





## EXERCISE-01

### Multiple Choice Questions

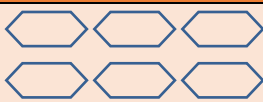
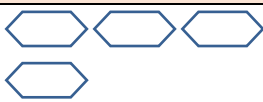
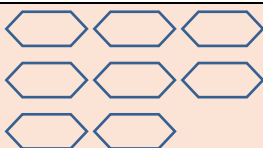
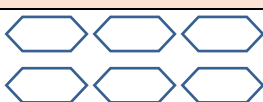
1. The pictograph below shows the number of shirts ordered of each size in one week


Size	Number ordered
Small	
Medium	
Large	
Extra Large	

Key :  = 3 shirts

Which size of shirts were ordered exactly 15 times?

- (1) Small (2) Medium  
(3) Large (4) Extra Large
2. The pictograph below shows the amount of money each class raised for an animal shelter.

Class	Amount raised by each class
III	
IV	
V	
VI	




If IV class raised ₹ 200 and VI class raised ₹ 300, how much money does one  represent?


- (1) ₹ 10 (2) ₹ 40  
(3) ₹ 50 (4) ₹ 100
3. The table below shows the number of ₹ 5, ₹ 2 and ₹ 1 coins in Guru's purse.

Coin	Number of coins
₹ 5	8
₹ 2	4
₹ 1	6




Which pictograph matches the facts given in the table?

(1)

Coin	Number of coins
₹ 5	
₹ 2	
₹ 1	




Each  means 2 coins


(2)

Coin	Number of coins
₹ 5	
₹ 2	
₹ 1	




Each  means 2 coins

(3)

Coin	Number of coins
₹ 5	
₹ 2	
₹ 1	

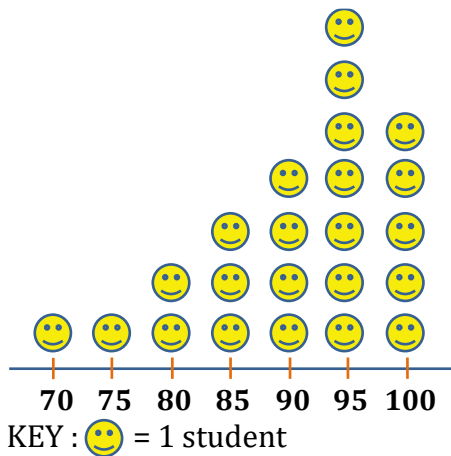
Each  means 2 coins

(4)

Coin	Number of coins
₹ 5	
₹ 2	
₹ 1	

Each  means 2 coins

4. The line plot below shows the marks scored by students on last week's Maths test.



How many students scored 95 or higher on the test?



- (1) 5 students                      (2) 7 students  
(3) 12 students                    (4) 16 students

5. If  $\square\square\square\square\square\square$  stands for 30, then  $\square\square$  will stand for \_\_\_\_\_
- (1) 6            (2) 10            (3) 12            (4) 26

**Direction (Q.6 and Q.7) :**


Following questions are based on this table and pictograph which show the number of school teachers in some towns

Name of Town	Number of School Teachers
Hyderabad	4200
Delhi	2400
Chennai	3000

Name of Town	Number of School Teachers
Hyderabad	
Chennai	

6. How many school teachers does 😊 represent ?
- (1) 500                                      (2) 600
- (3) 700                                      (4) 800

7. Which of the following is the correct representation of the number of school teachers in Delhi ?

- (1)   
 (2)   
 (3)   
 (4) 

8. If ★ represents 10 stars, then number of symbols to be drawn to represent 50 stars is

- (1) 5      (2) 60      (3) 10      (4) 12

**Direction (Q.9 to Q.12) :**

The pictograph given below shows how many letters were collected from a post box on each of the days of a certain week




Monday -       

Tuesday –     

Wednesday –    

Thursday –      

Friday – 

Saturday –   

 = 10 letters

9. On which day were the minimum number of letters collected ?

- (1) Tuesday                      (2) Wednesday  
(3) Friday                        (4) Saturday

- 10.** What are the total number of letters collected from the post box over the whole week?


