

# PRACTICE EXAM 19: BUSINESS & LAW EXAM SIMULATION (50 QUESTIONS)

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**Time Allowed:** 120 Minutes (2 Hours)

Total Questions: 50

Passing Score: 70% (35 Correct)

## DOMAIN 1: LICENSING REQUIREMENTS (Questions 1–8)

1. A contractor in Alabama holds a valid license and enters into a construction management atrisk (CMAR) contract with a school district. Under CMAR delivery, the contractor provides preconstruction services (budgeting, scheduling, constructability review) and then holds the trade contracts as the constructor. The total guaranteed maximum price is \$4,200,000. The contractor's license has a \$5,000,000 monetary limitation. Under Alabama licensing law, what licensing consideration applies to the CMAR delivery method?

- A. CMAR contracts are exempt from all licensing requirements because the CM acts only as an advisor
- B. Only the trade subcontractors need licenses and the CMAR contractor is exempt from licensing entirely
- C. CMAR contracts require a separate "construction management" license distinct from the general contractor's
- D. The CMAR contractor must hold a general contractor's license with a monetary limitation adequate for the GMP amount — the CMAR contractor holds the trade contracts and assumes construction risk, making this functionally equivalent to general contracting for licensing purposes

2. Under Alabama law, a contractor who has been disciplined by the Licensing Board (license suspended for 90 days) wants to know whether this disciplinary action will appear on background checks conducted by project owners during prequalification. Under Alabama's public records framework, what is the status of Board disciplinary records?

A. All disciplinary actions are permanently sealed and may never be disclosed to any party under any law

B. Board disciplinary actions are generally public records accessible through the Board's public database — project owners conducting prequalification routinely check license status and disciplinary history, and a 90day suspension will likely appear on the contractor's record and may affect the contractor's ability to prequalify for future projects

C. Disciplinary records are public only for suspensions exceeding one year with shorter actions kept private

D. Only the contractor may access their own disciplinary record and no third party has any access rights

3. A contractor holds an Alabama license and is the sole owner and qualifying party of the company. The contractor is diagnosed with a serious medical condition requiring extended hospitalization and rehabilitation. The contractor will be unable to supervise construction operations for approximately six months. Under Alabama licensing regulations, what must the contractor do to maintain the company's license during this absence?

A. The contractor must notify the Board of the qualifying party's inability to supervise operations and arrange for a temporary or permanent replacement qualifying party within the timeframe allowed by Board regulations — the company may need to limit new contractual commitments until a replacement is approved and operating under a qualifying party who cannot supervise violates the licensing requirement

B. The company may continue all normal operations for up to two years without any notification to the Board

C. The contractor's spouse automatically becomes the qualifying party during any medical absence

D. The license is automatically placed on hold and the contractor may resume operations whenever recovered

4. Under Alabama licensing law, a contractor who advertises construction services online (website, social media, directory listings) must comply with the same advertising requirements that apply to traditional advertising. A contractor creates a Facebook page advertising commercial construction services but does not include the contractor's license number anywhere on the page. Under Alabama licensing regulations, what violation exists?

A. Social media advertising is exempt from all licensing regulations because it is not traditional advertising

B. Only the contractor's phone number is required on social media advertising with no license number needed

C. The contractor has violated the advertising requirements by failing to include the license number — Alabama's advertising regulations apply to all forms of advertising including online platforms, and the license number must be displayed to allow consumers and regulators to verify the contractor's licensed status

D. License numbers are required only on printed advertisements and are never required for digital platforms

5. A contractor in Alabama completes a project and the building owner files a complaint with the Licensing Board alleging that the contractor used unqualified workers who damaged existing plumbing during renovation. The Board investigates and determines that the contractor indeed used untrained laborers to perform plumbing modifications without proper supervision. Under Alabama licensing law, what disciplinary grounds does this situation support?

A. Using untrained workers is acceptable as long as the project was completed within the original budget

B. Only the untrained workers face consequences and the licensed contractor bears no responsibility

C. The Board can take action only if the plumbing damage exceeds \$100,000 in documented repair costs

D. The contractor may face disciplinary action for failing to ensure competent performance of the work under the license — using unqualified workers to perform plumbing modifications without proper supervision constitutes deficient workmanship and may also involve performing work outside the contractor's licensed classification

6. Under Alabama licensing regulations, a contractor who holds both an Alabama license and licenses in reciprocal states (Mississippi, Louisiana, Tennessee, Arkansas) must maintain compliance with each state's licensing requirements independently. If the contractor fails to renew the Alabama license but continues working in Mississippi under the Mississippi license, what effect does the Alabama lapse have on the Mississippi license?

A. The Alabama lapse may have no immediate effect on the Mississippi license if the Mississippi license was independently obtained — however, if the Mississippi license was

obtained through reciprocity based on the Alabama license, the Alabama lapse may trigger a review by Mississippi's licensing authority and could potentially affect the Mississippi license's validity

B. All reciprocal licenses automatically lapse simultaneously when any single state license expires

C. The Alabama lapse permanently revokes all licenses in every reciprocal state without appeal

D. Reciprocal licenses are completely independent and a lapse in one state never affects any other state

7. A contractor applies for an Alabama license upgrade from a \$250,000 to a \$1,000,000 monetary limitation. The Board reviews the application and determines that the contractor has sufficient net worth and working capital for the \$1,000,000 classification but has never completed a project exceeding \$300,000. Under Alabama licensing regulations, how might the Board respond?

A. The Board must approve the upgrade because financial qualifications are the only criteria that matter

B. Financial qualifications alone do not guarantee approval of the requested classification level

C. The Board may approve the upgrade at a lower classification level (such as \$500,000) based on the contractor's demonstrated project experience — while the financial qualifications support \$1,000,000, the lack of experience managing projects at that scale may lead the Board to grant an intermediate upgrade rather than the full requested amount, allowing the contractor to build experience progressively

D. The Board must deny the upgrade entirely if the contractor has not completed a \$1,000,000 project

8. Under Alabama licensing law, a contractor who is the subject of a Board complaint has the right to legal representation throughout the disciplinary process. If the contractor cannot afford an attorney, does the Board provide legal counsel at the Board's expense?

