Facilities

Certification Review Practice Exam Section: Facilities

- 1. A club's largest energy expense is normally for:
 - A) electricity
 - B) propane
 - C) de-ionized water
 - D) natural gas
- 2. A successful sustainability program involves:
 - A) The major vendors to the club
 - B) The club staff
 - C) The club committees
 - (D) All of the answers are correct
- 3. Which is true about preventive maintenance programs?
 - A) Reduces the need for repair
 - B) May materially extend the useful life of equipment
 - G) Is usually scheduled by date, number, or hours
 - (D))All of the answers are correct
- 4. A complete benchmark includes
 - A) A frequency schedule
 - B) A performance schedule
 - C) A productivity standard
 - D All of the above answers are correct
- 5. In the United States, electrical codes are established by the ______ government
 - A) city council
 - B) county board of electrical control
 - C) state
 - D) federal board of electrical code control and enforcement
- 6. A club has 100 tables in the a la carte dining room. An accepted rule of thumb suggests that table cloths should be in the club's linen inventory
 - A) 25
 - B) 50
 - (C) 300
 - D) 100

- 7. Which of the following types of building plans show air and water flow and equipment system interconnections?
 - A) Mechanical
 - B) plots
 - C) Plan view
 - D) Elevations
- 8. Flammable liquids such as grease, paint, and oil cause what type of fire?
 A) Class A Ordinary combustibles
 - B) Class B Flammable liquids
 - C) Class C Electrical equipment
 - D) Class D Combustible metals
- 9. Color fading of laundry is a problem that is often caused by:
 - A) a wash temperature that is too cold
 - B) a wash temperature that is too hot
 - C) too much agitation
 - D) too much spinning to extract water
- 10. Which of the following is an important function of Material Safety Data Sheets (MSDSs):
 - A) to inform employees about hazardous chemicals used
 - B) to tell employees how to work safely with the chemicals
 - C) to explain procedures to follow in case of an accident
 - all of the answers are correct
- 11. In most clubs, the housekeeping department has very limited cleaning responsibilities in:
 - A) public rooms such as lobbies
 - B) exercise rooms
 - C) kitchen areas

D)

- management offices
- 12. When shampooing a carpet, using too much liquid solution can cause:
 - A) seam separation
 - B) splotching
 - C) scorching
 - D) blotting
- 13. Which type of pool-filtering material is considered the most convenient and provides very good quality filtering?
 - A) Paper cartridges
 - B) Sand
 - Diatomaceous earth (DE)
 - ວັ້ງ Clay

- 14. A facility quality assessment uses what type of report in providing a comprehensive building and grounds assessment that identifies condition and space function deficiencies along with cost estimates for corrective actions
 - Facility condition evaluation (FCE)



Eacility function evaluation (FFE)

- None of the answers provided is correct
- 15. A work or repair order is a document used:
 - A) To inventory the pieces of equipment needing repair at a club
 - B) To initiate requests for repair or maintenance services
 - C) To explain steps workers must follow to repair a piece of equipment
 - D) For all major pieces of equipment to record data about date purchased,
 - cost, life expectancy, and estimated replacement date
- 16. Which type of information is normally asked for when a request for qualifications (RFQ) is issued to potential architectural and engineering firms?
 - A) Previous projects completed
 - (B) Financial and insurance certificates
 - C) Background and location of the firm
 - All of the answers are correct
 - 658
- 17. In what phase of the design process are the basic functional requirements listed including square footage, utility and equipment needs, and descriptions of the finished project's element?
 - (A) Programming
 - B) Schematic design
 - C) Design development
 - D) Working documents
- 18. In what phase of the design process are the drawings first developed including floor plans, elevations, and building sections?
 - A) Programming
 - (B) Schematic design
 - C) Design development
 - D) Working documents
- 19. Who should develop the formal safety and security plan that will be in effect during a club's construction project?
 - A) The General Manager (on behalf of the club)
 - B) Contractor and club staff
 - C) Club staff working with the safety committee and the insurance carrier
 - D) A project safety and security consultant hired by the GM

20. Which construction concept works as a consultant to the club, provides inspections at each phase, is an extra level of expense to the club, and provides staff training on equipment and systems as the project is turned over?