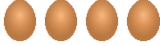
- (1) 300                      (2) 330  
(3) 350                      (4) 420

- 11.** How many more letters were collected on Friday than on Wednesday ?

- (1) 20      (2) 30      (3) 40      (4) 50

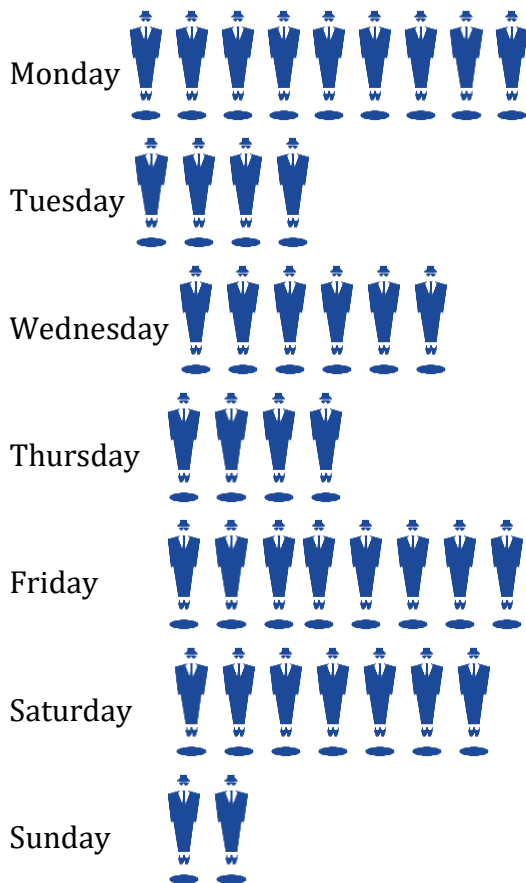
- 12.** How many less letters were collected on Wednesday than on Tuesday?

- (1) 10      (2) 20      (3) 30      (4) 40


13. If  represents 5 eggs, then how many eggs does  represent?  
 (1) 4      (2) 16      (3) 20      (4) 25

**Direction (Q.14 to Q.16) :**

Study the pictograph carefully. The pictograph given below shows how many persons travelled from city A to city B by bus on each of the days of a certain week.




14. What is the total number of persons who made the journey during the week ?

(Assume that one symbol  represents 10 persons.)

- (1) 200      (2) 400  
 (3) 600      (4) 900
15. On which day the bus was most crowded?  
 (1) Friday      (2) Saturday  
 (3) Sunday      (4) Monday

16. What were the total earnings on Wednesday, if the fare per person was 5 rupees?



(Assume that one symbol  represents 5 persons.)







- (1) ₹ 50      (2) ₹ 100  
 (3) ₹ 150      (4) ₹ 300

**Direction (Q.17 and Q.18) :**

Following questions are based on this table and pictograph which show the number of Government employees in some towns

Name of Town	Number of Govt. employees
Delhi	3500
Mumbai	3150
Chennai	2800

Name of Town	Number of Govt. employees
Delhi	
Chennai	





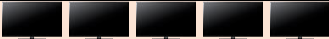
17. How many employees does  represent ?  
 (1) 500      (2) 600  
 (3) 700      (4) 800
18. Which of the following is the correct representation of the number of employees in Mumbai?  
 (1)       (2)   
 (3)       (4) 
19.  Number of houses represented by figures is \_\_\_\_\_, if each symbol represents 5 houses.  
 (1) 4      (2) 20      (3) 5      (4) 40

20. A symbol is used to represent 10 flowers. Number of symbols to be drawn to show 60 flowers is



(1) 6      (2) 12      (3) 10      (4) 10


**Direction (Q.21 to Q.24) :**

Answer the following set of questions by reading the below pictograph.


Year	Number of TV sets sold
1980	
1985	
1990	
1995	
2000	

Each  represents 500 TV sets.