A. The Board must provide free legal counsel to all contractors facing disciplinary proceedings at Board expense

B. The contractor has the right to retain legal counsel at the contractor's own expense — unlike criminal proceedings where the government may be required to provide counsel for indigent defendants, administrative licensing proceedings do not typically include a right to

governmentfunded legal representation; the contractor must arrange and pay for their own attorney

C. Legal representation is prohibited during Board proceedings and contractors must represent themselves

D. Only contractors with licenses valued above \$5,000,000 are entitled to Boardfunded legal representation

## **DOMAIN 2: ESTIMATING AND BIDDING (Questions 9–13)**

9. A contractor is preparing a bid for a "fasttrack" commercial project where construction begins before the design is 100% complete. The architect has completed only 60% of the construction documents. Under standard estimating practice, what unique challenge does fasttrack delivery create for the estimator?

A. The estimator must price the undefined 40% of the design using allowances, assumptions, and design development contingency — the estimate for the incomplete portions carries significantly more risk than the fully designed portions, and the estimator must clearly document all assumptions so that changes from the assumed scope can be tracked and recovered through change orders

B. Fasttrack projects always cost less because the shortened schedule reduces general conditions costs

C. The estimator should leave the undefined portions at \$0 and price them only when the design is complete

D. Fasttrack delivery has no effect on the estimating process because all projects have the same risk level

10. A contractor's estimator discovers that the structural drawings specify "moment connections" for the steel frame, but the structural engineer's calculations (included in the bid documents) show "shear connections" at the same locations. This conflict could represent a cost difference of \$200,000 or more. Under standard bidding practice, what should the estimator do?

A. The estimator should price the less expensive shear connections to make the bid more competitive

B. The estimator should average the cost of both connection types and use the midpoint for the bid

C. The estimator should submit a prebid RFI identifying the conflict between the drawings and calculations, requesting clarification of the correct connection type before the bid deadline — this document conflict could significantly affect the bid price and structural performance, and the architect must resolve it for all bidders

D. Connection type conflicts are common and the estimator should ignore them until construction begins

11. A contractor is bidding a public project in Alabama and the specifications include a "MBE/WBE participation goal" requiring the contractor to make goodfaith efforts to subcontract a specified percentage of the work to minorityowned and womenowned business enterprises. Under standard bidding practice, how does the MBE/WBE requirement affect the bid preparation process?

A. MBE/WBE requirements have no effect on bid preparation because they apply only after contract award

B. The estimator must identify and solicit bids from certified MBE/WBE subcontractors for applicable trade packages, document all outreach efforts, and submit evidence of goodfaith efforts with the bid — failure to demonstrate adequate outreach may render the bid nonresponsive even if the participation goal is not fully met

C. Only the project owner is responsible for identifying MBE/WBE subcontractors on all public projects

D. MBE/WBE participation goals apply only to federal projects and never to Alabama statefunded projects

12. A contractor is preparing a bid for a commercial project with a 30month construction duration. The estimator must account for material price escalation over the extended project timeline. Under standard estimating practice, the estimator reviews historical price data and industry forecasts for key materials (structural steel, concrete, lumber, copper). Steel prices are forecast to increase 8% annually. If the structural steel package costs \$500,000 at current prices and will be purchased in month 18, what escalated cost should the estimator include?

A. \$500,000 because material prices never change during construction regardless of project duration

B. The estimator should calculate the escalated cost by applying the forecast increase for 18 months

C. Material escalation is always the owner's responsibility and the contractor should exclude it from the bid

D. The estimator should apply the 8% annual escalation for 18 months (1.5 years):  $\$500,000 \times (1.08^{1.5}) \approx \$560,000$  — the escalated cost reflects the anticipated price at the time of actual procurement, not the current price; failing to account for escalation on a 30-month project creates a significant cost exposure

13. A contractor submits a bid on a negotiated commercial project and the owner asks the contractor to provide a "construction contingency" as a separate line item in the GMP. The contingency is 3% of the estimated construction cost (\$150,000 on a \$5,000,000 project). Under standard GMP contracting practice, who controls the contingency funds?

A. The subcontractors control the contingency and may draw from it without the GC's approval

B. The architect controls the contingency and allocates it to design changes at the architect's discretion

C. The construction contingency within the GMP is typically controlled by the contractor (with owner approval for expenditures) and is used to cover unforeseen conditions, minor scope gaps, and estimating imprecision that do not constitute formal owner-directed changes — any unused contingency typically reverts to the owner or is shared per the contract's savings provision

D. The contingency is the contractor's additional profit and may be retained regardless of whether it is used

### **DOMAIN 3: LIEN LAWS (Questions 14–15)**

14. Under Alabama's mechanics' lien law, a contractor who performs work on a leased property (where the building is owned by the landlord and the improvements are requested by the tenant) faces a unique lien situation. Under Alabama law, whose property interest does the mechanics' lien attach to when the work is performed at the tenant's request?

A. The lien generally attaches to the tenant's leasehold interest in the property — whether the lien also attaches to the landlord's fee interest depends on whether the landlord consented to or authorized the improvements; if the landlord did not consent, the lien may be limited to the tenant's interest only, which has limited value

B. The lien always attaches to the landlord's full fee interest regardless of the landlord's knowledge or consent

- C. No mechanics' lien may be filed on leased property under any circumstances in Alabama law
- D. The lien attaches only to the tenant's personal property (furniture, fixtures) and never to any real property

15. A material supplier delivers \$40,000 in customfabricated steel for a commercial project. After delivery, the general contractor disputes the quality and refuses to pay. The supplier wants to file a mechanics' lien but discovers that the custom steel was fabricated at the supplier's shop (offsite) and not yet installed in the building. Under Alabama's mechanics' lien law, can the supplier file a lien for materials fabricated offsite but delivered to the project?

