STATEMENT AND CONCLUSION

Directions: In each of the questions below are 7. 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 from commonly known facts. Read both the conclusions and then decide which of the given conclusions logically follows from the given 8. statements disregarding commonly known facts.

Give answer:

- 1) if only Conclusion I follows.
- 2) if only Conclusion II follows.
- 3) if either Conclusion I or II follows.
- 4) if neither Conclusion I nor II follows.
- 5) if both Conclusions I and If follow.
- 1. **Statements:** All fruits are lions.

All lions are foxes.

Some foxes are elephants.

Conclusions: I. All fruits are foxes.

II. Some fruits are elephants.

2. Statements: Some cars are wheels.

All wheels are branches.

Some branches are tins.

Conclusions: I. Some cars are branches.

II. Some tins are branches.

3. **Statements:** No stick is door.

All doors are pens.

Some pens are houses.

Conclusions: I. No stick is house.

II. Some pens are doors.

4. **Statements:** All men are parrots.

Some parrots are crows.

All crows are hens.

Conclusions: I. Some men are hens.

II. No man is hen.

. Statements: Some papers are dogs.

Some dogs are windows.

All windows are trees.

Conclusions: I. Some windows are papers.

II. Some papers are trees.

6. **Statements:** All books are eyes.

Some eyes are pens.

All pens are pencils.

Conclusions: I. Some pencils are books.

II. Some pencils are eyes.

Statements: Some trains are buses.

Some buses are goats.

Some goats are trees.

Conclusions: I. Some trees are trains.

II. No bus is train.

Statements: All horses are rivers.

All rivers are jungles.

No Jungle is flower.

Conclusions: I. No horse is flower.

II. No flower is horse.

9. **Statements:** Some tables are ears.

All ears are spoons.

Some spoons are glasses.

Conclusions: I. Some glasses are tables.

II. Some glasses are ears.

10. Statements: Some chairs are desks.

All rooms are desks.

All windows are rooms.

Conclusions: I. All windows are desks.

II. Some desks are rooms.

11. Statements: Some bulbs are canes.

Some canes are books.

All books are lanterns.

Conclusions: I. Some lanterns are canes.

II. Some lanterns are bulbs.

12. Statements: All pens are jungles.

All needles are jungles.

All toys are jungles.

Conclusions: I. Some needles are pens.

II. Some toys are pens.

13. Statements: All stores are tents.

Some tents are stones.

All stones are walls.

Conclusions: I. Some walls are stores.

II. Some walls are tents.

14. Statements: Some bricks are gates.

Some gates are roofs.

All types are bricks.

Conclusions: I. Some tyres are gates.

II. No gate is tyre.



15. Statements: All desks are benches.

No bench is chair.

All chairs are roads.

Conclusions: I. Some roads are chairs.

II. No chair is desk.

16. Statements: Some birds are tigers.

All tigers are schools.

Some schools are goats.

Conclusions: I. Some goats are birds.

II. Some schools are birds.

17. Statements: Some fruits are temples.

Some temples are not trees.

Some trees are boys.

Conclusions: I. Some boys are fruits.

II. Some boys are temples.

18. Statements: All hills are trucks.

Some trucks are houses. Some houses are buses.

Conclusions: I. Some buses are hills.

II. Some buses are trucks.

Directions: In each of the questions below are given two 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 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.

19. Statements: Some trees are roads.

All roads are stones.

Conclusions: I. All trees are roads.

II. Some stones are trees.

III. No stone is tree.

- 1) Only either II or III follows
- 2) Only either I or II follows
- 3) Only either I or III follows
- 4) Only II follows
- 5) None of these
- 20. Statements: Some pencils are houses.

All houses are buses.

Conclusions: I. Some pencils are buses.

II. Some buses are pencils.

III. All buses are pencils.

- 1) All follow
- 2) None follows
- 3) Only II follows
- 4) Only I and II follow
- 5) None of these

21. **Statements:** No train is star.

Some stars are men.

Conclusions: I. Some men are trains.

