

semister - VImportant QuestionsUNIT - I

- ① S/T  $P(E_0) = P(E_1)$  &  $V(\bar{y}_0) = \frac{N-1}{nN} S^2$ ,  $V(\bar{y}_1) = \frac{N-1}{N} S^2$
- ② census vs sampling survey
- ③ Types of sampling
- ④ Non sampling error vs sampling error.
- ⑤ principles of sampling survey

UNIT - II

- ①  $E(\bar{y}_{st}) = \bar{Y}_N$ ,  $E(\bar{y}_{sys}) = \bar{Y}$ .
- ②  $V(\bar{y}_{st})$  in stratified random sampling and systematic random sampling
- ③ optimum allocation & proportional allocation
- ④ S/T  $V(\bar{y}_{st})_{opt} \leq V(\bar{y}_{st})_{prop} \leq V(\bar{y}_{st})_r$
- ⑤ S/T  $V(\bar{y}_{st}) \leq V(\bar{y}_{sys}) \leq V(\bar{y})_r$

UNIT - III

- ① components of time series
- ② Link relative method
- ③ Moving averages method
- ④ seasonal indices by ratio to trend  
b) ratio to moving average
- ⑤ 3 selected points method
- ⑥ semi avg & graphical method

## UNIT - IV

02/11/22

- ① Importance of SQC in industry
- ② Dimensions of quality
- ③  $\bar{x}$  - bar chart
- ④ R - Chart
- ⑤ NP - chart a) fixed b) varying sample size
- ⑥ P - chart a) " b) "
- ⑦ C - chart
- ⑧ U - chart
- ⑨  $\sigma/s$  chart

### Short Questions

- ① Non sampling treatments, sources
- ② Population, sd, sampling distn, Sample parameter, statistic
- ③ systematic random sampling
- ④ stratified
- ⑤ simple random sampling with replacement & without replacement
- ⑥ Time series, & uses
- ⑦ models of time series
- ⑧ process & product control
- ⑨ 3 $\sigma$  - control limits
- ⑩ Applications of c-chart
- ⑪ Defects vs defective items
- ⑫ schewartz control charts
- ⑬ SQE
- ⑭ quality
- ⑮ Trend