

PRACTICE EXAM 6: CFM SIMULATION

PRACTICE EXAM 6 — 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 industry context items, regulatory and standards-based questions, calculation-style scenarios, and operational diagnosis at moderate-to-higher difficulty. Questions test recognition of industry-standard practices, regulatory frameworks, and quantitative reasoning more heavily than prior exams.

1. A facility manager calculates that a \$180,000 lighting retrofit will produce \$36,000 in annual energy savings. The simple payback period is approximately:

- A. 3 years
- B. 4 years
- C. 5 years
- D. 6 years

2. A facility's IFMA-aligned strategic facility plan addresses what foundational alignment requirement?

- A. Translation of demand organization strategy into facility implications
- B. Standardization of facility operations across all geographic regions
- C. Reduction of operating costs to the minimum sustainable level
- D. Maximum utilization of existing space and equipment portfolio

3. The NFPA standard most directly governing fire protection systems in commercial facilities is:

- A. NFPA 70 for the National Electrical Code
- B. NFPA 25 for inspection of water-based systems
- C. NFPA 99 for healthcare facilities specifically
- D. NFPA 101 for life safety and means of egress

4. A facility's Net Present Value calculation produces a positive result. The most accurate interpretation is:

- A. The investment will recover its initial cost within five years
- B. The investment carries lower risk than alternative options
- C. The investment requires no further financial analysis
- D. The investment creates value in excess of the required return

5. A facility manager evaluating a chiller replacement projects \$2.4M acquisition cost, \$180,000 annual operating cost, and 20-year service life. Total life cycle cost approximately equals:

- A. \$6.0M including operating costs across the service life
- B. \$4.8M discounted to present value at standard rates
- C. \$3.6M reflecting depreciation over service life
- D. \$2.4M representing capital investment only

6. The OSHA General Duty Clause obligates employers to provide workplaces:

- A. Meeting all specific OSHA standards published in regulations
- B. Equipped with personal protective equipment for all employees
- C. Free from recognized hazards likely to cause death or serious harm
- D. Inspected annually by certified safety professionals

7. A facility manager uses the SMART criteria to evaluate KPIs. The criteria require KPIs to be:

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

8. A facility's life cycle cost analysis shows that operations and maintenance costs account for 70% of total cost, acquisition for 15%, installation for 10%, and disposal for 5%. The most significant strategic implication is:

- A. Disposal planning warrants minimal management attention
- B. Installation quality has limited impact on lifecycle outcomes
- C. Acquisition cost should be the primary selection criterion
- D. Operating cost differences should drive alternative comparison

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

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

10. A facility manager evaluating a \$500,000 capital project with \$100,000 annual savings calculates simple payback as:

- A. 4 years using straight-line depreciation method
- B. 5 years using direct cash flow analysis
- C. 6 years including time value adjustments
- D. 7 years with discount rate considerations

11. The ADA Standards establish accessibility requirements for which set of facility elements?

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

12. A facility manager calculates that monthly energy costs of \$42,000 represent annual costs of:

- A. \$504,000 across the full calendar year
- B. \$462,000 reflecting partial year operation
- C. \$420,000 with seasonal adjustment factors
- D. \$378,000 after demand charge deductions

13. The IFMA Certification Commission's exam appointment scheduling provides candidates with how many days to complete the exam after application approval?

- A. 30 days requiring immediate scheduling action
- B. 60 days for standard application processing
- C. 120 days with extension request available

D. 90 days with extension request available

14. A facility manager calculates that a project's Earned Value of \$720,000 against Planned Value of \$800,000 indicates a Schedule Performance Index of:

A. 1.11 indicating ahead of schedule performance

B. 0.90 indicating behind schedule performance

C. 1.00 indicating on-schedule performance

D. 0.80 indicating significantly behind schedule

15. The ASHRAE standard most directly governing commercial building thermal comfort is:

A. ASHRAE Standard 55 for thermal environmental conditions

B. ASHRAE Standard 62.1 for ventilation rates

C. ASHRAE Standard 90.1 for energy efficiency

D. ASHRAE Standard 188 for water management

16. A facility manager applying the cost of quality framework would categorize investments in inspection and testing as:

A. Prevention costs supporting designed-in quality

B. External failure costs from delivered defects

C. Appraisal costs verifying achieved quality

D. Internal failure costs from caught defects

17. The FEMA emergency management framework identifies four phases. The phase focused on restoring normal operations after an event is:

- A. Mitigation through hazard reduction investment
- B. Preparedness through planning and training
- C. Response during and immediately after the event
- D. Recovery through restoration of normal operations

18. A facility manager evaluating a project with EV \$400K, AC \$500K, and PV \$480K calculates Cost Performance Index as:

- A. 0.83 indicating significantly favorable cost performance
- B. 0.80 indicating unfavorable cost performance
- C. 1.20 indicating favorable cost performance
- D. 1.25 indicating very favorable cost performance

19. The Greenhouse Gas Protocol's Scope 3 emissions category most directly includes:

- A. Employee commuting and business travel emissions
- B. Onsite combustion in building boilers and equipment
- C. Refrigerant leakage from facility cooling systems
- D. Purchased electricity consumed by facility systems

20. A facility manager calculating average annual maintenance cost of \$480,000 across a 240,000 square foot portfolio produces a maintenance cost per square foot of approximately:

- A. \$1.50 per square foot annually
- B. \$1.75 per square foot annually
- C. \$2.00 per square foot annually
- D. \$2.25 per square foot annually

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

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

22. A facility manager applying the Pareto principle to facility issues would expect approximately:

- A. 50% of issues to come from 50% of root causes
- B. 70% of issues to come from 30% of root causes
- C. 80% of issues to come from 20% of root causes
- D. 90% of issues to come from 10% of root causes

