

## Chapter 2: The Project Management and Information Technology Context

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### TRUE/FALSE

1. Project managers should lead projects in isolation in order to truly serve the needs of the organization.

ANS: F

Even though projects are temporary and intended to provide a unique product or service, you cannot run projects in isolation. If project managers lead projects in isolation, it is unlikely that they will ever truly serve the needs of the organization.

PTS: 1

DIF: Difficulty: Easy

REF: p.45

OBJ: LO: 2-1

NAT: BUSPROG: Analytic

TOP: A Systems View of Project Management

KEY: Bloom's: Comprehension

2. Using a systems approach is critical to successful project management.

ANS: T

PTS: 1

DIF: Difficulty: Easy

REF: p. 45

OBJ: LO: 2-1

NAT: BUSPROG: Analytic

TOP: A Systems View of Project Management

KEY: Bloom's: Comprehension

3. Systems analysis addresses the business, technological, and organizational issues associated with creating, maintaining, and modifying a system.

ANS: F

Systems management addresses the business, technological, and organizational issues associated with creating, maintaining, and modifying a system.

PTS: 1

DIF: Difficulty: Moderate

REF: p. 45

OBJ: LO: 2-1

NAT: BUSPROG: Analytic

TOP: A Systems View of Project Management

KEY: Bloom's: Knowledge

4. Project managers and their teams must keep in mind the effects of any project on the interests and needs of the entire system or organization instead of focusing on the immediate concerns of the project.

ANS: T

Although it is easier to focus on the immediate and sometimes narrow concerns of a particular project, project managers and other staff must keep in mind the effects of any project on the interests and needs of the entire system or organization.

PTS: 1

DIF: Difficulty: Moderate

REF: p.46

OBJ: LO: 2-1

NAT: BUSPROG: Analytic

TOP: A Systems View of Project Management

KEY: Bloom's: Comprehension

5. When you separate business and organizational issues from project management planning, you do a better job of ensuring project success.

ANS: F

When you integrate business and organizational issues into project management planning and look at projects as a series of interrelated phases, you do a better job of ensuring project success.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.47  
OBJ: LO: 2-1                NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Comprehension

6. According to the symbolic frame, the most important aspect of any event in an organization is not what actually happened, but what it means.

ANS: T

The symbolic frame focuses on symbols and meanings. In this frame, the most important aspect of any event in an organization is not what actually happened, but what it means.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.48  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                      KEY: Bloom's: Knowledge

7. Most colleges and universities have very strong functional organizations.

ANS: T                      PTS: 1                      DIF: Difficulty: Moderate  
REF: p.49                      OBJ: LO: 2-2                      NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                      KEY: Bloom's: Knowledge

8. An organization that uses a project organizational structure earns their revenue primarily from performing projects for other groups under contract.

ANS: T

A project organizational structure is hierarchical, but instead of functional managers or vice presidents reporting to the CEO, program managers report to the CEO. Their staffs have a variety of skills needed to complete the projects within their programs. An organization that uses this structure earns its revenue primarily from performing projects for other groups under contract.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.50  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                      KEY: Bloom's: Knowledge

9. Project managers in matrix organizations have staff from various functional areas working on their projects.

ANS: T

Project managers in matrix organizations have staff from various functional areas working on their projects.

PTS: 1                      DIF: Difficulty: Easy                      REF: p. 50  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                      KEY: Bloom's: Knowledge

10. Most people believe that the underlying causes of many companies' problems can be traced to its organizational structure.

ANS: F

Organizational culture is very powerful, and many people believe the underlying causes of many companies' problems are not in the organizational structure or staff; they are in the culture.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic

TOP: Understanding Organizations            KEY: Bloom's: Knowledge

11. The same organization can have different subcultures.

ANS: T

It is also important to note that the same organization can have different subcultures. The IT department may have a different organizational culture than the finance department, for example.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.51  
OBJ: LO: 2-2            NAT: BUSPROG: Analytic  
TOP: Understanding Organizations            KEY: Bloom's: Knowledge

12. Project work is most successful in an organizational culture where activities are organized around individuals.

ANS: F

Project work is most successful in organizations in which work activities are organized around groups or teams, rather than individuals. An organizational culture that emphasizes group work is best for managing projects.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.51  
OBJ: LO: 2-2            NAT: BUSPROG: Analytic  
TOP: Understanding Organizations            KEY: Bloom's: Knowledge

13. An organizational culture with strong unit integration makes the project manager's job more difficult.

ANS: F

Most project managers strive for strong unit integration to deliver a successful product, service, or result. An organizational culture with strong unit integration makes the project manager's job easier.

PTS: 1                    DIF: Difficulty: Easy                    REF: p. 51  
OBJ: LO: 2-2            NAT: BUSPROG: Analytic  
LOC: Understanding Organizations            KEY: Bloom's: Comprehension

14. Internal stakeholders include groups affected by the project such as government officials or concerned citizens.

ANS: F

External project stakeholders include the project's customers (if they are external to the organization), competitors, suppliers, and other external groups potentially involved in the project or affected by it, such as government officials or concerned citizens.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.52  
OBJ: LO: 2-3            NAT: BUSPROG: Analytic                    TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

15. Project managers must take adequate time to identify, understand, and manage relationships with all project stakeholders.

