

# REASONING ABILITY

**Dream Big Institution** 



### **IBPS PO Prelims Memory Based Paper -- Reasoning Ability**

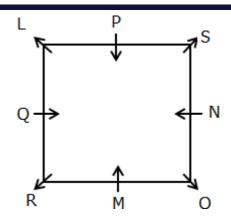
# Directions (1-5): Study the following information carefully and answer the given questions. (Level-Easy)

Eight persons - L, M, N, O, P, Q, R and S are sitting around a square table in such a way that four of them are sitting at the corners and facing away from the centre, while four of them are sitting in the middle of the sides and facing the centre.

N is an immediate neighbour of O, who sits at the corner of the table. R sits third to the left of N. M sits to the immediate left of R. L sits three places away from M. The number of persons sitting between L and N is **one more** than the number of persons sitting between O and S, when counted from the right of both L and S. Q sits second to the right of P.

- 1. How many persons sit between R and P, when counted to the left of R?
- a) One
- b) Two
- c) Three
- d) Four
- e) None
- 2. Who among the following person sits second to the right of the one who sits to the immediate left of L?
- a) Q
- b) O
- c) The one who sits to the immediate left of R
- d) N
- e) The one who sits opposite to O
- 3. Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which one of the following does not belong to the group?

a) L
b) <b>N</b>
c) S
d) O
e) R
4. If the positions of P and O are interchanged in the same way the positions of Q and M are interchanged, then who among the following person sits second to the left of M?
a) P
b) R
c) S
d) Q
e) <b>O</b>
5. If all the persons are sitting in alphabetical order from L in a clockwise direction, then how many persons are unchanged in their position (excluding L)?
a) Two
b) Four
c) Three
d) One
e) None
Directions (1-5):   Cam Big Institution   1. Answer: d
1. Answer: d
2. Answer: c
3. Answer: b (All the persons are sitting at the corners except option b)
4. Answer: e
5. Answer: d
Final arrangement:



### **Common Explanation:**

We have,

•

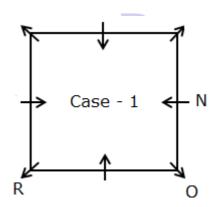
N is an immediate neighbour of O, who sits at the corner of the table.

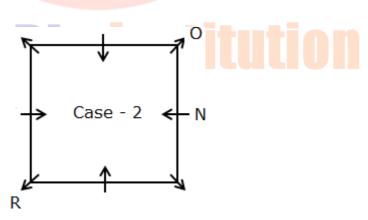
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R sits third to the left of N.

•

From the above conditions, we have two possibilities,





Again we have,

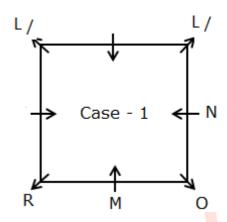
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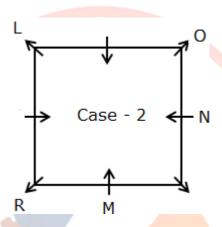
M sits to the immediate left of R.

•

L sits three places away from M.

•





Again we have,

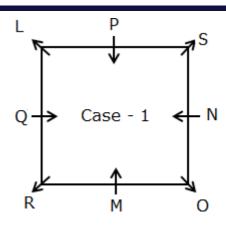
The number of persons sitting between L and N is **one more** than the number of persons sitting between O and S, when counted from the right of both L and S.

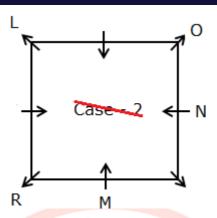
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Q sits second to the right of P.

•

While applying the above conditions, Case 2 gets eliminated, because can't place S. Thus, case 1 gives the final arrangement.





Directions (6-9): In the given questions, the relationship between different elements is shown in the statements followed by some conclusions. Find the conclusion which is definitely true.(Level-easy)

#### 6. Statements:

$$F > W = R > S \ge T$$
;  $K < G \le R > D$ 

#### **Conclusions:**

I. S > G

II.  $F \ge K$ 

- a) Only conclusion I is true
- b) Only conclusion II is true
- c) Either conclusion I or II is true

### d) Neither conclusion I nor II is true

e) Both conclusions I and II are true

### Answer: d)

### **Explanation:**

$$\mathsf{F} > \mathsf{W} = \mathsf{R} > \mathsf{S} \geq \mathsf{T}; \, \mathsf{K} < \mathsf{G} \leq \mathsf{R} > \mathsf{D}$$

I. 
$$S > G => G \le R > S =>$$
 **False**

II. 
$$F \ge K \Rightarrow F > W = R \ge G > K \Rightarrow False$$

Hence, Option D is correct.

