UNIQUE STUDY POINT

DATA HANDLING

Class 06 - Maths (NEW)

Time Allowed: 58 minutes **Maximum Marks: 95**

1. What is the upper class limit in the class-interval 200-225? **[1]**

   a) 200 b) 25

   c) 225 d) 50

2. Using tally marks, which one of the following represents the number eight: **[1]**

   a)  b) 

   c)  d) 

3. Tally marks are used to find: **[1]**

   a) frequency b) upper limit

   c) range d) class intervals

4. What does the height of a bar in a bar graph show? **[1]**

   a) Frequency or value b) Shape of the data

   c) Total length d) Color of the data

5. If 4 students chose ‘Football’, how many tally marks would you use? **[1]**

   a) || b) |||||

   c) |||| d) |

6. What is data? **[1]**

   a) A single number b) Pictures of objects

   c) A bar graph d) A collection of information

7. Why do we use tally marks when collecting data? **[1]**

   a) To play games b) To record and count easily

   c) To draw pictures d) To show time

8. If two bars are of equal height in a bar graph, what does it mean? **[1]**

   a) Both categories have the same frequency b) Graph is incorrect

   c) One value is less d) Data is missing

9. Using tally marks which one of the following represents the number five? **[1]**

   a)  b) 

c)  d) ||||

10. You want to make a graph of the tallest buildings in the world. Which type would be best? **[1]**

a) Table b) Vertical bar graph

c) Line graph d) Pie chart

11. **Match the following:-** **[2]**

Column A	**Column B**
1. The number of times a particular observation occurs	(a) frequency distribution table
2. Data may be represented by a table	(b) pictograph
3. A table showing the frequency of various observations	(c) frequency of data observation
4. The presentation of a data by picture or symbol	(d) tabular form

12. **Match the following:-** **[2]**

Column A	**Column B**
1. A text book describing the civil rights movement.	(a) Pictograph
2. A news report about the opening of a power plant	(b) Secondary data
3. When numerical data is presented as columns on graph, this graphical representation of data	(c) Primary data
4. The way of representing data using pictures	(d) Bar graph

13. **Match the following:-** **[2]**

Column A	**Column B**
1. 	(a) 8
2. 	(b) 6
3. |||	(c) 5
4. 	(d) 3

14. **Match the following:-** **[2]**

Column A	**Column B**
1. A collection of information in the form of numerical figure	(a) data
2. A data as it is collected or recorded	(b) raw data
3. A data arranged in ascending or descending order	(c) observation
4. Each numerical figure in a data	(d) arrayed data

15. **Match the following:** **[2]**

Column A	**Column B**
1. 	(a) 8

2. 𝍸 𝍸 𝍸 𝍸 |||	(b) 7
3. 𝍸 𝍸 ||	(c) 23
4. 𝍸 |||	(d) 12

16. If you were making a table of the longest rivers on each continent and their lengths, would you prefer to use a bar graph with vertical bars or with horizontal bars? Why? Try finding out this information, and then make the corresponding table and bar graph! Which continents have the longest rivers? **[1]**

17. Following pictograph shows the number of tractors in five villages: **[1]**

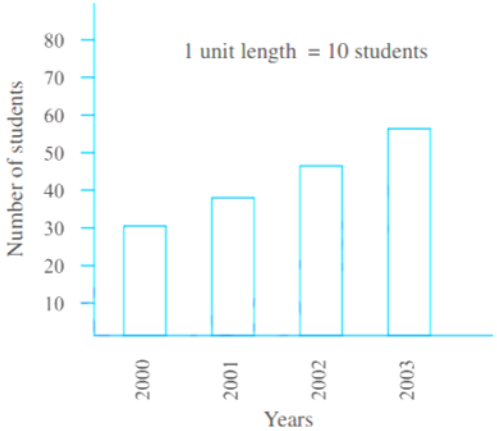
Villages	Number of tractors - 1 Tractor
Village A	
Village B	
Village C	
Village D	
Village E	

How many more tractors village C has as compared to village B.

18. In the following table, how many bicycles were manufactured from 2011 to 2015? **[1]**

Years	**No. of bicycles manufactured**
2011	800
2012	600
2013	900
2014	1100
2015	1200

19. Read the adjoining bar graph showing the number of students in a particular class of a school. **[2]**



Answer the following questions:

i. What is the scale of this graph?

ii. How many new students are added every year?

iii. Is the number of students in the year 2003 twice that in the year 2000?

20. In a village six fruit merchants sold the number of fruit baskets in a particular season: **[2]**

Number of fruit merchants	Number of fruit baskets - 100 Fruit baskets

Rahim	
Lakhanpal	
Anwar	
Martin	
Ranjit Singh	
Joseph	

Observe this pictograph and answer the question:

The merchants who have sold 600 or more number of baskets are planning to buy a godown for the next season. Can you name them?

