Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

Match the following facility management terms with their description.

1. _____ Operations
2. _____ Maintenance
3. _____ Asset inventory/register

a. Materials, equipment and systems found in infrastructure
b. Assuring how facility infrastructure is used
c. Assuring how infrastructure elements are serviced

4. If a complete, good-quality inventory/register is not available, what should the facility manager do?
   ( ) a. Begin to create one as new assets are acquired and installed.
   ( ) b. Initiate an inspection to create one.
   ( ) c. Observe how individual assets are functioning based on work logs and condition reports.
   ( ) d. There is nothing a facility manager can do.

5. A maintenance and repair cycle is typically
   ( ) a. an examination of facility assets and capital improvement expectations.
   ( ) b. an energy management review.
   ( ) c. precise and orderly management of preventive and corrective activities.
   ( ) d. a methods and resources schedule.

6. Maintenance activities may be routinely divided into
   ( ) a. operable and inoperable.
   ( ) b. predictive and unnecessary.
   ( ) c. strategic and tactical.
   ( ) d. planned and unplanned.

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Progress check answers

1. b (p. 4-3)
2. c (p. 4-3)
3. a (p. 4-7)
4. b (p. 4-7)
5. c (p. 4-7)
6. d (p. 4-7)

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Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

1. Which of the following is an element of a building foundation structure?
   ( ) a. Drilled piers and shafts
   ( ) b. Roofs
   ( ) c. Active fire protection
   ( ) d. HVAC, plumbing and similar systems

2. Which of the following is a common deficiency to look for in a building's structure?
   ( ) a. Vertical cracks in foundation walls
   ( ) b. Separation of corners at windows, doors or joints
   ( ) c. Poor acoustic quality
   ( ) d. Overgrown shrubs, trees or foliage next to the structure

3. Which of these is the most important reason to recognize and correct structural deficiencies?
   ( ) a. They are unsightly and bad for morale.
   ( ) b. They can be the primary cause of poor air quality.
   ( ) c. They are inexpensive if caught early.
   ( ) d. They could seriously affect health and safety.

4. Which of these approaches is regularly used to remediate or prevent foundation deficiencies?
   ( ) a. Position trees near to the building to divert rainfall effects.
   ( ) b. Grade slopes and position roof downspouts to drain water away from foundations.
   ( ) c. Provide a level grade out from foundations to support water percolation.
   ( ) d. Add shutters, awnings or other coverings to deflect rainfall.

5. Which of these would not typically be considered a building system?
   ( ) a. Stairway
   ( ) b. Fire suppression/life safety
   ( ) c. HVAC
   ( ) d. Electrical

6. Active fire protection measures
   ( ) a. are generally fixed-in-place walls, shaft enclosures and so forth.
   ( ) b. require on-premises firefighting personnel.
   ( ) c. include sprinkler and smoke control systems.
   ( ) d. are seldom necessary or required.

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7. Which of the following is typically not a component in a plumbing system?
   ( ) a. Distribution piping and pumps
   ( ) b. Filters and vents
   ( ) c. Backflow preventers and valves
   ( ) d. Fans, ducts and plenums

8. JSA and MSDS are designed for what purpose?
   ( ) a. To reduce the risk of accidents and incidents
   ( ) b. To catalog equipment and systems maintenance activities
   ( ) c. To support long-range planning
   ( ) d. To maintain manufacturer warranty requirements

9. At a minimum, mold or fungi can grow wherever there are viable mold spores, an acceptable temperature range, a consistent moisture source and
   ( ) a. fresh air.
   ( ) b. pollutants.
   ( ) c. nutrients (paint, paper, adhesives, plastics).
   ( ) d. radon gases.

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Progress check answers

1. a (p. 4-11)
2. b (p. 4-12)
3. d (p. 4-15)
4. b (p. 4-13)
5. a (p. 4-20)
6. c (p. 4-22)
7. d (p. 4-23)
8. a (p. 4-32)
9. c (p. 4-35)

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Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

1. The life cycle of a typical physical asset
   ( ) a. describes the entire useful life of that asset.
   ( ) b. is unknown until the asset fails.
   ( ) c. should not be considered when determining cost of ownership.
   ( ) d. is between 10 and 15 years.

2. The hierarchy of sustainability ranks recyclable resources above _____ resources.
   ( ) a. perpetual
   ( ) b. renewable
   ( ) c. reducible
   ( ) d. natural

3. Which of the following is true of the installation phase of an asset's life cycle? *(Circle all that apply.)*
   ( ) a. It may require commissioning.
   ( ) b. It marks the start of that asset's useful life.
   ( ) c. It should be completely documented.
   ( ) d. It is primarily an accounting activity since it affects tax liability.

