OPERATIONS MANAGEMENT (PRODUCTION MANAGEMENT)

Production takes place when a business takes input, carries out a production process and produces output. In other words it is the conversion of resources such as raw materials or components into goods and services. Production can be done at primary, secondary or tertiary levels.

<table>
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<tr>
<th>Inputs</th>
<th>Production</th>
<th>Outputs</th>
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</thead>
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<tr>
<td>Land</td>
<td>Process</td>
<td>Goods</td>
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<td>Raw</td>
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<td>Materials</td>
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Operations management is a wide range term which indicates the management of production process. It deals with issues like what to produce, what production methods to be used, how to control quality, how to maintain inventory or stock, location and size of the firm and how to make production more efficient.

ADDED VALUE OR VALUE ADDED
It is the difference between the cost of bought in components and the price charged for the finished product. Value added is not the same as profit. To calculate profit, we need to subtract wages (labour costs) financial costs and overheads. Value added can be calculated by the following formula:

\[
\text{Value} = \text{Sales} - \text{External added revenue Expenditure}
\]

External expenditure does not include the cost of land, labour and capital of the organization.

IMPORTANCE OF OPERATIONS MANAGEMENT
One major reason for the growing importance of operation management is the need for firms the compete more effectively in the market. To become the leader of the market, most areas of concern revolve around the ask and quality of production. With the help of operations management, firms produce better quality products at reasonable costs and can get a chance of gaining more market share.

LOCATION OF THE FIRM
Location is the general area selected for a particular business. Its choice is likely to involve a detailed process of analyzing alternatives through investment appraisal and other cost benefit analysis.

Industrial location is the geographic positioning of our operation in relation to its customers resources, employers, employees and other markets organizations faces problems in finding out the best location for their business and choice can be critical for success. Location decisions also depend upon the type and size of the business. The best location is one which has comparatively low cost of production and therefore should provide the opportunity to maximize return on investments in terms of sales and profits.

FACTORS INFLUENCING THE LOCATION (OF BUSINESS) DECISION

Types:

- Quantitative – tax, cost, etc
- Qualitative – availability of labour, legal cultural

1. Population and demand in the market
2. Number and location of competitors
3. Availability and cost of labour
4. Availability and cost of raw materials
5. Degree of government intervention
6. Rent and cost of land
7. Physical features, weather and quality of land
8. Personal preference and interest of the owners
9. Industrial inertia – locating in a congested area where there are already several similar industries
10. External economies of scale
11. Availability of infrastructure, transportation and communication facilities
12. Availability of natural resources and utilities
13. Financial incentives
   → by govt. as regional policy grants
   → profits more, cash surplus, loans are easy

**ISSUES REGARDING INTERNATIONAL LOCATION**

A multinational organization has to make key decisions about location as they are dealing with a wide range of local and international markets. Following issues are considered while making this decision:

1. Trade barriers
2. Exchange rates
3. Political stability
4. Legal boundaries
5. Language and cultural barriers
6. Ethical considerations
7. Market opportunities
8. Availability of labour
9. Financial incentives
10. To build a strong corporate image worldwide

Multinationals are growing very rapidly and represent a significant source of industrial development in countries throughout the world. Benefits of multinationals to host countries are as follows:

1. increased employment
2. GDP increases
3. economic growth
4. standard of living
5. increased competition
6. improves quality and efficiency
7. controls prices
8. increases variety and choices
9. technology transfer
10. better trained labour
11. revenue to the government
12. foreign investments increase
13. relations between host and guest countries improve politically and economically
14. balance of payment surplus
PRODUCTION
Production is the measured quantity of output that a firm produces in a given period of time.

EFFICIENCY
Efficiency is how well resources such as raw material, labour and capital can be used to produce a product or a service. Efficiency can be measured through the following ways:

1. labour productivity (output per worker) = \( \frac{Output \text{ per period}}{labour \text{ employed in that period}} \)

2. capital productivity (output per unit of capital) = \( \frac{Output \text{ per period}}{quantity / value \text{ of capital employed in that period}} \)

3. multi factor productivity = \( \frac{Output \text{ per period}}{\text{costs of (raw material + labour + capital) employed in that periods}} \)

4. capacity utilization = \( \frac{current \text{ output}}{Max. \text{ capacity}} \times 100 \)

5. added value = sales = external expenditure

PRODUCTIVITY
It is the means of the ratio of output to any of the firm’s inputs. Productivity is an efficiency measure. If a firm becomes more productive, it becomes more efficient. Following are the ways in which productivity levels can be increased:

1. improve the training of staff to raise skill levels.
2. purchase more technologically advanced equipment to increase the capital productivity
3. improve employee motivation
4. change the layout of work
5. improve working conditions
6. more efficient management

Raising productivity is not always a guarantee for success. It does not crate demand among the customers so it is the quality of management which determines the success of any policy. Discuss and evaluate work study as a method of improving labour efficiency-