

*LOGICAL REASONING*  
**MODULE 8 – SYLLOGISMS**

1. There are two statements, which are followed by four conclusions. Choose the conclusion which logically follow from the given statements.

**Statements:**

All men are vertebrates.

Some mammals are vertebrates.

**Conclusions:**

i) All men are mammals.

ii) All mammals are men.

iii) Some vertebrates are mammals.

iv) All vertebrates are men.

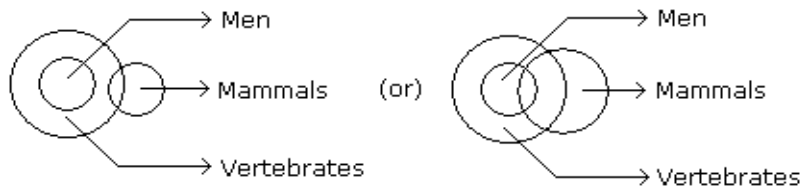
a) Only (i)

b) Only (ii)

c) **Only (iii)**

d) Only (iv)

**Answer: Option C**



Only (3) follows.

2. There are two statements, which are followed by two conclusions. Choose the conclusion which logically follow from the given statements.

**Statements:**

Some papers are pens.

All the pencils are pens.

**Conclusions:**

i) Some pens are pencils.

ii) Some pens are papers.

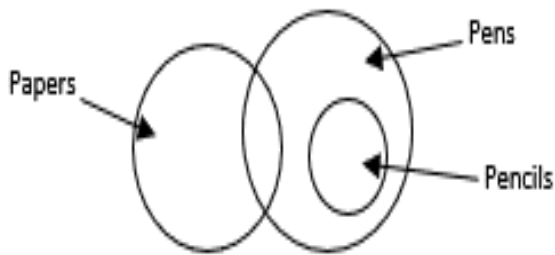
a) Only conclusion (i) follows

b) Only conclusion (ii) follows

**c) Both (i) and (ii) follow**

d) Either (i) or (ii) follows

**Answer: Option C**



3. There are two statements and some conclusions. Choose the conclusion that logically follows:

Statements:

All girls are crazy

Some girls are intelligent

a) Some girls are crazy

b) Some intelligent are crazy

**c) Both A & B**

d) None of the options

**Answer: Option C**

**Tick and Cross methods:**

**Girls = Tick, Crazy = Cross, Intelligent = Cross**

**Key points to be noted:**

**1. Conclusion should start with Some**

**2. Crazy = Cross**

**3. Intelligent = Cross.**

**Thus, the conclusion will be Some Crazy are Intelligent or Some Intelligent are Crazy. Therefore, B can be answer. At the same time, Some Girls are crazy is the subset of all girls are crazy. Therefore, A can also be a solution.**

**Thus, the answer will be both A and B.**

4. In the question below are given two statements followed by two conclusions numbered (i) and (ii), you have to take the two given statements to be true even if they seem to be at variance from commonly known facts and decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts:

**Statements:**

Some players are singers.

All singers are tall.

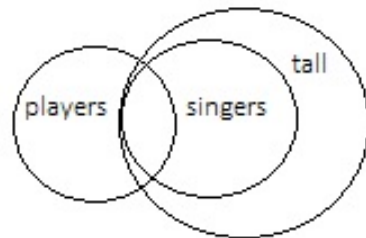
**Conclusions:**

i) Some players are tall.

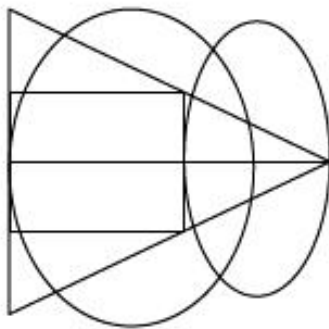
ii) All players are tall.

- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If either I nor II follows
- d) If neither I nor II follows

**Answer: Option A**



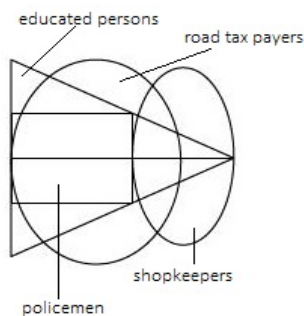
5. The figure represents a set of persons:
- i) The triangle represents educated persons
  - ii) The rectangle represents policemen
  - iii) The circle represents road tax payers
  - iv) The ellipse represents shopkeepers



According to the figure we can say that:

- a) Policemen do not pay road tax
- b) Shopkeepers do not pay road tax
- c) Some shopkeepers are educated**
- d) some policemen are shopkeepers

**Answer: Option C**

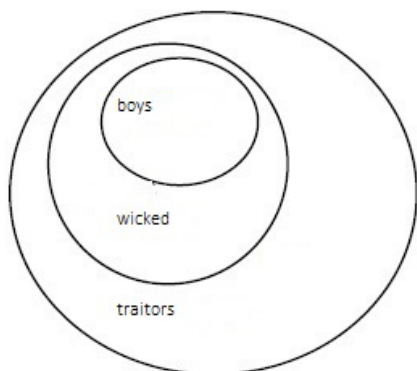


Since some of the portion of the ellipse is inside the triangle, hence, some shopkeepers are educated

6. Taken “All boys are wicked, all wicked (boys) are traitors” for granted, which of the following conclusions can be logically derived?

