Student name:\_\_\_\_\_\_\_\_\_\_

**TRUE/FALSE - Write 'T' if the statement is true and 'F' if the statement is false.**

1. Supply is the set of products or services a business offers to its customers.

* true
* false

1. Consumption utility is composed of price and convenience.

* true
* false

1. "Firm A Pareto dominates firm B" means that firm A’s product or service is inferior to that of firm B on all dimensions of the customer utility function.

* true
* false

1. A firm must make trade-offs because no single company can excel at everything.

* true
* false

1. Reducing inefficiencies will increase a firm’s profitability.

* true
* false

1. Every work requires operations.

* true
* false

1. "Who are the customers?" is a key question in operations management.

* true
* false

**MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.**

1. The set of products or services a business offers to its customers is called \_\_\_\_\_\_\_\_\_.

demand

bundle

supply

value

1. The set of products or services customers want is called \_\_\_\_\_\_\_\_\_.

demand

bundle

supply

value

1. "Match supply with demand" means \_\_\_\_\_\_\_\_\_.

telling customers what they need while reducing prices

offering customers what they want while also making a profit

explaining to customers what they should want while lowering costs

investing in marketing and automation

1. Which of the following is NOT a goal of operations management?

Understanding the drivers of customer utility

Matching supply with demand

Making a profit while providing customers what they need

Providing great products at low prices to customers

1. Which of the following is NOT a challenge of matching supply with demand?

Delivering better products at low prices

Attempting to predict demand

Providing customers with what they want at a low cost

Reducing demand to match supply

1. A customer’s desire for a product or service is measured by its \_\_\_\_\_\_\_\_\_.

popularity

costs

utility

advertisement

1. Economic theory suggests that a customer chooses a product or service to obtain the highest \_\_\_\_\_\_\_\_\_.

demand

supply

utility

satisfaction

1. Utility is composed of the following components EXCEPT \_\_\_\_\_\_\_\_\_.

customer loyalty

price

inconvenience

consumption utility

1. The features of a product or service that most, if not all, customers prefer are called \_\_\_\_\_\_\_\_\_.

consensus attributes

consumption attributes

fit attributes

performance attributes

1. The many flavors of ice-cream offered by ice-cream parlors are reflective of the \_\_\_\_\_\_\_\_\_ of today’s customers.

bargaining power

homogeneous preferences

heterogeneous preferences

knowledge base

1. Economists refer to the inconvenience of obtaining a product or receiving a service as \_\_\_\_\_\_\_\_\_.

transaction costs

fit

timing

unavailability

1. A restaurant promising a meal in two minutes or less is attempting to cater to which part of the customer utility function?

Timing

Preference

Ambience

Fit

1. Price utility includes all of the following EXCEPT \_\_\_\_\_\_\_\_\_.

cost of owning the product

shipping cost

financing costs

transaction costs

1. \_\_\_\_\_\_\_\_\_is the study of how customers derive utility from products or services.

Marketing

Operations

Economics

Management

1. Which dimension of the customer utility function is emphasized with a restaurant’s slogan, "Eat Fresh"?

Timing

Location

Performance

Fit

1. A firm that offers tailor-made suits to its customers is appealing to the \_\_\_\_\_\_\_\_\_ dimension of the customer utility function.

timing

location

performance

fit

1. Jerry is very frugal and always purchases the least expensive items whenever he goes to the store. Which dimension of the customer utility function seems to be most important to Jerry?

Performance

Timing

Price

Location

1. A pizza delivery service attempts to appeal to the\_\_\_\_\_\_\_\_\_component or subcomponent of the customer utility function.

price

timing

location

performance

1. Which of the following statements about a firm’s capabilities is FALSE?

A firm has capabilities to do well on some dimensions of its customers’ utility function.

A firm has capabilities to do well on all dimensions of its customers’ utility function.

A firm’s capabilities can be defined as the dimensions of the customer’s utility function it is able to satisfy.

How well a firm can satisfy its customers’ utility function is dependent on its capabilities.

1. You are considering four hotels that differ from each other with respect to their price and customer reviews:

|  |  |  |
| --- | --- | --- |
| **Hotel** | **Price** | **Reviews (1 = worst . . . 5 = best)** |
| **H1** | $ 100 | 3 |
| **H2** | $ 250 | 5 |
| **H3** | $ 200 | 4 |
| **H4** | $ 150 | 2 |

Which of the following is a valid conclusion?

