

Q. It is rightly said that the MPS Drives?

Ans. Material Requirements planning.

Q. Two complementary specializations of work study are, method study and.....?

A. Work measurement.

Q. The normal distribution has two humps (archs) at the mean?

A. False.

Q. Plant Layout decisions are considered to be?

A. Strategic.

Q. Which of the following is a cause of plant breakdown?

Ans. Overloading of machines.

Q. Which are the basic steps of method study?

A. Train the workers about benefits of new method. Select the work to be analyzed and record facts related. Examine the related facts critically. NOT SURE

Q. How to calculate expected time "TE"?

A.  $te = (a+4m+b)/6$  NOT SURE.

Q. Who has originally developed the work sampling technique?

Ans. LHC tipped.

Q. Under Product layout, Inspection is performed at?

A. Some critical stage in product line.

Q. The quality can be monitored by using the following?

A. Scatter Diagram, Histogram, Control chart.

Q. Match of the following?

A. Inspection > Represented by square

Method study > Recording and examination of existing and proposed ways of doing work

Reprocessing > Situation where component is not completely rejected

Storage > Represented by inverted triangle

Q. Match of the following?

A. Flexibility > Ability to satisfy varied customer requirements

Capacity of plant > Projected sales volume

Lead time > Delivery time expected by customers

Variety > Many products in one or few numbers

Q. Match of the following?

A. Type Of incentive plan > Efficiency based incentive

Non Financial incentives > Good work is appreciated

Financial Incentive > Commission of salesman

Semi Financial incentives > Paid Holidays

Q. Match of the following?

A. Plant location decisions > Strategic and non repetitive  
Suitability of the land > Topography and soil structure  
Pure materials > Add weight to finished product  
Gross materials > Loose weight during transformation.

Q. The persons carrying out PCA activities are?

A. Shop planner, Production controller, Scheduler.

Q. Overlapping of operations helps to reduce the manufacturing :.....BLANK time and hence the delivery period to the customer?

(Ans.) Cycle.

Q. While numbering as per Fulkerson's rule, arrows emerging from the initial event are deleted so as to create one or more initial events?

(Ans.) True .

Q. Feasibility of time schedule requires that an activity be scheduled before any of it's predecessors are scheduled?

(Ans.) False.

Q. As a general rule, a site five times the actual plant size is considered minimum for parking, access facilities and future expansion?

(Ans.) True.

Q. Following are the commonly used factors considered for evaluation of layout in factor analysis method?

(Ans.) Flow of material , Equipment utilization , Working condition.

Q. Systematic Layout Procedure(SLP) was developed by a team at USA?

(Ans) False.

Q. The function Scheduling is concerned with following activities ?

(Ans.) Preparation of machine load ,Fixation of dates for start of jobs ,Dispatch schedule of regular items .

Q. The following Options can be used to increase or decrease capacity to match current demand ?

(Ans.) Casual Labour ,Cross Training , Inventory .

Q. The :.....BLANK is also called 'master of all schedules'?

(Ans.) MPS.

Q. :.....BLANK , a result of desegregation , shows quantity and timing of specific products ?

(Ans.) Master Schedule.

Q. After preparing tentative MPS , :.....BLANK is used to check the feasibility of master schedule with respect to available manpower and machinery capacities , storage spaces and vendor capabilities?

(Ans.) Rough Cut Capacity Planning .

Q. Match the Following?

(Ans.) 1] Rough cut capacity Plan > A capacity check run at traditional bottleneck operations to verify the feasibility of a given MPS.

2] Master Production Schedule [ MPS ] > Master Schedule for goods producing Company

3] MPS Inputs > Forecast demand , Production Costs, Inventory Costs, Customer Orders, Inventory Levels, supply, lot size , production lead time , capacity.

4] MPS Outputs > Amounts to be produces , due dates , Quantity Available to Promise , Projected Available balance.

Q. As a general guideline during activity identification, an activity should represent the smallest unit of the operation or set of operations over which management desires control?

(Ans.) True.

Q. Match the Following ?

(Ans.) 1] Scheduling > Activity concerned with looking at events that will occur in the future.

2] Dispatching > Activity that attempts to control the present events.

3] Monitoring > Activity that attempts to provide analysis of the present and past activities.

4] Moving & Producing > Activities that help to implement present events.

Q. Match the Following?

(Ans.) 1] Exhaust gas > Smell

2] Air leakage > Listen

3] Corrosion > Watch

4] Temperature of motor > Body

Q. Match the Following?

(Ans.) 1] Taylor's System > individual

2] Barth's variable sharing plan > Beginners

3] Bedaux point system > Short cycle jobs

4] Gantt task & bonus system > Hourly basis

Q. The most common confidence level is :.....BLANK % ?

(Ans.) 95.

Q. In management prospective, Kanban is a visual indicator that triggers replenishment of item , such as

(Ans.) Card , Bin , Rack.

Q. What are the different steps in economic survey for site selection of a plant?

Ans-1. Prepare the list of relevant factors for the survey. 2. Estimate expenses, material, transport, wages, power, etc. 3. Collect data on intangible factors like community facilities and attitudes. 4. Analyse the tangible data for each location and find out ROI. 5. Select provisionally the location based on financial data. 6. Make decision based on tangible and intangible data.

Q. What is chase strategy of aggregate planning?

Ans-Chase strategy implies matching demand and capacity period by period. Capacities like workforce levels are adjusted to match demand requirement over the planning horizon. It results in considerable lower levels of inventories but lot of hiring, firing or laying off of employees are done resulting in unhappy employees.