- A. Materials fabricated offsite can never support a mechanics' lien regardless of delivery or incorporation
- B. Only standard offtheshelf materials may support a lien and customfabricated items are always excluded
- C. The supplier may file a lien only if the custom steel has been physically bolted to the building structure
- D. Materials that were specifically fabricated for the project and delivered to the site may support a mechanics' lien even if not yet installed — the key is that the materials were furnished for the improvement; customfabricated items made specifically for the project have a stronger lien claim than generic materials that could be used elsewhere

#### **DOMAIN 4: FINANCIAL MANAGEMENT (Questions 16–20)**

16. A contractor's financial advisor recommends implementing "earned value management" (EVM) on all projects exceeding \$1,000,000. The project manager resists, arguing that EVM is too complex for construction. Under financial management best practices, what specific value does EVM provide that traditional cost tracking does not?

- A. EVM provides only a historical record of past spending with no predictive capability for future costs
- B. EVM is identical to traditional cost tracking and provides no additional information or analytical value
- C. EVM integrates cost, schedule, and scope performance into a single analytical framework — traditional cost tracking shows only how much has been spent versus budget, while EVM

also measures how much work has been accomplished for that spending (cost efficiency) and whether the work is ahead or behind schedule (schedule efficiency), enabling early detection of problems and forecasting of final outcomes

D. EVM applies only to government contracts and has no application to private commercial construction

17. A contractor reviews the company's "aged accounts payable" report and discovers that several subcontractor invoices have been outstanding for more than 90 days. The total overdue payables amount to \$175,000. Under financial management principles, what risks does this aged payable balance create?

A. Aged payables create multiple risks: subcontractors may file mechanics' liens against the project owner's property, subcontractor relationships may deteriorate affecting future pricing and availability, the contractor may lose prompt payment discounts, the contractor's credit reputation in the market may suffer, and the aged balances may violate Alabama's prompt payment provisions

B. Aged payables improve the contractor's cash position and should be maintained as long as possible

C. Payables over 90 days are automatically forgiven under Alabama law and the contractor owes nothing

D. Only payables exceeding \$500,000 create any financial risk for the construction company

18. A contractor's job cost report shows that the "labor productivity variance" on a commercial project has been consistently negative (actual hours exceed estimated hours) for six consecutive months. The cumulative overrun is 2,400 labor hours beyond the estimate. At an average burdened rate of \$45 per hour, this represents \$108,000 in additional labor cost. Under standard construction financial management, what corrective analysis should the project manager perform?

A. A 2,400hour overrun is within normal tolerance and requires no investigation or corrective action

B. The project manager should immediately terminate all field workers and hire an entirely new workforce

C. Labor productivity variances are always caused by weather and cannot be investigated or corrected

D. The project manager should analyze the overrun by trade and activity to identify specific problem areas — determine whether the causes are systemic (inadequate supervision, wrong crew mix, excessive rework) or activity-specific (particular trades or work items driving the overrun); implement targeted corrections for identified causes and adjust the cost to complete forecast

19. A contractor's accountant explains that the company should monitor its "overhead rate trend" annually. Over the past three years, the home office overhead rate (as a percentage of direct labor) has increased from 22% to 28% to 35%. Under financial management principles, what does this rising trend indicate?

A. A rising overhead rate is always positive because it indicates the company is investing in its infrastructure

B. The rising overhead rate from 22% to 35% indicates that home office costs are growing disproportionately relative to the company's direct labor volume — possible causes include declining revenue (spreading fixed overhead over fewer labor dollars), growing administrative staff, increasing rent or insurance costs, or inefficient operations; the contractor must either grow revenue, reduce overhead, or increase markup rates to maintain profitability

C. Overhead rate trends have no significance for construction company financial management decisions

D. The rising rate indicates the company should reduce direct labor costs by 35% to match the overhead rate

20. A contractor's financial statement shows "notes receivable" of \$85,000 — representing a promissory note from a former project owner who agreed to make monthly payments over 24 months for a disputed balance. Under standard construction accounting, how should notes receivable be evaluated on the balance sheet?

A. Notes receivable should be evaluated for collectibility — the \$85,000 is an asset, but the contractor must assess whether the former owner has the ability and willingness to make the payments; if collection is uncertain, the contractor should establish an allowance for doubtful accounts to reflect the risk that some or all of the balance may not be collected

B. Notes receivable are always 100% collectible and should never be discounted or reserved against

C. Notes receivable should be removed from the balance sheet entirely because they are not real assets

D. Only notes receivable exceeding \$200,000 require evaluation for collectibility on financial statements

**DOMAIN 5: PAYROLL, TAXES, AND INSURANCE (Questions 21–26)**

21. Under federal tax law, a contractor who provides company-owned cell phones to field superintendents for business use must determine whether the cell phone benefit is taxable. Under current IRS rules, how is the employer-provided cell phone treated for tax purposes?

A. Cell phones provided primarily for business reasons are excluded from taxable income as a working condition fringe benefit — the IRS no longer requires detailed personal-versus-business-use tracking when the phone is provided primarily for business purposes; however, if the phone is provided as a substitute for compensation, it remains taxable

B. All employer-provided cell phones are taxable regardless of the purpose or extent of business use

C. Cell phones are taxable only if the monthly service plan exceeds \$200 per month per employee

D. Only cell phones manufactured outside the United States are taxable as an imported fringe benefit

22. A contractor's workers' compensation insurance carrier informs the contractor that the company's "loss ratio" for the current policy year is 85% — meaning that claims paid (\$170,000) represent 85% of the premium earned (\$200,000). Under standard workers' compensation insurance practice, what does this loss ratio indicate about the policy's profitability for the carrier?

