I. Multiple Choices

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| 1. D | 6. A |
| 2. B | 7. C |
| 3. C | 8. D |
| 4. A | 9. D |
| 5. A | 10. B |

II. Short Answer

1. Software professionals may overlook project cost management due to various reasons such as the focus on technical aspects, time constraints, or lack of experience.

This oversight can lead to cost overruns, delays, and even project failure, as it is crucial to understand and manage costs to complete projects within budget.

2. Basic principles of cost management include recognizing profits, considering life cycle costs, distinguishing between tangible and intangible costs and benefits, differentiating between direct and indirect costs, and establishing reserves for contingencies.

Profits – the difference between revenues and expenditures.

Life cycle costing (LCC) – a comprehensive approach that estimates the total costs associated with a project or asset throughout its entire life span, from planning through disposal. This method includes initial acquisition costs, operating and maintenance costs, and eventual disposal costs.

Tangible cost – the cost that is easily measurable in monetary terms

Intangible cost – the cost which is more challenging to quantify financially

Direct cost – the expenses that can be directly attributed to a specific project, such as salaries for project team members or costs for materials used in production.

Indirect cost – the costs that cannot be directly linked to a single project but are necessary for overall operations, such as utilities or administrative salaries.

3. A sunk cost is a cost that has already been incurred and cannot be changed or avoided.

Examples of typical sunk costs for a software project include development time invested, hardware and software purchases, and infrastructure setup.

In personal life, sunk costs could include tuition fees paid, a car purchased, or a vacation trip taken is difficult for people to ignore sunk costs because of the psychological tendency to want to recoup the investment made, even if it is not economically rational to do so.

4. Analogous estimating involves using historical data from similar projects to estimate costs for the current project.

Parametric estimating uses mathematical models and historical data to estimate costs based on factors such as size, complexity, and labor rates.

Bottom-up estimating involves breaking down the project into smaller, more manageable tasks and estimating costs for each task individually.

5. During the process to determine the project cost, each technique is applied to estimate costs for different aspects of the project. The estimates are then combined to obtain a comprehensive cost estimate for the project. This estimate is used to plan, manage, and track project expenses and ensure that the project stays within budget.