

**Question 1:**

In 2010 the service sector made up approximately what percentage of the Canadian economy (GDP)?

- A. 70%
- B. 22%
- C. 98.2%
- D. 51.46%
- E. 40%

**Question 2:**

You own a factory producing toys. Every day, 320 toys are produced in two 8 hour shifts. Your productivity is:

- A. 40 toys per hour
- B. 20 toys per hour
- C. 80 toys per hour
- D. 160 toys per hour
- E. Not enough data is provided to answer the question accurately

**Question 3:**

Henry Ford is noted for his contribution to:

- A. Assembly Line Operations
- B. Balancing Fabrication Lines
- C. Time and Motion Studies
- D. Statistical Quality Control
- E. Scientific Management

**Question 4:**

Your manager claims that "A growth in Output improves Productivity". This statement is:

- A. Always true, your manager is never wrong
- B. Always wrong, as your manager is annoying and therefore, always wrong
- C. Wrong, as you need to somehow measure quality to make such a claim
- D. It depends, if Input remains unchanged, the claim is indeed true
- E. It depends, since this is usually the correct answer

**Question 5**

Which of the following are the essential functions of all business organizations?

- A. Marketing, Finance, Human Resources, Research and Development
- B. Sales, Accounting, Production
- C. Human Resources, Information Technology, Marketing, Accounting
- D. Marketing, Finance, Operations
- E. It depends on the nature of the business

**Question 6**

The service sector usually has lower productivity improvements than the manufacturing sector because:

- A. This is not true; service sector productivity is easy to improve
- B. The quality of output in services is lower in services than manufacturing
- C. It is cheaper to automate certain tasks in a service setting
- D. Services are usually labor intensive
- E. Output in services is hard to measure, therefore, it is underestimated leading to lower productivity

**Question 7**

Which of the following is least likely to promote a Cost-Leadership competitive advantage?

- A. Low overhead costs
- B. Mass production
- C. Inventory management
- D. Broad product line
- E. Effective and efficient use of capacity

**Question 8**

Which of the following Operations Management strategies should an organization with a product in the mature phase be least concerned with at this present time?

- A. Standardization
- B. Cost cutting
- C. Fewer rapid product changes
- D. Long production runs
- E. Increase capacity

**Question 9**

You own a hamburger stand that uses only 5 ingredients but offers 17 different burgers. This process is known as:

- A. CAD/CAM
- B. Robust Design
- C. Modular Design
- D. QFD
- E. Value Analysis

**Question 10**

Robust design ensures that a small variation in production or assembly does not adversely affect the product

- A. True
- B. False

**Question 11**

An assembly line consists of 149 tasks grouped into 32 stations. The largest assigned cycle time is 4 minutes and the sum of all task times is 105 minutes. The efficiency of this line is:

- A. 17.96875 %
- B. 82.03125%
- C. 30.47%
- D. 21 %
- E. There is not enough information to address this issue as some stations are operating at full capacity and some are not

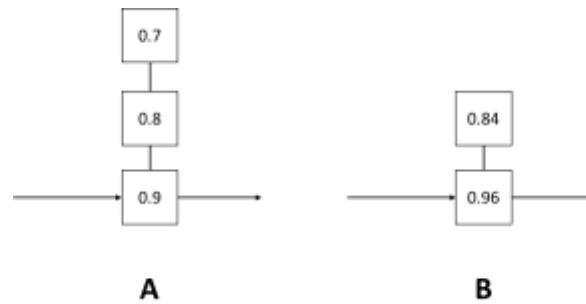
**Question 12**

Given a 480 minute work day, a daily requirement for 160 products, and a fabrication time of 15 minutes per product, what is the theoretical minimum number of stations?

- A. You can not produce 160 units in 480 minutes. To produce 160 units you need 2,400 minutes
- B. 5 stations
- C. 6 stations
- D. 3 stations
- E. 12 stations

**Question 13**

Which system has a higher reliability (objects on top of each other represent redundancies) ?



- A. System A
- B. System B
- C. Both have the same reliability
- D. It depends, as we don't know what the maintenance policy is and how it effects reliability
- E. There is not enough information to address the issue

**Question 14**

You are a producer of a brand new drone. You build the first drone in 100 hours. It is common belief that the learning rate for this type of activity is 85%. Given your knowledge of logarithmic learning curves, how long will it take you to build 4 drones?

- A. 334.54 hours
- B. 318.6625 hours
- C. 340 hours
- D. 400 hours
- E. There is not enough information to address the issue