A) Design build

B) Commissioning

Construction manager method

D) General contracting method

Eper - Disposal of voste what lamp has dodn flouracent & storm water not Hazerdows A 3-70 4 % moro Akaline. Architect Responsible for Finished work mest Common - 6 cnoral Contractor Food can't be recyclod work order Request For Scivicit 180° Dishmochina

25. Leaching is caused by weakened concrete breaking loose under the movement of traffic on the surface area

13/25 = 52.90

Answer

- 1. The largest portion of the maintenance department's POM expenditure is usually:
 - a. Water and sewage
 - b. Wages and benefits
 - c. Operating supplies
 - d. Electrical and mechanical equipment
- 2. Which of the following is used to control hot water temperatures?
 - a. Heat pump
 - b. Backflow preventer
 - c. Mixing valve
 - d. None of the above
- 3. Lines that deliver electricity to various portions of the building are called:
 - a. Fuses
 - b. Ampers
 - c.) Feeders
 - d. Transformers
- 4. Electrical circuits are opened and closed by:
 - a. Transformers
 - b. Relays
 - c. Transistors
 - d. None of the above
- 5. Which of the following HVAC systems allows both the heating and cooling, but only one at a
 - time?
 - a. Two-pipe system
 - b. Three-pipe system
 - c. Four-pipe system
 - d. All of the above
- 6. Which of the following decreases the amount of waste generated?
 - a. Recycling
 - b. Incineration
 - c. Waste transformation
 - d. Source reduction
- 7. A fire that involves flammable liquids such as paint, grease, oil, gasoline is called:
 - a. Type A fire waitenals
 - b. Type B fire Liquid

- c. Type C fire electric
- d. Type D fire
- 8. A thread count of 80x70 indicates there are:
 - a. 80 fill yarns per square inch
 - b. 80 warp yarns per square inch
 - c. 150 fill yarns per square inch
 - d. 150 warp yarns per square inch
- 9. Which of the following sets the bounds and scope of a renovation project?
 - a. Schematic design
 - b. Conceptual design
 - c. Property survey
 - d. Construction documents
- 10. If the temperature of the rinse cycle of a dish machine is lower than _____ a chemical sanitizer must be used.
 - a. 140
 - b. 155
 - c. 165
 - d. 180

11. Swimming pools naturally become more _____ than desired

- a. Acidic
- b. Neutral
- c. Alkaline
- d. Chlorinated
- 12. Which of the following types of building plans show air and water flow and equipment system interconnections?
 - a. Mechanical
 - b. Structural
 - c. Electrical
 - d. Elevations
- 13. In a club with lodging, if the time available for guestroom cleaning during a work shift is 6 hours and 40 minutes, and if room attendant is expected to clean 16 guestrooms per shift, each room attendant is expected to clean one room in
 - a. 15 minutes
 - b. 20 minutes
 - c. 25 minutes
 - d. 30 minutes
- 14. Which of the following is considered part of the recycled inventories maintained by the housekeeping department?
 - a. Shampoo
 - b. Cleaning supplies
 - c. Irons
 - d. Moisturizer

CCM TEST BANK: FACILITIES

10-2-12

71 QUESTIONS

NEW QUESTIONS = ANSWERS ARE IN BOLD;