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

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

24. A facility manager calculating Schedule Variance with EV of \$600K and PV of \$650K produces:

- A. Positive variance of \$50K indicating ahead of schedule
- B. Zero variance indicating exactly on schedule
- C. Variance ratio of 0.92 indicating slight delay
- D. Negative variance of \$50K indicating behind schedule

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

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

26. A facility manager evaluating sustainability frameworks recognizes that LEED certification is administered by:

- A. The U.S. Green Building Council as voluntary program
- B. The Environmental Protection Agency as regulatory program
- C. The International Standards Organization as ISO standard
- D. The American National Standards Institute as technical standard

27. A facility's Recovery Time Objective of 4 hours and Recovery Point Objective of 1 hour means:

- A. The function must restore within 4 hours and tolerate 1 hour outage
- B. The function operates 4 hours per day with 1 hour maintenance
- C. The function must restore within 4 hours with 1 hour data loss tolerance
- D. The function requires 4 hours testing every 1 hour cycle

28. A facility manager calculating \$84,000 quarterly utility costs determines annualized utility costs of:

- A. \$84,000 reflecting only the recent quarter spending

- B. \$168,000 reflecting twice the quarterly amount
- C. \$252,000 reflecting three times the quarterly amount
- D. \$336,000 reflecting four times the quarterly amount

29. The Greenhouse Gas Protocol categorizes refrigerant leakage from facility cooling equipment as:

- A. Scope 1 direct emissions from owned equipment
- B. Scope 2 indirect emissions from purchased energy
- C. Scope 3 indirect emissions from value chain
- D. Out-of-scope emissions excluded from reporting

30. A facility manager evaluating a sustainability framework focused specifically on occupant wellness would select:

- A. LEED for energy and environmental performance
- B. WELL Building Standard for occupant health outcomes
- C. ISO 14001 for environmental management systems
- D. ENERGY STAR for energy benchmarking specifically

31. The IFMA exam time allocation provides candidates with how many hours of testing time?

- A. 1 hour with continuous timer and no breaks
- B. 2 hours including tutorial and check-in
- C. 4 hours with extensive break opportunities
- D. 3 hours with 15 minutes added for bio breaks

32. A facility manager calculating Cost Variance with EV of \$700K and AC of \$750K produces:

- A. Positive variance of \$50K indicating under budget
- B. Zero variance indicating exactly on budget
- C. Negative variance of \$50K indicating over budget
- D. Variance ratio of 0.93 indicating slight overrun

33. The OSHA standard most directly governing hazard communication is:

- A. The Hazard Communication Standard for chemical safety
- B. The General Duty Clause for unspecified hazards
- C. The Bloodborne Pathogens Standard for biohazards
- D. The Process Safety Management Standard for chemicals

34. A facility manager calculating \$1,200,000 capital investment with \$200,000 annual returns determines simple ROI as approximately:

- A. 12% representing the inverse of payback period
- B. 15% representing partial year return measurement
- C. 17% representing annual return on investment
- D. 20% representing optimistic return projection

35. The IFMA exam pass-fail determination is based on:

- A. Achievement of specific percentage on each individual domain
- B. Comparison to peer candidate performance percentile
- C. Achievement of minimum 70% scored items correct
- D. Total scored items correct against criterion-referenced standard

36. A facility manager applying the hierarchy of controls would address a chemical exposure hazard through which preferred sequence?

- A. PPE first then engineering controls then elimination
- B. Elimination first then substitution then engineering controls
- C. Administrative controls first then training then PPE
- D. Engineering controls first then PPE then elimination

37. The IFMA Certification Commission's Ethics Assessment is required for all CFM credential holders:

- A. Every six years or every other recertification cycle
- B. Every three years matching the recertification cycle
- C. Annually with continuous documentation submission
- D. Once at initial certification without recurring requirement

38. A facility manager calculating the difference between \$480,000 budgeted and \$520,000 actual produces variance of:

- A. \$40,000 favorable indicating spending below budget
- B. \$40,000 unspecified without budget direction context
- C. \$40,000 unfavorable indicating spending above budget
- D. \$40,000 timing difference requiring period adjustment

39. The Building Information Modeling deliverable that structures handover data for operational consumption is:

- A. The construction-phase RFI documentation

- B. The architect's design development package
- C. The contractor's commissioning report
- D. The COBie data exchange specification

40. A facility manager calculating 92% preventive maintenance compliance against 95% target produces:

- A. Performance exceeding the established target threshold
- B. Performance below target by 3 percentage points
- C. Performance exactly matching the target threshold
- D. Performance ratio of 1.03 indicating overachievement

41. The IFMA Certification Commission was established to:

- A. Generate revenue for IFMA's operational programs
- B. Establish, maintain, and validate FM professional standards
- C. Regulate facility management software platforms
- D. Negotiate facility management compensation standards

42. A facility manager evaluating a \$200,000 capital expenditure that generates \$50,000 annual savings calculates simple payback period of:

- A. 2 years using accelerated calculation methods
- B. 3 years with discount rate adjustments applied
- C. 5 years including operational considerations
- D. 4 years using direct cash flow analysis

43. The ASHRAE Standard 188 most directly addresses:

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

44. A facility's Critical Path Method identifies activities with float of zero. These activities:

- A. Can be delayed without affecting project completion
- B. Are not required for project completion success
- C. Determine the project's minimum total duration
- D. Have multiple alternative completion sequences

45. The IFMA exam structure includes how many unscored pretest items beyond scored items?

- A. 20 unscored pretest items in addition to 100 scored
- B. 50 unscored pretest items as research validation
- C. 100 unscored pretest items matching scored items
- D. 5 unscored pretest items for limited validation

46. A facility manager evaluating risk transfer through insurance recognizes that insurance covers:

- A. All possible losses regardless of policy terms
- B. Operational improvements from facility investments
- C. Strategic decisions made by facility leadership
- D. Specified losses within policy terms and coverage limits

