in the examination right from SSC to BSc (Chemistry-Botany). All her teachers speak highly about her.
- (A) Not to be called for interview
  - (B) Data inadequate
  - (C) Refer to Manager – HRD
  - (D) To be waitlisted
  - (E) To be called for interview



28. Tasleem Ansari, who has been recommended by two actresses working in TV serials, is 23 years with Master's degree in Chemistry with 63%. She has won prizes in acting in inter-university drama competitions. She has obtained more than 70% marks in both SSC and BSc (Chemistry, Botany) and the selection test.
- (A) To be waitlisted (B) Not to be called for interview  
(C) Refer to Manager - Administration (D) Refer to Manager - HRD  
(E) To be called for interview
29. Abdul Khan won inter-college tournament for table-tennis in 1995 while doing his final year of BSc with Chemistry and Zoology. He has passed with more than 60% marks in all the examination right from SSC to selection test held by the company. He has enclosed two good references, one from college principal and another from an industrialist. His father works in a bank.
- (A) Data inadequate (B) To be called for interview  
(C) Not to be called for interview (D) Refer to Manager - HRD  
(E) To be waitlisted
30. Ms. Rohini Choudhary, born on 19th Nov, 1974 is a post graduate in Chemistry. At graduation she had Chemistry, Zoology and Botany. She had represented her school and college in sports and drama. Her father is a successful doctor. She has passed the selection test with 62% marks and has enclosed recommendation of President and Vice-President of the Chemist's Association.
- (A) To be called for interview (B) Data inadequate  
(C) Not to be called for interview (D) To be waitlisted  
(E) Meet Manager - HRD

**Direction (Q. 31-35) :** In each question below is given a statement followed by three courses of action numbered (A), (B) and (C). 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.

31. **Statement :** A heavy unseasonal downpour during the last two days has paralyzed the, normal life in the state in which five persons were killed but this has provided a huge relief to the problem of acute water crisis in the state.

**Courses of Action :**

- I. The state government should set up a committee to review the alarming situation.
  - II. The state government should immediately remove all the restrictions, on use of potable water in all the major cities in the state.
  - III. The state government should send relief supplies to all the affected areas in the state.
- (A) None (B) Only I  
(C) Only II and III (D) Only III  
(E) All I, II, III



32. **Statement :** A large private bank has decided to retrench one-third of its employees in view of the huge losses incurred by it during the past three quarters.

**Courses of Action :**

- I. The Govt. should issue a notification to general public to immediately: stop all transactions with the bank.
- II. The Govt. should direct the bank to refrain from retrenching its employees.
- III. The Govt. should ask the central bank of the country to initiate an enquiry into the bank's activities and submit its report.

- (A) None
- (B) Only I
- (C) Only II
- (D) Only III
- (E) Only I and III

33. **Statement :** Many political activists have decided to stage demonstrations and block traffic movement in the city during peak hours to protest against the steep rise in prices of essential commodities.

**Courses of Action :**

- I. The Govt. should immediately ban all forms of agitations in the country.
- II. The police authority of the city should deploy additional forces all over the city to help traffic movement in the city.
- III. The state administration should carry out preventive arrests of the known criminals staying in the city.

- (A) Only I
- (B) Only II
- (C) Only III
- (D) Only I and II
- (E) None of these

34. **Statement :** The school dropout rate in many districts in the state has increased sharply during the last few years as the parents of these children make them work in the fields owned by others to earn enough for them to get at least one meal a day.

**Courses of Action :**

- I. The Govt. should put up a mechanism to provide food grains to the poor people in these districts through public distribution system to encourage the parents to send their wards to school.
- II. The Govt. should close down some of these schools in the district and deploy the teachers of these schools to nearby schools and also ask remaining students to join these schools.
- III. Govt. should issue arrest warrants for all the parents who force their children to work in fields instead of attending classes.

- (A) Only I
- (B) Only II
- (C) Only III
- (D) Only I and II
- (E) None of these

35. **Statement :** One aspirant was killed due to stampede while participating in a recruitment drive of police constables.

**Courses of Action :**

- I. The official's incharge of the recruitment process should immediately be suspended.
  - II. A team of officials should be asked to find out the circumstances which led to the death of the aspirant and submit its report within a week.
  - III. The Govt. should ask the home department to stagger the number of aspirants over more number of days to avoid such incidents in future.
- (A) Only I (B) Only II  
(C) Only III (D) Only II and III  
(E) None of these

36. **Effect :** Majority of the employees of the ailing organization opted for voluntary retirement scheme and left the organization with all their retirement benefits within a fortnight of launching the scheme. Which of the following can be a probable cause of the above effect ?

- (A) The company has been making huge losses for the past five years and is unable to pay salary to its employees in time.
- (B) The management of the company made huge personal gains through unlawful activities.
- (C) One of the competitors of the company went bankrupt last year.
- (D) The company owns large tracts of land in the state which will fetch huge sum to its owners.
- (E) None of these

37. **Statement :** Most of the companies in IT and ITES sectors in India have started hiring from engineering college campuses this year and are likely to recruit much more than yearly recruitment of the earlier years.

Which of the following substantiates the facts stated in the above statement ?

- (A) IT and ITES are the only sectors in India which are hiring from engineering college campuses.
- (B) Govt. has stepped up recruitment activities after a gap of five years.
- (C) The IT and ITES companies have now decided to visit the engineering college campuses for tier II cities in India as well.
- (D) Availability of qualified engineers will substantially increase in the near future.
- (E) None of these

**Direction (Q. 38-40) :** Study the following information carefully and answer the questions given below.

The center reportedly wants to continue providing subsidy to consumers for cooking gas and kerosene for five more years. This is not good news from the point of view of reining in the fiscal deficit. Mounting subventions for subsidies means diversion of savings by the government from investment to consumption, raising the cost of capital in the process. The government must cut expenditure on subsidies to create more fiscal space for investments in both physical and social infrastructure. It should outline a plan for comprehensive reform in major subsidies including petroleum, food and fertilizers and set goal posts.

38. Which of the following is a conclusion which can be drawn from the facts stated in the above paragraph ?
- (A) Subsidy provided by the government under various heads to the citizen increases the cost of capital.
  - (B) Govt. is unable to withdraw subsidies provided to various items.
  - (C) Govt. subsidy on kerosene is purely a political decision.
  - (D) Govt. does not have enough resources to continue providing subsidy on petroleum products.
  - (E) None of these
39. Which of the following is an inference which can be made from the facts stated in the above paragraph ?
- (A) India's fiscal deficit is negligible in Comparison to other emerging economies in the world.
  - (B) Subsidy on food and fertilizers are essential for growth of Indian economy.
  - (C) Reform in financial sector will weaken India's position in the international arena.
  - (D) Gradual withdrawal of subsidy is essential for effectively managing fiscal deficit in India.
  - (E) None of these
40. Which of the following is an assumption which is implicit in the facts stated in the above paragraph ?
- (A) People in India may not be able to pay more for petroleum products.
  - (B) Many people in India are rich enough to buy petroleum products at market cost.
  - (C) Govt. may not be able to create more infrastructural facilities if the present level of subsidy continues for a longer time.
  - (D) Govt. of India has sought assistance from international financial organizations for its infrastructural projects
  - (E) None of these

**Direction (Q. 41-45) :** Study the following information carefully and answer the question given below.

P, Q, R, S, T, U, V, W, X are sitting around a circle facing the center. Q is fourth to the left of V who is second to right of R. U is fourth to the right of R and second to the left of X. P is fourth to the right of X. S is immediate neighbor of either X or V, W is third to the right of T.

41. Who is fourth to the right of S ?
- (A) X
  - (B) W
  - (C) T
  - (D) Q
  - (E) None of these
42. In which of the following combinations is the third person sitting in between the first and second persons ?
- (A) TXQ
  - (B) RWQ
  - (C) PVR
  - (D) UVS
  - (E) None of these
43. Who is third to the right of W ?
- (A) P
  - (B) S
  - (C) V
  - (D) U
  - (E) None of these

44. Who is the fourth to the left of T ?  
 (A) P (B) R  
 (C) V (D) Data inadequate  
 (E) None of these
45. Who is second to the right of X ?  
 (A) R (B) W  
 (C) U (D) T  
 (E) Data inadequate

**Directions (46-50) :** Study the following information carefully and answer the given questions :

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of in out and rearrangement.

Input: **come 95 late 48 84 again for 31**

Step1 : 34 come 95 late 48 86 again for

Step2 : 34 late come 95 48 86 again for

Step3 : 34 late 48 come 95 86 again for

Step4 : 34 late 48 again come 95 86 for

Step5 : 34 late 48 again 86 come 95 for

And step 5 is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given.

46. Step 3 of an Input: **18 whistle 27 91 85 sleep try bus**  
 Which of the following will be step 6 ?  
 (A) 18 whistle 27 try 85 sleep 91 bus  
 (B) 18 whistle 27 try 85 91 sleep bus  
 (C) 18 whistle 27 try 91 85 sleep bus  
 (D) There will be no such step  
 (E) None of these
47. Input: **stone horse 39 67 at most 85 59**  
 How many steps will be required to complete the rearrangement ?  
 (A) Four (B) Five  
 (C) Six (D) Three  
 (E) None of these
48. Step 2 of an input is: **47 zebra cry battle 55 85 73 done**  
 Which of the following is definitely the input ?  
 (A) cry 47 battle zebra 55 85 73 done  
 (B) zebra 47 cry battle 55 85 73 done  
 (C) battle cry 47 zebra 55 85 73 done  
 (D) cannot be determined  
 (E) None of these

49. Input : **net 77 51 goal from 43 27 top**  
Which of the following will be step 4 ?
- (A) 29 top 46 net 53 goal 79 from  
(B) 29 top 46 net 53 79 goal from  
(C) 29 top 46 net 79 53 goal from  
(D) 29 net 79 53 goal from 46 top  
(E) None of these
40. Step 3 of an input is : **27 turn 34 gain cheap rain 74 53**  
Which of the following steps will be the last but one ?
- (A) Six (B) Seven  
(C) Eight (D) Five  
(E) None of these

### ANSWER KEY

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

## SOLUTION

1. (A)

A	C	E	P	T	X	L
2	5	9	8	0	3	6

Here we see number for particular alphabet, so in PAINT we will choose related alphabets

$$P = 8$$

$$A = 2$$

I = in a table you cannot get particular no for this

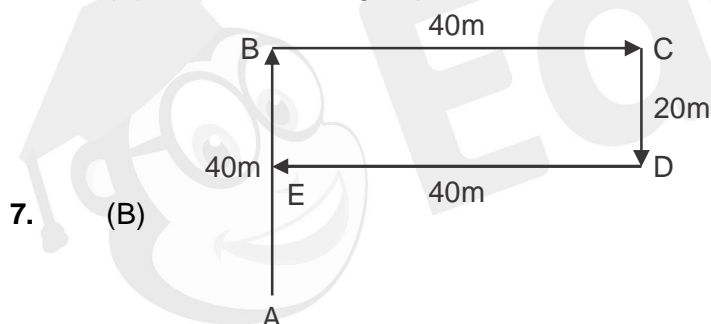
N = in a table you cannot get particular no for this

$$T = 0$$

So PAINT =  $82 - 0$

This series we will not get without in first portion, so our answer should be [A]

2. (D) Each letter at odd place in the word is one step behind and each letter at even place in the word is one step ahead of the corresponding letter of the code.
3. (B) The given words can be arranged into alphabetical order as Santro, Savage, Save, Savere, Savour
4. (C) S is daughter of P and sister of T. So, T is daughter of P. Then, the sister of P is the daughter of M. This means that P is the son or daughter of M. Clearly T is the granddaughter of M. So, M is the grandfather or Grandmother of T.
5. (A) The first, second and third letters of the first group are moved one, three and five steps forward respectively to obtain the corresponding letters of the second group.
6. (E) In all other groups, first, third and second letters are alternate.



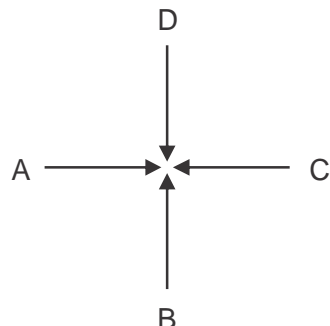
(A to B, B to C, C to D, D to E).

Kamini distance from his original position A

$$= AE = (AB - BE) = (AB - CD)$$

$$= (40 - 20) \text{ m} = 20 \text{ m}.$$

8. (A)  $9 + 3 \times 2 - 16 \div 2 = 9 + 3 \times 2 - 8 = 9 + 6 - 8 = 7$



9. (D)

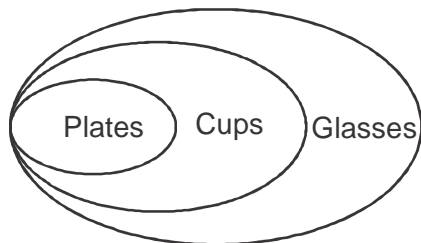
as per the given data, C faces towards West.

D is to the right of C. D is facing towards South.

So, B who is the partner of D. will face towards North.

10. (C)  $(13 + 11) = 24$ th letter from your right is E.

11. (C)



All the Glasses are Cups

Wrong

All the Plates are Glasses

Right

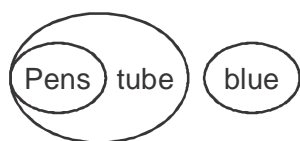
All the Cups are Plates

Wrong

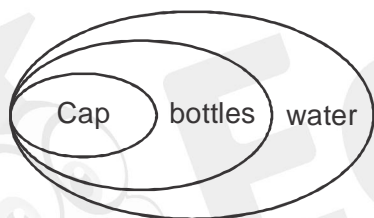
Some Glasses are Plates

Right

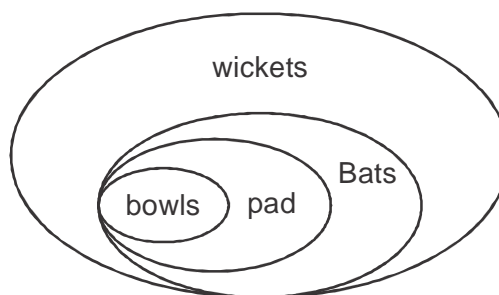
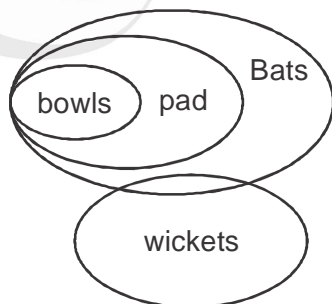
12. (B) Explanation :



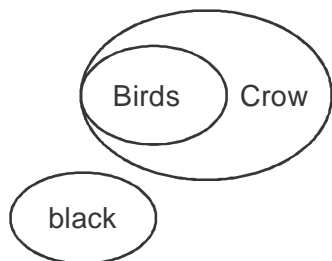
13. (B) Explanation :



14. (B) Explanation :



15. (E) Explanation :





**Direction (16-20) :**

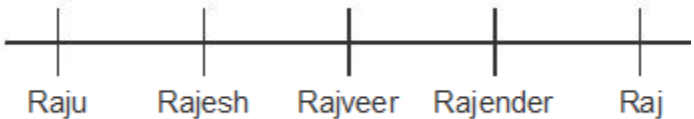
B, a male engineer travels with only G, a teacher in vehicle I. Since each vehicle has persons of both the sexes, so G is a female. C does not travel with A or F. Also, no person travels with any persons of the same profession. Since C and D are both doctors, So C does not travel with D. Since A travels in vehicle II, so C travels with E in vehicle III. Since C is a female, so E is A male.

Thus, A, D and F travel in vehicle II. So, their professions must be different. D is a doctor. Since A is not an engineer, so A is a teacher and F is an Engineer. A and G, Being sisters, are both females.