OLD QUESTIONS = ANSWERS ARE <u>UNDERLINED</u>

GENERAL-TECHNICAL-SAFETY GROUP

- How does a well-designed and maintained facility help club managers establish efficient 1) performance standards?
 - They can benchmark against other clubs with similar designs a.
 - b. They can obtain productivity rate information from architects and designers
 - They don't have to "work around" facility impediments (Facility Chap. in
 - c. CMAA Text) d. Employees who like to work in the environment can develop their own
 - performance standards
- How can effectively designed facilities affect a club's revenue? 2)
 - a. Construction costs are reduced
 - b. Design costs are reduced
 - c. Facilities can accommodate members at desired times (Facility Chap. in CMAA Text)
 - d. Equipment replacement costs are minimized
- When buildings are well constructed, facility personnel can focus primarily on: 4)
 - a. On-going construction needs
 - b. Renovation issues
 - c. Maintenance concerns (Facility Chap. in CMAA Text)
 - d. Furniture, fixtures, and equipment (F,F&E) replacement
- New facilities often use ______ to distribute heat. 5)
 - a. Electricity
 - b. Steam
 - Air C.
 - Hot water (Facility Chap. in CMAA Test) d.
- What percentage of the total energy produced in the United States is consumed by 9) buildings?
 - 10% a.
 - b. 30% (Facility Chap. in CMAA Text)
 - c. 50%
 - 70% d.

- Which type of lamp (lighting) consumes the least energy? 10)
 - a. Clear radiant
 - Florescent b.
 - Incandescent (Facility Chap. in CMAA Text) c.
 - Phosphorescent d.
- Which is not considered hazardous? 17)
 - Florescent light bulbs a.
 - b. Construction waste
 - c. Storm water (Facility Chap. in CMAA Text)
 - Solvents d.
- What should club managers do to best ensure that their club will not deviate from or fail to 20)comply with local, state, and federal codes?
 - Employ an environmental consultant on retainer a.
 - Schedule meetings with local, state, and federal code regulators at least quarterly b.
 - Purchase "canned" (already developed) training programs that address the topic c.
 - Ensure that there is at least one staff member who is "a resident expert" on d.
 - legal requirements (Facility Chap. in CMAA Test)
- All of the following are included in a "building envelope:" 46)
 - Walls a.
 - Walls and roofs b.
 - Walls, roofs, and floors C.
 - d. Walls, roofs, floors, and foundations (BMI III PowerPoint Bill Whitbeck)
- What is the average amount of total revenue that private clubs typically set aside as a 47)reserve for placement of club elements and new equipment?
 - 3% (Facilities Management-CCM Review Ed) a.
 - 5% b.
 - c. 6%
 - 7% d.
- Who provides material safety data sheets? 54)
 - a. Product manufacturer (Facilities Management-CCM Review Ed)
 - b. Product supplier
 - c. Environmental Protection Agency
 - Occupational Safety & Health Administration d.
- Electrical fires create what class of fires? 55)
 - Class A a.
 - b. Class B
 - Class C (Facilities Management-CCM Review Ed) c.
 - Class D d.

- 57) Heat detectors react to absolute temperature, temperature change, or ______ to detect a fire.
 - a. Smoke particles
 - b. Change in air flow
 - c. Dust build-up
 - d. A combination of absolute temperature and temperature change (Facilities Management-CCM Review – Ed)

60) Swimming pools naturally tend to become more ______ than desired.

- a. Acidic
- b. Neutral
- c. Alkaline
- d. Chlorinated
- 61) A club has 25 tables in the ala carte dining room. An accepted rule of thumb suggests that ______ table cloths should be in the club's linen inventory.
 - a. 25
 - b. 50
 - c. 75
 - d. 100

65) All are important functions of Material Safety Data Sheets (MSDSs) except:

- a. To inform employees about the hazardous chemicals they use
- b. To minimize manufacturer's liabilities for usage of the chemicals
- c. To tell employees how to work safely with the chemicals
- d. To explain procedures to follow in case of an accident
- 66) The temperature for water to be used in public access areas should be set no higher than at the source.
 - a. 100° F (37.8°C)
 - b. 120°F (48.9°C)
 - c. 160° F (71.1°C)
 - d. $180^{\circ}F(82.2^{\circ}C)$
- 78) Flammable liquids such as grease, paint, and oil cause what type of fire?
 - a. Class A
 - b. Class B
 - c. Class C
 - d. Class D

