

PRACTICE EXAM 15: CFM SIMULATION

PRACTICE EXAM 15 — QUESTIONS 1–100

Time Limit: 3 hours · 100 Questions · 4-Option Multiple Choice

Domain Distribution: 10 questions per domain across all 10 official CFM domains

Format Note: This exam emphasizes comprehensive integration questions covering knowledge, application, scenarios, and judgment across all 10 domains, simulating the full breadth and difficulty of the actual CFM examination. Difficulty is calibrated to exam-realistic level with mixed question types throughout.

1. A facility manager is presenting a strategic facility plan to executive leadership. The plan addresses portfolio decisions over 8 years and includes significant capital investment recommendations. Which presentation framing is most likely to engage executive interest?
 - A. The connection between facility decisions and organizational strategic objectives
 - B. The technical specifications of proposed facility infrastructure investments
 - C. The chronological history of facility capital investment over recent years
 - D. The marketing prominence of vendors associated with the recommendations

2. The IFMA exam consists of 120 total questions delivered to candidates within a:
 - A. 5-hour appointment with continuous testing timer running
 - B. 2-hour appointment including tutorial and check-in time
 - C. 3-hour appointment matching the testing timer exactly

D. 4-hour appointment with 3-hour testing timer plus breaks

3. A facility's preventive maintenance program has produced declining equipment failure rates over five years from approximately 18 to 6 failures per quarter. The CFO has questioned whether the program could be reduced. The most appropriate response is to:

- A. Reduce the program by 25% to capture immediate labor cost savings demonstrably
- B. Present the cost-failure relationship with risk implications of program reduction
- C. Defend the program based on facility leadership professional judgment exclusively
- D. Eliminate the program entirely given the favorable failure trajectory demonstrated

4. The standard hierarchy of controls in occupational safety prioritizes hazard management approaches with PPE classified as:

- A. The most preferred control level for hazard management consistently
- B. The control level immediately above engineering controls in the hierarchy
- C. The least preferred control level for hazard management consistently
- D. The control level immediately below substitution in the hierarchy

5. A facility manager is responding to a vendor proposal that includes attractive pricing at 18% below market rate but vague performance commitments without specific service level agreements. The most concerning element is:

- A. The lack of specific measurable performance commitments in the proposal
- B. The vendor's marketing prominence relative to alternative providers
- C. The vendor's geographic distance from the facility operation location
- D. The vendor's competitive pricing relative to industry benchmarks

6. The Greenhouse Gas Protocol categorizes facility refrigerant leakage from cooling systems as:

- A. Scope 3 indirect emissions from value chain activities
- B. Scope 2 indirect emissions from purchased energy consumption
- C. Out-of-scope emissions excluded from organizational reporting
- D. Scope 1 direct emissions from owned or controlled sources

7. A facility manager is selecting between alternative responses to identified workplace ergonomic concerns affecting 47 employees across 3 buildings. The most appropriate first response is to:

- A. Implement standard ergonomic improvements without specific assessment immediately
- B. Refer all ergonomic concerns to human resources without facility action
- C. Conduct ergonomic assessment to identify specific issues requiring intervention
- D. Document the concerns formally without action until they escalate further

8. The standard project lifecycle phase between planning and monitoring/controlling is:

- A. Stakeholder analysis and communication planning preparation
- B. Execution of project work and deliverable creation activities
- C. Risk assessment and contingency development planning
- D. Change order processing and scope adjustment execution

9. A facility's commissioning report identifies that life safety systems are operating outside design specifications. The most appropriate first action is to:

- A. Require immediate corrective action before continued occupancy is permitted
- B. Defer corrective action until after substantial completion certification
- C. Document the finding for future reference without immediate action

D. Accept the deviation given limited operational impact identified consistently

10. The IFMA Code of Conduct's principle of confidentiality requires practitioners to:

- A. Maintain detailed records of all confidential communications consistently
- B. Limit confidential information to senior leadership exclusively for review
- C. Document all confidentiality decisions for organizational review
- D. Not disclose confidential information without permission unless required by law

11. A facility manager is responding to executive concerns about facility budget growth from \$3.6 million to \$4.8 million over three years. After investigation, the growth reflects legitimate operational requirements. The most appropriate response is to:

- A. Reduce facility budget without specific basis to demonstrate organizational alignment
- B. Defend the budget growth based on facility leadership professional judgment
- C. Present the operational drivers of budget growth with specific quantified analysis
- D. Defer the concerns until executive leadership clarifies specific budget expectations

12. The standard ASHRAE Standard 188 most directly addresses:

- A. Water management plans for Legionella risk in building water systems
- B. Thermal comfort temperature and humidity ranges for occupied spaces
- C. Outdoor air ventilation rates for indoor air quality requirements
- D. Energy efficiency standards for commercial building operations

13. A facility's IWMS implementation has stalled at 14 months and is currently 35% over the original \$3.2 million budget. The vendor recommends additional scope; the project sponsor proposes pausing. The most appropriate facility manager response is to:

- A. Support the vendor recommendation to maintain implementation momentum consistently
- B. Conduct structured assessment of root causes before recommending direction
- C. Support the sponsor proposal to pause and reassess implementation strategy
- D. Defer the decision to executive leadership without facility recommendation

14. The standard NFPA code governing fire alarm and signaling systems is:

- A. NFPA 101 for life safety and means of egress requirements
- B. NFPA 70 for the National Electrical Code provisions
- C. NFPA 25 for inspection of water-based systems specifically
- D. NFPA 72 for fire alarm and signaling code requirements

15. A facility manager is responding to a request from finance for \$720,000 in budget reduction options. The reduction options would impact preventive maintenance, vendor services, and occupant amenities. The most appropriate response is to:

- A. Present reduction options with transparent service quality and risk implications
- B. Implement the requested reductions immediately to demonstrate organizational alignment
- C. Refuse the request based on facility leadership professional judgment exclusively
- D. Defer the response indefinitely while the function evaluates options consistently

16. The standard project delivery method involving multi-party contract with shared risk and reward is:

- A. Design-bid-build with traditional sequential contracting structure

- B. Design-build with single-point responsibility for design and construction
- C. Integrated Project Delivery with collaborative multi-party contract structure
- D. Public-Private Partnership with long-term operational integration consistently

17. A facility manager is selecting between two qualified vendor proposals for a \$2.4 million janitorial services contract. The most appropriate selection consideration is:

- A. The vendor's marketing prominence and brand recognition in the industry
- B. The fit between vendor capabilities and the specific service requirements
- C. The vendor's geographic proximity to the facility location consistently
- D. The vendor's competitive pricing relative to alternative qualified bidders

18. The standard Recovery Time Objective in business continuity planning represents:

- A. The acceptable data loss expressed as time before disruption occurs
- B. The frequency at which backup systems must be tested for validation
- C. The estimated duration of typical disruption events affecting facility
- D. The target timeframe within which a function must be restored

19. A facility's emergency action plan addresses fire and weather scenarios but does not address infectious disease scenarios. The most appropriate response is to:

- A. Continue using the existing plan as adequate for typical emergency scenarios
- B. Defer plan updates until specific infectious disease threats emerge again
- C. Update the plan to include infectious disease response procedures
- D. Outsource infectious disease planning to external public health consultants

20. The Schedule Performance Index of 0.85 indicates:

- A. Performance behind schedule by 15% of planned work consistently
- B. Performance ahead of schedule by 15% of planned work
- C. Performance exactly matching schedule expectations consistently
- D. Performance ahead of schedule by 85% completion rate

21. A facility manager is responding to occupant feedback indicating workplace dissatisfaction despite recent \$2.4 million workplace investment. Satisfaction declined from 76% pre-investment to 62% post-investment. The most appropriate diagnostic approach is to:

