

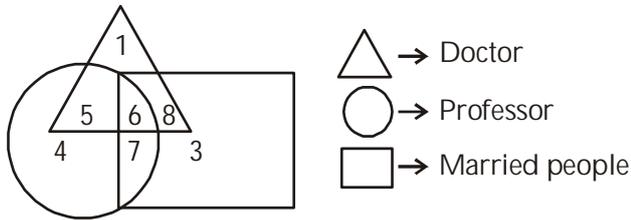
Chapter - 7

LOGICAL VENN-DIAGRAM

Answer Key with Step-by-Step Solutions
Includes: All MCQs + Extra PYQs with Detailed Explanations

Previous Year Questions

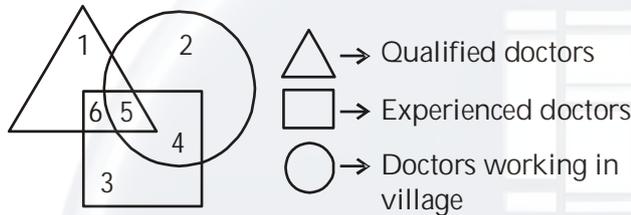
1. Which number indicates doctors who are not married.



- (a) 5 (b) 1
(c) 6 (d) 8

2. Study the diagram given below and answer the question.

The qualified and experienced doctor working in villages are represented by.



- (a) 4 (b) 5
(c) 2 (d) 6

3. The experienced doctors who are not working in villages.

- (a) 6 (b) 5
(c) 15 (d) 1

4. Only qualified doctors who are working in villages.

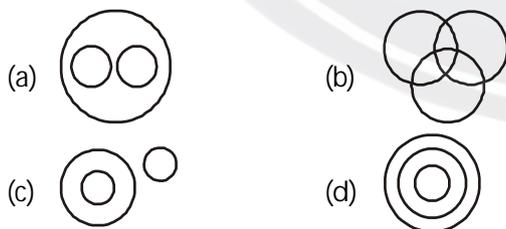
- (a) 2 (b) None
(c) 5 (d) 4

5. The doctors working in village are neither qualified nor experienced.

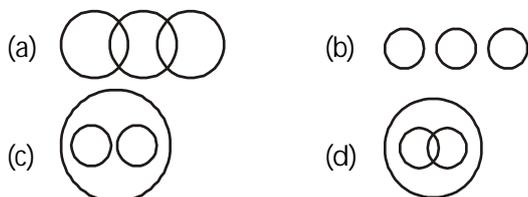
- (a) 15 (b) 10
(c) 2 (d) 4

(6-8) : Identify the diagram that best represents the relationship among classes given below.

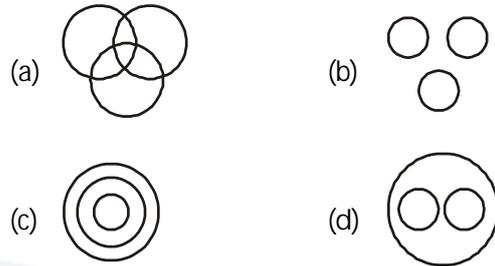
6. Professors, Researcher, Scientists.



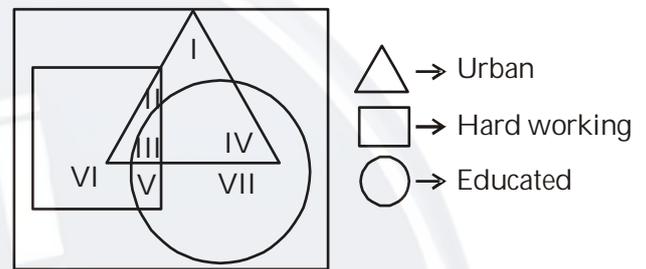
7. Language, English and Hindi.



