



**Q-4** **Attempt all questions** (14)  
a) Discuss sampling techniques.  
b) Give merits and demerits of random sampling.

**Q-5** **Attempt all questions** (14)  
a) Explain characteristics of t-test .  
b) Explain characteristics of f-test.

**Q-6** **Attempt all questions** (14)  
a) Explain method of business forecasting .  
b) Explain types of error in testing of hypotheses.

**Q-7** **Attempt all questions** (14)

a)

Sample	Mean	Variance	Sample Size
I	7	26	10
II	4	10	10

Calculate t-distribution at 5% level of significance .

b) In normal distribution mean  $\mu=21.5$  and  $\sigma =2.5$  find out of following.

(1) $P \{18 \leq x \leq 25\}$

(2) $P \{22 \leq x \leq 28\}$

**Q-8** **Attempt all questions** (14)  
a) Explain importance of normal distribution.  
b) Explain graphical method of linear programing.