Q. What is a critical path in CPA network? What are the benefits of finding the critical path?

Ans-The path on the network with the longest duration which determines the overall duration of the project is called critical path. Benefits are: Critical path helps to identify a set of activities which determine project duration and help in controlling. Completes the project earlier by shortening some of the activities of the project. Critical activities are given preference over others in resource allocation.

Q. Provision of drainage facilities is important for the following type of industry ?

Ans-Chemical Process.

Q. The MPS states the number of each product to be produced period by period over some time into the future , is known as?

Ans-Planning Horizon.

Q. The process of matching aggregate demand with capacity , steering the firm's capacity towards actual item demands that materialize over time , is known as?

Ans-Master Planning

Q. Match the Following ?

A. 1] scheduling > Time phase of loading and determining when and in what sequence the work will be carried out.

2] Dispatching > Transition from planning to action phase.

3] Tool control > Involves determining requirements and control of tools

4] Loading > Assignment of work to manpower , machinery etc

Q. Taylor's scientific management and Ford's mass-assembly line was followed by

Ans- JIT.

Q. Which is the next logical step after the project has been broken into activities?

Ans-Establish technological relationships.

Q. Project indirect cost depends on .....?

Ans-Entire duration of the project.

Q. Which is the zone extending upto AQL in case of Oc curve of a general plan?

Ans-Zone of acceptance.

Q. The situation where the variability of the process is within the variability allowed by the specifications but the process is off-centre indicates?

Ans-Good process variability but bad process centering

Q. Match the Following ?

A. 1] Time study - Short-cycle-repetitive jobs

2] Analytical Estimating - Short-cycle-non-repetitive jobs

3] Methods Time Measurement- Manual operations

4] Work sampling-Long cycle jobs

Q. In which of the following cases the location of the plant is preferred as nearer to the market?

Ans - The product is fragile, The promptness of service is required, The product is susceptible to spoilage.

Q. The function Scheduling is concerned with following activities?

Ans- Preparation of machine load, Fixation of dates for start of jobs, Dispatch schedule of regular items.

Q. Match of the following?

A. Master Production Schedule [ MPS ] > A specific statement of exactly what, usually in terms of individual end items or product models , will be produced in each time period.

2] Manufacturing > Provides simulation capabilities and cost information for other functionalResource Planning [ MRP II ]

3] Capacity Requirements Planning [ CRP ] -] > Uses routine sheets and labour standards to develop time-phased estimates of capacity requirements based on planned order releases.

4] Planning Horizon areas of the business. > Normally set to cover a minimum of cumulative lead time plus time for lot sizing low-level components and for capacity changes of primary work centers

Q. Places where individual perform tasks on a product are known as?

Ans-Work centers.

Q.Least Work Remaining [ LWR ] is an extension of the rule ' Shortest Processing Time (SPT)'?

Ans- True.

Q. Johnson's algorithm constructs a schedule which minimizes the maximum flow time for a two machine flow shop?

Ans-True.

Q. Scheduling means when and in what sequence, the work will be done.?

Ans-True.

Q. The unit of measurement in textile industries is?

Ans-Meters.

Q. .... indicates how much material is required each time for replenishment when Kanban is signaled?

Ans-Kanban size.

Q. If a Kanban size is too large , there will be an understocking?

Ans-False.

Q. The ..... is the process of withdrawing the equipment from the production line, dismantling it unitwise, visualising defects, effecting adjustments, replacing worn-out parts and finally building it up to get desired accuracies?

Ans-Reconditioning.

Q. A control chart consists of three lines including?

Ans-standard control limit.

Q. The cost of quality can be divided into following areas ?

Ans. Appraisal cost [ Inspection ],Prevention Cost, Failure Cost & Hidden Cost

Q. In case of material rejected during processing, the details like stage at which rejection has occurred and the place where the rejected material is taken, should not be shown in the chart during method study?

Ans-False.

Q. Two wellknown timing methods are cumulative method and .....?

Ans-Fly back method.

Q. Mass production of :.....BLANK product assumes scarcity of the tools of production?

Ans-commodity.

Q. Match the Following ?

A. Pure Serviceability - performance to expectation

2] Poor Service - limited capacity for service

3] Turnaround time - Increase Responsiveness

4] Efficiency--perform activities well and at the lowest cost

Q. Total ..... of the activity implies the excess of available time over its duration?

A. float.

Ques, Which are three subphases of the development phase?

Ans. Evaluation, investigation, selection.

Q. Following are the principles of good layout?

Ans. Minimum handling, minimum movements, unidirectional flow.

Q: It is the process of developing, analysis and maintaining a preliminary, approximate schedule of the overall operations of an organization?

Ans: Aggregate planning.

Q: Time study is best suited for?

Ans: Short-cycle-repetitive jobs.

Q: It is concerned with relative location of one department with another in order to facilitate material flow and processing of a product in the most efficient manner through the shortest possible distance and time?

Ans: Plant layout.

Q: Where the main purpose is to lead quality projects and work full time until they are completed?

Ans: Black belts.

Q: Most likely time is denoted by?

Ans: M.

Q: It is a designated period during which the master production schedule is frozen?

Ans: Planning time fence.

Q: This type of layout is having lower capital investment?

Ans: Process layout.

Q: While lying close to mean of the process what indicates biases in measurements, recording done without actual measurements and improper selection of samples?

Ans: Hugging points.

Q: A typical firm would master schedule the major subassemblies or modules that can be assembled to make the particular product options ordered by the customer. This type of strategy is known as?

Ans: Assemble-to-order.

Q: Scheduling must have workforce information regarding?

Ans: Retrenchment, dismissals, holidays.

Q: Work measurement employees techniques like?

Ans: work sampling, standard data, time study.

Q: DIT recommends small batches as they?

Ans: allow design changes within limited loss, allows parts modification within limited loss.