8. Tigers, Lions, Animals.



9. Which one of the areas marked I-VII represents the urban educated who are not hard working?



- (a) I (b) III
(c) II (d) IV

10. All urban and hard working, educated shown by.

- (a) III (b) II
(c) IV (c) VII

11. Only hard working & only urban are shown by.

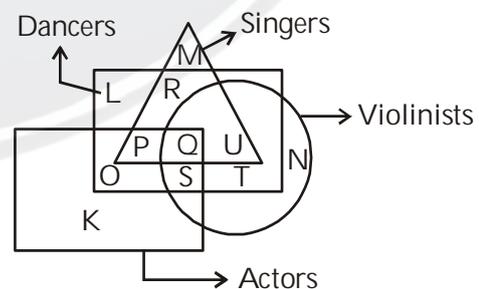
- (a) I, III (b) IV, III
(c) I, VI (d) II, III

12. Neither educated nor urban shown by.

- (a) VII (b) VI
(c) III (d) II

(13-14) : In the given figure, which letter represent

13. Those actors who are also dancers, singers as well as violinists.

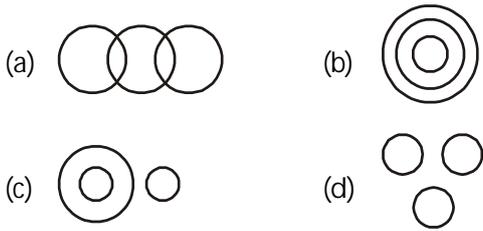


- (a) S (b) Q
(c) P (d) U

14. Those singers who are dancer but not (Actor and Violinists)

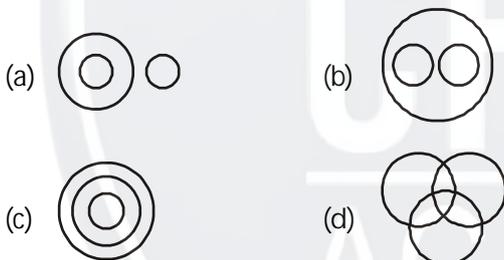
- (a) R (b) U
(c) T (d) K

Direction (15 – 27): Find out the diagram which indicate best relationship among given object.



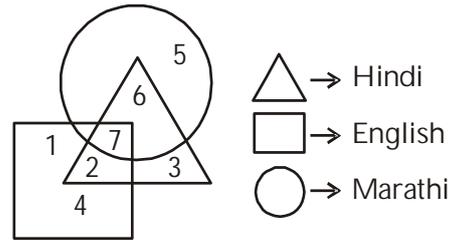
- 15. Travellers, Train, Bus.
- 16. Gases, Oxygen, Gold.
- 17. Indians, Bengali, East Indian.
- 18. World, India, Rajasthan.
- 19. Cricket, table tennis, Football.
- 20. Metal, Air, Road.
- 21. Nurse, Females, Doctor.
- 22. Shark, Bird, Lion.
- 23. Insect, Virus, Bacteria.
- 24. Milky-way, Earth, Universe
- 25. Cousins brothers female, Aunt.
- 26. Society, Family, Members.
- 27. Metal, Silver, Water.

28. Which diagram shows best relationship among carbon, sulphur dioxide and gases.



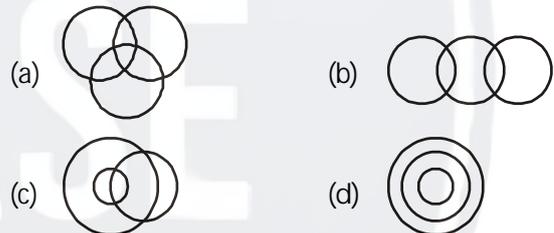
Direction (29 – 34): Given diagram shows different entities, find out relationship which are given below.

