

**ASSIGNMENT**  
**Sem-5 (Statistics)**

Q.1] Explain probability mass function of Poisson distribution and give its properties.

Q.2] Define integration and definite integration. And write down some standard result of integration.

Q.3] Explain:

(1) Theory of runs &  $3\sigma$  control limits.

(2) Difference between variable charts and attributes charts.

Q.4] What is single sampling plan? And explain following term.

(i) Producer's risk, (ii) Consumer's risk, (iii) ATI, (iv) AOQ.