

Syllogism

Class-01

Lecture-02

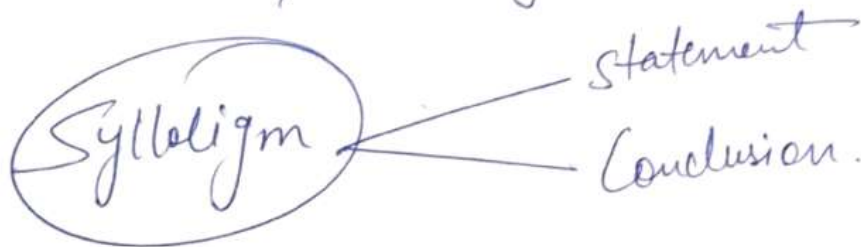
The foundation Batch

Basic Concept

Meaning logical derivation / deduction.

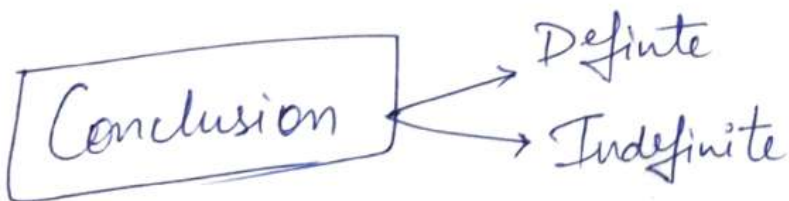
Deriving (taking-out) hidden Conclusion from already stated facts & information.

In Syllogism we ~~do~~ discussion about the relation of elements.

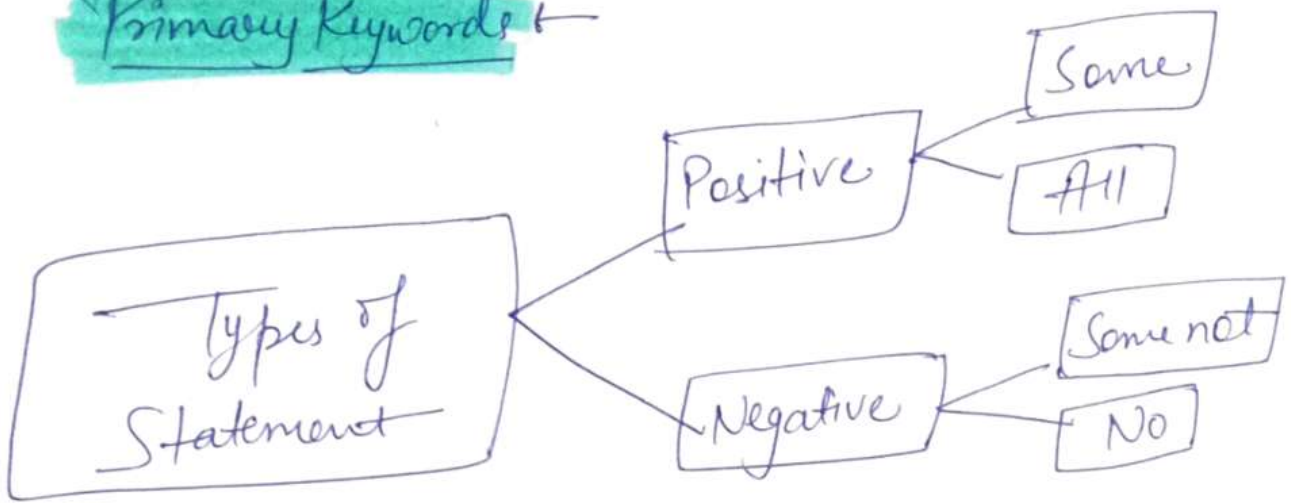


Statement → It defines the relation b/w two or more elements.
eg: Some Pen are mobile
→ It use to be illogical.

→ we will have to excepted as universal truth.