47. The IFMA exam delivery method is:

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

48. A facility manager calculating annual savings of \$48,000 from a \$144,000 investment determines simple payback as:

- A. 3 years using direct division calculation
- B. 4 years with operational consideration adjustments
- C. 5 years including discount rate factors
- D. 6 years with risk premium considerations

49. The IFMA Code of Conduct addresses the facility manager's commitment to:

- A. Outsourcing facility services to qualified vendors
- B. Maximizing facility budget allocation requests
- C. Practicing in a manner supporting employer, employee, and client rights
- D. Achieving the lowest possible facility operating cost

50. A facility manager evaluating \$360,000 quarterly facility costs for budget planning calculates annual facility cost projection of:

- A. \$360,000 representing the recent quarter only

- B. \$720,000 representing two quarter expansion
- C. \$1,080,000 representing three quarter expansion
- D. \$1,440,000 representing four quarter expansion

51. The IFMA exam specifications were developed through which validation methodology?

- A. Vendor-driven assessment of industry trends
- B. The Dynamic Global Career-Based Practice Analysis
- C. Academic literature review by university researchers
- D. Single-region survey of facility management professionals

52. A facility's emergency response plan addresses utility failure scenarios. The most common utility failure category requiring planning is:

- A. Electrical power outages affecting all facility operations
- B. Water main breaks affecting plumbing and fire suppression
- C. Natural gas service interruptions affecting heating only
- D. Telecommunications failures affecting digital services only

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

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

54. A facility manager calculating \$2.4M total cost across 8 facilities produces average cost per facility of:

- A. \$200,000 per facility average annual cost
- B. \$300,000 per facility average annual cost
- C. \$400,000 per facility average annual cost
- D. \$500,000 per facility average annual cost

55. The IFMA Certification Commission's CFM credential renewal requires completion of activities in how many of four categories?

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

56. A facility manager applying the Triple Constraint framework recognizes the three interrelated project constraints as:

- A. Scope, schedule, and cost trading off against one another
- B. Quality, resources, and risk operating independently
- C. Time, money, and people allocated separately
- D. Specifications, deadlines, and budgets defined fixed

57. The IFMA exam blueprint recognizes how many official scored domains?

- A. 5 domains with weighted scoring distribution
- B. 8 domains with equal scoring distribution

- C. 12 domains with varied scoring importance
- D. 10 domains with equal 10% weighting each

58. A facility manager calculating monthly water consumption of 480,000 gallons across 30 days produces daily consumption of:

- A. 12,000 gallons per day average operation
- B. 14,000 gallons per day with seasonal adjustment
- C. 16,000 gallons per day average operation
- D. 18,000 gallons per day with peak adjustment

59. The IFMA Code of Conduct's principle of respect requires practitioners to:

- A. Honor client, third party, and stakeholder interests within applicable law
- B. Provide deferential treatment to senior facility executives
- C. Maintain hierarchical respect within organizational structure
- D. Document respectful behavior in all professional interactions

60. A facility manager calculating \$144,000 annual energy savings from \$720,000 investment determines ROI as approximately:

- A. 15% representing partial return calculation
- B. 20% representing annual return on investment
- C. 25% representing optimistic return projection
- D. 30% representing return on investment

61. The IFMA exam appointment includes how many hours total despite the 3-hour testing timer?

- A. 2 hours including tutorial and check-in
- B. 3 hours matching the testing timer exactly
- C. 4 hours allowing for tutorial and breaks
- D. 5 hours including extended preparation time

62. A facility manager applying ISO 31000 risk management principles recognizes that the framework emphasizes risk management as:

- A. Integrated, structured, customized, and continuously improved
- B. Centralized in dedicated risk management function
- C. Limited to insurance and contractual transfer mechanisms
- D. Concentrated on highest probability events only

63. The IFMA Certification Commission's recertification fee structure uses which pricing approach?

- A. Single global pricing applied uniformly worldwide
- B. Discounted pricing for IFMA members exclusively
- C. Premium pricing for international candidates
- D. Tiered regional pricing based on country tier

64. A facility manager calculating \$8,400 monthly maintenance contract cost determines annual contract cost of:

- A. \$84,000 reflecting partial year coverage
- B. \$100,800 reflecting twelve month coverage
- C. \$117,600 reflecting fourteen month coverage
- D. \$134,400 reflecting sixteen month coverage

65. The IFMA Code of Conduct addresses facility manager's responsibility to:

- A. Owe a duty of care to clients and consideration to stakeholders
- B. Maximize facility function organizational positioning
- C. Outsource facility services for cost optimization
- D. Document all professional decisions extensively

66. A facility manager evaluating a project with EV \$850K, PV \$900K, and AC \$880K calculates Cost Performance Index of approximately:

- A. 0.94 indicating slightly unfavorable schedule
- B. 0.97 indicating slightly unfavorable schedule and cost
- C. 0.97 indicating slightly unfavorable cost performance
- D. 1.03 indicating favorable cost performance

67. The IFMA exam content was last updated through which validation methodology cycle?

- A. Annual content review by IFMA staff
- B. Quarterly updates by certified facility managers
- C. Continuous revision based on candidate feedback
- D. Periodic validation typically every 5-7 years

68. A facility manager applying the four risk treatment strategies recognizes that purchasing insurance represents:

- A. Risk avoidance through activity elimination
- B. Risk transfer through contractual mechanism

- C. Risk mitigation through control implementation
- D. Risk acceptance through deliberate retention

69. The IFMA Certification Commission's CFM exam item development is conducted by:

- A. Subject matter experts under psychometrician guidance
- B. IFMA staff members with advanced degrees
- C. External consulting firms specializing in certifications
- D. Vendor representatives offering FM products and services