- A. Reduce facility services to lower expectations and increase relative satisfaction
- B. Conduct executive briefings to defend the recent investment decisions
- C. Investigate specific dissatisfaction drivers through structured analysis
- D. Discontinue feedback collection to avoid documenting the dissatisfaction

22. The standard Cost of Quality framework identifies investments in inspection and testing as:

- A. Prevention costs supporting designed-in quality outcomes consistently
- B. Appraisal costs verifying achieved quality through measurement systems
- C. Internal failure costs from defects caught before delivery
- D. External failure costs from defects delivered to customers

23. A facility's preventive maintenance program shows compliance rates of 96% but unscheduled corrective work orders have increased 32% over the past year. The most appropriate diagnostic question is:

- A. Should compliance targets be reduced to match the corrective work patterns

- B. Should the maintenance team be expanded to handle increased corrective work
- C. Should the CMMS platform be replaced with a different vendor solution
- D. Are PM tasks addressing the actual failure modes producing the corrective work

24. The standard CPTED design framework reduces security risk through:

- A. Environmental design including natural surveillance and access control
- B. Maximum energy efficiency through building orientation and design
- C. Improved indoor air quality through ventilation design and management
- D. Optimized space utilization through layout planning and design

25. A facility manager is implementing a workplace transformation initiative affecting 1,800 employees across multiple buildings. The most critical success factor is:

- A. The technical sophistication of the new workplace technology platforms
- B. The financial savings projected from reduced real estate footprint consistently
- C. Disciplined change management throughout planning, transition, and adoption
- D. The aesthetic quality of the new workspace design and furniture

26. The IFMA exam blueprint allocates how many scored questions per domain?

- A. 5 scored questions equally weighted across domains consistently
- B. 10 scored questions equally weighted at 10% each
- C. 15 scored questions varying by domain criticality and importance
- D. 20 scored questions emphasizing operations content focus consistently

27. A facility's risk register identifies that backup power testing has not been conducted in the past 9 months. The 1,200 kW emergency generator serves critical IT infrastructure. The most appropriate response is to:

- A. Continue operations given established backup power reliability history consistently
- B. Document the testing gap formally for the risk register without testing
- C. Outsource backup power testing to specialized external testing vendors
- D. Conduct backup power testing immediately and establish ongoing schedule

28. The standard Plan-Do-Check-Act cycle is most commonly attributed to:

- A. W. Edwards Deming for continuous improvement methodology development
- B. Joseph Juran for the quality trilogy framework establishment
- C. Philip Crosby for zero defects quality philosophy advancement
- D. Kaoru Ishikawa for cause-and-effect analysis tools development

29. A facility manager is responding to repeated occupant complaints about workspace temperature in a specific zone. Investigation shows the BAS sensor has been reading 4°F higher than actual conditions for approximately 8 months. The most significant implication is:

- A. The sensor must be replaced with a calibrated unit immediately consistently
- B. The HVAC system in that zone must be redesigned and reinstalled
- C. Previous performance data for that zone is unreliable across the affected period
- D. The occupant complaints validate that the survey methodology was effective

30. The standard ENERGY STAR Portfolio Manager produces facility benchmarking scores on:

- A. Letter grades from A through F by building type classification

- B. Numerical scores from 1 to 100 percentile-based comparison
- C. Bronze, Silver, Gold, and Platinum certification tier achievement
- D. Percentile rankings without numerical scoring system consistently

31. A facility manager observes that vendor management practices vary significantly across multiple facility sites. Some sites maintain rigorous performance reviews; others have minimal oversight. The most appropriate response is to:

- A. Allow continued site-level variation appropriate to local operating conditions
- B. Centralize all vendor management at the corporate level for consistency
- C. Outsource vendor management entirely to specialized third-party firms
- D. Establish enterprise vendor management standards while supporting site implementation

32. The standard chargeback model that distributes costs based on actual measured consumption is:

- A. Consumption-based chargeback with metering infrastructure deployment
- B. Allocation-based chargeback by occupied area square footage
- C. Service-tiered chargeback by selection criteria established
- D. No chargeback with central absorption for organizational overhead

33. A facility's CMMS data quality discipline directly affects the reliability of analytics and management decisions. The CMMS contains 18,000 asset records with inconsistent quality. The most appropriate response is to:

- A. Continue current practice given established system functionality demonstrated
- B. Discontinue CMMS use given the data quality challenges identified consistently
- C. Implement structured data quality remediation across the asset portfolio
- D. Replace the CMMS platform with a different vendor solution immediately

34. The standard Triple Net (NNN) lease structure requires the tenant to pay base rent plus:

- A. Utilities, janitorial services, and security only consistently
- B. Property taxes, insurance, and maintenance consistently
- C. Property management fees and capital improvements consistently
- D. Marketing costs and tenant improvement allowances consistently

35. A facility's commissioning process for a \$32 million new construction project has identified 84 deficiencies during functional performance testing. The most significant lesson is:

- A. The construction contractor failed to deliver per industry standard practice
- B. The architect specified an inadequate modeling level of development
- C. BIM is fundamentally unsuitable for facility operations support purposes
- D. Owner project requirements should be specified upfront in future projects

36. The standard SMART criteria for KPI evaluation require KPIs to be:

- A. Specific, Measurable, Achievable, Relevant, and Time-bound consistently
- B. Standardized, Measurable, Auditable, Reportable, and Trackable consistently
- C. Strategic, Meaningful, Attainable, Realistic, and Tangible consistently
- D. Sustainable, Material, Accountable, Reliable, and Tracked consistently

37. A facility manager is selecting between alternative responses to identified accessibility deficiencies in a facility. The deficiencies span 28 specific items requiring approximately \$1.4 million in remediation. The most appropriate evaluation framework is:

- A. The cost of each deficiency correction in isolation from other considerations
- B. The marketing materials of accessibility technology vendor solutions consistently

- C. Compliance obligation with risk-prioritized correction sequencing
- D. The geographic distribution of the affected facility users consistently

38. The standard FEMA emergency management framework identifies four phases including:

- A. Identification, response, recovery, and accountability assignment consistently
- B. Mitigation, preparedness, response, and recovery consistently
- C. Preparedness, response, recovery, and litigation consistently
- D. Investigation, response, mitigation, and prevention consistently

39. A facility manager is responding to a vendor proposal that includes attractive long-term commitments at 18% below current pricing. The proposal would lock the organization into 8-year commitments without renegotiation provisions. The most appropriate concern is:

- A. The vendor's marketing materials promoting partnership benefits consistently
- B. The vendor's geographic proximity to facility operation locations consistently
- C. The vendor's competitive pricing during the long-term commitment period
- D. The long-term commitment may exceed organizational decision-making horizons

40. The standard IFMA Code of Conduct's principle of integrity requires practitioners to:

- A. Act with honesty and fairness without misleading parties consistently
- B. Provide services exclusively within their geographic region consistently
- C. Maintain professional certifications throughout their careers consistently
- D. Document all professional decisions for organizational review consistently

41. A facility manager is selecting between alternative responses to identified energy efficiency opportunities representing \$480,000 in potential capital investment. The opportunities span 7 distinct projects. The most appropriate evaluation framework is:

- A. The marketing materials of energy efficiency technology vendor solutions
- B. The total cost, energy savings, and operational implications across the analysis horizon
- C. The cost of each opportunity in isolation from other considerations
- D. The geographic proximity of energy efficiency vendor support offices

42. The standard ICS principle ensuring each responder reports to a single supervisor is:

- A. Unity of command throughout the response structure consistently
- B. Span of control limiting subordinate counts per supervisor consistently
- C. Common terminology enabling cross-organizational coordination consistently
- D. Modular organization scaling structure to incident complexity consistently