Primary Keywords



Secondary Keywords

Some	All	Some Not	No
→ few → A few → At least Some → Almost All → Maximum → Minimum → Many → most of → mostly → Many → more → Generally → 0.4% - 99.9%	→ Each → Every → Any → only → 100% → No → Keywords	→ Hardly → Scarcely → Seldom → Hardly	→ None → Never → All not → No one → 0%

Types of Conclusion

① Definite Conclusion

Absence of Can/may/possibility
exception - "Can-never" → Definite Conclusion

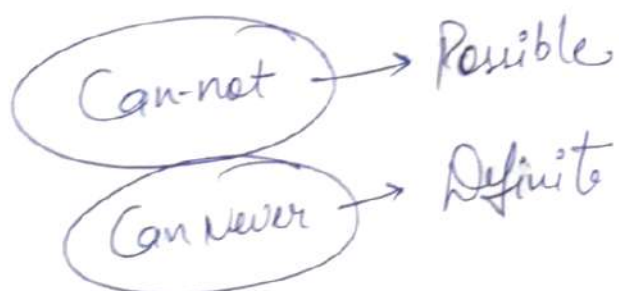
eg: Some A are B → Definite Con.
All A can never be B → Definite Con.

2) Indefinite Conclusion

Presence of can/may / possibility.

eg: No A can be B $\rightarrow$ (Indefinite con)
Some A may be B $\rightarrow$ (Indefinite con)

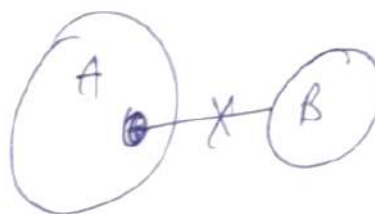
Absence Can-never



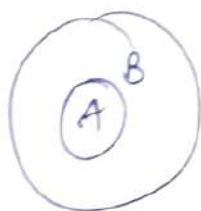
Some A are B



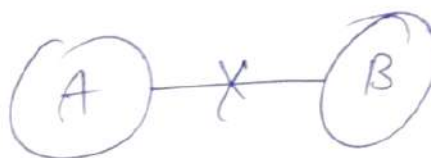
Some A are not B



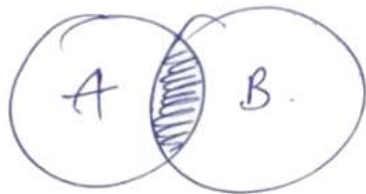
All A are B



No A are B



Some A are B



Correct conclusion

- Some A are not B is a possibility
- All A are B is a possibility.
- Some B are A.
- Some B are not A is a possibility
- All B are A is a possibility.

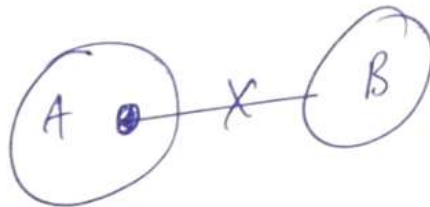
→ Some A are not B. X

All A are B



- Some A are B
- Some B are A
- Some B are not A is a possibility
- All B are A is a Possibility.

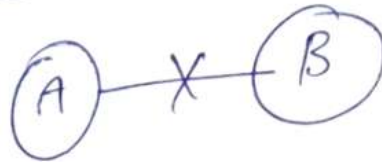
Some A are not B



- Some A are B is a possibility
- No A are B is a possibility
- All B are A is a possibility
- Some B are A is a possibility
- No B are A is a possibility
- Some B are Not A is a possibility.