A. An 85% loss ratio is excellent for the insurance carrier because the carrier retains 15% as pure profit

B. An 85% loss ratio indicates the carrier is making substantial profit from the contractor's policy

C. An 85% loss ratio indicates the policy is marginally profitable or potentially unprofitable for the carrier — the carrier's expenses (administration, claims handling, reserves, reinsurance) typically consume 20–35% of the premium in addition to the claims paid; a loss ratio of 85% combined with 25–30% expense loading means the carrier may be losing money on this account

D. Loss ratios have no significance for either the carrier's profitability or the contractor's renewal terms

23. Under Alabama law, an employer must provide each terminated employee with information about continuing health insurance coverage under COBRA (if applicable) or the Alabama equivalent. If the contractor has 18 employees (below COBRA's 20employee threshold), does any continuation coverage requirement apply?

A. No continuation coverage requirement exists for employers below COBRA's 20employee threshold in any jurisdiction

B. Only employees who have been with the company for more than five years are eligible for any continuation

C. Continuation coverage requirements apply only to employers with more than 100 employees in all cases

D. While COBRA does not apply to employers with fewer than 20 employees, Alabama may have a statelevel "miniCOBRA" continuation coverage requirement that provides similar protections for employees of smaller employers — the contractor should verify whether Alabama requires smallemployer continuation coverage

24. A contractor is reviewing the company's "umbrella liability" policy and discovers that the policy includes a "defense within limits" provision. Under standard umbrella policy terms, what does "defense within limits" mean?

A. The umbrella carrier provides unlimited defense costs in addition to the policy limits with no reduction

B. "Defense within limits" means the cost of defending a claim (attorney fees, expert witnesses, court costs) is paid from within the policy's aggregate limit rather than in addition to it — every dollar spent on defense reduces the amount available to pay the claim itself, which can significantly erode the available coverage for large, complex litigation

C. Defense costs apply only to claims filed during the first month of the policy period with no later effect

D. The provision requires the contractor to pay all defense costs personally with no carrier contribution

25. Under federal tax law, a contractor must determine whether certain "fringe benefits" provided to employees are taxable or excludable. The contractor provides a \$50 per month gym membership reimbursement to all field employees as part of a wellness program. Under current IRS rules, how is this gym membership treated?

A. Gym membership reimbursements are generally taxable compensation that must be included in the employee's W2 as wages subject to income tax and FICA — while employer-provided on-premises athletic facilities may be tax-free, offsite gym memberships paid by the employer are typically taxable fringe benefits under current tax law

B. All gym membership reimbursements are permanently tax-free regardless of the facility's location or type

C. Gym reimbursements are tax-free only if the employee works out more than 20 hours per month

D. Only gym memberships exceeding \$200 per month are taxable with lesser amounts excluded from income

26. A contractor's insurance broker explains that the company's CGL policy has been "nonrenewed" by the current carrier due to an unfavorable loss history (three large claims in two years). Under standard insurance practice, what challenges does a nonrenewal create for the contractor?

A. Nonrenewal has no effect because all insurance carriers offer identical coverage at identical premium rates

B. Nonrenewal forces the broker to seek coverage from alternative carriers, potentially at higher premiums

C. Nonrenewed policies are automatically picked up by the state insurance guaranty fund at the same premium

D. Nonrenewal by the current carrier forces the contractor to find replacement coverage, often at significantly higher premiums or with less favorable terms — the nonrenewal becomes part of the contractor's insurance history that future carriers will evaluate; the contractor may need to accept higher deductibles, lower limits, exclusions for the types of claims that caused the nonrenewal, or coverage through surplus lines carriers

**DOMAIN 6: PERSONNEL AND LABOR LAW (Questions 27–31)**

27. Under the Fair Labor Standards Act, a contractor pays nonexempt employees biweekly (every two weeks). During one pay period, a worker works 45 hours in Week 1 and 50 hours in Week 2. The worker's regular hourly rate is \$26.00. Under FLSA, what is the worker's total gross pay for this two-week period?

A. \$2,470.00 calculated as 95 hours  $\times$  \$26.00 with no overtime premium for any hours during the period

B. Week 1: 40 hours at \$26.00 (\$1,040) + 5 overtime hours at \$39.00 (\$195) = \$1,235; Week 2: 40 hours at \$26.00 (\$1,040) + 10 overtime hours at \$39.00 (\$390) = \$1,430; combined total = \$1,235 + \$1,430 = \$2,665

C. The worker earns \$2,795.00

D. \$3,705.00 calculated as 95 hours  $\times$  \$39.00 with the overtime rate applied to every hour in the period

28. A contractor's employee is injured at work and the treating physician assigns permanent work restrictions — the employee can no longer lift more than 25 pounds. The employee's current position as a concrete finisher requires regular lifting of 50+ pounds. Under Alabama workers' compensation law and the ADA, what obligation does the employer have?

A. The employer must terminate the employee immediately because the employee cannot perform the job

B. The employer must create a new position specifically designed for this one employee regardless of cost

C. The employer must evaluate whether the employee can be accommodated — under workers' compensation, the employer may offer modified duty or an alternative position; under the ADA (if the employee's condition qualifies as a disability), the employer must consider reasonable accommodations including reassignment to a vacant position the employee is qualified to perform

D. The employer has no obligation because workers' compensation and the ADA never apply simultaneously

29. Under OSHA's construction safety standards, employers must implement a "silica exposure control plan" for workers performing activities that generate respirable crystalline silica (concrete cutting, masonry grinding, sandblasting). Under OSHA's silica standard for

construction (29 CFR 1926.1153), what approach does the standard provide for controlling silica exposure?