II. No man is train.

III. All men are stars.

- 1) None follows
- 2) Only I follows
- 3) Only either I or II follows
- 4) Only either II or III follows
- 5) None of these

22. **Statements:** All books are cars.

All cars are tigers.

Conclusions: I. All books are tigers.

II. All tigers are books.

III. All cars are books.

- 1) Only I follows
- 2) Only II follows
- 3) Only I and II follow
- 4) All follow
- 5) None of these

23. **Statements:** All books are pins.

Some pins are desks.

Conclusions: I. Some desks are books.

II. All desks are pins.

III. No desk is book.

- 1) Only either I or II follows
- 2) Only either I or III follows
- 3) Only either II or III follows
- 4) Only I follows
- 5) None of these

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

24. **Statements:** Some merchants are customers.

Some customers are employees. Some employees are owners.

Conclusions: I. Some owners are merchants.

- **II.** Some customers are merchants.
- III. Some employees merchants.
- **IV.** Some owners are customers.
- 1) Only II follows
- 2) Only I and II follow
- 3) Only III and IV follow
- 4) Only I and IV follow

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25. **Statements:** All myths are fictions.

No fiction is novel.

All novels are stories.

Conclusions: I. No myth is novel.

II. Some fictions are novels.

III. Some fictions are myths.

IV. Some myths are novels.

- 1) All follow
- 2) Only either I or II and both III & IV follow
- 3) Only either I or IV and both II & III follow
- 4) Only either I or IV and II follow
- 5) None of these
- 26. **Statements:** Some disciples are preachers. 30. **Statements:** Some houses are trains.

All preachers are saints.

Some saints are not disciples.

Conclusions: I. Some saints are disciples.

II. All disciples are saints.

III. All preachers are disciples.

IV. No saint is disciple.

- 1) None follows
- 2) Only I follows
- 3) Only I and III follow
- 4) Only II and III follow
- 5) All follow
- 27. **Statements:** All oceans arc rivers.

Some springs are rivers.

All wells are springs.

Conclusions: I. Some springs are oceans.

II. Some wells are rivers.

III. Some rivers are oceans.

IV. No well is river.

- 1) Only either II or IV and III follow
- 2) Only either II or IV and I follow
- 3) Only either I or III and IV follow
- 4) None follows
- 5) All follow
- 28. **Statements:** Some farmers are landlords.

All landlords are labours.

Some labours are traders.

Conclusions: I. Some labours are farmers.

II. Some traders are farmers.

III. Some traders are landlords.

IV. Some landlords are farmers.

- 1) None follows
- 2) Only IV follows
- 3) Only I follows
- 4) Both I and IV follow
- 5) All follow

29. **Statements:** All branches are roads.

Some roads are dogs.

All dogs are rains.

Conclusions: I. Some rains are dogs.

II. Some rains are branches.

III. Some rains are roads.

IV. All roads are branches.

- 1) Only I, II and III follow
- 2) None follows
- 3) Only II, III and IV follow
- 4) Only I and III follow
- 5) All follow

All trains are fruits.

Some fruits are skies.

Conclusions: I. Some skies are houses.

II. Some fruits are houses.

III. Some trains are skies.

IV. All fruits are trains.

- 1) Only II follows
- 2) Only I follows
- 3) Only II and IV follow
- 4) Only II and III follow
- 5) None of these
- 31. **Statements:** All doors are buses.

All buses are leaves.

No leaf is a flower.

Conclusions: I. No flower is a door.

II. No flower is a bus.

III. Some leaves are doors.

IV. Some leaves are buses.

- 1) None follows
- 2) Only I and II follow
- 3) Only II and III follow
- 4) Only II, III and IV follow
- 5) All follow
- 32. Statements: All tigers are rivers.

No river is a forest.

Some forests are goats.

Conclusions: I. Some tigers are goats.

II. Some rivers are goats.

III. Some goats are tigers.

IV. Some forests are tigers.

- 1) Only II and III follow
- 2) None follows
- 3) Only III and IV follow
- 4) Only II and IV follow
- 5) Only I and IV follow



33. Statements: Some cars are windows.

Some windows are trees.