B and F are two engineers, C and D are two doctors. So, A, E and G are all teachers.

Person	A	B	C	D	E	F	G
Vehicle	II	I	III	II	III	II	I
Profession	Teacher	Engineer	Doctor	Doctor	Teacher	Engineer	Teacher
Sex	Female	Male	Female	Male	Male	Female	Female

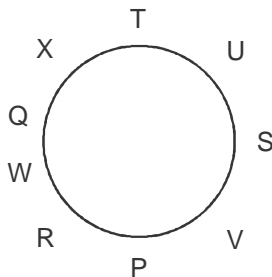
16. (C) C travels in vehicle III.
17. (B) There are four ladies in the group — A, C, F and G.
18. (B) F is an engineer by profession.
19. (D) Since F is an Engineer, so F – Female – Teacher is the incorrect combination.
20. (A) A, E and G are the three teachers.
21. (E) From I, II and III.  
From all three statements, A sits second to the left of C. So, all three statements are necessary to answer the question.
22. (D) From I and III, pizza is hot → tic jic lic ...  
(1) red is pizza → jic mic lic ...  
(2) pizza → jic or lic is → lic or jic So, the code for 'hot' is 'tic'. Thus, statements I and III are sufficient.
23. (E) From I.  $A > C$ , D From I and II.  $\rightarrow \rightarrow E > A > C$ , D From I, II and III.  $B > F > E > A > C$ , D Hence all together are sufficient  


24. (C)
25. (E) Even I, II and III together are not sufficient
26. (A) Narendra Meena does not qualify for interview as he did not pass B.Sc with Chemistry, Botany or Zoology.
27. (B) Age of the candidate is not given.
28. (E) The candidate, Tasleem Ansari, fulfils all the conditions as laid down in the question, and hence should be called for interview.
29. (A) Data is inadequate, as Condition C is not given.
30. (B) Data is inadequate, as qualification with regard to Condition B, percentages at SSC and graduation level are not given.
31. (D) Only III
32. (D) Only I and III
33. (B) Only II
34. (A) Only I



35. (D) Only II and III
36. (B) The management of the company made huge personal gains through unlawful activities.
37. (D) Availability of qualified engineers will substantially increase in the near future.
38. (B) Govt. is unable to withdraw subsidies provided to various items.
39. (D) Gradual withdrawal of subsidy is essential for effectively managing fiscal deficit in India.
40. (C) Govt. may not be able to create more infrastructural facilities if the present level of subsidy continues for a longer time.

**Direction (41-45) :**



41. (D) Q is fourth to the right of S. So, answer will D.
42. (D) S is sitting between U and V. So, answer will D.
43. (C) V is third to the right of W, So, answer will C.
44. (A) P is fourth to the left of T. So, answer will A.
45. (B) W is second to the right of X. So, answer will B.

**Direction (46-50) :**

46. (A) Step3 : 18 whistle 27 91 85 sleep try bus  
Step4 : 18 whistle 27 try 91 85 sleep bus  
Step5 : 18 whistle 27 try 85 91 sleep bus  
Step6 : 18 whistle 27 try 85 sleep 91 bus
47. (B) Step1 : 39 stone horse 67 at most 85 59  
Step2 : 39 stone 59 horse 67 at most 85  
Step3 : 39 stone 59 most horse 67 at 85  
Step4 : 39 stone 59 most 67 horse at 85  
Step5 : 39 station 59 most 67 horse 85 at
48. (D) It is not possible to determine the Input from any given step.
49. (B) Step1 : 27 net 77 51 goal from 43 top  
Step2 : 27 top net 77 51 goal from 43  
Step3 : 27 top 43 net 77 51 goal from  
Step4 : 27 top 43 net 51 77 goal from
50. (D) Step3: 27 turn 34 gain cheap rain 74 53  
Step4: 27 turn 34 rain gain cheap 74 53  
Step5: 27 turn 34 rain 53 gain cheap 74  
Step6: 27 turn 34 rain 53 gain 74 cheap

# IBPS RRB Clerk (Preliminary)

## Reasoning

1. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?  
(A) Pear (B) Jackfruit  
(C) Watermelon (D) Papaya  
(E) Mango
2. How many pairs of letters are there in the word EXPLOSION which have as many letters between them as in the English alphabet ?  
(A) One (B) Two  
(C) Three (D) Four  
(E) None of these
3. If it is possible to make only one meaningful English word from the sixth, the fifth, the twelfth and the fourth letters of the word IMAGINATIONS, using each letter only once, the **second** letter of that word is your answer. If no such word can be made mark 'X' as your answer, and if more than one such word can be formed mark 'M' as your answer.  
(A) I (B) N  
(C) S (D) X  
(E) M
4. In a certain code language the word NUMERICAL is written as LMUIREACN. How will the word PUBLISHED be written in that language ?  
(A) DUBSILEHP (B) DBULISEHP  
(C) DUBILSEHP (D) DBUSILEHP  
(E) None of these
5. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?  
(A) 143 (B) 63  
(C) 195 (D) 15  
(E) 257
6. In a certain code language, '851' means 'good sweet fruit'; '783' means 'good red rose' and '341' means 'rose and fruit'. Which of the following digits stands for 'sweet' in that language ?  
(A) 8 (B) 5  
(C) 1 (D) 3  
(E) None of these

**Directions (Q. 7-11) :** Answer these questions referring to the symbol-letter-number sequence given below :

J # X 2 D \$ Q Z 6 £ K 1 G O @ L 7 C A \* 4 R 9 3 B 5

7. What is the total member of 'the letters immediately preceded by a number belonging to the second half of the sequence' and 'the symbols immediately preceded by a letter belonging to the second half of the English alphabet' in the above sequence ?  
 (A) Six (B) Five  
 (C) Four (D) Three  
 (E) None of these
8. If the second half of the series is written in the reverse order which of the following will be twelfth element to the right of seventh element from your left ?  
 (A) B (B) 9  
 (C) 5 (D) 3  
 (E) None of these
9. Which of the following will be ninth element to the left of the 17th element from your left in the above series ?  
 (A) 6 (B) Z  
 (C) £ (D) Q  
 (E) None of these
10. How many letters in the sequence either immediately precede a number or immediately follow a symbol ?  
 (A) Five (B) Six  
 (C) Eight (D) Four  
 (E) None of these
11. Four of the following five are alike in a certain way and hence form a group. Which one does not belong to the group ?  
 (A) QKO (B) D6  
 (C) # \$ £ (D) @ A9  
 (E) 1 A
12. I am facing South. I turn right and walk 20 m. Then I turn right again and walk 10 m. Then I turn left and walk 10 m and then turning right walk 20 m. Then I turn right again and walk 60 m. In which direction am I from the starting point ?  
 (A) North (B) North-west  
 (C) East (D) North-east  
 (E) None of these
13. In a row, Rama is twelfth from the left end, Ramu is 19th from the right end. After their places are interchanged, Rama becomes 21st from the left end. How many students are there in the row ?  
 (A) 52 (B) 40  
 (C) 39 (D) Data inadequate  
 (E) None of these

14. Pointing to a boy, Meena says, "He is the son of my grandfather's only son." How is the boy's mother related to Meena ?
- (A) Mother (B) Aunt  
(C) Sister (D) Data inadequate  
(E) None of these

**Directions (Q. 15-17) :** Study the following information carefully to answer the questions given below.

- (i) Six friends, A, B, C, D, E and F are sitting along the sides of a hexagonal table for playing a game, though not necessarily in the same order.
- (ii) F, who is sitting exactly opposite of A, is to the immediate right of B.
- (iii) D is between A and B and is exactly opposite of C.
15. A is sitting between which of the following pairs of persons ?
- (A) D and E (B) B and E  
(C) B and C (D) E and C  
(E) None of these
16. Four of the following pairs are alike in a certain way on the basis of sitting positions and so form a group. Which is the one that does not belong to the group ?
- (A) A, D (B) B, C  
(C) B, F (D) C, E  
(E) E, A
17. Who is sitting opposite of B ?
- (A) C (B) A  
(C) E (D) Data inadequate  
(E) None of these

**Directions (Q. 18-19) :** Study the information given below and answer the questions following it :

Mohan is son of Arun's father's sister. Prakash is son of Reva, who is mother of Vikash and grandmother of Arun. Pranab is father of Neela and grandfather of Mohan. Reva is wife of Pranab.

18. How is Mohan related to Reva ?
- (A) Grandson (B) Son  
(C) Nephew (D) Data inadequate  
(E) None of these
19. How is Vikash's wife related to Neela ?
- (A) Sister (B) Niece  
(C) Sister-in-law (D) Data inadequate  
(E) None of these

**Directions (Q. 20–24) :** In each question below are given two statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

**20. Statements:** All spoons are bowls.

Some bowls are plates.

**Conclusions :** I. Some spoons are plates.

II. Some bowls are spoons.

III. Some plates are spoons.

IV. All bowls are spoons.

(A) Only I follows

(B) Only II follows

(C) Only II and III follow

(D) Only I and II follow

(E) None of these

**21. Statements:** Some dogs are cats.

No cat is a cow.

**Conclusions :** I. Some cats are dogs.

II. Some cows are dogs.

III. No dog is a cow.

IV. Some cats are not dogs.

(A) Only I and II follow

(B) Only II follows

(C) Only III and IV follow

(D) Only III follows

(E) None of these

**22. Statements :** All bats are flies.

All rats are bats.

**Conclusions :** I. All flies are rats.

II. All bats are rats.

III. All rats are flies.

IV. Some flies are not bats.

(A) Only I and III follow

(B) Only III and IV follow

(C) Only III and IV follow

(D) Only II and III follow

(E) None of these

**23. Statements :** All cups are saucers.

All pots are cups.

**Conclusions :** I. All pots are saucers.

II. All saucers are cups.

III. Some cups are pots.

IV. Some saucers are pots.

(A) Only I and III follow

(B) Only II and IV follow

(C) Only I, III and IV follow

(D) All follow

(E) None of these

24. **Statements** : Some boats are buses.

All trains are buses.

**Conclusions** : I. No train is a boat.

II. All buses are trains.

III. Some buses are boats.

IV. Some trains are boats.

(A) Either I or IV and III follow

(B) Only IV follows

(C) Only I and III follow

(D) Only III and IV follow

(E) None of these

**Directions (Q. 25–29)** : In the following questions, certain symbols are used with the following meanings:

(i)  $A \# B$  means A is not greater than B.

(ii)  $A \$ B$  means A is neither smaller than nor equal to B.

(iii)  $A ? B$  means A is neither greater than nor smaller than B.

(iv)  $A * B$  means A is neither greater than nor equal to B.

(v)  $A @ B$  means A is not smaller than B.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are **definitely true**. Give answer

(A) if only conclusion I is true;

(B) if only conclusion II is true;

(C) if either I or II is true;

(D) if neither I nor II is true; and

(E) if both I and II are true.

25. **Statements** :  $P \$ Q$ ,  $R @ S$ ,  $P * R$

**Conclusions** : I.  $Q * R$

II.  $P \# S$

26. **Statements** :  $U \$ V$ ,  $W * X$ ,  $U @ X$

**Conclusions** : I.  $V @ X$

II.  $V * X$

27. **Statements** :  $K \# T$ ,  $D \$ F$ ,  $T * F$

**Conclusions** : I.  $K * D$

II.  $D \$ T$

28. **Statements** :  $M \$ N$ ,  $G @ H$ ,  $N ? H$

**Conclusions** : I.  $M @ H$

II.  $M \$ G$

29. **Statements** :  $G @ M$ ,  $N \# L$ ,  $G * L$

**Conclusions** : I.  $G @ N$

II.  $L \$ M$

**Directions (Q. 30–35) :** Study the following information carefully and answer the questions given below :

- (i)  $A \# B$  means A is the son of B.
- (ii)  $A \star B$  means A is the daughter of B.
- (iii)  $A \bullet B$  means A is the father of B.
- (iv)  $A \blacksquare B$  means A is the mother of B.
- (v)  $A \text{‰} B$  means A is the paternal grandfather of B.
- (vi)  $A \div B$  means A is the sister of B.

Now, answer the questions given below:

**30.**  $P \# L \text{‰} T \div F \div G$

How is P related to G, according to the equation shown above ?

- (A) Father
- (B) Mother
- (C) Uncle
- (D) Aunt
- (E) Data inadequate

**31.** In which equation is S represented as the wife of P ?

- (A)  $P \blacksquare T \ M \div Z \text{‰} S$
- (B)  $P \bullet T \div M \div Z \# S$
- (C)  $P \bullet T \# M \div Z \div S$
- (D)  $S \bullet Z \text{‰} M \div T \div P$
- (E)  $P \bullet T \# Z \div M \div S$

**32.**  $F \bullet H \bullet I ? J \div K$

Which of the following symbols will replace the question mark (?) in order to give the meaning (from the equation) that F is the grandfather of K ?

- (A) #
- (B)  $\star$
- (C)  $\bullet$
- (D)  $\blacksquare$
- (E)  $\div$

**33.** Look at these five equations. The gender of how many elements is not known ?

- I.  $A \bullet B \# C \div D \div E$
- II.  $F \blacksquare G \div H \div I \star J$
- III.  $K \bullet L \div M \div N \# O$
- IV.  $P \bullet Q \text{‰} R \div S \div T$
- V.  $U \blacksquare V \div W \div X \# Y$

- (A) One
- (B) Two
- (C) Three
- (D) Four
- (E) Five

**34.** Look at the three equations carefully and find out how A is related to M.

- I.  $A \blacksquare B \div C \div D \# E$
- II.  $E \# F \text{‰} G \div H \star M$
- III.  $I \blacksquare J \div K \div L \star M$

- (A) Wife
- (B) Sister
- (C) Mother
- (D) Data inadequate
- (E) Sister-in-law

35. The positions of the first and the fifth digits in the number 84329517 are interchanged. Similarly, the positions of the second and the sixth digits are interchanged, and so on. Which of the following will be the second element from the right end after the rearrangement ?
- (A) 3 (B) 4  
(C) 2 (D) 9  
(E) None of these

### ANSWER KEY

1	2	3	4	5	6	7	8	9	10
C	C	E	D	E	B	D	A	B	C
11	12	13	14	15	16	17	18	19	20
E	D	C	A	A	B	C	A	C	B
21	22	23	24	25	26	27	28	29	30
E	E	C	A	A	C	E	D	B	E
31	32	33	34	35					
E	E	B	E	A					



## SOLUTION

1. (C) Except it all others have trees.

2. (C)  $\begin{array}{ccccccc} & & \overbrace{\text{P L O S}} & & \overbrace{\text{O N}} & & \\ \text{E} & \text{X} & & & & & \\ & & \underbrace{\text{L O S}} & & & & \end{array}$

3. (E) SING, SIGN

4. (D) The positions change as follows:

1      9, 2    3, 3    2, 4    6, 5    5,  
6      4, 7    8, 8    7, 9    1.

5. (E) The given numbers can be written as follows:

143     $12^2$     1; 63     $8^2$     1;  
195     $14^2$     1; 15     $4^2$     1

But, 257     $16^2$     1

Obviously, except 257, others can be written in the form  $x^2 - 1$ .

6. (B) In the first and second statements, the common code digit is '8' and the common word is 'good'. So, '8' means 'good'. In the first and third statements, the common code digit is '1' and the common word is 'fruit'. So '1' means 'fruit'. Thus, in the first statement, '5' means 'sweet'.

7. (D) J # X 2 D \$ Q Z 6 £ K 1    G O \_ @ L 7 C A \* 4 R 9    3 B 5

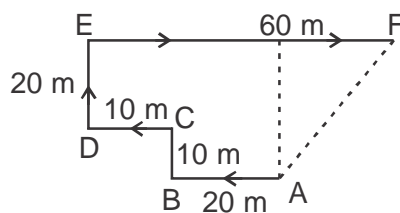
8. (A)

9. (B)

10. (C) J # X 2 D \$ Q Z 6 £ K 1    G O    @ L 7 C A \* 4 R 9    3 B 5

11. (E) The rest have, there is a gap of three elements each.