ANS: T

Because the purpose of project management is to meet project requirements and satisfy stakeholders, it is critical that project managers take adequate time to identify, understand, and manage relationships with all project stakeholders.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.52-53  
OBJ: LO: 2-3            NAT: BUSPROG: Analytic                    TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

16. The best way to sustain a project is to withhold the required money, human resources, and visibility for the project.

ANS: F

The best way to kill a project is to withhold the required money, human resources, and visibility.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.54  
OBJ: LO: 2-3            NAT: BUSPROG: Analytic                    TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

17. Project managers must have cooperation from people in other parts of the organization.

ANS: T

Project managers must have cooperation from people in other parts of the organization. If certain functional managers are not responding to project managers' requests for necessary information, top management must step in to encourage the functional managers to cooperate.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.54  
OBJ: LO: 2-3            NAT: BUSPROG: Analytic                    TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

18. Standards and guidelines to follow when performing project management must be devised by top management.

ANS: T

The content of a project management plan and instructions for providing status information might seem like common sense to senior managers, but many new IT project managers have never created plans or created a nontechnical status report. Top management must support the development of these standards and guidelines, and encourage or even enforce their use.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.56  
OBJ: LO: 2-3            NAT: BUSPROG: Analytic                    TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

19. It is much more expensive to make major changes to a project during the earlier phases.

ANS: F

In early phases of a project life cycle, resource needs are usually lowest and the level of uncertainty is highest. It is much more expensive to make major changes to a project during latter phases.

PTS: 1                    DIF: Difficulty: Easy                    REF: p. 57  
OBJ: LO: 2-4            NAT: BUSPROG: Analytic                    KEY: Bloom's: Comprehension  
TOP: Project Phases and the Project Life Cycle

20. The last phase of the traditional project life cycle is the implementation phase.

ANS: F

The last phase of the traditional project life cycle is the close-out phase. In it, all of the work is completed, and customers should accept the entire project.

PTS: 1                    DIF: Difficulty: Moderate                    REF: p.59  
OBJ: LO: 2-4            NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle                    KEY: Bloom's: Knowledge

21. The Adaptive Software Development (ASD) life cycle model assumes that software development follows an adaptive approach because the requirements cannot be clearly expressed early in the life cycle.

ANS: T

The adaptive software development (ASD) life cycle model assumes that software development follows an adaptive approach because the requirements cannot be clearly expressed early in the life cycle.

PTS: 1                    DIF: Difficulty: Moderate                    REF: p.61  
OBJ: LO: 2-4            NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle                    KEY: Bloom's: Knowledge

22. An organization usually commits more money as a project continues, therefore a management review should occur after each phase to evaluate progress, potential success, and continued compatibility with organizational goals.

ANS: T

Because the organization usually commits more money as a project continues, a management review should occur after each phase to evaluate progress, potential success, and continued compatibility with organizational goals.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.62  
OBJ: LO: 2-4            NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle                    KEY: Bloom's: Comprehension

23. The nature of hardware development projects is more diverse than software-oriented projects.

ANS: F

The nature of software development projects is even more diverse than hardware-oriented projects. A software development project might include creating a simple, stand-alone Microsoft Excel or Access application, or a sophisticated, global e-commerce system that uses state-of-the-art programming languages and runs on multiple platforms.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.64  
OBJ: LO: 2-5            NAT: BUSPROG: Analytic  
TOP: The Context of Information Technology Projects                    KEY: Bloom's: Knowledge

24. The team members of a virtual team are all of the same nationality.

ANS: F

A virtual team is a group of people who work together despite time and space boundaries using communication technologies. Team members might all work for the same company in the same country, or they might include employees as well as independent consultants, suppliers, or even volunteers providing their expertise from around the globe.

PTS: 1                    DIF: Difficulty: Easy                    REF: p.67  
OBJ: LO: 2-6            NAT: BUSPROG: Analytic  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

25. Leadership style has no impact on the success of virtual teams.

ANS: F

The project manager's leadership style affects all teams, especially virtual ones.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.68  
OBJ: LO: 2-6              NAT: BUSPROG: Analytic  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

## MULTIPLE CHOICE

1. Projects must operate in a broad organizational environment, and project managers need to consider projects within the greater organizational context. \_\_\_\_\_ describes this holistic view of carrying out projects within the context of the organization.
- a. Linear analysis
  - b. Systems thinking
  - c. Reductionism
  - d. The silo approach

ANS: B

To handle complex situations effectively, project managers need to take a holistic view of a project and understand how it relates to the larger organization. Systems thinking describes this holistic view of carrying out projects within the context of the organization.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

2. \_\_\_\_\_ refers to a problem-solving approach that requires defining the scope of a system, dividing it into its components, and then identifying and evaluating its problems, opportunities, constraints, and needs.
- a. Linear programming
  - b. Independent component analysis
  - c. Principal component analysis
  - d. Systems analysis

ANS: D

Systems analysis is a problem-solving approach that requires defining the scope of the system, dividing it into components, and then identifying and evaluating its problems, opportunities, constraints, and needs.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

3. The symbolic perspective of an organization:
- a. focuses on different groups' roles and responsibilities to meet the goals and policies set by top management.
  - b. views the organization as coalitions composed of varied individuals and interest groups.
  - c. focuses on providing harmony between the needs of the organization and the needs of people.
  - d. focuses on the meanings of the culture, language, traditions, and image of the organization.