21. For the following data, construct a frequency distribution table: **[2]**

55, 56, 56, 54, 57, 57, 56, 55, 55, 56, 56, 57, 55, 56, 56, 54, 56, 55, 54, 57, 57, 56, 55, 54 and 55.

22. Following are the choices of games of 40 students of Class VI: **[5]**

football, cricket, football, kho-kho, hockey, cricket, hockey, kho-kho, tennis, tennis, cricket, football, football, hockey, kho-kho, football, cricket, tennis, football, hockey, kho-kho, football, cricket, cricket, football, hockey, kho-kho, tennis, football, hockey, cricket, football, hockey, cricket, football, kho-kho, football, cricket, hockey, football.

i. Arrange the choices of games in a table using tally marks.

ii. Which game is liked by most of the students?

iii. Which game is liked by a minimum number of students?

23. **Read the following text carefully and answer the questions that follow:** **[4]**

Favorite Subjects in a Class

In a class of 25 students, the favorite subjects are recorded as follows:

8 students like Mathematics

6 students like Science

5 students like English

4 students like Social Studies

2 students like Art

a. How many students like Science? **(1)**

b. Which subject is the least favorite among the students? **(1)**

c. Represent the data using a bar graph. **(2)**

OR

What is the total number of students who like Mathematics or English? **(2)**

24. **Read the following text carefully and answer the questions that follow:** **[4]**

Number of Books Read by Students

In a school library, the number of books read by students in a month is recorded as follows:

5 students read 1 book

10 students read 2 books

8 students read 3 books

4 students read 4 books

3 students read 5 books

a. How many students read exactly 3 books? **(1)**

b. What is the most common number of books read by students? **(1)**

c. Prepare a frequency table for the given data. **(2)**

OR

How many students read more than 3 books? **(2)**

25. **Assertion (A):** A bar graph represents data in the form of pictures. **[1]**

Reason (R): Scale means the number used to represent one unit length of a bar.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

26. **Assertion (A):** **[1]**

Blood groups	No. of Students
A	9
B	6
O	12
AB	3
Total	30

Reason (R): The most common blood group is B.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

27. **Assertion (A):** The maximum marks obtained by any student is 95 out of 100. **[1]**

Reason (R): Data is a collection of numbers gathered to give some information.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

28. **Assertion (A):** In a Mathematics test, the following marks were obtained by 40 students. Arrange these marks in a table using tally marks. **[1]**

8 1 3 7 6 5 5 4 4 2
4 9 5 3 7 1 6 5 2 7
7 3 8 4 2 8 9 5 8 6
7 4 5 6 9 6 4 4 6 6

13 students obtained marks equal to or more than 7.

Reason (R): Organisation of data refers to a meaningful arrangement of data that provides the desired information at a glance.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

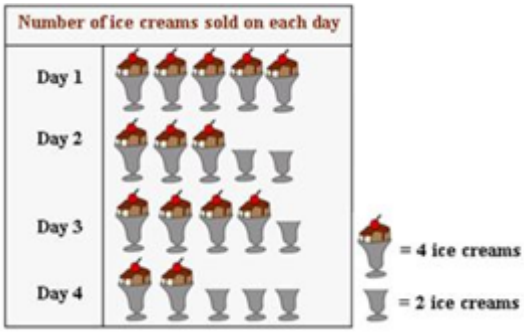
c) A is true but R is false.

d) A is false but R is true.

29. In the following table, how many bicycles were manufactured from 2011 to 2015? **[2]**

Years	No. of bicycles manufactured
2011	800
2012	600
2013	900
2014	1100
2015	1200

30. Identify the day on which 18 ice creams were sold. **[2]**



31. A _____ is a collection of numbers gathered to give some information. **[1]**

a) Frequency b) Cumulative Frequency

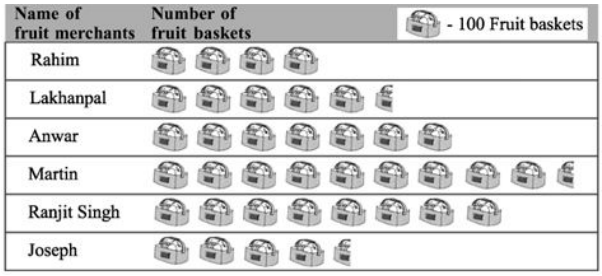
c) Tally mark d) Data

32. A _____ is a collection of numbers gathered to give some information. **[1]**

a) data b) Cumulative frequency

c) frequency d) tally mark

33. In a village six fruit merchants sold the following number of fruit baskets in a particular season. How many fruit baskets were sold by Rahim? **[1]**



a) 700 b) 400

c) 500 d) 650

34. Following frequency distribution table shows marks (out of 50) obtained in English by 45 students of class VI. Which two classes have the same frequency? **[1]**

