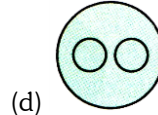
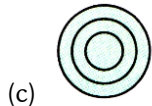
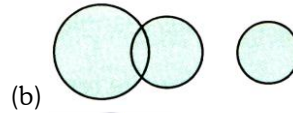
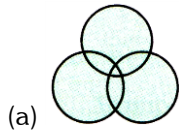


# Logical Venn Diagram

REASONING  
**WORKBOOK**

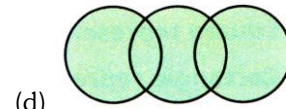
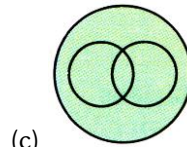
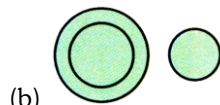
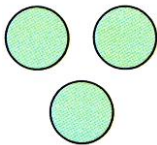
## QUESTIONS

**Direction (1- 5):** Each of the questions given below contains three classes of items. There may or may not be the relationship amongst these three. You have to choose one of the diagrams out of (a), (b), (c) and (d) that can fit regarding the relationship for the three classes.



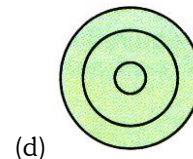
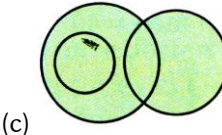
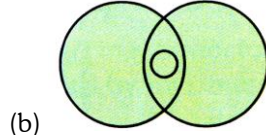
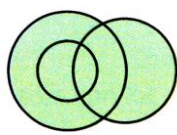
1. Table, Chair, Furniture
2. Husbands, Brothers, Fathers
3. Letter, Sentence, Word
4. Females, Doctors, Medicine
5. Tennis players. Girls, Students

**Direction (6 -10):** Each of the questions given below contains three groups of items. They may or may not have any link amongst themselves. You have to choose one of the diagrams (a), (b), (c) or (d) that can represent the link.

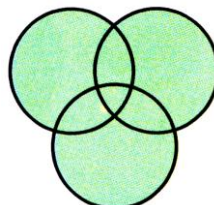


6. Goods train. Goods, Truck
7. Cow, Buffalo, Elephant
8. India, Delhi, Lahore
9. Earth, Mountains, Grass
10. Beautiful, Clever, Fair

**Direction (11 -14):** Each of the following questions contains three items. Use the relationship between these items, match each question with the most suitable diagram.

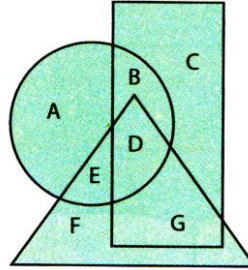


11. Food, Banana, Fruit
12. Engineers, Females, Wives
13. Males, Nephews, Cousins
14. Acute angled triangle. Isosceles triangle. Equilateral triangle
15. Which of the items given below are represented by the following Venn diagram?



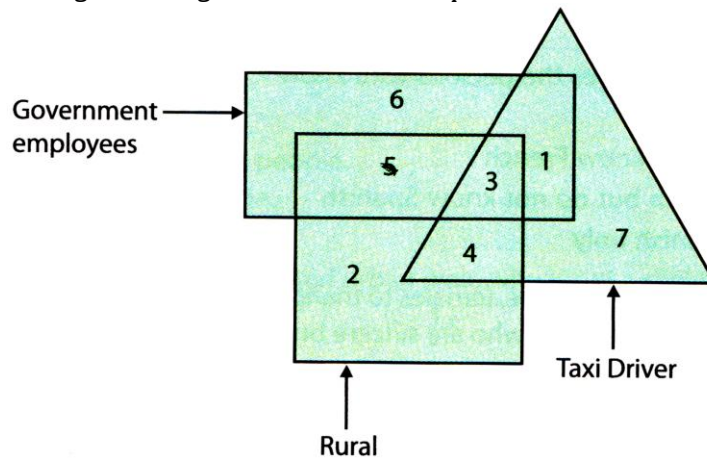
- (a) Singers, Boys, Girls
- (b) Singers, Dancers, Couples
- (c) Major, Air commodore. Naval chief
- (d) Hands, Fingers, Wrists