- a) All boys are traitors
- b) No boy is traitor
- c) Some wicked are not boys
- d) Some traitors are not boys

**Answer: Option A**



**DIRECTIONS (Q7 - Q10):** In each of the following questions there are three statements which are followed by three or four conclusions. Choose the conclusions which logically follow from the given statements.

**7. Statements:**

- All the locks are keys.
- All the keys are bats.
- Some watches are bats.

**Conclusions:**

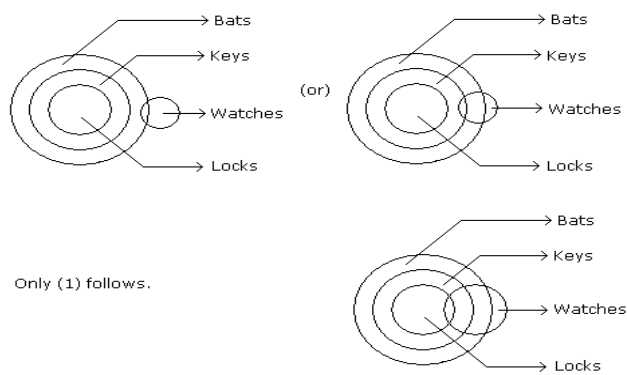
- i) Some bats are locks
- ii) Some watches are keys
- iii) All the keys are locks

- a) Only (i) and (ii)

- b) Only (i)

- c) Only (ii)

- d) Only (i) and (iii)



### 8. Statements:

Some questions are answers.

Some answers are writers.

All the writers are poets.

#### Conclusions:

i) Some writers are answers.

ii) Some poets are questions.

iii) All the questions are poets.

iv) Some poets are answers.

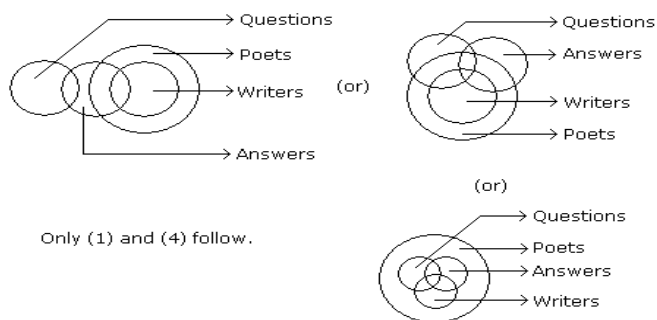
a) Only (i) and (ii)

**b) Only (i) and (iv)**

c) Only (i) and (iii)

d) Only (ii) and (iv)

**Answer: Option B**



### 9. Statements:

Some envelopes are gums.

Some gums are seals.

Some seals are adhesives.

#### Conclusions:

i) Some envelopes are seals.

ii) Some gums are adhesives.

iii) Some adhesives are seals.

iv) Some adhesives are gums.

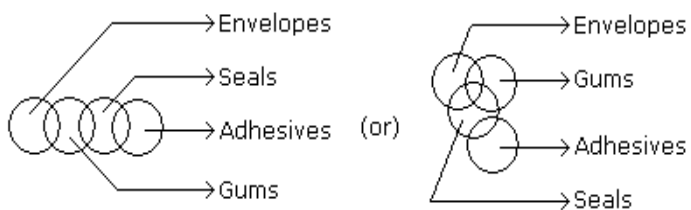
a) Only (ii)

b) Only (i)

**c) Only (iii)**

d) Only (iv)

**Answer: Option C**



**10. Statements:**

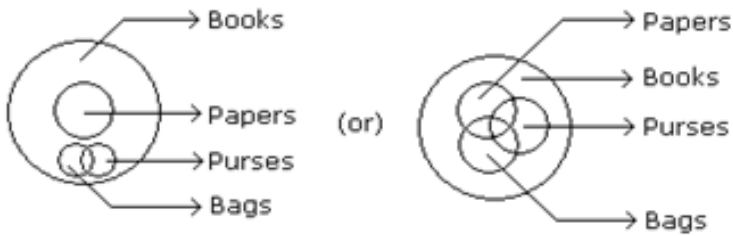
All the papers are books.  
All the bags are books.  
Some purses are bags.