Class Interval	**Frequency**
0 - 10	1
10 - 20	6
20 - 30	20

30 - 40	12
40 - 50	6
Total	**45**

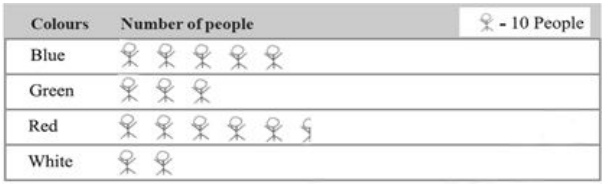
a) 10 - 20 and 40 - 50

b) 20 - 30 and 40 - 50

c) 10 - 20 and 20 - 30

d) 10 - 20 and 30 - 40

35. The colours of fridges preferred by people living in a locality are shown by the following pictograph. Find the number of people preferring green colour. **[1]**



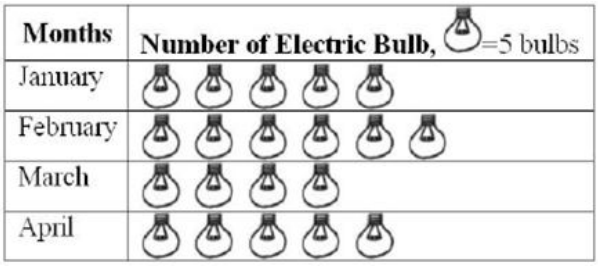
a) 50

b) 20

c) 40

d) 30

36. The sale of electric bulbs on different months in a year is shown below. Find the number of electric bulb purchased for a lodging house during February. **[1]**



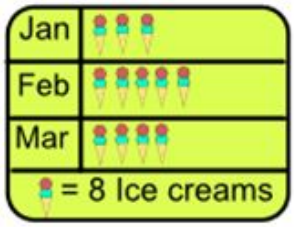
a) 15

b) 25

c) 30

d) 20

37. How many Ice creams did the Ice cream man sell in March? **[1]**



a) 8

b) 32

c) 16

d) 24

38. Following frequency distribution table shows marks (out of 50) obtained in English by 45 students of class VI. Which class has the highest frequency? **[1]**

Class Interval	Frequency
0 - 10	1
10 - 20	6
20 - 30	20
30 - 40	12

40 - 50	6
Total	**45**

a) 30 - 40

b) 40 - 50

c) 10 - 20

d) 20 - 30

39. The pictograph shows the earnings of four men in one week. As well as whole notes representing USD 100, there can be quarter, half and three-quarter notes. How much did Albert earn? **[1]**

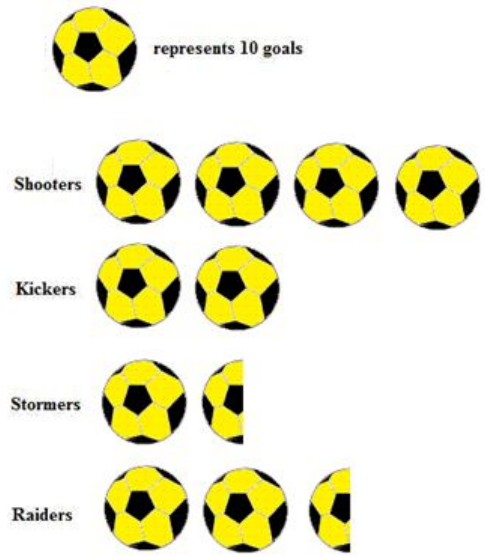
a) USD 300

b) USD 325

c) USD 450

d) USD 425

40. The pictograph shows the numbers of goals scored by four soccer teams in a season. How many goals did Shooters score? **[1]**



a) 40

b) 30

c) 20

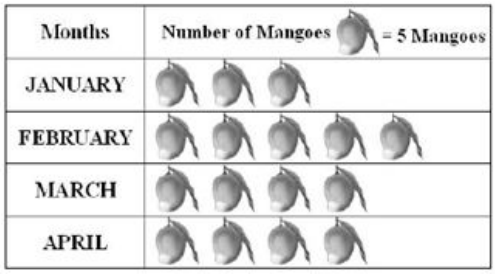
d) 10

41. The pictograph shows the earnings of four men in one week. As well as whole notes representing USD 100, there can be quarter, half and three-quarter notes. How much did Chase earn? **[1]**