Q: All operations add value to the objects thereby enhancing their usefulness?

Ans: false.

Q: In an assemble-to-order firm, a final assembly schedule is developed later when the customer orders are received?

Ans: True.

Q: The observation in work sampling must be made at .....of time and should be spread over all hours of the study?

A. random intervals

Q: Critical path is characterized by float?

A. zero

Q: In a combination mixed layout, the parts are assembling using .....type of layout?

A. process

Q: The .....of rounds is essential to avoid bias in the studies?

A. randomization

Q: Master production schedule sets the .....of each end item to be completed in each week of a short-range planning horizon?

A. quantity.

Q: This presents the quantitative data on material flow by recording distance and frequency of movements between different pairs of departments?

Ans: Travel chart.

Q: Control charts are important statistical tool for?

Ans: Quality control.

Q: To expedite a delayed job this method can be used?

Ans: Job splitting.

Q: It refers to the manufacturing process by which materials and other resources get converted into goods and services?

Ans: Production method.

Q: Which is the most commonly used method of selecting the representative time value?

Ans: Arithmetic mean.

Q: It is a graphical representation of the project?

Ans: Network.

Q: The process by which goods and services are produced is called?

Ans: Production.

Q: These are the scale plans on which the movements of an object are traced by means of a string?

Ans: String diagrams.

Q: It is a promise to deliver the product at a later date when it is more readily available?

Ans: Backorder.

Q: Poor location of plant can lead to?

Ans: Competitive disadvantage, difficulty in marketing, sub-standard quality of product.

Q: Work measurement studies must be preceded by method studies to simplify and standardize methods?

Ans: True.

Q: The .....is ill suited to cope with large variations in demand of the products?

A. pond draining system

Q: All machines tend to ..... in performance with use over the period?

Deteriorate

Q: A multiple activity chart is made to detect .....enforced on men and machine?

A. idle time

Q: Match the following?

Community facilities = transport facility.

Proximity to market = productivity of labour.

Legislation and taxation = safety factor.

Industrial and labour attitude = fragile product.

Q: In order to achieve cost economy with small lot sizes, set up time must be?

Ans: Reduced.

Q: What do you understand by PERT?

Ans: Project evaluation and review technique.



Q: What do you understand by the selection of the job for the method study on the basis of money saving potential of the job?

Ans: Technical consideration.

Q: What is the name of the document on which details of the process are recorded by the symbols and charting conventions?

Ans: Chart.

Q: The process of assigning workload to work center is known as?

Ans: Scheduling.

Q: Organisation structure for production department should normally be?

Ans: Structure.

Q: How should a dummy activity be represented in a network?

Ans: By dotted line.

Q: TO arrive at realistic machine capacity, the theoretical capacity is multiplied by?

Ans: Utilization index.

Q: JIT advocates the philosophy of elimination of waste from system which occurs in the following forms?

Ans: Waste due to waiting (queues), waste due to transportation, waste due to over production.

Q: Assignable variability can be traced to the specific causes (called assignable causes) whose removal brings about?

Ans: Reduced cost, greater product uniformity, lower waste.

Q: Features of cellular layout are?

Ans: Facilities are grouped into cells, it is a type of mixed layout, uses concept of group technology.

Q: The steeper the OC curve, the better is the discrimination between good and bad lots?

Ans: True.

Q: Rating is used as a leveling factor to convert the observed time of an element into normal time?

Ans: True.

Q: To shorten the time of the project, some of the activities on the critical path must be shortened?

Ans: False.

Q: Proper care and storage is not an essential part of a well planned lubrication system?

Ans: False.

Q: .....is a technique through which it is possible to identify which of an available set of jobs to process next on an available resource?

Dispatching

Q: Delay is indicated by .....during recording for method study?

A. letter dee

Q: Work study is also called .....study?

A. time and motion

Q: .....is expressed as total number of units needed?      A. Demand

Q: Match the following?

A. Eye = crack.

Tongue = sweet.

Ear = impact.

Nose = burnout.

Q: It is a visual display of statistically significant changes that may occur in a process?

Ans: Control chart.

Q: The master production scheduling process is?

Ans: Monetary inducements.

Q: an activity which shows only a technological relationship is called:?

Ans: Dummy activity.

Q: It is a pair of chart consisting of an average chart and a range chart?

Ans: X-R chart.

Q: It concerns determination and acquisition of productive resource to ensure that their availability matches the demand?

Ans: Capacity planning.

Q: These are photographic methods and are used to trace especially those movements which are too fast for human eye to pursue?

Ans: Cyclograph, chronocyclegraph.

Q: Selection of the jobs to be studied for methods improvement by the method study practitioner is a managerial responsibility and it may be based on?

Ans: Economic consideration, human consideration, technical consideration.

Q: Typical examples of chance causes are?

Ans: heterogeneity in the material used, temperature of the workshop.

Q: Usually financial incentives are those where earnings are related to effort?

Ans: True.

Q: All the process selection decisions need not be taken while formulating the manufacturing strategy of the firm?

Ans: False.

Q: Statistical quality control are employed for process control?

Ans: True.

Q: It is essential that all banks are equipped with .....computer system?

A. synchronous

Q: Work sampling gives .....results since workmen are not under close observation?

A. unbiased

Q: A multiple activity chart is made to detect .....enforced on men and machine?

A. idle time

Q: In jobbing production, the labour force is usually highly skilled and qualified who are expected to work from .....? A. minimum instructions.

Q: A change in .....time of an activity or activities can cause a change in critical path?

A. estimation.

Q: Match the following?

Ans: Capacity utilisation objective > maximizing utilization of manpower, machines.

Effective objective > producing the right kind of goods and service that customers needs.