43. A facility manager is responding to a recurring pattern of project cost overruns averaging 18% across 24 active projects. After investigation, the pattern is traceable to consistent under-estimation. The most appropriate response is to:

- A. Accept the overrun pattern as inherent to facility project execution consistently
- B. Increase project budgets generally to absorb expected overruns consistently
- C. Address the planning estimation discipline through structured improvement
- D. Discontinue facility project work given the demonstrated cost difficulty

44. The standard Critical Path Method identifies activities with:

- A. The highest individual cost across the project portfolio consistently

- B. The most labor resources required during execution phase consistently
- C. The most visible deliverables to project stakeholders consistently
- D. Zero float that determine project minimum duration consistently

45. A facility's risk assessment has identified that backup power capability has degraded over time without documented assessment. The most consequential implication is:

- A. The backup power vendor relationship may need to be renegotiated
- B. The actual resilience capability differs from assumed planning capability
- C. The maintenance budget for backup power should be increased substantially
- D. The backup power equipment age should be documented in records

46. The standard project charter formally authorizes the project and defines its purpose through:

- A. Documentation of scope, deliverables, schedule, budget, stakeholders, and authority
- B. Daily contractor activity reporting requirements consistently established
- C. Vendor pricing negotiation for facility services contracts consistently
- D. Calculation of building tax depreciation schedules consistently established

47. A facility manager is selecting between alternative project delivery methods for a complex healthcare facility renovation valued at \$18 million. The scope is uncertain and stakeholder input throughout design will be substantial. The most appropriate delivery method is:

- A. Design-bid-build with traditional sequential procurement and competitive bidding
- B. Time-and-materials contracting with daily oversight and reporting consistently
- C. Construction Manager at Risk with substantial preconstruction collaboration
- D. Public-Private Partnership with long-term operational integration consistently

48. The standard Lean methodology's seven waste categories are commonly remembered as:

- A. PDSA representing the improvement cycle stages consistently
- B. SMART describing goal characteristic dimensions consistently
- C. DMAIC for the Six Sigma project framework consistently
- D. TIMWOOD covering all seven waste types consistently

49. A facility manager is responding to executive interest in adopting cutting-edge facility technologies. The facility function lacks demonstrated capability with current \$1.8 million technology investments. The most appropriate response is to:

- A. Address current technology capability gaps before adopting cutting-edge solutions
- B. Adopt the cutting-edge technologies to demonstrate organizational responsiveness
- C. Defer all technology decisions until executive leadership clarifies expectations
- D. Implement cutting-edge technologies in pilot configurations to limit risk

50. The standard ASHRAE Standard 55 most directly governs:

- A. Outdoor air ventilation rates for indoor air quality requirements
- B. Thermal comfort temperature and humidity ranges consistently
- C. Energy efficiency standards for commercial building operations
- D. Water management plans for Legionella risk management

51. A facility's IWMS data shows that maintenance compliance varies significantly across 8 multiple sites ranging from 78% to 97%. The most appropriate diagnostic approach is to:

- A. Standardize all sites to the practices of the highest-performing site immediately
- B. Reduce compliance expectations across all sites to match the lowest performer

- C. Investigate organizational factors driving the variation across the multiple sites
- D. Replace the IWMS platform across all sites with a different vendor solution

52. The standard IFMA Certification Commission's CFM credential validity period is:

- A. 5 years matching standard exam validity periods consistently established
- B. 1 year requiring continuous documentation submission consistently
- C. Indefinite without specific renewal requirements consistently established
- D. 3 years requiring documented qualifying activities consistently established

53. A facility manager observes that the BAS has been generating approximately 340 alarm notifications per week, of which approximately 90% are not addressed by operations staff. The most concerning aspect is:

- A. The risk that genuine critical alarms will be missed in the noise
- B. The cost of the bandwidth required to transmit the notifications consistently
- C. The administrative burden of documenting the unaddressed alarms consistently
- D. The vendor's marketing characterization of the BAS reliability consistently

54. The standard Earned Value Management framework uses three foundational values:

- A. Earned Value, Vendor Value, and Strategic Value consistently established
- B. Planned Value, Actual Value, and Projected Value consistently established
- C. Earned Value, Planned Value, and Actual Cost consistently established
- D. Budget Value, Schedule Value, and Cost Value consistently established

55. A facility manager is selecting between alternative responses to a maintenance technician shortage representing 4 of 18 positions vacant for over 90 days. The most appropriate response is to:

- A. Discontinue maintenance services until staffing is restored to full level
- B. Evaluate workforce strategy options including staffing, contractor, and process changes
- C. Reduce maintenance service expectations to match available staffing consistently
- D. Increase compensation to attract additional maintenance technicians immediately

56. The standard mass notification system effectiveness depends most consequentially on:

- A. The visual aesthetics of the administrative interface consistently established
- B. The marketing prominence of the selected vendor brand consistently established
- C. The unit cost per subscriber across the user base consistently established
- D. Multi-channel reach across SMS, voice, email, and signage consistently

57. A facility's IWMS implementation team has identified that data migration from legacy systems will require significantly more effort than initially planned. The implementation timeline is at risk by approximately 6 months. The most appropriate response is to:

- A. Reassess scope, timeline, and approach with project sponsor and stakeholders
- B. Accept implementation timeline slippage to ensure data quality preservation
- C. Migrate only essential data and supplement subsequently after launch
- D. Maintain the original timeline by accepting reduced data migration scope

58. The standard preventive maintenance program is most appropriate for assets that:

- A. Have completely random failure patterns in nature consistently established
- B. Are easily replaced when they fail in operation consistently established

- C. Exhibit predictable wear patterns over time consistently established
- D. Require continuous condition monitoring infrastructure consistently established

59. A facility manager is responding to executive concerns about facility staff productivity. After investigation, productivity is consistent with industry benchmarks at \$2.40 per square foot. The most appropriate response is to:

- A. Defend facility productivity based on facility leadership professional judgment
- B. Present productivity benchmarking analysis with specific quantified comparison
- C. Implement productivity improvements without specific basis to demonstrate response
- D. Defer the concerns until executive leadership clarifies specific expectations

60. The standard CMMS platform supports which set of core functions?

- A. Asset records, work orders, PM scheduling, inventory, and reporting consistently
- B. Email management and calendar integration applications consistently established
- C. Customer relationship management and sales automation consistently established
- D. Human resources administration and payroll processing consistently established

61. A facility manager is responding to repeated occupant requests for expanded amenities. The facility budget cannot accommodate all requested investments. The most appropriate evaluation framework is:

- A. Implement the most popular amenity request based on occupant survey results
- B. Implement the lowest-cost amenity request to demonstrate organizational responsiveness
- C. Defer all amenity decisions until budget can accommodate comprehensive expansion
- D. Evaluate amenity requests against strategic talent and productivity objectives

62. The standard project lifecycle includes which phases in order?

- A. Initiation, execution, planning, monitoring, and closeout consistently
- B. Planning, initiation, execution, monitoring, and closeout consistently
- C. Initiation, planning, execution, monitoring, and closeout consistently
- D. Execution, planning, initiation, monitoring, and closeout consistently

63. A facility manager is selecting between alternative responses to identified workplace satisfaction concerns affecting approximately 38% of employees. The most appropriate response is to:

- A. Investigate the specific satisfaction concerns through structured engagement
- B. Implement standard workplace improvements without specific assessment consistently
- C. Reduce facility services to lower expectations and increase relative satisfaction
- D. Discontinue satisfaction measurement to avoid documenting the concerns