a) USD 450 b) USD 350

c) USD 425 d) USD 300

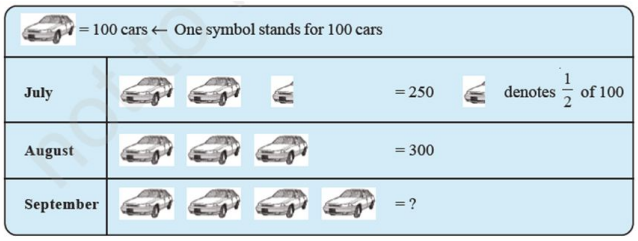
42. Find the number of mangoes purchased for a home during January. **[1]**



a) 15 b) 10

c) 20 d) 25

43. How many cars were produced in the month of September? **[1]**



a) 450 b) 300

c) 500 d) 400

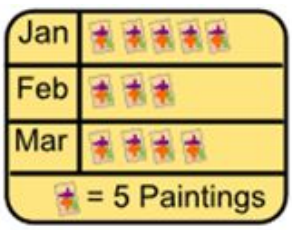
44. What is the upper limit of the class interval 30 – 40? **[1]**

Class Interval	Frequency
0-10	1
10-20	6
20-30	20
30-40	12
40-50	6
Total	45

a) 40 b) 10

c) 30 d) 20

45. How many paintings did the painter sell in March? **[1]**

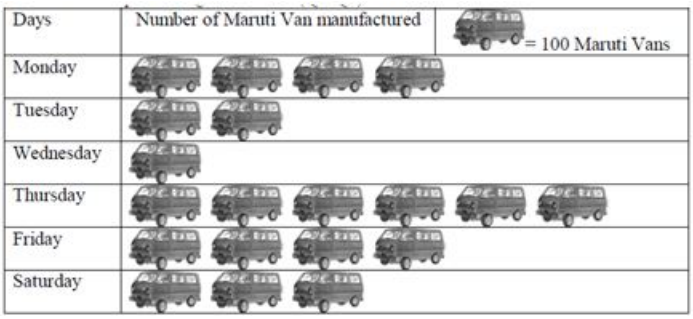


a) 15 b) 20

c) 10 d) 5

46. The following pictograph shows the number of Maruti van manufactured during a week. Find the number of **[1]**

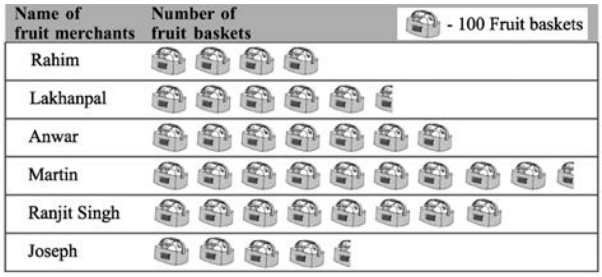
Maruti Vans manufactured on Wednesday.



a) 100 b) 400

c) 200 d) 300

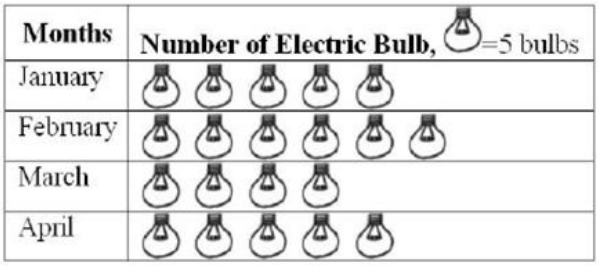
47. In a village six fruit merchants sold the following number of fruit baskets in a particular season. How many fruit baskets were sold by Martin? **[1]**



a) 950 b) 500

c) 800 d) 600

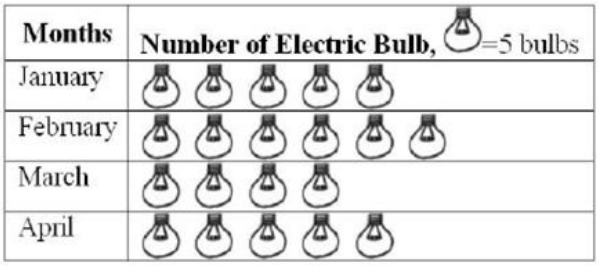
48. The sale of electric bulbs on different months in a year is shown below. In which month the sale of electric bulb is least? **[1]**



a) April b) March

c) February d) January

49. The sale of electric bulbs on different months in a year is shown below. Find the number of electric bulb purchased for a lodging house during April. **[1]**



a) 10 b) 25

c) 20 d) 15

50. The colour of refrigerators preferred by people living in a locality are shown by the following pictograph. How many people choose blue colour ? **[1]**