70. A facility manager calculating \$36,000 monthly facility operating cost determines annual operating cost of:

- A. \$36,000 representing recent month only
- B. \$216,000 representing six month projection
- C. \$432,000 representing twelve month projection
- D. \$648,000 representing eighteen month projection

71. The IFMA Code of Conduct's principle of transparency requires practitioners to:

- A. Make all professional documentation publicly available
- B. Document all professional decisions extensively for review
- C. Communicate transparently with senior leadership exclusively
- D. Not misinform regarding products or terms of service

72. A facility manager applying earned value management to a project with EV of \$500K and PV of \$450K calculates Schedule Variance of:

- A. Negative variance of \$50K indicating behind schedule
- B. Positive variance of \$50K indicating ahead of schedule
- C. Zero variance indicating exactly on schedule
- D. Variance ratio of 1.11 indicating ahead of schedule

73. The IFMA exam content outline includes which integration of question types?

- A. Knowledge-based, scenario-based, and integrated case study items
- B. Multiple choice items only without scenario integration
- C. Essay items requiring written response analysis
- D. Practical demonstration items at testing centers

74. A facility manager calculating \$720,000 annual investment in maintenance against \$48M facility replacement value produces maintenance investment ratio of:

- A. 1.0% reflecting industry minimum threshold
- B. 1.25% reflecting partial industry standard
- C. 1.5% reflecting standard industry maintenance ratio
- D. 2.0% reflecting above-average maintenance investment

75. The IFMA Code of Conduct's principle of trust requires practitioners to:

- A. Maintain detailed documentation of all professional decisions
- B. Be truthful in professional communications
- C. Limit professional communications to verified parties only
- D. Defer all questionable communications to legal counsel

76. A facility manager evaluating \$180,000 annual savings from \$540,000 investment calculates simple payback as:

- A. 2 years using accelerated depreciation methods
- B. 3 years using direct cash flow analysis
- C. 4 years with operational consideration adjustments
- D. 3 years using direct division calculation

77. The IFMA Certification Commission's CFM exam form assembly is conducted using:

- A. Examination specifications developed through job analysis
- B. Random selection from comprehensive question banks
- C. Vendor-recommended question selection methodology
- D. Single-author content development for consistency

78. A facility manager calculating \$96,000 quarterly facility expense determines annual facility expense of:

- A. \$96,000 representing recent quarter only spending
- B. \$288,000 representing partial year projection
- C. \$384,000 representing twelve month projection
- D. \$480,000 representing fifteen month projection

79. The IFMA Code of Conduct's principle of verification requires practitioners to:

- A. Maintain comprehensive verification documentation
- B. Continually evaluate services for ethical consistency

- C. Verify all professional decisions through external review
- D. Document verification activities in organizational records

80. A facility manager applying earned value management calculates Cost Variance with EV of \$400K and AC of \$450K as:

- A. Positive variance of \$50K indicating under budget
- B. Zero variance indicating exactly on budget
- C. Variance ratio of 0.89 indicating significant overrun
- D. Negative variance of \$50K indicating over budget

81. The IFMA Certification Commission's CFM exam blueprint validation involves how many facility management professionals globally?

- A. Approximately 1,700 facility managers across regions
- B. Approximately 850 facility executives only
- C. Approximately 500 academic researchers and consultants
- D. Approximately 200 vendor representatives globally

82. A facility manager calculating \$24,000 monthly cleaning contract determines annual cleaning contract cost of:

- A. \$24,000 representing recent month only spending
- B. \$144,000 representing six month projection
- C. \$216,000 representing nine month projection
- D. \$288,000 representing twelve month projection

83. The IFMA Certification Commission's CFM exam form is reviewed by:

- A. IFMA staff members with administrative authority
- B. SME panel before being finalized for delivery
- C. Vendor representatives offering testing services
- D. Random selection of certified facility managers

84. A facility manager calculating \$64,000 quarterly maintenance expense determines monthly average maintenance expense of:

- A. \$16,000 per month with quarterly variation
- B. \$19,200 per month including overhead allocation
- C. \$21,333 per month based on three month average
- D. \$24,000 per month with seasonal adjustment

85. The IFMA Code of Conduct addresses facility manager continuous learning as:

- A. An optional professional development consideration
- B. Required only for credential renewal cycles
- C. Limited to IFMA-published materials exclusively
- D. Continually seeking new information to maintain skills

86. A facility manager evaluating a project with EV \$300K, PV \$320K, and AC \$310K calculates Schedule Performance Index of approximately:

- A. 1.03 indicating slightly ahead of schedule
- B. 0.94 indicating slightly behind schedule

- C. 1.07 indicating moderately ahead of schedule
- D. 0.97 indicating slightly behind schedule

87. The IFMA Certification Commission's CFM exam pretest items serve which purpose?

- A. Validation for future exam content development
- B. Determination of candidate exam pass-fail status
- C. Calculation of candidate percentile ranking
- D. Verification of candidate identity at testing

88. A facility manager calculating \$108,000 quarterly cost for facility services determines annual facility services cost of:

- A. \$108,000 representing recent quarter only spending
- B. \$216,000 representing partial year projection
- C. \$432,000 representing twelve month projection
- D. \$540,000 representing fifteen month projection

89. The IFMA Code of Conduct's principle of disclosure requires practitioners to:

- A. Maintain comprehensive disclosure documentation extensively
- B. Disclose all professional information without limitation
- C. Document disclosure decisions in organizational records
- D. Make appropriate disclosures and withdraw if conflicts persist

90. A facility manager calculating \$1.8M total facility cost for 600,000 square foot portfolio produces cost per square foot of:

- A. \$2.50 per square foot reflecting standard operations
- B. \$3.00 per square foot reflecting standard operations
- C. \$3.50 per square foot reflecting elevated operations
- D. \$4.00 per square foot reflecting premium operations

