

IN – EQUALITY & SYLLOGISM

Direction : (Que No. 1-5) In the following questions, the symbols @, #, %, \$, & and © are used with the meaning as illustrated below:

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

'P©Q' means 'P is not equal to Q'.

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

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

'P@Q' means 'P is neither greater than nor equal Q'.

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

Now in each of the following questions assuming the given statement to be true, find which of the three conclusions I, II and III given below them is/are definitely true and give your answer accordingly.

1: Statements:

A + 2B % C + D; C \$ D + E; A - E \$ D - B

Conclusions:

I. B % D

II. 2D © B

III. B \$ 2D

1. None is true

2. Only I is true

3. Either II or III and I is true

4. Either II or III is true

5. All are true

2: Statements:

2B \$ 3C; A + D \$ B + C; 2C + D % 3B + A

Conclusions:

I. C % 2K

II. 5C @ 2D

III. C # 2K

1. Either I or III and II is true

2. Only I is true

3. Only III is true

4. Either I or II is true

5. All are true

3: Statements:

A + B \$ 2C; C + D \$ 2A; 2A + 3C % 3E

Conclusions:

I. D + 2B \$ 3C

II. B + 2D & 3A

III. 3E @ 4C + D

1. None is true

2. Only II is true

3. Only I and III are true

4. Only II and III are true

5. All are true

4: If A + D % C + E; C + D \$ 2B; C + D @ B + E. Which of the following it definitely follows?

1. B + D % C + E

2. B + E @ A + D

3. A + B % 2D

4. B + C @ A + D

5. None Follows.

5: If A + B \$ C + D and B + C @ A + D; then which one of the following is definitely wrong?

1. B @ A

2. A % C

3. C % D

4. D @ B

5. None

Directions (Q.6-10) In each of the questions below, Some statements are given followed by some conclusions. You have to consider the statements to be true even if they seem to be at variance with commonly known facts. You have to decide which

of the following conclusions logically follows from the given statements. Give answer.

6: Statements:

All rivers are water.

Some water is pond.

No pond is tree.

All trees are jungle.

Conclusion:

Some rivers are pond.

Some water is not tree.

All rivers being jungle is a possibility.

Options

1. Only I.

2. Only III.

3. II and III.

4. I and II.

5. None follows

7: Statements:

Some triangles are square.

All squares are cube.

No cube is circle.

Some circles are rectangle.

Conclusion:

All triangles being circle is a possibility.

No square is circle.

Some triangle is cube.

Options

1. Only II.

2. Only III.

3. I and III.

4. II and III.

5. None follows

8: Statements:

No black is orange.

All yellow is orange.

Some yellow is green.

All green is pink.

Conclusion:

Some orange are pink.

All orange being yellow is a possibility.

Some green is not black.

Options

1. Only I.

2. Only III.

3. I and III.

4. Only II.

5. All follow.

9: Statements:

Some cats are white.

Some white are dog.

All dogs are blue.

No dog is monkey.

All monkeys are tall.

Conclusion:

Some tall is not dog.

Some cat is dog.

All blue being monkeys is a possibility.

Options

1. Only I.

2. I and III.

3. II and III.

4. Only II.

5. All follow.

10: Statements:

All pens are pencil.

All pencils are eraser.
Some erasers are colour.
Some colours are brush.

Conclusion:

All erasers are pen.
Some brush is pencil.
Some erasers are colour.

Options

- | | |
|-----------------|--------------|
| 1. I and III. | 2. Only III. |
| 3. II and III. | 4. I and II. |
| 5. None follows | |

11: The question below contains seven statements followed by five sets of combinations of three. Choose the set in which the statements are logically related.

- (1) All books are having pages.
- (2) All kings are having pages.
- (3) All kings are books.
- (4) Some heavy things are having pages.
- (5) Some heavy things are books.
- (6) Some books are heavy.
- (7) Some heavy things are having pages.

- | | |
|---------------------|------------|
| 1. 1, 2, 3 | 2. 6, 1, 4 |
| 3. 4, 6, 1 | 4. 1, 5, 7 |
| 5. Both (2) and (4) | |

12: In the question below are given three statements followed by three conclusions I, II and III. You to take the three given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements:

All tables are sitars.
All sitars are harmoniums.
All harmoniums are violins.