colour	Number of people - 10 people
Blue	
Green	
Red	
White	

a) 30 b) 40

c) 10 d) 20

51. What is the frequency of class interval 175-200? **[1]**

Class intervals (daily income in Rs)	Frequency (Number of workers)
100-125	45
125-150	25
150-175	55
175-200	125
200-225	140
225-250	55
250-275	35
275-300	50
300-325	20
TOTAL	550

a) 125 b) 35

c) 50 d) 140

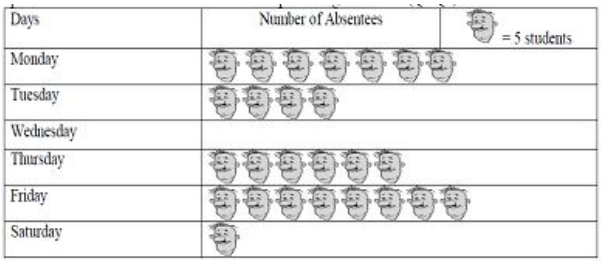
52. The following pictograph shows the number of Maruti van manufactured during a week. On which day were the least number of Maruti Vans manufactured? **[1]**

Days	Number of Maruti Van manufactured = 100 Maruti Vans
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

a) Wednesday b) Monday

c) Friday d) Saturday

53. The following pictograph shows the number of absentees in a class of 40 students during the previous week. On which day 30 students were absent? **[1]**



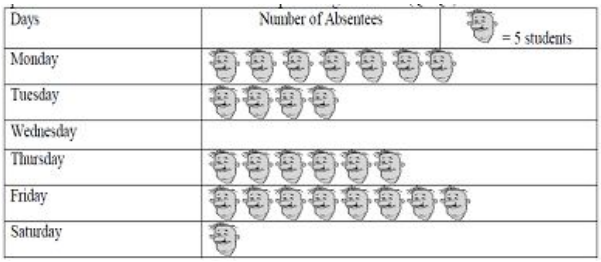
a) Tuesday

b) Thursday

c) Wednesday

d) Saturday

54. The following pictograph shows the number of absentees in a class of 40 students during the previous week. On which day 5 students were absent? **[1]**



a) Tuesday

b) Friday

c) Saturday

d) Monday

55. Following frequency distribution table shows marks (out of 50) obtained in English by 45 students of class VI. What is the size of class intervals? **[1]**

Class Interval	**Frequency**
0 - 10	1
10 - 20	6
20 - 30	20
30 - 40	12
40 - 50	6
Total	**45**

a) 5

b) 10

c) 20

d) 15

56. What is the frequency of class interval 200-225? **[1]**

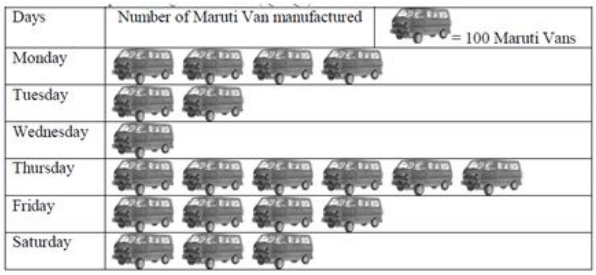
Class intervals (daily income in Rs)	Frequency (number of workers)
100-125	45
125-150	25
150-175	55
175-200	125
200-225	140
225-250	55

250-275	35
275-300	50
300-325	20
TOTAL	550

a) 20 b) 120

c) 140 d) 50

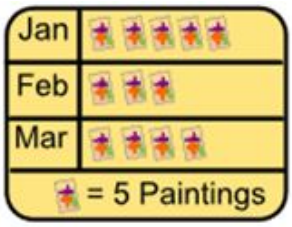
57. Find the number of Maruti Vans manufactured on Thursday. **[1]**



a) 400 b) 500

c) 600 d) 300

58. How many paintings did the painter sell in January? **[1]**



a) 25 b) 15

c) 30 d) 20

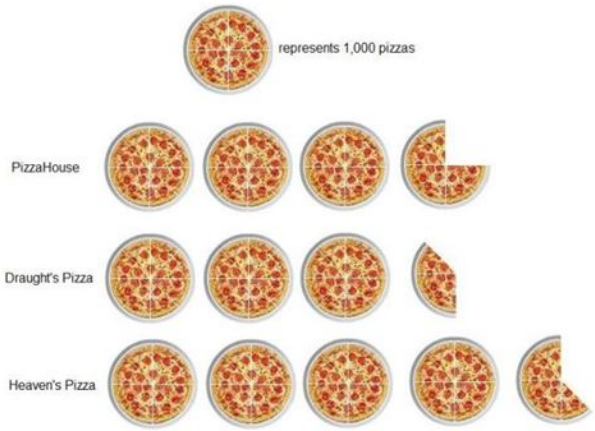
59. Following table shows the number of bicycles manufactured in a factory during the year 1998 to 2002. How many bicycles were manufactured from 1998 to 2000? **[1]**