Some trees are peaks.

Conclusions: I. Some peaks are cars.

II. Some trees are cars.

III. Some peaks are windows.

IV. No car is a peak.

- 1) Either I or II follows
- 2) Either I or III follows
- 3) Either I or IV follows
- 4) Either II or IV follows
- 5) Either III or IV follows
- 34. Statements: Some grains are pulses.

All vegetables are fruits.

All pulses are vegetables.

Conclusions: I. Some grains are vegetables.

II. All vegetables are pulses.

III. All fruits are grains.

IV. All vegetables are grains.

- 1) Only I and II follow
- 2) Only II follows
- 3) Only I and IV follow
- 4) Only II and IV follow
- 5) None of these
- 35. **Statements:** Some ships are boats.

All boats are submarines.

Some submarines are yatches.

Conclusions: I. Some yatches are boats.

II. Some submarines are boats.

III. Some submarines are ships.

IV. Some yatches are ships.

- 1) All follow
- 2) Only II and III follow
- 3) Only III follows
- 4) Only either III or IV follows
- 5) None of these
- 36. **Statements:** All letters are numbers.

Some graphs are letters.

All sheets are graphs.

Conclusions: I. All sheets are numbers.

II. Some sheets arc letters.

III. Some numbers are graphs.

IV. All graphs are numbers.

- 1) Only I follows
- 2) Only II follows
- 3) Only I and III follow
- 4) Only III follows
- 5) None of these

37. Statements: Most doctors are engineers.

No engineer is a pilot.

All pilots are doctors.

Conclusions: I. Some engineers arc doctors.

II. All doctors are pilots.

III. No pilot is an engineer.

IV. Some pilots are engineers.

- 1) Only I follows
- 2) Only II and HI follow
- 3) Only I and III follow
- 4) Only either III or IV follows
- 5) None of these

38. **Statements:** All files are folders.

All folders are boxes.

All boxes arc drawers.

Conclusions: I. All folders are drawers.

II. All boxes are files.

III. All files are drawers.

IV. All drawers are folders.

- 1) Only I and II follow
- 2) Only I and III follow
- 3) Only II and III follow
- 4) All follow
- 5) None of these

39. Statements: All cups are glasses.

Some glasses are bowls.

No bowl is a plate.

Conclusions: I. No cup is a plate.

II. No glass is a plate.

III. Some plates are bowls.

IV. Some cups are not glasses.

- 1) None follows
- 2) Only III and IV follow
- 3) Only either I or II follows
- 4) Only II and III follow
- 5) None of these
- 40. **Statements:** Some bags are purses.

All purses are containers.

All containers are suitcases.

Conclusions: I. Some suitcases are bags.

II. All purses are bags.

III. All purses are suitcases.

IV. Some containers are purses.

- 1) Only I, II and III follow
- 2) Only II and III follow
- 3) Only I and III follow
- 4) Only II, III and IV follow
- 5) Only I, III and IV follow



41. **Statements:** Some pearls are stones.

Some stones are diamonds.

No diamond is a gem.

Conclusions: I. Some Gems are pearls.

II. Some gems are diamonds.

III. No gem is a diamond.

IV. No gem is a pearl.

- 1) Only either I or IV and either II or III follow
- 2) Only III and IV follow
- 3) Only III and either I or IV follow
- 4) Only I and II follow
- 5) None of these
- 42. **Statements:** Some tapes are discs.

Some discs are cassettes.

Some cassettes are songs.

Conclusions: I. Some songs are discs.

II. Some cassettes are tapes.

III. Some songs are tapes.

IV. No song is a disc.

- 1) Only III and either II or IV follow
- 2) Only Hi and IV follow
- 3) Only either I or IV follows
- 4) Only either I or IV follows
- 5) None of these
- 43. **Statements:** Some strings are ropes.

Some ropes are threads.

All threads are needles.

Conclusions: I. Some needles are ropes.

II. Some threads are strings.

III. All needles are either strings or ropes.

IV. Some needles are threads.

- 1) None follows
- 2) Only II and IV follow
- 3) Only III and IV follow
- 4) All follow
- 5) None of these
- 44. Statements: Some leaves are plants.

