

GUJARAT TECHNOLOGICAL UNIVERSITY**MBA - SEMESTER-II • EXAMINATION – SUMMER 2013****Subject Code: 820006****Date: 24-05-2013****Subject Name: Production and Operations Management****Time: 10:30am – 01:30pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) Explain Product layout and Process Layout in detail. **07**
 (b) Write a note on Industrial safety. **07**

- Q.2** (a) What factors an entrepreneur should take into consideration before selecting a site for the setting up an Automobile manufacturing plant? **07**

- (b) Define Productions and Operations Management. Explains its functions. **07**

OR

- (b) What is Gantt Chart? Explain Benefits of Gantt Chart with reference to Production Planning. **07**

- Q.3** (a) What is Supply Chain Management? Explain SCM Activities. **07**
 (b) What is JIT? Explain benefits of JIT. **07**

OR

- Q.3** (a) What is Bull Whip Effect? Explain Risk Pooling. **07**
 (b) What is TQM? What is the Six Sigma concept in Quality Management? **07**

- Q.4** (a) Write a brief note on Economic Order Quantity. Explain dependent demand and independent demand with example. **07**

- (b) Compute the EOQ from the following information: **07**

No. of units bought at a time	Price per unit in Rs.
Less than 1000	10.00
1000- 2999	09.85
3000 and above	09.70

The cost per order is Rs. 60 and carrying cost is 20 % of the price.

OR

- Q.4** (a) What is queuing? Explain General Queuing System. **07**
 (b) Write a detailed note on Production Planning and Control. **07**

- Q.5 (a)** What is MRP? Explain its Objectives and Disadvantages. **07**
(b) Draw a network diagram for the activities given below and determine critical path : **07**

Activity	Description	Duration in months	Immediate Predecessor Activity
A	Design Plant	12	-
B	Select Site	8	A
C	Select Vendor	4	A
D	Select Personnel	3	A
E	Prepare Site	12	B
F	Manufacture Gen	18	C
G	Prepare Ops. Manual	5	C
H	Install Generator	4	E,F
I	Train Operators	9	D,G
J	Obtain License	6	H,I

OR

- Q.5 (a)** What is SQC? Explain Acceptance Sampling. Write advantages of SQC. **07**
(b) What is a Control Chart? Explain p chart and np chart in detail. **07**