29. How many person speak minimum two languages.



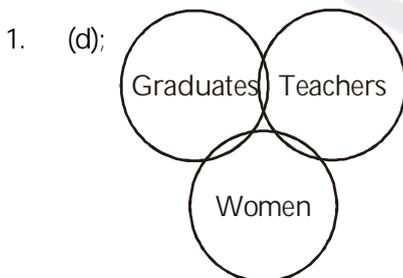
- (a) 8
- (b) 15
- (c) 4
- (d) 11
- 30. How many persons speak all three languages.
 - (a) 17
 - (b) 9
 - (c) 11
 - (d) 7
- 31. How many persons doesn't speak marathi.
 - (a) 6
 - (b) 15
 - (c) 10
 - (d) 17
- 32. How many persons speak only 1 language.
 - (a) 12
 - (b) 13
 - (c) 15
 - (d) 20
- 33. How many persons speak hindi.
 - (a) 17
 - (b) 18
 - (c) 20
 - (d) 25
- 34. How many persons speak only marathi.
 - (a) 10
 - (b) 12
 - (c) 5
 - (d) 4

(35-40) : Find out best diagram which shows the relationship among these objects.

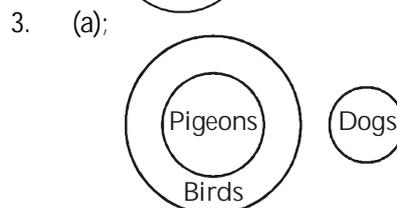
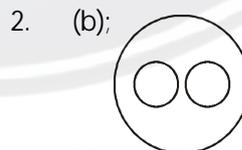


- 35. Mammal, Cat, Pet animal.
- 36. Male, Hindu, Muslim.
- 37. College, Lab, Equipment.
- 38. Letters, Word, Sentence
- 39. Men, female, professors.
- 40. Men, fathers, Indian.

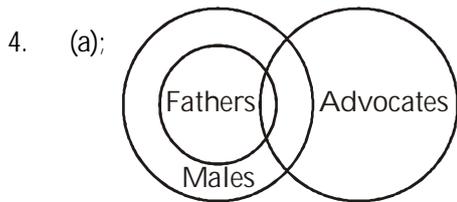
Practice Set Solutions



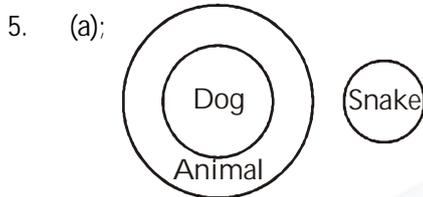
Here, some teachers may be women and some women may be graduates. Also some graduates may be teachers.



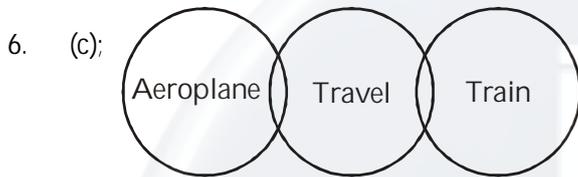
We can include pigeons into birds category but dogs are animals.



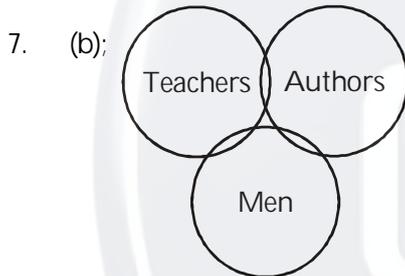
All fathers are males. Some males and some fathers may be advocates.



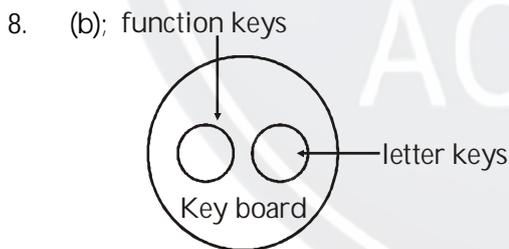
All dogs are animal but snake belongs to reptiles category.



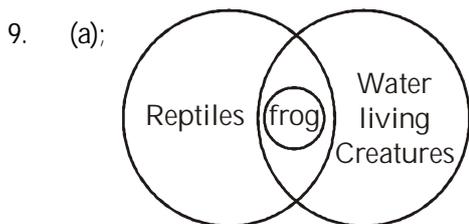
Travel can be both in Aeroplane and Train.



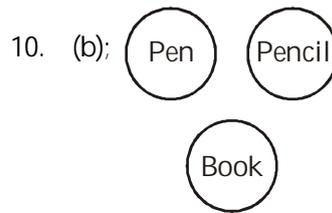
Some Authors may be men and some men may be teachers. Also, some teachers may be authors.