64. The standard FMEA risk priority number methodology prioritizes failure modes through:

- A. Marketing materials and vendor brand recognition consistently established
- B. Severity, occurrence, and detection scoring consistently established
- C. Cost of each failure in isolation from other considerations consistently
- D. Geographic distribution of failure occurrence patterns consistently established

65. A facility's preventive maintenance program covers building systems but does not address grounds and exterior maintenance. The most appropriate response is to:

- A. Continue current scope given the focus on building system reliability consistently
- B. Eliminate building system PM to free resources for grounds maintenance consistently
- C. Outsource all grounds and exterior maintenance to external service providers

D. Evaluate grounds and exterior maintenance for inclusion in the PM program

66. The standard hierarchy of controls preferred sequence from most to least effective is:

A. Elimination, substitution, engineering, administrative, and PPE consistently

B. PPE, training, engineering, substitution, and elimination consistently

C. Engineering, elimination, substitution, PPE, and administrative consistently

D. Administrative, engineering, substitution, PPE, and elimination consistently

67. A facility manager is responding to a vendor proposal for outsourced facility management services across the entire 920,000 square foot portfolio. The proposal would replace the current 24-person internal facility team. The most appropriate evaluation consideration is:

A. The vendor's marketing prominence and brand recognition in the industry

B. The vendor's geographic proximity to facility operations consistently

C. The strategic implications of outsourcing the facility management function

D. The financial savings projected from the outsourcing arrangement consistently

68. The standard Risk Treatment strategy that purchases insurance to cover potential losses is classified as:

A. Risk avoidance through activity elimination decisions consistently established

B. Risk transfer through contractual mechanism implementation consistently

C. Risk mitigation through control implementation efforts consistently established

D. Risk acceptance through deliberate retention decisions consistently established

69. A facility's after-action review following a recent incident has identified six specific improvement opportunities ranging from \$8,000 simple corrections to \$240,000 capital investments. The most appropriate prioritization framework is:

- A. Address all six recommendations simultaneously to demonstrate response consistently
- B. Address only the recommendations supported by executive interest consistently
- C. Address recommendations in chronological order of identification documentation
- D. Prioritize opportunities by risk reduction value and implementation feasibility

70. The standard Cost Performance Index of 0.80 indicates:

- A. Performance unfavorable to budget by 20% consistently established
- B. Performance favorable to budget by 20% consistently established
- C. Performance exactly matching budgeted cost consistently established
- D. Performance unmeasurable from current data consistently established

71. A facility manager is responding to a vendor that has been performing inconsistently over six months. The vendor delivers 78% of work on time and meets quality standards 85% of the time. The most appropriate response is to:

- A. Continue the relationship given established vendor performance history consistently
- B. Terminate the relationship immediately to address the inconsistent performance
- C. Implement structured performance review with documented corrective action
- D. Increase payment to the vendor to motivate improved performance levels

72. The standard ISO 31000 risk management framework emphasizes risk management as:

- A. Centralized in dedicated risk management function only consistently established

- B. Integrated, structured, customized, and continuously improved consistently
- C. Limited to insurance and contractual transfer mechanisms consistently established
- D. Concentrated on highest probability events only consistently established

73. A facility manager is selecting between alternative responses to identified opportunities for facility automation across 6 buildings totaling 740,000 square feet. The opportunities span 14 distinct projects. The most appropriate evaluation framework is:

- A. The marketing materials of automation technology vendor solutions consistently
- B. The cost of each automation opportunity in isolation from other considerations
- C. The geographic proximity of automation technology vendor support offices
- D. The strategic value, implementation cost, and operational integration of automation

74. The standard IFMA exam structure includes how many total questions delivered to candidates?

- A. 120 questions including 100 scored and 20 pretest items consistently
- B. 100 questions scored without pretest items included consistently established
- C. 150 questions with subject specialization sections consistently established
- D. 75 questions covering core domains only consistently established

75. A facility manager is responding to executive interest in implementing a new \$480,000 facility technology that has not been broadly evaluated against organizational requirements. The most appropriate response is to:

- A. Implement the technology immediately to demonstrate organizational responsiveness
- B. Decline executive interest based on absence of formal evaluation methodology
- C. Conduct structured evaluation of the technology against organizational requirements
- D. Defer the decision indefinitely while the function considers evaluation approach

76. The standard ADA Standards establish accessibility requirements for which facility elements?

- A. Energy systems, mechanical equipment, and HVAC components consistently
- B. Parking, entrances, routes, restrooms, signage, and alarms consistently
- C. Cybersecurity systems, network infrastructure, and data centers consistently
- D. Sustainability metrics, carbon reporting, and environmental management consistently

77. A facility's emergency response plan addresses fire, weather, and security scenarios. The plan does not address active threat scenarios despite recent local incidents. The most appropriate response is to:

- A. Continue using the existing plan as adequate for typical scenarios consistently
- B. Discontinue the existing plan pending complete redevelopment effort consistently
- C. Outsource active threat planning to specialized security consultants consistently
- D. Update the plan to include active threat response procedures consistently

78. The standard IFMA Certification Commission's CFM exam scoring methodology is:

- A. Criterion-referenced through standard-setting study consistently established
- B. Norm-referenced based on candidate cohort comparison consistently established
- C. Composite-scored across multiple sub-components consistently established
- D. Percentile-ranked against historical performance consistently established

79. A facility manager is selecting between alternative responses to identified opportunities for occupant experience improvement across 4 buildings serving 2,800 occupants. The opportunities span 12 distinct initiatives. The most appropriate evaluation framework is:

- A. The marketing materials of occupant experience technology vendor solutions
- B. The cost of each opportunity in isolation from other considerations consistently

- C. The strategic value, implementation cost, and operational integration of opportunities
- D. The geographic proximity of occupant experience technology vendor offices

80. The standard project delivery method providing single point of responsibility for design and construction is:

- A. Construction Manager at Risk with preconstruction services consistently established
- B. Design-build with single-point responsibility for design and construction
- C. Design-bid-build with sequential procurement processes consistently established
- D. Public-Private Partnership with operations integration consistently established

81. A facility's lease portfolio includes a building with 5 years remaining on the lease term and \$14 million in remaining lease obligations. The organization has decided to consolidate operations and vacate. The most appropriate financial response is to:

- A. Both pursue subleasing and explore early termination negotiation
- B. Pay the full remaining lease term and vacate the building entirely consistently
- C. Pursue subleasing to recover a portion of the remaining obligation consistently
- D. Negotiate with the landlord regarding early termination options consistently

82. The standard Greenhouse Gas Protocol's Scope 1 emissions include:

- A. Indirect emissions from purchased electricity consumption consistently established
- B. Value chain emissions from supplier and customer activities consistently
- C. Direct emissions from owned or controlled sources consistently established
- D. Cumulative emissions across multiple organizations consistently established

83. A facility manager is responding to a recurring pattern of vendor performance issues across 8 multiple contracts representing \$2.8 million annual spend. The pattern has emerged over 12 months. The most appropriate response is to:

- A. Continue current vendor management practices given established acceptance consistently
- B. Address the systemic vendor management issues through structured improvement
- C. Terminate all vendor relationships and rebid the contracts entirely consistently
- D. Defer vendor management changes indefinitely while the function evaluates approach

84. The standard Construction Manager at Risk method provides:

- A. Single point of responsibility for design and construction consistently established
- B. Multi-party contract with shared risk and reward consistently established
- C. Sequential procurement with competitive bidding consistently established
- D. Preconstruction expertise during design for complex projects consistently

85. A facility manager is responding to executive concerns about a particular facility cost category that has grown 28% faster than other categories over three years. After investigation, the growth reflects legitimate operational drivers. The most appropriate response is to:

- A. Present the operational drivers of category-specific growth with structured analysis
- B. Reduce the specific cost category to match other category growth rates immediately
- C. Defend the cost category growth based on facility leadership professional judgment
- D. Defer the concerns until executive leadership clarifies specific category expectations

