

Q2
Ans

The arrival rate is the number of arrivals per unit of time. The arrival rate is calculated from the following equation:-
arrival rate = $1 / \text{inter arrival time}$. Service rate denotes the rate at which customers are being served in a system. It is reciprocal of the service time.

* Importance of Replacement are as follows:-

- i) It may be due to lessening in the demand for the services rendered by the equipment or by the availability of more efficient equipment.
- ii) Deterioration is the decline in performance of equipments due to wear and tear, misalignment etc.
- iii) It may be thought of replacing old equipments and machinery which create unpleasant and hazardous working conditions.

(iv) Technology is progressing rapidly. Newer and better equipments are being developed and turned out every year. If the management does not go for a change in the equipment or machinery, the unwarranted manufacturing cost arising from obsolete equipments will reduce and seriously impair the concern's competitive position in market.