## EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE Chapter : Venn Diagrams

Name : Word Problems on Sets

Licensed To: Teachers and Students for non-commercial use

- 1. In a class of 22 students, each one likes either 'basketball' or 'swimming' or both. If 21 students like 'basketball' and 19 students like 'swimming', how many like both the games?
  - (i) 18 (ii) 16 (iii) 19 (iv) 20 (v) 17
- 2. In a class of 23 students, each one likes either 'carroms' or 'boxing' or both. If 21 students like 'carroms' and 10 students like 'boxing', how many like 'carroms' only?
  - (i) 14 (ii) 13 (iii) 12 (iv) 15 (v) 11
- 3. In a class of 33 students, each one likes either 'high jump' or 'running' or both. If 33 students like 'high jump' and 30 students like 'running', how many like 'running' only?
  - (i) (-3) (ii) (-1) (iii) 1 (iv) 0 (v) 2
- In a class of 20 students, each one likes either 'Singing' or 'Listening music' or both. If 17 4. students like 'Singing' and 14 students like 'Listening music', how many like both the activities?
  - (i) 9 (ii) 14 (iii) 12 (iv) 11 (v) 10
- 5. In a class of 18 students, each one likes either 'Dancing' or 'Reading books' or both. If 7 students like 'Dancing' and 18 students like 'Reading books', how many like 'Dancing' only?
  - (i) 1 (ii) (-1) (iii) (-3) (iv) 0 (v) 3
- 6. In a class of 18 students, each one likes either 'Community work' or 'Playing' or both. If 16 students like 'Community work' and 9 students like 'Playing', how many like 'Playing' only?
  - (i) 3 (ii) 1 (iii) 4 (iv) (-1) (v) 2
- 7. In a class of 21 students, each one studies either 'Telugu' or 'French' or both. If 19 students study 'Telugu' and 9 students study 'French', how many study both the subjects?
  - (i) 7 (ii) 4 (iii) 10 (iv) 6 (v) 8
- In a class of 16 students, each one studies either 'Mathematics' or 'Urdu' or both. If 10 8. students study 'Mathematics' and 7 students study 'Urdu', how many study 'Mathematics' only?
  - (i) 8 (ii) 6 (iii) 12 (iv) 10 (v) 9

- 9. In a class of 33 students, each one studies either 'German' or 'Telugu' or both. If 16 students study 'German' and 29 students study 'Telugu', how many study 'Telugu' only?
  - (i) 20 (ii) 16 (iii) 15 (iv) 18 (v) 17
- In a class of 34 students, each one prefers either 'Scooter' or 'Car' or both. If 34 students 10. prefer 'Scooter' and 14 students prefer 'Car', how many prefer both the modes of transport?
  - (i) 14 (ii) 17 (iii) 11 (iv) 15 (v) 13
- In a class of 14 students, each one prefers either 'School Van' or 'By Foot' or both. If 8 11. students prefer 'School Van' and 9 students prefer 'By Foot', how many prefer 'School Van' only?
  - (i) 2 (ii) 7 (iii) 6 (iv) 4 (v) 5
- In a class of 21 students, each one prefers either 'School Van' or 'Moped' or both. If 20 12. students prefer 'School Van' and 20 students prefer 'Moped', how many prefer 'Moped' only?
  - (i) 2 (ii) 0 (iii) 4 (iv) 1 (v) (-1)
- In a class of 19 students, each one reads either 'Times of India' or 'The Hindu' or both. If 6 13. students read 'Times of India' and 18 students read 'The Hindu', how many read both the news papers?
  - (i) 4 (ii) 6 (iii) 7 (iv) 5 (v) 2
- In a class of 17 students, each one reads either 'Deccan Chronicle' or 'Times of India' or 14. both. If 11 students read 'Deccan Chronicle' and 6 students read 'Times of India', how many read 'Deccan Chronicle' only?
  - (i) 11 (ii) 13 (iii) 9 (iv) 12 (v) 10
- In a class of 24 students, each one reads either 'Hindustan Times' or 'News Today' or both.

