

Chapter: 11

Q.1 Choose the correct alternative. (2)

- 1) In a percentage bar graph, all bars are of height 100 units.
a. True b. False

- 2) From the given data, find the value of $\sum f_i x_i$

x	3	4	6	10	8
f	2	2	3	1	3

- a. 11 b. 22 c. 33 d. 66

Q.2 Answer the following questions (Any two) (4)

- 1) The marks scored by 20 students in a Science test (30 marks) are given below:
8, 7, 12, 17, 20, 11, 16, 21, 28, 25, 27, 18, 20, 19, 7, 29, 16, 15, 20, 27
Using the data answer the following questions:
(1) How many students scored the lowest marks?
(2) How many students scored 20 marks?
(3) What is the frequency of score 27?
(4) How many students scored more than 20 marks?
- 2) The number of Science and Mathematics projects submitted by Model high school, Nandpur in last 20 years at the state level science exhibition is :
2, 3, 4, 1, 2, 3, 1, 5, 4, 2, 3, 1, 3, 5, 4, 3, 2, 2, 3, 2. Prepare a frequency table and find the mean of the data.
- 3) The number of members in the 40 families in Bhilar are as follows:
1, 6, 5, 4, 3, 2, 7, 2, 3, 4, 5, 6, 4, 6, 2, 3, 2, 1, 4, 5, 6, 7, 3, 4, 5, 2, 4, 3,
2, 3, 5, 5, 4, 6, 2, 3, 5, 6, 4, 2. Prepare a frequency table and find the mean of members of 40 families.

Q.3 Attempt the following questions. (Any two) (6)

- 1) The following table shows the number of saplings planted by 30 students. Fill in the boxes and find the average number of saplings planted by each student.

No. of saplings (Scores) x_i	No. of students (frequency) f_i	$f_i \times x_i$
1	4	4
2	6
3	12
4	8
	$N = \dots\dots\dots$	$\sum f_i x_i = \dots\dots\dots$