86. The standard reliability-centered maintenance approach is best characterized as:

- A. Default reactive maintenance applied for all assets consistently established

- B. Universal preventive maintenance applied to all assets consistently established
- C. Systematic analysis selecting optimal strategy per asset consistently established
- D. Continuous predictive monitoring on every asset consistently established

87. A facility's emergency response plan was last updated 22 months ago. The organization has experienced significant changes including 2 acquisitions, 3 relocations, and substantial workforce growth. The most appropriate response is to:

- A. Continue using the existing plan given limited operational changes consistently
- B. Review the plan and update for any organizational or operational changes
- C. Discontinue the existing plan pending complete redevelopment effort consistently
- D. Outsource plan maintenance to specialized emergency consultants consistently

88. The standard IFMA Code of Conduct's principle of high standard of service requires practitioners to:

- A. Provide services across all facility management disciplines consistently established
- B. Maintain professional certifications continuously throughout careers consistently
- C. Document all professional decisions for organizational review consistently established
- D. Provide only services for which they are competent and qualified consistently

89. A facility manager is responding to a vendor proposal that includes attractive technology innovations not yet proven in commercial deployment. The proposal would represent a \$1.2 million capital investment. The most appropriate response is to:

- A. Evaluate the risk-reward balance and pilot deployment options for the innovation
- B. Implement the innovation immediately to demonstrate organizational responsiveness
- C. Decline the innovation based on the absence of commercial deployment evidence
- D. Defer the decision indefinitely while the function evaluates approach consistently

90. The standard space planning hierarchy progresses through which top-down sequence?

- A. Detailed design, space planning, programming, and strategy consistently established
- B. Programming, strategy, detailed design, and space planning consistently established
- C. Strategy, programming, space standards, planning, and design consistently
- D. Space planning, strategy, design, programming, and standards consistently

91. A facility's risk register identifies several risks where mitigation has been implemented but residual risk remains significant. Three risks involve potential losses exceeding \$2 million each. The most appropriate response is to:

- A. Implement additional mitigation measures regardless of cost-benefit analysis consistently
- B. Document and accept the residual risk if within organizational tolerance
- C. Transfer all residual risk through additional insurance coverage consistently
- D. Avoid all activities producing residual risk regardless of operational impact

92. The standard project closeout activity most commonly neglected is:

- A. Lessons learned documentation and integration consistently established
- B. Final payment processing and lien releases consistently established
- C. Punch list completion and substantial completion certification consistently
- D. Certificate of occupancy filing with authorities consistently established

93. A facility manager is selecting between alternative responses to identified opportunities for sustainability improvement representing \$480,000 in potential capital investment across 8 distinct projects. The most appropriate evaluation framework is:

- A. The marketing materials of sustainability technology vendor solutions consistently

- B. The cost of each opportunity in isolation from other considerations consistently
- C. The geographic proximity of sustainability technology vendor support offices
- D. The total cost, sustainability impact, and operational implications across the analysis horizon

94. The standard IFMA Code of Conduct's principle of fiduciary responsibility requires practitioners to be:

- A. Aggressive in negotiating vendor financial terms consistently established
- B. Neutral on financial matters affecting facility decisions consistently established
- C. Honest, transparent, and trustworthy in financial dealings consistently
- D. Limited to advisory roles in financial matters only consistently established

95. A facility's risk register identifies several emerging risks without documented assessment including emerging cybersecurity exposures and climate-related physical risks. The most appropriate response is to:

- A. Conduct structured assessment of emerging risks using established methodology
- B. Defer assessment indefinitely while the function evaluates approach consistently
- C. Treat all emerging risks as low priority pending more concrete information
- D. Treat all emerging risks as high priority requiring immediate intervention

96. The standard FMEA (Failure Modes and Effects Analysis) is most appropriately applied when:

- A. Calculating annual facility depreciation for asset accounting purposes consistently
- B. Identifying potential failure modes and their consequences systematically
- C. Establishing vendor evaluation criteria for facility services procurement consistently
- D. Negotiating chargeback model rates across departmental cost allocation consistently

97. A facility manager is selecting between alternative responses to identified workplace safety issues affecting 14 specific job functions. The issues span ergonomic, chemical exposure, and physical hazard categories. The most appropriate evaluation framework is:

- A. The cost of each safety response in isolation from other considerations consistently
- B. The marketing materials of safety equipment vendors offering solutions consistently
- C. The hierarchy of controls applied to the specific identified hazards consistently
- D. The geographic distribution of the affected facility workers consistently established

98. The standard IFMA exam delivery method is:

- A. Computer-based testing at Prometric centers consistently established
- B. Paper-based testing at certified testing locations consistently established
- C. Live remote proctoring through approved providers consistently established
- D. In-person testing at IFMA regional offices consistently established

99. A facility's preventive maintenance documentation shows that PM frequency varies significantly across asset types ranging from monthly to annual intervals. The variation reflects historical practice without current asset-specific analysis. The most appropriate diagnostic approach is to:

- A. Standardize PM frequency across all asset types for consistency consistently
- B. Reduce PM frequency on all assets to match the lowest-frequency type consistently
- C. Increase PM frequency on all assets to match the highest-frequency type consistently
- D. Investigate whether current frequencies match asset-specific failure characteristics

100. The standard IFMA Certification Commission's CFM credential renewal requires activities in:

- A. One of four categories with documented activities consistently established
- B. At least two of four categories with documented activities consistently
- C. All four categories with documented activities required consistently established
- D. At least three of four categories with documented activities consistently established

PRACTICE EXAM 15 — ANSWER KEY AND FULL EXPLANATIONS

1. A — The connection between facility decisions and organizational strategic objectives is most likely to engage executive interest because executives evaluate facility investments against strategic outcomes. Strategic Facility Plans translate organizational strategy into facility implications. Technical specifications, chronological history, and vendor marketing prominence are operational details secondary to strategic alignment.
2. D — The IFMA exam appointment is 4 hours including a 3-hour testing timer plus tutorial, check-in, and breaks. The timer counts down from 3 hours; the additional appointment time accommodates non-testing activities. Other duration framings misrepresent the actual exam structure.
3. B — Presenting the cost-failure relationship with risk implications of program reduction makes the trade-offs visible to the CFO. Reducing the program, defending based on judgment, and elimination all fail to engage the legitimate financial question productively. Quantified analysis enables informed decision-making.
4. C — PPE is the least preferred control level in the hierarchy of controls. The hierarchy progresses through elimination, substitution, engineering controls, administrative controls, and PPE in descending order of effectiveness. Higher-order controls provide more reliable protection because they reduce dependence on consistent worker behavior.
5. A — The lack of specific measurable performance commitments is the most concerning element of attractive financial terms with vague performance. Without performance commitments, financial terms have no operational meaning. Marketing, geography, and pricing are secondary to commitment specificity.
6. D — Scope 1 emissions are direct emissions from sources owned or controlled by the organization, including refrigerant leakage from cooling equipment. The GHG Protocol distinguishes Scope 1 (direct), Scope 2 (purchased energy), and Scope 3 (value chain). Refrigerant leakage from owned facilities is classic Scope 1.
7. C — Conducting ergonomic assessment to identify specific issues requiring intervention provides the analytical foundation for effective response. Standard improvements without assessment, HR referral without facility action, and documentation without action all fail to address the underlying concerns. Ergonomic concerns warrant assessment-based intervention.