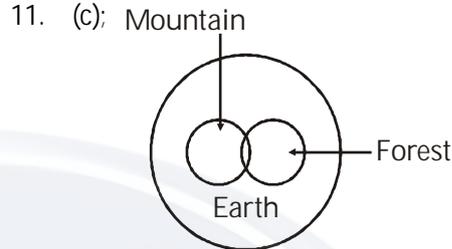
Function keys and letter keys both are present in key board but function keys are different from letter keys.



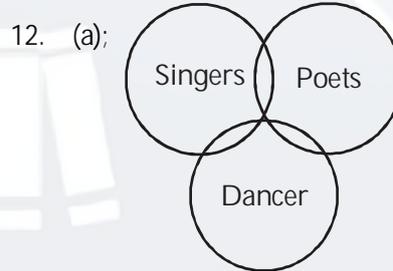
Some animals are belong to both categories reptiles and water living creatures. Such snake, crocodile, frog etc.



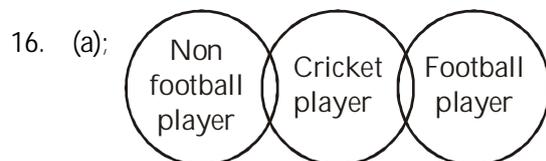
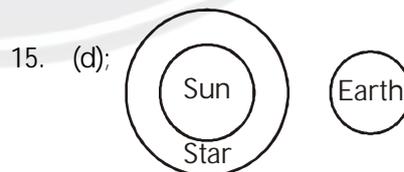
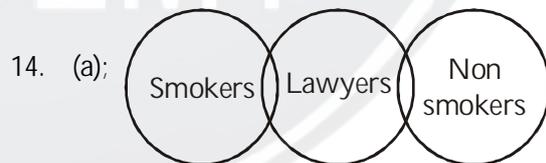
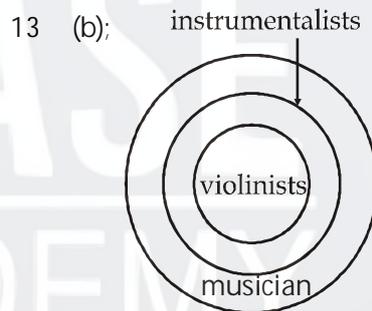
All are related to stationery but different from each other.

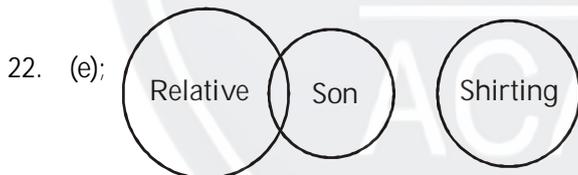
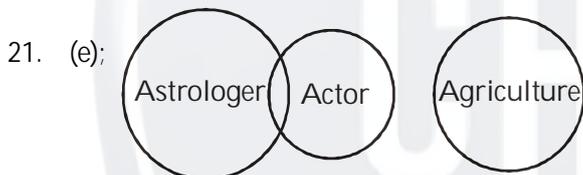
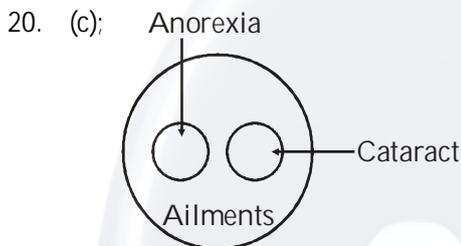
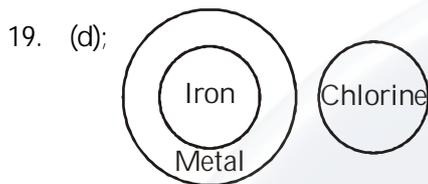
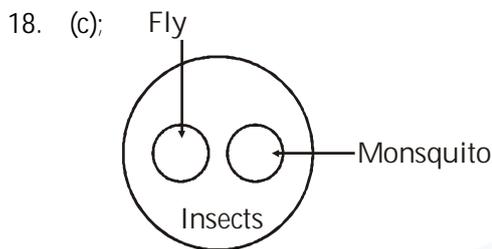
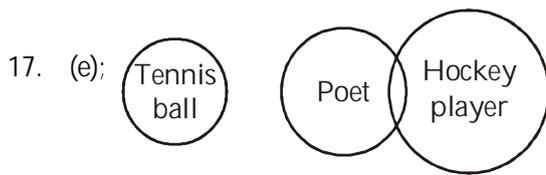


