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Total No. of Pages : 03

Total No. of Questions : 15

MBA/MBA(IB) (2015 to 2017) (Sem.-2)
PRODUCTION AND OPERATION MANAGEMENT
Subject Code : MBA-202
M.Code : 49097

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A** contains **SIX** questions carrying **FIVE** marks each and students has to attempt any **FOUR** questions.
2. **SECTION-B** consists of **FOUR** Sub-sections : Units-I, II, III & IV. Each Sub-section contains **TWO** questions each carrying **EIGHT** marks and student has to attempt any **ONE** question from each Sub-section.
3. **SECTION-C** is **COMPULSORY** and consist of **ONE** Case Study carrying **EIGHT** marks.

SECTION-A

- Q1. What are the responsibilities of operations manager?
- Q2. Explain Deming Wheel with the help of suitable example.
- Q3. How method study helps in productivity improvement?
- Q4. Discuss capacity planning decisions.
- Q5. Classify statistical process control charts.
- Q6. What is acceptance sampling?

SECTION-B**UNIT-I**

- Q7. Explain locational analysis techniques with the help of suitable examples.
- Q8. Explain product design and development with the help of suitable examples.

UNIT-II

- Q9. Explain production planning and control in detail.
- Q10. What is productivity? Discuss various problems faced in facility layout.

UNIT-III

- Q11. Discuss the role of Juran's Quality Trilogy in process improvement.
- Q12. A machine is set to deliver packet of a weights. 10 samples of size 5 each were recorded as :

Sample No.	1	2	3	4	5	6	7	8	9	10
Mean	15	17	15	18	17	14	18	15	17	16
Range	7	7	4	9	8	7	12	4	11	5

Calculate the Mean Chart and Range Chart and comment on the state of control. (Assume $A_2 = 0.577$, $D_4 = 2.115$ and $D_3 = 0.00$)

UNIT-IV

- Q13. What are production worksheets? Explain virtual factory concept in detail.
- Q14. What are various inventory levels? Explain inventory cost behaviour in details.

SECTION-C

- Q15. Solve the following case :

Contact Centers Should Take A Lesson From Local Business

There are three bagel shops in my hometown, two of which are fairly rudimentary in nature. They sell bagels, cream, cheese, and coffee. Good bagels, but nothing fancy.

The third store is part of a large, Boston-area chain, and the bagels there are also good. The store often has children's entertainment and has a large seating area with games, free newspapers, and room to spread out and relax. Last, and most important, it has a system that consists of a conveyer belt running across the length of the counter between the register and the "schmearing" operation-with a huge circular saw in the center. As bagels are ordered, they are tossed onto the conveyer, sliced in half by the saw, and travel at very high speed to the end of the conveyer. In other words, store number three isn't just bagel store; it's entertainment as well.

But that store has lost my business... At least 30 percent of the time we order from the store, the order is wrong. And the schmearers at store number three are probably the most stressed cream cheese-appliers ever. The look of terror on their faces from the constant pressure of the sliced bagels whizzing down the conveyor towards them is similar to the look I've seen on the faces of the customer service reps in oh-so-many call centers.

Does this happen in your call centre? Think about it. The system that makes store number three so very profitable just cost it what I'd argue is a pretty profitable customer.

There's also a hardware store in my hometown (actually, two). In the next town, there is a Home Depot, which I've frequented many a weekend, but not anymore. Our kitchen sink had been leaking on and off for six months, though the leak had been patched. The prospect of standing in line at Home Depot yet again, waiting for service and searching through what seemed like thousands of O-rings to find the right one, was not what I had planned for the weekend.

So I changed my plan and went to my local hardware store. As expected, the prices were at least two times what Home Depot charges, but the service was fabulous, particularly the part when the plumbing department manager suggested a little trick that would prevent the O-ring from failing. I took my expensive O-ring, went home, tried his suggestion, and five minutes later was finished. Not a drop since.

Questions:

1. What lessons are there from these two examples for contract (call) center managers?
2. What are the dilemmas posed in solving these problems in the context of a call centre?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.