8. B — Execution of project work and deliverable creation is the standard project lifecycle phase between planning and monitoring/controlling. The lifecycle progresses through initiation, planning, execution, monitoring/controlling, and closeout. Stakeholder analysis, risk assessment, and change order processing occur within phases rather than as standalone phases.
9. A — Requiring immediate corrective action before continued occupancy is permitted ensures life safety system integrity for occupants. Life safety systems are non-negotiable foundations of occupancy safety. Deferral, documentation, and acceptance all leave occupants exposed to life safety system performance gaps.
10. D — The IFMA Code of Conduct's principle of confidentiality requires practitioners to not disclose confidential information without permission unless required by law. The principle protects proprietary and confidential information in facility management practice. Documentation, hierarchy limitation, and review documentation are not the principle's core requirement.
11. C — Presenting the operational drivers of budget growth with specific quantified analysis engages the executive concern through analytical response. Reduction without basis, defense without analysis, and deferral all fail to engage the legitimate concern productively. Quantified analysis is the appropriate response to budget concerns.
12. A — ASHRAE Standard 188 governs water management plans addressing Legionella risk in cooling tower and other building water systems. The standard establishes requirements for risk assessment, control measures, monitoring, and documentation. Other standards address different facility performance areas.
13. B — Conducting structured assessment of root causes before recommending direction provides the analytical foundation for an informed decision. Supporting either the vendor recommendation or sponsor proposal without diagnosis bypasses the responsibility for analytical rigor. Diagnosis precedes prescription in stalled implementation situations.
14. D — NFPA 72 governs fire alarm and signaling code requirements for commercial facilities. The code addresses installation, performance, testing, and maintenance of fire alarm systems. NFPA 70, 25, and 101 address different fire and electrical safety areas.
15. A — Presenting reduction options with transparent service quality and risk implications enables finance to make informed decisions about acceptable trade-offs. Immediate implementation, refusal, and indefinite deferral all fail to engage the legitimate financial concern productively. Quantified analysis is the appropriate response to reduction requests.
16. C — Integrated Project Delivery uses a multi-party contract with shared risk and reward among owner, designer, and contractor. The model fits complex projects where collaboration produces significant value. Design-bid-build, design-build, and P3 distribute risk and responsibility differently.

17. B — The fit between vendor capabilities and the specific service requirements should drive selection between qualified vendor proposals. Marketing prominence, geographic proximity, and pricing are inputs to evaluation but not the central framework. Vendor selection must match capability to requirement.
18. D — Recovery Time Objective is the target timeframe within which a disrupted function must be restored. RTO is a planning target derived from Business Impact Analysis. Maximum acceptable data loss is RPO; backup testing frequency and disruption duration estimates are separate concepts.
19. C — Updating the plan to include infectious disease response procedures addresses the documented gap. Recent organizational experience demonstrates the credible threat warrants specific facility planning. Continuation, deferral, and outsourcing all leave the organization unprepared for credible threat scenarios.
20. A — A Schedule Performance Index of 0.85 indicates performance behind schedule by 15% of planned work. SPI below 1.0 indicates behind schedule; above 1.0 indicates ahead. The calculation shows the project completed 85% of planned work for the period.
21. C — Investigating specific dissatisfaction drivers through structured analysis is the appropriate diagnostic response when investment fails to produce expected satisfaction. Service reduction, executive defense, and discontinued feedback all bypass the analytical opportunity. Investment-satisfaction disconnect requires diagnostic investigation.
22. B — Appraisal costs verify achieved quality through inspection, audits, testing, and measurement systems. The cost of quality framework distinguishes appraisal from prevention (designed-in quality), internal failure (caught defects), and external failure (delivered defects). Inspection and testing are classic appraisal activities.
23. D — Are PM tasks addressing the actual failure modes producing the corrective work is the appropriate diagnostic question when PM compliance is high but corrective work increases. The pattern indicates that PM scope may not match the failure modes generating problems. Compliance reduction, staffing increases, and platform replacement all bypass the diagnostic opportunity.
24. A — CPTED reduces security risk through environmental design including natural surveillance, natural access control, territorial reinforcement, and maintenance. The framework integrates security into facility design. Energy efficiency, IAQ, and space optimization are addressed through other design disciplines.
25. C — Disciplined change management throughout planning, transition, and adoption is the most critical success factor for workplace transformation affecting many employees. Technology, financial savings, and aesthetics are inputs that do not substitute for managed change. Workplace transformation depends on adoption discipline.

26. B — The IFMA exam blueprint allocates 10 scored questions equally to each of the ten official domains, weighted at 10% each. Equal weighting means candidates cannot afford to neglect any single domain area. This is one of the most distinctive features of the CFM credential structure.
27. D — Conducting backup power testing immediately and establishing ongoing testing schedule addresses the verified gap and prevents recurrence. Continued operations without testing, documentation alone, and outsourcing without testing all fail to address the immediate testing gap. Critical backup systems require verified testing capability.
28. A — W. Edwards Deming developed the Plan-Do-Check-Act cycle as the foundational continuous improvement framework. The cycle is also called the Deming Cycle in recognition of his contribution. Juran developed the quality trilogy, Crosby championed zero defects, and Ishikawa contributed cause-and-effect analysis.
29. C — Previous performance data for that zone is unreliable across the affected period is the most significant implication of the 4°F sensor offset over 8 months. The offset means historical comparisons, energy analysis, and trend reporting for that zone have been distorted, requiring re-evaluation. Sensor replacement, redesign, and survey validation address symptoms but miss the data integrity implication.
30. B — ENERGY STAR Portfolio Manager produces facility benchmarking scores on a 1-to-100 scale. Scores of 75 or higher qualify eligible buildings for ENERGY STAR certification. Letter grades, certification tiers, and percentile rankings without numbers are not the Portfolio Manager scale.
31. D — Establishing enterprise vendor management standards while supporting site implementation balances consistency with site-level adaptation. Site-level variation, complete centralization, and comprehensive outsourcing all forfeit appropriate balance between standards and adaptation. Enterprise standards with site implementation is the standard organizational approach.
32. A — Consumption-based chargeback distributes costs based on actual measured consumption with submetering infrastructure. The model creates direct cost-consumption alignment and incentivizes efficient use. Allocation-based, tiered, and no-chargeback models distribute costs differently.
33. C — Implementing structured data quality remediation across the asset portfolio addresses the documented data quality issues across 18,000 records. Continuation, discontinuation, and platform replacement all fail to address the underlying data quality issues directly. CMMS value depends on data quality discipline.
34. B — Triple Net (NNN) lease requires the tenant to pay base rent plus property taxes, insurance, and maintenance. The "triple net" name reflects these three pass-through expense categories. Utilities, management fees, marketing costs, and tenant improvements are not typically included in the NNN structure definition.

35. D — Owner project requirements should be specified upfront in future projects to ensure construction-phase commissioning produces compliant deliverables. Without owner requirements, commissioning often identifies systematic deficiencies. Calling commissioning unnecessary, blaming the contractor, or blaming the architect misses the upstream requirements gap.
36. A — SMART criteria require KPIs to be Specific, Measurable, Achievable, Relevant, and Time-bound. The framework ensures that performance indicators are well-designed and actionable. Other letter combinations represent invented or alternative frameworks that are not the standard SMART definition.
37. C — Compliance obligation with risk-prioritized correction sequencing addresses both the legal requirement and practical implementation. Cost in isolation, marketing materials, and geographic distribution are secondary to compliance obligation. Compliance is non-discretionary while sequencing is risk-prioritized.
38. B — The four FEMA emergency management phases are mitigation, preparedness, response, and recovery. The framework structures emergency management activities across the full event lifecycle. Identification, litigation, investigation, and prevention are not standard FEMA phases.
39. D — The long-term commitment may exceed organizational decision-making horizons is the most appropriate concern about 8-year commitments without renegotiation provisions. Long-term commitments combined with attractive pricing can become liabilities when business conditions shift. Marketing, geography, and pricing are secondary to commitment horizon analysis.
40. A — The IFMA Code of Conduct's principle of integrity requires practitioners to act with honesty and fairness without misleading parties. The principle establishes the ethical baseline for professional communication and action. Geographic limitation, certification maintenance, and documentation requirements misrepresent the integrity principle.
41. B — The total cost, energy savings, and operational implications across the analysis horizon should drive energy efficiency evaluation. Marketing materials, isolated cost analysis, and geographic proximity are secondary considerations. Energy efficiency decisions require comprehensive analysis.
42. A — Unity of command throughout the response structure ensures each responder reports to a single supervisor in ICS. The principle prevents conflicting direction and confusion during incident response. Span of control, common terminology, and modular organization address different ICS concerns.
43. C — Addressing the planning estimation discipline through structured improvement addresses the systemic source of cost overruns averaging 18% across 24 projects. Acceptance, blanket budget increases, and project discontinuation all fail to address the underlying estimation pattern. Systemic patterns warrant systemic improvement.