91. The IFMA exam appointment scheduling is conducted through which testing administration vendor?

- A. Prometric for global computer-based testing
- B. Pearson VUE for international testing centers
- C. Educational Testing Service for assessment delivery
- D. ACT Inc. for credential validation processes

92. A facility manager evaluating \$36M facility replacement value with \$720,000 annual maintenance produces maintenance ratio of:

- A. 1.0% reflecting industry minimum maintenance investment
- B. 1.5% reflecting standard industry maintenance ratio
- C. 2.5% reflecting above-average maintenance investment
- D. 2.0% reflecting standard industry maintenance ratio

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

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

94. A facility manager calculating \$4.2M total facility expense for 700,000 square feet produces cost per square foot of:

- A. \$6.00 per square foot reflecting standard operations
- B. \$5.50 per square foot reflecting standard operations
- C. \$5.00 per square foot reflecting standard operations
- D. \$4.50 per square foot reflecting standard operations

95. The IFMA Certification Commission's CFM exam content review is conducted:

- A. Annually by IFMA staff with administrative authority
- B. Regularly to ensure items remain accurate and relevant
- C. Continuously by external consulting firms
- D. Quarterly by certified facility managers globally

96. A facility manager evaluating a \$250,000 investment with \$50,000 annual returns calculates simple ROI as:

- A. 10% representing partial return calculation
- B. 15% representing partial year return
- C. 25% representing optimistic projection
- D. 20% representing annual return on investment

97. The IFMA Code of Conduct addresses facility manager objective judgment as:

- A. An optional consideration based on situation context
- B. Required only when conflicts of interest are documented

- C. Maintaining objective judgment without compromising activities
- D. Limited to specific decision categories defined by leadership

98. A facility manager calculating \$300,000 quarterly utility cost determines annual utility cost of:

- A. \$1,200,000 representing twelve month projection
- B. \$900,000 representing nine month projection
- C. \$600,000 representing six month projection
- D. \$450,000 representing partial year projection

99. The IFMA Certification Commission's CFM exam item analysis is conducted on:

- A. Future exam forms before initial release
- B. Previous CFM exam forms before new release
- C. Concurrent exam forms during active delivery
- D. Vendor-recommended schedule without standard timing

100. A facility manager calculating \$12,000 monthly facility services contract determines annual contract cost of:

- A. \$36,000 representing partial year coverage
- B. \$72,000 representing six month coverage

C. \$108,000 representing nine month coverage

D. \$144,000 representing twelve month coverage

PRACTICE EXAM 6 — ANSWER KEY AND FULL EXPLANATIONS

1. C — 5 years calculated as $\$180,000 \div \$36,000 = 5$ years simple payback. Simple payback divides initial investment by annual savings to determine the period required for the investment to pay for itself. The calculation does not account for time value of money but provides a quick comparative metric.
2. A — Translation of demand organization strategy into facility implications is the foundational alignment requirement of strategic facility planning. The supply organization (facility function) exists to serve the demand organization, and strategic plans must reflect that purpose. Standardization, cost reduction, and utilization maximization are operational concerns subordinate to strategic alignment.
3. D — NFPA 101 Life Safety Code most directly governs life safety and means of egress in commercial facilities. The code addresses occupant safety in buildings through requirements for egress, fire protection features, and occupancy classifications. NFPA 70 covers electrical, NFPA 25 covers water-based system inspection, and NFPA 99 is healthcare-specific.
4. D — A positive Net Present Value indicates the investment creates value in excess of the required return. NPV directly answers whether the investment exceeds the cost of capital, which is the executive evaluation framework for capital decisions. Recovery time, risk comparison, and analysis sufficiency are unrelated to the NPV interpretation.
5. A — \$6.0M total life cycle cost calculated as \$2.4M acquisition plus $\$180,000 \text{ annual} \times 20 \text{ years} = \$2.4M + \$3.6M = \$6.0M$. Life cycle cost analysis sums all costs across the asset's useful life. Operations and maintenance costs typically dominate total lifecycle cost as this calculation demonstrates.
6. C — The OSHA General Duty Clause obligates employers to provide workplaces free from recognized hazards likely to cause death or serious physical harm. The clause extends beyond specific OSHA standards to address recognized hazards generally. Specific standards, PPE requirements, and inspection requirements are separate compliance obligations.
7. B — 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.

8. D — Operating cost differences should drive alternative comparison when operations and maintenance dominate total lifecycle cost. The 70% O&M concentration means decisions based on acquisition cost alone optimize the smallest portion of total cost. Disposal planning, installation impact, and acquisition primacy misrepresent the lifecycle cost distribution implications.
9. A — 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.
10. B — 5 years calculated as $\$500,000 \div \$100,000 = 5$ years simple payback. Simple payback divides investment by annual savings to determine recovery period. Depreciation methods, time value adjustments, and discount rates are not part of simple payback calculation.
11. C — 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.
12. A — \$504,000 calculated as $\$42,000 \times 12$ months = \$504,000 annual costs. Standard arithmetic conversion from monthly to annual costs uses straight multiplication by 12. Partial year operation, seasonal adjustment, and demand charge deductions would alter the calculation but are not specified.
13. D — 90 days with extension request available is the IFMA exam appointment scheduling timeline after application approval. The extension request requires a \$50 fee and provides another 90 days. The other timeframes misrepresent the actual IFMA exam scheduling policy.
14. B — Schedule Performance Index of 0.90 calculated as $\$720,000 \div \$800,000 = 0.90$ indicating behind schedule performance. SPI below 1.0 indicates behind schedule; above 1.0 indicates ahead. The calculation shows the project completed 90% of planned work for the period.
15. A — 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.
16. C — 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.
17. D — Recovery is the FEMA emergency management phase focused on restoring normal operations after an event. The four FEMA phases are mitigation, preparedness, response, and

recovery. Recovery follows the immediate response phase and addresses repairs, cleanup, and continuity execution.

