

Code: BA2T4

I MBA - II Semester - Regular Examinations - AUGUST 2015

PRODUCTION AND OPERATIONS MANAGEMENT

Duration: 3 hours

Max. Marks: 70 M

SECTION-A

1. Answer any FIVE of the following: 5 x 2 = 10 M

- a. CDA and CAM
- b. Process Layout
- c. Demand forecasting
- d. Methods of Production Control
- e. Productivity engineering
- f. Quality Control
- g. ISO series
- h. TQM

SECTION – B

Answer the following: 5 x 10 = 50 M

2. a) What is POM? Differentiate between production management and operations management.

OR

b) Define product design. What are the objectives of product design?

3. a) Define the term plan layout. Discuss the factors influencing the layout.

OR

b) What is job design? State its objectives.

4. a) Explain the role of Production Planning and Control (PPC) in engineering industry.

OR

b) What is aggregate planning? What are its objectives?

5. a) How do you perceive the role of quality control manager in an organization?

OR

b) What is ISO-9000 standards? How do these differ from ISI standards?

6. a) Discuss the techniques PERT and CPM.

OR

b) Explain how personal scheduling is done in services?

SECTION – C

7. Case Study

1 x 10 = 10 M

A Case on Product Design

A boat manufacturing company always concentrates on introducing innovative, high quality new boats in order to compete well with others in the industry. Its differentiation strategy is reflected in a product line consisting of 22 models. To maintain this stream of innovation, it seeks design inputs from customers, dealers, and consultants.

Design ideas rapidly find themselves in the styling studio, where they are placed onto CAD machines in order to speed the development process. Existing boat designs are always evolving as the company tries to stay stylish and competitive. Moreover, with

life cycles as short as 3 years, a steady stream of new products is required. A few years ago, the new product was the three passenger “Rs. 11,000 Rush”, a small but powerful boat capable of pulling a water-skier. This was followed with a 20-foot inboard-outboard performance boat with so many innovations that it won prize after prize in the industry. Another new boat is a redesigned 42-foot Commodore that sleeps six in luxury staterooms.

In this manner the firm involves the supplier in to early stages of development of concept and design. The in the stage of CAD product specifications were finalized. The first stage in the actual production is the creation of the ‘plug’, a foam-based carving used to make the molds for fiberglass hulls and decks. Specifications from CAD system drive the carving process. Once the plug is carved, the permanent molds for each new hull and deck design are formed. Molds take about 4 to 8 weeks to make and are all hand-made. Similar molds are made for many of the other features in boats – from gallery and stateroom components to lavatories and steps. Finished molds can be joined and used to make thousands of boats.

Questions:

1. How does the concept of product life-cycle apply to the firms boat manufacturing?
2. What are the benefits of CAD technology in this process of product development?