A. The standard provides a "Table 1" approach that specifies engineering controls and work practices for common construction tasks — if the contractor fully implements the controls specified in Table 1 for a given task (such as using a saw with integrated water delivery for concrete cutting), the contractor is not required to perform exposure monitoring; alternatively, the contractor may measure actual exposure and implement controls based on the measured levels

B. Only respiratory protection may be used to control silica exposure with no engineering controls permitted

C. The silica standard applies only to underground mining and has no construction-specific provisions

D. Employers are required only to post warning signs about silica with no controls on actual exposure

30. A contractor employs a 19-year-old worker who has been on the job for three months. The worker is assigned to operate a backhoe excavator on a commercial site. Under OSHA and FLSA regulations, are there any age-related restrictions on this assignment?

A. Workers under 21 may not operate any construction equipment under OSHA or FLSA regulations

B. Only workers over 25 may operate excavation equipment on commercial construction sites

C. Age restrictions on equipment operation apply only to workers under 16 in the construction industry

D. At 19 years old, the worker is not subject to FLSA child labor restrictions (which apply to minors under 18) — however, the employer must ensure the worker has been properly trained and is competent to operate the backhoe safely per OSHA's training requirements regardless of the worker's age

## **DOMAIN 7: PROJECT MANAGEMENT (Questions 32–34)**

31. Under OSHA's construction safety standards, employers must provide "medical surveillance" for employees exposed to certain hazardous substances above specified action levels. For lead exposure in construction, what does medical surveillance include?

- A. Medical surveillance for leadexposed workers includes only a single blood test at the time of hire
- B. Medical surveillance consists only of an annual flu vaccination with no leadspecific testing required
- C. Medical surveillance for lead includes initial and periodic blood lead level (BLL) testing, physical examination, medical history review, and additional testing as recommended by the physician — workers with BLLs at or above 50 µg/dL must be removed from lead exposure until levels decrease; the employer pays all costs of medical surveillance
- D. Medical surveillance applies only to workers in lead smelting plants and not to construction workers

32. A contractor is managing a commercial project and the owner requests "monthly schedule narratives" accompanying each CPM schedule update. Under standard scheduling practice, what should the monthly schedule narrative include?

- A. The schedule narrative should describe the work accomplished during the reporting period, explain any changes to the critical path, identify activities that are trending behind schedule, describe the causes of any delays (weather, owner changes, subcontractor issues), present the recovery plan for delayed activities, forecast the projected completion date, and highlight upcoming critical milestones and potential risks
- B. The narrative should contain only the project's total percentage complete with no additional detail
- C. Schedule narratives are identical to the daily construction log and contain no schedulespecific analysis
- D. Only a list of completed activities is needed with no analysis of delays, risks, or critical path changes

33. A contractor is implementing "last responsible moment" (LRM) decisionmaking on a complex commercial project. Under lean construction principles, what does the LRM concept mean, and how does it benefit project management?

- A. LRM means making all decisions on the first day of construction before any field work begins
- B. LRM means delaying all decisions until the last possible day of the project regardless of consequences

C. LRM has no application to construction and is used only in software development methodologies

D. LRM means deferring noncritical decisions until the latest point at which the decision can be made without negatively impacting the project — this allows maximum information gathering before committing resources, reduces rework from premature decisions, and enables better informed choices; however, the decision must be made before it becomes a constraint on downstream activities

34. A contractor's project manager discovers that the project's "request for information" (RFI) log shows an average architect response time of 28 calendar days. The contract allows 14 calendar days for RFI responses. Of the 180 RFIs submitted, 120 were answered late. Under standard project management practice, what documentation should the project manager maintain?

A. No documentation is needed because RFI response times have no contractual or schedule significance

B. The project manager should maintain a detailed RFI tracking log showing submission dates, contractual response deadlines, actual response dates, the number of days each RFI was late, the specific work activities affected by each delayed response, and the cumulative schedule and cost impact — this documentation supports potential delay claims and demonstrates that the contractor diligently pursued timely responses

C. Only RFIs that are more than 90 days late should be tracked and documented on the tracking log

D. The project manager should document only the first five late RFIs and ignore all subsequent delays

## **DOMAIN 8: CONTRACT MANAGEMENT (Questions 35–40)**

35. Under Alabama contract law, a contractor who relies on the owner's representation that the project site is "clean and free of environmental contamination" later discovers significant petroleum contamination requiring \$200,000 in remediation. The owner knew about the contamination but did not disclose it. Under Alabama law, what legal theory supports the contractor's claim for the remediation costs?

A. The contractor has no claim because environmental conditions are always the contractor's responsibility

B. The contractor assumed all environmental risk by signing the contract regardless of the owner's representations

C. The contractor may pursue a claim based on fraudulent misrepresentation — the owner's knowing concealment of the contamination while affirmatively representing the site as "clean" constitutes fraud that induced the contractor to enter the contract at a price that did not include remediation; the contractor may recover remediation costs, lost profits, and potentially punitive damages

D. Environmental misrepresentation claims are barred by the statute of frauds in all Alabama contracts

36. A contractor signs a subcontract that includes a "backcharge" provision allowing the GC to deduct costs from the subcontractor's payments for work the GC performs that was the subcontractor's responsibility. The GC backcharges the subcontractor \$8,000 for cleanup work the subcontractor failed to perform. The subcontractor disputes the charge. Under standard subcontract provisions, what documentation must the GC have to support the backcharge?

A. The GC must have documentation showing: written notice to the subcontractor that the cleanup was required, a reasonable opportunity for the subcontractor to perform the cleanup before the GC performed it, the actual costs incurred by the GC for the cleanup work, and the contractual basis for the subcontractor's cleanup obligation — backcharges without proper notice and documentation are difficult to enforce

B. No documentation is needed because the GC may backcharge any amount at any time without support

C. Only a verbal conversation with the subcontractor's foreman is sufficient to support a backcharge of any size

D. Backcharges are prohibited in all Alabama construction subcontracts under state law

37. Under Alabama contract law, a project owner wants to assign the construction contract to a new owner who is purchasing the property. The original contract does not contain a specific "assignment" clause. Under Alabama law, may the owner assign the contract without the contractor's consent?