Some plants are flowers.

All flowers are trees.

Conclusions: I. Some trees are leaves.

II. All flowers are either leaves or plants.

III. No leaf is a flower.

IV. All leaves are trees.

- 1) None follows
- 2) Only I and II follow
- 3) Only I, II and IV follow
- 4) Only II and III follow
- 5) None of these

45. **Statements:** Some spoons are bowls.

All bowls are knives.

All knives are forks.

Conclusions: I. All spoons are forks.

II. All bowls are forks.

III. Some knives are bowls.

IV. Some forks are spoons.

- 1) All follow
- 2) Only II and III follow
- 3) Only III and IV follow
- 4) Only II and IV follow
- 5) None of these

Directions: In each of the questions below one statement is followed by blank spaces which are followed by a conclusion which can be drawn from either the statement given in the question or from the statement given in the question and an additional statement which may fit in the blank space. You have to study the question and the alternatives which provide a statement and decide which of the answer best fits between the given statement and conclusion.

46. **Statement I:** The Government has decided to effect a significant increase in the procurement price of Kharif crops with immediate effect.

Blank	Space:	

Conclusion: The farmers income will not get adversely affected this Kharif season.

- (a) **Statement II:** The production of Kharif crops this season has surpassed the production level of all the earlier years.
- **(b) Statement II:** The production of Kharif crops has declined considerably from that of the previous year.
- **(c) Statement II:** The production of Kharif crops this year has remained unchanged in comparison with those of the previous years.
- (1) Only (a)
- (2) Only (b)
- (3) Only (c)
- (4) Any one of the above statements will fit.
- (5) No additional statement is required to draw the conclusion



47	of this college have secured more than 99 percent aggregate marks in the final degree examination conducted recently. Blank Space:	in India has remained very low particularly in the infrastructure sector comparative to that in China. Blank Space:
48	 Conclusion: The question papers set by the university this year for all the colleges under its jurisdiction were comparatively much easier than the earlier years. (a) Statement II: Students from other colleges under the university also have secured unusually higher percentage of marks. (b) Statement II: The university does not have required number of teachers to evaluate the answer papers. (c) Statement II: Students appeared in the previous year's examination secured comparatively less marks. (1) Only (a) (2) Only (b) (3) Only (c) (4) Any one of the above statements will fit. (5) No additional statement is required to draw the conclusion. Statement I: The agitating workers had 50. 	 Conclusion: The Government has now set up a board of experts which is given full authority to approve proposals of foreign direct investment in the infrastructure sector within reasonable time. (a) Statement II: The delay in approvals by the Government for the foreign direct investment proposals is inordinated because of complex approval system. (b) Statement II: The people engaged so fair in the approval system did not have the expertise to take quick decision. (c) Statement II: The processing time in China to approve the foreign direct investment proposal is comparatively very low. (1) Only (a) (2) Only (b) (3) Only (c) (4) Any one of the above statements will fit. (5) No additional statement is required to draw the conclusion Statement I: Every year during monsoon
	taken out a peaceful procession in front of the factory gate to register their protest. Blank Space:	large number of people in the city suffer from various water borne diseases and many of such people even succumb to these diseases Blank Space:
	 Conclusion: The Government has suspended the police officer in-charge of the picket and initiated an enquiry into this incidence of police atrocity. (a) Statement II: The workers had applied for a mass casual leave on the day of the incidence. (b) Statement II: The agitating workers did not allow the policemen to enter the factory premises. (c) Statement III: The police resorted to indiscriminate lathi charge on the agitating workers of the local factory. 	Conclusion: The civic authority has failed to put in place an effective mechanism to immune people from such water-borned diseases. (a) Statement II: People are careless particularly in monsoon season about the quality of their food and drinks. (b) Statement II: The sewage system in the city has become very old resulting into mixing with rainwater during monsoon. (c) Statement II: The Government has been cautioning people every year to be careful about the water-borne diseases.
	(1) Only (a)(2) Only (b)(3) Only (c)(4) Any one of the above statements will fit.	(1) Only (a)(2) Only (b)(3) Only (c)(4) Any one of the above statements will fit.