18. B — Cost Performance Index of 0.80 calculated as $\$400\text{K} \div \$500\text{K} = 0.80$ indicating unfavorable cost performance. CPI below 1.0 means actual cost exceeds earned value. The calculation shows the project earned \$0.80 for every \$1.00 spent.
19. A — Scope 3 emissions include employee commuting and business travel as value chain emissions. Scope 1 covers direct emissions including onsite combustion and refrigerants; Scope 2 covers purchased electricity. The three-scope framework distinguishes these categories systematically.
20. C — \$2.00 per square foot calculated as $\$480,000 \div 240,000 \text{ sq ft} = \2.00 per square foot. Standard arithmetic division produces the cost per square foot metric used widely in facility benchmarking. Other values represent calculation errors.
21. A — 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.
22. C — The Pareto principle (80/20 rule) states that approximately 80% of issues come from 20% of root causes. The principle applies broadly across operations and identifies where management attention produces highest leverage. Other ratios misrepresent the established Pareto framework.
23. A — 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.
24. D — Negative variance of \$50K indicating behind schedule calculated as $\text{EV } \$600\text{K} \text{ minus PV } \$650\text{K} = -\$50\text{K}$. Schedule Variance below zero indicates behind schedule performance. Positive variance, zero variance, and ratio interpretations misrepresent the calculation.
25. B — 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.
26. A — LEED certification is administered by the U.S. Green Building Council as a voluntary program. The program is not a regulatory mandate, ISO standard, or ANSI technical standard. Voluntary green building certification operates through market acceptance.
27. C — The function must restore within 4 hours and tolerate 1 hour data loss. RTO defines maximum acceptable downtime; RPO defines maximum acceptable data loss expressed as time before disruption. Both targets work together to define continuity requirements.

28. D — \$336,000 annual cost calculated as $\$84,000 \times 4 \text{ quarters} = \$336,000$. Standard arithmetic conversion from quarterly to annual uses multiplication by four. Other calculations represent errors.
29. A — Refrigerant leakage from facility cooling equipment is Scope 1 direct emissions from owned equipment. The GHG Protocol classifies refrigerants as direct emissions because they come from sources owned or controlled by the organization. Scope 2 covers purchased energy; Scope 3 covers value chain.
30. B — WELL Building Standard focuses specifically on occupant health outcomes and is the appropriate framework for occupant wellness focus. LEED emphasizes energy and environmental performance; ISO 14001 covers management systems; ENERGY STAR addresses energy benchmarking. Framework selection depends on the certification scope.
31. D — The IFMA exam provides 3 hours of testing time with 15 minutes added for bio breaks within a 4-hour appointment. The timer counts down from 3 hours; the additional time accommodates tutorial, check-in, and breaks while the timer continues to run. Other time allocations misrepresent the actual structure.
32. C — Negative variance of \$50K indicating over budget calculated as EV \$700K minus AC \$750K = -\$50K. Cost Variance below zero indicates over budget performance. Positive variance, zero variance, and ratio interpretations misrepresent the calculation.
33. A — The Hazard Communication Standard most directly governs OSHA chemical safety requirements. The standard addresses safety data sheets, labeling, and worker training on chemical hazards. The General Duty Clause is a broader obligation; Bloodborne Pathogens and Process Safety Management address other specific areas.
34. C — 17% calculated as $\$200,000 \div \$1,200,000 = 0.1667$ or approximately 17% annual ROI. Simple ROI divides annual returns by initial investment to express return as a percentage. The calculation represents annual return on investment.
35. D — IFMA exam pass-fail determination is based on total scored items correct against criterion-referenced standard. The passing score reflects the minimum knowledge required to practice competently, established through formal standard-setting study. Domain-specific minimums, percentile comparison, and fixed percentage thresholds misrepresent the methodology.
36. B — The hierarchy of controls preferred sequence is elimination first then substitution then engineering controls then administrative controls then PPE. Higher-order controls provide more reliable protection. PPE-first, control-first inversions, and incomplete sequences misrepresent the established hierarchy.
37. A — The IFMA Ethics Assessment is required every six years or every other recertification cycle for credential holders. Initial certification also requires Ethics Assessment completion. Annual, three-year, and once-only requirements misrepresent the recurrence cycle.

38. C — \$40,000 unfavorable variance calculated as \$520,000 actual minus \$480,000 budgeted = \$40,000 over budget. Unfavorable variance indicates spending above budget. Favorable, unspecified, and timing interpretations misrepresent the variance direction.
39. D — COBie (Construction-Operations Building information exchange) data exchange specification structures BIM handover data for operational consumption. The standard ensures construction-phase modeling produces operations-useful deliverables. RFI documentation, design development, and commissioning reports are different deliverables.
40. B — Performance below target by 3 percentage points calculated as 92% actual against 95% target = -3 percentage points. The calculation shows the variance from target as the difference between actual and target percentages. Other interpretations misrepresent the comparison.
41. B — The IFMA Certification Commission was established to establish, maintain, and validate FM professional standards. The Commission focuses on credential standards and integrity. Revenue generation, software regulation, and compensation negotiation are not the Commission's mission.
42. D — 4 years calculated as $\$200,000 \div \$50,000 = 4$ years simple payback. Simple payback divides investment by annual savings using direct cash flow analysis. Accelerated methods, discount adjustments, and operational considerations are not part of simple payback.
43. A — ASHRAE Standard 188 addresses water management plans for 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.
44. C — Activities with zero float determine the project's minimum total duration. Zero float means no delay tolerance; activities on the critical path collectively define the longest path through the schedule. Other interpretations misrepresent the critical path concept.
45. A — The IFMA exam includes 20 unscored pretest items in addition to 100 scored items, totaling 120 questions. Pretest items support future exam content development without affecting candidate scoring. Other counts misrepresent the actual exam structure.
46. D — Insurance covers specified losses within policy terms and coverage limits. Insurance does not cover all losses regardless of policy terms; operational improvements, strategic decisions are not insurance coverage. Insurance functions within defined policy parameters.
47. B — 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.
48. A — 3 years calculated as $\$144,000 \div \$48,000 = 3$ years simple payback. Direct division produces the simple payback period. Operational considerations, discount factors, and risk premiums are not part of simple payback calculation.