Conclusions:

- I. All violins being tables is a possibility
- II. Some violins are definitely sitars
- III. All harmoniums are sitars

- | | |
|------------------|--------------------|
| 1. All follow | 2. Only II follow |
| 3. Only I follow | 4. I and II follow |
| 5. None follows | |

13: The question contains six statements followed by five sets of combinations of three. Choose the set in which the statements are logically related.

- (1) Looting is a crime.
- (2) Some crooked people are criminals.
- (3) All those involved in looting are criminals.
- (4) Some crooked people are involved in looting.
- (5) All criminals are looked down in society.
- (6) Some crooked people are not criminals.

- | | |
|------------------|------------|
| 1. 1, 4, 6 | 2. 3, 6, 2 |
| 3. 1, 2, 6 | 4. 3, 4, 2 |
| 5. None of these | |

14: In the question below are given two statement followed by two conclusions number I and II. You have to take the given statements to the true even if they seem to be at variance with commonly known facts. Read all the conclusion and then decide which of the

given conclusions logically follow from the given statement, disregarding commonly known facts.

Statements:

Some gases are liquids.
All liquids are water

Conclusions:

- I. All gases being water is a possibility
 - II. All such gases which are not water can never be liquids
1. Only conclusion I follows
 2. Only conclusions II follows
 3. Either conclusion I or conclusions II follows
 4. Neither conclusions I nor conclusions II follows
 5. Both conclusions I and conclusions II follow

15: In the question below are given four statements followed by three conclusions numbered I, II and 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.

Statements:

All parrots are peacocks.
No peacock is a bird.
All birds are animals.
Some animals are crow.

Conclusions:

- I Some birds are crows.
- II All parrots being animals is a possibility.
- III All crows are peacock is a possibility.

- | | |
|---------------------------|--------------------------|
| 1. Only II and III follow | 2. Only II follows |
| 3. All follows | 4. Only I and III follow |
| 5. Only I follows | |

16: In the following question assuming the given statements to be true, find which of the conclusion among given five conclusions is/are definitely true and then give your answers accordingly.

Statements:

$M \geq O = N$; $I \geq G > R$; $N > Z$; $Z \geq I$

Conclusions:

- I. $R < I$
- II. $O < Z$
- III. $Z < M$
- IV. $G \leq Z$
- V. $M = N$

1. Both conclusions I and II are true.
2. Conclusion I, III and IV are true.
3. Both conclusion III and IV are true.
4. Either conclusion I or III is true.
5. Only conclusion V is true.

17: In the following question assuming the given statements to be true, find which of the conclusion among given three conclusions is /are definitely true and then give your answers accordingly.

Statements: $T < S$; $S \leq U$; $L > U$; $R \geq U$

Conclusions:

- I. $R \geq S$
 - II. $L > S$
 - III. $T < U$
- | | |
|----------------------------|-----------------------------|
| 1. Only III is true | 2. Only I is true |
| 3. Only I and III are true | 4. Either II or III is true |

5. All are true

18: In the following question assuming the given statements to be true, find which of the conclusion among given three conclusions is /are definitely true and then give your answers accordingly.

Statements: $A \leq K$; $K > P$; $P = O$

Conclusions:

I. $A \geq P$

II. $K > O$

III. $O > A$

1. Only III is true

2. Only I and II are true

3. Only II is true

4. None is true

5. All are true

Directions(19-23): In the following questions, the symbols \$, %, *, & and © are used with the following meaning as illustrated below:

'A % B' means 'A is greater than B'.

'A \$ B' means 'A is not greater than B'.

'A * B' means 'A is neither greater than nor equal to B'.

'A & B' means 'A is either greater than or equal to B'.

'A © B' means 'A is neither smaller than nor greater than B'.

Now in each of the following questions assuming the given statements to be true, find which of the conclusion/s given below them is/are definitely true?