(5) No additional statement is required to

draw the conclusion

(5) No additional statement is required to

draw the conclusions.

STATEMENT AND CONCLUSION

1.1; The first and the second Premises are Universal Affirmative (A-type). The third Premise is Particular Affirmative (I-type). All fruits are lions.

All lions are foxes.



Some foxes are elephants.

A + A + 1

 \Rightarrow A + I \Rightarrow No Conclusion Consider the first two Premises: All fruits are lions.

All lions are foxes. We know that, $A + A \Rightarrow A$ -type Conclusion Thus, our derived Conclusion would be: "All fruits are foxes." Therefore, Conclusion I follows.

2.5; Some cars are wheels.



All wheels are branches.

We know that, $I + A \Rightarrow I$ -type Conclusion

Thus, our derived Conclusion would be:

"Some cars are branches".

This is the Conclusion I. Conclusion II is the Converse of the third Premise. Therefore, both the Conclusions follow.

3.2; No stick is door



All doors are pens.

We know that

 $E + A \Rightarrow O_1$ - type Conclusion

Thus, our derived Conclusion would be:

"Some pens are not sticks".

All doors are pens



Some pens are houses.

We know that,

 $A + I \Rightarrow No Conclusion II is the Converse of the$ second Premise.

4.3; All men are parrots



Some parrots are crows

We know that, $A + I \Rightarrow No$ Conclusion

Some parrots are crows



All crows are hens.

We know that, $I + A \Rightarrow I$ -type Conclusion

Thus our derived Conclusion would be:

"Some parrots are hens". Both the Conclusions form Complementary Pair. Therefore, either Conclusion I or Conclusion II follows.

5.4; Some dogs are windows



All windows are trees

We know that,

 $I + A \Rightarrow I$ -type Conclusion:

Thus, our derived Conclusion would be:

"Some dogs are trees."

6. 2; Some eyes are pens. (I)



All pens are pencils (A)

I + A = I-type Conclusion

Therefore,

"Some eyes are pencils".

Conclusion II is converse of this conclusion.

7. 4; No Conclusion follows from Particular Premises.

8. 5; All horses are rivers. (A)



All rivers are jungles. (A)

 $A + A \Rightarrow A$ -type Conclusion

Therefore,

"All horses are jungles".

All rivers are jungles. (A)



No jungle is flower. (E)

 $A + E \implies E$ -type Conclusion

Therefore,

"No rivers is flower".

All horses are jungles.



No jungle is flower.

Therefore, "No horse is flower".

9.4; Some tables are ears. (1)



All ears are spoons. (A)

I + A = I-type Conclusion

Therefore,

"Some tables are spoons".

10.5; All windows are rooms. (A)



All rooms are desks. (A)

 $A + A \implies A$ -type Conclusion

Therefore,



"All windows are desks".

Conclusion II is converse of second premise.

11.1; Some canes are books (I)



All books are lanterns. (A)

 $I + A \Rightarrow I$ -type Conclusion

Conclusion: Some canes are lanterns.

Conclusion I is converse of this Conclusion.

12.4; All the three premises are Universal Affirmative (A-

But no two premises are aligned. If we converse one 20.4; First Premise is Particular Premises, then we will get A + I combination. We know that no Conclusion follows from A + I combination.

13.2; Some tents are stones. (I)



All stones are walls. (A)

Conclusion: Some tens are walls.

Conclusion II is Converse of this Conclusion.

- 14.3; Conclusion I and II form complementary Pair. Therefore, either Conclusion I or II follows.
- 15.5; All desk are benches. (A)



No bench is chair. (I)

 $A + E \implies E$ -type Conclusion

Conclusion: No desk is a chair.

Conclusion II is Converse of this Conclusion.

Conclusion I is converse of the third Premise.

16.2; Some birds are tigers. (I)



All tigers are schools. (A)

 $I + A \Rightarrow I$ -type Conclusion

Conclusion: Some birds are schools.

