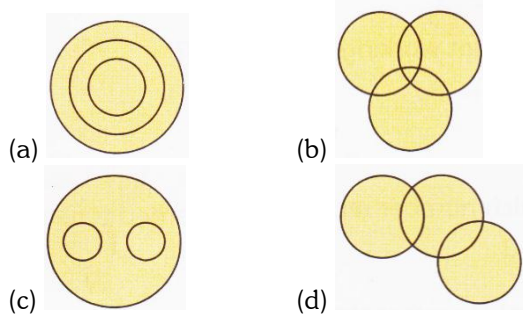


# Logical Venn Diagrams

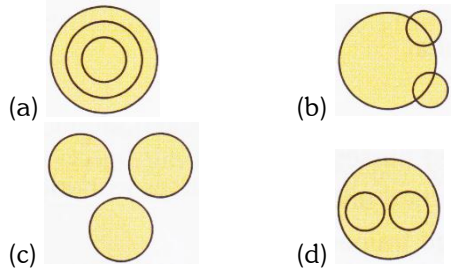
## QUESTIONS

**Direction (1-5): Which of the following diagrams indicates the best relation amongst the following?**

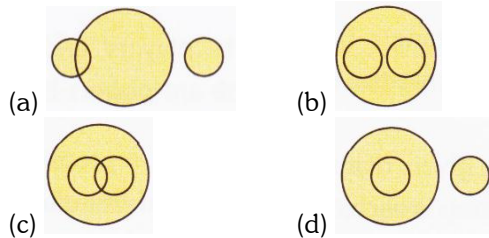
**1.** Science, Physics, Chemistry



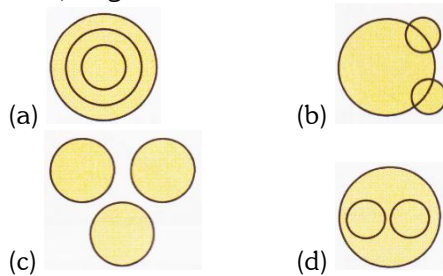
**2.** Moon/Sun and Earth



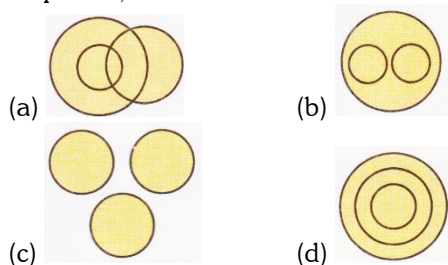
**3.** Dogs, Pet animals and Animals



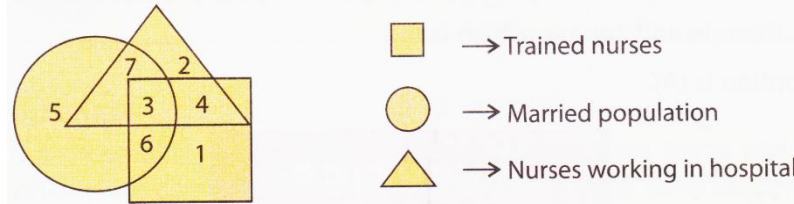
**4.** Lion, Dog and Snake



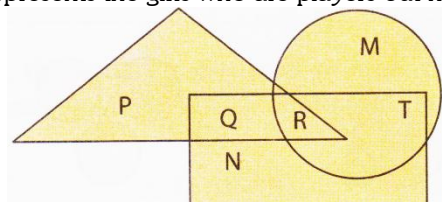
**5.** Elephants, Wolves and Animals



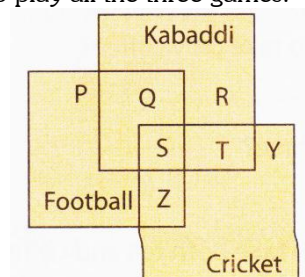
**Direction (6-10): Study the following diagram and then answer the questions given below.**



6. If hospital management requires only married trained nurses already working in the hospital for operation theatre, which part of the diagram should be chosen?  
 (a) 7 (b) 4  
 (c) 3 (d) 6
7. Which number represents the married but untrained nurses working in the hospital?  
 (a) 4 (b) 6  
 (c) 7 (d) 3
8. Which number represents married trained nurses not working in hospital?  
 (a) 3 (b) 7  
 (c) 6 (d) 2
9. What is represented by the number 2?  
 (a) Married but untrained nurses working in the hospital.  
 (b) Trained nurses.  
 (c) Unmarried untrained nurses working in the hospital.  
 (d) Married trained nurses.
10. Which number represents the trained unmarried nurses working in the hospital?  
 (a) 6 (b) 5  
 (c) 7 (d) 4
11. In the given diagram, triangle represents 'girls', rectangle represents 'players' and circle represents 'coach'. Which part of the diagram represents the girls who are players but not coach?

