



# MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu



**MKC**

**DEPARTMENT OF MANAGEMENT STUDIES**

**2019-20**

**I Year/ II Semester**

Subject		Operations Management ( I- MBA EVEN Sem )		
S.No	Term	Notation ( Symbol)	Concept/Definition/Meaning/Units/Equation/ Expression	Units
1	Operation Management		Operations management is the administration of business practices to create the highest level of efficiency possible within an organization.	I
2	Transformational process		A transformation process is any activity or group of activities that takes one or more inputs, transforms and adds value to them, and provides outputs for customers or clients	I
3	Entropy		The entropy of an object is a measure of the amount of energy which is unavailable to do work.	I
4	Productivity		A measure of the efficiency of a person, machine, factory, system, etc., in converting inputs into useful outputs.	I
5	Consumer		The consumer is an individual who pays some amount of money or the thing required to consume goods and services.	I
6	Investor		An investor puts capital to use for long-term gain, while a trader seeks to generate short-term profits by buying and selling securities over and over again.	I
7	Strategic fit		Strategic fit expresses the degree to which an organization is matching its resources and capabilities with the opportunities in the external environment.	I
8	Suppliers		a person or organization that provides something needed such as a product or service	I
9	Quality control		Quality control (QC) is a procedure or set of procedures intended to ensure that a manufactured product	I

10	Production planning		Production planning is the planning of production and manufacturing modules in a company or industry.	I
11	Production control		Production control is the activity of monitoring and controlling any particular production or operation.	I
12	Continuous production		Continuous production is a flow production method used to manufacture, produce, or process materials without interruption.	I
13	Intermittent production		A manufacturing method of producing several different products using the same production line.	I
14	Mass production		The production of large quantities of a standardized article by an automated mechanical process.	I
15	Process production		A system of production in which a product passes through several processes	I
16	Assembly lines		A series of workers and machines in a factory by which a succession of identical items is progressively assembled.	I
17	project		A project can also be defined as a set of inputs and outputs required to achieve a particular goal.	I
18	Job shop production		A job shop is a small company or business that makes specific products for one customer at a time.	I
19	Batch production		Batch production is a method of manufacturing where the products are made as specified groups or amounts, within a time frame.	I
20	Supply chain management		Supply chain management is the management of the flow of goods and services and includes all processes that transform raw materials into final products.	I
21	Efficiency		Performing activities at the lowest possible cost.	I
22	Just-in-time		A philosophy designed to achieve high-volume production through elimination of waste and continuous improvement.	I
23	Value added		A term used to describe the net increase created during the transformation of inputs into outputs.	I
24	Mass customization		The ability of a firm to highly customize its goods and services at high volumes through its operations management function.	I
25	Location analysis		Identifying the best location for facilities	I
26	Forecasting		The process of predicting future events, including product demand.	II

27	Point of sales		The point of sale or point of purchase is the time and place where a retail transaction is completed.	II
28	Delphi technique		A systematic forecasting method that involves structured interaction among a group of experts on a subject.	II
29	Qualitative methods		Qualitative research is a scientific method of observation to gather non-numerical data.	II
30	Capacity		The amount that something can produce.	II
31	Capacity planning		The process of determining the production capacity needed by an organization to meet changing demands for its products.	II
32	Demand leading strategy		A lead capacity strategy (lead demand strategy) is a proactive approach which adds or subtracts capacity in expectation of future market demand	II
33	Rough – cut capacity planning (RCCP)		RCCP is a gross capacity planning technique that does not consider scheduled receipts.	II
34	Capacity requirement planning (CRP)		capacity requirements planning, is an enterprise application that is used by an organization.	II
35	Supply		a stock or amount of something supplied or available for use	II
36	MRP		Maximum retail price	II
37	MPS		Master Production Schedule	II
38	Bill of material		A bill of materials (BOM) is a comprehensive inventory of the raw materials, assemblies, subassemblies, parts and components, as well as the quantities of each, needed to manufacture a product.	II
39	MRP II		Manufacturing resource planning	II
40	ERP		Enterprise resource planning (ERP)	II
41	Facility layout		Facility layout is an arrangement of different aspects of manufacturing in an appropriate manner as to achieve desired production results.	II
42	Process layout		Process layout is a design for the floor plan of a plant which aims to improve efficiency by arranging equipment according to its function.	II
43	Product layout		A product layout refers to a production system where the work stations and equipment are located along the line of production, as with assembly lines.	II