4. Which of these best describes the process of commissioning?
   ( ) a. Paying incentives to contractors for superior work
   ( ) b. Evaluating and documenting performance prior to operation
   ( ) c. Providing rewards to staff such as special privileges
   ( ) d. Running equipment to failure before replacement

5. Vibration monitoring, airborne ultrasonics and laser shaft alignment are all examples of
   ( ) a. air quality concerns.
   ( ) b. equipment failure.
   ( ) c. PdM analysis tools.
   ( ) d. root cause analysis requirements.

6. Periodic inspection, adjustments and lubrication are examples of
   ( ) a. unscheduled maintenance requirements.
   ( ) b. poor maintenance practice.
   ( ) c. mission-critical predictive maintenance.
   ( ) d. preventive maintenance activities.

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Match the following analysis tools with their description.

7. _____ RCM
8. _____ RCA
9. _____ FMEA

a. A process to discover the systemic cause or root cause of a problem
b. A detailed analysis to help determine failure probabilities and system reliability calculations
c. A maintenance philosophy of optimizing reliability and availability at the lowest cost

10. Which of these activities would be considered unplanned maintenance? *(Circle all that apply.)*
    ( ) a. Corrective maintenance
    ( ) b. Run-to-failure
    ( ) c. Predictive maintenance
    ( ) d. Emergency maintenance

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Progress check answers

1. a (p. 4-45)
2. c (p. 4-49)
3. a, b and c (p. 4-49)
4. b (p. 4-49)
5. c (p. 4-55)
6. d (p. 4-54)
7. c (p. 4-58)
8. a (p. 4-59)
9. b (p. 4-59)
10. a, b and d (p. 4-56)

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Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

1. Which of the following is not typically considered an example of a soft or occupant service?
   ( ) a. Custodial cleaning, window washing, waste management
   ( ) b. Food service, records management, human resources
   ( ) c. Parking, shipping and receiving, security
   ( ) d. Inspection, testing, commissioning

2. A typical occupant service planning approach identifies needs, evaluates, communicates, implements a plan and
   ( ) a. measures performance.
   ( ) b. assigns staff rather than contractors.
   ( ) c. processes all occupant service requests first.
   ( ) d. All of the above

3. To determine the right mix of occupant services, the facility manager considers
   ( ) a. the opinions of occupants and owners.
   ( ) b. only lowest-cost and highly competitive contractors.
   ( ) c. low-bid requests for services.
   ( ) d. staff over contract.

4. The workflow process for occupant services is _____ the workflow process for building systems and equipment.
   ( ) a. completely different from
   ( ) b. exactly the same as
   ( ) c. similar in approach to
   ( ) d. not considered as important as

5. In general, a facility manager should conserve resources and provide a quality environment
   ( ) a. at maximum sustainability.
   ( ) b. that always exceeds minimum standards.
   ( ) c. at the lowest possible cost.
   ( ) d. without using outside contractors.

6. Occupant turnover, changes in facility mission and even legislative changes would most likely stimulate which of these facility management activities?
   ( ) a. Modifications to occupant services
   ( ) b. Elimination of O&M budgets
   ( ) c. Replacing contract workers with staff
   ( ) d. Complete revision of performance contracts, SLAs or similar

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7. The movement and relocation of occupants within an organization is commonly called
   ( ) a. downsizing.
   ( ) b. turnover or churn.
   ( ) c. workflow process.
   ( ) d. productivity management.

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Progress check answers

1. d (p. 4-79)
2. a (p. 4-81)
3. a (p. 4-81)
4. c (p. 4-81)
5. c (p. 4-83)
6. a (p. 4-84)
7. b (p. 4-86)

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Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

1. What is the most accurate description of the difference between a service level agreement and a statement of work?
   ( ) a. There is no difference; they are identical.
   ( ) b. A statement of work can be part of a service level agreement.
   ( ) c. A statement of work can be negotiated; an SLA cannot.
   ( ) d. A statement of work is for staff; a service level agreement is for contractors.

2. The typical SLA for contracting outside services would
   ( ) a. contain all information both parties require.
   ( ) b. not stipulate how disputes will be handled.
   ( ) c. provide the facility manager with negotiating advantages.
   ( ) d. discuss incentives only in the event of disputes.

3. Why may outside contractors be hired? *(Circle all that apply.)*
   ( ) a. facility staff do not have necessary competencies.
   ( ) b. the work is highly visible and would risk staff credibility.
   ( ) c. they can perform the work at lower cost.
   ( ) d. the contracted tasks are not relevant to the core mission.

4. An activity that has high mission relevance and requires low expertise would
   ( ) a. generally be performed by a contracted service.
   ( ) b. seldom require an operations and maintenance focus.
   ( ) c. most often require expert services beyond the level of staff.
   ( ) d. most likely represent a good option for staff assignment.

5. Outsourcing or out-tasking is the process of
   ( ) a. rewarding high performers.
   ( ) b. scheduling staff or contractors for maximum productivity.
   ( ) c. comparing results of staff against contractors.
   ( ) d. contracting for services, not using staff.

