

MIDTERM EXAMINATION

Spring 2009

MGT613- Production / Operations Management (Session - 2)

Question No: 1 (Marks: 1) - Please choose one

Which one of the following forms of productivity has units of output per dollar input?

Capital

Energy

Labor

Machine

Question No: 2 (Marks: 1) - Please choose one

What would be the productivity if a machine produced 50 units in 3 hours?

0.066 units per hr

16.66 units per hr

6.766 units per hr

60.66 units per hr

Question No: 3 (Marks: 1) - Please choose one

The major business function consisting of research and development, product design, manufacturing, marketing, distribution, and customer service is refers to:

Value chain

The transformation process

Quality control

Life cycle

Question No: 4 (Marks: 1) - Please choose one

Which of the following is **NOT** usually considered a general characteristic of a service?

Production and sales cannot easily be separated functionally

Many services involve both tangible and intangible outputs

Production and consumption can always be separated

Degree of customer contact is high

Question No: 5 (Marks: 1) - Please choose one

Which of the following statements corresponds to an order-winning characteristic?

A factor which may be significant in other parts of the organization

A factor which gives an organization a competitive edge

A factor which serves as a minimum standard for purchase

A factor which increases the profitability of the organization

Question No: 6 (Marks: 1) - Please choose one

Which one of the following is an implication of laplace approach of decision making?

The best of the worst possible payoff

The best possible payoff

The best average payoff

The least of the worst regrets

Question No: 7 (Marks: 1) - Please choose one

Which one of the following is an outcome of Maximin criterion?

The best of the worst possible payoff

The best possible payoff

The best average payoff

The least of the worst regrets

Question No: 8 (Marks: 1) - Please choose one

Given the table:

Possible Alternatives future demand

Low (Rs.) High (Rs.)

Small facility 10,000 8,000

Medium facility 12,000 20,000

Large facility 18,000 15,000

Which one of the following is the correct payoff under MAXIMIN approach?

Rs. 8,000

Rs. 12,000

Rs. 18,000

Rs. 20,000

Question No: 9 (Marks: 1) - Please choose one

Which one of the following forecasting techniques is used to identify a trend when data is neither growing nor declining rapidly and has no seasonal characteristics?

Simple moving average

Delphi method

Trend adjusted forecast

Naïve forecast

Question No: 10 (Marks: 1) - Please choose one

Which one of the following refers to the maximum output that a firm can produce under ideal conditions?

Design capacity

Effective capacity

Capacity planning

Utilization rate

Question No: 11 (Marks: 1) - Please choose one

Which one of the following perspectives is the most obvious to be considered while evaluating alternatives for future capacity?

- Social
- Political
- Economic
- Legal

Question No: 12 (Marks: 1) - Please choose one

Which of the following terms of financial analysis are important for the organization to proceed with a capacity alternative decision?

- Cash flow and fixed cost
- Present value and fixed cost
- Cash flow and present value
- Cash flow and profit

Question No: 13 (Marks: 1) - Please choose one

Which one of the following manufacturing process is associated with high volume car manufacture?

- Job shop
- Assembly line
- Batch
- Automation

Question No: 14 (Marks: 1) - Please choose one

The formula for determining the required cycle time is operation time per day divided by:

- Sum of task times
- Actual output per day (in units)
- Number of workstation
- Desired output (in units)

Question No: 15 (Marks: 1) - Please choose one

Assembly lines relate most closely to a:

- Functional layout
- Product layout**
- Process layout
- Departmental layout

Question No: 16 (Marks: 1) - Please choose one

Which one of the following layout type is associated with a restaurant?

- Fixed position layout

Process layout
Product layout
Hybrid layout

Question No: 17 (Marks: 1) - Please choose one

Which of the following forecasting technique is based on the assumption that past data is more indicative of the future than the most recent occurrences?

Exponential smoothing
Linear regression
Judgmental forecast
Naive forecast

Question No: 18 (Marks: 1) - Please choose one

In exponential smoothing model, α denotes:

Smoothing constant
Actual forecast
Forecast error
Previous forecast

Question No: 19 (Marks: 1) - Please choose one

Which of the following takes into consideration the design of aesthetics of the product?

Functional design
Production design
Service design
Product design

Question No: 20 (Marks: 1) - Please choose one

Which of the following factors are considered in product and service design?

Customer satisfaction, quality, and improvement costs
Employee motivation, quality, and production costs
Customer satisfaction, flexibility, and production costs
Customer satisfaction, quality, and production costs

Question No: 21 (Marks: 1) - Please choose one

Which one of the following is the overall objective of product and service design?

Customer satisfaction and variety
Customer satisfaction and profitability
Reliability and variety
Quality and reliability

Question No: 22 (Marks: 1) - Please choose one

CBR stands for which one of the following?