→ All A are B is a possibility X

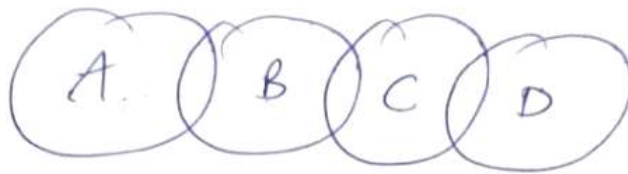
No A are B



- Some A are not B
- No B are A
- Some B are not A

① Statement

Some A are B
Some B are C
Some C are D



Conclusion

- | | |
|----------------------|---------------------------------------|
| ① Some A are C X | ⑥ Some A are C is a possibility ✓ |
| ② Some B are not D X | ⑦ Some B are not D is a possibility ✓ |
| ③ No A are D X | ⑧ No A are D is a possibility ✓ |
| ④ Some D are A X | ⑨ Some D are A is a possibility ✓ |
| ⑤ All C are A X | ⑩ All C are A is a possibility ✓ |

Note-1

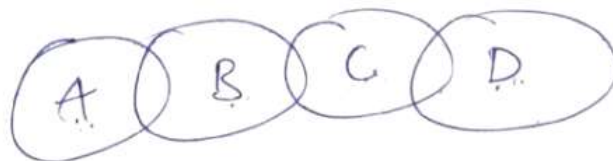
Whenever there is "no relation" between any two elements according to Venn diagram, then all type of definite conclusion will be treated wrong (Can't say) whereas all type of possible conclusion b/w the same will be treated true.

Lecture-03

class 2

① Statements

Some A are B
Some B are C
Some C are D

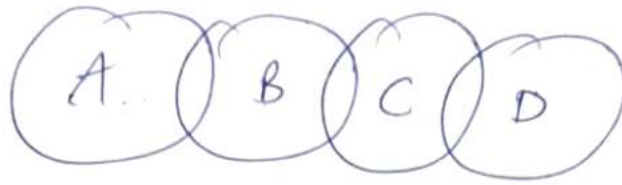


Conclusions

- | | |
|----------------------|---------------------------------------|
| ① Some A are C X | ⑥ Some A are D is a possibility ✓ |
| ② Some B are not D X | ⑦ No B is D is a possibility ✓ |
| ③ No A are D X | ⑧ All C are A is a possibility X ✓ |
| ④ Some D are A X | ⑨ No D is A is a possibility X ✓ |
| ⑤ All C are A X | ⑩ Some A are not C is a possibility ✓ |

Statement

Some A are B
Some B are C
Some C are D



Conclusion

- | | |
|-----------------------|---------------------------------------|
| 1) Some A are C X | ⑥ Some A are C is a possibility ✓ |
| 2) Some B are not D X | ⑦ Some B are not D is a possibility ✓ |
| 3) No A are D X | ⑧ No A are D is a possibility ✓ |
| 4) Some D are A X | ⑨ Some D are A is a possibility ✓ |
| 5) All C are A X | ⑩ All C are A is a possibility ✓ |

Note-1

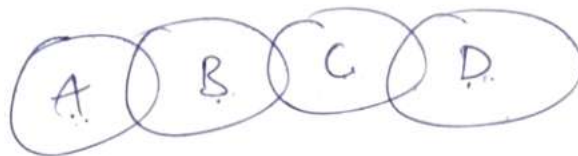
Whenever there is "no relation" between any two elements according to Venn diagram, then all type of definite conclusion will be treated wrong (Can't say) whereas all type of possible conclusion b/w the same will be treated true.

Lecture-03

Class 2

① Statements

Some A are B
Some B are C
Some C are D



Conclusion

- | | |
|----------------------|---------------------------------------|
| ① Some A are C X | ⑥ Some A are D is a possibility ✓ |
| ② Some B are not D X | ⑦ No B is D is a possibility ✓ |
| ③ No A are D X | ⑧ All C are A is a possibility X ✓ |
| ④ Some D are A X | ⑨ No D is A is a possibility X ✓ |
| ⑤ All C are A X | ⑩ Some A are not C is a possibility ✓ |

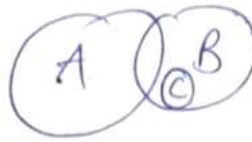
② Statements

Some A are B

All C are B

Conclusion

- ① Some B are A ✓
- ② Some C are A ✗
- ③ Some A are not C ✗
- ④ Some A are not B ✗
- ⑤ Some B are not C ✗



Note-2

Whenever we will be required to draw a true Conclusion regarding the "Blank-Space" of any Venn-diagram we will have to use the word possibility. Otherwise the conclusion would be treated wrong.