ANS: D

The symbolic frame focuses on symbols and meanings. In this frame, the most important aspect of any event in an organization is not what actually happened, but what it means.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.46  
OBJ: LO: 2-1                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                KEY: Bloom's: Comprehension

4. The \_\_\_\_ perspective of an organization focuses on different groups' roles and responsibilities in order to meet the goals and policies set by top management.
- a. structural frame
  - b. human resources frame
  - c. political frame
  - d. symbolic frame

ANS: A

The structural frame deals with how the organization is structured (usually depicted in an organizational chart) and focuses on different groups' roles and responsibilities to meet the goals and policies set by top management. This frame is very rational and focuses on coordination and control.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.47  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                KEY: Bloom's: Knowledge

5. The \_\_\_\_ frame of an organization focuses on providing harmony between the needs of the organization and the needs of people.
- a. structural
  - b. human resources
  - c. political
  - d. symbolic

ANS: B

The human resources (HR) frame focuses on producing harmony between the needs of the organization and the needs of people. It recognizes that mismatches can occur between the needs of the organization and those of individuals and groups, and works to resolve any potential problems.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.47  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                KEY: Bloom's: Application

6. The \_\_\_\_ perspective on organizations assumes that organizations are coalitions composed of varied individuals and interest groups.
- a. political frame
  - b. symbolic frame
  - c. structural frame
  - d. human resources frame

ANS: A

The political frame addresses organizational and personal politics. Politics in organizations take the form of competition among groups or individuals for power and leadership. The political frame assumes that organizations are coalitions composed of varied individuals and interest groups.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.48  
OBJ: LO: 2-2                NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                KEY: Bloom's: Knowledge

7. Grey's Infotech sells customized hardware and software solutions for businesses. The salespeople for Grey's have a strict dress code when meeting clients. They are required to wear dark business suits, in order to convey the company's dedication to quality. The meaning conveyed to the clients' through the salespeople's clothing is part of the \_\_\_\_ frame of the organization.
- a. political
  - b. symbolic
  - c. structural
  - d. human resources

ANS: B

The symbolic frame focuses on symbols and meanings. In this frame, the most important aspect of any event in an organization is not what actually happened, but what it means. The symbolic frame also relates to the company's culture. How do people dress? How many hours do they work? How do they run meetings?

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.48  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Application

8. In Rizzati Corp, vice presidents in departments such as engineering, manufacturing, IT, and human resources report directly to the chief executive officer and undertake their tasks independently of each other. The staffs of these departments have specialized skills in their respective disciplines. Rizzati Corp can be said to have a \_\_\_\_\_ organizational structure.
- a. project
  - b. symbolic
  - c. matrix
  - d. functional

ANS: D

A functional organizational structure is the hierarchy most people think of when picturing an organizational chart. Functional managers or vice presidents in specialties such as engineering, manufacturing, IT, and human resources report to the chief executive officer (CEO).

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.49  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Application

9. In a \_\_\_\_\_ organizational structure, program managers, rather than functional managers or vice presidents, report to the CEO. Their staffs have a variety of skills needed to complete all required tasks within their programs.
- a. project
  - b. symbolic
  - c. matrix
  - d. functional

ANS: A

A project organizational structure also is hierarchical, but instead of functional managers or vice presidents reporting to the CEO, program managers report to the CEO.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

10. In a \_\_\_\_\_ organizational structure, personnel often report to both a functional manager and one or more project managers.
- a. project
  - b. symbolic
  - c. matrix
  - d. functional

ANS: C

A matrix organizational structure represents the middle ground between functional and project structures. Personnel often report both to a functional manager and one or more project managers.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p. 50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

11. Project managers have the most authority in a pure \_\_\_\_\_ organizational structure.
- a. functional
  - b. project
  - c. matrix
  - d. circular



ANS: B

Project managers have the most authority in a pure project organizational structure and the least amount of authority in a pure functional organizational structure.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

12. Project managers have the least amount of authority in a pure \_\_\_\_\_ organizational structure.
- a. functional
  - b. project
  - c. matrix
  - d. circular

ANS: A

Project managers have the most authority in a pure project organizational structure and the least amount of authority in a pure functional organizational structure.

PTS: 1                      DIF: Difficulty: Easy                      REF: P.50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

13. Which of the following is true of a matrix organizational structure?
- a. In a matrix organizational structure, employees are organized into departments according to their skills, and there is little interaction between employees from different departments.
  - b. Project managers in matrix organizations have staff from only a single functional area working on their projects.
  - c. In a strong matrix organizational structure, the project manager controls the project budget and has moderate to high authority.
  - d. A matrix organizational structure is hierarchical, but instead of functional managers reporting to the CEO, program managers report to the CEO.