COST GROUP

- 3) Which is *true* about a cost overrun?
 - a. It is unexpected
 - b. It exceeds the amount allocated in a budget
 - c. It increases post-construction operating costs
 - d. A and B above (Facility Chap. in CMAA Test)

- e. All the above
- 59) A club's largest energy expense is normally for:
 - a. Electricity
 - b. Natural gas
 - c. Water
 - d. Steam

ECOLOGICAL-SUSTAINABILITY GROUP

- 6) Sustainability addresses environmental issues within the context of economics, ecology, and
 - a. Esthetics
 - b. Ethics (Facility Chap. in CMAA Text)
 - c. Cost reduction
 - d. Managers' preferences
- 7) The best way a general manager can promote sustainability is to:
 - a. Budget for it
 - b. Be aware of applicable legislation and regulations
 - c. Create a club-wide "green" culture (Facility Chap. in CMAA Text)
 - d. Follow the wishes of department heads
- 8) A successful sustainability program involves:
 - a. Club managers
 - b. Club employees
 - c. Club members
 - d. Everyone who interacts with the club (Facility Chap. in CMAA Text)
- 15) All can be recycled except:
 - a. Plastic
 - b. Yard waste
 - c. Metal
 - d. Food garbage (Facility Chap. in CMAA Text)
- 19) A first step in developing an energy conservation and management program for clubs is to:
 - a. Purchase energy efficient equipment
 - b. Determine the club's current energy use and cost (Facility Chap. in CMAA Text)
 - c. Retain the services of an energy conservation consultant
 - d. Install energy efficient HVAC systems

PREVENTIVE MAINTENANCE GROUP

11) Which is <u>true</u> about the short-term impact of reduced preventive maintenance?a. It is quickly noticed

- b. It frustrates employees
- c. Members complain
- d. Impacts are typically minimal (Facility Chap. in CMAA Text)
- 26) A computerized preventive maintenance management system should include information about all the following *except* ______ for each covered facility asset.
 - a. Purchase cost (Facility Chap. in CMAA Text)
 - b. Installation date
 - c. Expected useful life
 - d. Service call reports
- 58) A work or repair order is a document used:
 - a. To inventory the pieces of equipment needing maintenance at a club.
 - b. To initiate requests for maintenance services.
 - c. To show maintenance workers how to repair a structural element or piece of equipment.
 - d. For all major pieces of equipment to record facts and information important for maintenance.
- 77) Which statement is <u>true</u> about Equipment Data Cards?
 - a. They should only be used for electrical equipment
 - b. They record information helpful for equipment maintenance
 - c. They should not be used for equipment that has been fully depreciated
 - d. They should be provided by the applicable equipment manufacturer

HOUSEKEEPING GROUP

- 12) Which is necessary for an exemplary housekeeping plan?
 - a. It should be designed by an ad hoc club committee
 - b. Benchmarks must be established for all club areas (Facility Chap. in CMAA Text)
 - c. The local department of health regulations dictate exemplary requirements
 - d. A cross-functional team should evaluate cleanliness
- 49) What is the primary problem with excessively high inventory levels of housekeeping supplies?
 - a. They take up storage space
 - b. They create a potential for employee theft
 - c. Cash is tied up in inventory (Facilities Management-CCM Review Ed)
 - d. Excessive recording keeping requirements
- 51) Which type of cleaning would be classified as "deep cleaning?"
 - a. Work done weekly
 - b. Cleaning tasks incorporated into standard work procedures
 - c. Work done by outside vendors
 - d. Cleaning after extensive repair work (Facilities Management-CCM Review Ed)

