

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

MBA (International Business) – SEMESTER 2 – EXAMINATION – SUMMER 2019

**Subject Code: 1529303**

**Date: 11/05/2019**

**Subject Name: Global Operations Management**

**Time: 10.30 AM TO 1.30 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**Q.1** Define the following terms: **14**

- (a) MRP
- (b) CPM
- (c) JIT
- (d) Slack Time
- (e) TQM
- (f) Mass customization
- (g) Taguchi Concept

**Q.2 (a)** Explain Global Operations Management and its ten Key Strategic decisions. **07**

**(b)** Suppose you are working with project consultant. IKEA a Swedish Home Furnishing major opened its first store in Hyderabad recently, five years after it received approval to invest in the country's single-brand retail sector and wants to ensure its presence across India. IKEA has approached you for guidance in locating its facility location in Gujarat. Guide your Client with justification on various factors considered for said decision. **07**

**OR**

**(b)** Discuss the strategies to adjust capacity and manage demand along with examples. **07**

**Q.3 (a)** Explain the different types of layout. Additionally differentiate between product and process layout. **07**

**(b)** Write a detailed note on Just in time to achieve competitive advantage **07**

**OR**

**Q.3 (a)** What is Aggregate Plan? Discuss aggregate planning Options with advantages and disadvantages. **07**

**(b)** Explain Supply chain Integration and Sustainability. List down and discuss major challenges to ensure Supply chain Sustainability. **07**

**Q.4 (a)** Discuss strategic importance of Maintenance and Reliability in an organisation. **07**

- (b) Explain Lean Production system and eight types of wastes to ensure value addition by each and every activity of system. **07**

**OR**

- Q.4 (a)** Explain Mass customization focus as one of the process strategy and discuss challenges for mass customization strategy with suitable Examples. **07**

- (b) A project has been defined to contain the following activities, along with their time completion , **07**

Activity	Time Estimates in Weeks			Immediate Predecessor
	a	m	b	
A	1	4	7	-
B	2	6	7	A
C	3	4	6	A,D
D	6	12	14	A
E	3	6	12	D
F	6	8	16	B,C
G	1	5	6	E,F

- Calculate the Expected time and Variance for each activity.
- Draw the Critical Path diagram.
- Calculate and show early start, early finish and late start, late finish times.
- Show the critical path.

What is the probability that the project can be completed in 34 weeks?

- Q.5** ABC Enterprises has three plants manufacturing dry cells, located at different locations. Production cost differs from plant to plant. There are five offices of the company located in different regions of the country. The selling prices can differ from region to region. The shipping cost from each plant to each sales office and other information is given below.

**Production Information**

Plant Number	Maximum capacity (in number of units)	Production cost per unit
1	150	20
2	200	22
3	125	18

**Shipping Cost (Rupees)**

Plant Number	Sales Office				
	A	B	C	D	E
1	1	1	5	9	4
2	9	7	8	3	6
3	4	5	3	2	7

**Demand and Selling Price**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Demand (units)</b>	<b>80</b>	<b>100</b>	<b>75</b>	<b>45</b>	<b>125</b>
<b>Selling Price (Rupees)</b>	<b>30</b>	<b>32</b>	<b>31</b>	<b>34</b>	<b>29</b>

- Q.5** (a) Derive a profit matrix indicating the profit per unit obtained when produced and sold in various combinations of plants for sales office A & B. Assume all the other costs (apart from production cost and shipping cost) to be zero. **07**
- (b) Find out the most profitable distribution schedule of the company using North West Corner rule method. **07**

**OR**

- (a) Derive a profit matrix indicating the profit per unit obtained when produced and sold in various combinations of plants for sales office C & D. Assume all the other costs (apart from production cost and shipping cost) to be zero. **07**
- (b) Find out the most profitable distribution schedule of the company using Vogel's Approximation method. **07**

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