  15. If 23 students read 'Hindustan Times' and 23 students read 'News Today', how many read 'News Today' only?
  - (i) 2 (ii) (-1) (iii) 3 (iv) 0 (v) 1
- 16. In a class of 27 students, if 6 students like 'football', 25 students like 'badminton' and 5 students like both the games, how many do not like any of the games ?
  - (i) (-2) (ii) 1 (iii) 0 (iv) 2 (v) 3
- 17. In a class of 28 students, if 9 students like 'hockey', 24 students like 'carroms' and 8 students like both the games, how many like 'hockey' only?
  - (i) 1 (ii) (-2) (iii) 0 (iv) 4 (v) 2

- 18. In a class of 29 students, if 14 students like 'cricket', 5 students like 'long jump' and 3 students like both the games, how many like 'long jump' only?
  - (i) 1 (ii) 3 (iii) 4 (iv) 2 (v) (-1)
- In a class of 26 students, 11 students in 'Hindi', 17 students in 'Sanskrit', 9 students in 'Telugu', 6 students in 'Hindi' and 'Sanskrit', 5 students in 'Sanskrit' and 'Telugu', 5 students in 'Telugu' and 'Hindi', 2 students in all the three subjects could get first class marks. How many of them got first class marks in only 'Hindi'?
  - (i) O (ii) 2 (iii) 5 (iv) 3 (v) 1
- In a class of 33 students, 12 students in 'Sanskrit', 23 students in 'French', 21 students in 'Social Studies', 9 students in 'Sanskrit' and 'French', 15 students in 'French' and 'Social Studies', 11 students in 'Social Studies' and 'Sanskrit', 8 students in all the three subjects could get first class marks. How many of them got first class marks in only 'French'?
  - (i) 4 (ii) 8 (iii) 6 (iv) 7 (v) 10
- In a class of 26 students, 10 students in 'Biology', 12 students in 'Mathematics', 7 students in 'Urdu', 8 students in 'Biology' and 'Mathematics', 5 students in 'Mathematics' and 'Urdu', 3 students in 'Urdu' and 'Biology', 3 students in all the three subjects could get first class marks. How many of them got first class marks in only 'Urdu'?
  - (i) (-1) (ii) 3 (iii) 4 (iv) 1 (v) 2
- In a class of 31 students, 16 students in 'Physics', 18 students in 'Biology', 25 students in 'French', 11 students in 'Physics' and 'Biology', 15 students in 'Biology' and 'French', 13 students in 'French' and 'Physics', 9 students in all the three subjects could get first class marks. How many of them got first class marks in exactly two subjects?
  - (i) 11 (ii) 13 (iii) 14 (iv) 12 (v) 10
- In a class of 28 students, 6 students in 'French', 9 students in 'Spanish', 16 students in 'Physics', 1 students in 'French' and 'Spanish', 6 students in 'Spanish' and 'Physics', 3 students in 'Physics' and 'French', none of the students in all the three subjects could get first class marks. How many of them got first class marks in more than one subject?
  - (i) 7 (ii) 12 (iii) 10 (iv) 11 (v) 9
- In a class of 27 students, 8 students in 'Social Studies', 19 students in 'French', 7 students in 'Urdu', 6 students in 'Social Studies' and 'French', 5 students in 'French' and 'Urdu', 3 students in 'Urdu' and 'Social Studies', 2 students in all the three subjects could get first class marks. How many of them got first class marks in none?
  - (i) 3 (ii) 7 (iii) 4 (iv) 6 (v) 5
- In a class of 31 students, 12 students like 'carroms', 10 students like 'tennis', 13 students <sup>25</sup>. like 'badminton', 4 students like 'carroms' and 'tennis', 6 students like 'tennis' and

'badminton', 6 students like 'badminton' and 'carroms', 3 students like all the three games. How many of them like only 'carroms'?