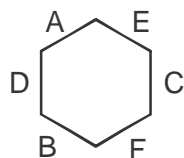
12. (D) The movements of the person are from A to F, as shown in Fig. Clearly, the final position is F which is to the North-east of the starting point A.



13. (C) Total no. of students =  $(21 + 19) - 1 = 39$  students.

14. (A) One's grandfather's only son    one's father. And the son of one's father    One's brother or oneself. Hence, the mother of the boy is Meena's mother.

**Direction (15–17) :**



15. (A)

16. (B) The rest are sitting adjacent to each other.

17. (C)

**Direction (18–19) :**

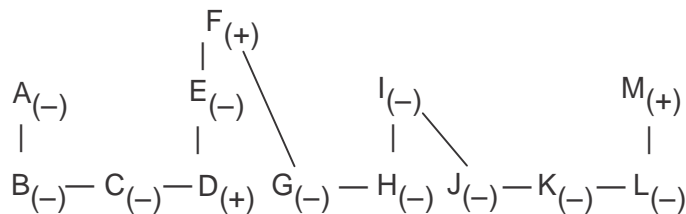

18. (A)
19. (C)
20. (B) All spoons are bowls conversion Some bowls are spoons. Hence II follows. No other conclusion follows.
21. (E)
22. (E)
23. (C)
24. (A)
25. (A)  $P > Q \dots(i), R < S \dots(ii), P < R \dots(iii)$   
 From (i) and (iii), we get  $R > P > Q$   $R > Q$  or,  $Q < R$ . Hence I is true.  
 From (ii) and (iii), we get  $P < R < S$  no conclusion.  
 Hence II is not true.
26. (C)  $U > V \dots(i), W < X \dots(ii), U < X \dots(iii)$   
 From (i) and (iii), we get  $V < U < X$  no conclusion, means either  $V > X$ , or  $V = X$ , or  $V < X$ . Hence either I or II is true.
27. (E)  $K < T \dots(i), D > F \dots(ii), T < F \dots(iii)$   
 From (ii) and (iii), we get  $D > F > T$   $D > T$ . Hence II is true.  
 From II and (i), we get,  $D > T < K$   $D > K$  or  $K < D$ .  
 Hence I is true.
28. (D)
29. (B)  $G < M \dots(i), N < L \dots(ii), G < L \dots(iii)$   
 From (ii) and (iii), we get  $G < L < N$  no conclusions. Hence I is false.  
 From (i) and (iii), we get  $L > G < M$   $L > M$ . Hence II is true.
30. (E) Here,  
 $L_{()}$   
 $|$   
 $P_{()}$   
 $T_{()} - F_{()} - G$   
 Hence, P is either father or uncle of G.
31. (E) From (2) we get  
 $P_{()}$   $S_{()}$   
 $|$   $|$   
 $T_{()} - M_{()} - Z_{()}$   
 Hence, S is the wife of P.

32. (E) Replacing '?' by '÷', we get

$$\begin{array}{c} F_{()} \\ | \\ H_{()} \\ | \\ I_{()} - J_{()} - K \end{array}$$

33. (B) In equation I, we have no information about E's gender. Also, in equation (IV), we have no information about T's gender.

34. (E) Here, we have



Now, F is the paternal grandfather of G. Therefore, we come to know that M is the son of F and brother of E. Hence, A is the sister-in-law of M.

35. (A) After making the changes, we get the following arrangement of the digits:

95178432

Hence, the second digit from the right end is 3.

# IBPS RRB Clerk (Mains)

## Reasoning

1. Four of the following five are alike in a certain way based on the position in above arrangement and form a group. Which is the one that **does not** belong to that group ?  
(A) HPT (B) OVS  
(C) ARW (D) ABC  
(E) BMC
2. A man is facing north-west. He turns  $90^\circ$  in the clockwise direction and then  $135^\circ$  in the anticlockwise direction. Which direction is he facing now ?  
(A) East (B) West  
(C) North (D) South  
(E) None of these
3. Out of the five car manufacturing companies A, B, C, D and E, the production of company B is more than that of company A but not more than that of company E. Production of company C is more than the production of company B but not as much as the production of company D. Considering the information to be true, which of the following is **definitely true** ?  
(A) Production of company D is highest of all the five companies.  
(B) Company C produces more number of cars than Company E.  
(C) The numbers of cars manufactured by companies E and C are equal.  
(D) Company A produces the lowest number of cars.  
(E) None of these
4. Pointing to a man, Rohit recalled, 'He is the son of the mother of the father of my daughter.' How is Rohit related to the man ?  
(A) cousin (B) brother  
(C) nephew (D) uncle  
(E) son
5. In a class Seema is 10th from the top and Bablee is 20th from the bottom. Raju is 11 ranks below Seema and 21 ranks above Bablee. How many students are in the class if list includes all the students of the class ?  
(A) 60 (B) 61  
(C) 62 (D) Data inadequate  
(E) None of these

**Directions (Q. 6–10) :** Study the following information carefully and answer the given questions following it.

- (i) Eleven students A, B, C, D, E, F, G, H, I, J and K are sitting in the first row of a class facing the teacher.
  - (ii) D, who is on the immediate left of F, is second to the right of C.
  - (iii) A is second to the right of E, who is at one of the ends.
  - (iv) J is the immediate neighbour of A and B and third to the left of G.
  - (v) H is on the immediate left of D and third to the right of I.
6. Who is sitting midway between E and H ?
- (A) J (B) B  
(C) I (D) G  
(E) None of these
7. Which of the following statements is not true in the context of the above sitting arrangements ?
- (A) There are seven students sitting between K and D.  
(B) G is the immediate neighbour of I and C.  
(C) H is the immediate neighbour of D and F.  
(D) K is between E and A.  
(E) F is third to the right of C.
8. To obtain the respective seats of all the persons which clue given above is superfluous ?
- (A) Clue I (B) Clue II  
(C) Clue III (D) Clue IV or Clue V  
(E) None of these
9. Besides 'E', who among the following is at the extreme end ?
- (A) K (B) F  
(C) B (D) Can't say  
(E) None of these
10. Which of the following groups is at the left of I ?
- (A) AJB (B) GCH  
(C) HDF (D) GCH  
(E) None of these

**Directions (Q. 11–15) :** In the following questions the symbols \$, @, \*, # and ? are used with the following meanings.

A \$ B means A is greater than B.

A @ B means A is either greater than or equal to B.

A \* B means A is equal to B.

A # B means A is smaller than B.

A ? B means A is either smaller than or equal to B.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely **True? Give answer**

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

11. **Statements :**  $M \# N, T \$ U, N \# U$

- Conclusions :** I.  $M ? T$   
 II.  $T \$ N$

12. **Statements :**  $P \$ T, G ? N, T @ N$

- Conclusions :** I.  $P \$ N$   
 II.  $G ? T$

13. **Statements :**  $P ? Q, R \$ S, Q @ S$

- Conclusions :** I.  $P \$ S$   
 II.  $R \# Q$

14. **Statements :**  $J \# K, K * F, H @ F$

- Conclusions :** I.  $J ? H$   
 II.  $H \$ K$

15. **Statements :**  $D @ F, G \$ H, F ? H$

- Conclusions :** I.  $G \$ F$   
 II.  $D @ H$

**Direction (Q. 16-20) :** Study the following information carefully and answer the questions given below :

- 'P + Q' means 'P is the father of Q'  
 'P - Q' means 'P is the mother of Q'  
 'P × Q' means 'Q is the brother of P'  
 'P ÷ Q' means 'Q is the sister of P'  
 'P k Q' means 'P is the son of Q'  
 'P # Q' means 'P is the daughter of Q'

16. What does the expression  $A + B + C \times D \div E \times F k G$  mean ?

- (A) A is the father of G (B) G is the wife of A  
 (C) B is the husband of G (D) G is the daughter of A  
 (E) None of these

17. Which of the following expressions indicates that F is the sister-in-law of A ?

- (A)  $A k B + C \div D \times E \div F$  (B)  $A - D \times E \div C \# B \times F$   
 (C)  $F \# E - D \div C \times B \div A$  (D)  $A \times D + C \div B \div E \# F$   
 (E)  $A k E \times B + D \times C \div F$

18. Which of the following is a doubtful conclusion drawn from the expression  $D \# H + L k P - T \div W$  ?
- (A) D is the sister of W (B) W is the daughter of H  
(C) H is the father of T (D) T is the brother of D  
(E) H is the husband of T's mother
19. In which of the following expressions has 'A' been represented as the cousin of 'B'?
- (A)  $A k C \times D \times L \div M - B$  (B)  $A k C k D \times L \div M - B$   
(C)  $A \# C \div D \times M \times L + B$  (D)  $A \# D \# C \times L \times M + B$   
(E) Both (A) and (C)
20. Which of the following is the correct conclusion drawn from the expression  $A + D + K \times P k L \# M$  ?
- (A) D is the daughter-in-law of M  
(B) D is the wife of L  
(C) A is the father-in-law of M's daughter  
(D) M is the father-in-law of A's son  
(E) M is the mother-in-law of A's son

**Directions (Q. 21–25) :** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

21. **Statements :** a. All books are pins.  
b. Some pins are tablets.  
c. All tablets are needles.  
d. Some needles are threads.
- Conclusions :** I. Some needles are pins.  
II. Some pins are books.  
III. Some threads are needles.  
IV. Some needles are tablets.
- (A) None follows (B) Only I and II follow  
(C) Only I, II and III follow (D) Only II, III and IV follow  
(E) All follow
22. **Statements :** a. All jungles are bins.  
b. All bins are petals.  
c. No petal is root.  
d. All roots are flowers.
- Conclusions :** I. No flower is bin.  
II. No jungle is root.  
III. All jungles are petals.  
IV. All flowers are roots.
- (A) Only I and II follow (B) Only II and III follow  
(C) Only I, II and III follow (D) All follow  
(E) None of these

23. **Statements :** a. All poles are fans.  
b. All fans are stands.  
c. Some stands are pens.  
d. Some pens are boxes.
- Conclusions :** I. Some boxes are poles.  
II. Some fans are boxes.  
III. Some pens are poles.  
IV. Some pens are fans.
- (A) None follows (B) Only I and II follow  
(C) Only II and IV follow (D) Only III and IV follow  
(E) Only I, II and IV follow

24. **Statements :** a. Some scales are weights.  
b. All weights are metals.  
c. Some metals are rings.  
d. All rings are bands.
- Conclusions :** I. Some bands are scales.  
II. Some weights are bands.  
III. Some rings are scales.  
IV. Some metals are scales.
- (A) Only I and III follow (B) Only I and II follow  
(C) Only II and III follow (D) Only II and IV follow  
(E) None of these

25. **Statements :** a. Some houses are beads.  
b. Some beads are cycles.  
c. Some cycles are tubes.  
d. Some tubes are rains.
- Conclusions :** I. Some tubes are beads.  
II. Some cycles are houses.  
III. No bead is tube.  
IV. Some rains are cycles.
- (A) Only I follows (B) Only either I or III follows  
(C) Only I and II follow (D) Only either I or III and IV follow  
(E) None of these

**Directions (Q. 26–30) :** 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 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.



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

**Directions (Q. 31–35) :** Study the following information carefully and answer the given questions.

P, Q, R, S, T, V, W and X are sitting in a straight line facing north but not necessarily in the same order.

- a. R sits third to the left of P. T sits fifth to the right of R but neither sits at any of the extreme ends.  
b. Q and S are immediate neighbours of each other but neither of them is an immediate neighbour of T.  
c. Only one person sits between Q and V, who is not an immediate neighbour of P.  
d. X does not sit at an extreme end.
31. Who among of the following pairs sit at the extreme ends of the line ?  
(A) X, R (B) V, W  
(C) V, X (D) Q, W  
(E) None of these
32. How many persons sit between X and R ?  
(A) Two (B) Three  
(C) Four (D) Five  
(E) Cannot be determined
33. If all the persons are made to sit in alphabetical order from left to right, the positions of how many of them will remain unchanged as compared to the original arrangement ?  
(A) None (B) One  
(C) Two (D) Three  
(E) Four

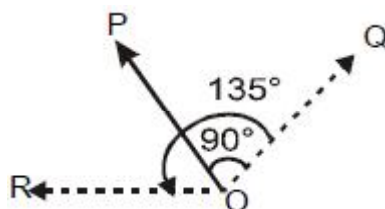
34. What is the position of V with respect to X ?
- (A) Fourth to the left (B) Fifth to the left  
(C) Third to the right (D) Fourth to the right  
(E) None of these
35. Four of the following five are alike in a certain way based on their seating arrangement and so form a group. Which is the one that does not belong to that group ?
- (A) VS (B) QX  
(C) PW (D) TS  
(E) RP

### ANSWER KEY

1	2	3	4	5	6	7	8	9	10
D	B	D	B	B	B	C	E	B	A
11	12	13	14	15	16	17	18	19	20
B	E	D	D	A	C	D	D	E	C
21	22	23	24	25	26	27	28	29	30
E	B	A	E	B	D	A	D	E	E
31	32	33	34	35					
B	B	B	B	D					

## SOLUTION

1. (D) Others are groups of consecutive elements in the series.
2. (B) As shown in Figure the man initially faces in the direction OP. On moving  $90^\circ$  clockwise the man faces in the direction OQ. On further moving  $135^\circ$  anticlockwise, he faces in the direction OR, which is West.



3. (D)  $E > B > A$  ... (i)  
 $D > C > B$  ... (ii)
4. (B) Rohit's daughter's father ? Rohit.  
 Mother of Rohit's daughter's father ? Rohit's mother.  
 Son other than Rohit of Rohit's mother ? Rohit's brother

5. (B)
- 21 students { 10 students { Seema (10th from the top)
- Raju (21st from the top)
- Bablee (42nd from the top and 20th from the bottom)

Thus, total number of students can be calculated easily by Bablee's position from the top and the bottom. ? Required number of students =  $42 + 20 - 1 = 61$ .

**Direction (6–10) :**

Suppose they are facing 'north'. From clue (iii), since A is second to the right of 'E', who is at one of the extreme ends; hence 'E' is at the extreme left. Hence, 'E' is at the first place while 'A' is at the third place. Again, from clue (iv), since 'J' is the immediate neighbour of 'A' and 'B', therefore 'J' cannot be at the immediate left of 'A' because in that case 'B' will have no place to sit. Hence, 'J' is at no. 4, 'B' is at no. 5 and 'G' is at no. 7. Thus we get the following order of their sitting arrangements

$$\begin{array}{cccccc} \text{E} & \text{A} & \text{J} & \text{B} & \text{G} & \dots(1) \\ 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 2 & 3 & 4 & 5 & 6 & 7 \end{array}$$

Again, from clues (ii) and (v) we get the following order of sitting of I, C, H, D and F:

$$\begin{matrix} I & C & H & D & F & & \dots(2) \\ 1 & 1 & 1 & 1 & 1 & 1 & \end{matrix}$$

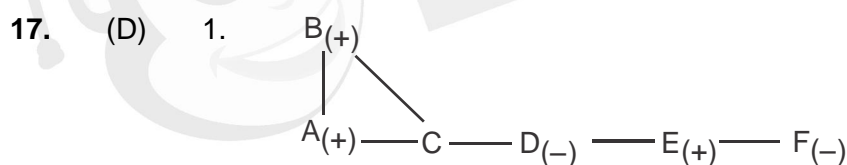
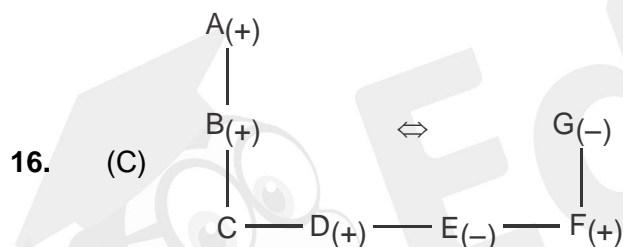
Now from (1) and (2) and from clue (i) We get

E	K	A	J	B	I	G	C	H	D	F
1	1	1	1	1	1	1	1	1	1	1
1	2	3	4	5	6	7	8	9	10	11

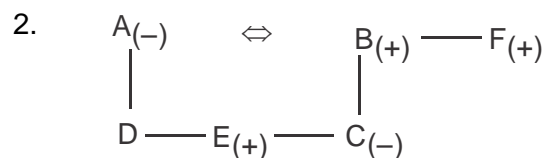
Hence we get the following answers of the given questions.