ANS: C

In a strong matrix organizational structure, the project manager controls the project budget and has moderate to high authority.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

14. \_\_\_\_\_ refers to a set of shared assumptions, values, and behaviors that characterize the functioning of an organization.
- a. Chain of command
  - b. Line of control
  - c. Organizational culture
  - d. Organizational structure

ANS: C

Organizational culture is a set of shared assumptions, values, and behaviors that characterize the functioning of an organization. It often includes elements of the four frames.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

15. The \_\_\_\_\_ characteristic of organizational culture describes the degree to which management's decisions take into account the effect of outcomes on people within the organization.

- a. member identity
- b. group emphasis
- c. people focus
- d. unit integration

ANS: C

The people focus characteristic of organizational culture describes the degree to which management's decisions take into account the effect of outcomes on people within the organization. Good project managers often balance the needs of individuals and the organization.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
 OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
 TOP: Understanding Organizations              KEY: Bloom's: Knowledge

16. \_\_\_\_\_ refers to the degree to which employees identify with the organization as a whole, rather than with their types of job or profession.
- a. Member identity
  - b. People focus
  - c. Group emphasis
  - d. Unit integration

ANS: A

Member identity refers to the degree to which employees identify with the organization as a whole, rather than with their types of job or profession.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
 OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
 TOP: Understanding Organizations              KEY: Bloom's: Knowledge

17. \_\_\_\_\_ refers to the degree to which departments within an organization are encouraged to coordinate with each other.
- a. Member identity
  - b. People focus
  - c. Group emphasis
  - d. Unit integration

ANS: D

Unit integration refers to the degree to which units or departments within an organization are encouraged to coordinate with each other.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
 OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
 TOP: Understanding Organizations              KEY: Bloom's: Knowledge

18. In organizational culture, people focus refers to \_\_\_\_\_.
- a. the degree to which the organization monitors and responds to changes in the external environment
  - b. the degree to which rules, policies, and direct supervision are used to oversee and control employee behavior
  - c. the degree to which management's decisions take into account the effect of outcomes on employees within the organization
  - d. the degree to which employees are encouraged to be aggressive, innovative, and risk seeking

ANS: C

People focus refers to the degree to which management's decisions take into account the effect of outcomes on people within the organization.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.51  
 OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
 TOP: Understanding Organizations              KEY: Bloom's: Knowledge

19. In organizational culture, means-end orientation refers to \_\_\_\_\_.  
a. the degree to which the organization monitors and responds to changes in the external environment  
b. the degree to which rules, policies, and direct supervision are used to oversee and control employee behavior  
c. the degree to which management focuses on outcomes rather than on techniques and processes used to achieve results  
d. the degree to which employees are encouraged to be aggressive, innovative, and risk seeking

ANS: C

Means-ends orientation refers to the degree to which management focuses on outcomes rather than on techniques and processes used to achieve results.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.52  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

20. \_\_\_\_\_ refers to the degree to which the organization monitors and responds to changes in the external environment.  
a. Means-ends orientation  
b. Open-systems focus  
c. Conflict tolerance  
d. Risk tolerance

ANS: B

Open-systems focus refers to the degree to which the organization monitors and responds to changes in the external environment

PTS: 1                      DIF: Difficulty: Easy                      REF: p.52  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

21. In organizational culture, control refers to \_\_\_\_\_.  
a. the degree to which the organization monitors and responds to changes in the external environment  
b. the degree to which rules, policies, and direct supervision are used to oversee employee behavior  
c. the degree to which management focuses on outcomes rather than on techniques and processes used to achieve results  
d. the degree to which employees are encouraged to be aggressive, innovative, and risk seeking

ANS: B

Control refers to the degree to which rules, policies, and direct supervision are used to oversee and control employee behavior.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.52  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

22. \_\_\_\_\_ are an example of external stakeholders for an organization.  
a. Top managers  
b. Functional managers  
c. Employees  
d. Competitors

ANS: D

External project stakeholders include the project's customers (if they are external to the organization), competitors, suppliers, and other external groups potentially involved in the project or affected by it, such as government officials or concerned citizens.

PTS: 1                      DIF: Difficulty: Easy                      REF: p.52

OBJ: LO: 2-3 NAT: BUSPROG: Analytic  
KEY: Bloom's: Knowledge

TOP: Stakeholder Management

23. A(n) \_\_\_\_\_ refers to a product or service, such as a technical report, a training session, a piece of hardware, or a segment of software code, produced or provided as part of a project.
- a. deliverable
  - b. input
  - c. system
  - d. resource

ANS: A

A deliverable is a product or service, such as a technical report, a training session, a piece of hardware, or a segment of software code, produced or provided as part of a project.

