Chapter 1: Introduction to Project Management

TRUE/FALSE

1. Until the 1980s, project management primarily focused on providing schedule and resource data to top management in the military, computer, and construction industries.

   ANS: T　　　　PTS: 1　　　　REF: 2

2. Worldwide IT spending is expected to grow between 14 percent and 16 percent in the next few years.

   ANS: F　　　　PTS: 1　　　　REF: 3

3. One attribute that helps define a project is that a project has a unique purpose.

   ANS: T　　　　PTS: 1　　　　REF: 7

4. A project should be developed using progressive elaboration, starting from specific details and broadening in scope as it progresses.

   ANS: F　　　　PTS: 1　　　　REF: 7

5. Projects are often defined narrowly when they begin.

   ANS: F　　　　PTS: 1　　　　REF: 7

6. Projects rarely involve uncertainty.

   ANS: F　　　　PTS: 1　　　　REF: 8

7. Every project is constrained in different ways by its scope and cost goals. These limitations are sometimes referred to in project management as the double constraint.

   ANS: F　　　　PTS: 1　　　　REF: 8

8. Questions about how long a project's schedule should be are related to the issue of the project's scope.

   ANS: F　　　　PTS: 1　　　　REF: 8

9. Because projects involve uncertainty and limited resources, projects rarely finish according to discrete scope, time, and cost goals originally planned.

   ANS: T　　　　PTS: 1　　　　REF: 9

10. Managing the triple constraint involves making trade-offs between scope, time, and cost goals for a project.

    ANS: T　　　　PTS: 1　　　　REF: 9

11. Some people refer to the "*double constraint*" of project management to include quality and customer satisfaction.

ANS: F   PTS: 1   REF: 10

12. In the example of building a new house, the support staff would provide the wood, windows, flooring materials, appliances, and so on.

ANS: F   PTS: 1   REF: 12

13. Stakeholders' needs and expectations are only important in the beginning of a project.

ANS: F   PTS: 1   REF: 12

14. There are six core knowledge areas of project management.

ANS: F   PTS: 1   REF: 12

15. Follow-up studies done by the Standish Group showed that the number of failed projects has more than doubled in the past decade.

ANS: F   PTS: 1   REF: 15

16. The 2004 Standish Group survey showed that IT project success rates had risen from 16 percent in 1994 to 34 percent in 2002.

ANS: T   PTS: 1   REF: 15

17. Project management is the silver bullet that guarantees success on all projects.

ANS: F   PTS: 1   REF: 15

18. A key finding of a 2004 study is that relationship management is viewed as a top success factor for information systems in China, while it is not mentioned in U.S. studies.

ANS: T   PTS: 1   REF: 16|17

19. The winners know that strong program managers—referred to as project leaders—are crucial to project success.

ANS: T   PTS: 1   REF: 17

20. A program is "a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually."

ANS: T   PTS: 1   REF: 18

21. Program managers are not responsible for coordinating the efforts of project teams, functional groups, suppliers, and operations staff.

ANS: F   PTS: 1   REF: 19

22. The job description for a project manager can vary by industry and by organization.

ANS: T   PTS: 1   REF: 24

23. Project managers should possess general management knowledge and skills such as financial management, accounting, and procurement.

   ANS: T   PTS: 1   REF: 25

24. Project managers must be able to make effective use of technology as it relates to the specific project.

   ANS: T   PTS: 1   REF: 26

25. Project managers for large information technology projects have to be experts in the field of information technology.

   ANS: F   PTS: 1   REF: 26

26. Project managers often take on the role of both leader and manager.

   ANS: T   PTS: 1   REF: 28

27. Today's project managers still draw the Gantt charts by hand.

   ANS: F   PTS: 1   REF: 30

28. Determining the relationships among tasks is not essential in helping to improve project scheduling.

   ANS: F   PTS: 1   REF: 31

29. New software makes basic tools, such as Gantt charts and network diagrams, inexpensive, easy to create, and available for anyone to update.

   ANS: T   PTS: 1   REF: 32

30. Many people still use basic productivity software, such as Microsoft Word or Excel, to perform many project management functions.