Efficiency objective > with minimum resource inputs, maximizing output of goods and service.

Cost objective > minimizing cost of producing goods.

Q: It is the designated period during which the master scheduler is allowed to make changes, but computer software is not:?

Ans: Planning time fence.

Q: A physical or a psychological change in form or state of inputs is referred as?

Ans: Alteration.

Q: The most commonly used technique of pre-determined motion and time study is?

Ans: Methods time measurement.

Q: It is the system or a set of tools and techniques, by which products are made to comply with the specifications at minimum cost to the firm?

Ans: Quality control.

Q: Most preferred way to add value is by?

Ans: Reducing cost of activities in transformation process.

Q: It includes activities like making of work orders, converting work orders into shop orders, preparing auxiliary orders?

Ans: Order preparation.

Q: Operational layouts, after goods have been manufactured, require to be collected back from the shops and filled so that they can be?

Ans: Re-issued at a later date.

Q: It concerns in a situation where an activity or a series of activities are to be repeated?

Ans: Repetition.

Q: It is the quality specified by the designer on behalf of the customer?

Ans: Quality of design.

Q: It concerns fixation of method of manufacture such that to enable shops to produce goods of the right quality at the lowest cost?

Ans: Process planning.

Q: It refers to the number of samples to be collected to construct a control chart?

Ans: Sample population.

Q: Which is a sampling inspection in which the decision to accept or reject the lot is based on inspection results of a single sample?

Ans: Single sampling plan.

Q: Control charts are important statistical tool for?

Ans: Quality control.

Q: Advantages of CPA are?

Ans: helps to exercise control by exception, enables plan to be revised in accordance with changes, identifies trouble spots often in advance and apply remedial measures.

Q: External environmental comprises of activities like?

Ans: customers, competitors, suppliers.

Q: The inputs of master production scheduling are?

Ans: customer order, forecast demand, due dated.

Q: Overhead facilities cannot be visualized by use of templates?

Ans: True.

Q: It is wrong to say that production brings together people, machines and materials to provide goods and services thereby satisfying the wants of people?

Ans: False.

Q: The techniques used for master production schedule depend on the .....of the firm?

competitive priorities.

Q: TQM advocates .....involvement to achieve the desired goal?

A. top management

Q: Master production schedule is an important link of .....?

A. planning process.

Q: In an efficient production function.....must be eliminated or at least minimized?

A. wastes of all kinds

Q: Match the following?

Level strategy = allows to maintain constant level of output.

Staffing plan = staff sizes, labour related capacities.

New demand creation = a new but complementary demand is created for a period or service.

Production plan = production rates, work force levels, inventory investment.

Q: What represents the time duration by which an activity can be delayed or extended without delaying any subsequent activity?

Ans: Free slack.

Q: Firms using a make-to-stock strategy typically schedule?

Ans: Production of end items.

Q: This type of layout is having lower capital investment?

Ans: Process layout.

Q: In service industry like hotels, hospitals, etc. customer waiting time is primarily depends on?

Ans: services.

Q: It is a chart on which the major activities and entry points of materials are recorded to have graphic view of operations and inspections involved in the process:-?

Ans: Operation process chart.

Q: Six Sigma is a highly?                      Ans: Disciplined process.

Q: Where the main purpose is to lead quality projects and work full time until they are completed?

Ans: Black belts.

Q: A typical firm would master schedule the major subassemblies or modules that can be assembled to make the particular product options ordered by the customer. This type of strategy is known as?

Ans: Assemble-to-order.

Q: The percentage of occurrence of the activity or delay is called?

Ans: Activity percentage.

Q: Following tools are used for scientific scheduling?

Ans: Time study, bar chart, gantt chart.

Q: BD is a problem solving methodology for?

Ans: Product improvement, process improvement.

Q: Informal standards have many weaknesses like?

Ans: They are generally based on different methods employed by different workmen, they do not reflect true work content of the job, they are strongly influenced by working speed of the workmen and as such they may be valid for a few selected workmen in the organization.

Q: The CPA technique cannot indicate optimal start and finish times of each activity of the project?

Ans: False.

Q: Material can be handled many times in the same direction?

Ans: False.

Q: Stricter specifications of the product definitely help in the reducing the product cost?

Ans: False.

Q: The serviceability is equal to .....? A. time.

Q: In .....layout the factory is divided into process, units and within these process units all similar facilities are grouped together?

A. cellular

Q: SPC prevents the occurrences of defectives by exercising control over the .....rather than inspecting goods for conformance after they have been produced?

A. process

Q: Cleaning and upkeep of the machines is another important activity of .....maintenance?

A. preventive

Q: .....are usually made up of wood or plastic?

A. Three dimensional models

Q: Match the following?

Measures how far a given process deviates from perfection = six sigma.

Reduce the defects in any process = quality of the product.

Eliminate wasteful practices = scheduling and after sales service quality.

Delight internal and external customer by fulfilling their present and future needs = cost of the product.

Q: Match the following?

Weekly reports = from one month after and upto two months after the trial.

Daily reports = until one week after trial.

Monthly reports = from two month and upto six months after the trial.

Weekly reports = from one week after and upto four weeks after the trial.

Q: In this manufacturing method interruptions due to breakdown and absenteeism seriously affect production?

Ans: Mass and flow production.

Q: In gantt chart priority rules, the job with earliest delivery time get processed/goes first is termed as?

Ans: Earliest due date.

Q: A manufacturing unit while producing goods and services must meet?

Ans: Customer's requirements.

Q: The model of the facilities resembling the actual in length, width and height is called?

Ans: Three dimensional models.

Q: This plan is a managerial statement of the period-by-period staff and labour related capacities, given customer requirements and capacity limitation?