Commercial board of revenue

Central board of recycling

Central board of renovation

Central board of revenue

Question No: 23 (Marks: 1) - Please choose one

Which one of the following designs resists modifications?

Frozen design

Product design

Service design

Robust design

Question No: 24 (Marks: 1) - Please choose one

Which one of the following is a curve showing failure rate over time?

Cost curve

Bath tub curve

Fish bone diagram

Reliability curve

Question No: 25 (Marks: 1) - Please choose one

Which of the following management level is responsible for long-range capacity planning?

Lower management

Middle management

Top management

Non managerial employees

Question No: 26 (Marks: 1) - Please choose one

Capacity planning involves answering all of the following questions EXCEPT:

What kind of capacity is needed?

How much is needed?

When is it needed?

Who is going to decide?

Question No: 27 (Marks: 1) - Please choose one

The advantages of specialization to management include all of the following EXCEPT:

Rapid training of the workforce

Ease in recruiting new workers

Fewer turnovers

Less boredom for workers

Question No: 28 (Marks: 1) - Please choose one

The disadvantages of specialization to management include all of the following EXCEPT:

- More absenteeism
- Minimum responsibility
- More turnovers
- More difficult to teach the job

Question No: 29 (Marks: 1) - Please choose one

Technology has impacted the work place by:

- Adding to the existing geographical barriers for recruiting
- Increasing the cost of telecommuting
- Increasing the amount required to be spent on training
- Unifying the workforce to a common skill level

Question No: 30 (Marks: 1) - Please choose one

Which of the following can be used to compute standard time?

- Multiplying the elemental average time by the rating factor
- Dividing the average elemental time by the rating factor
- Multiplying the normal cycle time by the rating factor
- Multiplying the normal cycle time by one plus the allowance factor**

Question No: 31 (Marks: 1) - Please choose one

Which one of the following is the focus of predetermined motion time system?

- Individual human motions that are used in a job task
- Determining the length of time it will take to undertake a particular task
- Determining the amount of time a worker spends on various activities
- Providing standard times for micro motions such as reach, move and release

Question No: 32 (Marks: 1) - Please choose one

Which one of the following is an example of community factors that affect location decisions?

- Transportation
- Quality of life
- Location of new markets
- Location of raw materials

Question No: 33 (Marks: 1) - Please choose one

Which one of the following is an example of site related factors that affect location decision?

- Transportation
- Quality of life
- Location of new markets
- Location of raw materials

Question No: 34 (Marks: 1) - Please choose one

Which one of the following location strategies follows a decentralized approach?

- Process plant strategy
- Market area plant strategy
- Cost conservation strategy
- Product plant strategy

Question No: 35 (Marks: 1) - Please choose one

Which of the following is the primary input in capacity planning?

- Supply chain capabilities
- Competitors' strengths
- Demand forecasts
- Overall cost estimates

Question No: 36 (Marks: 1) - Please choose one

Which of the following statements would generally be considered as correct job shop?

- A continuous process has lower output volume as compared to job shop
- Equipment flexibility is lower in job shop than that of a continuous process
- Labour costs are higher in a Job Shop operation than in most other processes
- Batch processing produces a more standard range of products than continuous flow processes

Question No: 37 (Marks: 1) - Please choose one

Which one of the following is TRUE about work sampling?

- It describes individual human motions that are used in a job task
- It involves determining the length of time it will take to undertake a particular task
- It involves determining the amount of time a worker spends on various activities**
- It provides standard times for micro motions such as reach, move and release

Question No: 38 (Marks: 1) - Please choose one

Services differ from manufacturing in all the following ways EXCEPT:

- Customers typically interact directly with the service delivery process.
- Consumption and production take place simultaneously.

Services are intangible.
Services can be stored.

Question No: 39 (Marks: 1) - Please choose one

purpose is to coordinate and control all the required sources so that productive system can be used efficiently and to ensure the delivery of product in time.

Total quality control's

Demand management's

Forecasting's

Operations management's

Question No: 40 (Marks: 1) - Please choose one

Forecasting for groups tend to be more accurate than forecasting for individual items because:

A group is composed of a number of items

A group exhibits a uniform behavior

A group cancels the forecasting errors among items

A group behavior is relatively less uncertain

Question No: 41 (Marks: 5)

Operations management does not work in isolation within an organization. How would you relate marketing, finance and other functions to operations function?

Question No: 42 (Marks: 5)

Suppose you want to estimate the time required to perform a certain task by the two employees. One employee's study yielded a mean of 6.4 minutes and standard deviation of 2.1 minutes with 95% confidence Interval. Other employee's study yielded a mean of 2.1 minutes and standard deviation of 6.4 minutes with confidence interval of 95%. Now how many observations you will need if desired maximum error is 10% of sample mean?($z= 1.96$) Do both the employees have same number of observations?