

K.J. Somaiya Institute of Management Studies & Research

PGDM (Ops.) and MMS (Ops.)

Trimester V – 2017 – 19 BATCH

Manufacturing Strategy and Technology Management

Time : 3 Hrs.

Marks : 50

Date: Jan. 16,2019

Notes 1. Question No. 1 is compulsory & carries 20 Marks.

2. Out of the remaining four questions, attempt any three .Each of them carries 10 marks.

Q1. Enclosed is the Case Study of Reebok a sports goods manufacturing company.

- a. Which is the dominant manufacturing strategy for this firm? Provide the logic for the same.
- b. Carry out a cost benefit analysis for the suggested strategy.

Q2. Ching-Chang Kau is considering opening a new foundry in Denton, Texas; Edwardsville, Illinois; or Fayetteville, Arkansas to produce high quality rifle sights. He has assembled the following fixed cost and variable cost data:

Per- Unit Costs

Location	Fixed Cost/Year	Materials	Variable Labour	Overhead
Denton	\$ 200,000	\$ 0.20	\$ 0.40	\$ 0.40
Edwardsville	\$ 180,000	\$ 0.25	\$ 0.75	\$ 0.75
Fayetteville	\$ 170,000	\$ 1.00	\$ 1.00	\$ 1.00

Over what range of annual volume is each facility going to have competitive advantage?

Q3. Krupp Refrigeration Inc. is trying to reduce inventory and wants you to install a Kanban system for compressors on one of its assembly lines. Data collected is given below:

Set-up cost: \$10

Annual Holding cost per compressor: \$ 100

Daily production: 200 compressors

Annual Usage: 25,000

Lead time: 3 days

Safety Stock: ½ day production of compressors

Krupp Refrigeration works for 5 days a week and for 250 days in a year.

How will you go about implementing Kanban in this scenario?

Q4. What is a Virtual Organization? Is there any relationship between Mass Customization & Virtual Organization? Are these required for Agile Manufacturing? How has Burger King used these strategies?

Q5. Enclosed is the case of “Grabbing the Opportunities in Stem Cell Research”. Analyze the same using Ford’s Acquisition Matrix.