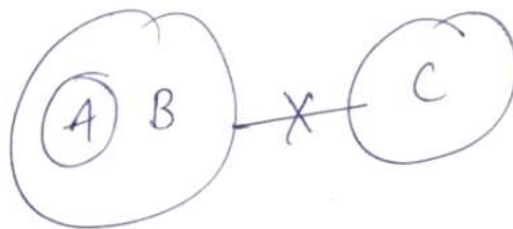
③ Statements

All A are B

No B are C

Conclusion

1. Some A are B ✓
2. No C are B ✓
3. Some B are not A ✗
4. Some B are Not C ✓
5. No A are C is a possibility ✗
6. Some B are A is a possibility ✗

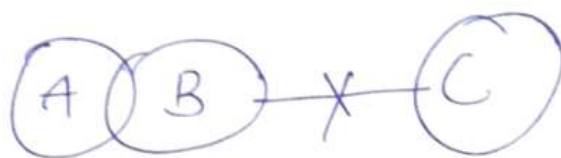


Note-3

Already existence of relation between two elements or already restriction b/w two elements never allows possibility.

Definite + Possibility = ~~wrong~~ conl.

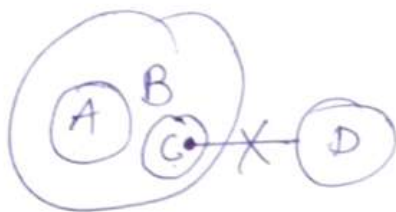
④ Statement -
Some A are B
No B are C



Conclusion -

- ① Some B are A ✓
- ② Some A are not B X
- ③ Some B are not C. ✓
- ④ No C are B ✓
- ⑤ Some A are not C ✓
- ⑥ Some C are not A X
- ⑦ All A are C X
- ⑧ All A are C is a possibility X
- ⑨ Some A are C is a possibility ✓
- ⑩ All C are A is a possibility ✓
- ⑪ Some A are not B is a possibility ✓

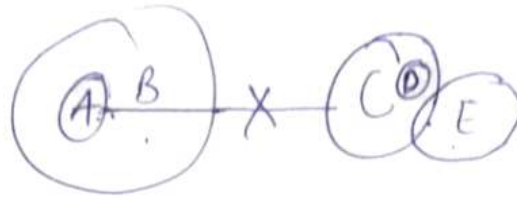
⑤ Statements -
All A are B
All C are B
No C are D



Conclusion -

- ① Some B are A ✓
- ② No A are C X
- ③ Some C are not D ✓
- ④ Some B are not D ✓
- ⑤ No A are D X
- ⑥ All B are D is a possibility X
- ⑦ All A are D is a possibility ✓
- ⑧ All D are B is a possibility ✓

- ① All A are B
 All D are C
 No C are A
 Some C are E

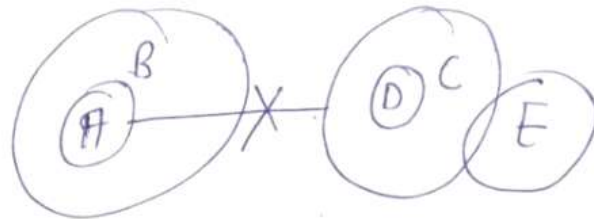


Conclusion:-

- ① Some E are not B. X
 ② No A is D ✓
 ③ No E is A X
 ④ All D are E is a possibility. ✓
 ⑤ Some E are not A ✓

