(Please write your Exam Roll No.) Exam Roll No. .....

END TERM EXAMINATION

FIFTH SEMESTER [BBA] NOVEMBER-DECEMBER-2016

Paper Code: BBA-305 **Subject: Production and Operations Management**

Time: 3 Hours **Maximum Marks: 75**

Note: Attempt any five questions. All questions carry equal marks.

Q1 Explain operations management as transformation process?

Q2 (a) The Ministry of Home affairs is considering 3 alternative locations for setting up new plant for prefabricated sheet (1mx3m) for distributing as relief material as a part of its rehabilitation programme. It is in the process of preparing action plan for managing Disaster in NCR. Experts of Steering committee have suggested three locations. A study has been carried out and it was ascertained that three locations namely Noida, Guragaon and Faridabad will have fixed costs of Rs 50,00,000 Rs 60,00,000 and Rs 40,00,000 respectively and the variable costs-per unit are Rs 450/-, Rs 425 and Rs 400/- respectively. The project will be financed by bond bearing 10% interest rate. It has been further suggested that an annual output of 1000 sheets will be manufactured. Assuming that you are one of the members of expert Committee which location you will recommend for setting up new plant. **Note: You can make appropriate assumptions if required.**

(b) Explain point rating methods of site selection.

Q3 Derive EOQ formulae with suitable assumption?

Q4 The table below has details on the mean and range of 10 samples drawn from a process during routine sample and inspection. The readings are weights of a certain metal deposited on the surface of electro-mechanical device. The lower and upper and limits are 20.7 gms and 23.3 gms respectively. The S.D is found to be 0.32. Assume the sample size to be five.

(a) Develop relevant chart
(b) Is the process under control?

Q5 The arrival of vehicles in a petrol pump station can be assumed to be follow poisson distribution. The number of vehicles arriving in the station in an hour is 125. The station can attend around 150 vehicles on an average per hour. Find.

(a) Probability that a customer has to wait for service
(b) Mean length of system
(c) Mean length of queue
(d) Mean waiting time in System

Q6 Differentiate between site and location? Explain assembly line balancing with suitable example?

Q7 Explain acceptance sampling. Also explain consumer and producer's risk.

Q8 Write short note on **any three** of the following:-

(a) Economics of waiting line
(b) International and National Quality Awards
(c) Inventory Models
(d) Total Quality Management

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