H3 is Pareto dominated by H2

H2 is Pareto dominated by H3

H1 is Pareto dominated by H4

H4 is Pareto dominated by H1

1. You are considering four hotels that differ from each other with respect to their price and customer reviews:

|  |  |  |
| --- | --- | --- |
| **Hotel** | **Price** | **Reviews (1 = worst . . . 5 = best)** |
| **H1** | $ 100 | 3 |
| **H2** | $ 250 | 5 |
| **H3** | $ 200 | 4 |
| **H4** | $ 150 | 2 |

Which of these hotels is NOT on the efficient frontier?

H1

H3

H2

H4

1. You are considering four hotels that differ from each other with respect to their price and customer reviews:

|  |  |  |
| --- | --- | --- |
| **Hotel** | **Price** | **Reviews (1 = worst . . . 5 = best)** |
| **H1** | $ 100 | 3 |
| **H2** | $ 250 | 5 |
| **H3** | $ 200 | 4 |
| **H4** | $ 150 | 2 |

Which of these hotels is inefficient?

H1

H2

H3

H4

1. You are considering four new vehicles that differ from each other with respect to their price and fuel economy:

|  |  |  |
| --- | --- | --- |
| **Vehicle** | **Price** | **Fuel Economy (miles per gallon)** |
| **V1** | $ 22,000 | 24 |
| **V2** | $ 27,000 | 26 |
| **V3** | $ 29,000 | 30 |
| **V4** | $ 24,000 | 27 |

Which of the following is a valid conclusion?

V2 is Pareto dominated by V1

V4 is Pareto dominated by V2

V2 is Pareto dominated by V4

V3 is Pareto dominated by V1

1. You are considering four new vehicles that differ from each other with respect to their price and fuel economy:

|  |  |  |
| --- | --- | --- |
| **Vehicle** | **Price** | **Fuel Economy (miles per gallon)** |
| **V1** | $ 22,000 | 24 |
| **V2** | $ 27,000 | 26 |
| **V3** | $ 29,000 | 30 |
| **V4** | $ 24,000 | 27 |

Which of these vehicles is NOT on the efficient frontier?

V1

V2

V3

V4

1. You are considering four new vehicles that differ from each other with respect to their price and fuel economy:

|  |  |  |
| --- | --- | --- |
| **Vehicle** | **Price** | **Fuel Economy (miles per gallon)** |
| **V1** | $ 22,000 | 24 |
| **V2** | $ 27,000 | 26 |
| **V3** | $ 29,000 | 30 |
| **V4** | $ 24,000 | 27 |

Which of these vehicles is inefficient?

V1

V2

V3

V4

1. Beyond just executing the current way of doing things, operations management is about \_\_\_\_\_\_\_\_\_.

eliminating inefficiencies to move the firm below the efficient frontier

making strategic trade-offs to do well on all dimensions of the customers’ utility function

managing inputs and resources to move the firm below the efficient frontier

innovating its operations to shift the efficient frontier in a positive direction

1. By cooking and dressing burgers before customers order them, a fast-food restaurant is sacrificing the dimension of \_\_\_\_\_\_\_\_\_ and improving the dimension of \_\_\_\_\_\_\_\_\_in the customers’ utility function.

timing, fit

fit, timing

timing, price

price, timing

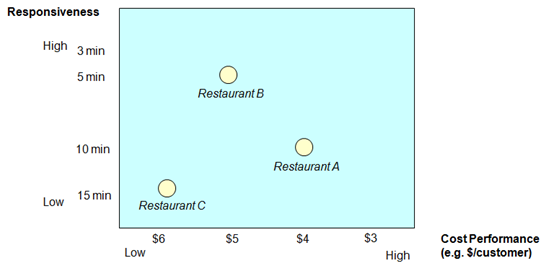
1. A firm that targets a market segment of budget-conscious customers is likely to sacrifice some \_\_\_\_\_\_\_\_\_ to get a better \_\_\_\_\_\_\_\_\_.

consumption utility, price

performance, fit

timing, location

location, utility

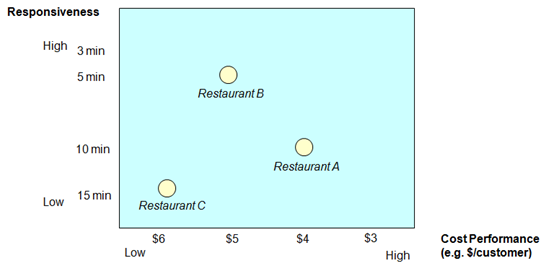
1. Three restaurants are compared along the dimensions of responsiveness and cost performance, as shown below:  
     
   Which of the following conclusions can be drawn about Restaurant C?