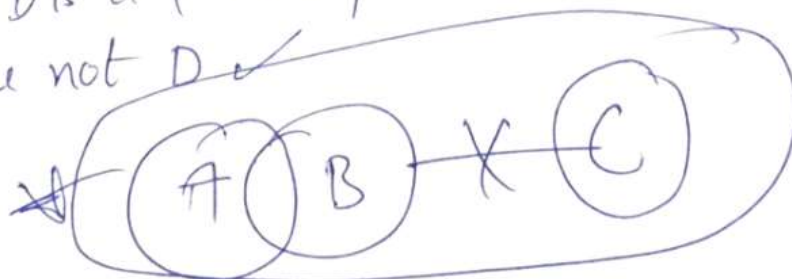
② Statement:-

- All A are B
 All D are C
 No C are A
 Some C are E



Conclusion:-

- ① Some B are not C ✓
 ② All B are E is a possibility ✓
 ③ All E are A is a possibility X
 ④ All B are D is a possibility X
 ⑤ Some B are not D ✓



most important Venn Diagram of syllogism

Conditions for 'Either Or'

- ① Both the elements of two given Conclusion must be same.
- ② One Conclusion should be positive whereas another must be negative.
- ③ Both the Conclusion must be wrong (can't say) individually.

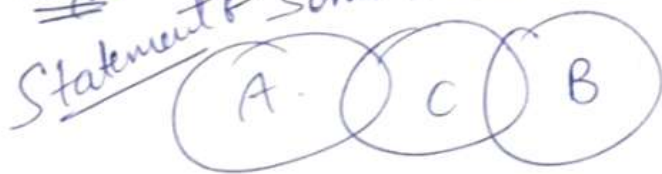
Complimentary Pairs

- ① (1) Some A are not B
(2) All A are B
- ② (1) Some A are B $\rightarrow$ Positive
(2) Some A are not B $\rightarrow$ Negative
- ③ (1) Some A are B $\rightarrow$ Both are individually wrong.
(2) No A are B $\rightarrow$

Exception

- ① (1) All A are B
(2) No A are B

Ex. Some A are C
Some C are B



Conclusion

- ① Some A are B
 - ② Some A are not B
- Definite $\rightarrow$ All A are B
 (Pos) $\rightarrow$ No A are B
- either ① or ②
 Possibility ($\checkmark$)
- (definite) $\checkmark$

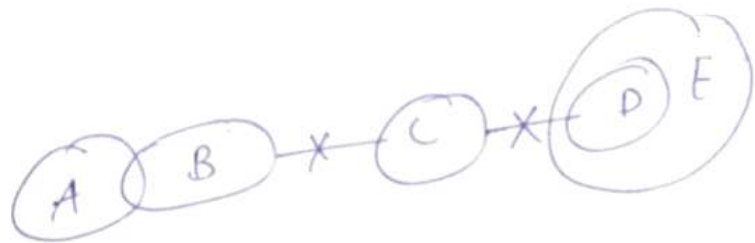
Complementary Pairs which are change or not.

- ① Some A are not B
All B are A } X
- ② Some A are B
Some B are not A } ✓
- ③ Some A are B
No B are A } ✓

Element 1	Element 2	Parallel	Cross
All	Some Not	✓	X
Some	Some Not	✓	✓
Some	No	✓	✓

① Statement

Some A are B
No B are C
No C are D
All D are E



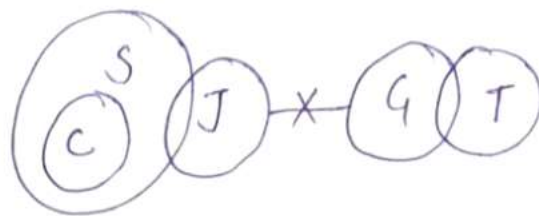
Conclusion →

- ① Some D are A } either or
- ② No D are A } X
- ③ All B are D is a possibility ✓
- ④ No A are D is a possibility ✓

Qust either 1 or 2, 3 & 4 are follow.

