1. The following are the number of computers creating problem in a laboratory in different days

Number of computers: 8, 6, 10, 12, 11, 9, 7, 10, 5, 15.

Do you think that the average number of problem creating computer per day is 9?

What will be happened if population variance is 20?

2. The following are the number of mails received by different organizations in different days

Organizations Number of mails received in different days

1 10, 12, 11, 14, 12, 21, 15 2 15, 7, 12, 16, 17

Are the both organizations similar in respect of mails received?

- 3. Eighty percent students are usually become successful in writing program. Once 20 students are asked to write a program. Among 20 students 12 become successful. Is the assumption regarding the students correct?
- 4. In a laboratory there are 70 Samsung and 30 Philips computers. Ten Samsung computers and 4 Philips computers create problem during work. Are the proportions of problem creating computers similar for both types of computers?
- 5. The computer centers of different localities are classified according to level of income. The classified results are given below:

Number of centers of localities Level of income 1 2 3 4 5 12 14 15 Medium 16 5 25 High 12

Is there any association between level of income and number of centers of localities?

1. The following are the number of e. mails received in different days by different organizations:

Days (x) : 5 8 3 10 15 No. of mails received (y) : 54 65 12 98 58

- a) Calculate coefficient of correlation and test for the significance of correlation.
- b) Fit a line of y on x and test the significance of regression.
- c) Estimate y if x = 9.

<sup>\*\*\*</sup>For a sample of size 36,  $\sum x = 761.6$ ,  $\sum x^2 = 16125.5$ . Is the population mean 21?