It is on the efficient frontier.

It Pareto dominates A.

It is inefficient.

It is efficient.

1. Three restaurants are compared along the dimensions of responsiveness and cost performance, as shown below:  
     
   Which of the following conclusions can be drawn?

A is Pareto dominated by B.

A is on the efficient frontier.

C Pareto dominates A and B.

C is on the efficient frontier.

1. A firm invents an app that allows customers to make purchases with their smartphone. The firm hopes its new mobile payment app will \_\_\_\_\_\_\_\_\_ the efficient frontier through \_\_\_\_\_\_\_\_\_.

shift, innovation

stay on, innovation

stay on, imitation

shift, imitation

1. The difference between revenue and costs is called \_\_\_\_\_\_\_\_\_.

profit

input

supply

demand

1. A firm invests in building a manufacturing plant. This investment is an example of \_\_\_\_\_\_\_\_\_.

costs for outputs

variable costs

costs for resources

marketing costs

1. A firm can increase its profitability by \_\_\_\_\_\_\_\_\_.

increasing costs and reducing price

moving below the efficient frontier

reducing efficiencies

reducing inefficiencies

1. Which of the following is NOT a system inhibitor?

Inflexibility

Poor brand recognition

Variability

Waste

1. Leftover bread that is not sold at a bakery is an example of \_\_\_\_\_\_\_\_\_.

defect

flexibility

variability

waste

1. A long waiting line at the teller station in a bank at various times during the day is an example of \_\_\_\_\_\_\_\_\_ and a symptom of \_\_\_\_\_\_\_\_\_.

defect, waste

inflexibility, profit

variability, inflexibility

waste, variability

1. A sold-out concert that turns away music fans because it is unable to increase the number of seats is an example of \_\_\_\_\_\_\_\_\_.

defect

inflexibility

variability

waste

1. Which of the following is NOT a source of supply variability?

Customers with different requests

Power outage

Time to serve a customer

Wrong order entered

1. To which system inhibitor does the following customer complaint relate: "I wish they could add more cashiers in the busy hours"?

Defect

Inflexibility

Variability

Waste

1. More guests showing up than expected at a party is an example of \_\_\_\_\_\_\_\_\_.

demand variability

supply variability

demand inflexibility

supply inflexibility

1. A waitress who does not show up for work today will result in \_\_\_\_\_\_\_\_\_.

demand variability

supply variability

demand inflexibility

supply inflexibility

1. Which of the following statements about system inhibitors is TRUE?

Reducing waste will to eliminate system inhibitors.

Increasing profit will overcome system inhibitors.

Eliminating system inhibitors is a one-time activity.

System inhibitors result in inefficiencies.

1. Sustainability relates to the \_\_\_\_\_\_\_\_\_.

environmental impact of a company’s operations

labor practices used by a company

ability of a company to stay in business

ability of a company to remain competitive

1. What is the goal of sustainable operations?

to remain competitive

to stay in business

to avoid engaging into questionable labor practices

to maintain an ecological balance by not depleting finite natural resources

1. Engaging in questionable labor practices such as using child labor or illegal labor is an example of a (an) \_\_\_\_\_\_\_\_\_ issue.

strategic

environmental

ethical

trade-off

1. Operations management is about \_\_\_\_\_\_\_\_\_.

working harder

avoiding work

improving work

dealing with customer feedback

1. Which of the following statements about operations management is TRUE?

All work requires operations.

Operations is only about manufacturing plants.

Operations management is in every job description.

Operations management is not relevant for lawyers.