A. The owner may assign the contract to anyone at any time without the contractor's knowledge or consent

B. Assignment of a construction contract is always prohibited regardless of the contract terms or party consent

C. Only the contractor may assign a construction contract and the owner never has assignment rights

D. Generally, the owner may assign the right to receive the benefits of the contract (such as the completed building) without the contractor's consent, but may not delegate the obligations (such as the duty to make payments) without the contractor's agreement — the contractor bargained with the original owner based on that owner's creditworthiness and reputation

38. A contractor is reviewing a contract that includes a "retention of records" clause requiring both parties to maintain project records for seven years after final payment. Under standard construction practice, why is a sevenyear retention period specified?

A. The sevenyear retention period has no relationship to any statute of limitations or practical need

B. The sevenyear period ensures records are available to support or defend claims that may arise within the applicable statute of limitations (six years for breach of written contract in Alabama) plus an additional margin — records may be needed for tax audits (IRS requires employment tax records for four years), warranty claims, latent defect litigation, and insurance claims that may surface years after completion

C. Only financial records must be retained and all other project records may be destroyed after 30 days

D. Record retention is optional and the clause is unenforceable under Alabama contract law

39. Under Alabama contract law, a contractor who performs "extra work" directed by the owner's onsite representative (project manager) but not authorized by a formal written change order faces a specific legal challenge in recovering the cost. Under standard contract provisions, what principle governs this situation?

A. The contractor may recover for extra work directed by the owner's authorized representative even without a formal written change order if the contractor can demonstrate that the representative had actual or apparent authority to direct the work, that the work was outside the original contract scope, and that the owner received the benefit of the additional work — however, the contractor assumes risk by proceeding without written authorization

B. Extra work directed verbally is always free and the contractor may never recover the cost under any theory

C. Only the architect may direct extra work and owner representatives have no authority to do so

D. Written change orders are the only mechanism for recovering extra work costs under all Alabama contracts

40. A contractor completes a commercial project and the owner refuses to issue the Certificate of Substantial Completion, claiming that the mechanical system does not meet the performance specifications. The contractor argues that the system was installed per the drawings and specifications. Under standard contract provisions, what dispute mechanism exists for resolving disagreements about substantial completion?

A. Only the building inspector may determine whether substantial completion has been achieved on any project

B. The contractor must demolish and rebuild the entire mechanical system before substantial completion is considered

C. The contractor may request that the architect independently evaluate whether the project meets the criteria for substantial completion — if the architect determines the project is substantially complete, the architect may issue the certificate; if the dispute persists, the contractor may pursue the claim through the contract's dispute resolution process while continuing to address legitimate deficiencies

D. Substantial completion disputes are automatically resolved in the owner's favor without any review process

#### **DOMAIN 9: BUSINESS ORGANIZATION (Questions 41–42)**

41. A contractor operates as a multimember LLC and the operating agreement includes a "buysell agreement" triggered by certain events (death, disability, voluntary departure, involuntary termination). The buysell agreement specifies that a departing member's interest will be valued using the "fair market value" method determined by an independent appraiser. Under standard business valuation principles, what factors does the appraiser consider when valuing a construction company?

A. Only the company's cash balance on the date of departure determines the fair market value

B. The appraiser considers the company's financial statements, tangible assets, intangible assets (goodwill, client relationships, backlog), historical earnings, projected future earnings, industry multiples, management quality, competitive position, and marketability of the interest —

construction company valuations are complex because significant value may reside in the backlog, reputation, and key personnel relationships

C. Construction companies are always valued at exactly one year's total revenue regardless of profitability

D. Only the book value of equipment determines the fair market value with no other factors considered

42. A contractor is considering converting from a sole proprietorship to an SCorporation. Under federal tax law, what is the primary tax advantage of an SCorporation over a sole proprietorship for a profitable construction business?

A. SCorporations pay no taxes of any kind including employment taxes on all business income

B. SCorporations are taxed at a lower corporate rate than the individual rate applied to sole proprietors

C. Sole proprietorships and SCorporations have identical tax treatment with no advantage to either structure

D. In an SCorporation, the owner pays selfemployment tax (Social Security and Medicare) only on salary, not on the entire net income — in a sole proprietorship, the entire net income is subject to selfemployment tax (15.3%); the SCorporation allows the owner to take a reasonable salary (subject to employment tax) and distribute remaining profits as dividends that avoid selfemployment tax

#### **DOMAIN 10: RISK MANAGEMENT (Questions 43–46)**

43. A contractor is constructing a commercial building and the geotechnical engineer recommends installing vibration monitors on an adjacent historic building during pile driving operations. Under standard risk management practice, what is the purpose of the vibration monitoring program?

A. Vibration monitors are purely decorative and have no practical risk management purpose

B. The monitors serve only to measure noise levels for compliance with local noise ordinances

C. The vibration monitoring program establishes baseline conditions, measures peak particle velocity (PPV) during pile driving, compares readings against industry damage thresholds, and provides realtime data that allows the contractor to modify operations (reduce drop height,

change hammer type, adjust driving schedule) if vibrations approach damaging levels — the monitoring data also provides a defense against false damage claims

D. Vibration monitoring is required only for blasting operations and never for pile driving activities

44. Under Alabama law, a contractor who operates a fleet of vehicles must carry commercial automobile insurance meeting state minimum requirements. If one of the contractor's dump trucks is involved in a serious accident causing injuries to multiple people and the damages exceed the commercial auto policy limits, what additional insurance coverage might respond?

A. The contractor's commercial umbrella liability policy provides excess coverage above the auto policy limits — if the dump truck accident damages exceed the commercial auto limit, the umbrella responds to the excess amount up to its own limit, providing critical additional protection against catastrophic multivehicle or multiinjury accidents

B. No additional coverage exists and the contractor is personally liable for all damages above the auto limit

C. The contractor's workers' compensation policy covers all automobile accident damages above the auto limit

D. The contractor's builder's risk policy covers all automobile accident damages including bodily injury

45. A contractor's safety manager is developing a "fall rescue plan" for workers who may become suspended in a personal fall arrest system after a fall. Under OSHA's fall protection standards and standard safety practice, why is a prompt rescue plan essential?