Conclusion II is Converse of this Conclusion.

Conclusion I is converse of the third Premise.

17.4: First and third Premises are Particular Affirmative (I-type).

Second Premise is Particular Negative (O-type).

No Conclusion follows from Particular Premises.

18.4; All hills are trucks. (A)



Some trucks are houses. (I)

 $A + I \implies No Conclusion$

19.4; First Premise is Particular

Affirmative (I-type)

Second Premise is Universal

Affirmative (A-type)

Both the Premises are already aligned.

Some trees are roads.



All roads are stones.

We roads are stones.

 $I + A \implies I$ -type conclusion

Thus, our derived conclusion would be:

"Some trees are stones".

Conclusions II is the conversion of our derived conclusion.

Affirmative (I-type)

Second Premise is Universal

Affirmative (A-type)

Both the Premises are already aligned.

Some pencils are houses.



All houses are buses.

We know that,

 $I + A \Rightarrow I$ -type conclusion

Thus, our derived conclusion would be:

"Some pencils are buses".

This is the conclusions I.

Conclusions II is the conversion of our derived conclusion.

Therefore, only conclusions I and II follow.

21.1; First Premise is Universal

Negative (E-type)

Second Premise is Particular

Affirmative (I-type)

Both the Premises are already aligned.

Some train is star



Some starts are men.

We known that,

 $E + I \implies O_1$ -type conclusion

Thus, our derived conclusion would be:

"Some men are not trains".

One of the two Premises is Negative, therefore, Affirmative conclusions are invalid.

One of the Premises is Particular, therefore Universal conclusions are invalid.

Both the Premise are Universal Affirmative (A-type) Again, the given Premises are already aligned.

All books are cars.



All cars are tigers.

We know that,

 $A + A \implies A$ -type conclusion

Thus, our derived conclusion would be:

"Some books are tigers".

This is the conclusion I.

23.2; First Premise is Universal

Affirmative (A-type)

Second Premise is Particular

Affirmative (I-type)

Both the Premises are already aligned.

Some books are pins.



All pins are desks.

We know that,

 $A + I \implies No conclusion$

Now look for any conversion and/or implication.

Conclusions I and III form complementary pair.

Therefore, either conclusion I or III follows.

24. 1; All the three Premises are Particular Affirmative (I-type).

No conclusion follows from the Particular Premises.

But, conclusion II is the converse of the first Premises.

Therefore, only Conclusion II follows.

25.5; First and third Premises are Universal Affirmative (A-

Second Premises is Universal Negative (E-type).

(A) All myths are fictions



No fiction is novel.

We know that,

 $A + E \implies E$ -type Conclusion

Therefore, out derived Conclusion would be:

"No myth is novel".

This is the Conclusion I.

(B) No fiction is novel



All novels are stories.

We know that,

 $E + A \Rightarrow O_1$ -type Conclusion

Therefore, our derived Conclusion would be:

"Some stores are not fictions".

(C) No myth is novel.



All novels are stories.

We know that,

 $E + A = O_1$ -type Conclusion

Therefore, our derived Conclusion would be:

"Some stories are not myths".

Conclusion III is the converse of the first Premises.

Thus, only Conclusions I and III follow.

26.2; First Premise is Particular Affirmative (I-type).

Second Premises is Universal Affirmative (A-type).

Third Premises is Particular Negative (O-type)

Some disciples are preachers



All preachers are saints.

We know that,

 $I + A \Rightarrow I$ -type Conclusion

Therefore, our derived Conclusion would be:

"Some disciples are saints".

Conclusion I is the Converse of this Conclusion.

27. 1; First and third Premises are Universal Affirmative (A-type)

Second Premise is Particular Affirmative (I-type).

All wells are springs.



Some springs are rivers.

We know that,

 $A + I \implies No Conclusion$

Conclusion III is the Converse of the first Premise

Conclusions II and IV form complementary pair.

Therefore, either conclusion II or Conclusion IV follows

28.4; First and third Premises are Particular Affirmative (I-type)

Second Premises is Universal Affirmative (A-type) Some farmers are landloards.