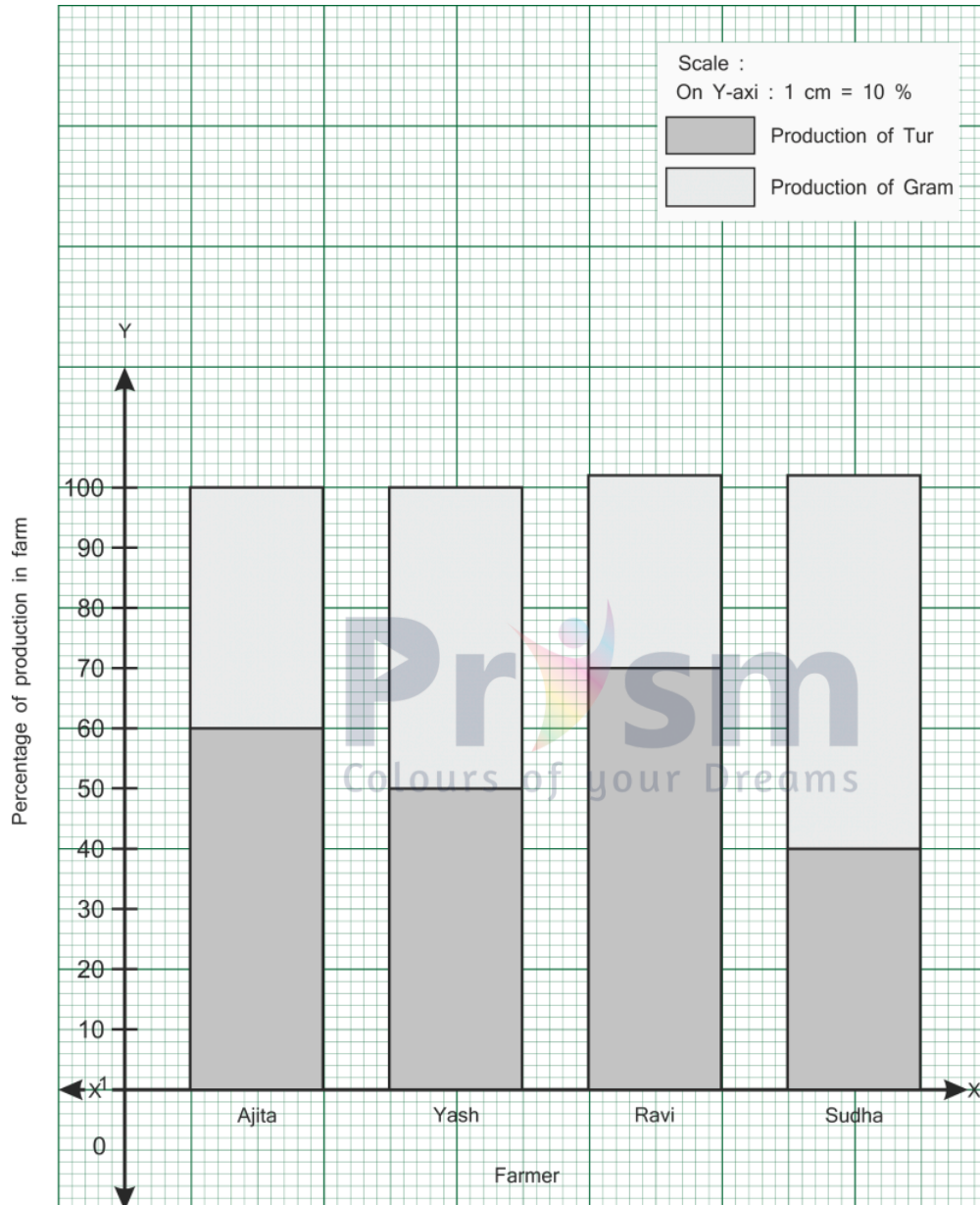
$$\text{Mean } \bar{x} = \frac{\sum f_i x_i}{N}$$

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∴ The average number of trees planted is

2) Observe the following graph and answer the questions.



- State the type of the bar graph.
- How much percent is the Tur production to total production in Ajita's farm ?
- Compare the production of Gram in the farms of Yash and Ravi and state whose percentage of production is more and by how much ?
- Whose percentage production of Tur is the least?
- State production percentages of Tur and gram in Sudha's farm.

3)

Electricity used (Units) x_i	No. of families (frequency) f_i	$f_i \times x_i$
30	7	210
45	2	90
60	8	480

75	5	375
90	3	270
	N =	$\sum f_i x_i = 1425$

The following table shows the electricity (in units) used by 25 families of Eklara village in a month of May. Complete the table and answer the following questions.

i. How many families use 45 units electricity ?

ii. State the score, the frequency of which is 5.

iii. Find N, and $\sum f_i x_i$.

iv. Find the mean of electricity used by each family in the month of May.

Q.4 Solve the following questions. (Any two)

(8)

- 1) In the following table, data of the transport means used by students in 8th standard for commutation between home and school is given. Draw a subdivided bar diagram to show the data.

Mean of commutation \ Town	Paithan	Yeola	Shahapur
Cycle	3250	1500	1250
Bus and Auto	750	500	500
On foot	1000	1000	500

- 2) The following data is collected in a survey of some students of 10th standard from some schools. Draw the percentage bar graph of the data.

School	1 st	2 nd	3 rd	4 th
Inclination towards science stream	90	60	25	16
Inclination towards commerce stream	60	20	25	24

- 3) 20 students donated books to a school. The information is given in the following table. Fill in the blanks and find the mean number of book donated by each student.

Number of books (x_i)	Tally marks	Frequency f_i	$f_i \times x_i$
2	
3	12
4	3
5	4
6		18
7	
		N = 20	$\sum f_i x_i = 84$