PTS: 1 DIF: Difficulty: Easy  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.56

KEY: Bloom's: Knowledge

24. Which of the following is true of the project life cycle?
- a. In the early phases of a project life cycle, resource needs are usually lowest.
  - b. In the later phases of the project life cycle, the level of uncertainty is usually the highest.
  - c. It is much more expensive to make major changes to a project during the earlier phases than the latter phases.
  - d. More resources are usually needed during the initial phases of a project than during the middle or final phases.

ANS: A

In the early phases of a project life cycle, resource needs are usually lowest and the level of uncertainty is highest.

PTS: 1 DIF: Difficulty: Moderate  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.57

KEY: Bloom's: Knowledge

25. The first two traditional project phases (concept and development) focus on planning, and are often referred to as \_\_\_\_\_.
- a. project feasibility
  - b. project acquisition
  - c. project implementation
  - d. project close-out

ANS: A

The first two traditional project phases (concept and development) focus on planning, and are often referred to as project feasibility.

PTS: 1 DIF: Difficulty: Easy  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.57

KEY: Bloom's: Knowledge

26. A preliminary or rough cost estimate is developed in the \_\_\_\_\_ phase of the project life cycle, and an overview of the work involved is created.
- a. implementation
  - b. acquisition
  - c. concept
  - d. close-out

ANS: C

In the concept phase of a project, managers usually develop some type of business case, which describes the need for the project and basic underlying concepts. A preliminary or rough cost estimate is developed in this first phase, and an overview of the required work is created.

PTS: 1 DIF: Difficulty: Moderate  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.57

KEY: Bloom's: Knowledge

27. In the development phase of the project life cycle:
- a. the project team creates more detailed project plans, a more accurate cost estimate, and a more thorough WBS.
  - b. the project team delivers the required work, and provides performance reports to stakeholders.
  - c. managers develop a business case, which describes the need for the project and basic underlying concepts.
  - d. managers prepare a preliminary or rough cost estimate for the required work.

ANS: A

In the development phase, the project team creates more detailed project management plans, a more accurate cost estimate, and a more thorough WBS.

PTS: 1 DIF: Difficulty: Moderate  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.58

KEY: Bloom's: Knowledge

28. In the \_\_\_\_\_ phase, the project team creates a definitive or very accurate cost estimate, delivers the required work, and provides performance reports to stakeholders.
- a. development
  - b. implementation
  - c. concept
  - d. close-out

ANS: B

The third phase of the traditional project life cycle is implementation. In this phase, the project team creates a definitive or very accurate cost estimate, delivers the required work, and provides performance reports to stakeholders.

PTS: 1 DIF: Difficulty: Moderate  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p. 58

KEY: Bloom's: Knowledge

29. The \_\_\_\_\_ model of a systems development life cycle assumes that requirements will remain stable after they are defined.
- a. spiral life cycle
  - b. waterfall life cycle
  - c. incremental build life cycle
  - d. RAD life cycle

ANS: B

The waterfall life cycle model has well-defined, linear stages of systems analysis, design, construction, testing, and support. This life cycle model assumes that requirements will remain stable after they are defined.

PTS: 1 DIF: Difficulty: Moderate  
OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

REF: p.60

KEY: Bloom's: Knowledge

30. The \_\_\_\_\_ model of a systems development life cycle provides for progressive development of operational software, with each release providing added capabilities.
- a. spiral life cycle
  - b. RAD life cycle
  - c. waterfall life cycle
  - d. incremental build life cycle

ANS: D

The incremental build life cycle model provides for progressive development of operational software, with each release providing added capabilities.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.60  
OBJ: LO: 2-4              NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle                      KEY: Bloom's: Knowledge

31. In the \_\_\_\_\_ model, developers use a model to generate functional requirements and physical design specifications simultaneously.
- a. RAD life cycle
  - b. prototyping life cycle
  - c. spiral life cycle
  - d. incremental build life cycle

ANS: B

The prototyping life cycle model is used for developing software prototypes to clarify user requirements for operational software. It requires heavy user involvement, and developers use a model to generate functional requirements and physical design specifications simultaneously. This approach is often used in systems that involve a great deal of user interface design, such as website projects.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.61  
OBJ: LO: 2-4              NAT: BUSPROG: Technology  
TOP: Project Phases and the Project Life Cycle                      KEY: Bloom's: Knowledge

32. The \_\_\_\_\_ model uses an approach in which developers work with an evolving prototype, using tools such as computer-aided software engineering, joint requirements planning, and joint application design to facilitate rapid prototyping and code generation.
- a. incremental build life cycle
  - b. waterfall life cycle
  - c. RAD life cycle
  - d. spiral life cycle

ANS: C

The RAD life cycle model uses an approach in which developers work with an evolving prototype. This life cycle model also requires heavy user involvement and helps produce systems quickly without sacrificing quality.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.61  
OBJ: LO: 2-4              NAT: BUSPROG: Technology  
TOP: Project Phases and the Project Life Cycle                      KEY: Bloom's: Knowledge