6. List at least two advantages and two disadvantages of contracting a service.
   Advantages:_____
   _____
   Disadvantages:_____
   _____

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7. Which of these would not be considered an appropriate characteristic of negotiations?
   ( ) a. Discussion implied with compromise
   ( ) b. Meet objectives of service providers and facility owners
   ( ) c. Designed to give the facility manager an advantage
   ( ) d. Specific performance measures and non-negotiable minimums

8. The most effective way to resolve contract disputes is by
   ( ) a. using incentives and rewards.
   ( ) b. establishing concrete and mutually understood SLAs.
   ( ) c. using flexible scheduling and providing access to human resources.
   ( ) d. maintaining a positive attitude.

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Progress check answers

1. b (p. 4-90)
2. a (p. 4-92)
3. a, c and d (p. 4-93)
4. d (p. 4-93)
5. d (p. 4-93)
6. Advantages of contracting: cost control, potential improvement in service quality, reduced liability
   Disadvantages: lack of loyalty, loss of control, different goals and agendas (p. 4-95)
7. c (p. 4-97)
8. b (p. 4-106)

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Progress Check Questions

Directions: Read each question and respond in the space provided. Answers and page references follow the questions.

1. How does total cost of ownership (TCO) relate to life-cycle cost (LCC)?
   ( ) a. They are identical terms.
   ( ) b. TCO is an annual update of the entire life-cycle cost of an asset.
   ( ) c. TCO provides life-cycle (cradle-to-grave) costs needed to perform the LCC.
   ( ) d. TCO is only an accounting tool; LCC is only a maintenance tool.

2. What is the purpose of a degradation curve relative to life-cycle cost analysis?
   ( ) a. It indicates unforeseen gaps such as carrying charges or hidden competitive costs.
   ( ) b. It accounts for replacement and decommissioning costs.
   ( ) c. It factors in inflation, technology improvements and obsolescence.
   ( ) d. It estimates the rate and probability at which an asset may become impaired in intended function.

3. Which of the following statements about predicting the useful life of all assets is correct? *(Circle all that apply.)*
   ( ) a. LCC provide a useful standard rule for this process.
   ( ) b. All assets deteriorate over time.
   ( ) c. Different assets deteriorate at different rates.
   ( ) d. Routine maintenance can extend service life beyond expectations.

4. What is the typical relationship between a strategic facility plan (SFP) and the O&M approach?
   ( ) a. They are not related; SFP is for the entire facility strategy and O&M is just schedules.
   ( ) b. O&M activities should have outcomes that support the SFP.
   ( ) c. They are the same in that the SFP schedules O&M.
   ( ) d. O&M measurements determine with the SFP plan should be.

The strategic facility plan determines tactics and the workflow process executes the plan. Match the following assessment stages to their tool description.

5.	_____ Know what to measure	a.	Work log results
6.	_____ Know how to consolidate	b.	Balanced scorecard
7.	_____ Know how to track and record	c.	Performance indicators

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8. How does the SMART approach relate to key performance indicators (KPIs)?
   ( ) a. KPIs may be developed using the SMART approach.
   ( ) b. SMART is a KPI.
   ( ) c. KPIs measure performance; SMART measures effectiveness.
   ( ) d. SMART has nothing to do with KPIs.

9. A facility condition index, mean time between failures, work order aging and custodial level of service are all examples of what?
   ( ) a. Failed or out-of-specification conditions
   ( ) b. Engineering predictive and preventive maintenance tasks
   ( ) c. Typical key performance indicators (KPIs)
   ( ) d. Life-cycle cost analysis tools

10. Which of these is the best way the facility manager develops plans that reflect occupant expectations?
   ( ) a. By surveying occupants
   ( ) b. By hiring more contract services
   ( ) c. By reducing disruptions during moves and relocations
   ( ) d. By installing higher-quality fixtures, furnishings and equipment

11. What is the best description of a service quotient for facilities management?
   ( ) a. Total annual costs of a facility's O&M for occupant services
   ( ) b. Standard percentage for customer satisfaction; usually 95 to 98 percent
   ( ) c. Measurement of occupant satisfaction
   ( ) d. Difference in energy costs after a new device or system is installed

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Progress check answers

1. c (p. 4-112)
2. d (p. 4-116)
3. b and c (p. 4-116)
4. b (p. 4-121)
5. c (p. 4-122)
6. b (p. 4-122)
7. a (p. 4-122)
8. a (p. 4-123)
9. c (p. 4-125)
10. a (p. 4-128)
11. c (p. 4-127)

Next Steps

You have completed this competency of the IFMA Facility Management Learning System. Next, check your understanding by completing the online competency-specific chapter quizzes and case study to help you identify any concepts that need additional study. Check your understanding another way by selecting the competency-specific eFlashcards, or visit the Resource Center to download printable flashcards.

Once you have completed the chapter quizzes, reviewed the eFlashcards, completed the case study and feel confident that you have mastered the information, you can advance to the next competency.

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