Years	No.of bicycles manufactured
1998	800
1999	600
2000	900
2001	1100
2002	1200

a) 2000 b) 1900

c) 2300 d) 2200

60. The pictograph shows the monthly sales of three rival pizza companies. How many pizzas did Pizza House sell during the month? **[1]**



a) 3250 b) 3500

c) 3750 d) 3000

61. **Fill in the blanks:** **[5]**

(a) The presentation of a data by picture or symbol is called_____. **[1]**

(b) A collection of information in the form of a numerical figure is called _____. **[1]**

(c) The number of times a particular observation occurs in a data is called the _____ observation. **[1]**

(d) An observation occurring seven times in a data is represented as _____ using tally marks. **[1]**

(e) The word data means information or set of given facts in _____. **[1]**

62. **State whether the given statement is True or False:** **[3]**

(a) In a bar graph, the width of bars may be unequal. **[1]**

(b) The grouped data are called raw data. **[1]**

(c) The tally mark $\not{|||}$ represents 5. **[1]**

63. **Fill in the blanks:** **[2]**

(a) Data can be organized using _____ marks. **[1]**

(b) The information which is collected initially is called the _____ data or unclassified data. **[1]**

64. **Read the text carefully and answer the questions:** **[5]**

The pictograph given below shows the number of letters collected from the post-box in front of my house on each day of a certain week

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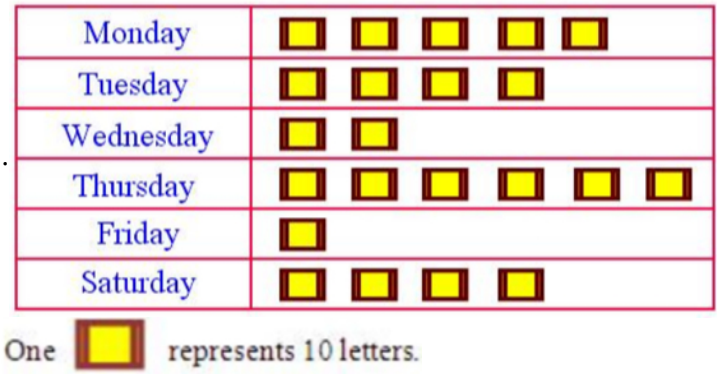


(a) Fill in the blanks:

On _____ were minimum number of letters collected.

(b) On which day were maximum number of letters collected?

a) Monday b) Tuesday

c) Saturday d) Thursday

(c) What was the total number of letters collected from the box over the whole week?

a) 250 b) 300

c) 220 d) 200

(d) How many more letters were collected on Thursday than Friday?

a) 5 b) 10

c) 40 d) 50

(e) State whether the given statement is True or False:

40 less letters were collected on Saturday than on Monday.

a) True b) False

Solution

DATA HANDLING

Class 06 - Maths (NEW)

1. **(c)** 225
   Explanation:
   The upper limit is the highest value in the class interval so in class 200-225, so, the upper limit is 225.

2. **(b)** 
   Explanation:
   Using tally marks, the data in this option is,
   5 + 3 = 8

3. **(a)** frequency
   Explanation:
   Tally marks are used to find the frequency of the observations.

4. **(a)** Frequency or value
   Explanation:
   The bar's height or length indicates the number or measure.

5. **(c)** ||||
   Explanation:
   Each vertical line represents one count; 4 students = 4 lines.

6. **(d)** A collection of information
   Explanation:
   Data refers to facts, figures, and observations collected for a purpose.

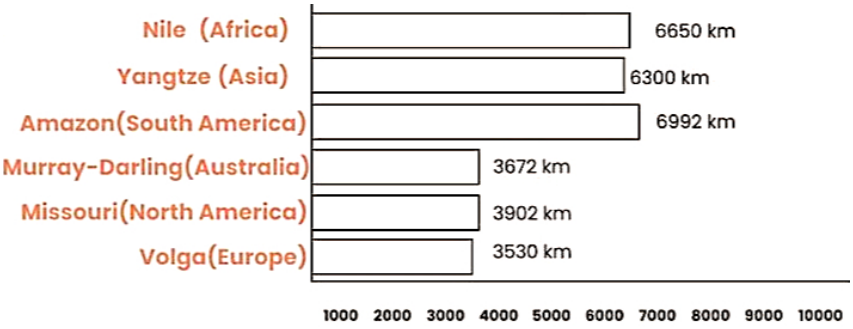
7. **(b)** To record and count easily
   Explanation:
   Tally marks make it easy to count repeated items and group them efficiently.

8. **(a)** Both categories have the same frequency
   Explanation:
   Equal bar height = equal value.

