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

1. A central premise in economics is that prices adjust to match supply with demand.

* true
* false

1. Managers view excess demand as resulting in lost revenue.

* true
* false

1. Managers view excess supply as a positive condition.

* true
* false

1. When the COVID-19 pandemic hit the United States and the rest of the world, it created massive demand for health care professionals while creating a huge shortage of the supply of personal protective equipment.

* true
* false

1. The Airbus 380, the largest passenger airliner in 2007, shows how a company appropriately aligned supply with demand.

* true
* false

1. Firms that understand how to better match supply with demand will achieve a sustainable form of competitive advantage over their rivals.

* true
* false

1. The ability to match supply with demand is generally not difficult for firms to do well.

* true
* false

1. Even a small improvement in a firm’s operations can significantly enhance its profitability.

* true
* false

1. A qualitative model is a mathematical procedure or equation that takes inputs (such as a demand forecast, a processing rate) and outputs a number that either instructs a manager on what to do or informs a manager about a relevant performance measure.

* true
* false

1. Operations management tools can be applied to ensure that resources are used as efficiently as possible.

* true
* false

1. Operations management tools can be used to redesign or restructure business operations so that a firm can improve performance along multiple dimensions simultaneously.

* true
* false

1. The first use of operations management is to ensure that use of organizational resources is minimized on all key operational dimensions.

* true
* false

1. The second use of operations management is to find the optimal balance between competing business objectives in order to enhance profitability.

* true
* false

1. The third use of operations management tools is to fundamentally question the design of the current system itself.

* true
* false

1. A qualitative strategy refers to a guiding principle for increasing operational flexibility and enhancing customer service.

* true
* false

1. A central premise in economics is to match \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_.

strategy; structure

costs; profits

supply; demand

efficiency; effectiveness

processes; outcomes

1. From the perspective of managers, excess demand is viewed as being associated with

loss of revenue.

increased revenue.

increased profits.

reduced productivity.

increase efficiency.

1. From the perspective of managers, excess supply is viewed as being associated with

loss of revenue.

wasted resources.

increased profits.

reduced productivity.

increased efficiency.

1. Reasons why matching supply and demand is so difficult include

demand can vary in predictable ways.

demand can vary in unpredictable ways.

supply is inflexible.

shifting resources across time and locations is costly.

demand can vary predictably and unpredictably; supply is inflexible; and resources shift across time and location making it costly.

1. Improvements in firm profitability can be achieved

only through a fundamental redesign of a firm’s operations.

only through significant enhancements in efficiency.

only through significant reductions in operating costs.

even through minor improvements in operations.

even through minor improvements in industry characteristics.

1. A mathematical procedure or equation that inputs and outputs a number that either instructs a manager on what to do or informs a manager about a relevant performance measure is called a

quantitative model.

qualitative strategy.

hybrid model.

judgmental model.

perceptual model.

1. Guiding principles for increasing the flexibility of a firm’s production facilities, decreasing the variety of products offered, or serving customers in priority order are called

quantitative model.

qualitative strategy.

hybrid model.

judgmental model.

perceptual.

1. Operations management tools can be used to

ensure that resources are used as efficiently as possible.

make desirable trade-offs between competing objectives.

redesign or restructure operations to improve performance along multiple dimensions simultaneously.

All of the uses are correct.

None of the choices are correct.

1. Which of the following is the best example of a firm using operations management strategies to enhance the effectiveness of its call center?

The firm identifies a strategy for maximizing the quality of customer service using the fewest staff members possible.

The firm updates its strategic plan.

The firm provides diversity training to all of its employees.

The firm changes its branding strategy.

The firm increases its hiring of IT specialists.

1. Which of the following is the best example of a firm using operations management strategies to redesign its restaurant operations?

The firm reduced all prices on its menu.

The firm added new items to its menu.

The firm implemented kiosks for customers to place orders using touch screens.

The firm implemented a new branding strategy for social media.

The firm provided customer service training for all employees.

1. Identify the three major uses of operations management.

1. Why is it difficult for firms to match supply and demand?

**Answer Key**Test name: chapter 1

TRUE

Basic economic theory says that prices of goods and services will vary in order for supply to match demand.