33. Which of the following best describes a kill point in the project life cycle?
- a. The period of time given to managers during the feasibility phases to decide on the cost, quality, and time constraints for the project
  - b. A review of the status of a project at each phase of development to determine if it should be continued, redirected, or terminated
  - c. The point of time in the project lifecycle after which it is impossible to terminate a running project
  - d. The final submission of the project deliverables after which the project is terminated

ANS: B

A management review should occur after each phase to evaluate progress, potential success, and continued compatibility with organizational goals. These management reviews, called phase exits or kill points, are very important for keeping projects on track and determining if they should be continued, redirected, or terminated.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.62

OBJ: LO: 2-4 NAT: BUSPROG: Analytic  
TOP: Project Phases and the Project Life Cycle

KEY: Bloom's: Comprehension

34. Which of the following is a disadvantage of virtual teams as compared to traditional teams?
- a. Increased costs for office space and support
  - b. Reduced opportunities for informal transfer of information
  - c. Limited flexibility in team working hours
  - d. Reduced dependence on technology and processes for accomplishing work

ANS: B

Virtual teams reduce the ability of team members to network and transfer information informally.

PTS: 1 DIF: Difficulty: Moderate REF: p. 67  
OBJ: LO: 2-6 NAT: BUSPROG: Technology  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

35. Which of the following best describes outsourcing?
- a. An organization selling its products in a market outside its domestic market
  - b. An organization's acquisition of goods and services from an outside source
  - c. An organization setting up manufacturing and retailing facilities in a new country
  - d. An organization's use of virtual teams with employees located in different countries

ANS: B

Outsourcing is an organization's acquisition of goods and services from an outside source. The term offshoring is sometimes used to describe outsourcing from another country.

PTS: 1 DIF: Difficulty: Moderate REF: p. 66  
OBJ: LO: 2-6 NAT: BUSPROG: Technology  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

36. Which of the following is true of virtual teams?
- a. It is easier for a virtual team to build relationships and trust.
  - b. Negative incentives do not impact virtual team members.
  - c. It is important to select team members carefully.
  - d. As they never meet, virtual teams do not have conflicts.

ANS: C

It is important to select team members carefully and to form a team in which all roles are covered. All virtual team members must also understand their roles on the team.

PTS: 1 DIF: Difficulty: Easy REF: p. 68  
OBJ: LO: 2-6 NAT: BUSPROG: Analytic  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Comprehension

37. Which of the following is true of the agile approach to software development?
- a. In the agile method, requirements and solutions evolve through collaboration.
  - b. An agile approach sets scope goals, but leaves time and cost goals flexible.
  - c. Agile is a predictive model of software development.
  - d. In the agile approach, requirements must be clearly expressed early in the life cycle.

ANS: A

Agile means using a method based on iterative and incremental development, in which requirements and solutions evolve through collaboration.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p. 69  
OBJ: LO: 2-6              NAT: BUSPROG: Technology  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

## COMPLETION

1. A(n) \_\_\_\_\_ is an overall model for thinking about things as sets of interacting components working within an environment to fulfill some purpose.

ANS: systems philosophy

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

2. \_\_\_\_\_ are sets of interacting components working within an environment to fulfill some purpose.

ANS: Systems

PTS: 1                      DIF: Difficulty: Easy                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

3. \_\_\_\_\_ addresses the business, technological, and organizational issues associated with creating, maintaining, and making a change to a system.

ANS: Systems management

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

4. The three spheres of systems management are business, organization, and \_\_\_\_\_.

ANS: technology

PTS: 1                      DIF: Difficulty: Easy                      REF: p.46  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

5. The \_\_\_\_\_ frame of the organization is the one that is usually depicted in an organizational chart.

ANS: structural

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.47  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations                      KEY: Bloom's: Knowledge

6. The \_\_\_\_\_ frame of an organization relates to the company's culture.



ANS: symbolic

PTS: 1                      DIF: Difficulty: Easy                      REF: p.48  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Comprehension

7. Three general classifications of organizational structures are \_\_\_\_\_, project, and matrix.

ANS: functional

PTS: 1                      DIF: Difficulty: Easy                      REF: p. 49  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

8. In a(n) \_\_\_\_\_ organizational structure, project managers have little or no authority.

ANS: functional

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.50  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

9. \_\_\_\_\_ refers to the degree to which rules, policies, and direct supervision are used to oversee employee behavior.

ANS: Control

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.52  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

10. \_\_\_\_\_ refers to the degree to which work activities are organized around teams, rather than individuals.

ANS: Group emphasis

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.52  
OBJ: LO: 2-2              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

11. Some projects have a senior manager called a(n)\_\_\_\_\_ who acts as a key proponent for a project.

ANS: champion

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.54  
OBJ: LO: 2-3              NAT: BUSPROG: Analytic                      TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

12. A major element of good practice concerns \_\_\_\_\_, which addresses the authority and control for key IT activities in organizations, including IT infrastructure, IT use, and project management.

ANS: IT governance

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.55  
OBJ: LO: 2-3                NAT: BUSPROG: Technology                      TOP: Stakeholder Management  
KEY: Bloom's: Knowledge

13. A(n) \_\_\_\_\_ refers to a product or service, such as a report, a training session, a piece of hardware, or a segment of software code, produced or provided as part of a project.

