

Q1/ The heights in inches of commonly grown herbs are shown. Organize the data into a frequency distribution with six classes, and think of a way in which these results would be useful.

18 20 18 18 24 10 15

12 20 36 14 20 18 24

18 16 16 20 7

Q2/ Calculate Arithmetic Mean from the data showing marks of students in a class in an statistics test: 40, 50, 55, 78, 58.

**Q3/ Select the best answer.**

1. Number of books on a library shelf are classified as:  
(a) Quantitative discrete (c) quantitative continuous (c) Categorical
2. What are the boundaries for 8.6–8.8?  
*a.* 8–9      *b.* 8.5–8.9      *c.* 8.55–8.85      *d.* 8.65–8.75
3. What graph should be used to show the relationship between the parts and the whole?  
*a.* Histogram      *b.* Pie graph      *c.* Pareto chart      *d.* Ogive

Q4/ Find the mean, median, and mode of each of the sets.

(a) 7, 7, 2, 3, 4, 2, 7, 9, 31

(b) 36, 41, 27, 32, 29, 38, 39, 43

**Q5/ Complete these statements with the best answers.**

1. On a bar chart, the frequencies should be represented on the -----axis.

2. In a frequency distribution, the number of classes should be between -----and----- .

3. Data such as blood types (A, B, AB, O) can be organized into -----a(n) frequency distribution.

4. Data collected over a period of time can be graphed using a(n) -----graph.

Q6/ The B.P. of (6) students were determined before and after examination and the results were as follows:

Student	x1 (before)	x2 (after)	d=(x1-x2)	
1	10	12	-2	4
2	11	13	-2	4
3	12	14	-2	4
4	11	10	1	1
5	13	12	1	1

$$\begin{array}{ccccccc}
 6 & & 15 & & 11 & & 4 \\
 & & & & & & \hline
 & & & & & & 16 \\
 & & & & & & \hline
 & & & & & & 30 \\
 & & & & & & \hline
 & & & & & & 0
 \end{array}$$

Calculate t-test?

Q7/present the following data in the form of a histogram and polygn:

Classes	3-5	5-7	7-9	9-11	11-13
Frequency	4	5	3	3	2

Q8/ Suppose we have a sample of 120 plants, where 32 of them were diseased: (88 non-diseased and 32 diseased).

Test the following hypothesis:

Ho:  $p = 70\%$

Ha:  $p \neq 70\%$