MICRO EXERCISE

Total Cost of Ownership and Cost Objectives

CIPS Level 2 Module 1 (L2M1): Introducing Procurement and Supply

15 multiple-choice questions | total cost of ownership · total cost of acquisition · TCO factors · procurement cost objectives

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Instructions: Choose the one best answer for each question. Answers, with a brief reason for each, are given at the end of the paper.

Q1. What does total cost of ownership (TCO) mean?

- **A.** All the costs of an item over its whole life, from buying it to getting rid of it
- **B.** Only the price shown on the supplier's quote
- **C.** The cost of delivery only
- **D.** The amount the supplier pays its staff

Q2. What does total cost of acquisition (TCA) mean?

- **A.** All costs until the item is thrown away
- **B.** The cost of training staff to use the item
- **C.** The money an organisation must budget to receive the product or service
- **D.** The cost of insuring the item each year

Q3. *A company in Riyadh buys a photocopier. The price is SAR 20,000, delivery costs SAR 1,500 and customs duty is SAR 500. Maintenance will cost SAR 2,000 a year.*

What is the total cost of acquisition (TCA)?

- **A.** SAR 20,000
- **B.** SAR 22,000
- **C.** SAR 21,500
- **D.** SAR 24,000

Q4. *A warehouse in Dammam buys a forklift for SAR 80,000, including delivery. It plans to keep it for five years. Staff training costs SAR 5,000. Maintenance costs SAR 4,000 a year, fuel costs SAR 10,000 a year, and disposal at the end costs SAR 3,000.*

What is the total cost of ownership over the five years?

- **A.** SAR 80,000
- **B.** SAR 102,000
- **C.** SAR 155,000
- **D.** SAR 158,000

Q5. *A factory in Jeddah must pay for special moulds before a supplier can produce its new bottle design.*

Which TCO factor is this?

- **A.** Tooling
- **B.** Storage
- **C.** Disposal
- **D.** Insurance

Q6. *A shopping mall in Al Khobar installs new air-conditioning units. The electricity they use each month adds to the mall's bills.*

Which TCO factor is this?

- **A.** Tooling
- **B.** Operating
- **C.** Training
- **D.** Disposal

Q7. *A delivery company in Buraidah buys ten new vans and must pay each year to protect them against accidents and theft.*

Which TCO factor is this?

- **A.** Storage
- **B.** Tooling
- **C.** Operating
- **D.** Insurance

Q8. *A hospital in Abha buys new patient-records software. Nurses and doctors must attend two days of sessions to learn how to use it.*

Which TCO factor is this?

- **A.** Maintenance
- **B.** Insurance
- **C.** Training
- **D.** Disposal

Q9. *An oil services company in Jubail keeps spare parts for its pumps in a rented warehouse, ready for breakdowns.*

Which TCO factor is this?

- **A.** Storage
- **B.** Operating
- **C.** Tooling
- **D.** Training

Q10. *A clinic in Tabuk replaces its old X-ray machine. A licensed company must remove the old machine safely because it contains hazardous parts.*

Which TCO factor is this?

- **A.** Maintenance
- **B.** Insurance
- **C.** Storage
- **D.** Disposal

Q11. *A university in Taif has a contract for its lifts to be serviced every six months to keep them safe and working.*

Which TCO factor is this?

- **A.** Operating
- **B.** Maintenance
- **C.** Tooling
- **D.** Training

Q12. *A food factory in Hail compares two machines over four years. Machine A costs SAR 50,000 to buy and SAR 15,000 a year to run. Machine B costs SAR 70,000 to buy and SAR 8,000 a year to run.*

Which machine has the lower total cost of ownership, and why?

- **A.** Machine A, because it has the lower purchase price
- **B.** Machine A, because its total over four years is SAR 60,000
- **C.** Machine B, because its total over four years is SAR 102,000 compared with SAR 110,000 for Machine A
- **D.** Both machines cost the same over four years

Q13. Which statement about TCA and TCO is correct?

- **A.** TCA is part of TCO
- **B.** TCO is part of TCA
- **C.** TCA and TCO always give the same figure
- **D.** TCO only includes the purchase price

Q14. *The procurement team of a hospital in Al Ahsa checks the price it pays for surgical gloves against the prices paid by other hospitals in the region.*

Which procurement objective is the team working towards?

- **A.** Cross-functional working
- **B.** Benchmarking
- **C.** Ethical and sustainable buying
- **D.** Supplier management

Q15. Which of these is an objective of procurement in making the business cost effective and efficient?

- **A.** Paying more than competitors to impress suppliers
- **B.** Buying the most expensive option every time
- **C.** Reducing input costs
- **D.** Avoiding contact with other departments

Answer Key

Total Cost of Ownership and Cost Objectives: correct answers with brief reasons

Q	Answer	Reason
1	A	TCO, also called whole life cost or lifetime cost, includes every cost incurred over the life of a product or service.
2	C	TCA is the cost of getting the item: the amount needed to buy and receive it. It is only one part of TCO.
3	B	TCA covers the cost of buying and receiving the item: 20,000 + 1,500 + 500 = SAR 22,000. Maintenance is a running cost, so it belongs in TCO, not TCA.
4	D	80,000 + 5,000 + (4,000 x 5) + (10,000 x 5) + 3,000 = SAR 158,000. Leaving out disposal gives 155,000, which is a common mistake.
5	A	Tooling is the cost of special equipment, such as moulds or dies, needed to make the item.
6	B	Operating costs are the costs of running the item day to day, such as power, fuel and consumables.
7	D	Insurance protects the item against loss or damage and is paid throughout its life.
8	C	Training is the cost of teaching staff to use the new item. It is often forgotten when only the price is compared.
9	A	Storage is the cost of keeping items or spare parts until they are needed, including space and handling.
10	D	Disposal is the cost of removing and getting rid of an item at the end of its life, safely and legally.
11	B	Maintenance covers servicing and repairs that keep the item working throughout its life.
12	C	Machine A: 50,000 + (15,000 x 4) = SAR 110,000. Machine B: 70,000 + (8,000 x 4) = SAR 102,000. The lowest price does not always give the lowest total cost.
13	A	TCO includes the cost of acquisition plus all the costs of using, maintaining and disposing of the item.
14	B	Benchmarking checks that the price being paid is in line with what others are paying.
15	C	Procurement aims to reduce input costs while getting value for money. Other objectives include benchmarking, ethical and sustainable buying, supplier management and cross-functional working.