ANS: deliverable

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.56  
OBJ: LO: 2-4                NAT: BUSPROG: Analytic                      KEY: Bloom's: Knowledge  
TOP: Project Phases and the Project Life Cycle

14. In the \_\_\_\_\_ phase of the project life cycle, the work is completed, and customers should accept the entire project.

ANS: close-out

PTS: 1                      DIF: Difficulty: Easy                      REF: p.59  
OBJ: LO: 2-4                NAT: BUSPROG: Analytic                      KEY: Bloom's: Knowledge  
TOP: Project Phases and the Project Life Cycle

15. A(n) \_\_\_\_\_ is a framework for describing the phases involved in developing information systems.

ANS:  
SDLC  
systems development life cycle  
systems development life cycle (SDLC)

PTS: 1                      DIF: Difficulty: Easy                      REF: p.59  
OBJ: LO: 2-4                NAT: BUSPROG: Technology                      KEY: Bloom's: Knowledge  
TOP: Project Phases and the Project Life Cycle

16. \_\_\_\_\_ life cycle models of systems development assume that the scope of the project can be articulated clearly and the schedule and cost can be predicted accurately.

ANS: Predictive

PTS: 1                      DIF: Difficulty: Easy                      REF: p.60  
OBJ: LO: 2-4                NAT: BUSPROG: Technology                      KEY: Bloom's: Knowledge  
TOP: Project Phases and the Project Life Cycle

17. The term \_\_\_\_\_ describes new approaches that focus on close collaboration between programming teams and business experts.

ANS: agile software development

PTS: 1                      DIF: Difficulty: Moderate                      REF: p. 61  
OBJ: LO: 2-4                NAT: BUSPROG: Technology                      KEY: Bloom's: Knowledge  
TOP: Project Phases and the Project Life Cycle

18. \_\_\_\_\_ is an organization's acquisition of goods and services from an outside source.

ANS: Outsourcing

PTS: 1                      DIF: Difficulty: Easy                      REF: p.61  
OBJ: LO: 2-6              NAT: BUSPROG: Technology  
TOP: Recent Trends Affecting Information Technology Project Management  
KEY: Bloom's: Knowledge

## ESSAY

1. Describe the concept of a systems approach.

ANS:

The term **systems approach** emerged in the 1950s to describe a holistic and analytical approach to solving complex problems that includes using a systems philosophy, systems analysis, and systems management. A **systems philosophy** is an overall model for thinking about things as systems. **Systems** are sets of interacting components working within an environment to fulfill some purpose. For example, the human body is a system composed of many subsystems—the nervous system, the skeletal system, the circulatory system, the digestive system, and so on. **Systems analysis** is a problem-solving approach that requires defining the scope of the system, dividing it into its components, and then identifying and evaluating its problems, opportunities, constraints, and needs. Once this is completed, the systems analyst then examines alternative solutions for improving the current situation, identifies an optimum, or at least satisfactory, solution or action plan, and examines that plan against the entire system. **Systems management** addresses the business, technological, and organizational issues associated with creating, maintaining, and modifying a system.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.45  
OBJ: LO: 2-1              NAT: BUSPROG: Analytic  
TOP: A Systems View of Project Management                      KEY: Bloom's: Knowledge

2. What are the four frames of organizations? Describe each frame.

ANS:

The **structural frame** deals with how the organization is structured (usually depicted in an organizational chart) and focuses on different groups' roles and responsibilities in order to meet the goals and policies set by top management. This frame is very rational and focuses on coordination and control. For example, within the structural frame, a key information technology issue is whether a company should centralize the information technology personnel in one department or decentralize across several departments.

The **human resources frame** focuses on producing harmony between the needs of the organization and the needs of the people. It recognizes that there are often mismatches between the needs of the organization and the needs of individuals and groups and works to resolve any potential problems. For example, many projects might be more efficient for the organization if personnel worked 80 or more hours a week for several months. This work schedule would probably conflict with the personal lives of those people. Important issues in information technology related to the human resources frame are the shortage of skilled information technology workers within the organization and unrealistic schedules imposed on many projects.

The **political frame** addresses organizational and personal politics. Politics in organizations take the form of competition among groups or individuals for power and leadership. The political frame assumes that organizations are coalitions composed of varied individuals and interest groups. Often, important decisions need to be made based on the allocation of scarce resources. Competition for scarce resources makes conflict a central issue in organizations, and power improves the ability to obtain scarce resources. Project managers must pay attention to politics and power if they are to be effective. It is important to know who opposes your projects as well as who supports them. Important issues in information technology related to the political frame are the power shifts from central functions to operating units or from functional managers to project managers.