44. D — The Critical Path Method identifies activities with zero float that determine project minimum duration. Activities on the critical path have no delay tolerance; any delay extends the project. Cost, resource intensity, and visibility are unrelated to critical path identification.
45. B — The actual resilience capability differs from assumed planning capability is the most consequential implication of degraded backup power. The gap means business continuity assumptions may be invalid, exposing the organization to disruption it believed it could absorb. Vendor relationships, maintenance budgets, and equipment age are operational concerns secondary to capability assumption validity.
46. A — A project charter formally authorizes the project and defines its purpose, scope, deliverables, schedule, budget, stakeholders, and project manager authority. The charter is approved by the project sponsor and serves as the foundational governance document. Daily reports, vendor pricing, and tax depreciation are not charter purposes.
47. C — Construction Manager at Risk with substantial preconstruction collaboration suits complex healthcare renovations with uncertain scope and substantial stakeholder input. The CMAR model provides preconstruction expertise during design when collaboration produces value. Design-bid-build, T&M, and P3 fit different project profiles.
48. D — TIMWOOD covers all seven Lean waste types: Transportation, Inventory, Motion, Waiting, Overproduction, Over-processing, and Defects. The acronym is widely used in Lean education and practice. PDSA, SMART, and DMAIC reference different frameworks.
49. A — Addressing current technology capability gaps before adopting cutting-edge solutions builds the foundation for successful technology adoption. Cutting-edge adoption, deferral, and pilots all proceed without addressing the underlying capability gap. Organizational capability is the foundation for technology adoption.
50. B — ASHRAE Standard 55 most directly governs commercial building thermal comfort, defining acceptable combinations of temperature, humidity, airspeed, and radiant conditions. Standard 62.1 addresses ventilation, 90.1 addresses energy efficiency, and 188 addresses water management. Each standard addresses a distinct facility performance area.
51. C — Investigating organizational factors driving the variation across the multiple sites provides the analytical foundation for an informed response. Standardization to highest performer, reduced expectations, and platform replacement all bypass the diagnostic opportunity. Variation across similar circumstances is diagnostic information warranting investigation.
52. D — The IFMA CFM credential is valid for 3 years requiring documented qualifying activities for renewal. Recertification requires at least three activities in a minimum of two of four categories. Other validity periods misrepresent the actual certification cycle.
53. A — The risk that genuine critical alarms will be missed in the noise is the most concerning aspect of high-volume unaddressed alarm patterns. Alarm fatigue is a documented operational risk that

desensitizes operators to all alarms including critical ones. Bandwidth, administrative burden, and vendor characterization are secondary to operational safety.

54. C — EVM uses three foundational values: Earned Value (EV), Planned Value (PV), and Actual Cost (AC). The three values support calculation of variance, performance indices, and forecasting. Vendor Value, Strategic Value, and other framings misrepresent the EVM framework.
55. B — Evaluating workforce strategy options including staffing, contractor, and process changes addresses the staffing shortage through comprehensive options analysis. Service discontinuation, expectation reduction, and immediate compensation increases all narrow the option set prematurely. Workforce challenges warrant comprehensive strategy evaluation.
56. D — Multi-channel reach across SMS, voice, email, and signage is the most consequential design factor for mass notification effectiveness. Single-channel reliance fails when the channel itself is unavailable. Aesthetics, marketing prominence, and unit cost are secondary to functional reach.
57. A — Reassessing scope, timeline, and approach with project sponsor and stakeholders is the appropriate response to significant new project information. Accepting slippage, reducing data scope, or maintaining timeline through scope cuts all proceed without sponsor engagement on consequential changes. Major project changes warrant sponsor decision-making.
58. C — Preventive maintenance is most appropriate for assets that exhibit predictable wear patterns over time, allowing scheduled intervention before failure. Random failure patterns favor reactive maintenance, easily replaced equipment may not justify PM, and continuous monitoring enables predictive approaches. Strategy selection matches asset failure characteristics.
59. B — Presenting productivity benchmarking analysis with specific quantified comparison engages the executive concern through analytical response. Defense based on judgment, generic improvements without basis, and deferral all fail to engage the legitimate concern productively. Quantified analysis is the appropriate response to productivity concerns.
60. A — CMMS platforms support asset records, work orders, PM scheduling, inventory, and reporting as core functions. The platforms centralize maintenance information and operational workflow. Email, CRM, and HR functions are outside CMMS scope.
61. D — Evaluating amenity requests against strategic talent and productivity objectives connects facility investment to organizational outcomes. Lowest-cost, most popular, and deferral approaches all fail to apply strategic evaluation. Amenity decisions are strategic workplace investments rather than operational popularity contests.
62. C — The standard project lifecycle progresses through initiation, planning, execution, monitoring/controlling, and closeout in that order. The sequence reflects the natural progression of project work from authorization through delivery. Other orderings misrepresent the standard project lifecycle structure.

63. A — Investigating the specific satisfaction concerns through structured engagement provides the analytical foundation for effective response. Standard improvements without assessment, service reduction, and discontinued measurement all fail to address the underlying concerns. Satisfaction concerns warrant diagnostic engagement.
64. B — FMEA risk priority number methodology prioritizes failure modes through severity, occurrence, and detection scoring. The RPN calculation supports systematic prioritization of failure prevention investment. Marketing materials, isolated cost analysis, and geographic distribution are not part of FMEA RPN calculation.
65. D — Evaluating grounds and exterior maintenance for inclusion in the PM program provides the analytical foundation for scope decisions. Continued narrow scope, building system elimination, and outsourcing without evaluation all proceed without analytical assessment. Program scope decisions warrant substantive evaluation.
66. A — The hierarchy of controls preferred sequence is elimination, substitution, engineering controls, administrative controls, and PPE in descending order of effectiveness. Higher-order controls provide more reliable protection. PPE-first, engineering-first inversions, and incomplete sequences misrepresent the established hierarchy.
67. C — The strategic implications of outsourcing the facility management function should drive evaluation of comprehensive outsourcing proposals affecting the 24-person internal team. Marketing prominence, geographic proximity, and financial savings are inputs but not the central framework. Comprehensive outsourcing is a strategic decision requiring strategic evaluation.
68. B — Risk transfer shifts risk to a third party through insurance or contractual mechanisms. Purchasing insurance is the classic risk transfer strategy. Avoidance, mitigation, and acceptance represent alternative treatment strategies addressing risk differently.
69. D — Prioritizing opportunities by risk reduction value and implementation feasibility produces a defensible recommendation sequence across opportunities ranging from \$8,000 to \$240,000. Simultaneous implementation, executive interest filtering, and chronological order all fail to apply structured prioritization. Risk-based prioritization aligns response with potential value.
70. A — A Cost Performance Index of 0.80 indicates performance unfavorable to budget by 20%. CPI below 1.0 means actual cost exceeds earned value, with the magnitude of difference reflecting unfavorable cost performance. CPI above 1.0 indicates favorable performance.
71. C — Implementing structured performance review with documented corrective action is the appropriate response to inconsistent vendor performance with patterns documented over six months. Continued relationship without action, immediate termination, and increased payment all fail to address the performance pattern through structured response. Vendor performance issues warrant structured management.