- 64) Color fading is a common laundry problem that may be caused by:
 - a. A wash temperature that is too low
 - b. A wash temperature that is too high
 - c. Too much agitation
 - d. Too little agitation
- 68) The deepest cleaning method available for most carpets is:
 - a. Dry foam cleaning
 - b. Water extraction
 - c. Rotary shampoo
 - d. Chemical emulsion
- 69) In most clubs, the housekeeping department has very limited cleaning responsibilities in:
 - a. Pool and patio areas
 - b. Exercise rooms
 - c. Kitchen areas
 - d. Management offices
- 70) When shampooing a carpet, overwetting can cause:
 - a. Seam separation
 - b. Shading
 - c. Spotting
 - d. Fading
- 71) Which planning tool helps the Executive Housekeeper identify how often equipment in a particular club area must be cleaned or maintained?
 - a. Inventory pars
 - b. Area inventory lists
 - c. Frequency schedules
 - d. Productivity standards
- 72) In a club with lodging facilities, the maintenance department has scheduled room 222 for extensive repair work. The Executive Housekeeper should make every effort to:
 - a. Personally inspect the room after the work is completed.
 - b. <u>Schedule room 222 for deep cleaning immediately after the repair work is done.</u>
 - c. Remind the Chief Engineer that maintenance is responsible for leaving the room in a spotless condition.
 - d. Ensure that needed repairs to adjacent rooms are completed at the same time.
- 73) Items that should be cleaned or maintained on a monthly basis are usually:
 - a. Not included on daily or weekly inspection checklists.
 - b. The responsibility of the maintenance department.
 - c. Part of the housekeeping department's deep-cleaning program.
 - d. Attended to only when staffing levels permit.

- 74) Which statement is *true*?
 - a. To determine realistic productivity standards, an Executive Housekeeper should conduct time and motion studies on all tasks used to clean and maintain items on an inventory list.
 - b. <u>Before determining the number of guestrooms that a room attendant should be</u> <u>expected to clean during a work shift, the Executive Housekeeper must first</u> <u>establish performance standards for guestroom cleaning.</u>
 - c. A calendar plan for deep cleaning guestrooms should schedule the majority of work for periods of high occupancy.
 - d. Productivity standards for guestroom cleaning are uniform throughout the lodging and club industry.
- 75) Which planning tool helps the Executive Housekeeper to determine how long it should take an employee to perform assigned tasks according to the department's performance standards?
 - a. Job lists
 - b. Job specifications
 - c. Job breakdowns
 - d. Productivity standards
- 76) In a club with lodging facilities, if the time available for guestroom cleaning during a work shift is 6 hours and 40 minutes and, if a room attendant is expected to clean 16 guestrooms per shift, each room attendant is expected to clean one guestroom in:
 - a. 15 minutes
 - b. 20 minutes
 - c. 25 minutes
 - d. 30 minutes
- 79) After the last two functions held in the club's main banquet room, the banquet set-up staff dragged tables across the floor, and ground dirt and food into the carpeting. Spot-cleaning the carpet kept the housekeeping's night crew from attending to routine cleaning responsibilities. The most appropriate action for the Executive Housekeeper would be to:
 - a. Schedule extra staff on nights when banquet rooms are in use.
 - b. Write a memo to the General Manager complaining about the banquet set-up staff.
 - c. <u>Meet with the Banquet Manager to ensure that tables are not dragged across</u> carpeting.
 - d. Inform the Banquet Manager that housekeeping personnel will no longer clean carpets in banquet and meeting rooms.
- 80) After three months on the job, the new Executive Housekeeper at a club with lodging facilities raised the productivity standards of room attendants from 15 rooms to 18 rooms per 8-hour shift. The General Manager and Controller were pleased with the short-term labor savings. However, there are now serious concerns about the dramatic decrease in member/guest satisfaction ratings about the cleanliness of the rooms, and inadequate supplies of towels and soap. The most appropriate action for the Executive Housekeeper

would be to:

- a. Re-double inspection efforts to ensure that rooms are cleaned correctly and properly stocked before they are made ready for re-use.
- b. Stock the front desk area with towels, soap, and other guestroom items so that members and guests can pick up anything not properly placed when cleaning rooms.
- c. <u>Review the current performance standards for guestroom cleaning with the Room</u> <u>Attendant staff, and determine if retraining is needed or if the productivity</u> standards should be lowered.
- d. Identify the Room Attendants who are underperforming and place them on a 30day probation.