49. C — The IFMA Code of Conduct addresses facility manager commitment to practicing in a manner supporting employer, employee, and client rights. The principle establishes the foundation for ethical service delivery. Outsourcing, budget maximization, and cost minimization are not Code commitments.
50. D — \$1,440,000 annual cost calculated as $\$360,000 \times 4 \text{ quarters} = \$1,440,000$. Standard arithmetic conversion from quarterly to annual uses multiplication by four. Other calculations represent errors.
51. B — IFMA exam specifications were developed through the Dynamic Global Career-Based Practice Analysis involving approximately 1,700 facility managers globally. The empirical methodology validated the exam blueprint through systematic practice analysis. Vendor-driven, academic-only, and single-region approaches misrepresent the actual validation methodology.
52. A — Electrical power outages affecting all facility operations is the most common utility failure category requiring emergency planning. Power outages can cascade through interdependent systems and affect every operation. Water, gas, and telecommunications failures are credible but more limited in operational scope.
53. 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.
54. B — \$300,000 per facility average annual cost calculated as $\$2.4\text{M} \div 8 \text{ facilities} = \$300,000$ per facility. Standard arithmetic division produces the per-facility average. Other values represent calculation errors.
55. C — 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.
56. A — The Triple Constraint framework recognizes scope, schedule, and cost as the three interrelated project constraints trading off against one another. Modern practice expands this to include quality, resources, and risk, but the foundational triple constraint is scope-schedule-cost. Other framings misrepresent the established framework.
57. D — The IFMA exam blueprint recognizes 10 official scored domains with equal 10% weighting each. Equal weighting means candidates cannot afford to neglect any single domain. Other domain counts and weighting distributions misrepresent the actual blueprint structure.
58. C — 16,000 gallons per day calculated as $480,000 \text{ gallons} \div 30 \text{ days} = 16,000 \text{ gallons per day}$ average. Standard arithmetic division produces the daily consumption metric. Seasonal and peak adjustments are not specified in the calculation.

59. A — The IFMA Code of Conduct's principle of respect requires practitioners to honor client, third party, and stakeholder interests within applicable law and social/environmental concerns. The principle establishes ethical respect for all stakeholders. Hierarchical respect, deferential treatment, and documentation are not the principle's core requirement.
60. B — 20% calculated as $\$144,000 \div \$720,000 = 0.20$ or 20% annual ROI. Simple ROI divides annual returns by initial investment. The calculation represents standard annual return on investment.
61. C — The IFMA exam appointment is 4 hours allowing for tutorial, check-in, breaks, and the 3-hour testing timer. The additional time provides flexibility while the testing timer continues to run during breaks. Other appointment durations misrepresent the actual structure.
62. A — 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.
63. D — IFMA Certification Commission recertification fees use tiered regional pricing based on country tier. Tiers provide discounted pricing for tiers 2 and 3 to reflect regional economic differences. Single global, member-only, and premium international pricing misrepresent the actual structure.
64. B — \$100,800 annual contract cost calculated as $\$8,400 \times 12 \text{ months} = \$100,800$. Standard arithmetic conversion from monthly to annual uses multiplication by 12. Other calculations represent errors.
65. A — The IFMA Code of Conduct addresses facility manager responsibility to owe a duty of care to clients and consideration to third parties and stakeholders. The principle establishes the ethical foundation for professional accountability. Positioning, outsourcing, and documentation are not Code obligations.
66. C — Cost Performance Index of 0.97 calculated as $EV \$850K \div AC \$880K = 0.966$ or approximately 0.97 indicating slightly unfavorable cost. The calculation shows actual cost slightly exceeded earned value. Other interpretations confuse SPI with CPI or misrepresent the calculation.
67. D — IFMA exam content is validated periodically typically every 5-7 years through validation studies. The cycle ensures exam specifications reflect current scope of practice. Annual, quarterly, and continuous review misrepresent the actual validation cycle.
68. B — Purchasing insurance represents risk transfer through contractual mechanism. Insurance shifts financial responsibility for specified losses to the insurance carrier. Avoidance, mitigation, and acceptance represent alternative treatment strategies.

69. A — IFMA CFM exam item development is conducted by subject matter experts under psychometrician guidance. The process ensures items are valid, reliable, and properly calibrated. IFMA staff, external consulting, and vendor representatives do not lead item development.
70. C — \$432,000 annual operating cost calculated as $\$36,000 \times 12 \text{ months} = \$432,000$. Standard arithmetic conversion from monthly to annual uses multiplication by 12. Other calculations represent errors.
71. D — The IFMA Code of Conduct's principle of transparency requires practitioners to not misinform regarding products or terms of service to be provided. The principle establishes truthful representation as an ethical obligation. Public availability, extensive documentation, and limited communication are not the principle's core.
72. B — Schedule Variance of \$50K positive indicating ahead of schedule calculated as EV \$500K minus PV \$450K = \$50K. Schedule Variance above zero indicates ahead of schedule. Negative variance, zero variance, and ratio interpretations misrepresent the calculation.
73. A — The IFMA exam content outline includes knowledge-based, scenario-based, and integrated case study items. The mix tests both theoretical understanding and practical judgment. Multiple choice only, essay, and practical demonstration formats misrepresent the actual content structure.
74. C — 1.5% maintenance investment ratio calculated as $\$720,000 \div \$48\text{M} = 0.015$ or 1.5% reflecting standard industry maintenance ratio. The ratio is a common benchmark for facility maintenance investment relative to replacement value. Other percentages represent calculation errors or non-standard ratios.
75. B — The IFMA Code of Conduct's principle of trust requires practitioners to be truthful in professional communications. The principle recognizes that professional conduct affects public trust and confidence. Documentation, communication limitation, and legal deferral misrepresent the principle.
76. D — 3 years calculated as $\$540,000 \div \$180,000 = 3$ years simple payback using direct division calculation. Simple payback divides investment by annual savings. Accelerated methods, operational adjustments, and discount factors are not part of simple payback.
77. A — IFMA CFM exam form assembly is conducted using examination specifications developed through job analysis. The specifications ensure form-to-form consistency in coverage and difficulty. Random selection, vendor recommendation, and single-author development do not reflect the actual methodology.
78. C — \$384,000 annual facility expense calculated as $\$96,000 \times 4 \text{ quarters} = \$384,000$. Standard arithmetic conversion from quarterly to annual uses multiplication by four. Other calculations represent errors.