19: Statements:

$R * A$, $A \$ M$, $P \& M$, $M \$ C$

Conclusions:

I. $P \% R$

II. $A \$ P$

III. $P \% C$

1. Only Conclusion I is true.

2. Both Conclusions I and II are true.

3. Either Conclusion I or III is true.

4. Neither Conclusion I nor III is true.

5. Either Conclusions I or II and III are true.

20: Statements:

$A \$ S © D$, $Z \& X © A$, $C \% S$

Conclusions:

I. $S \% Z$

II. $D * C$

III. $X * C$

1. Only Conclusion I is true.

2. Both Conclusions II and III are true.

3. Either Conclusion II or III is true.

4. Neither Conclusion I nor III is true.

5. Either Conclusions I or II and III are true.

21: Statements:

$F © G$, $F \% H \& V$, $B \$ H$

Conclusions:

I. $F \% V$

II. $G © H$

III. $V \% B$

1. Only Conclusion I is true.

2. Both Conclusions I and II are true.

3. Either Conclusion I or III is true.

4. Neither Conclusion I nor III is true.

5. Either Conclusions I or II and III are true.

22: Statements:

$E \% J$; $J \& H$; $H © D$; $D \$ C$; $D \% F$

Conclusions:

I. $E \% C$

II. $F * E$

III. $J \% F$

1. Only Conclusion I is true.

2. Both Conclusions I and II are true.

3. Both Conclusions II and III are true.

4. Neither Conclusion I nor III is true.

5. Either Conclusions I or II and III are true.

23: Statements:

$Z © Y$; $Y \& V$; $W \% V$; $W \$ R$

Conclusions:

I. $W \& Y$

II. $R \% V$

III. $V \$ Z$

1. Only Conclusion I is true.

2. Both Conclusions I and II are true.

3. Both Conclusions II and III are true.

4. Neither Conclusion I nor III is true.

5. Either Conclusions I or II and III are true.

24: In the following question assuming the given statements to be true, find which of the conclusion among given three conclusions is /are definitely true and then give your answers accordingly.

Statements: $6 < 2$; $5 > 2$; $7 = 6$; $8 > 6$

Conclusions:

I. $8 > 7$

II. $8 > 5$

III. $6 > 2$

1. None is true

2. Only I is true

3. Only II is true

4. Only III is true

5. All are true

25: In the following question assuming the given statements to be true, find which of the conclusion among given three conclusions is /are definitely true and then give your answers accordingly.

Statements: $\$ < @$; $@ > \%$; $\% = \&$; $\& < 4$

Conclusions:

I. $\$ \geq 4$

II. $@ > \&$

III. $4 > \%$

1. None is true

2. Only I & II are true

3. Only II is true

4. Only II & III are true

5. All are true

Direction (26-29):- In the following question three statements are given, followed by two conclusions. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements and select the appropriate option.

26: Statement I: All pages are books

Statement II: No book is a register

Statement III: Some registers are notebooks

Conclusion I: Some books can be notebooks

Conclusion II: All pages can be notebooks

1. Conclusion I only

2. Conclusion II only

3. Both the conclusions follow

4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

27: Statement I: Some pens are pencils
Statement II: All erasers are pencils
Statement III: No eraser is a ruler
Conclusion I: No pencil can be ruler
Conclusion II: All pens can be rulers

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

28: Statement I: All tables are desks
Statement II: All chairs are class
Statement III: No table is a chair
Conclusion I: No desk can be chair
Conclusion II: No class can be table

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

29 :Statement I: All cats are dogs
Statement II: All rats are dogs
Statement III: Some dogs are not lions
Conclusion I: All rats can be lions
Conclusion II: No rat being a cat is a possibility.

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

Direction (30-32):- In the following question three statements are given, followed by two conclusions. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements and select the appropriate option.

30: Statement I: Some triangles are pentagons.
Statement II: All pentagons are circles.
Statement III: No circle is a hexagon.
Conclusion I: No circle is a triangle.
Conclusion II: Some triangles can be hexagons.

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

31: Statement I: Some chairs are stools.
Statement II: No stool is a table.
Statement III: All dusters are tables.
Conclusion I: Some dusters can be chairs.
Conclusion II: All tables can be chairs.

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows

- 5 .None of the conclusions follows

32 : Statement I: All pens are markers.
Statement II: No pen is a pencil.
Statement III: Some pencils are markers.
Conclusion I: All pencils can be markers.
Conclusion II: All markers can be pencils.