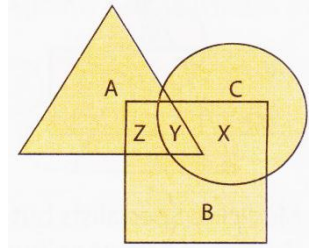


- (a) P (b) Q  
 (c) R (d) N
12. The diagram given below represents those students who play Cricket, Football and Kabaddi. Study the diagram and identify the students who play all the three games.

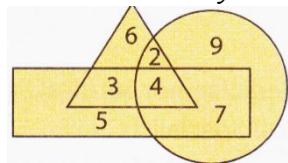


- (a)  $P + Q + R$  (b)  $Z + T$   
 (c)  $S + T + Z$  (d) S

13. In the given figure, square represents doctors, triangle represents ladies and circle represents professors. By which letter the ladies who are both doctors and professors represented?

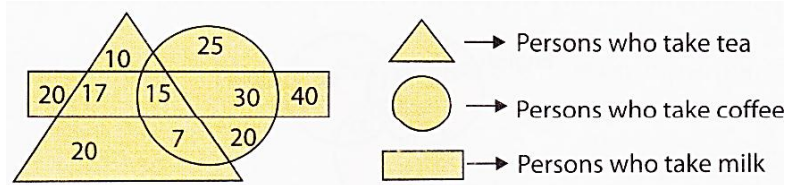


- (a) X (b) Y  
(c) Z (d) A
14. In the given figure, triangle represents healthy people, rectangle represents old persons and circle represents men. What is the number of those men who are healthy but not old?



- (a) 3 (b) 4  
(c) 6 (d) 2

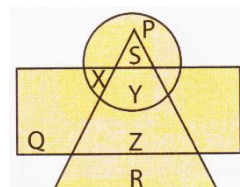
**Direction (15-18): Study the following diagram and hence answer each of the given questions.**



**The number in a geometrical figure indicates the number of corresponding persons.**

15. How many persons take milk?  
(a) 100 (b) 82  
(c) 92 (d) 122
16. How many persons are there who take only coffee?  
(a) 90 (b) 45  
(c) 25 (d) 20
17. How many persons take all the three?  
(a) 20 (b) 17  
(c) 25 (d) 15
18. How many persons are there who take both tea and coffee but not milk?  
(a) 22 (b) 17  
(c) 7 (d) 20

**Direction (19-21): In the following diagram, the circle stands for Professors, the triangle stands for Surgical Specialists and Medicine Specialists are represented by the rectangle. Answer the questions based on given information.**

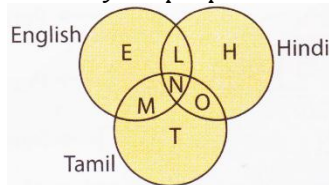


19. Surgical Specialists who are also Medicine Specialists but not Professors are represented by  
 (a) Q (b) X  
 (c) Y (d) Z

20. R represents  
 (a) Medicine Specialists only  
 (b) Professors only  
 (c) Surgical Specialists only  
 (d) Medicine and Surgical Specialists only

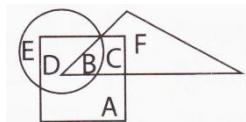
21. Q represents  
 (a) Professors who are neither Medicine nor Surgical Specialists.  
 (b) Professors who are not Surgical Specialists.  
 (c) Medicine Specialists who are neither Professors nor Surgical Specialists.  
 (d) Professors who are not Medicine Specialists.

22. Study the diagram and identify the people who can speak only one language.



- (a)  $L + M + O$   
 (b)  $T + H + E$   
 (c) T  
 (d) E

23. In the given diagram, circle represents people who live in joint family, triangle represent school Teachers and square represent married people. Then by which letter the married people who live in joint family but are not school teachers are represented?