- 6. (B)**

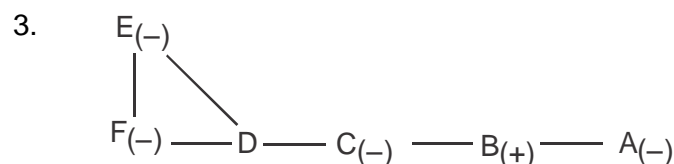
7. (C)  
 8. (E)  
 9. (B)  
 10. (A)  
 11. (B)  $M < N \dots(i), T > U \dots(ii); N < U \dots(iii)$   
 Combining these, we get  $M < N < U < T$   
 Hence  $M < T$  and  $T > N$ .  
 12. (E)  $P > T \dots(i); G > N \dots(ii), T > N \dots(iii)$   
 From (i) and (iii),  $P > N$   
 From (ii) and (iii),  $G > T$ .  
 13. (D)  $P > Q \dots(i); R > S \dots(ii); Q > S \dots(iii)$   
 Thus the relationships can't be established.  
 14. (D)  $J < K \dots(i); K = F \dots(ii); H > F \dots(iii)$   
 Combining these, we get  $J < K = F > H$   
 So,  $J < H$ . Thus I does not follow.  
 Again,  $H > K$ . Thus II does not necessarily follow.  
 15. (A)  $D > F \dots(i); G > H \dots(ii); F > H \dots(iii)$   
 From (ii) and (iii),  $G > F$ . Hence I follows.  
 But II can't be established.



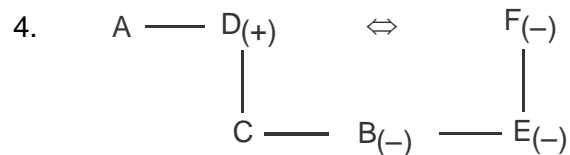
Hence, 'F' is the sister of 'A'. (Rejected)



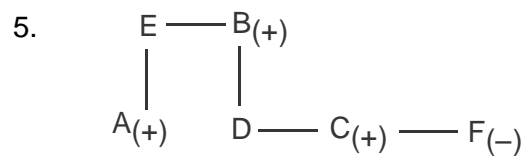
Here, 'F' is the brother-in-law of 'A'. (Rejected)



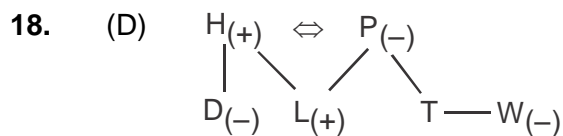
Here, 'F' is the sister of 'A'. (Rejected)



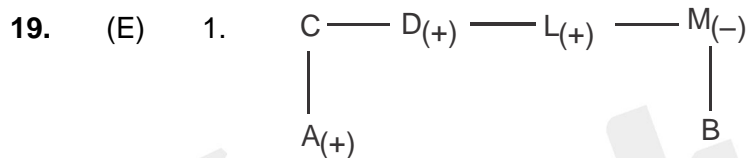
Here, 'F' is the sister-in-law of 'A'. (Selected)



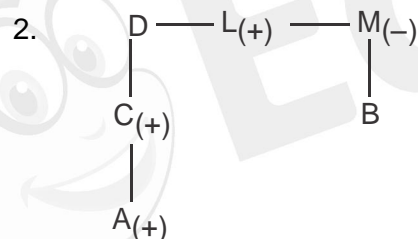
Here, 'F' is the cousin of 'A'. (Rejected)



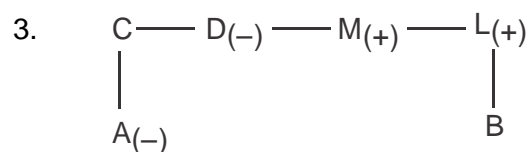
Gender of T is not known. T is either brother or sister of D.



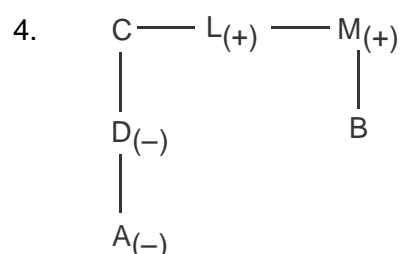
Here (A) is the cousin of (B).



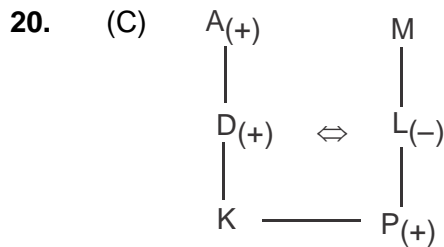
Here (A) is the son of the cousin of (B). (Rejected)



Here, (A) is the cousin of (B).

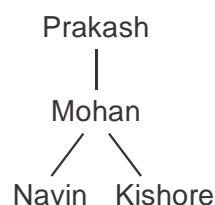


Here (A) is the daughter of (B)s cousin. (Rejected)



21. (E) Statement (b) + statement (c) gives conclusion "Some pins are needles" [ $\therefore I + A = I$ ]. Now, on conversion "Some pins are needles" gives conclusion I. Hence, conclusion I follows. Conclusion II follows from conversion of statement (a). Conversion of statement (d) gives conclusion III. Again, conclusion IV follows from conversion of statement (c). Thus, all conclusions follow.
22. (B) Statement (a) + statement (b) gives conclusion III [ $\therefore A + A = A$ ]. Hence, conclusion III follows. Again, conclusion III + statement (c) gives conclusion II [ $\therefore A + E = E$ ]. Hence, conclusion II follows. Note that statement (b) + statement (c) gives conclusion "No bins are roots" [ $\therefore A + E = E$ ]. Again, "No bins are roots" + statement (d) gives conclusion "Some flowers are not bins" [ $\therefore E + A = O^*$ ]. Hence, conclusion I does not follow. Since conversion of statement (d) gives conclusion "Some flowers are roots", hence conclusion IV does not follow.
23. (A) Statement (a) + statement (b) gives conclusion "All poles are stands" [ $\therefore A + A = A$ ]. Now, "All poles are stands" + statement (c) gives no conclusion [ $\therefore A + I = \text{no conclusion}$ ]. Hence, conclusion III does not follow. Again, conclusion IV does not follow because statement (b) + statement (c) gives no conclusion [ $\therefore A + I = \text{no conclusion}$ ]. Since statement (c) + statement (d) gives no conclusion [ $\therefore I + I = \text{no conclusion}$ ], therefore, we can't relate 'boxes' and 'poles'. Hence, conclusion I does not follow. Again, since statement (b) + statement (c) gives no conclusion, we can't relate 'fans' and 'boxes'. Hence, conclusion II does not follow.
24. (E) Only IV follows Statement (a) + statement (b) gives conclusion "Some scales are metals" [ $\therefore I + A = I$ ]. Hence, conclusion IV can be obtained after conversion of "Some scales are metals". Also, statement (b) + statement (c) gives no conclusion [ $\therefore A + I = \text{no conclusion}$ ]. Therefore, conclusions I, II and III do not follow.
25. (B) Note that  $I + I = \text{no conclusion}$ . Therefore, conclusions I, II, III and IV do not follow. But among these four conclusions, conclusion I and conclusion III make an I-E type complementary pair. Hence, either conclusion I or conclusion III follows.
26. (D) I alone is not sufficient because it lacks information regarding K. II alone is not sufficient because it does not give information about the number of sons (of K). From I and II: We get that M and T are sons of K. Thus, K has either two or more than two sons. Since our answer is not clear, both I and II even together are not sufficient.

27. (A) **From I :**

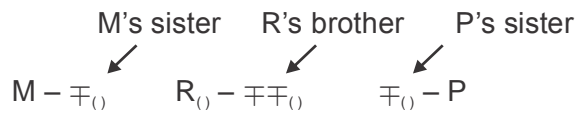


Hence, it was Prakash who reached the office first.

**From II :** Either Mohan or Prakash reached the office first.

28. (D) I alone is not sufficient because it lacks information regarding P. II alone is not sufficient because it lacks information regarding M.

Now, from I and II, we get



Still, we do not have clear picture. We have no information regarding the gender of M. Hence, both the statements I and II even together are not sufficient.

29. (E) I lacks information regarding N and Q. Hence, I alone is not sufficient. II lacks information regarding M. Hence, II alone is not sufficient. Now, from I and II, we get that T is the youngest.
30. (E) I alone is not sufficient because it is not certain that the codes of the words are in the same order as the words are in the sentence. Similarly, II alone is not sufficient. Now, from I and II: in the code part there must be two codes common in both I and II. But we get only one code 'na' common in both. Thus, the given question is not rational.

**Direction (31–35) :**

The seating arrangement is given below:

V      R      Q      S      P      X      T      W

In alphabetical

order : P      R      S      T      V      W      X

31. (B)
32. (B)
33. (B) Arranging in alphabetical order:  
P Q R S T V W X  
Only S retains its position.
34. (B)
35. (D) In all other options the second person of the pair sits third to the right of the first person of the pair.

# IBPS RRB PO (Preliminary)

## Reasoning

**Directions (Q. 1-5) :** Study the following information carefully and answer the given questions.

A, B, C, D, E, F, G and H are eight members in a family. Among them, four are males and four are females. There are three husbands, three wives, two daughters, and two sons in the family. They all have a different profession, viz. Lecturer, Professor, Lawyer, Businessman, Beautician, Doctor, Housewife and CA. They all are sitting around a circular table, facing the centre. A is father of C and F, who is a male Doctor. The Housewife is married to a Businessman and neither A nor B is a Businessman. E is a Professor and is sitting between the Lawyer and the Housewife. No male is a Professor. G is father of B and is sitting between two male members. D is daughter of C, who is second to the right of her son. H is a Beautician and married to a Doctor. D is a CA and is sitting second to the left of her father. A and B cannot sit adjacent to each other. All females sit together.

1. Who among the following is the Lawyer ?  
(A) A (B) B  
(C) C (D) Either A or B  
(E) G
2. Who is the Lecturer ?  
(A) A (B) B  
(C) C (D) G  
(E) None of these
3. Which of the following pairs is not correctly matched ?  
(A) G – Businessman (B) B – Lawyer  
(C) E – Professor (D) A – Housewife  
(E) None of these
4. Who is sitting second to the left of A ?  
(A) B (B) C  
(C) D (D) H  
(E) E
5. A is related to F, and G is related to B. Similarly, E is related to which of the following on the basis of their seating arrangements ?  
(A) H (B) C  
(C) D (D) A  
(E) G



**Directions (Q. 6-10) :** In these questions a relationship between different elements is shown in the statement(s). The statement(s) is/are followed by two conclusions numbered I and II. Given answer

- (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 conclusion I nor II is true  
 (E) if both conclusions I and II are true

6. **Statements :**  $A > B, C \geq D = E < B$

**Conclusions :** I.  $C = E$   
 II.  $A > E$

7. **Statements :**  $K > L, M = P \geq Q < L$

**Conclusions :** I.  $K < Q$   
 II.  $K = Q$

8. **Statements :**  $R \leq N < P, P \geq M$

**Conclusions :** I.  $N > M$   
 II.  $R \leq M$

9. **Statements :**  $M > R = A \leq K$

**Conclusions :** I.  $K > M$   
 II.  $K \geq R$

10. **Statements :**  $Q \leq R > S = T$

**Conclusions :** I.  $Q = R$   
 II.  $T > Q$

**Directions (Q. 11-15) :** Study the following information carefully to answer the given questions.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

**Input :** she 78 31 good 17 very 43 cricket played

**Step I :** 17 she 78 31 good very 43 cricket played

**Step II :** 17 very she 78 31 good 43 cricket played

**Step III :** 17 very 31 she 78 good 43 cricket played

**Step IV :** 17 very 31 she 43 78 good cricket played

**Step V :** 17 very 31 she 43 played 78 good cricket

Step V is the last step of the rearrangement.

11. If the first step of an input is '11 are you 22 boy clever very 35 17' then how many more steps will be required to complete the rearrangement ?

- (A) Three (B) Four  
 (C) Five (D) Six  
 (E) Seven

12. If 'are you 11 22 boy clever very 35 17' is the input then which of the following will be Step V ?
- (A) 11 you 17 very are 22 boy clever 35  
 (B) 11 you 17 very 22 are boy clever 35  
 (C) 11 you 17 are 22 boy clever very 35  
 (D) 11 you 17 ver 22 clever are boy 35  
 (E) None of these
13. If the input of an arrangement is 'may you go 21 23 now 33 47 right' then which step will be the last but one ?
- (A) Third (B) Fourth  
 (C) Fifth (D) Sixth  
 (E) Seventh
14. The last step of an input is '25 please 31 over 45 house 79 easily 82 come'. Then the third step of the arrangement will be
- (A) 79 82 come please home 43 25 easily 31 over  
 (B) 25 79 82 come please home 43 easily 31 over  
 (C) 25 please 31 79 82 come home 43 easily over  
 (D) Can't be determined  
 (E) None of these
15. The second step of an input is '15 to fight polio 21 51 eradicate by 27'. Then which step will be the final step of the arrangement ?
- (A) Step III (B) Step IV  
 (C) Step V (D) Step VI  
 (E) Step VII

**Directions (Q.16-21) :** In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follows from the given statements, disregarding commonly known facts. Given answer

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

**Direction (16-17) :**

**Statements :** All politicians are men.

Every man is wise.

Some wise are experienced.

16. **Conclusions :** I. Some politicians are experienced.  
 II. Some men being experienced is a possibility.
17. **Conclusions :** I. At least some wise are experienced.  
 II. At least some men are experienced.

**Direction (18-19) :****Statements :** All actors are dancers.

No dancer is a singer.

Some singers are musicians.

18. **Conclusions :** I. No musician is a dancer.  
II. Some dancers being musicians is a possibility.
19. **Conclusions :** I. Some actors being musicians is a possibility.  
II. Some singers being actors is a possibility.

**Direction (20-21) :****Statements :** Some newspapers are magazines.

All newspapers are books.

Some books are journals.

20. **Conclusions :** I. No journal is a magazine.  
II. Some newspapers being journal is a possibility.
21. **Conclusions :** I. Some journals are newspapers.  
II. All magazines are books.

**Directions (Q.22-25) :** Study the following information carefully to answer the given questions.

Five friends – A, B, C, D and E – belong to five different cities, viz. Delhi, Chennai, Kolkata, Mumbai and Bangalore. They study in college X, taking History, Geography, Science, Maths and Management as their optional subjects.

A neither belongs to Bangalore nor studies Geography. C belongs to Mumbai and studies Science. The one who studies Maths is neither from Delhi nor from Chennai, and the one who is from Kolkata studies History, but he is not B. The one who studies Geography is neither from Kolkata nor from Bangalore.

Neither A nor D is from Kolkata. B does not study Management. He is neither from Delhi nor from Chennai.