   ANS: T   PTS: 1   REF: 36

MULTIPLE CHOICE

1. A 2001 report showed that the U.S. spends _____ on projects every year.
   a. $2.3 billion   c. $2.3 trillion
   b. $23 billion   d. $23 trillion

   ANS: C   PTS: 1   REF: 2

2. A 2001 report showed that the U.S. spends the equivalent of _____ of the nation's gross domestic product on projects every year.
   a. 1/10   c. 1/4
   b. 1/5   d. 1/2

   ANS: C   PTS: 1   REF: 2

3. Many organizations assert that using project management provides advantages, such as _____.
   a. lower profit margins   c. lower quality
   b. lower costs   d. lower worker morale

ANS: B   PTS: 1   REF: 4

4. Because a project requires resources, often from various areas, many projects cross _____ or other boundaries to achieve their unique purposes.
   a. financial   c. departmental
   b. spatial   d. technological

   ANS: C   PTS: 1   REF: 7

5. The project _____ usually provides direction and funding for the project.
   a. leader   c. manager
   b. sponsor   d. director

   ANS: B   PTS: 1   REF: 7

6. The limitations of scope, time, and cost goals are sometimes referred to as the _____.
   a. double bind   c. double constraint
   b. triple constraint   d. double obstacle

   ANS: B   PTS: 1   REF: 8

7. _____ are the people involved in or affected by project activities and include the project sponsor, project team, support staff, customers, users, suppliers, and even opponents of the project.
   a. Managers   c. Directors
   b. Stakeholders   d. Citizens

   ANS: B   PTS: 1   REF: 11

8. In the example of the project of building a house, the sponsors would be the potential _____.
   a. contractors   c. managers
   b. support staff   d. new homeowners

   ANS: D   PTS: 1   REF: 11

9. In the example of the project of building a house, the _____ would normally be the general contractor responsible for building the house.
   a. project sponsors   c. project manager
   b. project team   d. support staff

   ANS: C   PTS: 1   REF: 11

10. Project _____ management involves defining and managing all the work required to complete the project successfully.
    a. scope   c. time
    b. quality   d. cost

    ANS: A   PTS: 1   REF: 12

11. Project _____ management ensures that the project will satisfy the stated or implied needs for which it was undertaken.
    a. cost   c. scope
    b. time   d. quality

    ANS: D   PTS: 1   REF: 13

12. Project _____ management is concerned with making effective use of the people involved with the project.
a. human resource   c. communications
b. risk   d. procurement

ANS: A   PTS: 1   REF: 13

13. Project _____ management involves generating, collecting, disseminating, and storing project information.
a. risk   c. communications
b. procurement   d. resource

ANS: C   PTS: 1   REF: 13

14. Project _____ management is an overarching function that affects and is affected by all of the other knowledge areas.
a. cost   c. integration
b. quality   d. time

ANS: C   PTS: 1   REF: 13

15. What works on one project may not work on another, so it is essential for project managers to continue to develop their knowledge and _____ in managing projects.
a. time   c. funding
b. resources   d. skills

ANS: D   PTS: 1   REF: 15

16. According to the Standish group, which of the following factors contributes most to the success of information technology projects?
a. Executive support   c. Experienced project manager
b. User involvement   d. Clear business objectives

ANS: A   PTS: 1   REF: 16

17. According to the 2001 Standish Group study describing what factors contribute most to the success of information technology projects, _____ percent of successful projects are led by experienced project managers.
a. 75   c. 97
b. 80   d. 100

ANS: C   PTS: 1   REF: 16

18. "All project leaders use a shared road map, focusing on key business aspects of their projects while integrating goals across all parts of the organization." Which best practice for project delivery does this describe?
a. Use an integrated toolbox
b. Grow project leaders
c. Develop a streamlined project delivery process
d. Measure project health using metrics

ANS: C   PTS: 1   REF: 17|18

19. _____ project management software integrates information from multiple projects to show the status of active, approved, and future projects across an entire organization.
a. Investment   c. Enterprise

b. Active   d. Budget

ANS: C   PTS: 1   REF: 23

20. ____ includes thousands of job listings for project managers.
    a. eBay.com   c. Amazon.com
    b. Monster.com   d. CEO.com

ANS: B   PTS: 1   REF: 24

21. Project managers should understand important topics related to financial management, accounting, procurement, sales, marketing, and contracts. These topics are related to which area?
    a. Soft Skills
    b. Application area knowledge, standards, and regulations
    c. Project environment knowledge
    d. General management knowledge and skills

