Unit 3 - Week 1

Assignment 1

Due on 2020-02-12, 23:59 HST.

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1) Which of the following are not embedded systems?
   a. Washing machine.
   b. Desktop computer.
   c. Aircraft.
   d. Smartphone.
   e. None of these.
   Acceptable Answers:
   a, c, d
   No, the answer is incorrect.
   Prompt:
   Which of the following are not embedded systems?
   a. Washing machine.
   b. Desktop computer.
   c. Aircraft.
   d. Smartphone.
   e. None of these.

2) Which of the following states are false about an embedded system?
   a. It is a microprocessor-based system designed to perform some specific functions.
   b. It can be normally programmed by the end-user.
   c. It is self-contained and has a traditional computing system (desktops, laptops, etc.).
   d. All of these.
   e. None of these.
   Acceptable Answers:
   b, c
   No, the answer is incorrect.
   Prompt:
   Which of the following states are false about an embedded system?
   a. It is a microprocessor-based system designed to perform some specific functions.
   b. It can be normally programmed by the end-user.
   c. It is self-contained and has a traditional computing system (desktops, laptops, etc.).
   d. All of these.
   e. None of these.

3) Which of the following statements are true about a product being manufactured?
   a. R + R + R + R + R + R = 6
   b. X + X + X = 3
   c. Y + Y = 2
   d. None of these.
   Acceptable Answers:
   a, b, c
   No, the answer is incorrect.
   Prompt:
   Which of the following statements are true about a product being manufactured?
   a. R + R + R + R + R + R = 6
   b. X + X + X = 3
   c. Y + Y = 2
   d. None of these.

4) Which of the following statements about revenue are true?
   a. Price, consumption, and performance can be simultaneously improved.
   b. MRP cost and performance can be simultaneously improved.
   c. Improving performance increases the power consumption.
   d. None of these.
   Acceptable Answers:
   a, b, c
   No, the answer is incorrect.
   Prompt:
   Which of the following statements about revenue are true?
   a. Price, consumption, and performance can be simultaneously improved.
   b. MRP cost and performance can be simultaneously improved.
   c. Improving performance increases the power consumption.
   d. None of these.

5) Consider a typical triangle-shaped revenue model. Suppose that a product enters the market at time t = 0, the peak revenue of $5/unit occurs at time t = 2, and the product life is 5 years. The total number of units sold during the product's lifetime can be estimated as:
   a. $2,000
   b. $2,500
   c. $3,000
   d. $3,500
   e. None of these.
   Acceptable Answers:
   b
   No, the answer is incorrect.
   Prompt:
   Consider a typical triangle-shaped revenue model. Suppose that a product enters the market at time t = 0, the peak revenue of $5/unit occurs at time t = 2, and the product life is 5 years. The total number of units sold during the product's lifetime can be estimated as:
   a. $2,000
   b. $2,500
   c. $3,000
   d. $3,500
   e. None of these.

6) Consider a typical triangle-shaped revenue model. Suppose that a product is supposed to enter the market at time t = 0 with the peak revenue of $5/unit at time t = 2 and the product life is 5 years. However, the launch of the product gets delayed by a time t = 3. For M = 10 weeks, and D = 3 weeks, which will be the percentage revenue loss due to the delayed launch of the product?
   a. 15.15%
   b. 15.05%
   c. 8.75%
   d. None of these.
   Acceptable Answers:
   b
   No, the answer is incorrect.
   Prompt:
   Consider a typical triangle-shaped revenue model. Suppose that a product is supposed to enter the market at time t = 0 with the peak revenue of $5/unit at time t = 2 and the product life is 5 years. However, the launch of the product gets delayed by a time t = 3. For M = 10 weeks, and D = 3 weeks, which will be the percentage revenue loss due to the delayed launch of the product?
   a. 15.15%
   b. 15.05%
   c. 8.75%
   d. None of these.