44	Fixed position layout		A production technique used to assemble products that are too large, bulky, or fragile to safely or effectively move to a location for completion	II
45	Cellular manufacturing		A cellular layout is an equipment layout configured to support cellular manufacturing.	II
46	Unit cost		Average cost per unit of output	II
47	Labor intensive		High proportion of labor compared to capital	II
48	B2B		Business-to-business. A business selling to other businesses.	II
49	B2C		Business-to-consumer. A business selling directly to consumers.	II
50	category management		The management of groups of products that are interchangeable.	II
51	Product design		Product design is when a new product is created to sell to customers.	III
52	Standardization		The process of making something conform to a standard.	III
53	Manufacturability		To make or process goods, especially in large quantities and by means of industrial machines.	III
54	Aesthetics		Aesthetics refers to the visual attractiveness of a product.	III
55	Invention		the action of inventing something, typically a process or device	III
56	Commercialization		the process of managing or running something principally for financial gain	III
57	Product development		The creation of products with new or different characteristics that offer new or additional benefits to the customer.	III
58	Process planning		It is a process that involves making and evaluating each set of interrelated decisions.	III
59	Process strategy		Process strategy is the pattern of decisions made in managing processes so that they will achieve their competitive priorities.	III
60	Mass customization		Mass customization is a marketing and manufacturing technique	III
61	Work study		a system of assessing methods of working so as to achieve the maximum output and efficiency.	III
62	Method study		Method study is systematic both in investigation of problem being considered and in the development of its solutions.	III

63	Motion study		Motion study is a systematic way of determining the best method of doing the work by scrutinizing the motions made by the worker or the machine.	III
64	Flow process chart		A process flowchart is a graphical representation of a business process through a flowchart.	III
65	Time study		Time study is a structured process of directly observing and measuring human work using a timing device to establish the time required for completion of the work by a qualified worker when working at a defined level of performance.	III
66	Work measurement		Work measurement is the application of techniques which is designed to establish the time for an average worker to carry out a specified manufacturing task at a defined level of performance	III
67	Productivity		The state or quality of being productive	III
68	Partial productivity		Partial productivity can be defined as the relationship between the output and the single input which is used in the production	III
69	Incentives		A thing that motivates or encourages someone to do something.	III
70	Chronocyclegraph		A device used in micro motion studies to record a complete work cycle by taking still pictures with long exposures	III
71	Efficiency		Performing activities at the lowest possible cost.	III
72	Forecasting		The process of predicting future events, including product demand.	III
73	Product design		The process of deciding on the unique and specific features of a product.	III
74	Mass customization		The ability of a firm to highly customize its goods and services at high volumes through its operations management function.	III
75	Quality management		The process used to ensure the quality of a product, including measuring quality and identifying quality problems	III
76	Material management		Materials management is a core supply chain function and includes supply chain planning and supply chain execution capabilities.	IV
77	Purchasing		Acquire (something) by paying for it; buy	IV

78	Material planning		Material planning is a scientific technique of determining in advance the requirements of raw materials, ancillary parts and components, spares etc	IV
79	Integrated materials management		Material management is a service function. It is as important as manufacturing, engineering and finance	IV
80	Purchasing management		Purchasing management is the management of the purchasing process and related aspects in an organization	IV
81	Vendor		A person or company offering something for sale, especially a trader in the street.	IV
82	Performance rating		Rating individual employees annually, without any context from the work they're doing, can result in a variety of problems.	IV
83	Value analysis		Value analysis An approach to improving the value of an item or process by understanding its constituent components and their associated costs.	IV
84	Store management		The store manager is responsible for hiring, training, and in some cases, development of employees.	IV
85	Inventory control		Inventory control, also known as stock control, is regulating and maximizing your company's warehouse inventory	IV
86	Buffer inventories		Buffer inventory, also called buffer stock or safety stock, is a cushion of supply in excess of forecast demand.	IV
87	EOQ		economic order quantity	IV
88	Re – order level		Reorder level depends on a company's work-order lead time and its demand during that time and whether the company maintain a safety stock	IV
89	Classification		The action or process of classifying something	IV
90	Codification		The action or process of arranging laws or rules according to a system or plan.	IV
91	ABC analysis		ABC analysis is a type of inventory categorization method in which inventory is divided into three categories, A, B, and C, in descending value.	IV
92	JIT		Just in time	IV
93	Stockholders		A holder of supplies for manufacturers.	IV

94	Kanbans		an instruction card used in a kanban system.	IV
95	Plant layout		Plant layout is the most effective physical arrangement, either existing or in plans of industrial facilities	IV
96	Mass customization		The ability of a firm to highly customize its goods and services at high volumes through its operations management function.	IV
97	Scheduling		The process of deciding on the timing and use of resources within an operation	IV
98	Total quality management (TQM)		A philosophy that seeks to improve quality by eliminating causes of product defects and by making quality the responsibility of everyone in the organization	IV
99	Reengineering		The process of redesigning a company's processes to increase efficiency, improve quality, and reduce costs.	IV
100	Just-in-time		A philosophy designed to achieve high-volume production through elimination of waste and continuous improvement.	IV
101	Project		an individual or collaborative enterprise that is carefully planned to achieve a particular aim.	V
102	Project management		Project management is the practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals.	V
103	PERT		Program Evaluation and Review Technique	V
104	CPM		Critical path method	V
105	Scheduling		arrange or plan (an event) to take place at a particular time	V
106	Sequencing		arrange in a particular order	V
107	Shop floor control		Shop Floor Control (SFC) is a software system of methods and tools that are used to track, schedule and report on the progress of work in a manufacturing plant.	V
108	Gantt chart		A Gantt chart is a useful graphical tool which shows activities or tasks performed against time. It is also known as visual presentation of a project	V
109	Job sequencing		Job sequencing is the arrangement of the task that is to be performed or processed in a machine in that particular order	V
110	Johnsons rule		A method of scheduling jobs in two work centers. Its primary objective is to find an optimal sequence of jobs to reduce makespan	V