72. B — ISO 31000 emphasizes risk management as integrated, structured, customized, and continuously improved. The framework establishes principles applicable across organizational contexts. Centralization, transfer-only, and probability-only emphases misrepresent the standard's integrated approach.
73. D — The strategic value, implementation cost, and operational integration of automation should drive automation evaluation across 14 distinct projects. Marketing materials, isolated cost analysis, and geographic proximity are secondary considerations. Automation decisions require comprehensive evaluation.
74. A — The IFMA exam consists of 120 total questions including 100 scored items and 20 unscored pretest items. Candidates do not know which items are scored versus pretest, so all questions warrant full attention. The 100-question scored count is what determines exam outcome.
75. C — Conducting structured evaluation of the technology against organizational requirements provides the analytical foundation for the response. Immediate implementation, decline based on absence, and indefinite deferral all proceed without structured evaluation. Technology adoption warrants substantive evaluation.
76. B — ADA Standards establish accessibility requirements for parking, entrances, routes, restrooms, signage, and alarms among other facility elements. The standards address physical accessibility for people with disabilities. Energy systems, cybersecurity, and sustainability metrics are governed by other regulatory frameworks.
77. D — Updating the plan to include active threat response procedures addresses the documented gap given recent local incidents. Continuation, discontinuation, and outsourcing all fail to address the credible threat scenario. Emergency planning must address all credible threat categories including active threats.
78. A — IFMA CFM exam scoring methodology is criterion-referenced through standard-setting study. The passing score reflects the minimum knowledge required to practice competently. Norm-referenced, percentile-ranked, and composite-scored methodologies misrepresent the actual approach.
79. C — The strategic value, implementation cost, and operational integration of opportunities should drive occupant experience improvement evaluation across 12 distinct initiatives. Marketing materials, isolated cost analysis, and geographic proximity are secondary considerations. Occupant experience decisions require comprehensive evaluation.
80. B — Design-build is the project delivery method with single point of responsibility for both design and construction. The model provides faster delivery and accountability concentration but requires owner clarity on requirements upfront. CMAR, design-bid-build, and P3 distribute design and construction responsibility differently.

81. A — Both pursuing subleasing and exploring early termination negotiation maximizes options for managing the unwanted lease obligation of \$14 million. Single-strategy approaches may produce inferior outcomes; combined exploration increases the probability of a favorable resolution. Sublease and early termination are complementary rather than mutually exclusive responses.
82. C — Scope 1 emissions are direct emissions from sources owned or controlled by the organization, including onsite combustion, fleet vehicles, and refrigerant leakage. The GHG Protocol's three-scope framework distinguishes Scope 1 from Scope 2 (purchased energy) and Scope 3 (value chain).
83. B — Addressing the systemic vendor management issues through structured improvement engages the recurring pattern across 8 contracts through systemic response. Continuation, blanket termination, and indefinite deferral all fail to address the underlying systemic issues. Recurring patterns warrant systemic improvement.
84. D — Construction Manager at Risk provides preconstruction expertise during design for complex projects through integrated CMAR involvement. The model fits projects where scope clarity benefits from CMAR collaboration during design. Single-point responsibility, multi-party contracting, and sequential procurement describe other delivery methods.
85. A — Presenting the operational drivers of category-specific growth with structured analysis engages the executive concern through analytical response. Reduction without basis, defense without analysis, and deferral all fail to engage the legitimate concern productively. Quantified analysis is the appropriate response to cost growth concerns.
86. C — Reliability-centered maintenance is a systematic analytical framework selecting optimal strategy per asset based on failure modes, consequences, and cost-effective mitigation. RCM typically results in a portfolio decision combining strategies rather than uniform application. Default reactive, universal preventive, and continuous predictive approaches lack RCM's analytical foundation.
87. B — Reviewing the plan and updating for any organizational or operational changes maintains plan currency given 22 months of organizational evolution. Continuation without review, discontinuation, and outsourcing all fail to address the substantive review need. Emergency action plans require periodic review to remain operationally effective.
88. D — The IFMA Code of Conduct's principle of high standard of service requires practitioners to provide only services for which they are competent and qualified. The principle protects clients and the profession from incompetent service delivery. Discipline coverage, certification maintenance, and documentation are different requirements.
89. A — Evaluating the risk-reward balance and pilot deployment options for the innovation provides the analytical foundation for adoption decisions on \$1.2 million capital investment. Immediate

implementation, decline based on absence of evidence, and indefinite deferral all proceed without structured risk-reward evaluation. Innovative technology evaluation requires structured analysis.

90. C — Space planning hierarchy progresses from strategy through programming, space standards, planning, and design — increasing in specificity at each level. The cascade ensures detailed design decisions trace back to organizational strategy. Reverse sequences misrepresent the planning logic.
91. B — Documenting and accepting the residual risk if within organizational tolerance recognizes that no mitigation eliminates risk entirely. Additional mitigation regardless of cost-benefit, blanket transfer, and avoidance all fail to apply structured residual risk management. Residual risk requires deliberate acceptance decisions.
92. A — Lessons learned documentation and integration is the project closeout activity most commonly neglected to long-term detriment. Teams move on without capturing institutional learning that should improve future projects. Payment, punch lists, and occupancy filing are typically completed even when lessons learned is skipped.
93. D — The total cost, sustainability impact, and operational implications across the analysis horizon should drive sustainability improvement evaluation across 8 distinct projects. Marketing materials, isolated cost analysis, and geographic proximity are secondary considerations. Sustainability decisions require comprehensive evaluation.
94. C — The IFMA Code of Conduct's principle of fiduciary responsibility requires practitioners to be honest, transparent, and trustworthy in financial dealings. The principle protects employers, clients, and stakeholders from financial misconduct. Aggressive negotiation, neutrality, and advisory limitation are not fiduciary requirements.
95. A — Conducting structured assessment of emerging risks using established methodology provides the analytical foundation for emerging risk management. Indefinite deferral, low priority assumption, and high priority assumption all bypass structured assessment. Emerging risks warrant systematic assessment.
96. B — FMEA identifies potential failure modes and their consequences systematically through structured analytical approach. The methodology evaluates failure modes by severity, occurrence, and detection to prioritize prevention. Depreciation, vendor criteria, and chargeback rates are unrelated to FMEA application.
97. C — The hierarchy of controls applied to the specific identified hazards is the appropriate evaluation framework for safety response selection across 14 affected job functions. Cost in isolation, marketing materials, and geographic distribution are secondary to the hierarchy of controls framework. Safety responses must apply established hierarchy logic.
98. A — The IFMA exam is delivered through computer-based testing at Prometric centers. Live remote proctoring is no longer allowed for the CFM exam. Paper-based, regional office, and live remote delivery misrepresent the actual delivery method.

99. D — Investigating whether current frequencies match asset-specific failure characteristics provides the analytical foundation for frequency decisions. Standardization, blanket reduction, and blanket increase all proceed without asset-specific analysis. PM frequency decisions warrant asset-specific evaluation.
100. B — CFM credential renewal requires completion of activities in at least two of four categories with documented activities. The framework requires three activities minimum across two or more categories for a total of six activities. Other category requirements misrepresent the actual renewal structure.