DEPARTMENT OF MANAGEMENT
SCHOOL OF MANAGEMENT &BUSINESS STUDIES
JAMIA HAMDARD

Even Semester Examination (Online) July - August2021

MBA[Semester II]

Paper Name: Operations Management MM: 75

Paper Code: MBA-CG-205 Time: 03Hours

Email Id of the Examiner: alka.sanjeev@jamiahamdard.ac.in

Email Id of the Assistant Superintendent of Exams:mba2july2021@gmail.com
Email Id of Dean: deanmanagement@jamiahamdard.ac.in

Note:

- Students have to submit the **Scanned hand written solutions** to the Examiner, Assistant Superintendent of Examination and Dean on the email ids as mentioned above.
- Students shall use **ruled white paper & blue ink** to write the solution. Each page must have a **serial number and the signature** of the student.
- An additional ½ an hour will be given to the examinees to scan the answer sheets, convert it into single PDF and upload it on the id's given on the question papers.
- If any two copies are found to be similar then both the copies shall be cancelled. Such students will be considered/ tried for unfair means.
- The attachedPDF shall be named as follows –
  Full Name-Enrollment Number-Course-Semester-Subject Abbreviation(Example: Rabia Shaheen-2017-334-032-MBA-IV-QTM) and students shall also mention the same in subject line of the email & his/her answer copy also.
- Answer All Questions, each carry equal marks.

1. Critically analyze the nature and scope of Production and Operations management.

2. Explain Forecasting and its types and methods.

3. What do you mean by Aggregate Production Planning? Explain a few pure and mixed strategies.

4. Fastcomp is a Japanese electronics firm that buys computer chips from a supplier in the United States. The cost of a chip is $80 per unit, regardless of the order quantity. In addition, the company incurs a fixed cost of approximately $1000 per order to process the order and obtain import license. Fastcomp has determined that it costs approximately 12% per year of an item's cost to hold the item in inventory. The lead time for delivery is 1.5 month. The company uses 10,000 computer chips per month at a relatively constant rate. Historically, Fastcomp has followed a policy of buying a one-month supply of chip (10,000) every month. We want to determine the optimal order quantity (EOQ) and reorder point (ROP) for Fastcomp. Find the annual cost resulting from the optimal policy, and compare it with the current policy.

5. A company supplies toys to a customer in lots of 10,000. The company and customer have agreed on AQL of 0.01 and LTPD of 0.1. The customer has suggested that the following procedure be used to determine whether or not it will accept a shipment: 20 toys will be sampled; if 1 or fewer toys are defective, it will accept the shipment and if 2 or more are defective, it will reject the shipment.

a) Compute the producer's risk (α) and the consumer's risk (β) for this sampling plan.
b) For the sampling plan for this problem, derive the OC curve.