111	Personnel scheduling		A schedule, often called roster, is a list of <b>employees</b> , and associated information e.g. location, working times, responsibilities for a given time period	V
112	Project network		A project network is a graph depicting the sequence in which a project's terminal elements are to be completed by showing terminal elements and their dependencies	V
113	Variances		The fact or quality of being different, divergent, or inconsistent.	V
114	Expected time		Expected time for an activity. expected time for an activity. in Program Evaluation And Review Technique (PERT),	V
115	Probability		The quality or state of being probable; the extent to which something is likely to happen or be the case.	V
116	Master production scheduling		A master production schedule (MPS) is a plan for individual commodities to be produced in each time period such as production, staffing, inventory, etc	V
117	Manufacturing schedule		The production schedule is a project plan of how the production budget will be spent over a given timescale, for every phase of filmmaking	V
118	Job order manufacturing		Job order production is the process of manufacturing custom or unique products for specific customers.	V
119	Project dedication		A book dedication is a device that some authors use to bestow a very high honor on a person (or small group of people) they want to praise or otherwise spotlight	V
120	Infinite loading		Image result for Infinite loading definition Infinite loading is the calculation of the capacity required at work centers in the time periods required regardless of the capacity available to perform this work	V
121	Lean systems		Sometimes synonymous with just-in-time, it is a philosophy that takes a total system approach to creating efficient operations through the elimination of waste.	V
122	Location analysis		Identifying the best location for facilities	V
123	Scheduling		The process of deciding on the timing and use of resources within an operation	V
124	Process selection		The process of identifying the unique features of the production process that will give the product its unique characteristics	V



125	Productivity		A measure of how efficiently an organization converts inputs into outputs. It is usually measured by a ratio of output divided by input.	V
GENERAL QUESTIONS				
1	Accounts Payable		Liabilities that result from a purchase of goods or services on an open account. Amounts owed to suppliers of goods or services.	
2	Five S's		Toyota defines the fives S (for keeping an operation clean):Seison, Seiton, Sheiri, Seiketsu, Shitsuke	
3	Kanban		A card that signals the replenishment requirements in a production process.	
4	Distribution		This term denotes the process and/or entities that take manufactured products and make them available to the ultimate customer.	
5	Make-To-Order		Operations that make products or deliver services only to customer order--no finished goods inventory.	
6	ISO Certification		Denotes that a firm or plant has received an ISO quality standard.	
7	Kaizen		The process whereby teams attack a manufacturing operation to make a series of Quick, small steps to improve the process.	
8	Lead Time		Time that is required to fill an order or meet customer demand.	
9	Economies Of Scale		The unit cost reduction that accrues from larger volume production or distribution of similar products or products produced in similar operations	
10	Flow Shop:		An operation that produces products at volume in a continuous flow or by a well-defined, connected sequence of activities or processes.	
11	Goodwill:		The excess of the cost of an acquired company over the book value.	
12	Bill Of Material (Bom):		A bill of material is an ordered listing of all the parts in a finished product.	
13	Make-To-Stock:		Operations that make products to inventory in anticipation of customer demand--requires demand forecasts.	
14	Material Flow:		That process that defines the flow of materials in an operation.	

15	NPD:		New product development	
16	Operating Income:		Gross profit less administrative (SG&A) and development (ER&G) expenses.	
17	Acquisition:		Typically the purchase of a company or a significant business asset. In the defense industry, acquisition means the purchase of products and systems.	
18	Material Control:		That process whereby materials are ordered, received, and distributed throughout an operation to satisfy the master production schedule.	
19	Muda		Waste. Reducing waste throughout the enterprise is one of the fundamentals tenets of the Toyota Production System.	
20	Direct Materials Purchasing:		is purchasing from suppliers on a contractual basis for a fixed period of time or amount of product.	
21	Product Mix:		The proportion of different products in the total production of an operation or plant.	
22	Reorder Point:		That inventory level where new is ordered.	
23	Sourcing:		The process by which supply contracts are let by purchasing.	
24	Maintenance:		That classification of employees and process by which machines and equipment are maintained for sustained production.	
25	Control Charts:		Statistical charting process that is used to identify sporadic and chronic faults in a process.	
Faculty Team Prepared		<b>V.Mohaneshwari</b>	Signatures	

**HoD**