- (a) C  
 (b) F  
 (c) D  
 (d) A

(SOF NCO 2016)

24. Which of the following Venn diagrams best depicts the relationship amongst, 'Singers, Dancers, Actors'?

(SOF NSO 2016)

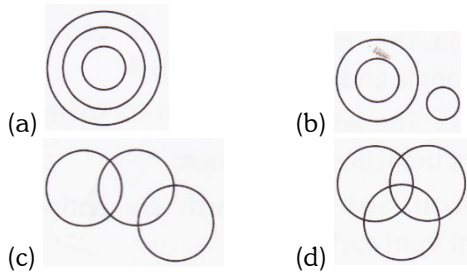
- (a) (b)   
 (c) (d)

25. Which of the following Venn diagrams best illustrates the relationship amongst, "Sun, Moon and Stars"?

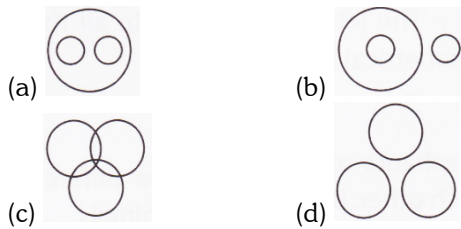
(SOF IMO 2016)

- (a) (b)   
 (c) (d)

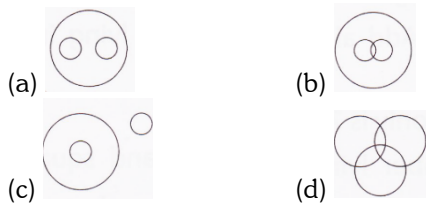
26. Select a Venn diagram from the options which best illustrates the relationship amongst Metal, Copper, Wood".  
(SOF IMO 2016)



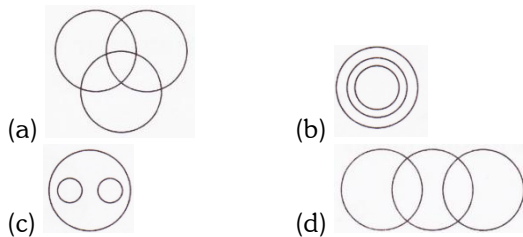
27. Which of the following Venn diagrams best represents the relationship amongst, "Females, Doctors, Patients"?  
(SOF NCO 2017)



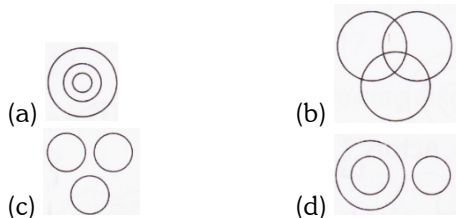
28. Which of the following Venn diagrams best depicts the relationship amongst, "Paddy, Wheat and Rabi-Crop"?  
(SOF NSO 2017)



29. Which of the following Venn diagrams best illustrates the relationship amongst/"Flute, Musical instruments, Violin"?  
(SOF IMO 2017)



30. Which of the following Venn diagrams best illustrates the relationship amongst, "Rings Ornaments, Diamond rings"?  
(SOF IMO 2017)



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

## EXPLANATIONS

1. (c) : Physics and Chemistry are two different branches of science.
2. (c) : Moon, Sun and Earth are entirely different from each other.
3. (c) : All dogs and pet animals are animals. Some dogs are pet animals.
4. (c) : All three are different from each other.
5. (b) : Elephants and wolves are different from each other. But both are animals.
6. (c) : The number common to all the three geometrical figures is 3.
7. (c) : Number that is common to triangle and circle only is 7.
8. (c) : Number lying in circle and square only is 6.
9. (c) : 2 represents unmarried untrained nurses working in the hospital.
10. (d) : The number that is **common** to triangle and square only is 4.
11. (b) : The letter common to triangle and rectangle only is Q.
12. (d) : **S** is common **to** all the three geometrical figures.
13. (b) : The letter common to all the three geometrical figures is Y.
14. (d) : The number common to triangle and circle only is 2.
15. (d) : Add all the numbers lying in the rectangle.
16. (b) : Add all the numbers lying in circle **only**.
17. (d) : Find the number that is common overall.
18. (c) : The number common to circle and triangle only is 7.
19. (d) : Find the letter common to rectangle and triangle only.
20. (c) : R lies inside the triangle only.
21. (c) : Q lies inside the rectangle only. So, Q represents medicine specialists who are neither professors nor surgical specialists.
22. (b) : People who speak English only = E  
People who speak Hindi only = H  
People who speak Tamil only = T  
So, required people are  $E + H + T$ .