ANS: D   PTS: 1   REF: 25

22. Achieving high performance on projects requires ____, otherwise called human relations skills.
    a. capital skills   c. light skills
    b. soft skills   d. hard skills

ANS: B   PTS: 1   REF: 25

23. A(n) ____ focuses on long-term goals and big-picture objectives, while inspiring people to reach those goals.
    a. assistant   c. leader
    b. CEO   d. manager

ANS: C   PTS: 1   REF: 28

24. A(n) ____ often deals with the day-to-day details of meeting specific goals.
    a. manager   c. programmer
    b. leader   d. analyst

ANS: A   PTS: 1   REF: 28

25. According to a 2006 survey by CIO.com, project management is the ____ most desired skill by IT executives.
    a. first   c. third
    b. second   d. fourth

ANS: B   PTS: 1   REF: 28

26. Most people agree that the modern concept of project management began with the ____.
    a. Great Wall of China   c. Egyptian pyramids
    b. first space shuttle   d. Manhattan Project

ANS: D   PTS: 1   REF: 30

27. The Manhattan Project cost almost $2 billion in ____.
    a. 1936   c. 1956
    b. 1946   d. 1966

ANS: B   PTS: 1   REF: 30

28. In ____, Henry Gantt developed the famous Gantt chart as a tool for scheduling work in factories.
    a. 1897
    b. 1917
    c. 1927
    d. 1957

    ANS: B   PTS: 1   REF: 30

29. A Gantt chart displays a project's start and finish dates in a ____ format.
    a. pie chart
    b. line graph
    c. bar graph
    d. calendar

    ANS: D   PTS: 1   REF: 30

30. ____ was the key industry behind the development of several project management techniques.
    a. NASA
    b. The military
    c. Steel manufacturing
    d. Marine biology

    ANS: B   PTS: 1   REF: 31

31. The longest path through a network diagram that determines the earliest completion of a project is called the ____ path.
    a. essential
    b. important
    c. critical
    d. vital

    ANS: C   PTS: 1   REF: 31

32. By the ____, the military had begun to use software to help manage large projects.
    a. 1960s
    b. 1970s
    c. 1980s
    d. 1990s

    ANS: B   PTS: 1   REF: 32

33. ____ was an early project management software product that helped managers analyze complex schedules for designing aircraft.
    a. Artemis
    b. Columbia
    c. Vega
    d. Oberlin

    ANS: A   PTS: 1   REF: 32

34. A PMO, or Project ____ Office, is an organizational group responsible for coordinating the project management function throughout an organization.
    a. Management
    b. Money
    c. Municipal
    d. Marketing

    ANS: A   PTS: 1   REF: 32

35. Many organizations are now using enterprise or project ____ management software to help manage projects.
    a. path
    b. portfolio
    c. institute
    d. office

    ANS: B   PTS: 1   REF: 33

36. PMI provides certification as a Project Management ____ (PMP), someone who has documented sufficient project experience and education, agreed to follow the PMI code of professional conduct, and demonstrated knowledge of the field of project management by passing a comprehensive examination.

a. Producer   c. Professional
b. Practitioner   d. Professor

ANS: C   PTS: 1   REF: 33

37. By the end of December 2006, there were approximately ____ certified project management
professionals.
a. 20,000   c. 220,000
b. 150,000   d. 820,000

ANS: C   PTS: 1   REF: 33

38. The Project Management ____, a Web site for people involved in project management, provides an
alphabetical directory of more than 300 project management software solutions.
a. Center   c. Consortium
b. Alliance   d. Facility

ANS: A   PTS: 1   REF: 36

39. ____ tools are often recommended for small projects and single users.
a. Low-end   c. High-end
b. Midrange   d. Expensive

ANS: A   PTS: 1   REF: 36

40. ____ tools, sometimes referred to as enterprise project management software, provide robust
capabilities to handle very large projects.
a. Low-end   c. High-end
b. Midrange   d. Inexpensive

ANS: C   PTS: 1   REF: 37

COMPLETION

1. More than 16 _____ people regard project management as their profession.

ANS: million

PTS: 1   REF: 3

2. The "_____" study found that more than 31 percent of information technology
projects were canceled before completion.

ANS: CHAOS

PTS: 1   REF: 4

3. A(n) _____ is a temporary endeavor undertaken to create a unique product, service,
or result.

ANS: project

PTS: 1   REF: 5

4. The term "_____" refers to work done in organizations to sustain the business.

ANS: operations

PTS: 1 REF: 5

5. _____ include people, hardware, software, or other assets.