#### 7. Statements:

$$Y < J = E \le U < Q; P = J \ge A \ge X$$

#### **Conclusions:**

$$I. X = E$$

II. 
$$J > X$$

- a) Only conclusion I is true
- b) Only conclusion II is true
- c) Either conclusion I or II is true
- d) Neither conclusion I nor II is true
- e) Both conclusions I and II are true

Answer: c)

### **Explanation:**

$$Y < J = E \le U < Q; P = J \ge A \ge X$$

II. 
$$J > X = E = J \ge A \ge X = False$$

But on combining both, either conclusion I or II is true. Hence, Option C is correct.

### 8. Statements:

$$H < X < E < T = R > K; A < F < R = Y$$

### **Conclusions:**

I. 
$$X < Y$$

II. 
$$K > A$$

### a) Only conclusion I is true

- **b)** Only conclusion II is true
- c) Either conclusion I or II is true
- d) Neither conclusion I nor II is true
- e) Both conclusions I and II are true

Answer: a)

### **Explanation:**

$$H < X < E < T = R > K$$
;  $A < F < R = Y$ 

$$I. X < Y => X < E < T = R = Y => True$$

II.
$$K > A => K < R > F > A => False$$

Hence, Option A is correct.

#### 9. Statements:

 $P > T \ge F = U < I > E; D < N < U \le B$ 

#### **Conclusions:**

- I. T > D
- II. N < I
- a) Only conclusion I is true
- b) Only conclusion II is true
- c) Either conclusion I or II is true
- d) Neither conclusion I nor II is true
- e) Both conclusions I and II are true

Answer: e)

### **Explanation:**

$$P > T \ge F = U < I > E; D < N < U \le B$$

II. 
$$N < I \Rightarrow N < U < I \Rightarrow True$$

Hence, Option E is correct.

# Directions (10-12): Study the following information carefully and answer the given questions. (Level-Easy)

Tanya starts walking towards the north for 5m, then takes a right turn and walks for 4m to reach Point P. Then she takes a left turn and walks for 3m, then she turns towards her right and walks for 6m to reach Point Q. Again, she turns towards her right and walks for 8m to reach Point R, then she turns towards her left and walks for 2m. Then she takes two consecutive right turns and walks for 4m and 8m to reach Points S and T, respectively.

### 10) What is the shortest distance between Points P and Q?

- a.  $2\sqrt{2}\sqrt{2}$ m
- h. √5√5m
- c.  $3^{\sqrt{5}\sqrt{5}}$ m
- **d.** 5m

- **e.** 3m
- 11) Point T is in which direction with respect to Point R?
- a. South-west
- **b.** North
- c. South-east
- **d.** North-west
- e. North-east
- 12) Four of the five are related to each other in a certain way and thus form a group, find the odd one out which doesn't belong to the same group?
- a) SP
- b) TQ
- c) PT
- d) SQ
- e) PR

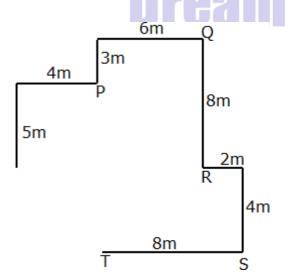
Directions (10-12):

10) Answer: c

11) Answer: a

12) Answer: c (only in option C both points are in same line)

**Solution:** 





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Directions (13-16): Study the following statements and then decide which of the liven conclusions logically follows from the given statements, disregarding commonly mown facts.

#### 3) Statements:

nly a few States are capitals

II capitals are country

lo country is a city

ome cities are urban

#### conclusions:

- . Some Urban can never be capital
- All countries being state is a possibility
- ) Only conclusion I follows
- ) Only conclusion II follows
- ) Either conclusion I or II follows
- Neither conclusion I nor II follows

### ) Both conclusions I and II follow

#### 4) Statements:

Inly a few cars are bikes

Inly bike is bicycle

lo car is auto

ome autos are buses

#### conclusions:

- . All bicycles can never be bus
- Some bikes being auto is not a possibility

#### ) Only conclusion I follows.

- ) Only conclusion II follows.
- ) Either conclusion I or II follows.



- ) Neither conclusion I nor II follows.
- ) Both conclusions I and II follow.

#### 5) Statements:

- II ACs are fans
- ome fans are coolers
- only a few coolers are blowers
- lo blower is lighter

#### onclusions:

- . All coolers being Ac is not a pos<mark>sib</mark>ility
- All coolers can be lighter
- ) Only conclusion I follows.
- ) Only conclusion II follows.
- ) Either conclusion I or II fo<mark>ll</mark>ows.

#### ) Neither conclusion I nor II follows.

) Both conclusions I and II follow.