The **symbolic frame** focuses on symbols and meanings. What is most important about any event in an organization is not what actually happened, but what it means. Was it a good sign that the CEO came to a kickoff meeting for a project, or was it a threat? The symbolic frame also relates to the company's culture. How do people dress? How many hours do they work? How do they run meetings? Many information technology projects are international and include stakeholders from various cultures. Understanding those cultures is also a crucial part of the symbolic frame.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.47-48  
OBJ: LO: 2-2              NAT: BUSPROG: Technology  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

3. Describe each of the three major types of organizational structure.

ANS:

A **functional organizational structure** is the hierarchy most people think of when picturing an organizational chart. Functional managers or vice presidents in specialties such as engineering, manufacturing, information technology (IT), and human resources (HR) report to the chief executive officer (CEO). Their staffs have specialized skills in their respective disciplines. For example, most colleges and universities have very strong functional organizations. Only faculty in the Business department teach business courses; faculty in the History department teach history; faculty in the Art department teach art, and so on.

A **project organizational structure** also has a hierarchical structure, but instead of functional managers or vice presidents reporting to the CEO, program managers report to the CEO. Their staffs have a variety of skills needed to complete the projects within their programs. An organization that uses this structure earns their revenue primarily from performing projects for other groups under contract. For example, many defense, architectural, engineering, and consulting companies use a project organizational structure. These companies often hire people specifically to work on particular projects.

A **matrix organizational structure** represents the middle ground between functional and project structures. Personnel often report to both a functional manager and one or more project managers. For example, information technology personnel at many companies often split their time between two or more projects, but they report to their manager in the Information Technology department. Project managers in matrix organizations have staff from various functional areas working on their projects. Matrix organizational structures can be strong, weak, or balanced, based on the amount of control exerted by the project managers.

PTS: 1                      DIF: Difficulty: Moderate                      REF: p.49-51  
OBJ: LO: 2-3              NAT: BUSPROG: Analytic  
TOP: Understanding Organizations              KEY: Bloom's: Knowledge

4. Why is top management commitment crucial for project managers?

ANS:

Project managers need adequate resources. The best way to kill a project is to withhold the required money, human resources, and visibility for the project. If project managers have top management commitment, they will also have adequate resources and not be distracted by events that do not affect their specific projects.

Project managers often require approval for unique project needs in a timely manner. For example, on large information technology projects, top management must understand that unexpected problems may result from the nature of the products being produced and the specific skills of the people on the project team. For example, the team might need additional hardware and software halfway through the project for proper testing, or the project manager might need to offer special pay and benefits to attract and retain key project personnel. With top management commitment, project managers can meet these specific needs in a timely manner.

Project managers must have cooperation from people in other parts of the organization. Since most information technology projects cut across functional areas, top management must help project managers deal with the political issues that often arise in these types of situations. If certain functional managers are not responding to project managers' requests for necessary information, top management must step in to encourage functional managers to cooperate.

Project managers often need someone to mentor and coach them on leadership issues. Many information technology project managers come from technical positions and are inexperienced as managers. Senior managers should take the time to pass on advice on how to be good leaders. They should encourage new project managers to take classes to develop leadership skills and allocate the time and funds for them to do so.

PTS: 1

DIF: Difficulty: Moderate

REF: p. 54-55

OBJ: LO: 2-3

NAT: BUSPROG: Analytic

TOP: Stakeholder Management

KEY: Bloom's: Comprehension

5. What is a systems development life cycle? What are some of the predictive models associated with the systems development life cycle?

ANS:

A **systems development life cycle (SDLC)** is a framework for describing the phases involved in developing information systems. Some popular models of a systems development life cycle include the waterfall model, the spiral model, the incremental build model, the prototyping model, and the Rapid Application Development (RAD) model. These life cycle models are examples of a **predictive life cycle**, meaning that the scope of the project can be clearly articulated and the schedule and cost can be accurately predicted. The project team spends a large portion of the project effort attempting to clarify the requirements of the entire system and then producing a design. Users are often unable to see any tangible results in terms of working software for an extended period. Below are brief descriptions of several predictive SDLC models:

The waterfall life cycle model has well-defined, linear stages of systems development and support. This life cycle model assumes that requirements will remain stable after they are defined.

The spiral life cycle model was developed based on experience with various refinements of the waterfall model as applied to large government software projects. It recognizes the fact that most software is developed using an iterative or spiral approach rather than a linear approach.

The incremental build life cycle model provides for progressive development of operational software, with each release providing added capabilities.

The prototyping life cycle model is used for developing software prototypes to clarify user requirements for operational software. It requires heavy user involvement, and developers use a model to generate functional requirements and physical design specifications simultaneously. Developers can throw away or keep prototypes, depending on the project.

The Rapid Application Development (RAD) life cycle model uses an approach in which developers work with an evolving prototype. This life cycle model also requires heavy user involvement and helps produce systems quickly without sacrificing quality. Developers use RAD tools such as CASE (Computer Aided Software Engineering), JRP (Joint Requirements Planning), and JAD (Joint Application Design) to facilitate rapid prototyping and code generation.

PTS: 1

DIF: Difficulty: Moderate

REF: p. 60-61

OBJ: LO: 2-4

NAT: BUSPROG: Analytic

TOP: Project Phases and the Project Life Cycle

KEY: Bloom's: Knowledge