

Jagan Institute of Management Studies
End-Term Examination, September-October, 2017
Trimester IV – PGDM 2016-18

Production & Operations Management
ET_PG_POM_2709

Time: 3 Hrs.

M. Marks: 70

INSTRUCTIONS: Attempt any SEVEN questions. All questions carry equal marks.

- Q 1** What is bullwhip effect? How can a company ensure its supply chain does not suffer from bullwhip effect? **10**
- Q 2** What is ERP? Discuss various applications of ERP. **10**
- Q 3** Explain the theory of constraints. What are its important applications? **10**
- Q 4** NDMC has one office that issues birth certificates only. The clerk can issue on an average 10 birth certificates per hour whereas on an average 4 requests are received for issuing birth certificates per hour. Service rate follows exponential distribution and arrival rate follows Poisson distribution. Compute:
- b)** The average length of the waiting line;
 - c)** The average number of arrivals in the system;
 - d)** The average waiting time;
 - a)** The average time an arrival spends in the system;
 - b)** The probability of one or more arrival in the system. **10**
- Q 5** What do you mean by capacity planning? Explain different types of capacities. **10**
- Q 6** Explain the service design. What are challenges of a service design? **10**
- Q 7** Discuss the concept of globalization in location decision. What the reasons of globalizations. What the dominant factors operations managers should consider for global locations? **10**
- Q 8** What are the inputs of layout decisions? Discuss the objectives of an ideal plant layout. What are the factors affecting layout decisions? **10**

- Q 9** Explain the process of conversion along with its various components. Also distinguish between manufacturing and service sectors in terms of their similarities and dissimilarities. **10**
- Q 10** Explain:
- a) Quality Function Deployment
 - b) Capacity planning in service vs. manufacturing **10**