1. *Operations* comes from the Latin word "opus," which means \_\_\_\_\_\_\_\_\_.

continuous change

helping people

improvement

work

1. Operations management improves the way work is done by all of the following means EXCEPT \_\_\_\_\_\_\_\_\_.

overcoming efficiencies

eliminating waste

decreasing variability

increasing flexibility

1. A doctor can apply operations management tools to \_\_\_\_\_\_\_\_\_.

find a cure for cancer

discover a new drug

improve his/her work tasks as a doctor

improve his/her language skills

1. Which of the following is a job of an operations manager?

Managing inventory levels

Setting up an accounting system

Filing lawsuits against competitors

Developing a new company logo

1. Which of the following is NOT a job of an operations manager?

Acquiring inputs

Managing resources

Overcoming inefficiencies

Developing a new company logo

1. Which of the following is NOT a job of an operations manager?

Acquiring inputs

Managing resources

Overcoming inefficiencies

Filing lawsuits against competitors

1. As an operations manager, you improve work by doing all of the following EXCEPT \_\_\_\_\_\_\_\_\_.

eliminating waste

increasing flexibility

doing the work of others

reducing variability

1. As an operations manager, you improve work by doing all of the following EXCEPT \_\_\_\_\_\_\_\_\_.

eliminating waste

increasing flexibility

reducing variability

setting up a new accounting system

1. A mismatch of supply and demand can be caused by all of the following EXCEPT \_\_\_\_\_\_\_\_\_.

demand variability

supply variability

supply inflexibility

demand inflexibility

1. Which of the following is NOT an operational problem that you will learn in this text?

Process analysis

Process improvement

Process satisfaction

Process quality

1. \_\_\_\_\_\_\_\_\_ addresses the question of how a firm should produce the products or services its customers want.

Process analysis

Product development

Process satisfaction

Process quality

1. \_\_\_\_\_\_\_\_\_ is(are) a response to the three system inhibitors and helps to answer the question of how a firm can improve the productivity of its processes.

Demand anticipation

Inventory management

Process variability

Lean operations

1. \_\_\_\_\_\_\_\_\_ helps a firm to answer the question of how much of a product should be made or how many customers should be served.

Product development

Inventory management

Process variability

Lean operations

1. Which key operational question corresponds to the "inconvenience" component of the customer utility function?

Who are the customers and what are their heterogeneous needs?

How efficiently will products or services be delivered?

What is the product or service to be delivered?

Where will the demand be fulfilled?

1. Which key operational question corresponds to the “performance” subcomponent of consumption utility?

Who are the customers and what are their heterogeneous needs?

How much do we charge?

What is the product or service to be delivered?

Where will the demand be fulfilled?

1. Which key operational question corresponds to the “fit” subcomponent of consumption utility?

Who are the customers and what are their heterogeneous needs?

How much do we charge?

What is the product or service to be delivered?

Where will the demand be fulfilled?

**Answer Key**Test name: chapter 1

TRUE

Supply is the set of products or services a business offers to its customers.

FALSE

Consumption utility is composed of performance and fit.

FALSE

"Firm A Pareto dominates firm B" means that firm A’s product or service is superior to that of firm B on all dimensions of the customer utility function.

TRUE

A firm must make trade-offs because no single company can excel at everything.

TRUE

Reducing inefficiencies by increasing what the customer is willing to pay and/or by decreasing costs will increase a firm’s profitability.

TRUE

All work requires operations to do the work and/or to improve the work.

TRUE

"Who are the customers and what are their heterogeneous needs?" is a key operations management question, corresponding to the consumption utility component of the consumer utility function.

C

Supply is the set of products or services offered by a business to its customers.

A

Demand is the set of products or services customers want.

B

"Offer customers what they want" is another way of saying "match supply with demand."

A

Understanding the drivers of customer utility is a goal of marketing, not operations management.

D

The challenge of matching supply with demand is to understand and satisfy demand, not to reduce demand.

C

According to economic theory, utility measures one’s desire for a product or service.

C

A customer chooses a product or service that gives him/her the highest utility.

A

Utility is composed of consumption utility, price, and inconvenience.

D

Performance attributes are features of a product or service that most, if not all, customers prefer.

C

The differences in customer preferences for the taste, color, or size of a product or services are called heterogeneous preferences.

A

Economists refer to the inconvenience of obtaining a product or receiving a service as transaction costs.

A

Promising customers quick delivery is designed to appeal to the timing dimension of customer utility.

D

Price utility includes the total cost of owning the product or receiving the service. Transaction costs refer to the inconvenience of obtaining the product or receiving the service.

A

Marketing is the study of how customers derive utility from products or services.

C

"Eat Fresh" is a performance attribute of Subway’s sandwiches indicating that most, if not all, customers prefer fresh over processed ingredients in their food.

D

Fit captures how well the product or service matches the unique characteristics of a given customer.