**Conclusions:**

- i) Some papers are bags.
- ii) Some books are papers.
- iii) Some books are purses.

- a) Only (i)
- b) Only (ii) and (iii)
- c) Only (i) and (ii)
- d) Only (i) and (iii)

**Answer: Option B**



Only (2) and (3) follows.

**DIRECTIONS (Q11 - Q15):** Each question contains six statements followed by four options of combinations of any three of the given statements. Choose the option in which the combinations are logically related.

- 11.** (A) All tigers lay eggs.  
(B) All cats lay eggs.  
(C) Some cats can fly.  
(D) All tigers cannot fly.  
(E) All tigers are cats.  
(F) All tigers cannot swim.

- a) BEA
- b) ABE
- c) DEC
- d) ECB

**Answer: Option A**

In the above question, it can be clearly seen that the sequence BEA is the most appropriate since if all cats lay eggs is true and it is also true that all tigers are cats, then it will also be true that all tigers lay eggs.

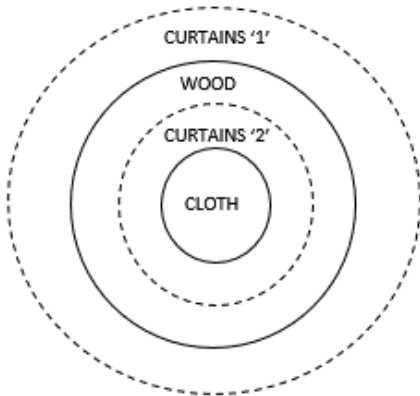
- 12.** (A) Some curtains are cloth.  
(B) All cloth is wood.  
(C) All that is wood is cloth.  
(D) All cloth are curtains.  
(E) All curtains are wood.  
(F) Some curtains are wood.

- a) BED
- b) BDF
- c) FAB
- d) FBA

**Answer: Option B**

BDF is the most logical sequence here since if we take B and D as the premises, then the curtains which are cloth will also be wood.

The diagram for BD will look like this --



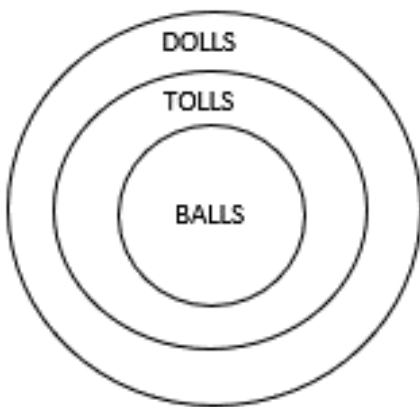
Hence, F is the correct conclusion.

13. (A) All balls are tolls.  
(B) Some tolls are dolls.  
(C) Some dolls are balls.  
(D) Some tolls are not balls.  
(E) All tolls are dolls.  
(F) No tolls are dolls.

a) EAC    b) BCD c) ABC d) EDC

**Answer: Option A**

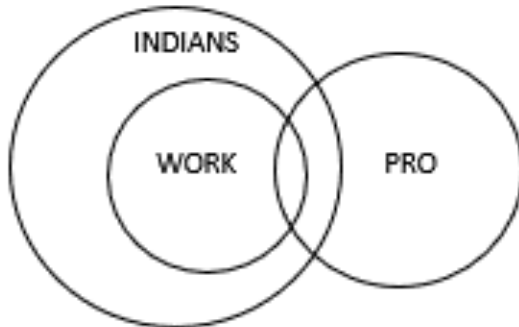
EA will give the following figure which will give C as the conclusion. Hence, the answer is (a).



14. (A) No brother is a pro.  
 (B) Some pros like to work.  
 (C) No Indian is rude.  
 (D) Some rude are pros.  
 (E) Some pro are Indians.  
 (F) All Indians like to work.

a) ABE    b) CED    c) **FEB**    d) BEF

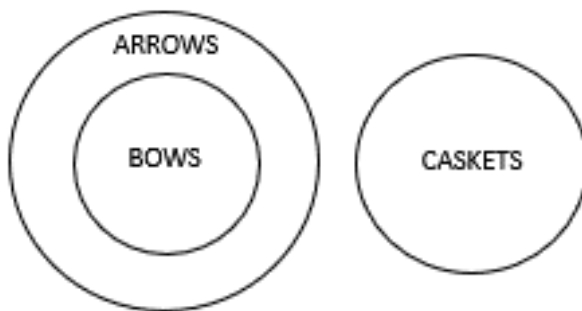
**Answer: Option C**



15. (A) All bows are arrows.  
 (B) No arrow is a casket.  
 (C) No bow is a casket.  
 (D) Some caskets are arrows.  
 (E) Some bows are caskets.  
 (F) No casket is a bow.

a) BDE    b) ACB    c) CDF    d) **ABF**

**Answer: Option D**



## HOME WORK

**Directions (Q16 – Q20):** In each of the questions below are given two or three statements followed by some conclusions. You have to take the given statements as 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 follow(s) from the given statements, disregarding commonly known facts.

