SYLLOGISM

EXERCISE

Directions (Qs. 1-10): In each 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 then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts. Read both the statements and—

Give answer (a) if only conclusion I follows; give answer (b) if only conclusion II follows; give answer (c) if either I or II follows; give answer (d) if neither I nor II follows and give answer (e) if both I and II follows.

1.	Statements 1:	All tomatoes are red.
	П:	All grapes are tomatoes.
	Conclusions I:	All grapes are red.
	<i>II</i> :	Some tomatoes are grapes.
2.	Statements 1:	All painters are smilling.
	П:	Some authors are painters.
	Conclusions I:	All smiling authors are
		painters.
	П:	Some authors are smiling.
3.	Statements I:	All peons in this office are
		efficient.
	П:	Ramu is not efficient.
	Conclusions I:	Ramu is not peon in this of-
		fice.
	П:	Ramu should be more effi-
		cient.
4.	Statements I:	All weavers are hard work-
		ing.
	II :	No hard working men are
		foolish.

	Conclusions I:	No weavers are foolish.
	II:	Some foolish are weavers.
5.	Statements I:	All fishes are cars.
	II :	All cars are vegetables.
	Conclusions I:	Some vegetables are cars.
	И:	Some vegetables are fishes.
6.	Statements I:	Some dogs are pups.
	И:	All horses are pups.
	Conclusions I:	Some dogs are horses.
	И:	Some horses are dogs.
7.	Statements I:	All beautiful women are
		mothers.
	И:	All mothers are understand-
		ing.
	Conclusions I:	All beautiful women are
		understanding.
	И:	All mothers are beautiful
		women.
8.	Statements I:	Some toys are tables.
	И:	No table is black.
	Conclusions I:	Some toys are black.
	И:	Some toys are not black.
9.	Statements I:	All rivers are mountains.
	И:	Some rivers are deserts.
	Conclusions I:	Some mountains are deserts.
	П:	Some deserts are not moun-
		tains.
10.	Statements I:	All men are horses.
	П:	All horses are elephants.
	Conclusions I:	All men are elephants.
	II :	All elephants are men.
Direct	ions (Qs. 11-15)	: In the following questions,
select	the set of conclu	sion which logically follows

from the given statements.

- **11.** *Statements I*: All foxes are plates.
 - *II*: All plates are trees.
 - Conclusions I: All foxes are trees.
 - *II*: All trees are foxes.
 - III: Some trees are foxes.
 - *IV*: Some trees are plates.
 - (a) All conclusions are correct.
 - (b) Only conclusions I, III, and IV follow.
 - (c) Only conclusions II, III, and IV follow.
 - (d) Only conclusions I and IV follow.
 - (e) None of the above.
- **12.** *Statements I*: Some cubes are squares.
 - II: All squares are circles.
 - Conclusions I: All cubes are circles.
 - *II*: Some circles are cubes.
 - *III*: Some circles are squares.
 - IV: All squares are cubes.
 - (a) Only conclusion I follows.
 - (b) Only conclusion I, II and III follow.
 - (c) All conclusions are correct.
 - (d) Only conclusions II and III follow.
 - (e) None of the above.
- **13.** *Statements I*: All cups are goats.
 - *II*: All goats are tins.
 - Conclusions I: All goats are cups.
 - *II*: All tins are goats.
 - III: No cups are tins.
 - *IV*: No tins are cups.

- (a) Only conclusions III and IV follow.
- (b) Only conclusios I and II follow.
- (c) Only conclusions I, II and III follow.
- (d) All conclusions are correct.
- (e) None of the above.
- **14.** *Statements I*: All bombs are bags.
 - II: Some bags are jets.
 - Conclusions I: All bombs are jets.
 - II: All jets are bombs.
 - *III*: Some jets are bombs.
 - *IV*: Some bombs are jets.
 - (a) Only conclusion III follows.
 - (b) Only conclusions I and II follow.
 - (c) All conclusions are correct.
 - (d) Only conclusions III and IV follow.(e) None of these.
- **15.** *Statements I*: Some thorns are jackets. *II*: Some jackets are boats.
 - Conclusions I: No thorns are boats.
 - II: All jackets are boats.
 - *III*: Some boats are thorns.
 - *IV*: No jackets are thorns.
 - (a) Either conclusion I or IV follows.
 - (b) Either conclusion I or II follows.
 - (c) Either conclusion I or III follows.
 - (d) No conclusion is correct.
 - (e) All conclusions are correct.

EXPLANATORY ANSWERS

1. (e): When all tomatoes are red and all grapes are tomatoes, then all grapes are also red. When all grapes are tomatoes, then some



tomatoes must be grapes. Therefore, both conclusions I and II are correct.

2. (b): When all painters are smiling and some authors are painters, then some authors are smiling. Therefore, only conclusion II is correct.



3. (*a*) : When all the peons of the office are efficient, then Ramu cannot be a peon in this office. Therefore, only conclusion I is correct.



4. (*a*): When all weavers are hardworking and no hardworking men are foolish, then no weavers are foolish. Therefore, only conclusion I is correct.



5. (e): When all fishes are cars and all cars are vegetables, then all fishes will naturally be vegetables. This means that some vegetables are fishes. And when all cars are vegetables, then some vegetables will be cars naturally. Therefore, both the conclusions I and II are correct.



6. (d): No relationship can be established between the two statements. Therefore, neither conclusion I nor conclusion II is correct.



7. (a): When all beautiful women are mothers and all mothers are understanding, then naturally all beautiful women are understanding. All mothers need not be beautiful women. Therefore, only conclusion I is correct.



8. (c): When some toys are tables and no table is black, then it is indicated that some toys can be black, as all toys are not tables. On the other hand, some toys may not be black. Therefore, there is a possibility that some toys may or may not be black. As such, either conclusion I or conclusion II can be correct.



9. (e): When all rivers are mountains and some rivers are deserts, then some deserts cannot be mountains and also, some mountains need not be deserts. Therefore, both conclusion I and conclusion II are correct.



10. (a): When all men are horses and all horses are elephants then, naturally all men are elephants, but all elephants need not be men. Therefore, only conclusion I is correct.



When all foxes are plates and all plates are trees, then naturally all foxes will be trees and some trees will then have to be foxes. And when all plates are trees then some trees will have to be plates. Therefore, only conclusions I, III and IV are correct.

12. (d): When it is given that some cubes are squares and all squares are circles, then some cubes will naturally be circles, though all cubes cannot be circles. When some cubes are circles, then some circles will have to be cubes. And when all squares are circles, then some circles will have to be squares. As per given statement II, all squares are circles. Therefore all squares cannot be cubes. As such only conclusions II and III are correct.



13. (e): When all cups are goats, then only some goats can be cups. When all goats are tins, then only some tins can be goats. When all cups are goats and all goats are tins, then naturally all cups are tins and some tins must be cups. Therefore, all the conclusions are incorrect.



14. (e): When all bombs are bags and some bags are jets then all bombs cannot be jets. 'Some bags' indicate that there is no chance of some bombs being jets, or some jets being bombs. Further all jets cannot be bombs. Therefore, all conclusions are incorrect.



15. (*d*) : When some thorns are jackets and some jackets are boats, then some thorns may be boats but some boats cannot be thorns. As per Statement I, some thorns are jackets, some jackets need to be thorns. When Statement II conveys that some jackets are boats, then it is clear that all jackets cannot be boats. Therefore, no particular given conclusion can be drawn from the given statements.