21. Number of TV sets sold in the year 1995 is
- (1) 1000                      (2) 500  
(3) 50                         (4) 2000
22. The year in which the least number of TV sets have been sold is
- (1) 1980                      (2) 1995  
(3) 2000                      (4) 1990
23. Number of TV sets sold in the year 1980 is
- (1) 1000                      (2) 1500  
(3) 1250                      (4) 2000
24. 1500 TV sets were sold in the year .....
- (1) 1985                      (2) 1990  
(3) 1980                      (4) 2000
25. If one symbol of  represents 50 children then  represents \_\_\_\_\_ number of children.
- (1) 5      (2) 25      (3) 15      (4) 20

26. One  represents 5 balloons then number of symbols to be drawn to represent 60 balloons is

(1) 5      (2) 60      (3) 10      (4) 12

27. If one symbol of  represents 10 bottles of apple juice then 35 bottles of apple juice are represented by

(1) 

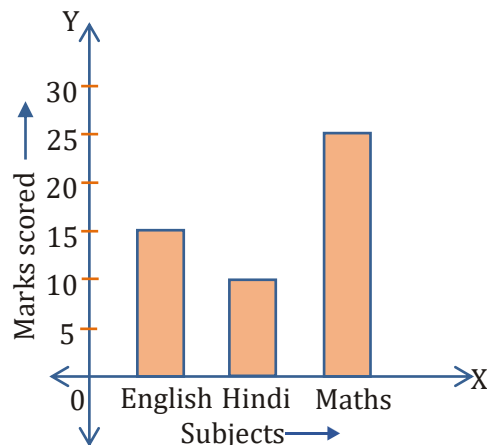
(2) 

(3) 

(4) 

**Direction (Q.28 to Q.30) :**

Read the shown graph and answer the questions.



28. The horizontal line in the graph is called
- (1) X-axis                      (2) Y-axis  
(3) line                         (4) None of these
29. The vertical line in the graph is called
- (1) Y-axis                      (2) X-axis  
(3) ray                         (4) None of these
30. Highest marks are scored in the subject
- (1) English                      (2) Hindi  
(3) Maths                         (4) None of these

**Fill in the blanks**

1. A collection of information is called \_\_\_\_\_.
2. The number of times a particular value occurs in data is called its \_\_\_\_\_.
3. Data obtained in the \_\_\_\_\_ form is called raw data.
4. Information represented through numbers is called \_\_\_\_\_ data.
5. Arranging the numerical figures in an ascending or a descending order is called an \_\_\_\_\_.
6. The data can be arranged in a tabular form using \_\_\_\_\_ marks.
7. Arranging the data in the form of a table is called \_\_\_\_\_.
8. A graph drawn using pictures is called \_\_\_\_\_.
9. A graph drawn using vertical bars is called \_\_\_\_\_.
10. The width of the bar in a bar graph remains the \_\_\_\_\_ for all bars.

**ANSWER KEY**

**Multiple choice questions**

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	1	3	2	3	2	2	1	1	4	2	3	1	3	2	4
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	3	3	3	2	1	2	2	1	2	2	4	2	1	1	3

**Fill in the blanks**

1. data
2. frequency
3. original
4. numerical
5. array
6. tally
7. tabulation
8. pictograph
9. bar graph
10. same

## EXERCISE-02

## Short answer type questions








1. A die was thrown 30 times and the following scores were obtained  
4, 1, 3, 2, 6, 2, 4, 2, 1, 2, 3, 6, 2, 6, 4, 2, 1, 4, 1, 2, 5, 4, 2, 2, 5, 4, 3, 2, 5, 6  
Prepare a table using tally marks and answer the following questions :
- Which number has occurred maximum number of times?
  - Which number has occurred minimum number of times?
2. Height of the students of Class VI is shown below.

Height	No. of students
143 cm	3
144 cm	2
145 cm	3
146 cm	1
147 cm	0
148 cm	1
149 cm	6
150 cm	5
151 cm	4
152 cm	2

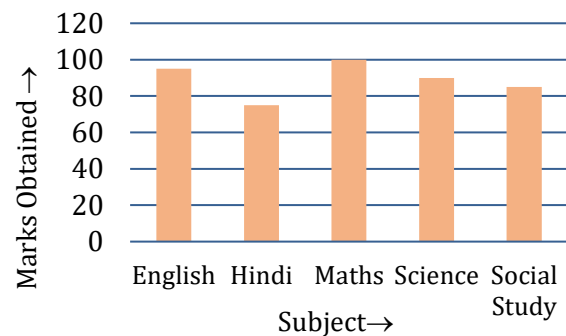
Represent this information by placing faces in place of numbers for the above information and answer the following questions :

- Which height is attained by maximum number of students?
- How many students have the minimum height?