22. Who studies Maths as an optional subject ?  
(A) A (B) B  
(C) C (D) Either A or B  
(E) Either A or D
23. Whose optional subject is Geography ?  
(A) A (B) B  
(C) C (D) D  
(E) E
24. The one who studies Management as an optional subject has his home town in  
(A) Delhi (B) Chennai  
(C) Bangalore (D) Data inadequate  
(E) None of these

25. Bangalore is the home town of
- |       |       |
|-------|-------|
| (A) A | (B) B |
| (C) C | (D) D |
| (E) E |       |

**Directions (Q. 26-30) :** 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 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 I alone are sufficient to answer the question.
- (D) if the data given in both statements I and II together are not sufficient to answer the question.
- (E) if the data in both statements I and II together are necessary to answer the question.
26. Office X is in which direction with respect of Office Y ?
- I. X is to the east of Z, which is to the north of Y.
- II. W is to the east of Y and to the south of X.
27. How is L related to N ?
- I. K is daughter of L, and N is daughter of M.
- II. K is mother of N, who is sister of O.
28. Who among P, Q, R, S and T stood first in a class test ?
- I. Q is in the middle from either side and S is at the bottom.
- II. P, Q and T are immediate neighbours if they are made to sit according to their ranks.
29. What is the code for 'running' in a certain code language ?
- I. In that code language 'ram running too fast' is written as 'po he chh to'.
- II. In that code language 'he is running very fast' is written as 'ha ni he ma po'.
30. Among Sanjeev, Rajeev, Gautam, Ranjit, Amit and Mithilesh, who is on the immediate left of Gautam ?
- I. Gautam is sitting between Sanjeev and Amit, who is on the extreme right.
- II. Gautam is third to the right of Mithilesh and second to the left of Ranjit.
31. Despite provisions of legal punishment, child labour is prevalent in our society. Which of the following could be a logical **course of action** for the above mentioned phenomenon ?
- (A) Strict laws should be made by the parliament against child labour.
- (B) Focus should be brought about on the proper execution of the legal provisions.
- (C) The youth should be persuaded to rebel against their parents who are involved in child labour.
- (D) All business establishments who are involved in child labour should be closed.
- (E) None of these

32. Statistics released by the National Crime Records Bureau show the maximum unnatural deaths recorded in 2012 were in road accidents.  
Which of the following **conclusions** can be drawn from the above statement ?
- (A) Public transportation systems are no longer safe for travelling.
  - (B) People are taking no precaution while driving.
  - (C) In India, there are no proper safety measures for vehicles.
  - (D) In India, people do not follow traffic rules and regulations.
  - (E) None of these
33. Owing to delayed and weak south-west monsoon there is an alarming depletion in the water levels of important reservoirs.  
Which of the following **course of action** could be taken by the government ?
- (A) The Central Government should issue an advisory to the State Government to make judicious and regulated release of water.
  - (B) The government should give preference to drinking water and irrigation, and enhance ground water use to meet current needs.
  - (C) Farmers should be advised by the government to grow such crops as require less water.
  - (D) All (A), (B) and (C)
  - (E) None of these
34. The interest rates on small savings schemes such as the post office savings schemes, ROI Relief Bonds, Provident Fund and PPF continue to be administered at high levels in relation to market rates. These schemes also have a variety of tax schemes and tax incentives which result in much higher post-tax returns, and on the flip side more liability for the government.  
Which of the following inferences drawn from the facts stated in the above passage is **definitely true** ?
- (A) Tax incentives are provided to benefit all sections of the society.
  - (B) The interest rates on small savings have decreased considerably over the last few years.
  - (C) Returns on different government-administered savings schemes are higher for the tax-paying individuals.
  - (D) The government-administered savings schemes drain out the exchequer's money in the long run.
  - (E) None of these
35. The Rail Ministry has decided to set up one-stop facility counters to attend the various needs of the passengers at all major stations.  
Which of the following **assumptions** is implicit in the above statement? (An assumption is something taken for granted)
- (A) Majority of the passengers will remain deprived of the variety of services during their journey.
  - (B) The services provided by these counters will help all those passengers who are travelling alone.
  - (C) This will lead to an extra burden on the Railways.
  - (D) The services provided by these counters will result in better facilities to the passengers.
  - (E) None of these

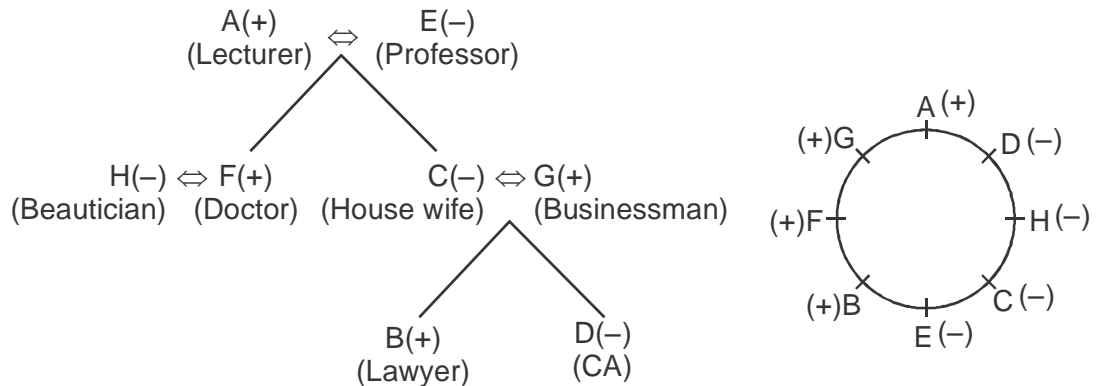
**ANSWER KEY**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
B	A	D	D	A	B	D	D	B	D
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
E	B	D	D	C	B	D	B	A	B
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
D	B	D	D	B	C	D	E	D	A
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>					
B	D	A	C	D					



## SOLUTION

**Direction (1-5) :**



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

**Given statements :**  $A > B$

$$C \geq D = E < B$$

...(i)

...(ii)

From (i) and (ii), we have

$$E < B < A$$

Thus,  $E < A$  or  $A > E$

Hence, conclusion II is true.

Again, from (ii), we get

$$C \geq D = E < B$$

Here,  $C \geq E$ , which means either  $C > E$  or  $C = E$

Hence, conclusion I is not true.

7. (D) **Given statements :**  $K > L$

...(i)

$$M = P \geq Q < L$$

...(ii)

Combining (i) and (ii), we have

$$M = P \geq Q < L < K$$

Thus,  $Q < L < K$

So,  $Q < K$  or  $K > Q$

Hence, neither I nor II is true.

8. (D) **Given statements :**  $R \leq N < P$

...(i)

$$P \geq M$$

...(ii)

Combining (i) and (ii), we have

$$R \leq N < P \geq M$$

**Check for I.**  $N < P \geq M$

We can't compare N and M. Hence, conclusion I is not true.

**Check for II.**  $R \leq N < P \geq M$

We can't compare R and M. Hence, conclusion II is not true.



9. (B) **Given statement :**  $M > R = A \leq K$

$$\begin{array}{c} M > R = A \leq K \\ \hline \end{array}$$

**Check for I.**

We can't compare M and K.

Thus, conclusion I is not true.

**Check for II.**  $R = A \leq K$

Hence,  $R \leq K$  or  $K \geq R$

Thus, conclusion II is true.

10. (D) **Given statement :**  $Q \leq R > S = T$

**Check for I.**  $Q \leq R$

Hence,  $Q < R$  or  $Q = R$

Thus, conclusion I is not true

**Check for II.**

$$\begin{array}{c} Q \leq R > S = T \\ \hline \end{array}$$

We can't compare Q and T.

Thus, conclusion II is not true.

**Direction (11-15) :**

The machine rearranges the words and numbers in such a way that numbers in such a way that numbers come first and are arranged in ascending order while words come after the number in the next step and are arranged in reverse alphabetical order.

11. (E) **Step I :** 11 are you 22 boy clever very 35 17  
**Step II :** 11 you are 22 boy clever very 35 17  
**Step III :** 11 you 17 are 22 boy clever very 35  
**Step IV :** 11 you 17 very are 22 boy clever 35  
**Step V :** 11 you 17 very 22 are boy clever 35  
**Step VI :** 11 you 17 very 22 clever are boy 35  
**Step VII :** 11 you 17 very 22 clever 35 are boy  
**Step VIII :** 11 you 17 very 22 clever 35 boy are

Hence, seven more steps will be required.

12. (B) Same as above

13. (D) **Input :** may you go 21 23 now 33 47 right  
**Step I :** 21 may you go 23 now 33 47 right  
**Step II :** 21 you may go 23 now 33 47 right  
**Step III :** 21 you 23 may go now 33 47 right  
**Step IV :** 21 you 23 right may go now 33 47  
**Step V :** 21 you 23 right 33 may go now 47  
**Step VI :** 21 you 23 right 33 now may go 47  
**Step VII :** 21 you 23 right 33 now 47 may go

14. (D)

15. (C) **Step II :** 15 to fight polio 21 51 eradicate by 27  
**Step III :** 15 to 21 fight polio 51 eradicate by 27  
**Step IV :** 15 to 21 polio fight 51 eradicate by 27  
**Step V :** 15 to 21 polio 27 fight 51 eradicate by

Hence, Step V will be the last step.



16. (B) All politicians are men (A) + Every man is wise (A) = A + A = A = All politicians are wise. Now, All politicians are wise (A) + Some wise are experienced (I) = A + I = No conclusion. Hence, conclusion I does not follow. But conclusion II follows from second and third statements.
17. (D) Conclusion I does not follow because it is a restatement. Again, Every man is wise (A) + Some wise are experienced (I) = A + I = No conclusion. Hence, conclusion II does not follow.
18. (B) No dancer is a singer (E) + Some singers are musicians (I) = E + I = O\* = Some musicians are not dancers. Hence, conclusion I does not follow. But a possible relation may exist between 'dancers' and 'musicians'. Hence, conclusion II follows.
19. (A) All actors are dancers (A) + No dancer is a singer (E) = A + E = E = No actor is a singer. Hence, conclusion II does not follow. Now, No actor is a singer (E) + Some singers are musicians (I) = E + I = O\* = Some musicians are not actors. But a positive relation is possible between 'musicians' and 'actors'. Thus conclusion I follows.
20. (B) Since there is no negative statement a negative conclusion can not exist. Again, All newspapers are books (A) + Some books are journals (I) = A + I = No conclusion. But a possible relation exists between 'newspapers' and 'journals'. Thus, conclusion II follows.
21. (D) All newspapers are books (A) + Some books are journals (I) = A + I = No conclusion. Hence, conclusion I does not follow. Again, Some newspapers are magazines → conversion → Some magazines are newspapers (I) + All newspapers are books (A) = I + A = I = Some magazines are books. Hence, conclusion II does not follow.

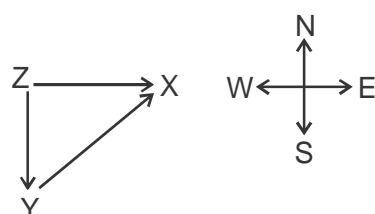
**Direction (22-25) :**

Student	City					Subject				
	Del	Che	Kol	Mum	Ban	Hist	Geog	Sc	Maths	Mgmt
A			x	x	x	x	x	x	x	√
B	x	x	x	x	√	x	x	x	√	x
C	x	x	x	√	x	x	x	√	x	x
D			x	x	x	x	√	x	x	x
E	x	x	√	x	x	√	x	x	x	x

Person	City	Subject
A	Delhi/Chennai	Management
B	Bangalore	Maths
C	Mumbai	Science
D	Delhi/Chennai	Geography
E	Kolkata	History

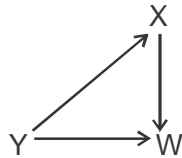
22. (B)  
23. (D)  
24. (D)  
25. (B)  
26. (C)

**From I.**



Hence, X is to the north-east of Y.

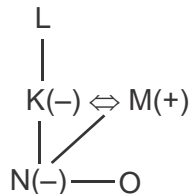
From II.



Hence, X is to the north-east of Y.

Thus, either statement I or statement II alone is sufficient.

27. (D) From I and II, we get

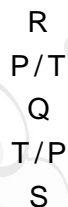


L is either maternal grandfather or maternal grandmother of N. But we can't solve the question any further.

28. (E) From I. —  
—  
Q  
—  
S

From II. P Q T or T Q P

From I and II, we have



Hence, R stood first among them.

29. (D) From I and II, we have  
running/fast  $\rightarrow$  he/po

The code of running is either *he* or *po*. So, we can't determine the code of *running* from both the statements.

30. (A) From I.

\_ \_ \_ Sanjeev Gautam Amit

Hence, Sanjeev is on the immediate left of Gautam.

From II. Mithilesh \_ \_ Gautam \_ Ranjit.

31. (B) When the legal provisions are already there, the next logical step is "proper execution" of these laws.
32. (D) Accidents have a direct link to violation of traffic rules and regulations.
33. (A) Judicious and regulated release of water is the only way out. (2) does not make sense because absence of rains will also lead to scarcity of ground water. (3)
34. (C) (1) is not true because the incentives would benefit only a particular section – the tax payers. (2) does not seem likely if we go by the concern shown in the statement. (3) is true because of the "tax incentives" associated with the schemes. (4) is not true because there may be other positive factors in the long run.
35. (D) Whenever a facility is provided to people, the assumption is that it would lead to better services to them.

# IBPS RRB PO (Mains)

## Reasoning

**Directions (1–5) :** Read the following information carefully and answer the questions which follow.

Eight persons – Elesh, Vikram, Vinay, Denny, Ela, Farukh, Gurpreet and Hitesh – are sitting around a circular table facing away from the centre. Each of them likes a novel of a different writer, viz Chetan Bhagat, William Faulkner, Charles Dickens, Leo Tolstoy, Mark Twain, George Eliot, Bob Mayor and Marcel Proust, but not necessarily in the same order.

Elesh, who likes Leo Tolstoy, sits third to the right of Ela. The one who likes Marcel Proust sits second to the left of Denny, who likes the novel of Chetan Bhagat. Vinay, who likes William Faulkner, sits between the persons who like George Eliot and Marcel Proust. Denny sits second to the left of Vikram, who cannot sit adjacent to Ela. Gurpreet likes Bob Mayor and sits second to the right of Hitesh, who likes Charles Dickens.

1. What is the position of Denny with respect to the person who likes the novel of William Faulkner?  
(A) Third to the left (B) Third to the right  
(C) Second to the right (D) Fifth to the right  
(E) Fourth to the left
2. Which of the following combinations is definitely true ?  
(A) Elesh – Marcel Proust (B) Hitesh – Chetan Bhagat  
(C) Ela – Bob Mayor (D) Farukh – Leo Tolstoy  
(E) Vikram – Mark Twain
3. How many persons are sitting between Ela and the person who likes the novel written by Leo Tolstoy (if counted from Ela in clockwise direction) ?  
(A) One (B) Two  
(C) Three (D) None  
(E) More than three
4. Who likes the novel of George Eliot ?  
(A) Vikram (B) Denny  
(C) Ela (D) Farukh  
(E) Hitesh
5. Denny is related to 'Marcel Proust' and Gurpreet is related to Charles Dickens. In the same way, Farukh is related to whom among the following ?  
(A) Chetan Bhagat (B) George Eliot  
(C) Bob Mayor (D) William Faulkner  
(E) Leo Tolstoy

**Directions (6–10) :** Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question and then mark the appropriate option as answer.