Ans: Production plan.

Q: It is the time expected by the customers with respect to how soon the demand has to be met without losing on sales?

Ans: Lead time/delivery lead time.

Q: Scheduling possesses up-to-date information regarding materials like?

Ans: Expected delivery dates, purchase orders cancelled.

Q: Every activity must have?

Ans: One succeeding (head) event, one preceding (tail) event.

Q: The amount of supervision required in batch production is lower than that of jobbing production?

Ans: True.

Q: Flexibility and product variety are inter related?                      Ans: true.

Q: A network is a .....representation of the activities comprising the project?

A. graphical

Q: Variability is necessarily .....in any process?

A. inherent

Q: On a shop floor, recording of..... can serve a valuable guide for improving existing layouts?

A. movements

Q: The .....gives a lot of flexibility in loading and scheduling, in jobbing production?

A. grouping of machines

Q: Match the following?

A. Job splitting = batch of delayed job is split up into smaller batches.

Change in priority = to shift equipment and workmen from low priority production order to operations of delayed order.

Overlapping = running of a job simultaneously for its more than operations.

Alternate routing = other jobs are routed elsewhere to pave the way for delayed job.

Q: Match the following?

A. Template = they are made to scale and are placed on a cross hatched surface or on a graph paper.

Operation process = major activities and entry point of material.

Scale model = three dimensional model.

Q: Any premises in which persons are employed for the purpose of making, altering, repairing, ornamenting, finishing, cleaning, washing, breaking, demolishing or adopting for sale, any article is called?

Ans: Factory.

Q: It is a visual display of statistically significant changes that may occur in a process?

Ans: Control chart.

Q: In this manufacturing method interruptions due to breakdown and absenteeism seriously affect production?

Ans: Jobbing production.

Q: The economic manufacture will result when the process capability and the design tolerance are made to?

Ans: Synchronize

Q: This is the manufacturing method where a production run arranged according to the sequence of operations and several numbers of products are manufactured at a time?

Ans: Mass and flow production.

Q: It concerns with making projection of company's product market, requirement material, spares, etc?

Ans: Forecasting.

Q: What is needed when the object is moved from one place to another?

Ans: Transport.

Q: The types of end items can be?

Ans: Service and replacement parts, subassemblies sold to customers, Components shipped to other parts.

Q: Overlapping helps to?

Ans: Make up or the delays, compress manufacturing cycle time.

Q: Control is a .....activity in the shops?

A. diffused

Q: CPA forces a through .....of each and every activity comprising the project?

A. pre-planning

Q: The techniques used for master production schedule depend on the .....of the firm?

A. competitive priorities

Q: Match the following?

A. PMTS = the time required to do a job is synthesized by combining the predetermined times for different elements of the job.

Time study = standard time of the job is synthesized from these elemental timings.

Synthetic data = Compilation of known elements which have been observed by the stop watch studies.

Q: Match the following?

A. Higher total throughput time = hunting time, queuing time, buried time.

Higher conversion costs = bad conditions of machines, wrong selection of materials.

Idling of resources = job orders waiting to be processed.

Production of defective goods and services = components/parts not conforming to specifications.

Q: Quality assurance program for BPO is designed to?

Ans: Identify inefficiencies, mirror the auditing processes that of the client, minimize production loss.

Q: In the interest of customer service and operational efficiency banks had to go in for?

Ans: Numerous branches in same city.



Q: In case the resources are available, the trial schedule of master production schedule is?

Ans: Authorised for implementation.

Q: Activities that are not recorded/included in an operation process chart are?

Ans: Storages, delays, transports.

Q: Measurement of service quality is difficult because the customer is its ultimate gauge?

Ans: False.

Q: Operations management involves managing people, equipment, technology, information and many other resources?

Ans: False.

Q: What maintenance is the maintenance work performed which is not conceived in advance?

Ans: Unplanned.

Q: In master production schedule, there is no consideration for customer service?

Ans: False.

Q: In any organization, the production function is directly proportional to the production system?

Ans: true.

Q: CPM was developed by?

Ans: Henry Ford, Morgan Walker, James Kelly.

Q: It is very easy for any organization to achieve six sigma level status overnight?

Ans: False.

Q: Many services firms manufactures physical goods that they deliver to their customers or consume during service delivery?

Ans: False.

Q: operations management is the .....function of every company?

A. essential

Question:- Typical examples of the uses of the three dimensional models are layout plans of chemical factories, refineries etc?

Answer:- True

Q.This un-committed capacity is utilised to accommodate rush orders and| thereby avoiding the need to alter the remainder of the scheduling. Ans. True

Ques. Production kanban used together with transport kanban is known as ?

Ans. Integrated kanban

Question:- Dispatching?

Answer:- Execution of the current production schedule relative to the current state of the production system.

Question:- Backward Scheduling?

Answer:- An approach to scheduling that starts from a desired due date and works backward.

Question:- Tool order?

Answer:- Instruct to keep necessary tools ready for use.

Question:- Inspection order?

Answer:- one for each stage of inspection.

Question: - Which of the following work measurement techniques are data based and analytical in nature?

Answer: - Analytical estimating; Synthetic data; Predetermined motion and time study.

Question:- Proximity to market?

Answer:- Productivity of labour.

Question:- Industrial and labour attitude ?

Answer:- Fragile product.

Question:- Legislation and taxation?

Answer:- Safety factor.

Question:- Community Facilities?

Answer:- Transport facility.

Q. Process flow charts are of ..... types?

A. Three.

Question. Which of the following are examples of consumption of physical effort during recording for method study?

Answer. Bending, Positioning, Unloading.

Ques. It concerns determination and acquisition of productive resource to ensure that their availability matches the demand Tree Diagram encourages team members to expand their thinking when creating solutions?