#### 6) Statements:

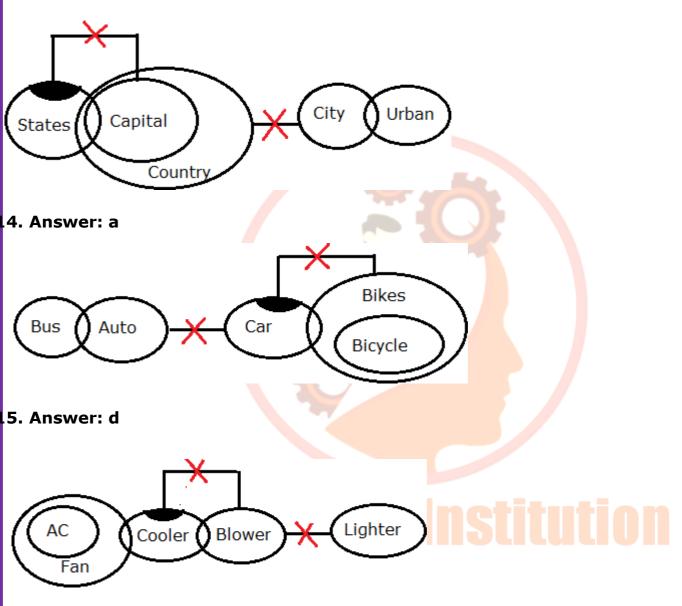
- nly addition is subtraction.
- only a few additions are divisions.
- II divisions are multiplication.
- only a few multiplications are sum.

#### conclusions:

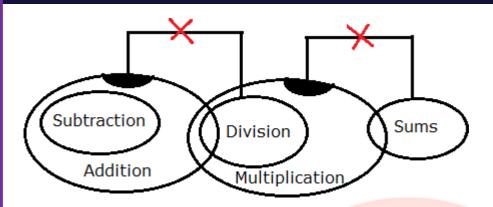
- . Some additions are multiplications
- I. All subtractions can never be sum
- ) Only conclusion I follows.
- ) Only conclusion II follows.
- ) Either conclusion I or II follows.
- ) Neither conclusion I nor II follows.
- ) Both conclusions I and II follow.

### irections (13-16):

### 3. Answer: e



6. Answer: e



17) If in the number "798754862" one is added to each odd positioned numbers whereas two is subtracted from each even positioned numbers from the left end, and then digits are rearranged in ascending order, then what is the product of fourth digit from the left end and the third digit from the right end?

- a) 24
- b) 27
- c) 82
- d) 45
- e) None of these

Answer: D

Explanation:

798754862

879**5**62**9**43

Thus, required product =  $5 \times 9 = 45$ 

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# Direction (18-21): Study the following information carefully and answer the given questions

A certain number of persons are sitting in a linear row facing north.

Only three persons sit between E and K. K sits fifth to the right of C. C sits adjacent to I, who sits at one of the extreme ends. As many person sits between I and K as between C and H. D and H are immediate neighbors. T sits immediate left of A, who sits third to the right of D.

The number of persons sbetween A and H.	sitting to	the	right of	A is	twice	the	number	of	persons	sittin
18. How many persons	are sitti	ng in	a linear	row	ı?					
a) 20										
b) 18										
c) 19										
d) 17										
e) 21										
19. Who among the follow	owing p	ersoi	n s <mark>it</mark> s fift	th to	the le	ft of	A?			
a) H										
b) D										
c) <b>K</b>			1							
d) E										

### 20. Which of the following statement is/are true with respect to the final arrangement?

- a) Only seven persons sit to the left of K
- b) T sits second to the right of D
- c) Only three persons sit between A and H
- d) Both a and b
- e) Both b and c

### 21. How many persons are sitting between A and E?

a) Five

e) C

- b) As many persons sit between T and I
- c) Ten
- d) As many persons sit to the left of D
- e) Six

Directions (18-21)

18. Answer: b

19. Answer: c

20. Answer: e

21. Answer: d

#### **Final arrangement:**



# Direction (22-26): Study the following information carefully and answer the given questions

Five boxes-A, B, C, D and E are kept one above another in a single stack, but not necessarily in the same order. Each box has different fruits- Apple, Mango, Grapes, Guava and Kiwi.

Only two boxes are kept between box B and the box which has Kiwi. Box D is kept immediately above the box which has kiwi. Only one box is kept between boxes C and D, which does not have Guava. As many boxes kept below C as above the box which has Apple. Only two boxes are kept between box E and the box which has mango. Box A is kept below the box which has Guava.

### 22. Box A has which of the following fruits?

- a) Mango
- b) Guava
- c) Kiwi
- d) Apple
- e) Grapes

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### 23. How many boxes are kept above box E?