ANS: Resources

PTS: 1 REF: 7

6. The question, "What unique product or service does the customer or sponsor expect from the project?" is related to the _____ of the project.

ANS: scope

PTS: 1 REF: 8

7. The question, "What is the project's budget?" is related to the project's _____.

ANS: cost

PTS: 1 REF: 8

8. The _____ of project management includes quality along with scope, time, and cost.

ANS: quadruple constraint

PTS: 1 REF: 10

9. _____ is "the application of knowledge, skills, tools, and techniques to project activities to meet project requirements."

ANS: Project management

PTS: 1 REF: 10

10. Project management _____ describe the key competencies that project managers must develop.

ANS: knowledge areas

PTS: 1 REF: 12

11. Project management tools and _____ assist project managers and their teams in carrying out work in all nine knowledge areas.

ANS: techniques

PTS: 1 REF: 13

12. Gantt charts, project network diagrams, critical path analysis, crashing, fast tracking, and schedule performance measurements are examples of tools and techniques for _____.

ANS: time management

PTS: 1   REF: 14

13. Companies that excel in project delivery use performance _____ to quantify progress.

ANS: metrics

PTS: 1   REF: 18

14. _____ refers to the process in which organizations group and manage projects and programs as a portfolio of investments that contribute to the entire enterprise's success.

ANS:
Project portfolio management
Portfolio management

PTS: 1   REF: 19

15. _____ skills include effective communication, influencing the organization to get things done, leadership, motivation, negotiation, conflict management, and problem solving.

ANS: Soft

PTS: 1   REF: 25

16. One reason project managers need good _____ skills is that to understand, navigate, and meet stakeholders' needs and expectations, they need to lead, communicate, negotiate, solve problems, and influence the organization at large.

ANS: soft

PTS: 1   REF: 26

17. Some people say that, "Managers do things right, and _____ do the right things."

ANS: leaders

PTS: 1   REF: 28

18. A(n) _____ chart is a standard format for displaying project schedule information.

ANS: Gantt

PTS: 1   REF: 30

19. As computer hardware became smaller and more affordable and _____ became graphical and easy to use, project management software became less expensive and more widely used.

ANS: software

PTS: 1   REF: 32

20. The _____, an international professional society for project managers founded in 1969, has continued to attract and retain members, reporting 225,432 members worldwide by December 31, 2006.

ANS:
PMI
Project Management Institute
Project Management Institute (PMI)

PTS: 1   REF: 33

21. Because there are so many people working on projects in various industries, PMI has created Specific _____ (SIGs) that enable members to share ideas about project management in their particular application areas, such as information systems.

ANS: Interest Groups

PTS: 1   REF: 33

22. _____, loosely defined, is a set of principles that guide our decision making based on personal values of what is "right" and "wrong."

ANS: Ethics

PTS: 1   REF: 34

23. _____ tools, a step up from low-end tools, are designed to handle larger projects, multiple users, and multiple projects.

ANS: Midrange

PTS: 1   REF: 36

24. _____ is still the most widely used project management software today in the midrange tools category.

ANS: Microsoft Project

PTS: 1   REF: 37

25. _____ tools are generally licensed on a per-user basis.

ANS: High-end

PTS: 1   REF: 37

ESSAY

1. Describe the triple constraint. What are the three components? What is the relationship among them?

ANS:

Every project is constrained in different ways by its scope, time, and cost goals. These limitations are sometimes referred to in project management as the **triple constraint**. To create a successful project, a project manager must consider scope, time, and cost and balance these three often-competing goals. He or she must consider the following:

Scope: What work will be done as part of the project? What unique product, service, or result does the customer or sponsor expect from the project? How will the scope be verified?

Time: How long should it take to complete the project? What is the project's schedule? How will the team track actual schedule performance? Who can approve changes to the schedule?

Cost: What should it cost to complete the project? What is the project's budget? How will costs be tracked? Who can authorize changes to the budget?