② Statements

All cups are stars
 Some ~~stars~~ stars are jugs
 No jug is glass
 Some glasses are tables.



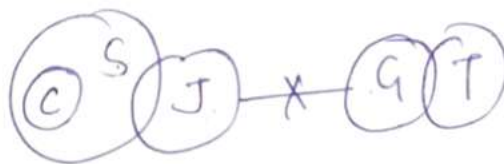
Conclusion

- ① Some tables are stars X
 - ② Some glass are cups X
 - ③ No tables is stars X
 - ④ All jugs are cups X
 - ⑤ No cups are jugs X
- either or

Qns Either I & ③.

③ Statements

All cups are stars
 Some stars are jugs
 No jug is glass
 Some glasses are table.



Conclusion

- ① A few jugs are not glasses ✓
- ② No jugs are tables X
- ③ Atleast some stars are not cups X
- ④ Maximum stars are not not glasses ✓
- ⑤ Any stars are glasses X
- ⑥ All stars are glasses is a possibility ✓
- ⑦ Some stars are glass is a possibility ✓
- ⑧ All tables are jug is a possibility ✓
- ⑨ All glasses are star is a possibility ✓
- ⑩ Some cups are tables is a possibility ✓

→ Only / only a few / cannot Vs can never / Def. does not follow.

Agenda of the Session

- Diff. between cannot & can never.
- Only Vs only a few
- Does not follow Vs Definitely does not follow.
- use of Secondary keywords.

1. Statement +

No cup is a medal
All medals are trophies
No trophy is a shield.



Conclusion +

- ① All trophies are medals X
- ② No shield is a medals. ✓

- ① Both conclusion I and II are true
- ② Neither Conclusion I nor II is true
- ③ Either Conclusion I or II is true
- ④ only Conclusion II is true
- ⑤ only Conclusion I is true.

2. Statements

Some minutes are hours
No hour is a second.
Some periods are seconds



Conclusion + ① Some periods are definitely not hours. ✓

- ② Some minutes are not seconds. ✓
- ③ Some seconds are not hours. ✓

- ① only I & II follow
- ② only II & III follow
- ③ only II follows
- ④ only I and III follow
- ⑤ none of these.

Can't & can never concept

Possibility

can't certainty
Definite

Some A can be B

→ Some A are B is a possibility.

Some A cannot be B

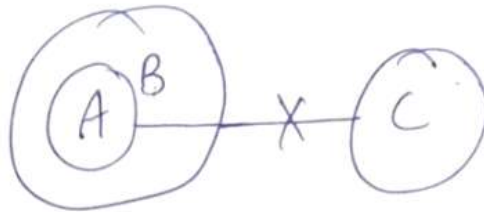
→ Some A are not B is a possibility.

Some A can never be B

→ Definite

Example + statements

All A are B
No A are C



Conclusion

- ① Some A are not B X
- ② Some A are not C ✓
- ③ No C are B X
- ④ Some B can be C ✓
- ⑤ Some B can not be C ✓
- ⑥ Some B can never be C ✓

Concept of 'only'

Only A are B

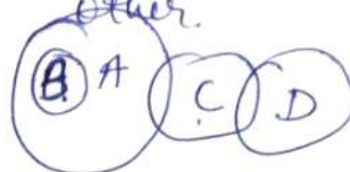
→ All B are A →



B is loyal for A, B is not meet with other.