6. Six friends M, T, S, R, U and W are sitting around a circular table facing the centre. What is the position of S with respect to M ?
- I. M is between R and T.
  - II. R sits second to the left of W.
  - III. U does not sit on the immediate right of R.
- (A) Only I and II (B) Only II and III  
(C) Only III (D) Only I and III  
(E) All I, II and III together
7. What is the code for 'cold' in a code language ?
- I. 'icecream is cold' is written as 'tic jic lic'.
  - II. 'fruits are healthy' is written as 'mic fic eic'.
  - III. 'healthy is icecream' is written as 'jic mic lic'.
- (A) Only I (B) Only II  
(C) Only I and II (D) Only III and I  
(E) None of these
8. Among P, Q, R, S, T and U, whose rank is first in a class test ?
- I. P scored more than only R and S.
  - II. T's rank is 3rd highest.
  - III. U did not score the highest marks.
- (A) Only I  
(B) Only II  
(C) Only III  
(D) I, II and III even together are not sufficient to answer the question.  
(E) All I, II and III
9. Five persons Jitesh, Jeevan, Jeet, Jai and Jeena sit on a straight line, facing north, but not necessarily in the same order. How many persons sit between Jitesh and Jai?
- I. Jeet sits second to the right of Jitesh. Jai is not an immediate neighbour of Jitesh.
  - II. Jeena sits on the extreme end of the line.
  - III. Jeet sits on the immediate right of Jeevan.
- (A) Only II (B) Only III  
(C) Only I and II (D) Only I and III  
(E) All I, II and III together

10. How is N related to X ?
- I. M is brother of N; M is grandson of W.
  - II. S is sister of N.
  - III. X is mother of M's father.
- (A) Only I
  - (B) Only II
  - (C) Only III
  - (D) All I, II and III together
  - (E) Even I, II and III together are not sufficient

**Directions (11–15) :** Study the following information to answer the given questions.

In a certain code language, 'monsoon comes India on June' is written as 'mee nee lee aee bee', 'monsoon hits India' is written as 'aee mee ree', 'India will enjoy' is written as 'zee yee aee' and 'comes enjoy monsoon' is written as 'bee mee zee'.

11. Which of the following represents the code for 'India will enjoy monsoon' ?
- (A) yee zee bee nee
  - (B) mee yee zee aee
  - (C) aee mee yee lee
  - (D) zee yee aee bee
  - (E) None of these
12. Which of the following is the code for 'monsoon will enjoy body' ?
- (A) aee yee mee bee
  - (B) mee zee yee aee
  - (C) mee aee zee bee
  - (D) fee yee zee mee
  - (E) None of these
13. Which of the following is the code for 'June' ?
- (A) mee
  - (B) bee
  - (C) aee
  - (D) nee
  - (E) Can't be determined
14. What does 'lee' stand for ?
- (A) India
  - (B) in
  - (C) June
  - (D) Either 'in' or 'June'
  - (E) None of these
15. If 'hit' is related to 'ree', 'comes' is related to 'bee', then 'enjoy' represents which of the following?
- (A) bee
  - (B) mee
  - (C) yee
  - (D) aee
  - (E) None of these

**Directions (16–20) :** Study the following information carefully and answer the given questions.

There are seven persons – M, P, Q, R, S, T and U – who participated in a singing competition which started on 25th May and ended on 31st May. In the first round of the competition, each of them performed regional songs, viz Nepali, English, Marathi, Bengali, Kannada, Punjabi and Bhojpuri, but not necessarily in the same order. They like different colours, viz White, Yellow, Red, Black, Brown, Green and Pink, but not necessarily in the same order.

U, who likes Green, performed on the fourth day of the competition but performed neither Nepali nor English song. Two performances were held between the performance of U and T, neither of whom performed on the 1st day of the week. There was one performance between the performance of R and Q. But Q's performance did not happen either on 1st or on 3rd day of the competition. Q likes Yellow colour and performed Nepali song. The one who performed Marathi song on the last day of competition, likes Red colour. P did not perform on the day either immediately before or immediately after the performance of R, who does not like either Brown or White or Black colour. S performed immediately after Q and he likes White colour. M does not like Brown colour and performed a Bengali song. R did not perform either Bhojpuri or Punjabi song. The one who performed in Kannada was scheduled immediately after the performance of the Nepali singer.

16. Which of the following combinations is definitely false regarding their schedule ?  
 (A) Q-Yellow-Nepali (B) R-Pink-English  
 (C) M-Black-Bengali (D) U-Green-Marathi  
 (E) None of these
17. Who among the following performed on the fifth day of the competition ?  
 (A) S (B) T  
 (C) Q (D) M  
 (E) None of these
18. Who sings Punjabi song ?  
 (A) U (B) R  
 (C) P (D) Either P or U  
 (E) None of these
19. If 'U' is related to 'Yellow', 'S' is related to 'Red', then which of the following is 'R' related to?  
 (A) Brown (B) Green  
 (C) Black (D) Pink  
 (E) None of these
20. Which of the following combinations is true ?  
 (A) M's performance was held on the fifth day of the week.  
 (B) S likes Green colour.  
 (C) R sings Nepali song.  
 (D) S's performance was scheduled before Q but after T.  
 (E) None of these

**Directions (Q. 21–25):** Study the following information carefully and answer the given questions.

A word/number arrangement machine, when given an input line of words and numbers, rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

**Input :** prohibition 36 wirless 49 enourmour 16 treasurer 25 81 interrelate abundant 64 vacation

**Step I :** 81 prohibition 36 wirless 49 enourmour 16 treasurer 25 interrelate 64 vacation abundant

**Step II :** 81 25 prohibition 36 wireless 49 16 treasurer interrelate 64 vacation abundant enourmour

**Step III :** 81 25 49 prohibition 36 wireless 16 treasurer 64 vacation abundant enourmour interrelate

**Step IV :** 81 25 49 64 36 wireless 16 treasurer vacation abundant enourmour interrelate prohibition

**Step V :** 81 25 49 64 16 36 wireless vacation abundant enourmour interrelate prohibition treasurer

**Step VI :** 81 25 49 64 16 36 wireless abundant enourmour interrelate prohibition treasurer vacation

**Step VII :** 81 25 49 64 16 36 abundant enourmour interrelate prohibition treasurer vacation wireless

Step VII is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the input given below.

**Input :** 196 narcotic senseless 121 81 orderly tetanus 4 knead unofficial 144 abstract reorganise 9

21. Which of the following would be last step but one ?
  - (A) 121 9 81 196 4 144 senseless tetanus reorganise abstract unofficial knead narcotic
  - (B) 121 9 81 196 4 144 senseless tetanus abstract orderly unofficial knead narcotic reorganize
  - (C) 121 9 81 196 4 144 unofficial abstract knead narcotic orderly reorganise senseless tetanus
  - (D) 121 9 81 196 4 144 abstract orderly unofficial knead narcotic reorganise senseless tetanus
  - (E) None of these
22. Which step number would be following output ?  
'121 9 81 196 4 narcotic senseless tetanus 144 reorganise abstract orderly unofficial knead?'
  - (A) VII
  - (B) VI
  - (C) V
  - (D) IV
  - (E) None of these
23. In step III, which of the following number/word would be at sixth place from the right end ?
  - (A) knead
  - (B) unofficial
  - (C) senseless
  - (D) 144
  - (E) None of these
24. Which of the following would be the last step of the arrangement ?
  - (A) V
  - (B) VII
  - (C) VI
  - (D) X
  - (E) None of these
25. In step V of the rearrangement, '81' is related to '121' and '144' is related to '196' in a certain way. Which of the following would 'reorganize' be related to, following the same pattern ?
  - (A) orderly
  - (B) unofficial
  - (C) tetanus
  - (D) 9
  - (E) None of these



**Directions (26–30) :** In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

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

26. **Statements :** Some pigeons are parrots.

All parrots are owls.

No owl is an eagle.

**Conclusions :** I. All parrots being pigeons is a possibility.

II. If some parrots are pigeons then their being eagles is a possibility.

27. **Statements :** Some ducks are swans.

All ducks are geese.

All geese are crows.

**Conclusions :** I. Some crows are not geese.

II. All crow being swan is a possibility.

28. **Statements :** All pins are keys.

No keys are locks.

No lock is a door.

**Conclusions :** I. Some doors being pins is a possibility.

II. All doors which are pins also being keys is a possibility.

29. **Statements :** No glass is a cup.

Some cups are bowels.

All bowels are jugs.

**Conclusions :** I. No bowl is a glass.

II. All jugs being glasses is a possibility.

30. **Statements :** No Black is White.

No White is Blue.

No Yellow is Blue.

**Conclusions :** I. Some Blacks are Yellow.

II. Some Whites being Yellow is a possibility.

31. Which of the following expressions will be true if the expression  $V \leq W < R \geq N = S \geq M$  is definitely true ?

- (A)  $R \leq V$
- (B)  $R = N$
- (C)  $R > N$
- (D) Either  $R = N$  or  $R > N$
- (E) None of these



32. Which of the following expressions will not be definitely true for the given expression  $V \geq W \geq T \leq U = S \geq R > M > X$  ?
- (A)  $V \geq T$  (B)  $W \geq U$   
 (C)  $S > M$  (D)  $S > X$   
 (E) None of these

**Directions (33–35) :** Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group ?

33. (A) aGeNCY (B) BeNeaTH  
 (C) JuMPeR (D) eSTiMaTe  
 (E) NEuTRoN
34. (A) 5 A 7 (B) 6 E 4  
 (C) 2 B 6 (D) 11 D 10  
 (E) 8 Y 4
35. (A) F 6 R 18 (B) H 8 O15  
 (C) L12 K 11 (D) U21 W 23  
 (E) P 15 Q 17

**Directions (36–37) :** Study the following passage carefully and answer the questions.

Rising prices of commodities have become a source of great concern to the Indian economists at present time. It has caused great hardship to all sections of our society, particularly fixed income groups, like salaried persons, wage earners and pensioners, have been feeling the maximum pinch. They have no means to supplement their income and no savings to fall back upon the economic uncertainty of their future. This also breeds social unrest and causes tension and conflict between the have and the have-nots. There are other adverse effects of price rise too. Inflation induces businessmen to invest their money in non-productive assets like gold and land. Their real worth is not affected by rising prices. High prices also adversely affect the exports of the country and distort the balance of foreign trade.

36. What should be the **course of action** to check rising prices ?
- (A) Accelerating production  
 (B) Checking investment in non-productive assets  
 (C) Control on inflation and keep eye on erring businessmen  
 (D) Effective distribution system  
 (E) Social awareness
37. What is the **effect** of inflation in the context of the passage ?
- (A) It increases competition.  
 (B) It increases foreign trade.  
 (C) It increases agriculture and industrial production.  
 (D) Not mentioned in the passage  
 (E) None of these

**Directions (38–40) :** Study the following information carefully and answer the given questions.

The central bank is scheduled to announce its first midquarter review of monetary policy for 2012-13. The Reserve Bank of India (RBI) has cut the rates for the first time in three years. In its annual credit policy, RBI has slashed short-term lending rate or repo rate by 0.50 bps. The RBI has hinted at a cut in interest rates. Moderation in inflation due to lower economic growth and cooling global oil prices provides room for easing monetary policy.

- (a) It may be good news for all depositors who are planning to make investments.
- (b) It's beneficial for all home loan, auto loan, personal loan borrowers because of low interest rate.
- (c) The sagging economy has prompted concern about balance of payments of the country.
- (d) The cut in the policy in repo rate is an indication of decelerating GDP of the country.

**38.** Which of the following statements (a), (b), (c) and (d) is **definitely false** in the context of the passage ?

- (A) Only (b)
- (B) Only (d)
- (C) Only (a)
- (D) Only (c)
- (E) Both (c) and (d)

**39.** Which of the following statements (a), (b), (c) and (d) is definitely the **cause** of cut in key rates of RBI ?

- (A) Only (d)
- (B) Only (c)
- (C) Only (a)
- (D) Both (c) and (d)
- (E) Both (a) and (c)

**40.** Which of the following statements (a), (b), (c) and (d) is definitely an **effect** according to the passage ?

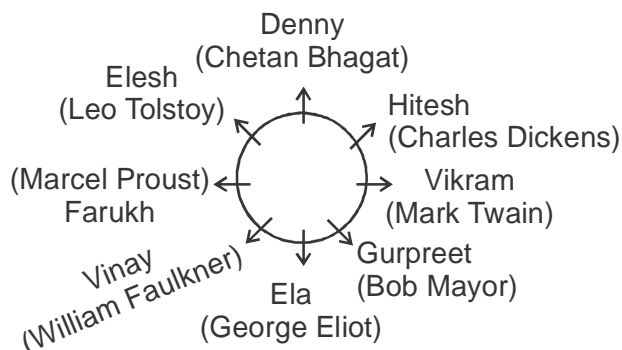
- (A) Only (a)
- (B) Only (b)
- (C) Only (c)
- (D) Only (d)
- (E) None of these

### ANSWER KEY

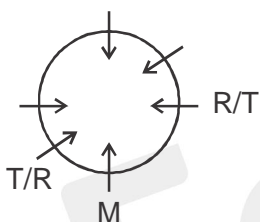
1	2	3	4	5	6	7	8	9	10
B	E	B	C	B	E	D	E	C	E
11	12	13	14	15	16	17	18	19	20
B	D	E	D	E	D	C	D	B	E
21	22	23	24	25	26	27	28	29	30
E	D	A	E	E	A	B	E	B	B
31	32	33	34	35	36	37	38	39	40
D	B	E	D	E	C	E	C	D	B

## SOLUTIONS

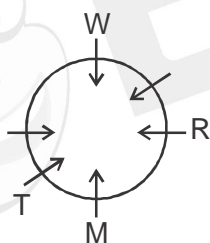
Direction (1-5) :



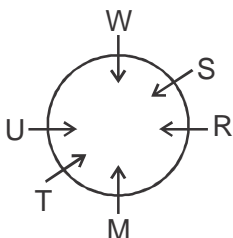
1. (B)
2. (E)
3. (B)
4. (C)
5. (B)
6. (E) From I



From II



From III



From all three statements, M sits second to the left of S. So, all three statements are necessary to answer the question.

7. (D)

**From I and III,**

icecream is cold      tic jic lic      ... (1)

healthy is icecream      jic mic lic      ... (2)

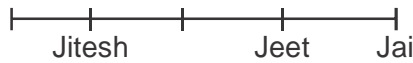

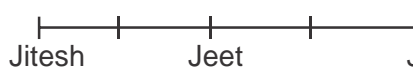
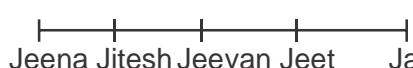
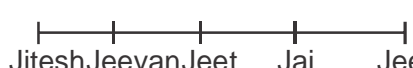
icecream      jic or lic

is      lic or jic

So, the code for 'cold' is 'tic'.

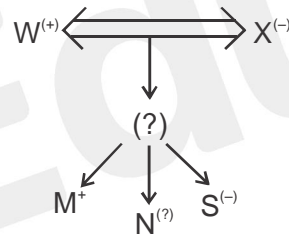
Thus, statements I and III are sufficient.

8. (E) From I.  $P > R, S$   
 From I and II.  $- > - > T > P > R, S$   
 From I, II and III.  $Q > U > T > P > R, S$   
 Hence all together are sufficient

9. (C) From I
- 
- or
- 
- or
- 
- From II and II
- 
- or
- 

Thus I and II together are sufficient.

10. (E) From I M is Brother of N and G Grand-son of W and M is male.  
 From II S is female and sister of M,  
 From III X is Grand mother of M.  
 So, in family tree, the sum of all three statements is as follows :



Here N's gender is not defined So, we can't say whether N is Grandson or Granddaughter of X.