All landlords are labours

We know that,

 $I + A \Rightarrow I$ -type Conclusion

Therefore, our derived Conclusion would be:

"Some farmers are labours".

Conclusion I is the Converse of this Conclusion.

Conclusion IV is the Converse of the first Premise.

29.4; First and third Premises are Universal Affirmative (Atype). Second Premises is Particular Affirmative (Itype).

Some roads are dogs.



All dogs are rains.

We know that,

 $I + A \Rightarrow I$ -type Conclusion

Thus, our derived Conclusion would be:

"Some roads are rains".

Conclusion III is Converse of this Conclusion.

Conclusion I is Converse of the third Premise.

30.1

31.5; First and Second Premises are Universal Affirmative (A-type).

Third Premise is Universal Negative (E-type).

(A) All doors are buses.



All buses are leaves.

We know that,

 $A + A \Rightarrow A$ -type Conclusion

Thus, our derived Conclusion would be;

"All doors are leaves"

Conclusion III is converse of this conclusion.

(B) All buses are leaves.



No leaf is a flower.

Thus, our derived Conclusion would be:

"No door is a flower".

Conclusion I is Converse of this Conclusion.

Conclusion IV is Converse of second Premise.

32.2; First Premise is Universal Affirmative (A-type). Second Premise is Universal Negative (E-type)

Third Premise is Particular Affirmative (I-type).

(A) All tigers are rivers.



No river is a forest.

We know that.

 $A + E \Rightarrow E$ -type Conclusion

Thus, our derived Conclusion would be:

"No tiger is a forest".

(B) No river is a forest.



Some forests are goats.

We know that,

 $E + I \Rightarrow O_1$ -type Conclusion

Thus our derived conclusion would be:

"Some goats are not rivers".

(C) No tiger is a forest.

Some forests are goats.

We know that

 $E + I = O_1$ -type Conclusion

Thus, our derived Conclusion would be:

"Some goats are not tigers".

33. 3; All the three Premises are Particular Affirmative (I-type)
No Conclusion follows from the Particular Premises.
Now look for any Conversation and/or Implication.
Conclusions I and IV form Complementary Pair.
Therefore, either Conclusion I or IV follows.

34.5; First Premise is Particular Affirmative (I-type).
Second and third Premises are Universal Affirmative

(A-type).

(i) Some grains are pulses.



All pulses are vegetables.

We know that,

 $I + A \Rightarrow$ (I-type) Conclusion would be:

Therefore, our derived Conclusion would be:

"Some grains are vegetables".

This is Conclusion I.

(ii) Some grains are vegetables.



All vegetables are fruits.

Thus, our derived Conclusion would be:

"Some grains are fruits.

(iii) All pulses are vegetables.



All vegetables are fruits.

We know that,

 $A + A \Rightarrow A$ -type Conclusion

Thus, our derived Conclusion would be:

"All pulses are fruits".

(iv) Some grains are pulses.



All pulses are fruits.

Thus, our derived Conclusion would be:

"Some grains are fruits"

Therefore, only Conclusion I follows.

35.2; First and third Premises are Particular Affirmative (I-Type).

Second Premise is Universal Affirmative (A-type). Some ships are boats.





All boats are submarines.

We know that,

 $I + A \Rightarrow I$ -type Conclusion

Thus, our derived Conclusion would be:

"Some ships are submarines."

Conclusion III is the converse of our derived Conclusion.

Conclusion II is the converse of the second Premise. Therefore, only Conclusions II and III follow.

36.4; First and third Premises are Universal Affirmative (A-type).

Second Premise is Particular Affirmative [I-type). Some graphs are letters.



All letters are numbers.

We know that,

 $I + A \Rightarrow I$ -type Conclusion

Thus, our derived Conclusion would be:

"Some graphs are numbers."

Conclusion III is the converse of this derived Conclusion.

37.3; Second Premise is Universal Negative (E-type)

Third Premise is Universal Affirmative (A-type)

First Premise is Particular Affirmative (I-type)

Most (some) doctors are engineers.