- a) One
- **b)** Two
- c) Three
- d) Four
- e) No box

### 24. Which of the following box is kept two boxes above the box which has grapes?

a) Box E

- b) The box which has Kiwi
- c) Box C
- d) The box which has apple
- e) None of these
- 25. What is the position of box D with respect to the box which has guava?
- a) Immediately below
- b) Two boxes above
- c) Three boxes below
- d) Immediately above
- e) Two boxes below
- 26. As many boxes kept between box B and \_\_\_\_\_ as between box A and \_\_\_\_ respectively.
- a) E, the box which has apple
- b) D, C
- c) The box which has grapes, E
- d) C, D
- e) The box which has kiwi, C

#### Directions (22-26)

22. Answer: c

23. Answer: a

24. Answer: d

25. Answer: a

26. Answer: c

### **Final arrangement:**

Boxes	Fruits		
В	Apple		
E	Guava		

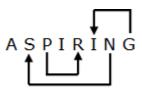
D	Grapes
Α	Kiwi
С	Mango

27. How many such pairs of letters are in the word "ASPIRING" which has as many letters between them as there are in the English alphabetical series (both forward and backward)?

- a) Two
- b) Three
- c) One
- d) Four
- e) More than four

Answer: b

### **Explanation:**



28. If a four-letter meaningful word can be formed by using the fourth, fifth, eighth and tenth letters from the left end of the word "INTERCHANGE", then what is the third letter from the left end of the newly formed word? Mark X as your answer, if more than one word is formed. Mark Z, if no meaningful word can be formed.

- a) A
- b) G
- c) R
- d) **X**
- **e)** Z

Answer: d

**Explanation:** 

INTERCHANGE -> E, R, A, G -> Gear, Rage

**Topic: Puzzle** 

**Sub Topic: Table based puzzle** 

**Sub Type: Table based puzzle-Single variable** 

Directions (29-31): Study the following information carefully and answer the given questions.

Nine persons – N, P, Q, S, U, V, W, Y and Z are living in three different cities viz. Barcelona, Dehradun and Texas. At least two persons but not more than four persons live in the same city.

Q lives in Barcelona. Only P and Z live in the same city. S and V live in the different cities. W lives in the same city as S. Q doesn't live with W. W and U live in the same city. N neither lives with V nor in Texas.

### 29. Who among the following person lives with S?

- a) U
- b) N
- c) Q
- d) Z
- e) Both a and b

### 30. Who among the following person lives in Texas?

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- a) S
- b) W
- c) V
- d) **P**
- e) Y

# 31. Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which among the following does not belong to the group?

- a) VY
- b) NV
- c) QV
- d) US

e) YQ

Directions (29-31):

29) Answer: e

30) Answer: d

31) Answer: b (All the given pair of persons live in the same city, except option b)

City	Barcelona	Dehradun	Texas
Persons	QVY	SNWU	PZ

**Topic: Puzzle** 

**Sub Topic: Month with date based puzzle** 

Sub Type: Month with date based puzzle-Two variable

## Directions (32-35): Study the following information carefully and answer the given questions.

Six persons – A, B, C, D, E and F graduated on two different dates either 9<sup>th</sup> or 28<sup>th</sup> of three different month viz. May, June and July of the same year. Each person is from different cities viz. Chennai, Kerala, Kolkata, Goa, Kanpur and Mumbai.

A graduated on an even numbered date in the month having an odd number of days. Only two persons graduated between A and the one who is from Kolkata. E graduated after the one who is from Kolkata and on an even numbered date. As many persons graduated after E as before C. The one who is from Kerala graduated on an odd numbered date of immediate following month of C. D and the one who is from Goa graduated in the same month. F graduated immediately after the one who is from Goa. B and the one who is from Kanpur graduated on different dates. E doesn't from Mumbai.

### 32. Who among the following person is graduated on June 28..?

- a) The one who is from Kanpur
- b) A
- c) F
- d) **B**
- e) None of these

# 33. The one who is from Mumbai graduated in which of the following month and date?

- a) May 9<sup>th</sup>
- b) June 28<sup>th</sup>
- c) July 9<sup>th</sup>
- d) July 28<sup>th</sup>
- e) May 28<sup>th</sup>

## 34. Who among the following person is graduated in the same month as the one who is from Chennai?

- a) C
- b) B
- c) **F**
- d) D
- e) A

### 35. Which of the following statement is / are true based on the given information?

- a) The one who is from Goa and A graduated in same date
- b) F is from Kolkata
- c) C graduated immediately before the one who is from Mumbai
- d) Only two persons graduated between D and E
- e) All the given statements are true

### Directions (32-35):

32) Answer: d

33) Answer: e

34) Answer: c

35) Answer: e

### Final arrangement

Month	Date	Persons	City
May	9	O	Kanpur

	28	А	Mumbai		
June	9	D	Kerala		
	28	В	Goa		
July	9	F	Kolkata		
	28	Е	Chennai		