C

The price component of the customer utility function appears to be most important to Jerry.

C

A pizza delivery service appeals to the location subcomponent of inconvenience since it eliminates the need to travel to get the pizza. It does not appealing to the timing subcomponent since it may actually take longer to receive the pizza by delivery than by picking it up directly.

B

A firm has capabilities to do well on some but not all dimensions of its customers’ utility function.

D

Pareto dominated means that a firm’s product or service is inferior to one or multiple competitors on all dimensions of the customer utility function.

D

At least one competitor is better on both factors than H4. H4 is Pareto dominated and cannot be on the efficient frontier.

D

A firm that is not on the efficient frontier is inefficient.

C

Pareto dominated means that a firm’s product or service is inferior to one or multiple competitors on all dimensions of the customer utility function.

B

One vehicle is better on both factors than V2. V2 is Pareto dominated and cannot be on the efficient frontier.

B

A vehicle that is not on the efficient frontier is inefficient.

D

There are three ways in which operations management can match supply with demand: make trade-offs, reduce inefficiencies, and innovate.

B

Trade-offs among the dimensions of the customer’s utility function allow a firm to sacrifice on one dimension, such as fit, while excelling on another, such as time.

A

Budget-conscious customers are price sensitive and will be less willing to pay (price utility) for a perfectly fitted or optimally performed (consumption utility) product/service.

C

Restaurant C is not on the efficient frontier, suggesting that it is inefficient.

B

Both A and B are on the efficient frontier and Pareto dominate C.

A

Innovating is a way of shifting the efficient frontier.

A

Profit is the difference between revenue and costs.

C

Resources such as production facilities are things that a business uses to transform inputs into outputs.

D

Reducing inefficiencies will increase a firm’s profitability.

B

The three system inhibitors are waste, variability, and inflexibility. Brand recognition is the concern of marketing.

D

Leftover bread consumes inputs and resources but adds no value to customers if it is not sold.

C

Customers arriving at different times of the day result in demand variability and indicate inflexibility in staffing.

B

The inability to accommodate all music fans due to insufficient seating capacity is an example of inflexibility.

A

Customers having different requests results in demand variability.

B

Inflexibility is the inability of an operation to quickly and cheaply respond to new information.

A

Demand variability deals with uncertainty in knowing exactly how many guests will show up.

B

A waitress who does not show up for work is an example of supply variability.

D

Inefficiencies are the result of having system inhibitors in an operation.

A

Sustainability relates to the environmental impact of a company’s operations.

D

The goal of sustainable operations is to maintain an ecological balance by not depleting finite natural resources.

C

Engaging in questionable labor practices such as using child labor or illegal immigrant labor is an example of an ethical issue.

C

Operations management is about improving how work is being done.

A

All and every work require operations.

D

*Operations* comes from the Latin word "opus," which means "work."

A

Operations management helps people improve the way they work by overcoming *in*efficiencies that they face.

C

Operations management tools can help a doctor improve his/her work tasks.

A

Operations managers are in charge of acquiring inputs and managing the resources they need to better serve their customers. Managing inventory levels is one such activity.

D

Operations managers are in charge of overcoming inefficiencies, acquiring inputs and managing the resources they need to better serve customers. Developing a new company logo would be done by the marketing department.

D

Operations managers are in charge of overcoming inefficiencies, acquiring inputs, and managing the resources they need to better serve customers. Filing lawsuits against competitors would be done by attorneys.

C

Work can be improved by overcoming the three system inhibitors. As an operations manager, you manage and improve the work of others, not do the work itself.

D

Work can be improved by overcoming the three system inhibitors. Setting up a new accounting system would be done by the accounting and/or information technology department, not by an operations manager.

D

Inflexibility comes from the supply side only.

C

The term "process satisfaction" does not make sense. We should satisfy the customer, not the process.

A

Process analysis addresses the question of how a firm should produce the products or services its customers want.

D

Lean operations are a response to system inhibitors that can improve a firm’s process productivity.

B

Inventory management helps a firm to anticipate customer demand and to guide how much of a product to make.

D

The question "Where will the demand be fulfilled?" corresponds to the location subcomponent of the inconvenience component of the customer utility function.

C

The question "What is the product or service to be delivered?" defines the features or “performance” subcomponent of consumption utility.

A

The question “Who are the customers and what are their heterogeneous needs?” relates to the “fit” subcomponent of consumption utility.