

Question: 1

The following calculation of the net present value (NPV) of a project has been produced.

| | Year 0 | Years 1-8 | Year 8 |
|-----------------------------|-------------------|----------------------|-------------------|
| Asset purchase/disposal \$ | -80,000 | | 5,000 |
| Revenue \$ | | 60,000 | |
| Variable costs \$ | | 25,000 | |
| Fixed costs \$ | | 15,000 | |
| Cash flows \$ | -80,000 | 20,000 | 5,000 |
| Present value factor at 12% | 1.000 | 4.968 | 0.404 |
| Present value \$ | -80,000 | 99,360 | 2,020 |
| NPV \$ | | | 21,380 |

By how much can the forecast revenue decrease before the project is not viable?

- A. 7.2%
- B. 35.6%
- C. \$20,000 per year
- D. \$21,380 in total

Answer: A

Question: 2

A company produces a single product which is sold to one customer.

Components for the product are stored in a warehouse and when required for production they are inspected. Those passing the quality check are moved to the initial production line. Part-completed items are then inspected and those passing this second quality check are moved to the warehouse until required in the finishing process. After the finishing process the products are inspected, packaged and returned to the warehouse until required by the customer.

The company is considering implementing a full just-in-time (JIT) system for both purchasing and production and has asked your advice about the activities that will be necessary if this system is implemented.

Which THREE of the following activities will definitely be required in the proposed JIT system?

- A. Components received
- B. Components inspected
- C. Product manufactured
- D. Part finished product inspected
- E. Finished product stored

F. Finished product despatched to customer

Answer: A, C, F

Question: 3

A product requires one each of three different components.

Faulty components are identified only at the end of the manufacturing process.

The following average fault rates have been identified:

Component A – 1 in 100

Component B – 1 in 20

Component C – 1 in 10

The probability that a unit of finished product contains no faulty components is:

A. 0.84645

B. 0.00005

C. 0.99231

D. 0.97692

Answer: A

Question: 4

Which of the following is a valid objective of a transfer pricing system?

A. To achieve divisional autonomy

B. To maintain head office control

C. To establish centralised decision making

D. To develop a top-down culture

Answer: A

Question: 5

A company has just received the latest in a series of annual payments; this payment was \$620. The annual payments are expected to continue for three more years with each payment being increased by the expected rate of inflation. The real cost of capital is 8% per year and the expected rate of inflation is 6% per year.

What is the present value of the future payments the company expects to receive?

Give your answer to the nearest \$.

Answer: \$1598

Question: 6

The cash flows from a project are detailed in the table below.

| | Initial investment | Year 1 | Year 2 | Year 3 |
|--------------|---------------------------|---------------|---------------|---------------|
| Cash outflow | -\$52,175 | | | |
| Cash inflows | | \$20,000 | \$30,000 | \$10,000 |

To the nearest 1%, what is the project's internal rate of return?

- A. 15%
- B. 8%
- C. 46%
- D. 115%

Answer: B

Question: 7

Kaizen costing is being used by an organization to gradually reduce the unit cost of one of its products in order to achieve a 20% mark up on the product's cost.

The selling price of the product must be \$72 per unit and this selling price has been maintained for two years.

Two years ago the product's cost was \$3 per unit more than its selling price. Kaizen costing has achieved an 8% reduction from the previous period's unit cost in each of the past two years. The organization expects to continue to achieve the same rate of cost reduction next year.

Which of the following statements provides an accurate analysis of the extent to which Kaizen costing has been successful in achieving the required unit cost for the product?

- A. Kaizen costing has successfully achieved the necessary cost reduction.
- B. The current cost is \$63.00 per unit and the required unit cost will be achieved next year.
- C. Kaizen costing has not yet achieved the required unit cost of \$57.60 because a greater rate of reduction in costs was needed.

D. The current cost is \$63.48 per unit and the required unit cost will be achieved next year.

Answer: D

Question: 8

A manufacturing company is in the process of introducing just in time (JIT) and total quality management (TQM) into every aspect of its value chain.

Which TWO of the following are appropriate changes to make to the support activities in the organization's value chain?

- A. Inbound logistics would need to ensure that materials of appropriate quality are delivered on a just in time basis.
- B. Operations would need to be carried out on a right first time basis as any failure could delay production.
- C. After sales service would need to ensure that appraisal costs are kept to a minimum.
- D. Procurement would need to arrange to purchase goods so that they are delivered as required.
- E. Firm infrastructure would need to arrange appropriate training courses for staff.
- F. Technology development would need to ensure that processes are continually improving.

Answer: D, F

Question: 9

A supermarket group has experienced operational problems during recent years, including a shortage of warehousing space due to increasing turnover and poor inventory management. The product portfolio has expanded considerably. Although this has led to increased sales volume, marketing and logistics costs have increased disproportionately. Non product-specific costs have also increased significantly.

Management is now considering using Direct Product Profitability (DPP).

Which of the following statements are valid in respect of the possible implementation of DPP within the supermarket group?

Select ALL that apply.

- A. DPP should result in improved management of storage space.
- B. DPP should result in improved supplier relationships.
- C. DPP should result in improved pricing decisions.
- D. DPP requires non product-specific costs to be apportioned rather than allocated.
- E. DPP provides summary information on the profitability of each customer group.

Answer: A, B, C

Question: 10

Which of the following factors would prevent a learning curve being observed for a task?

- A. The task has a significant automated element.
- B. The task is repetitive.
- C. The task has a significant manual element.
- D. There is a low rate of labor turnover of the staff carrying out the task.

Answer: A

Question: 11

Which basis of transfer pricing retains the full autonomy of divisional managers?

- A. Full cost-plus pricing
- B. Variable cost-plus pricing
- C. Negotiated pricing
- D. Market based pricing

Answer: C

Question: 12

A division of a company transfers all its output to other divisions in the same company. For this division, which of the following measures is NOT affected by the transfer price that the division uses?

- A. Operating profit
- B. Return on investment
- C. Cost of components purchased
- D. Sales revenue

Answer: C

Question: 13

In an organization's transfer pricing system the selling division and the purchasing division each record a different price for the same transaction.

This is known as a:

- A. Dual pricing system.
- B. Two part tariff system.
- C. Full cost pricing system.
- D. Marginal cost plus pricing system.

Answer: A

Question: 14

The following data relate to an investment opportunity.

The percentage reduction in the annual revenue that could occur before the project is no longer financially viable is:

| | Year | Cash flow | Discount factor @ 10% | Present value |
|--------------------|------|------------|-----------------------|---------------|
| Initial investment | 0 | \$(50,000) | 1.000 | \$(50,000) |
| Revenue | 1-5 | \$28,000 | 3.791 | \$106,148 |
| Variable costs | 1-5 | \$(12,000) | 3.791 | \$(45,492) |
| Scrap proceeds | 5 | \$10,000 | 0.621 | \$6,210 |

- A. 15.9%
- B. 56.0%
- C. 28.6%
- D. 212.3%

Answer: A