TRUE

Managers in real-world organizations will likely see excess demand for goods and services as being a problem in terms of lost opportunities to generate revenue.

FALSE

Managers in real-world organizations will likely see excess supply as a problem because it would constitute a waste of resources.

TRUE

COVID-19 is a good example of how an environmental factor had an adverse impact on both supply of personal protective equipment and the demand of health care professionals.

FALSE

Airbus management believed that the demand for global air travel would increase and that the A380 would be an ideal aircraft to help airlines meet that demand, but the market changed and demand for global travel decreased resulting in excess supply of the A380. This led to the termination of its production in 2021.

TRUE

Being able to match supply with demand of a firm’s goods and services is clearly a core competency that will enable it to outperform its rivals.

FALSE

In reality, being able to match supply with demand is very challenging as demand can be very difficult to predict and supply is inflexible. Firms that can do this well will achieve a sustainable competitive advantage.

TRUE

Even a seemingly small improvement in operations can have a significant effect on a firm’s profitability precisely because, for most firms, their profit (if they have a profit) is a relatively small percentage of their revenue. Hence, improving the match between supply and demand is a critically important responsibility for a firm’s management.

FALSE

This actually refers to a quantitative model given that it is mathematical in nature.

TRUE

It is correct that a key use of operations management tools is that they can be used to improve a firm’s business performance and to achieve a competitive advantage.

TRUE

It is true that operations management take a systems approach to improving the business performance of a firm by identifying the best fit or alignment between all of the elements of the system.

FALSE

The first use of operations management is to ensure the effective use of resources not just to simply minimize their usage.

TRUE

It is correct that the second use of operations management is finding balance between competing objectives in order to maximize business performance.

TRUE

It is correct that the third use of operations management is to question the basic design of a firm’s system for developing and providing goods and services to continuously improve effectiveness and profitability.

TRUE

It is correct that a qualitative strategy provides a guiding principle on which to make decisions about optimizing operations and the achievement of business objectives.

C

It is correct that from an economic perspective, a key objective is to match supply with demand.

A

Managers will view excess demand in a negative light as it is associated with a loss of revenue and profits for the firm.

B

Managers will view excess supply in a negative light as it is associated with wasted resources that reduce the efficiency of the firm and increase wasted or unused resources.

E

All of the reasons listed explain why matching supply and demand can be challenging.

D

Making even incremental improvements can have a significant impact on the effectiveness and profitability of a firm.

A

A mathematical procedure or equation that inputs and outputs a number that either instructs a manager on what to do or informs a manager about a relevant performance measure is referred to as a quantitative model.

B

Guiding principles for increasing the flexibility of a firm’s production facilities, decreasing the variety of products offered, or serving customers in priority order are called qualitative strategies.

D

All of the options are legitimate uses of operations management tools.

A

The firm’s strategy for improving customer service while minimizing the use of resources is most in alignment with the goals of operations management.

C

The firm implementing the new kiosks represents a redesign of its ordering system that could have a significant impact on operations and firm performance.

Short Answer

Just as the tools of operations management come in different forms, they can be applied in different ways:

Operations management tools can be applied to ensure that resources are used as efficiently as possible; that is, the most is achieved with what we have.

Operations management tools can be used to make desirable trade-offs between competing objectives.

Operations management tools can be used to redesign or restructure our operations so that we can improve performance along multiple dimensions simultaneously.

Short Answer

Why is matching supply with demand difficult? The short answer is that demand can vary, in either predictable or unpredictable ways, and supply is inflexible. On average, an organization might have the correct amount of resources (people, product, and/or equipment), but most organizations find themselves frequently in situations with resources in the wrong place, at the wrong time, and/or in the wrong quantity. Furthermore, shifting resources across locations or time is costly, hence the inflexibility in supply. For example, physicians are not willing to rush back and forth to the hospital as they are needed and retailers cannot afford to immediately move products from one location to another. While it is essentially impossible to always achieve a perfect match between supply and demand, successful firms continually strive for that goal.