9. **(c)** 
   Explanation:
   Using tally marks  represents the number five.

10. **(b)** Vertical bar graph
    Explanation:
    Heights are easier to compare using vertical bars (like buildings).

11. 1. → (c),
    2. → (d),
    3. → (a),
    4. → (b)
12. 1. → (b),
    2. → (c),
    3. → (d),
    4. → (a)
13. 1. → (b)
    2. → (a)
    3. → (d)
    4. → (c)
14. 1. → (a),
    2. → (b),
    3. → (d),
    4. → (c)
15. 1. → (b),
    2. → (c),
    3. → (d),
    4. → (a)
16. .



17. From the given pictograph, we have,
    Number of more tractors that village C has as compared to B = 8 - 5 = 3
18. Bicycles were manufactured from 2011 to 2015 = 800 + 600 + 900 + 1100 + 1200 = 4600
    Hence, 4600 bicycles are manufactured.
19. 1. The scale is 1 unit length equals 10 students.
    2. From the graph, every year 10 students are added.
    3. Yes, as the number of students in 2003 is 60 which is double of 30 students in 2000.
20. From the above-given pictograph following table is constructed:

Number of fruit merchants	Number of fruit baskets
Rahim	400
Lakhanpal	550
Anwar	700
Martin	950
Ranjit Singh	800
Joseph	450

    The merchants who have sold more than 600 baskets are Anwar, Martin and Ranjit.
21. The required frequency table will be as shown below:

Marks	**Tally marks**	**Frequency**
54	||||	4

55	𝍸 ||	7
56	𝍸 𝍸	9
57	𝍸 |	5
Total		25

22. a.

Games	**Tally marks**	**Number of Students**
Football	𝍸 𝍸 𝍸 ||| 𝍸 𝍸 |||	13
Cricket	𝍸 |||| 𝍸 ||||	9
Kho-Kho	𝍸 | 𝍸 |	6
Hockey	𝍸 |||| 𝍸 |||	8
Tennis	||||	4

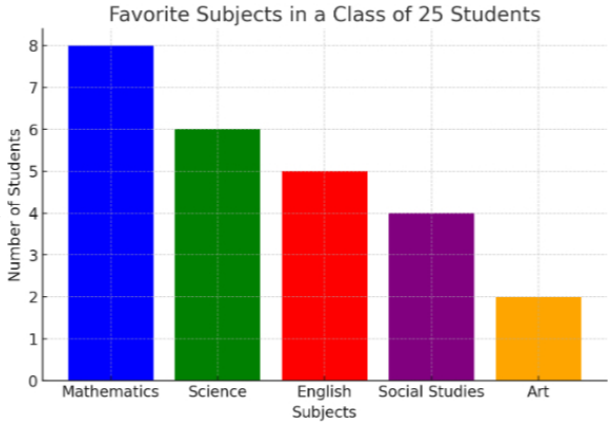
b. Football is liked by most of the students.

c. Tennis is liked by a minimum number of students.

23. a. 6 students like Science.

b. Art is the least favorite subject among the students.

c.



OR

The total number of students who like Mathematics or English is 13 (8 + 5).

24. a. 8 students read exactly 3 books.

b. The most common number of books read by students is 2.

c.

Number of Books Read	**Number of Students (Frequency)**
1	5
2	10
3	8
4	4
5	3

OR

7 students read more than 3 books (4 + 3).

25.

(d) A is false but R is true.

Explanation:

A pictograph represents data in the form of pictures. Bar graphs or bar diagrams are helpful in representing the data visually. So, (A) is a false statement.

Scale means the number used to represent one unit length of a bar. So, (R) is a true statement.

26.

(b) Both A and R are true but R is not the correct explanation of A.

Explanation:

The most common blood group is O and the least common blood group is AB.

So, (A) is a true statement and (R) is a false statement.

27.

(d) A is false but R is true.

Explanation:

The maximum mark obtained by any student is 95 out of 100.

Data is a collection of numbers gathered to get some information.

28. **(a)** Both A and R are true and R is the correct explanation of A.

Explanation:

There are 5 students who obtained 7, 4 students who obtained 8, and 3 who obtained 9. So, there are 5 + 4 + 3 = 12 students who obtained marks equal to or more than 7.

Data organization is a process of organizing raw data, by classifying them into different categories.

29. 4600

Explanation:

Bicycles were manufactured from 2011 to 2015 = 800 + 600 + 900 + 1100 + 1200 = 4600

Hence, 4600 bicycles are manufactured.