Most (some) doctors are engineers.

(i) Most (some) doctors are engineers.



No engineer is a pilot.

We know that.

 $I + E \Rightarrow O$ -type Conclusion

Thus, our derived Conclusion would be:

"Some doctors are not pilots."

(ii) No engineer is a pilot.

All pilots are doctors.

We know that

 $E + A \Rightarrow O$ -type Conclusion

Thus, our derived Conclusion would be:

"Some doctors are not engineers."

Conclusion I is the converse of the first Premise.

Conclusion III is the converse of the second Premise.

Therefore, only Conclusions I and III follow.

38.2; All the three Premises are Universal Affirmative (A-type).

(i) All files are folders.



All folders are boxes.

We know that,

 $A + A \Rightarrow A$ -type Conclusion

Thus, our derived Conclusion would be:

"All files are boxes."

(ii) All files arc boxes.



All boxes are drawers.

Thus, our derived Conclusion would be:

"All files are drawers."

This is the Conclusion III

(iii) All folders are boxes.



All boxes are drawers.

Thus, our derived Conclusion would be:

"All folders are drawers."

This is the Conclusion I.

39. 1; First Premise is Universal Affirmative (A-type).
Second Premise is Particular Affirmative (I-type).
Third Premise is Universal Negative (E-type).
All cups are glasses.



Some glasses are bowls.

 $A + I \Rightarrow No Conclusion.$

Some glasses are bowls.



No bowl is a plate.

 $I + E \Rightarrow O$ -type Conclusion

"Some glasses are not plates."

If one of the Premises is Particular, Universal Conclusion is invalid.

40. 5; First Premise is Particular Affirmative (I-type). Second and third Premises are Universal Affirmative (A-type).

(A) Some bags are purses.



All purses are containers.

 $I + A \Rightarrow I$ -type Conclusion

"Some bags are containers".

(B) All purses are containers.



All containers are suitcases.

 $A + A \Rightarrow A$ -type Conclusion

"All purses are suitcases". This is the Conclusion III.

(C) Some bags are purses.



All purses are suitcases.



"Some bags are suitcases". This is the converse of Conclusion I.

(D) Some bags are containers.



All containers are suitcases.

"Some bags are suitcases". Conclusion IV is the converse of second Premise.

41. 1; First and second Premises are Particular Affirmative (Itype).

Third Premise is Universal Negative (E-type).

Some stones are diamonds.



No diamond is a gem.

 $I + E \Rightarrow O$ -type Conclusion

"Some stones are not gems"

Conclusion I and IV form Complementary Pair. Therefore, either I or IV follows. Similarly, Conclusions II and III from Complementary Pair. Therefore, either II or III follows.

- 42. 4; All the three Premises are Particular Affirmative (1-type).

 No Conclusions follows from Particular Premises.

 Conclusions I and IV form Complementary Pair.

 Therefore, either I or IV follows.
- 43. 5; First and second Premises are Particular Affirmative (I-type).

Third Premise is Universal Affirmative (A-type). Some ropes are threads.



All threads are needles.

 $I + A \Rightarrow I$ -type Conclusion

"Some ropes are needles."

This is the converse of the Conclusion I.

Conclusion IV is converse of the third Premise.

44. 1; First and second Premises are Particular Affirmative (I-type).

Third Premise is Universal Affirmative (A-type).

Some plants are flowers.



All flowers are trees.

 $I + A \Rightarrow I$ -type Conclusion

"Some plants are trees".

45.5; First premise is Particular Affirmative (I-type).

Second and third Premises are Universal Affirmative (A-type).

(A) Some spoons are bowls.



All knives are forks.

"Some spoons are forks".

Conclusion IV is the converse of this Conclusion.

(C) All bowls are knives.



All knives are forks.

 $A + A \implies A$ -type Conclusion

"All bows are forks".

This is Conclusion II.

Conclusion III is converse of second Premise.

50.2

Therefore, Conclusions II, III and IV follow.

46.2 47.1 48.3 49.3