3. A pictograph given below shows the number of visitors in Red Fort during a week

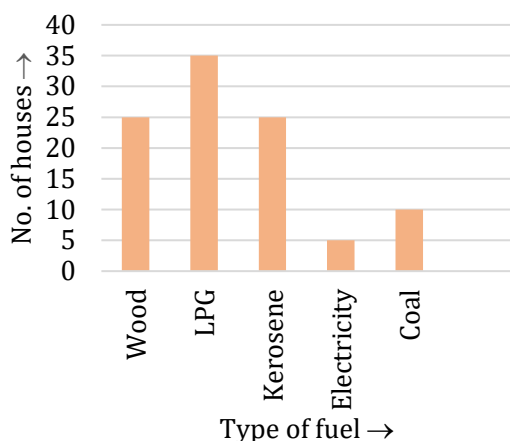
Day	No. of visitors  = 1000 visitors
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

- Find the total number of visitors during the week?
  - On which day was the number of visitors minimum?
  - Find the number of visitors on Friday.
4. The parent of a child was given the following bar chart in a PTM meeting representing his performance. Observe it carefully and answer the following questions :



- What information does the bar graph give?
- In which subject has the child scored the highest marks?
- In which subject has the child scored the minimum marks?
- Arrange the subjects in ascending order of marks obtained?
- What is the scale chosen to represent the marks?

5. The following bar graph shows the number of houses (out of 100) in a town using different types of fuel for cooking. Read the bar graph and answer the following questions.



- Which fuel is used in maximum number of houses?
- How many houses are using coal as fuel?
- Suppose that the total number of houses in the town is 1 lakh. From the above graph estimate the number of houses using electricity?

### Long answer type questions

6. A random survey was done on the difficulty level of a competitive examination. 100 candidates were asked to choose one of the following responses : Difficult, O.K., Easy, No Comments

Response	Difficult	O.K.	Easy	No comments
Number of candidates	30	25	40	5

Draw a bar graph to represent the above data.

7. Milk consumption per day by each family in a colony is given below.

No. of litres	No. of families
1	11
2	32
3	18
4	45
5	12
6	36
7	14

Show this information on a bar graph.

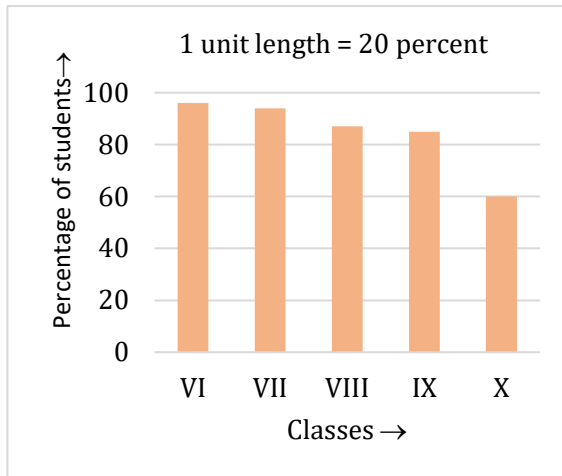
Find the quantity of milk consumed per day by maximum number of families. Also find the maximum quantity of milk consumed by a family per day.

8. Literacy rate of various states of India in a particular year is given below.

State	Literacy rate per 1,000
Madhya Pradesh	600
Bihar	650
Mizoram	810
Uttar Pradesh	700
Kerala	900

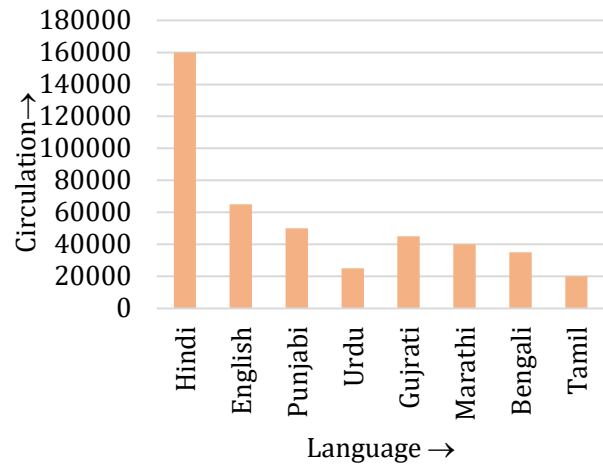
Represent this data using a bar graph and show which state has the highest literacy rate.