1. Conclusion I only
2. Conclusion II only
3. Both the conclusions follow
4. Either conclusion I or conclusion II follows
5. None of the conclusions follows

Direction (33-35):- In these questions, the relationship between different elements is shown in the statements. These statements are followed by two conclusions. Study the conclusions based on the given statement(s) and select the appropriate answer.

33 : No tree is a herb.
Some shrubs are grass.
No grass is a herb.

- Conclusions:
I: No shrub can be a herb
II: No grass can be a tree
1. Only conclusion I follows
 2. Only conclusion II follows
 3. Either conclusion I or II follows
 4. Neither of the conclusions follow
 5. Both the conclusions follow

34 : All dogs are dragons.
All cats are dragons.
No dragon is a lion.

- Conclusions:
I: No dog can be a lion.
II: No cat can be a lion.
1. Only conclusion I follows
 2. Only conclusion II follows
 3. Either conclusion I or II follows
 4. Neither of the conclusions follow
 5. Both the conclusions follow

35 : Some skies are blue.
No blue is red.

- Some red are water.
Conclusions:
I. Some blue can be water.
II. All water cannot be skies.
1. Only conclusion I follows
 2. Only conclusion II follows
 3. Either conclusion I or II follows
 4. Neither of the conclusions follow
 5. Both the conclusions follow

Directions 36: The question contains six statements followed by five sets of combinations of three. Choose the set in which the statements are logically related.

- (1) Some women are those who are successful in life.
- (2) Some men are those who have patience.
- (3) No man is a woman.
- (4) All those who have patience are successful in life.
- (5) Some who are successful in life are men.
- (6) Some men are not those are successful in life.

1. 1, 3, 6
3. 1, 5, 3
5. Both options 1 and 4
2. 4, 2, 6
4. 2, 4, 5

Direction37: In each of these questions two Conclusions have been given followed by 5 sets of possible Statements. You have to take the given Conclusions to be true even if they seem to be at variance with the commonly known facts and then decide for the given Conclusions logically follows from the which of the given statements disregarding commonly known facts.

Conclusion: All pens being marker is a possibility. At least Some markers are Papers.

Statements: No paper is markers. All color are papers. Some papers are pens.

Statements: No pen is color. All color are papers. No paper is markers.

Statements: No pen is paper. All color are papers. No paper is markers.

Statements: No pen is color. All color are papers. Some papers are markers.

Statements: No pen is color. No color is paper. Some colors are markers.

Direction38: In following question two conclusions have been given followed by 5 sets of possible Statements. You have to take the given Conclusions to be true even if they seem to be at variance with the commonly known facts and then decide for the given Conclusions logically follows from the which of the given statements disregarding commonly known facts.

Conclusion: All work being motivation is a possibility. All motivation being good is a possibility.

1. Statements: Some motivation are lessons. Some lessons are good. No motivation is a good.

2. Statements: Some motivation are lessons. All lessons are work. No lessons is good.

3. Statements: No motivation is lesson. All lessons are good. No good is a work.

4. Statements: Some motivation are lessons. All lesson are work. No good is work.

5. Statements: Some motivation are lessons. All lessons are work. No good is motivation.

Direction39: In each of these questions two Conclusions have been given followed by 5 sets of possible Statements. You have to take the given Conclusions to be true even if they seem to be at variance with the commonly known facts and then decide for the given Conclusions logically follows from the which of the given statements disregarding commonly known facts.

Conclusion: No reals are Fake and some Fake are Man.

1. Statements: All man are good. Some good are real. Some real are fake. All Fake are bad.

2. Statements: Some real are bad. Some bad are good. All goods are Fake. Some goods are Man.

3. Statements: All real are bad. Some bad are good. Some goods are Fake. All goods are Man.

4. Statements: All Man are Fake. Some Fake are good. All Fake are bad. Some bad are real

5. Statements: All Man are Fake. Some Fake are good. All Fake are bad. No bad is real

Directions 40: In question below are given two statements followed by four conclusions numbered I, II, III and IV. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows/follow from the two given statements disregarding commonly known facts.

Statements:

No manager is a teacher

All teachers are researchers

Conclusions:

I. No researcher is a teacher

II. No researcher is a manager

III. Some teachers are researchers

IV. Some researchers are teachers

1. None follows

2. All follow

3. Only II follows

4. Only III and IV follow

5. None of these

ANSWER KEY

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