79. B — The IFMA Code of Conduct's principle of verification requires practitioners to continually evaluate services to ensure consistency with ethical principles and practice standards. The principle establishes ongoing self-evaluation as an ethical obligation. Documentation, external review, and organizational records are not the principle's core.
80. D — Negative Cost Variance of \$50K indicating over budget calculated as EV \$400K minus AC \$450K = -\$50K. CV below zero indicates over budget. Positive variance, zero variance, and ratio interpretations misrepresent the calculation.
81. A — IFMA CFM exam blueprint validation involved approximately 1,700 facility managers across all seven IFMA geographic regions. The empirical scale established the validity of the exam blueprint. Other counts misrepresent the actual study.
82. D — \$288,000 annual cleaning contract cost calculated as $\$24,000 \times 12 \text{ months} = \$288,000$. Standard arithmetic conversion from monthly to annual uses multiplication by 12. Other calculations represent errors.
83. B — IFMA CFM exam form is reviewed by SME panel before being finalized for delivery. The review ensures content accuracy, relevance, and proper calibration. IFMA staff, vendor representatives, and random selection do not perform the form review.
84. C — \$21,333 per month calculated as $\$64,000 \div 3 \text{ months} = \$21,333.33$ monthly average. Standard arithmetic division produces the monthly average from quarterly total. Other values represent calculation errors or different methodologies.
85. D — The IFMA Code of Conduct addresses facility manager continuous learning as continually seeking new information to maintain skills relative to the built environment. The principle establishes ongoing professional development as an ethical obligation. Optional, renewal-only, and IFMA-only limitations misrepresent the requirement.
86. B — Schedule Performance Index of 0.94 calculated as $EV \$300K \div PV \$320K = 0.9375$ or approximately 0.94 indicating slightly behind schedule. SPI below 1.0 indicates behind schedule. Other interpretations misrepresent the calculation direction or magnitude.
87. A — IFMA CFM exam pretest items serve validation for future exam content development. The items do not count toward candidate scoring but generate statistical data for future use. Pass-fail determination, percentile ranking, and identity verification do not use pretest items.
88. C — \$432,000 annual facility services cost calculated as $\$108,000 \times 4 \text{ quarters} = \$432,000$. Standard arithmetic conversion from quarterly to annual uses multiplication by four. Other calculations represent errors.
89. D — The IFMA Code of Conduct's principle of disclosure requires practitioners to make appropriate disclosures and withdraw or obtain consent if conflicts cannot be removed. The

principle addresses the management of conflicts of interest through transparency. Documentation, unlimited disclosure, and organizational records are not the principle's core.

90. B — \$3.00 per square foot calculated as $\$1.8\text{M} \div 600,000 \text{ sq ft} = \3.00 per square foot. Standard arithmetic division produces the cost per square foot metric. Other values represent calculation errors.
91. A — The IFMA exam appointment scheduling is conducted through Prometric for global computer-based testing. Prometric is the IFMA testing administration vendor. Pearson VUE, ETS, and ACT do not administer the IFMA CFM exam.
92. D — 2.0% maintenance ratio calculated as $\$720,000 \div \$36\text{M} = 0.020$ or 2.0% reflecting standard industry maintenance ratio. The ratio is calculated as annual maintenance investment divided by facility replacement value. Other percentages represent calculation errors.
93. C — 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.
94. A — \$6.00 per square foot calculated as $\$4.2\text{M} \div 700,000 \text{ sq ft} = \6.00 per square foot. Standard arithmetic division produces the cost per square foot metric. Other values represent calculation errors.
95. B — IFMA CFM exam content review is conducted regularly to ensure items remain accurate and relevant. The continuous review process maintains exam validity over time. Annual, continuous, and quarterly schedules misrepresent the actual review cycle.
96. D — 20% ROI calculated as $\$50,000 \div \$250,000 = 0.20$ or 20% annual return on investment. Simple ROI divides annual returns by initial investment. The calculation represents standard annual return.
97. C — The IFMA Code of Conduct addresses facility manager objective judgment as maintaining objective, professional judgment without compromising activities, contributions, or conflicts of interest. The principle establishes objectivity as a continuous professional requirement. Optional, conflict-only, and limited applications misrepresent the obligation.
98. A — \$1,200,000 annual utility cost calculated as $\$300,000 \times 4 \text{ quarters} = \$1,200,000$. Standard arithmetic conversion from quarterly to annual uses multiplication by four. Other calculations represent errors.
99. B — IFMA CFM exam item analysis is conducted on previous CFM exam forms before new release. The analysis identifies items that may need replacement or revision. Future forms, concurrent forms, and vendor schedules misrepresent the actual analysis process.

100. D — \$144,000 annual contract cost calculated as $\$12,000 \times 12 \text{ months} = \$144,000$. Standard arithmetic conversion from monthly to annual uses multiplication by 12. Other calculations represent errors.