Managing the triple constraint involves making trade-offs between scope, time, and cost goals for a project. For example, you might need to increase the budget for a project to meet scope and time goals. Alternatively, you might have to reduce the scope of a project to meet time and cost goals. Experienced project managers know that you must decide which aspect of the triple constraint is most important. If time is most important, you must often change the initial scope and/or cost goals to meet the schedule. If scope goals are most important, you may need to adjust time and/or cost goals.

PTS: 1   REF: 8|9   TOP: Critical Thinking

2. List and describe each of the nine project management knowledge areas.

ANS:
Project scope management involves defining and managing all the work required to complete the project successfully.

Project time management includes estimating how long it will take to complete the work, developing an acceptable project schedule, and ensuring timely completion of the project.

Project cost management consists of preparing and managing the budget for the project.

Project quality management ensures that the project will satisfy the stated or implied needs for which it was undertaken.

Project human resource management is concerned with making effective use of the people involved with the project.

Project communications management involves generating, collecting, disseminating, and storing project information.

Project risk management includes identifying, analyzing, and responding to risks related to the project.

Project procurement management involves acquiring or procuring goods and services for a project from outside the performing organization.

Project integration management is an overarching function that affects and is affected by all of the other knowledge areas.

PTS: 1   REF: 12|13   TOP: Critical Thinking

3. What is the difference between leadership and management? How do these two terms relate to a project manager?

ANS:
Leadership and *management* are terms often used interchangeably, although there are differences. Generally, a **leader** focuses on long-term goals and big-picture objectives, while inspiring people to reach those goals. A **manager** often deals with the day-to-day details of meeting specific goals. Some people say that, "Managers do things right, and leaders do the right things." "Leaders determine the vision, and managers achieve the vision." "You lead people and manage things."

However, project managers often take on the role of both leader and manager. Good project managers know that people make or break projects, so they must set a good example to lead their team to success. They are aware of the greater needs of their stakeholders and organizations, so they are visionary in guiding their current projects and in suggesting future ones. As mentioned earlier, companies that excel in project management grow project "leaders," emphasizing development of business and communication skills. Yet good project managers must also focus on getting the job done by paying attention to the details and daily operations of each task. Instead of thinking of leaders and managers as specific people, it is better to think of people as having leadership skills, such as being visionary and inspiring, and management skills, such as being organized and effective. Therefore, the best project managers have leadership and management characteristics; they are visionary yet focused on the bottom line. Above all else, good project managers focus on achieving positive results!

PTS: 1   REF: 28   TOP: Critical Thinking

4. Discuss the PMP certification. What are the advantages of obtaining PMP certification?

ANS:
Professional certification is an important factor in recognizing and ensuring quality in a profession. PMI provides certification as a **Project Management Professional (PMP)**—someone who has documented sufficient project experience and education, agreed to follow the PMI code of professional conduct, and demonstrated knowledge of the field of project management by passing a comprehensive examination.

The number of people earning PMP certification continues to increase. In 1993, there were about 1,000 certified project management professionals. By the end of December 2006, there were 221,144 active PMPs.

Organizations that support PMP certification see the value of investing in programs to improve their employees' knowledge in project management. Many employers today require specific certifications to ensure their workers have current skills, and job seekers find that they often have an advantage when they earn and maintain marketable certifications.

Passing the PMP exam is becoming a standard for project managers. Some companies are requiring that all project managers be PMP certified. Project management certification is also enabling professionals in the field to share a common base of knowledge. For example, any person with PMP certification can list, describe, and use the nine project management knowledge areas. Sharing a common base of knowledge is important because it helps advance the theory and practice of project management.

PTS: 1   REF: 33|34   TOP: Critical Thinking

5. Discuss the PMI Code of Ethics and Professional Conduct.

ANS:

PMI approved a new Code of Ethics and Professional Conduct effective January 1, 2007. This new code applies not only to PMPs, but to all PMI members and individuals who hold a PMI certification, apply for a PMI certification, or serve PMI in a volunteer capacity. It is vital for project management practitioners to conduct their work in an ethical manner. Even if you are not affiliated with PMI, these guidelines can help you conduct your work in an ethical manner, which helps the profession earn the confidence of the public, employers, employees, and all project stakeholders. The PMI Code of Ethics and Professional Conduct includes short chapters addressing vision and applicability, responsibility, respect, fairness, and honestly.

PTS: 1   REF: 35   TOP: Critical Thinking