

MID  
~~Final~~ Assessment

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BBA Program

Course title: Production and operation Management

Course Code : POM - 325

Student Name : MD Tushar Ahammed

Student ID : 1113300361

Ans. to the Q. No: 01

Operation management: Operation Management is a way or means through which the listed objectives of an operating system are achieved. It is accepted norm the O.M includes techniques which are enabling the achievement of operational objectives in an operation system.

## Answer to the Question NO:02

Advantages of robot in industry: We can analyze the various advantages of robots in three perspectives.

Technical factors: When comparing robot and human performance it is generally considered that humans cannot match the speed, quality, reliability, endurance and predictability of robotics systems. Robots therefore provide a link between the rigidity of dedicated automation and the flexibility of the human operator, in that they offer:

- 1) High flexibility of product type and variation.
- 2) Lower preparation time than hand automation.
- 3) Better product quality.

4) Fewer rejects and less waste than labor-intensive production.

Economic factors: Major factors in considering the possible implementation of robotics systems include:

- 1) The need to increase production rates to remain competitive.
- 2) Pressure from the marketplace to improve quality.
- 3) Increasing costs.
- 4) Shortage of skilled labor.

Social factors:

- 1) Robots are employed to do mindless, repetitive tasks so that the human capital can be utilized in more interesting work.
- 2) Many low-level tasks can be carried out

by robots.

3) Robots can be utilized to perform undesirable work in dangerous or hazardous environments and work requiring heavy physical effort.

### Answer to the Question NO:3

Materials Management: We can define Materials Management as the function responsible for the coordination of planning, sourcing, purchasing, moving, storing, and controlling materials in an optimum manner so as to provide a pre-decided service to the customer at a minimum cost.

### Secondary scopes of material management:

Secondary objectives are so varied that they limit the possibility of listing exclusively in one breath. In one way or the other, they help to achieve the primary objectives but different organizations put different emphasis on them. The following are a few examples.

Make - or - Buy decisions: Since the Materials Management department is immediately

concerned with the selection of supply sources, materials - cost, procurement - cost and the availability of materials. It influences heavily the Make-or-Buy decision.

Value analysis and Value engineering: Any item that is produced or bought is to serve a specific purpose. Before making or buying any material or equipment, engineers and buyers must decide what purpose they are to serve in order to find out whether a lower-cost design would work well or a less costly item could fill the need. Value engineering and Value Analysis are close to the same thing. They are approaches to cost-saving goals that deal primarily with product design.

Standardization: Standardization is essential to a mass production system which an defined

as "that which has been established as a model to which an object or action can be compared".

Product development and new products: Since the discovery and improvement of materials frequently lead to a new product and lower costs on existing products, the Materials department can suggest materials and components that will do better or equivalent jobs at lower cost.

Price, demand and requirements forecasting: In large concerns this is a functional responsibility of economists. They make forecasts both for sales and purchases. Materials management personnel translate them into specific purchase actions.



Answer to the question NO:04

The characteristics of flow shop production:

Product	The products are standardized.
Conversion	Special purpose equipment, designed for the specific.
Work force	Specialized people, doing the repetitive jobs.
Work-in-progress inventory	Productive resources are balanced that result in less work in progress inventory.
Cycle time	cycle time per unit is relatively low.
Workforce Job Satisfaction	Job Satisfaction among the employee is low because of the repetitive nature of job, results in boredom, more turnover and absentees.
Quantity of production	Comparatively quantity of production is more.

Answer to the Questions no: 05

The characteristics of job shop production:

Product	The products are of order based mostly non standardized.
Work - Force	General purpose equipment, grouped according to their functions.
Work force Satisfaction	Job satisfaction among the employee is high because the operator role is multifaceted.
Work in progress Inventory	There is lot of waiting time for the product to be manufactured in the system that results in more in process inventory.
Cycle time	Because of more waiting time for the product in the production line that results more manufacturing cycle time comparatively.

Cost of production	Cost of production per unit is relatively high.
Quantity of production	Since it is order based production, quantity produced per unit type is relatively less.