Ans. True

Quality Control determines the causes of ..... in the characteristics of the products?

A. variations.

Question:- The term \_\_\_\_\_ implies the foregone profit due to inability of company to produce?

Answer:- Opportunity cost.

Q. To achieve cost economy with small lot sizes there has to be a reduction in?

Ans. set up time

Q. In case if finished goods inventory is built up in slack demand period, and later used in high demand period then?

Ans. No temporary labour is needed, no need to hire new workers, nil requirement of overtime.

Q. ....as mentioned earlier, is the time allowed to an operator to carry out a specified task under specified conditions and at the defined level of performance?

A. Standard time

Question:- Crash time of activity?                      Answer:-  $T_c$

Question:- Normal cost of an activity?                      Answer:-  $C_n$

Question:- Crash cost of an activity?                      Answer:-  $C_c$

Question:- The scheduling chart with horizontal rows representing jobs or resources to be scheduled and vertical division representing time period is known as?

Answer:- gantt chart

Question:- Which of the following charts are used for the recording of data during the method study?

Answer:- Operation process chart , Multiple activity chart , Flow process chart.

Q. A ..... process chart is a chart on which the activities performed by two hands or two limbs of the operator are recorded to show their inter-relationships?

A. two handed.

Question: - What do you mean by the standards based on past experience?

Answer: - Informal Standards

Question: - Which of the following are illustrations of inspection?

Answer; - Physical count of incoming material against the quantity mentioned in delivery Challan; A dimension check with measuring instrument; Visual check of burrs and finish

Q. Since the acceptance is based on the inference drawn from the sample, the technique is known as .....

A. acceptance sampling.

Question: - What do you mean by a single event which represents the joint completion of more than one activities?

Ans. Burst event

Q. Match of the following?

A. Time Fence > is a series of time intervals that specifies what types of order changes are allowed.

Projected On-Hand Inventory > The level of inventory expected for an item in a future time period

Available-to-Promise (ATP) > Quantities from the MPS that have not been committed to an actual customer order

Master Production Schedule (MPS) > A detailed schedule that states which end items are produced, when they are] needed and in what quantities

Q. Eliminating defects provides cost benefits?                      Ans. True.

Q. Which of the following can be called as turnkey projects ?

Ans. Substation, power house, factory establishment.

Q. Some of the pre-requisite to the preparation of the chart is the decision on the following aspects?

Ans. Quality characteristics, sample size, sample population.

Q. A control chart consists of three lines?

A. a central line, upper control limit and lower control limit.

Q..... in which the facilities are clubbed! together into cells to utilise the concepts, principles and approaches of group technology?

A. cellular layout.

Q. Usually the job card is prepared in .....?

A. duplicate.

Question:- \_\_\_\_\_ is the assignment of people to jobs or jobs to machines for specified capacities of men and machines?

Answer: Scheduling

Q. Display boards are advantageous to show the actual progress with planned progress when a large number of shop orders are processed at the same time?

Ans. True.

Question:- Production scheduling aims at?

Answer:- Reduction of manufacturing time, reduction of setup time, imparting management training

Question:- The \_\_\_\_\_ provides a scientific method of fixing standard time for a job?

Answer:- Work measurement.

Q.....is a type of sampling inspection in which the decision to accept or reject the lot is based on inspection of possibly more than two samples?

A. Multiple sampling plan.

Ques Dummy activities?

Ans. Shows only technological relationship, shown by dotted line.

Question:- What are the uses of failure statistics analysis?

Answer:- To forecast the defect , To identify causes of major repetitive failures , To quantify the frequency of preventive inspection

Question:- Which kind of labour force is required in case of Jobbing Production?

Answer:- Highly Skilled

Q. Duration of each activity is referred to as ?            A. activity time

Q. The MRS gives production department, purchasing department and top management the information needed to plan and control the manufacturing operation ?

A. True.

Question: - Match The Following?

- A. Process Planning : - Route Sheet  
 Progressing : - Collection of data  
 Order Acceptance : - Register  
 Capacity Planning : - Estimation of requirement of resources

Question:- A major limitation of kanban system is that?

Answer:- Kanban is intrinsically a system for repetitive manufacturing. It will not succeed without modification in non repetitive manufacturing environment

Question:- Six sigma is the tools that can help the organization to know?

Answer:- How good or bad its current processes are, What, where and how much can they can improve, What progress they are making in their efforts to improve

Question: - The following are the objectives of MPS?

Answer: - To set due dates for the availability of end items; To provide information regarding resources and materials required to support the aggregate plan; To set specific production schedules for parts and components used in end items as an input to MRP

Ques. A poor layout causes the following?

Ans. congestion, unnecessary material handling, higher throughput time.

Q..... is the process of checking actual performance against the production plan and reporting exceptional deviations to the concerned authorities for the corrective action?

A. Progressing.

Question:- Root causes of many of the failures in meeting planned production can be attributed to poor medium/long range planning?

Answer:- TRUE.

Question:- Need for change in layout can occur due to following reason?

Answer:- introduction of new product.

Ques. What do you understand by the longest path which sets the overall duration of the project?

Ans. Critical path.

Question:- Examples of Work aids are?

Answer:- jigs and fixtures, work arbors, copying templates.

Q. Match of the following?

- A. store issue order = instructs stores department to  
 move order = instructs workmen for movement of material from stores to  
 machine setup order = instructs setters to set up  
 forwarding note = informs dispatch/finish parts

Q. Match of the following?

- A. Lot Multiplier > Use this if it makes sense to.....  
 Lead time > The time to replenish kanba.....  
 Number of cards > Each bin card is specified with.....  
 Allocation percent > Indicates percent distribution.....