16. Which of the following statements is correct regarding to the given diagram?



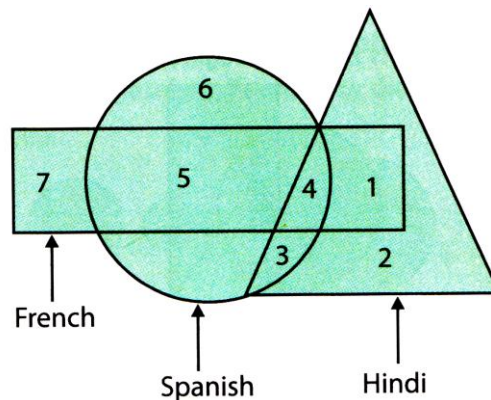
- (a) B and D are in common to circle and triangle.  
 (b) B is in common to all the three figures.  
 (c) D and G are in common to rectangle and triangle.  
 (d) C and D are in triangle.

**Direction (17 -19):** Study the following Venn diagram and answer the questions that follow.



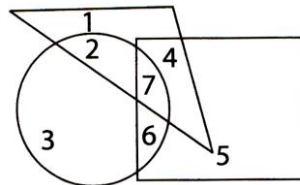
- Sum of numbers in a figure represents the number of persons of corresponding category.
17. The number of rurals who are taxi drivers but not government employees is  
 (a) 6 (b) 8 (c) 10 (d) 4
18. The number of taxi drivers who are government employees but not belonging to rural is  
 (a) 2 (b) 1 (c) 4 (d) 3
19. The ratio of numbers who are rural but are neither taxi drivers nor government employees and who are neither rural nor taxi drivers is  
 (a) 2 : 3 (b) 1 : 3 (c) 6:7 (d) 7 :4

**Direction (20-22):** Study the following diagram and corresponding information carefully to answer the questions that follow.

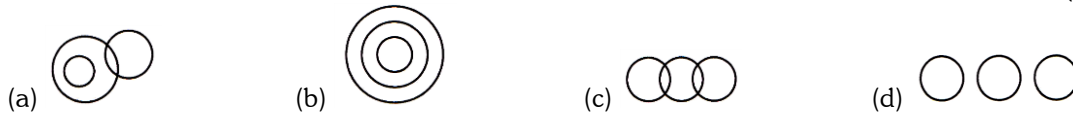


20. Which number represents the persons who know neither Hindi nor Spanish?  
 (a) 3 (b) 4 (c) 7 (d) 8

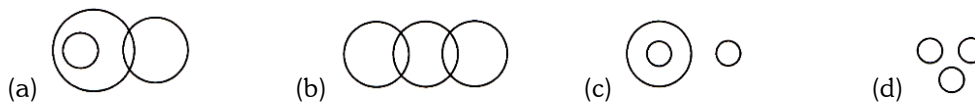
21. Which number represents the persons who know both French and Hindi only?  
 (a) 1 (b) 5 (c) 6 (d) 3
22. The region 2 best describes the persons who know  
 (a) Hindi only  
 (b) Hindi but do not know French  
 (c) Hindi and French but do not know Spanish  
 (d) Hindi and Spanish only
23. If ambitious is equivalent to circle, females to triangle and sincere to rectangle. Which number will represent female members who are sincere but not ambitious.  
**(SOF NCO 2016)**



- (a) 3 (b) 4 (c) 5 (d) 6
24. Which of the following Venn diagrams best represents the relationship amongst, "Red, Clothes and Roses"?  
**(SOF NSO 2016)**



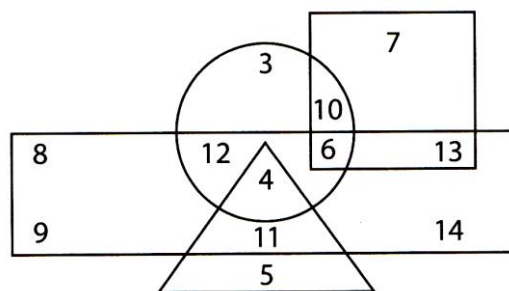
25. Which of the following Venn diagrams best represents the relationship amongst, "Males, Females and Brothers"?  
**(SOF NSO 2016)**