#### Direction (11–15) :

- |                             |                     |          |
|-----------------------------|---------------------|----------|
| monsoon comes India in June | mee nee lee aee bee | ...(I)   |
| monsoon hits India          | aee mee ree         | ...(II)  |
| India will enjoy            | zee yee aee         | ...(III) |
| comes enjoy monsoon         | bee mee zee         | ...(IV)  |
| From I, II and IV monsoon   | mee                 |          |
| From I and IV comes         | bee                 |          |
| From I, II and III India    | aee                 |          |
| From III and IV enjoy       | zee                 |          |
| From II hits                | ree                 |          |
| From I, III and IV will     | yee                 |          |
| in Either 'nee' or 'lee'.   |                     |          |
| June Either 'lee' or 'nee'. |                     |          |

11. (B)  
 12. (B)  
 13. (E)  
 14. (D)  
 15. (E)

**Direction (16–20) :**

25 <sup>th</sup> May	P	Brown	Punjabi / Bhojpuri
26 <sup>th</sup> May	M	Black	Bengali
27 <sup>th</sup> May	R	Pink	English
28 <sup>th</sup> May	U	Green	Punjabi / Bhojpuri
29 <sup>th</sup> May	Q	Yellow	Nepali
30 <sup>th</sup> May	S	White	Kannada
31 <sup>st</sup> May	T	Red	Marathi

16. (D)
17. (C)
18. (D)
19. (B)
20. (E)

**Direction (21–25) :**

The rearrangement takes place in such a way that squares of numbers are arranged from left side with the largest odd and then the smallest odd numbers. After that same for even numbers. Words are arranged from right side-first the ones starting with vowels and then those with consonants as they appear in alphabetical series.

**Input :** 196 narcotic senseless 121 81 orderly tetanus 4 knead unofficial 144 abstract reorganise 9.

**Step I :** 121 196 narcotic senseless 81 orderly tetanus 4 knead unofficial 144 reorganise 9 abstract.

**Step II :** 121 9 196 narcotic senseless 81 tentanus 4 knead unofficial 144 reorganise abstract orderly

**Step III :** 121 9 81 196 narcotic senseless tetanus 4 knead 144 reorganise abstract orderly unofficial

**Step IV :** 121 9 81 196 4 narcotic senseless tetanus 144 reorganise abstract orderly unofficial knead

**Step V :** 121 9 81 196 4 144 senseless tetanus reorganise abstract orderly unofficial knead narcotic

**Step VI :** 121 9 81 196 4 144 senseless tetanus abstract orderly unofficial knead narcotic reorganise

**Step VII :** 121 9 81 196 4 144 tetanus abstract orderly unofficial knead narcotic reorganise senseless

**Step VIII :** 121 9 81 196 4 144 abstract orderly unofficial knead narcotic reorganise senseless tetanus

21. (E)
22. (D)
23. (A)
24. (E)
25. (E)
26. (A)

Some pigeons are parrots conversion All parrots being pigeons is a possibility. Conclusion I follows. Again, All parrots are owls (A) + No owl is an eagle (E) = A + E = E = No parrots is an eagle.

27. (B) Some ducks are swans  $\rightarrow$  conversion  $\rightarrow$  Some swans are ducks (I) + All ducks are geese (A) = I + A = I = Some swans are geese (I) + All geese are crows (A) = I + A = I = Some swans are crows. It means. All crows being swan is a possibility. Hence, conclusion II follows but All geese are crows  $\rightarrow$  conversion  $\rightarrow$  some crows are geese. So, conclusion I doesn't follow
28. (E) All pins are keys (A) + No keys are locks (E) = A + E = E = No pins are locks (E) + No lock is door (E) = E + E = No conclusion. But some relation between door and pin is a possibility. It means some doors being pins is a possibility. Hence, conclusion I follows. And since all pins are keys, conclusion II follows.
29. (B) No glass is a cup + some cups are bowels = E + I = O\* = Some bowels are not glasses. Hence I does not follow. Some cups are bowles + All bowels are jugs = I + A = I = Some cups are jugs. No glass is a cup + Some cups are jugs = E + I = O, 1/2 = Some jugs are not glasses. Hence II does not follow.
30. (B) No Black is White (E) + No White is Blue (E) = E + E = No conclusion. some possible relation between White and Yellow may exists. Hence, some White being Yellow is a possibility.
31. (D)  $V < W < R > N = S > M$   

$$\begin{array}{c} V < W < R > N = S > M \\ \text{combining} \end{array}$$
Check for I.  
So, option I is not true for the given conditions.  

$$\begin{array}{c} V < W < R > N = S > M \\ \text{combining} \end{array}$$
Check for II.  
So, option II is also not true alone.  
Option III is also not true alone.  

$$\begin{array}{c} V < W < R > N = S > M \\ \text{combining} \end{array}$$
Option IV.  
So, either 'R > N' or 'R = N' holds true.
32. (B)  $V > W > T < U = S > R > M > X$   
Check  

$$\begin{array}{c} V > W > T < U = S > R > M > X \\ \text{combining} \end{array}$$
So,  $V > T$  holds true.  

$$\begin{array}{c} V > W > T < U = S > R > M > X \\ \text{combining} \end{array}$$
Check  
Comparison is not possible  
So,  $W > U$  is not definitely true in this expression.
33. (E) All the groups of letters contain vowels in small letters and consonants in capital letters.. Except option [5].
34. (D) In all other groups except 4) the sum of first and third digit are even number 12, 10, 8, 21, 12
35. (E) All the groups have letters followed by numbers which are their positions in alphabetical series. Except [5]. Because the position of 'P' in alphabetical series is 16.
36. (C)
37. (E)
38. (C)
39. (D)
40. (B)

# IBPS SO

## Reasoning

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**Directions (Q. 1-2) :** Read the given informations and answer the questions.

1. Company X-one of the largest automobile manufacturing companies of the country has started its own dedicated Colour Design Department which decides which colour will be given to which model of colour.

Which of the following may not be a reason for starting this colour dedicated department by the said company ?

- (A) Although people usually come with a clear idea about the basic features in a car within a stipulated budget, colour is the trial factor which influences their decision prior to purchase.
- (B) It has been recently suggested by experts that the depth and brightness of colour can be used to accelerate the shape and size of a car so that it appeals to prospective customers.
- (C) Two years ago a similar department was started by company R, one of the biggest competitors of company X.
- (D) As per market research done by the company many customers have chosen cars of competitor companies only because the colour of the cars of company X did not match their expectations.
- (E) As per recent research the colour of the car is an important aspect in the customer is likely to choose a car looking at its colour at first sight.

2. Some preschools in city Y have recently discontinued the physical safety training for toddlers which was compulsorily provided to staff members for three months after joining.

Which of the following may be a reason for the decision taken by some of the schools in city Y ?

- (A) Even after employing trained staff members and providing further training to them, a few parents in city Y do not send their children to preschools as they are worried about the safety of their children.
- (B) A manual of safety is followed by all preschools of city Y.
- (C) Some teachers, who have been associated with these preschools for long, have suggested that the training which was provided to the institute was a little different as compared to the training provided.
- (D) All preschools in city Y have recently started employing only those people who have a certification in physical safety of toddlers and providing additional training simply leads to duplication of what they have already learnt.
- (E) There is not authority in city Y to regulate whether the staff members of schools are provided training.



**Directions (Q. 3-7) :** Study the given information carefully and answer the questions.

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

**Input :** 46 span role 62 79 into main 13 39 deal

**Step 1 :** 79 46 role 62 into main 13 39 deal span

**Step 2 :** 62 79 46 into main 13 39 deal span role

**Step 3 :** 46 62 79 into 13 39 deal span role main

**Step 4 :** 39 46 62 79 13 deal span role main into

**Step 5 :** 13 39 46 62 79 span role main into deal

**Step 6 :** is the last step of the above arrangement as the intended arrangement is obtained.

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

**Input :** 11 east 54 vent kind 35 over 27 71 bowl

3. How many elements are there between '35' and 'kind' in the last step ?  
 (A) Two (B) Four  
 (C) One (D) Three  
 (E) None
4. What is the position of 'bowl' from the right of '71' in the second step ?  
 (A) Seventh (B) Fifth  
 (C) Sixth (D) Second  
 (E) Third
5. Which of the following represent the two consecutive elements to the immediate right of 'over' in the second last step ?  
 (A) bowl, vent (B) 11, bowl  
 (C) vent, kind (D) 71, 11  
 (E) kind, east
6. Which of the third element to the left of the sixth element from the left element in the first step ?  
 (A) over (B) 35  
 (C) bowl (D) east  
 (E) 27
7. In step II, which element appears exactly between '27' and 'over' ?  
 (A) Only 11 (B) Only 71  
 (C) Both kind and 71 (D) Only kind  
 (E) Both bowl and vent



**Directions (Q. 8-13) :** Study the following information and answer the questions.

Seven friends namely, M, N, O, P, Q, R and S attend different language, classes namely, French, English, Spanish, Sanskrit, Chinese, German and Japanese, not necessarily in the same order, from Monday to Sunday (of the same week).

M attends a class on Friday. Only two people attend classes between M and the one who is learning Sanskrit. R attends a class immediately before P. Neither R nor P is learning Sanskrit. Only one person attends a class between R and the one who is learning Spanish. The one who is learning Spanish does not have a class on Monday. N attends a class immediately before the one who is learning French. M is not learning French. Only one person has a class between R and Q. O is learning German. Only two people have classes between O and the one who is learning Chinese. Q is not learning Japanese.

8. Which of the following represent those who have language classes immediately before and immediately after N ?
 

(A) P, M	(B) Q, M
(C) Q, R	(D) Other than those given as options
(E) R, P	
9. Which of the following language is Q learning ?
 

(A) Other than those given as options	(B) Chinese
(C) English	(D) Spanish
(E) Sanskrit	
10. As per the given arrangement Q is related to Chinese and R is related to Japanese in a certain way. To which of the following is P related to in the same way ?
 

(A) Sanskrit	(B) Other than those given as options
(C) Spanish	(D) English
(E) French	
11. Four of the following five form a group as per the given arrangement. Which of the following that does not belong to that group ?
 

(A) Q-Tuesday	(B) N-Thursday
(C) S-Sunday	(D) M-Saturday
(E) P-Friday	
12. On which of the following days does P have a class ?
 

(A) Monday	(B) Thursday
(C) Wednesday	(D) Tuesday
(E) Sunday	
13. Who amongst the following is learning Japanese ?
 

(A) N	(B) M
(C) S	(D) R
(E) Cannot be determined	

14. The agriculture experts of country X experimented the usage of genetically-modified cotton plants to manufacture clothes. After the post-manufacture analysis, it was decided to discontinue the use of such modified plants and grow only the natural ones.
- Which of the following statements (if taken to be true) best supports the decision of the agricultural exports ?
- (A) The trend of polyester clothes has dominated the markets of country X since the past two years but now the demand for cotton clothes has gone up again.
  - (B) The weather conditions of country X is such that the residents of the country have to resort to only woollen clothes.
  - (C) The high rate of pest attack in chemically grown plants as compared to the natural plants makes it unfeasible and uneconomic to grow.
  - (D) Other few genetically grown plants have proved to be successful in country X.
  - (E) Growing of genetically modified plants does not necessitate the use of humus-rich soil and hence is easy to grow.

**Directions (Q. 15-17) :** Read the following information and the sentences A, B, C, D, E and F given below it carefully and answer the given questions.

Town ABC has seen very few takers. 48% flats are lying unsold ever since its construction. Prices should be cut by 20% per sq feet in order to match the ongoing market price of ₹ 6800 per sq feet. This would bring the buyers back and ideal with this slump in sales.

- (A) Market price of the flats are controlled by government which cannot be altered by independent authorities.
  - (B) All present flats are being sold at more than ₹ 8000 per sq feet.
  - (C) The township ABC is located far from the main city and has poor transport facilities for the same.
  - (D) In order to recover the investments made by the builders, they must make a profit of minimum ₹ 10000 per sq feet per flat sold.
  - (E) No buyer is willing to pay a price more than the ongoing market rate.
  - (F) There have been numerous complaints about poor construction material and apathy of builders towards the same by people already residing in the township.
15. Which of the given statements weakens the promise that lack of buyers is only because of the price of the flats ?
- (A) Only D
  - (B) A and B
  - (C) Only A
  - (D) A and E
  - (E) C and F
16. Which of the following may prove that 30% price cut may not be a feasible step to be taken by the builders ?
- (A) Only D
  - (B) A and B
  - (C) Only E
  - (D) E and B
  - (E) Only B
17. Which of the given statements can be concluded from the facts/information given in the statement ?
- (A) E
  - (B) D
  - (C) C
  - (D) A
  - (E) B

**Directions (Q. 18-19) :** Study the given information carefully to answer the questions.

Anupama starts from point K which is 8 m to the East of point B. From point K, she walks 10 m to the North, takes a right turn and then walks for 5 m. She then takes a right turn, walks for 3 m and stops at point M.

Animesh starts from point P which is 4 m to the North of point B. From point P he walks 5 m to the West, takes a right turn and walks for 3 m. He then again takes a right turn and walks for 13 m and stops at point X.

18. What is the distance between point M and X ?
- |         |          |
|---------|----------|
| (A) 3 m | (B) 10 m |
| (C) 5 m | (D) 11 m |
| (E) 8 m |          |
19. In which direction is point K with respect to point P ?
- |                |                |
|----------------|----------------|
| (A) South-East | (B) North-West |
| (C) West       | (D) North      |
| (E) South-West |                |

**Directions (Q. 20-24) :** Study the following information to answer the given questions.

Eight people A, B, C, D, E, F, G and H live on separate floors of an 8-Floor building but not necessarily in the same order. Ground floor is numbered 1, first floor is numbered 2 and so on until the topmost floor is numbered eight.

Only two people live below the floor on which G lives. Only one person lives between G and A. H lives on an odd numbered floor but not on floor number 7.

Only two people live between H and B. B does not live on the topmost floor.

A does not live on the lowermost floor.

C lives immediately below D. Neither C nor E lives on floor number 6.

20. How many people live between the floors on which A and D live ?
- |           |                     |
|-----------|---------------------|
| (A) Three | (B) More than three |
| (C) None  | (D) Two             |
| (E) One   |                     |
21. Who lives on the floor immediately below G ?
- |       |       |
|-------|-------|
| (A) F | (B) E |
| (C) D | (D) B |
| (E) C |       |
22. On which of the following floor numbers does D live ?
- |       |       |
|-------|-------|
| (A) 4 | (B) 1 |
| (C) 8 | (D) 5 |
| (E) 7 |       |
23. 'Which of the following is true 'with respect to F as per the given arrangement ?
- |  |
|--|
| (A) Only three people live between F and B |
| (B) Only three people live above F         |
| (C) F lives on the floor number 6          |
| (D) None of the given options is true      |
| (E) F lives immediately above D            |

24. Who among the following lives on floor number 5 ?
- |       |       |
|-------|-------|
| (A) D | (B) C |
| (C) E | (D) B |
| (E) A |       |

**Directions (Q. 25-29) :** In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

- (A) Either conclusion I or II is true  
 (B) Neither conclusion I nor II is true  
 (C) Both conclusion are true  
 (D) Only conclusion I is true  
 (E) Only conclusion II is true
25. **Statements :**  $N < A = T \geq Z$ ;  $R \geq T$ ;  $Z < S$   
**Conclusions :** I.  $R > N$   
 II.  $S > Z$
26. **Statements :**  $L \leq E = A > P$ ;  $Y > E > R$   
**Conclusions :** I.  $Y \geq L$   
 II.  $A > R$
27. **Statements :**  $D < S \geq L > U$ ;  $Q < S$   
**Conclusions :** I.  $Q < D$   
 II.  $U > Q$
28. **Statements :**  $L \leq E = A > P$ ;  $Y \geq E > R$   
**Conclusions :** I.  $P \geq R$   
 II.  $A \leq Y$
29. **Statements :**  $N < A = T \geq Z$ ;  $R \geq T$ ;  $Z < S$   
**Conclusions :** I.  $R = Z$   
 II.  $Z < R$

**Directions (Q. 30-35) :** In these questions, two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

**Given answer**

- (A) Either conclusion I or II is true  
 (B) Neither conclusion I nor II is true  
 (C) Both conclusions are true  
 (D) Only conclusion I is true  
 (E) Only conclusion II is true
30. **Statements :** All apartments are houses.  
 No apartment is a motel.  
**Conclusions :** I. Some houses being motels is a possibility.  
 II. No house is a motel.