Q. Match of the following?

A. Travel Chart > Distance & frequency of movements/Closeness  
Flow Diagram > Scale plans  
Template > Two dimensional cutouts  
REL Chart > Activity relationships

Q. Match of the following?

A. Operation Process Charts > Graphic representation of major activities  
Flow Process Charts > Sets out flow & activities of a component/man  
String Diagram > Scale plans  
Scale Models > Three dimensional models

Q. Match of the following?

A. Flow Time > Same as lead time  
Job Shop > Jobs have different sequence of operations  
Flow Shop > All the jobs use the machines following the same order

Q. Match of the following?

A. Fewest operations remaining > Number of successive operations remaining  
Least work remaining > Processing time remaining before the job is complete  
Least setup > Scheduling first the job that minimize the changeover time  
Earliest due date > The job with the earliest due date goes first.

Q. Match of the following?

A. Community Facility > Social infrastructure  
Legislation & Taxation > Incentive for setting up new industry  
Proximity to Market > is given the highest priority  
Industrial & Labour Attitudes > Community attitudes

Q. Match of the following?

A. Work Measurement > Scientific method of setting performance  
Work Sampling > Large number of observations are conducted at random intervals of time  
Standard Time > The time required by the operator to complete a specified task for the defined method  
Incentive > Is an inducement given to an employee to improve his effectiveness

Q. Match of the following?

A. Earliest starting date > Earliest start time of an activity equals earliest event time of the tail event  
Latest finishing date > The latest event time of the head event  
Earliest finishing date > Earliest event time of the tail event plus duration of the activity emanating from the tail event  
Latest starting date > The latest finishing time minus activity duration

Q. Match of the following?

A. a > Optimistic time  
B > Pessimistic time  
M > Most likely time  
Te > Three time estimates

Q. Match of the following?

A. Lead Time > The time to replenish Kanban from its source

Allocation Percent > How much material is required each time for Replenishment when Kanban is signaled

Number of Cards > Each bin-card is specified with the number of items for which total Kanban size can be determined

Lot Multiplier > Use this if it makes sense to replenish material in fixed multipliers

Q. Match of the following?

A. MPS > Which end items are to be produced, when they are needed, and in what quantities.

ATP > Quantities from the MPS that have not been committed to an actual customer order

Time Fence > Series of time interval that specifies what type of order changes are allowed

Rough Cut Capacity plan > To verify the feasibility of a given MPS

Q. Match of the following?

A. Scheduling > Transition from planning to action phase

Loading > Time phase of loading and determining when and in what sequence the work will be carried out

Tool Control > Involves determining requirement and control tools

Dispatching > Loading of material into a truck, lorry or wagon

Q. Match of the following?

A. Machine set-up order > Instructs setter to set-up machine tool mentioned therein

Move order > Instructs workmen for movement of material from stores to first machine and between departments

Forwarding note > Informs dispatch/ finish parts to stores regarding the description of goods accompanying the note

Q. Match of the following?

A. Stable operations > Ensuring consistent, predictable process to improve what the customer sees and feels

Defect > Failing to deliver what customer wants

Critical to Quality (CTQ) > Attributes most important to customers

Voice of customer > To understand customer needs and expectations

Q. Match of the following?

A. MPS Output > Amounts to be produced, due date, quantity available to promise

MPS Inputs > Forecast demand, production costs, inventory costs, customer orders

MPS > Master schedule for goods producing company

Rough out Capacity plan > A capacity check run at traditional bottleneck operations to verify the feasibility of a given MPS

Q. Match of the following?

A. High production volume, low variety > Product layout

Low production volume, high variety > Cellular layout

Unit produced of very large product > Fixed position layout

Grouping into families of similar products > Process layout

Q. Match of the following?

A. Manufacturing Resource Planning (MRP II) > Provides simulation capabilities and cost information for other functional areas of the business

Planning Horizon > Normally set to cover a minimum of cumulative lead time plus time for a lot sizing low-level components and for capacity changes of primary work centers

Master Production Schedule (MPS) > A specific statement of exactly what, usually in terms of individual end items or product models, will be produced in each time periods

Capacity Requirement Planning (CRP) > Information about resources and facilities available

Q. Match of the following?

A. Slack time per operation (ST/O) > Slack time is divided by number of operations remaining until the job is completed with the smaller values being scheduled first

Least work remaining (LWR) > That work be scheduled according to the processing time remaining before the job is considered to be complete

Tardiness > Difference between flow time and due date

Fewest operations remaining (FOR) > It sequences jobs based on the number of successive operations remaining until the job is considered complete

Q. Match of the following?

A. Taylor's system > Taylor's system

Gantt task and Bonus system > Satisfaction

Barth's variable sharing system > Individual

Bedaux point system > Short cycle jobs

Q. Match of the following?

A. JIT Layout > U shaped layout

JIT > What we want, when we want it

Cell > Autonomous module

Inventory carrying cost > Holding cost

Q. Match of the following?

A. Crash cost on activity > Cc

Normal cost of activity > Cn

Crash time on activity > Ct

Normal time on activity > Tn

Q. Match of the following?

A. Watch > Leakage, wear, crack

Listen > Impact, rotation, air leakage

Touch > Vibrations, temperature

Smell > Burn-out, exhaust gas or oil

Q. Match of the following?

A. Corrosion > Watch

Exhausted gas > Smell

Temperature of motor > Body

Air leakage > Listen



Q. Match of the following?

- A. Customer centric approach > The ability of a process to meet customer's quality  
DMAIC > Standardized step-by-step process used in six sigma with specific tools for conducting projects  
Process capability > Open loop feedback process  
Father of six sigma > Smith (Motorola)