WASTE MANAGEMENT GROUP

- 13) What is the ultimate goal of a club's waste minimization program?
 - a. To ensure disposal is done in an approved and environmentally suitable manner (Facility Chap. in CMAA Text)
 - b. To ensure disposal is done at the absolute minimal cost
 - c. To emphasize the recycling of waste materials
 - d. To train employees to follow club's re-use procedures
- 14) When do waste minimization procedures begin?
 - a. At time of product purchase (Facility Chap. in CMAA Text)
 - b. When contracts for waste removal are signed
 - c. When employees are trained to follow waste minimization procedures
 - d. When there is a reduction in the use of products that contribute to waste
- 16) Which federal agency requires specific storage, labeling, and handling procedures for hazardous materials?
 - a. Food & Drug Administration
 - b. Environmental Protection Agency (Facility Chap. in CMAA Text)
 - c. Hazardous Chemicals Recovery Commission
 - d. Occupational Safety & Health Administration

CONSTRUCTION/RENOVATION GROUP

- 21) What is the purpose of a facility function evaluation (FFE)?
 - a. To evaluate the physical condition of the facility
 - b. To evaluate the life cycle of facility systems
 - c. To study spaces contained within the facility to determine whether they meet the needs of members and staff (Facility Chap. in CMAA Text)
 - d. To develop information required for the maintenance budget
- 22) Who should complete a facility condition evaluation?
 - a. A club consultant
 - b. A representative of the facility's maintenance department
 - c. A vendor as a value-added service

d. A staff member from each department (Facility Chap. in CMAA Text)

- How often should a facility condition evaluation be done? 23)
 - Twice-yearly (Facility Chap. in CMAA Text) a.
 - Annually b.
 - c. Every two years
 - Every five years d.
- Which provides a comprehensive building and grounds assessment that identifies 24)condition and space function deficiencies along with cost estimates for corrective actions?
 - Facility capital budget a.
 - b. Facility quality assessment (Facility Chap. in CMAA Text)
 - c. Facility function evaluation
 - d. Facility condition evaluation
- Who should develop the scope of work and estimated costs resulting from an analysis of 25) existing physical conditions?
 - a. General manager
 - b. Consultant with architectural/engineering background (Facility Chap. in CMAA Text)
 - c. Committee of facility management employees
 - Ad hoc committee of board and club members d.
- How is an architectural and engineering (AE) consultant selected when a design and 27) construction team is being assembled?
 - a. By a nomination process from other club managers
 - b. By recommendations of the general contractor
 - Through a request for qualifications (RFQ) process (Facility Chap. in C. CMAA Text)
 - After interviews with the state licensing board d.
- Which type of information is <u>not</u> normally asked for when a request for qualifications 28) (RFQ) is issued to potential architectural and engineering firms?
 - a. Resumes of proposed project staff members
 - b. Fee proposal
 - c. Current salaries of those who will be assigned to the project (Facility Chap. in CMAA Text)
 - d. Background and location of the firm
- Approximately how many architectural engineering firms should be interviewed based 29) upon the RFQs they have submitted?
 - 1-3 a.
 - b. 3-5 (Facility Chap. in CMAA Text)
 - c. 5-7
 - d. As many as possible