Example +

Statement - only A are B
Some A are C
Some C are D



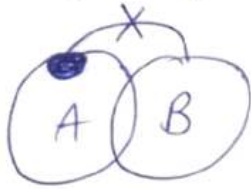
Conclusion - Some B are not C ✓
No D are B ✓

All A are D is a possibility X
All B are C is a possibility X
Some C are B is a possibility X

'Only a few' concept

Only a few A are B

$\begin{matrix} \text{A few A are B} \\ \hline \rightarrow \text{Some A are B} \end{matrix}$



All A can be B X

All A can not be B X

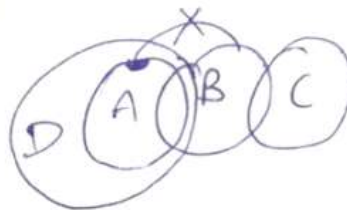
All A can never be B ✓

Example Statements

Only a few A are B

Some B are C

All A are D



Conclusion +

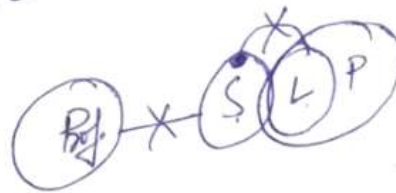
- ① Some B are A ✓
- ② Some D are B ✓
- ③ All A are B is a possibility X
- ④ All D are B is a possibility X
- ⑤ All B are A is a possibility ✓

① Statement +

No Professor is student

Only a few student is lecturer

All lecturer is principal



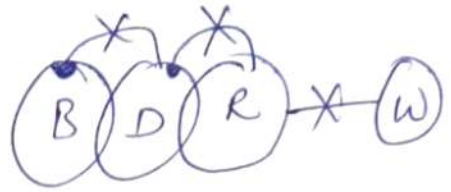
Conclusion +

- ① All professor being Principal is a possibility ✓
- ② All student being lecturer is a possibility X
- ③ If only conclusion I follows
- ④ If only conclusion II follows
- ⑤ If either conclusion I or II follows

- ④ If neither conclusion I nor II follows
- ⑤ If both conclusion I and II follow

② Statement 1

only a few Beaches are Deltas
only a few Deltas are River
No River is wave.



Conclusions

- ① All Deltas can never be Wave ✓
- ② No River is Beaches X

Only I Conclusion follow

Lecture-6

Class-5

Does not follow vs. Definitely does not follow.

Agenda of the Session

- Does not follow.
- Definitely does not follow
- Practice on only & only a few.

Direction (1-4): In each question below are given statements followed by five Conclusion number 1, 2, 3, 4 and 5 you have to assume everything in the statements to be true even if they seem to be at variance with commonly known facts and then find out which of the five given conclusion does not logically follow from the statements, regarding commonly known facts.

Does not follow → $\begin{matrix} \checkmark \rightarrow X \\ X \rightarrow \checkmark \end{matrix}$

① Statements

All Papers are pages
Some Pages are books
All books are copies



589095853106

Conclusion

- ① All papers being copies is a possibility X
- ② Some papers are books ✓
- ③ Some copies are pages +
- ④ Some pages are paper +
- ⑤ All books being paper is possibility X

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Only Conclusion II does not follow

② Statements

Some numbers are letter.
No letter is vowel.
All vowels are words.



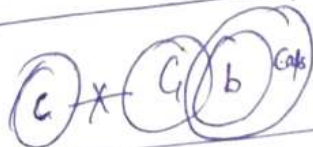
Conclusion

- ① Some numbers are not vowels X
- ② No vowel is a letter X
- ③ Some words are not letter X
- ④ Some words are vowel +
- ⑤ Some no. are words ✓

Only Conclusion I does not follow

③ Statements

No cup is a glass
Some glasses are bottle
All bottles are caps



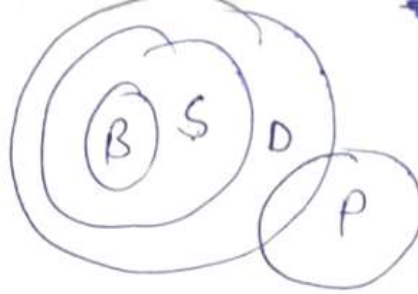
Only Conclusion III does not follow

Conclusion

- ① Some glasses are caps X
- ② Some bottles are not cups X
- ③ Some caps are cups ✓
- ④ Some caps are bottles X
- ⑤ No glass is a cup X

4. Statements

All birds are swans
All swans are ducks
Some ducks are parrots



Conclusion

- ① All birds being parrot is possibility X
- ② Some swans are parrots ✓
- ③ All ducks being birds is a possibility X
- ④ Some swans are not parrots ✓
- ⑤ No Swan is a bird ✓

I II, IV & V does not follow

~~II~~ Only V does not follow.