Q. Match of the following?

- A. REL chart > Degree of closeness  
Template > Two dimensional cutouts  
Travel chart > Distance & frequency of movements  
Flow diagram > Tracing movements

Q. Match of the following?

- A. PROFRESSING > Route sheets  
ORDER ACCEPTANCE > Collection of data  
CAPACITY PLANNING > Preparation of machine load  
PROCESS PLANNING > Estimation of requirement of resources

Q. Match of the following?

- A. Minimization of production delays > Objective of good layout  
Factor analysis > Techniques of evolving & analysis of layout  
Maximum visibility > Principles of good layout  
Scale model > Modeling approach to layouts

Q. Match of the following?

- A. Pond Draining system > Use of inventory as a buffer  
Pull system > Manufacture to order  
Master production scheduling > Short range planning  
Push system > Moving output from one station to other

Q. Match of the following?

- A. C-Chart > Counted data on number of defects  
P Chart > Acceptable and non-Acceptable fractions  
Sample population > Number of samples to be collected to control  
Np-chart > Control chart for number-defectives.

Q. Templates have few limitations.....?

- A. Overhead facilities cannot be visualized.

Q2- Which of the following aspects are analyzed in Method study?

- A. Manufacturing, operations and sequence, Workmen, Machines.

Q. Six sigma emphasis on preventing defects through-----?

- A. Mistake proofing method.

Q. MRP is-----?      A. Pull System.

Q. In the choice of location of plant, which factor is given highest priority?

- A. Proximity to market.

Q. ----- specifies what type of order changes are allowed?

A. Time Fences.

Q. ----- is useful to study a work bench layout?

A. Two handed process chart.

Q. Match of the following?

A. Information given > Giving directions or instructions  
Consumptions of effort > Press shop operation  
Subtraction > Removal of worn-out part from a machi.....  
Change in chemical > Chemical reaction characteristic

Q. Match of the following?

A. Inspection > Represented by square  
Storage > represented by inverted triangle  
Reprocessing > Situation where component is not compl....  
Method Study > Recording and examination of existing a ....

Q. Match of the following?

A. Tool Order > Instructs to keep necessary tools ready...  
Backward scheduling > An approach to scheduling that starts fr.....  
Inspection Order > One for each stage of inspection  
Dispatching > Execution of current production schedule

Q. Match of the following?

A. Production Plan > Manufacturing Aggregate Plan  
Staffing Plan > Service Aggregate Plan  
Dell Incorporation > Allows user to enter cost data inputs in...  
Search Decision Rule > Linear Decision Rule

Q. Six sigma involves discipline data collection and analysis to achieve one of the following goals ?

A. Reduce the defects in the any process, to less than 3.4 per million operation, Eliminate wasteful practices, Delight internal & external customer.

Q. Some benefits of JIT based SCM systems are as follows?

A. Product quality is improved, Reduction in cost, time and WIP inventory, Inventory levels are drastically reduced..

Q. DMAIC performs following functions?

A. Improves the process by eliminating defects, Measures the process to determine current performance, Defines project goals and customer [internal & external] deliverables.

Q. The objectives of six sigma are?

A. Value to end customer, High Performance, Reliability.

Q. Which allowance compensates the operator for the time lost due to unavoidable delays and interruptions?

A. Policy allowance.

Q. The advantages of chase strategy are?

A. Investment in inventory is low, Anticipation inventory is not required, Labour utilization is kept high.

Q. The purpose of MPS can be stated in following lines?

A. To provide the schedule used by order processing to acknowledge Delivery dates for current and new orders, To provide the schedule input for the MRP process, To establish the production schedule for the specific models/options of products.

Q. Which of the following are examples of pure materials ?

A. Bakeries, Ice factories, Lime stone.

Q. How to calculate earliest finishing date of an activity?

A. Equals to the earliest starting time minus duration of the activity emanating from the tail event.

Q. Plant layout facilitates processing of products in most effective manner through the following?

A. Shortest possible distance, Shortest processing, Minimum movement.

Q. Which Are the factors on which the structure of the transportation cost depends?

A. Characteristics of the commodity, Average distance of shipment , Medium of shipment.

Q. Which utilities are considered as infrastructural requirements?

A. Disposal of waste, Power, Water.

Q. Which unit of measurement is used in case of work sampling?

A. TMU.

Q. The method for determining number of units to be produced in each product family , is provided by?

A. VED Analysis.

Q. The actions to be taken in MPS are?

A. Make a preliminary MPS, Perform rough-cut capacity planning, Produce at constant rate.

Q. In case of backward pass computation, the latest event time of the burst event equals the smallest of the difference between the latest event time of the head less duration of the activity converging on the head event?

A. True.

Q. How to calculate the earliest event time of a merge event in case of forward pass computation?

A. Equals the largest of the sum earliest event time of the preceding event plus duration of activity emanating from the preceding event.

Q. Components of production Management include?

A. Job Design, Production planning, Capacity planning.

Q. Which is the most popular scientific fool for project planning?

A. Critical path analysis.

Q. Which of the following aspects are analyzed in method study?

A. Maintenance schedules, Manufacturing operations and their sequence, Machines.

Q. Some of the principles of “ Quality at source “ are?

A. Selecting suppliers based on their quality assurance capability, Encouraging suppliers to introduce pre-shipment quality audit, Providing feedback on nature of defects and helping suppliers to reduce/eliminate rejection.

Q. Which are the sub factors of community facilities or social infrastructure?

A. Educational, Accomodation, Entertainment.

Q. Following is not a function of ppc?

A. Product planning.

Q. Space required for a production centre is determined by adding the space requirements for various parts of the production system like?

A. Components, Machines, Operator movement.