(i) 5 (ii) 2 (iii) 8 (iv) 4 (v) 6

- In a class of 26 students, 9 students like 'long jump', 11 students like 'running', 7 students like 'cricket', 3 students like 'long jump' and 'running', 2 students like 'running' and 'cricket', 3 students like 'cricket' and 'long jump', 1 students like all the three games. How many of them like only 'running'?
  - (i) 8 (ii) 10 (iii) 7 (iv) 5 (v) 6
- In a class of 27 students, 6 students like 'Watching TV', 14 students like 'Community work', 7 students like 'Playing', 2 students like 'Watching TV' and 'Community work', 5 students like 'Community work' and 'Playing', 1 students like 'Playing' and 'Watching TV', 1 students like all the three activities. How many of them like only 'Watching TV'?
  - (i) 3 (ii) 1 (iii) 6 (iv) 5 (v) 4
- In a class of 30 students, 7 students like 'Singing', 24 students like 'Watching TV', 14 students like 'Painting', 7 students like 'Singing' and 'Watching TV', 10 students like 'Watching TV' and 'Painting', 4 students like 'Painting' and 'Singing', 4 students like all the three activities. How many of them like only 'Watching TV'?
  - (i) 11 (ii) 9 (iii) 10 (iv) 12 (v) 13
- In a class of 34 students, 25 students prefer 'Auto', 22 students prefer 'Moped', 22 students prefer 'By Foot', 16 students prefer 'Auto' and 'Moped', 15 students prefer 'Moped' and 'By Foot', 16 students prefer 'By Foot' and 'Auto', 11 students prefer all the three modes of transport. How many of them prefer only 'By Foot'?
  - (i) 3 (ii) 5 (iii) (-1) (iv) 2 (v) 1
- In a class of 26 students, 14 students prefer 'School Van', 5 students prefer 'Scooter', 8 students prefer 'Moped', 3 students prefer 'School Van' and 'Scooter', 1 students prefer 30. 'Scooter' and 'Moped', 2 students prefer 'Moped' and 'School Van', none of the students prefer all the three modes of transport. How many of them prefer exactly two modes of transport?
  - (i) 5 (ii) 6 (iii) 9 (iv) 7 (v) 3
- In a class of 30 students, 11 students read 'News Today', 22 students read 'Times of India', 22 students read 'Indian Express', 5 students read 'News Today' and 'Times of India', 14 31. students read 'Times of India' and 'Indian Express', 9 students read 'Indian Express' and 'News Today', 3 students read all the three news papers. How many of them read more than one news paper?
  - (i) 22 (ii) 21 (iii) 25 (iv) 23 (v) 20
- 32. In a class of 33 students, 8 students read 'Hans India', 9 students read 'Times of India', 14

students read 'Deccan Chronicle', 2 students read 'Hans India' and 'Times of India', 3 students read 'Times of India' and 'Deccan Chronicle', 3 students read 'Deccan Chronicle' and 'Hans India', none of the students read all the three news papers. How many of them read none?

(i) 7 (ii) 13 (iii) 9 (iv) 10 (v) 11

## **Assignment Key**

- 1) (i)
- 2) (ii)
- 3) (iv)
- 4) (iv)
- 5) (iv)
- 6) (v)
- 7) (i)
- 8) (v)
- 9) (v)
- 10) (i)
- 11) (v)
- 12) (iv)
- 13) (iv)
- 14) (i)
- 15) (v)
- 16) (ii)
- 17) (i)
- 18) (iv)
- 19) (ii)
- 20) (iv)
- 21) (v)
- 22) (iv)
- 23) (iii)
- 24) (v) 25) (i)
- 26) (iii) 27) (v)
- 28) (i)
- 29) (iv)
- 30) (ii)
- 31) (i)
- 32) (iv)