Mountain and forest both are on earth. But some forest may be on mountains.



Some singers may be poets and some dancer may be singers. Some poets may be dancer.

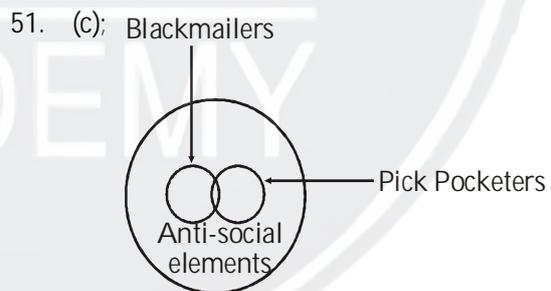




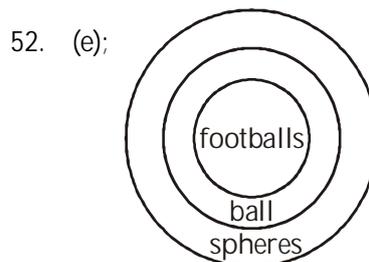
23. (c); Number 6 represents non-school going villagers infants.
 24. (a); Number 8 represents villagers boys.
 25. (b); Number 5 represents the school going villagers boys.
 26. (e); 4 represents the infant boys who are school going.
 27. (b); 3 represents the infant villagers boys who are school going.
 28. (d); Letter 'c' represents the blank space.
 29. (a); Letter 'e' represents the students who play volleyball and hockey.
 30. (d); No letter is there which represents the boys who play all games.
 31. (c); Letter 'f' represents the students who play football and hockey.

32. (d); None.
 33. (c); Letter 'f' represents the lawyer women.
 34. (b); Letter 'k' represents the men-doctor.
 35. (a); Letter 'h' and 'a' represents the women who are not lawyer and doctor.
 36. (c); Letter 'b' and 'c' represents the men who are not doctor and lawyer.
 37. (b); Letters 'd' and 'g' represents women doctors.
 38. (c); Tiger is a carnivorous animal and elephant is not carnivorous
 39. (d); Some students are boys and some are girls. So option d is the answer.
 40. (b); 7 Boys are disciplined students.
 41. (d); → 11.
 42. (b); → 3.
 43. (c); → 10.
 44. (a); → 4.
 45. (d); → 12 → The condition which is not mentioned should not be considered or assumed. For instance, here 6 also denotes the required region. But, since it lies in side the square and there is no mention of 'civil servant', so it cannot be the answer.
 46. (a); → 7.
 47. (c); → 6.
 48. (b); → 13.
 49. (b); → 4.
 50. (b); → B.

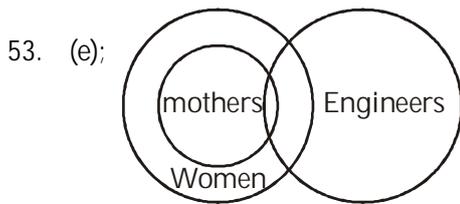
Distinct Solutions



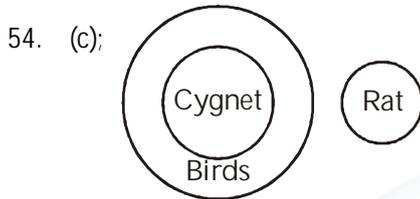
Some blackmailers may be pickpocketers but all blackmailers and all pickpockets are anti-social elements.