31. **Statements :** All plants are trees.  
Some trees are weeds.  
All weeds are shrubs.  
**Conclusions :** I. No shrub is a plant.  
II. All weeds being trees is a possibility.
32. **Statements :** Some drinks are juices.  
All juices are beverages.  
No beverage is a solid.  
**Conclusions :** I. No juice is a solid.  
II. No drink is a solid.
33. **Statements :** Some drinks are juices.  
All juices are beverages.  
No beverage is a solid.  
**Conclusions :** I. Some drinks are beverages.  
II. All drinks are beverages.
34. **Statements :** All plants are trees.  
Some trees are weeds.  
All weeds are shrubs.  
**Conclusions :** I. At least some trees are shrubs.  
II. All plants being shrubs is a possibility.
35. **Statements :** All snakes are reptiles.  
Some reptiles are turtles.  
No turtle's is a bird.  
**Conclusions :** I. All reptiles being birds is a possibility.  
II. No snake is a turtle.

**Directions (Q. 36-38) :** Study the following information and answer the given questions.

Y is the sister of J. L is the wife of J. L has only one son R. K is the mother of L. K is married to D. D has only one son and only one daughter.

36. As per the given information, how is J related to K ?  
(A) Son (B) Son-in-law  
(C) Niece (D) Nephew  
(E) Daughter-in-law
37. As per the given information, how is R related to Y ?  
(A) Nephew (B) Cannot be determined  
(C) Uncle (D) Niece  
(E) Aunt

38. If L is the sister of B, then how is B related to J ?
- |                   |                          |
|-------------------|--------------------------|
| (A) Sister-in-law | (B) Cannot be determined |
| (C) Brother       | (D) Brother-in-law       |
| (E) Uncle         |                          |

**Directions (Q. 39-42) :** Read the following information to answer the given questions.

P, Q, R, S, T, U, V and W are seated in a straight line but not necessarily in the same order. Some of them are facing South. Only three people sit to the left of T. Only two people sit between T and Q. U sits third to the right of W. W is neither an immediate neighbour of T nor Q. W does not sit at any of the extreme ends of the line. Both the immediate neighbours of S face North. S is not an immediate neighbour of W. Only one person sits between S and P. P faces same direction as W. Immediate neighbours of Q face opposite directions (i.e. if one neighbour faces North then the other South and vice-versa.) Persons sitting at extreme ends face opposite directions. R faces a direction opposite to S.

39. How many persons are seated between T and P ?
- |          |                    |
|----------|--------------------|
| (A) Four | (B) More than four |
| (C) One  | (D) Three          |
| (E) Two  |                    |
40. Which of the following pairs represents persons seated at the two extreme ends of the line ?
- |          |          |
|----------|----------|
| (A) R, T | (B) P, V |
| (C) P, U | (D) Q, R |
| (E) R, S |          |
41. Which of the following is true about V with respect to the given arrangement ?
- |   |
|---|
| (A) Only two people sit between V and Q       |
| (B) Only one person sits to the right of V    |
| (C) None of the given options is true         |
| (D) U is one of the immediate neighbours of V |
| (E) R sits second to the right of V           |
42. Who amongst the following sits to immediate left of R ?
- |       |       |
|-------|-------|
| (A) T | (B) P |
| (C) W | (D) Q |
| (E) S |       |
43. Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that does not belong to that group ?
- |       |       |
|-------|-------|
| (A) R | (B) U |
| (C) P | (D) W |
| (E) T |       |
44. What is the position of U with respect to Q ?
- |                         |                         |
|-------------------------|-------------------------|
| (A) Second to the right | (B) Fifth to the left   |
| (C) Second to the left  | (D) Fourth to the right |
| (E) Third to the left   |                         |

**Directions (Q. 45-46) :** Study the given information carefully and answer the given questions.

L, M, N, O, P, Q, R and S are sitting around a circular table at equal distances between each other, but not necessarily in the same order. Some of the people are facing the centre while some face outside (i.e. in a direction opposite to the centre).

O sits third to the right of L. Both O and L face the same direction. Only three people sit between P and M. P is neither an immediate neighbour of L nor O. M faces outside. R sits to the immediate left of M. Q sits to the immediate right of N. Neither L nor O is an immediate neighbour of N. Both the immediate neighbours of M face the opposite directions. S sits second to the right of R. Both R and Q face the same direction as S. P face a direction opposite to that of N.

- 45.** How many people in the given arrangement face the centre ?
- (A) One (B) Four  
(C) Five (D) Three  
(E) Two
- 46.** What is N's position with respect to P ?
- (A) Immediate left (B) Third to the right  
(C) Fourth to the right (D) Second to the left  
(E) Immediate right
- 47.** Four of the following five are alike in a certain way based on the given seating arrangement and so form a group. Which is the one that does not belong to that group ?
- (A) L (B) S  
(C) N (D) Q  
(E) R
- 48.** Which of the following is true regarding Q as per the given arrangement ?
- (A) Only three people sit between Q and R  
(B) Q sits second to right of O  
(C) Q faces outside  
(D) None of the given statements is true  
(E) Q sits second to the left of P
- 49.** Who amongst the following sits exactly between M and the one who sits second to the left of P ?
- (A) L (B) N  
(C) R (D) Q  
(E) O
- 50.** Who is sitting to immediate left of S ?
- (A) L (B) Q  
(C) P (D) N  
(E) O



**ANSWER KEY**

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





## SOLUTION

1. (B)

2. (D)

### Direction (3-7) :

According to the rule in given example, the appropriate steps for the given input are

**Input :** 11 east 54 vent kind 35 over 27 71 bowl

**Step I :** 71 11 east 54 kind 35 over 27 bowl vent

**Step II :** 54 71 11 east kind 35 27 bowl vent over

**Step III :** 35 54 71 11 east 27 bowl vent over kind

**Step IV :** 27 35 71 11 bowl vent over kind east

**Step V :** 11 27 35 54 71 vent over kind east bowl

3. (B) From the last step of given input, there are four elements between '35' and 'kind', which are 54 71 vent over.

4. (C) From the step II of given input, 'bowl' is sixth from the right of '71'.

5. (E) In second last step, 'kind', east' are two consecutive elements to the immediate right of 'over'.

6. (D) 'east' is the third element to the left of the sixth element from the left element in the first step.

7. (E) In step II, both 'bowl' and 'vent' appears exactly between '27' and 'over'.

### Direction (8-13) :

By the given information, day to work, friends name and language are arrange in following table

Day	Mon	Tues	Wed	Thur	Fri	Sat	Sun
Friend's Name	Q	N	R	P	M	S	O
Language	English	Sanskrit	French	Chinese	Spanish	Japanese	German

From the above table, we get the answer of all questions.

8. (C)

9. (C) Q is learning English language on Monday.

10. (B) As per given arrangement, Q and R attend their language class after two day i.e. Chinese and Japanese according to this new arrangement, P is related to the language German.

11. (B)

12. (B) From the arrangement, P has a class on Thursday.

13. (C) From the arrangement, S is learning Japanese.

14. (D)

15. (E)

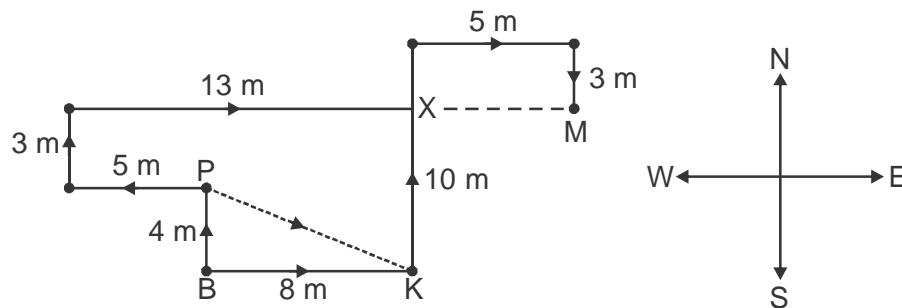
16. (A)

17. (E)

**Direction (18-19) :**

Anupama starts from point K.

Animesh starts from point P.



18. (C) From the figure,  
Distance, between point M and X = 5 m
19. (A) From the figure, K is in South-East with respect to point P.

**Direction (20-24) :**

According to given information in questions, we get the following arrangement of floor and people :

Floor	People
8	D
7	C
6	F
5	A
4	B
3	G
2	E
1	H

20. (D) From the arrangement, two people live between the floors on which A and D live. (i.e., C, F).
21. (B) From the arrangement E lives on the floor immediately below G.
22. (C) According to the arrangement, D lives on 8th floor.
23. (C) According to the arrangement, statement (c) 'F lives on the floor number 6' is true.
24. (E) According to the arrangement, A lives on floor number 5.
25. (C) From the statement

$$N < A = T \geq Z \text{ } S / R \geq T$$

From conclusion I,

$$R \geq T = A > N$$

$$\Rightarrow R \geq T > N$$

$$\Rightarrow R > N$$

Conclusion I is true.

From conclusion II

$$Z < S \quad (\text{from statement})$$

Conclusion II is also true.

26. (E) From the statement  
 $L \leq E = A > P; Y > E > R$

For conclusion I,

i.e.  $Y > E \geq L$

So, Y is always greater than L.

i.e.  $Y > L$

For conclusion II,

i.e.  $A = E > R$

i.e.  $A > R$

So, conclusion II is true.

27. (B)

28. (E) From the statements,

$$L \leq E = A > P; Y \geq E > R$$

For conclusion I,  $P < A = E > R \Rightarrow P < E > R$

P and R both less than E

So, conclusion I is not true.

For conclusion II,

$$A = E \leq Y$$

$$\Rightarrow A \leq Y$$

So, conclusion II is true.

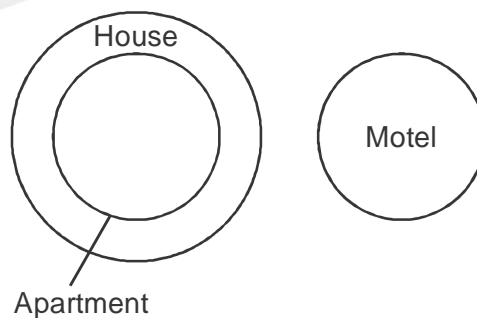
29. (A) From the statement,  $N < A = T \geq Z; R \geq T; Z < S$

For conclusion I and II

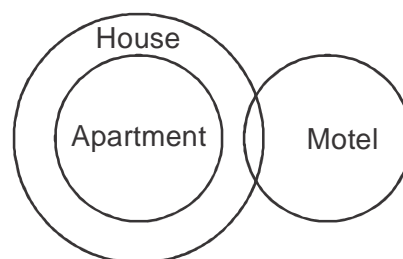
$$R \geq T \geq Z \Rightarrow R \geq Z$$

So, either conclusion I or II is true.

30. (A) According to the question,



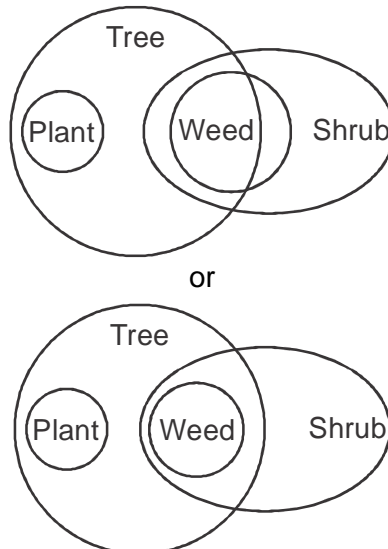
or



from the diagram,

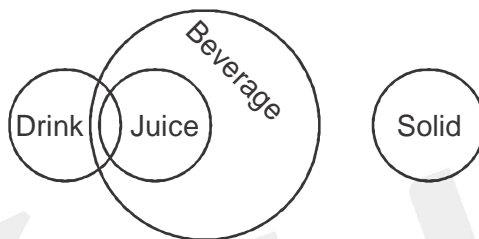
Either conclusion I or II is true.

31. (E) According to the question,



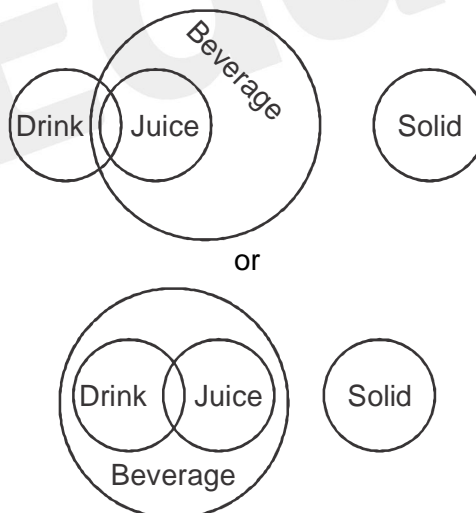
From the diagram, only conclusion II is true.

32. (D) According to the question,



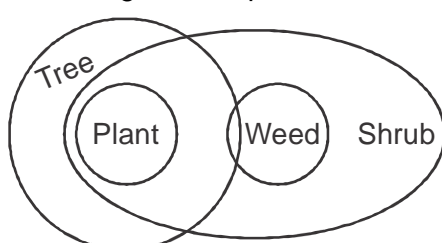
From the diagram only conclusion I is true.

33. (A) According to the question,



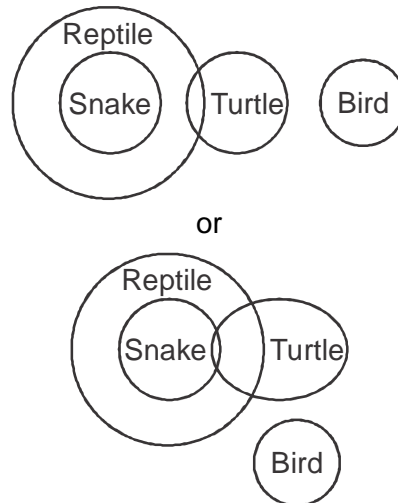
From the diagram,  
Either conclusion I or II is true.

34. (C) According to the question,



From the diagram,  
Both conclusions are true.

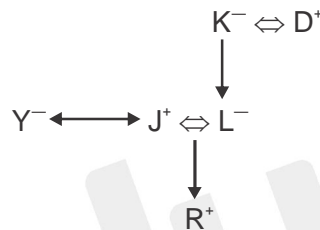
35. (B) According to the question,



From the diagram, Neither condusion I nor II is true.

**Direction (36-38)**

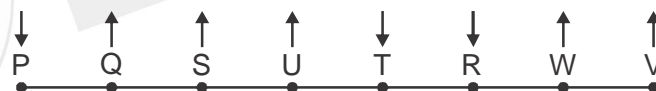
As per the given information, the relation graph of family members is shown below



36. (B) Clearly, J is the son-in-law of K.
37. (A) Clearly, R is the nephew of Y.
38. (B) As gender of B is not known, therefore relation of B with J cannot be determined.

**Direction (39-44) :**

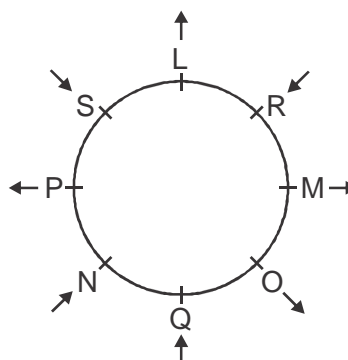
As per the given information, seating arrangement persons is given below



39. (D)
40. (B)
41. (C)
42. (C)
43. (B)
44. (A)

**Direction (45-50) :**

As per the given information, seating arrangement eight person is as below



- 45. (B)
- 46. (A)
- 47. (A)
- 48. (E)
- 49. (E)
- 50. (A)