A. Rescue plans are optional and OSHA has no requirements for postfall rescue of suspended workers

B. Suspended workers face no medical risk and may remain in the harness indefinitely until help arrives

C. Fall rescue plans are required only for falls exceeding 100 feet and not for lower fall distances

D. A prompt rescue plan is essential because a worker suspended in a harness faces the risk of "suspension trauma" (orthostatic intolerance) — blood pooling in the legs due to the harness pressure can cause loss of consciousness within minutes and death within 1530 minutes if the

worker is not rescued promptly; the employer must have rescue capability that can retrieve suspended workers within this critical timeframe

46. A contractor is evaluating the risk of a "professional liability" claim arising from the contractor's preparation of a "contractor's cost estimate" that the owner relied upon for project financing. The estimate projected a total project cost of \$3,500,000, but the actual cost was \$4,200,000 — a 20% overrun. Under standard risk management principles, does the contractor face professional liability exposure for the inaccurate estimate?

A. Contractors never face professional liability for cost estimates regardless of accuracy or reliance

B. The contractor may face professional liability exposure if the owner reasonably relied on the estimate for financing decisions and the estimate was prepared negligently — if the contractor failed to exercise the degree of care that a reasonably competent estimator would exercise (omitting major scope items, using outdated pricing, ignoring known site conditions), the inaccurate estimate may constitute professional negligence

C. Professional liability for estimates applies only when the estimate exceeds the actual cost, not when it is low

D. Only architects face liability for cost estimates and contractors are always exempt from estimating claims

**DOMAIN 11: SAFETY, RECORDKEEPING, AND ENVIRONMENTAL (Questions 47–50)**

47. Under OSHA's construction safety standards, a contractor must implement specific "lockout/tagout" (LOTO) procedures when workers perform servicing or maintenance on construction equipment. Under OSHA's LOTO requirements, what must the authorized employee do before beginning maintenance on a piece of equipment?

A. The authorized employee must notify affected employees that the equipment will be locked out, shut down the equipment using normal stopping procedures, isolate all energy sources (electrical, hydraulic, pneumatic, mechanical, thermal), apply personal locks and tags to each energy isolation device, and verify that the equipment cannot be restarted by attempting to operate the controls — only after zeroenergy verification may maintenance begin

B. The employee should simply turn off the equipment and begin maintenance immediately without locks

- C. Only a verbal warning to nearby workers is needed before beginning maintenance on any equipment
- D. LOTO procedures apply only to electrical equipment and not to hydraulic or pneumatic construction equipment

48. A contractor is performing demolition of a commercial building and discovers that the building's caulking and glazing compounds contain polychlorinated biphenyls (PCBs). Under EPA's Toxic Substances Control Act (TSCA), how must PCB-containing caulk be managed during demolition?

- A. PCB caulk may be disposed of in the regular construction dumpster with no special handling requirements
- B. PCB caulk may be left in place and covered with new caulk without removal or environmental concern
- C. PCB-containing caulk must be removed carefully to minimize the spread of PCB contamination, workers must be protected from exposure, the removed caulk must be characterized for PCB concentration, and disposal must comply with TSCA PCB disposal regulations — high-concentration PCB waste must be disposed of at approved facilities; building surfaces that contacted the PCB caulk may also require remediation
- D. PCB regulations were fully repealed in 2005 and no longer apply to any building materials

49. Under OSHA's construction safety standards, employers must implement a "heat illness prevention program" when workers are exposed to high heat conditions. Under OSHA's recommended practices (and the proposed heat standard), what are the key elements of an effective heat illness prevention program?

- A. Only providing water is sufficient for a complete heat illness prevention program without other elements
- B. Only scheduling work during cooler morning hours satisfies the heat prevention program requirement
- C. Heat illness prevention applies only to desert climates and not to the southeastern United States
- D. An effective program includes providing adequate water (at least one quart per worker per hour), providing shade or cool rest areas, implementing work/rest schedules based on heat index, acclimatizing new and returning workers gradually, training workers and supervisors to

recognize heat illness symptoms, and establishing emergency response procedures for heat-related medical emergencies

50. A contractor is constructing a commercial building on a site where the grading plan requires filling a low area with imported fill material. The specifications require that the fill be "clean fill" free of contaminants and debris. The contractor purchases fill from a local supplier who provides a "clean fill certification." During placement, workers notice an unusual chemical odor from the fill material. Under Alabama environmental regulations, what should the contractor do?

A. The contractor should continue placing the fill because the supplier's certification guarantees it is clean

B. The contractor must stop placement of the suspect fill, segregate the material already placed, document the condition with photographs and notes, notify the owner and the environmental consultant, and arrange for laboratory testing to verify whether the fill is contaminated — the supplier's certification does not override observable field evidence of potential contamination, and placing contaminated fill creates environmental liability for the contractor and the property owner

C. Chemical odors in fill material are normal and indicate healthy mineral content from the quarry source

D. Only the project owner is responsible for verifying fill quality and the contractor has no obligation to inspect

## Practice Exam 19: Answer Key and Explanations

### DOMAIN 1: LICENSING REQUIREMENTS (Questions 1–8)

1. D — A CMAR contractor holds trade contracts and assumes construction risk, making it functionally equivalent to general contracting. The contractor must hold a general contractor's license with a monetary limitation adequate for the GMP amount. The \$4,200,000 GMP is within the contractor's \$5,000,000 limitation.

2. B — Board disciplinary actions are generally public records accessible through the Board's database. Project owners routinely check license status and disciplinary history during prequalification. A 90-day suspension will appear on the record and may affect the contractor's ability to prequalify for future work.