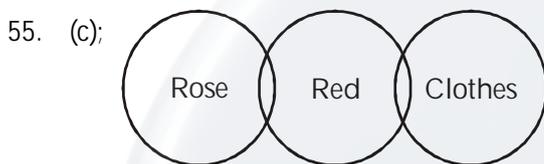
All footballs are balls and all balls are spheres.



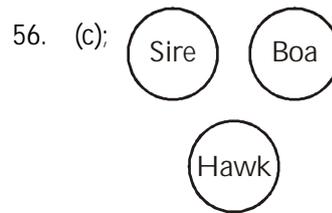
All mothers are women. Some mothers and some women may be Engineers.



Cygnets (the young of a Swan) are birds. And we can put it into birds category. But Rat does not belong to birds category.

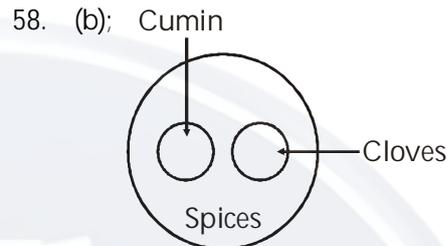


Some clothes and rose may be red. But rose can not be clothes.



All are related to different categories.

57. (c); All three belong to different categories. Alligator related to reptile category. Adjutant related to birds category and steed related to animal category.



Cumin and cloves both are related to spices category. But Cumin can not be cloves.

59. (c); The question is related to examination and practice both but partially.

60. (a); Some teachers are writer and they also are related to dancer.

Previous Year Solutions

1. (c); 6, the doctor who are not married (5 + 1).
2. (b); The qualified and experienced doctors working in villages are 5.
3. (a); The experienced doctor who doesn't working in villages are represent by 9.
4. (b); The only qualified doctors who are working in village is none.
5. (c); The doctor working in village who neither qualified nor experienced are represented by 2.
6. (b); Some professors are researchers as well as scientists so option (b) is correct.
7. (c); English and Hindi, both are language, so answer is (c).
8. (d); Lions and tigers, both are animals, so answer is (d).
9. (d); The urban educated who are not hard working are shown by IV.
10. (a); The part III shows urban, hard working and educated.
11. (c); Only hard working with urban shown by I and VI.
12. (b); Neither educated nor urban are shown by VI.
13. (b); The actors who are also dancer, singers and violinists are shown by Q.
14. (a); R is a part of singers who are dancer but doesn't related to actor and violinists.
15. (a); Some travellers are related to train and some are from bus.
16. (c); Oxygen is totally related to the gas and gold is a metal.
17. (b); Some Indians are Marathian and some are east Indian so answer is option (b).
18. (b); Rajasthan is a part of India and India is a part of world, so answer is (b).
19. (d); All are different.
20. (d); All three objects are unrelated to each other.
21. (a); Some females candidate are nurse and some are doctors.
22. (d); Shark, bird and lion, all of them belong to different areas.
23. (d); Insect, virus and bacteria all are different, they doesn't have any common relation.
24. (b); Our earth is present in milky-way galaxy and milky-way is a part of universe.
25. (c); All aunts are female and cousin brother is different from both of them.
26. (b); Members are part of family, and family is a part of society.



27. (c); Silver is a metal and water is different from them.
28. (b); Sulphur dioxide and carbon both are part of gases.
29. (b); The person who speak min two language are $2 + 7 + 6 = 15$.
30. (d); 7 person can speak all three language.
31. (c); The person who doesn't speak marathi are $4 + 2 + 3 + 1 = 10$
32. (b); The person who speak only one language = $4 + 3 + 1 + 5 = 13$.
33. (b); Total person who speaks Hindi are $6 + 7 + 5 = 18$
34. (c); The person who speak only marathi is 5.
35. (c); All cats are mammal but some cat and mammals are pet animals.
36. (b); Some male candidates are hindu and some are Muslim.
37. (d); Equipment is a part of lab and lab is present in college.
38. (d); Combination of letters is called word, and combination of words is called sentence.
39. (b); Some professor are male and some are female.
40. (c); All father are men and some men are Indians.

