Data Handling -I Ex 21.1 Q1

Answer :

(i) Observation is the active acquisition of information from a primary source.
(ii) A collection of facts such as values and measurements are called data.
(iii) Number of times an observation has occurred in a given data.
(iv) A frequency distribution is an arrangement of instances in which a variable takes each of its possible values. A frequency distribution depicts a summarised grouping of data divided into mutually exclusive classes and the number of occurrences in those classes.

Data Handling -I Ex 21.1 Q2

Answer :

(i)Frequency distribution of the given marks in mathematics of 30 students:

30 – 39	37, 39
40 – 49	44, 48, 48
50 – 59	50, 52, 53, 55, 56, 58, 58, 59
60 – 69	60, 60, 60, 61, 62, 64, 67, 68
70 – 79	70, 75, 77, 78
80 – 89	84, 88
90 – 99	90, 98
100 - 109	100

(ii) From the given data we can see that the highest score is 100.

(iii) The above data shows 37 as the lowest score.

(iv) Range = Highest score – Lowest score = 100 – 37 = 63

(v) If 40 is the pass marks, students who have scored less than 40 have failed. So, the students who have scored 37 and 39 have failed.
∴ Number of students that have failed in the exam = 2

(vi) Students who have scored 75, 77, 78, 84, 88, 90, 98 and 100 are the ones to score more than 75.

Data Handling -I Ex 21.1 Q3

Answer :

(i) Arranging the weights of the newborn babies in the descending order, we get: 3.1, 3.0, 2.9, 2.9, 2.8, 2.8, 2.7, 2.7, 2.6, 2.5, 2.5, 2.4, 2.3, 2.2, 2.1.

(ii) In a descending order, the first number is always the highest.
∴ Highest weight = 3.1kg.

(iii) In a descending order, the last number is always the lowest.
∴ Lowest weight = 2.1kg.

(iv) Range = Highest weight – Lowest weight
= 3.1kg – 2.1kg = 1.0kg

(v) We can count the number of babies born on that particular day by counting the number of observations.
∴ Number of babies born on that day = 15

(vi) Babies which weigh 2.1, 2.2, 2.3 and 2.4kg are the ones to weigh less than 2.5kg.
∴ Number of babies below 2.5kg = 4

(vii) Babies which weigh 2.9, 2.9, 3.0 and 3.1kg are the ones to weigh more than 2.8kg.
∴ Number of babies above 2.8kg = 4

(viii) Number of babies weighing 2.8kg = 2

Data Handling -I Ex 21.1 Q4

Answer :

Frequency distribution of the given data:

Number of children	Tally marks	Frequency
0	𝍸	5
1	𝍸 II	7
2	𝍸 𝍸 I	11
3	𝍸	5
4	𝍸 I	6
5	III	3
6	III	3

Data Handling -I Ex 21.1 Q5

Answer :

Frequency distribution table of the given scores:

Marks	Tally marks	Frequency
7	II	2
14	I	1
16	I	1
17	I	1
19	I	1
21	I	1
22	I	1
27	II	2
29	I	1
31	I	1
33	II	2
34	I	1
37	IIII	4
38	II	2
39	IIII	4
41	I	1
42	𝍸I	6
43	I	1
44	I	1
47	I	1
49	I	1
51	III	3
52	I	1
53	III	3
54	I	1
57	I	1
59	II	2
61	I	1
62	I	1
67	I	1

********** END **********