9. Given below is a bar graph. Look at it carefully and answer the following questions



- What information does the bar graph give?
- Which class has the highest percentage of students present?
- In which class are the students most irregular?
- Assuming no student is absent, which class has the maximum strength?

10. The given bar graph represents the circulation of news-papers in different languages. Study the graph and answer the following questions



- What is the total circulation of newspapers in Hindi, Marathi and Tamil?
- In which language is the circulation least?
- In which language is the circulation highest?



**ANSWER KEY****Short answer type questions**

1. (i) Score 2                      (ii) Score 3 and 5
2. (i) 149 cm                      (ii) 3 students
3. (i) 44,000 visitors (ii) Thursday                      (iii) 6000 visitors
4. (i) The bar graph represents the marks obtained in different subjects by a child.  
(ii) Maths  
(iii) Hindi  
(iv) Hindi, Social Study, Science, English, Maths  
(v) Scale Chosen : 1 unit = 20 marks.
5. (i) LPG                      (ii) 10 houses                      (iii) 5 lakh

**Long answer type questions**

7. 4 litres, 7 litres
8. Kerala
9. (i) The bar graph shows the percentage of students present in classes VI to X.  
(ii) Class VI  
(iii) Class X  
(iv) Class VI
10. (i) 2,20,000                      (ii) Tamil                      (iii) Hindi

## Exercise-01 Solutions

## 1. Option (1)

1 picture = 3 shirts

$\Rightarrow 15 \text{ shirts} = 5 \text{ picture}$

Small size of shirt ordered exactly 15 shirts.

## 2. Option (3)




In class IV

$$\text{Hexagon represent} = \frac{200}{4} = ₹ 50$$

In class VI

$$\text{Hexagon represent} = \frac{300}{6} = ₹ 50$$

## 3. Option (2)

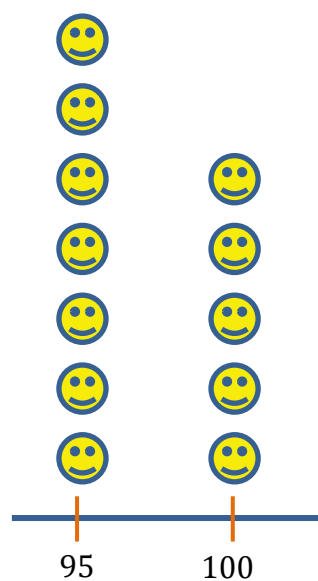
Coin	Number of coins
₹ 5	
₹ 2	
₹ 1	

Where, each  means 2 coins

## 4. Option (3)

The line plot below shows how students scored on last week's maths test.

Maths test scores



12 students scored 95 or higher on the test.

5. Option (2)

$\therefore$   Stands for 30

$\therefore$   Stands for  $\frac{30}{6} = 5$

$\therefore$   Stand for  $5 \times 2 = 10$


6. Option (2)

Number of teachers  represent =  $\frac{4200}{7}$

= 600

7. Option (1)

 represents 600 teachers

In Delhi =  $\frac{2400}{600} = 4$  symbol = 

8. Option (1)

Number of symbols =  $\frac{50}{10} = 5$  symbol

9. Option (4)

On Saturday minimum number of letters collected =  $3 \times 10 = 30$  letters

10. Option (2)

Total number of letters =  $10 \times$  Number of symbols  
=  $10 \times 33$   
= 330

11. Option (3)

Total number of letters were collected on Friday =  $10 \times$  Number of symbols on Friday  
=  $10 \times 8 = 80$

Letters were collected on Wednesday  
=  $10 \times 4 = 40$

$\therefore 80 - 40 = 40$  more letters were collected

12. Option (1)

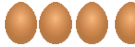
Total number of letters collected on Wednesday =  $4 \times 10 = 40$

Total number of letters collected on Tuesday =  $5 \times 10 = 50$

Difference =  $50 - 40 = 10$  less letters were collected on Wednesday

13. Option (3)

 represents = 5 eggs

 represents =  $4 \times 5$   
= 20 eggs.