30. 3

Explanation:

Number of ice creams sold on day 1 = $5 \times 4 = 20$

Number of ice creams sold on day 2 = $(4 \times 3) + (2 \times 2) = 12 + 4 = 16$

Number of ice creams sold on day 3 = $(4 \times 4) + (2 \times 1) = 16 + 2 = 18$

Number of ice creams sold on day 4 = $(4 \times 2) + (2 \times 3) = 8 + 6 = 14$

On day 3, 18 ice creams were sold.

31.

(d) Data

Explanation:

Collection of data = Information

facts and statistics collected together for reference or analysis is called data

32. **(a)** data

Explanation:

Collection of data = Information

33.

(b) 400

Explanation:

$4 \times 100 = 400$

34. **(a)** 10 - 20 and 40 - 50

Explanation:

Both have 6 frequency

35.

(d) 30

Explanation:

$3 \times 10 = 30$

36.

(c) 30

Explanation:

$6 \times 5 = 30$

37.

(b) 32

Explanation:

$4 \times 8 = 32$

38.

(d) 20 - 30

Explanation:

20 - 30 has 20 frequency , the highest

39.

(b) USD 325

Explanation:

$3.25 \times 100 = 325$

40. **(a)** 40

Explanation:

$4 \times 10 = 40$

41.

(b) USD 350

Explanation:

$3.5 \times 100 = 350$

42. **(a)** 15

Explanation:

$3 \times 5 = 15$

43.

(d) 400

Explanation:

Cars produced in the month of September = 100 +100 + 100 + 100 = 400

44. **(a)** 40

Explanation:

As 40 is the upper value of the range

45.

(b) 20

Explanation:

$4 \times 5 = 20$

46. **(a)** 100

Explanation:

1 = 100

47. **(a)** 950

Explanation:

$9.5 \times 100 = 950$

48.

(b) March

Explanation:

$4 \times 5 = 20$, least

49.

(b) 25

Explanation:

$5 \times 5 = 25$

50.

(b) 40

Explanation:

$10 \times 4 = 40$

40 people choose blue colour.

51. **(a)** 125

Explanation:

frequency of class interval 125 -150 is 125 as shown in table

52. **(a)** Wednesday

Explanation:

100 the least

53.

(b) Thursday

Explanation:

5 students = 1 icon,

So, 30 students$= \frac{30}{5}$ = 6 icons.

On Thursday, there are 6 icons of absentees. So, on Thursday 30 students were absent

54.

(c) Saturday

Explanation:

One icon = 5 students. There is 1 icon on Saturday

So, $= 1 \times 5 = 5$ students were absent on Saturday.

55.

(b) 10

Explanation:

There is gap of 10 in each interval like 0.10,20,30 etc

56.

(c) 140

Explanation:

frequency of class interval 200 - 225 is 140

57.

(c) 600

Explanation:

$6 \times 100 = 600$

58. **(a)** 25

Explanation:

$5 \times 5 = 25$

59.

(c) 2300

Explanation:

800 + 600 + 900 = 2300

60.

(c) 3750

Explanation:

$3.75 \times 1000 = 3750$

61. Fill in the blanks:

(i) Pictograph

(ii) Data

(iii) Frequency of data

(iv) 𝍸𝍸|||

(v) numerical figures

62. State whether the given statement is True or False:

(i) **(b)** False

Explanation:

False.

We know that, In a bar graph, bars of uniform width are drawn horizontally or vertically with equal spacing between them.

(ii) **(b)** False

Explanation:

False

(iii) **(a)** True

Explanation:

True

63. Fill in the blanks:

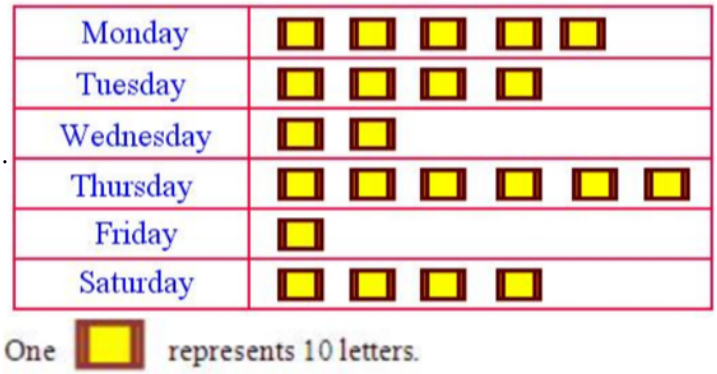
(i) 1. Tally

(ii) 1. Raw

64. **Read the text carefully and answer the questions:**

The pictograph given below shows the number of letters collected from the post-box in front of my house on each day of a certain week

.



(i) 1. Friday

(ii) **(d)** Thursday

Explanation:

Thursday

(iii) **(c)** 220
Explanation:
220

(iv) **(d)** 50
Explanation:
50

(v) **(b)** False
Explanation:
False