III Either 3 or 4 and 5 does not follow

IV Either II & or IV does not follow

V none of these.

~~XXXX~~ In ~~set~~ does not follow either or does not exist

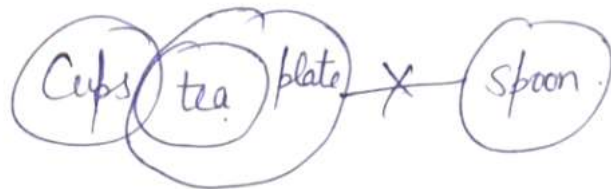
Direction (5-8) In each question below are given statement followed by five conclusions numbered (1), (2), (3), (4) and (5). You have to ~~same~~ assume everything in the statements to be true even if they seems to be at Variance with ~~common~~ Commonly known facts and then find out which of the five given conclusions definitely does not follow from the statements, disregarding commonly known facts.

Definitely Does not follow

→ To Conclusions possibility mein bhi Galat hoga, Vo aapka Correct Answer hoga.

⑤ Statements -

Some cups are tea
All tea are plate
No plates is a spoon.

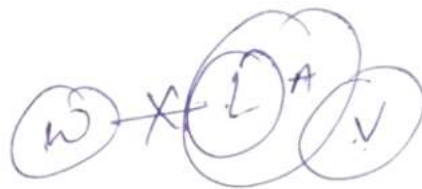


Conclusion -

1. No tea is a spoon X
2. Some cups are plates X
3. All plates being cups is a possibility X
4. All Spoons are tea ✓
5. Some tea not being cups is a possibility X

⑥ Statements -

No word is letter
All letter are alphabets
Some vowels are alphabet.



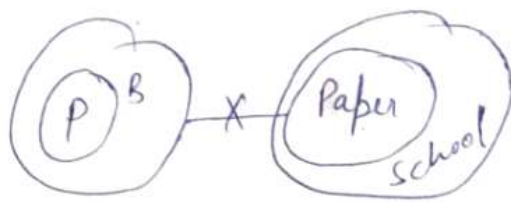
Conclusion -

- ① Some alphabets are not being ^{vowel} is a possibility X
- ② Some alphabets are not Words X
- ③ No letter is a word X
- ④ No alphabets is a letter ✓
- ⑤ All vowels being letter is a possibility X

Only Conclusion IV definitely does not follow

7. Statements +

All pens are books
No book is paper
All papers are schools



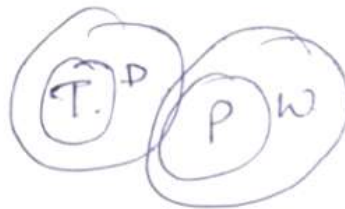
Conclusion +

- (1) Some School are not books X
- (2) Some Schools are papers X
- (3) All books are School X
- (4) All Schools are books ✓
- (5) No pen is paper X

Only Conclusion IV definitely does not follow

8. Statements +

All teachers are doctors
Some professors are doctors
All professors are writers



Conclusion +

- (1) All teachers being writer is a possibility X
- (2) All professor being teacher is a possibility X
- (3) No doctor is a writer ✓
- (4) Atleast some doctors are winter X
- (5) Some doctors not being professor is a possibility X

Only Conclusion III definitely does not follow

Direction (1-6) In this question two/three statements followed by four conclusion numbers

(1), (2), (3) and (4) have been given. You have to take the given statements to be true even if they seem to be at various variances with the commonly known facts and then decides which of the given conclusion logically follows the given statements disregarding commonly known facts.