**14. Option (2)**

$$\begin{aligned}\text{Total number of persons} &= 10 \times \text{Number of symbols} \\ &= 10 \times 40 = 400\end{aligned}$$

**15. Option (4)**

$$\text{Maximum number of symbols on Monday} = 9 \times 10 = 90 \text{ person}$$

**16. Option (3)**

One symbol represents 5 persons

Total earning on Wednesday

$$\begin{aligned}&= 5 \times \text{No. of symbol} \times \text{fare per person} \\ &= 5 \times 6 \times 5 \\ &= ₹ 150\end{aligned}$$

**17. Option (3)**

$$\begin{aligned}\square \text{ represent} &= \frac{\text{Number of govt. employee in Delhi}}{\text{Number of symbol}} \\ &= \frac{3500}{5} = 700\end{aligned}$$

**18. Option (3)**

$$\text{Total number of employees in Mumbai} = 3150$$

$$\Rightarrow \text{Number of } \square = \frac{3150}{700} = 4.5$$

$\square \quad \square \quad \square \quad \square \quad [$

$$700 + 700 + 700 + 700 + 350 = 3150$$

**19. Option (2)**

$\because$  One symbol represents 5 houses.

$$\therefore 4 \text{ symbol represents} = 4 \times 5 = 20 \text{ houses}$$

**20. Option (1)**

$$\text{Number of symbols} = \frac{60}{10} = 6$$

**21. Option (2)**

$\because$  One symbol represents 500 TV sets.

$$\text{Number of TV sets sold in the year 1995} = 500$$

**22. Option (2)**

$$\text{In 1995 least number of TV sets sold} = 500$$

**23. Option (1)**

$$\text{Number of TV sets sold in the year 1980} = 500 \times 2 = 1000$$

**24. Option (2)**

$$\text{Number of symbols} = \frac{1500}{500} = 3$$

Since 3 symbols in 1990


**25. Option (2)**

$$\text{Half symbol represents} = \frac{50}{2} = 25$$

**26. Option (4)**

$$\text{Number of symbol} = \frac{60}{5} = 12$$

**27. Option (3)**

 one symbol represents = 10 bottles



$$10 + 10 + 10 + 5 = 35$$

**28. Option (1)**

X-axis

**29. Option (1)**

Y-axis

**30. Option (3)**

Highest marks scored in the maths.

## Exercise-02 Solutions




























1.

Score	Tall Marks	Frequency
1		4
2	<del>    </del> <del>    </del>	10
3		3
4	<del>    </del>	6
5		3
6		4

(i) Score 2 has occurred the maximum number of times.

(ii) Score 3 and 5 have occurred the minimum number of times.

2.

Height (in cm)	No. of students
143	  
144	 
145	  
146	
147	-
148	
149	     
150	    
151	   
152	 

(i) 149 cm

(ii) 3 students are having height of 143 cm which is minimum.

3.

(i) 44,000 visitors

(ii) Thursday had minimum number of visitors.

(iii) 6000 visitors

4.

(i) The bar graph represents the marks obtained in different subjects by a child.

(ii) Maths

(iii) Hindi

(iv) Hindi, Social Study, Science, English, Maths

(v) Scale chosen : 1 unit = 20 marks.

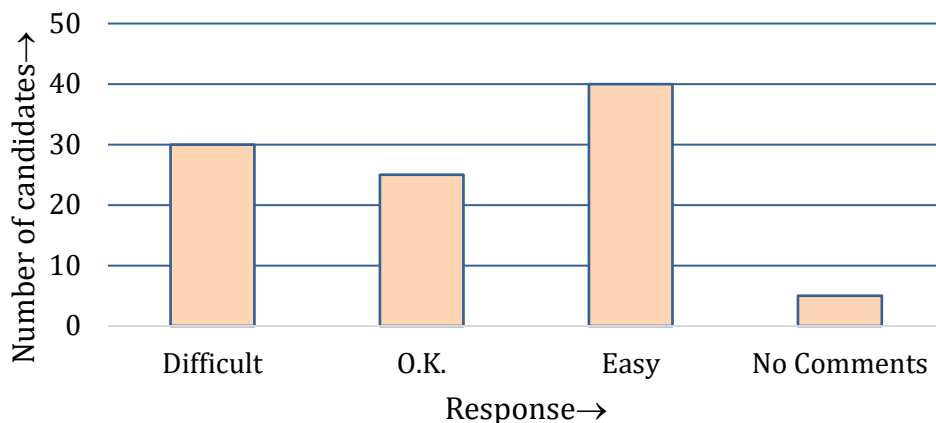
5.

