



7. An online medicine shop claims that the mean delivery time for medicines is less than 120 minutes with a standard deviation of 30 minutes. Is there enough evidence to support this claim at a 0.05 significance level if 49 orders were examined with a mean of 100 minutes ?
8. Test whether gender has anything to do with political party preference at 5 percent level of significance. You poll 420 voters in a simple random sample to find out which political party they prefer. The results of the survey are shown in the table below :

	Republican	Democrat	Independent	Total
Male	100	70	30	200
Female	140	60	20	220
Total	240	130	50	420

SECTION – C
(Compulsory)

Answer to the question should **not** exceed **6** pages.

(1×14=14)

9. Three types of fertilizers are used on three groups of plants for 6 weeks. You are required to check if there is a difference in the mean growth of each group. Use 0.05 significant level to test the hypothesis.

Fertilizer 1	Fertilizer 2	Fertilizer 3
6	8	13
8	12	9
4	9	11
5	11	8
3	6	7
4	8	12