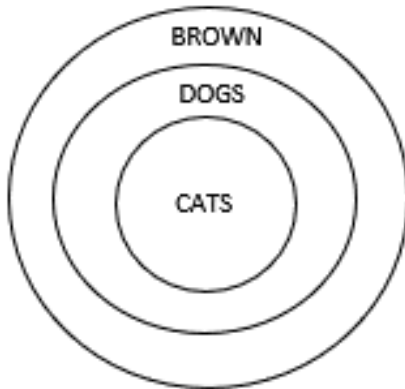


- 16. Statements:** (A) All cats are dogs.  
(B) All dogs are brown.

**Conclusions:** I. All cats are brown.  
II. All brown are dogs.

- a) **If only conclusion I follows.**  
b) if only conclusion II follows.  
c) if both follows.  
d) if neither I nor II follows.

**Answer: Option A**

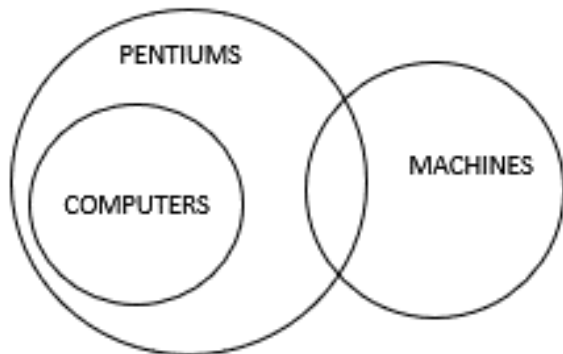


- 17. Statements:** (A) All Computers are Pentiums.  
(B) Some Pentiums are Machines.

**Conclusions:** I. Some Computers are Machines.  
II. Some Machines are Computers.

- a) If only conclusion I follows.  
b) if only conclusion II follows.  
c) if both follows.  
d) **if neither I nor II follows**

**Answer: Option D**

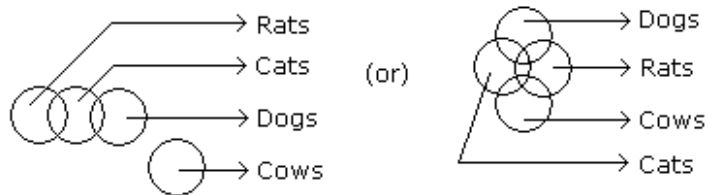


- 18. Statements:** (A) Some rats are cats.  
 (B) Some cats are dogs.  
 (C) No dog is cow.

**Conclusions:** I. No cow is cat.  
 II. No dog is rat.  
 III. Some cats are rats.  
 IV. No cats are cows.

- a) Only I follows.  
 b) Only I and II follow.  
 c) Only I and III follow.  
**d) Only III follows.**

**Answer: Option D**

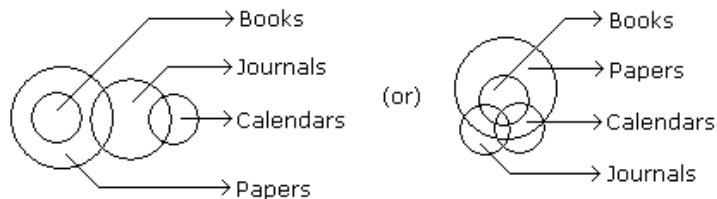


- 19. Statements:** (A) All the books are papers.  
 (B) Some papers are journals.  
 (C) Some journals are calendars.

**Conclusions:** I. Some journals are books.  
 II. Some calendars are papers.  
 III. Some books are journals.  
 IV. Some books are calendars.

- a) Only I follows.  
 b) Only II follows.  
 c) Only III follows.  
**d) None of these follow.**

**Answer: Option D**



None of these follows.

- 20. Statements:** (A) All the bottles are boxes.  
 (B) All the boxes are bags.  
 (C) Some bags are trays.

**Conclusions:** I. Some bottles are trays.

- II. Some trays are boxes.
- III. All the bottles are bags.
- IV. Some trays are bags.

- a) Only III and IV follow.
- b) Only I and II follow.
- c) Only II and III follow
- d) Only I and IV follow.

**Answer: Option A**