(i) LPG is used in maximum number of houses

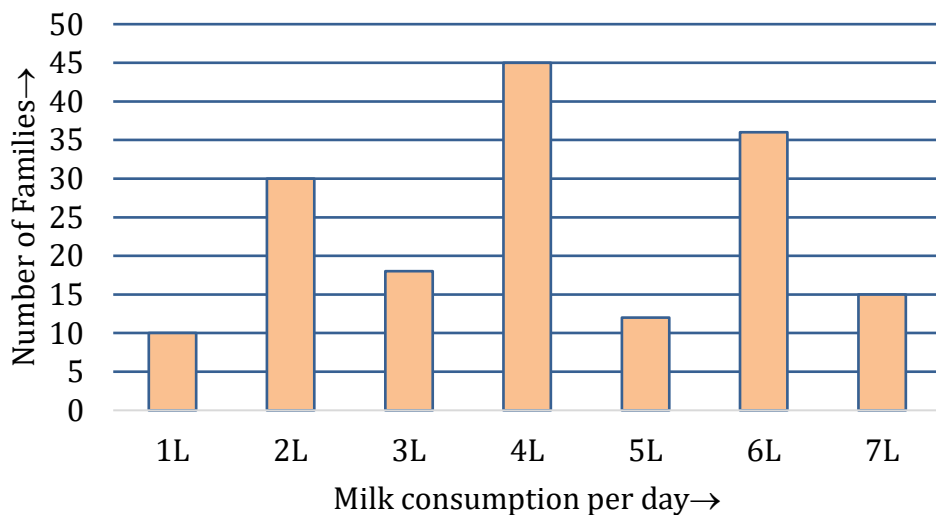
(ii) 10 houses are using coal as fuel.

(iii) 5 lakh

6. Scale 1 unit = 5 candidates

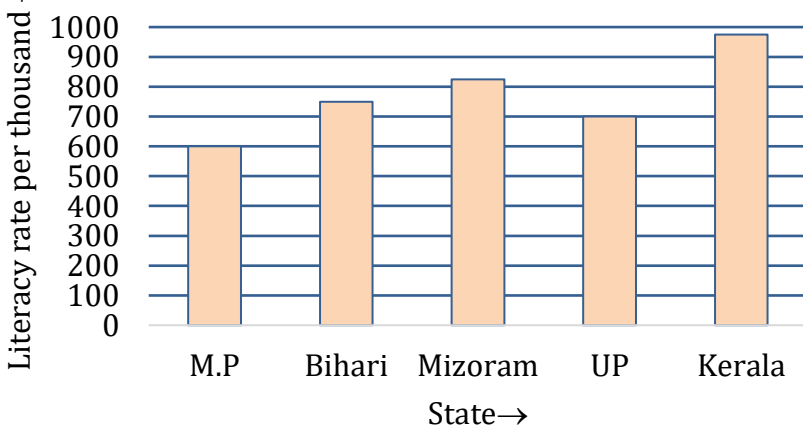


7. Scale : 1 unit = 9 families



Most of the families consume 4 litres of milk per day. Maximum quantity of milk consumed per day is 7 litres.

8. Scale : 1 unit = 100 literacy rate



State having highest literacy rate is Kerala.

- 
9. (i) The bar graph shows the percentage of students present in classes VI to X.  
(ii) Class VI has the highest percentage of attendance.  
(iii) Class X students are most irregular.  
(iv) Class VI has the minimum strength.
10. (i)  $1,60,000 + 40,000 + 20,000 = 2,20,000$   
(ii) Tamil language has least circulation.  
(iii) Hindi has highest circulation.
-