- b. According to the contract between the contractor and sub-contractors
- c. According to the application and certification for payment form (Facility Chap. in CMAA Text)
- d. According to payment schedules outlined in the surety bond
- 38) Who is responsible for ensuring that the completed work is correct according to project plans and specifications?
 - a. The architect (Facility Chap. in CMAA Text)
 - b. The contractor
 - c. The lending institution
 - d. The club
- 39) Which is the most common of three possible contractual methods that can be used for a construction project?
 - a. Construction manager method
 - b. Design build method
 - c. General contracting method (Facility Chap. in CMAA Text)
 - d. Competitive bid construction project method
- 40) For what type of project does the construction manager method work best?
 - a. Small projects
 - b. Large renovations requiring detailed estimates (Facility Chap. in CMAA Text)
 - c. Projects in which more than one architect/engineering firm is used
 - d. "Fast track" projects
- 41) What is the purpose of a bid bond?
 - a. It ensures contractors will perform to their contract requirements
 - b. It ensures that contractors will not default on projects
 - c. It ensures contractors will pay sub-contractors and suppliers
 - d. It provides an insurance that bidders will enter contracts with owners (Facility Chap. in CMAA Text)
- 42) Who should be responsible for carrying builder risk insurance for a project?
 - a. Club owner
 - b. Contractor
 - c. Club owner or contractor (Facility Chap. in CMAA Text)
 - d. Club owner and contractor
- 44) At what point in a project do local regulatory code officials approve the project?
 - a. When the project is approved by the architect
 - b. When the project is approved by the engineer
 - c. At the time of "substantial completion" (Facility Chap. in CMAA Text)
 - d. After the club has made final payment
- 45) Approximately what percentage of the total construction payment will a contractor have

received at the time the project's punch list is completed and closeout items are identified?

- a. 70%
- b. 80%
- c. 90% (BMI III PowerPoint Bill Whitbeck)
- d. 100%
- 62) Which type of building plans show air and water flow and equipment system interconnections?
 - a. Mechanical
 - b. Structural
 - c. Electrical
 - d. Elevations
- 63) The average amount of reserve for replacement used to fund replacement of club elements and to purchase new equipment is ______% of total revenue.
 - a. 1−2%
 - b. 2-3%
 - c. 3 4%
 - d. 4-5%

Note: Rotate Questions 30 - 33

- 30) What is the first of the four fundamental phases in the design process for a construction project?
 - a. Programming phase (Facility Chap. in CMAA Text)
 - b. Schematic design phase
 - c. Design and development phase
 - d. Contract document development phase
- 31) During which phase in the design process is a milestone schedule developed to help the club manager monitor the project's progress?
 - a. Programming phase
 - b. Schematic design phase (Facility Chap. in CMAA Text)
 - c. Design and development phase
 - d. Contract document development phase
- 32) Materials, finishes, fixtures, equipment, and other design elements are selected during which phase of the design process?
 - a. Programming phase
 - b. Schematic design phase
 - c. Design and development phase (Facility Chap. in CMAA Text)
 - d. Contract document development phase
- 33) Which phase of the design process normally takes significantly more time than the other phases?
 - a. Programming phase
 - b. Schematic design phase
 - c. Design and development phase
 - d. Contract document development phase (Facility Chap. in CMAA Text)
- 34) Who should develop the formal safety and security plan that will be in effect during a club's construction project?
 - a. Contractor working with sub-contractors
 - b. Contractor and club staff (Facility Chap. in CMAA Text)
 - c. Club staff separately with each sub-contractor
 - d. A project safety consultant
- 35) Who retains sole responsibility for the construction site's safety?
 - a. The architect/engineer
 - b. The club itself
 - c. The contractor (Facility Chap. in CMAA Text)
 - d. Each individual sub-contractor
- 36) When are construction project payments made?
 - a. According to payment schedules developed by the lending institution

- b. According to the contract between the contractor and sub-contractors
- c. According to the application and certification for payment form (Facility Chap. in CMAA Text)
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