26. Select a figure from the options that illustrates the relationship amongst "pigeons, birds, dogs".  
**(SOF IMO 2016)**



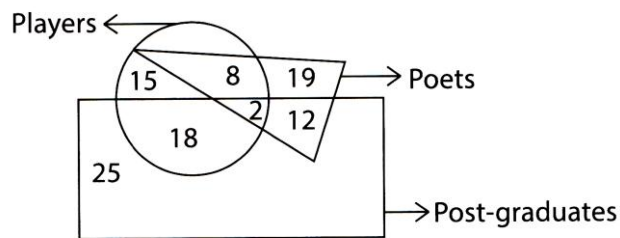
27. The following question is based on the diagram given below.  
**(SOF IMO 2016)**



- (i) Rectangle represents males.  
 (ii) Triangle represents educated people.  
 (iii) Circle represents urban people.  
 (iv) Square represents civil servants.  
 Who among the following is uneducated urban male who is not a civil servant?

- (a) 8 (b) 3 (c) 11 (d) 12

28. Study the given Venn diagram carefully and answer the question that follows:

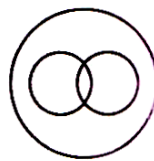


How many players are post-graduates but not poets?

(SOF NCO 2017)

29. Which of the following options satisfies the given Venn diagram?

(SOF NSO 2017)



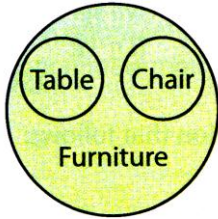
- (a) English, French, German  
(b) Mothers, Females, Cricketers  
(c) Prime numbers, Integers, Even numbers  
(d) Planets, Mars, Sun
30. In the given Venn diagram, if circle represents 'Politicians', triangle represents 'Doctors' and rectangle represents 'Married people', then which of the following numbers represents the Married doctors who are not Politicians?
- (a) 4 (b) 3 (c) 2 (d) 5

(SOF IMO 2017)

ANSWER - KEY									
1.	D	2.	A	3.	C	4.	B	5.	A
6.	D	7.	A	8.	B	9.	C	10.	A
11.	D	12.	A	13.	A	14.	B	15.	B
16.	C	17.	D	18.	B	19.	B	20.	C
21.	A	22.	A	23.	B	24.	C	25.	C
26.	A	27.	D	28.	C	29.	C	30.	D

## EXPLANATIONS

1. (d) : Furniture has table and chair as its two items. But table and chair are separate,



2. (a): Some husbands can be both brothers and fathers. The same statements are for brothers and fathers,
3. (c): A letter is a part of a word and a word is a part of a sentence.
4. (b) : Some females can be doctors and vice-versa. But medicine is not related to any of other two classes.
5. (a); Some tennis players can be girls and students both .The same statement are for other two classes.
6. (d) : Goods trains and truck are entirely different. But some goods are carried by goods train and some goods are carried by trucks.
7. (a) : Cow, buffalo and elephant have no link.
8. (b): Delhi is a part of India, but Lahore is entirely different from both of the other two.
9. (c) Earth consists of mountains and grass. But some mountains are grassy.
10. (a): All the three are separate from each other.
11. (d): Banana is a fruit and all fruits are food.
12. (a): All wives are females. But some females and some wives are engineers.
13. (a) : All nephews are males. Some males and nephews are cousins also.
14. (b) : Some acute angled triangles are isosceles and some isosceles triangles are acute angled triangles. But all equilateral triangles are both acute and isosceles.
15. (b) : Some singers may be both dancers and couples. Some dancers may be both singers and couples. Some couples may be both singers and dancers.
16. (c) : Only D and G are in common to rectangle and triangle.
17. (d) Not Available
18. (b) 11 is common in rectangle & triangle.
19. (b); Required ratio = 2:6 or 1:3.
20. (c): The region represented by 7 does not belong to circle or triangle.
21. (a); Regions 1 is common to rectangle and triangle.
22. (a) Region 2 lies in Hindi section only.
23. (b) Not Available
24. (c) Not Available
25. (c) Not Available
26. (a) Not Available
27. (d) Not Available
28. (c) Not Available
29. (c) Not Available
30. (d) Not Available