3. A — The qualifying party must actively supervise operations. A six-month absence requires Board notification and arrangement for a replacement qualifying party. The company should

limit new commitments until a replacement is approved, and operating without active qualifying party supervision violates licensing requirements.

**4. C** — Alabama's advertising regulations apply to all forms of advertising including social media platforms. The license number must be displayed to allow consumers and regulators to verify licensed status. Omitting the license number from any advertising medium — print, digital, or social — violates the advertising requirements.

**5. D** — Using unqualified workers to perform plumbing modifications without proper supervision constitutes deficient workmanship. The contractor is responsible for ensuring competent performance of all work under the license. This may also involve performing plumbing work outside the contractor's licensed classification if a separate plumbing license is required.

**6. A** — If the Mississippi license was independently obtained, the Alabama lapse may have no immediate effect. However, if the Mississippi license was obtained through reciprocity based on the Alabama license, the Alabama lapse may trigger a review by Mississippi's licensing authority and could potentially affect the reciprocal license's validity.

**7. C** — The Board may approve an intermediate classification rather than the full requested amount. While financial qualifications support \$1,000,000, the lack of experience at that project scale may lead the Board to grant a progressive upgrade (such as \$500,000) allowing the contractor to build experience before advancing to the higher classification.

**8. B** — Unlike criminal proceedings, administrative licensing proceedings do not typically include a right to government-funded legal representation. The contractor has the right to retain an attorney but must arrange and pay for legal counsel at their own expense. The Board is not required to provide free legal representation.

## **DOMAIN 2: ESTIMATING AND BIDDING (Questions 9–13)**

**9. A** — The undefined 40% of design must be priced using allowances, assumptions, and design development contingency. These portions carry significantly more risk than fully designed elements. All assumptions must be clearly documented so changes from the assumed scope can be identified and recovered through change orders.

**10. C** — A conflict between drawings showing moment connections and calculations showing shear connections represents a \$200,000+ cost difference with significant structural implications. A prebid RFI forces the architect to resolve the conflict before all bidders finalize their pricing, ensuring everyone prices the correct connection type.

**11. B** — MBE/WBE requirements affect bid preparation by requiring the contractor to identify, solicit, and document outreach to certified MBE/WBE firms for applicable trade packages. Evidence of goodfaith efforts must be submitted with the bid. Inadequate documentation may render the bid nonresponsive.

**12. D** — The escalated cost is  $\$500,000 \times (1.08^{1.5}) \approx \$560,000$ . The 8% annual escalation applied over 18 months (1.5 years) reflects the anticipated steel price at the time of actual procurement. Failing to account for escalation on a 30month project with volatile material prices creates significant unrecovered cost exposure.

**13. C** — The construction contingency within a GMP is typically controlled by the contractor with owner oversight. It covers unforeseen conditions, scope gaps, and estimating imprecision that are not formal owner-directed changes. Unused contingency typically reverts to the owner or is shared per the contract's savings provision.

### **DOMAIN 3: LIEN LAWS (Questions 14–15)**

**14. A** — When improvements are requested by a tenant, the lien generally attaches to the tenant's leasehold interest. Whether the lien extends to the landlord's fee interest depends on whether the landlord consented to or authorized the improvements. Without landlord consent, the lien may be limited to the tenant's interest, which typically has limited value.

**15. D** — Materials specifically fabricated for the project and delivered to the site may support a mechanics' lien even if not yet installed. Custom-fabricated items made specifically for the improvement have stronger lien claims than generic materials because they demonstrate clear intent to furnish materials for that specific project.

### **DOMAIN 4: FINANCIAL MANAGEMENT (Questions 16–20)**

**16. C** — EVM integrates cost, schedule, and scope into a single framework. Traditional tracking shows only spending versus budget, while EVM also measures work accomplished relative to spending (cost efficiency) and whether progress matches the plan (schedule efficiency). This integration enables early problem detection and accurate forecasting.

**17. A** — Aged payables create multiple risks: mechanics' lien filings against the owner's property, deteriorated subcontractor relationships, lost prompt payment discounts, damaged market reputation, and potential violations of Alabama's prompt payment provisions. Each risk compounds the financial and business impact of delayed payments.

**18. D** — The project manager must analyze the 2,400-hour overrun by trade and activity to identify specific problem areas. Determining whether causes are systemic (supervision, crew mix, rework) or activity-specific enables targeted corrections. The cost-to-complete forecast must be adjusted to reflect actual productivity trends.

**19. B** — The rising overhead rate from 22% to 35% indicates home office costs are growing disproportionately to direct labor volume. Possible causes include declining revenue, growing administrative staff, increasing fixed costs, or operational inefficiency. The contractor must grow revenue, reduce overhead, or increase markup to maintain profitability.

**20. A** — Notes receivable must be evaluated for collectibility. The contractor should assess whether the former owner has the ability and willingness to make payments over the 24-month term. If collection is uncertain, an allowance for doubtful accounts should reflect the risk, preventing the balance sheet from overstating actual recoverable assets.

### **DOMAIN 5: PAYROLL, TAXES, AND INSURANCE (Questions 21–26)**

**21. A** — Cell phones provided primarily for business reasons are excluded from taxable income as a working condition fringe benefit. The IRS simplified this rule — detailed personal-versus-business-use tracking is no longer required when the phone is provided primarily for non-compensatory business purposes.

**22. C** — An 85% loss ratio is marginally profitable or potentially unprofitable for the carrier. The carrier's expense loading (administration, claims handling, reserves) typically consumes 20-35% of premium. Combined with the 85% loss ratio, the carrier may be losing money on this account, which could affect renewal terms.

**23. D** — While COBRA does not apply to employers with fewer than 20 employees, Alabama may have statelevel "miniCOBRA" provisions requiring smaller employers to offer continuation coverage. The contractor should verify whether Alabama mandates smallemployer continuation coverage for terminated employees.

**24. B** — "Defense within limits" means legal defense costs are paid from the policy's aggregate limit rather than in addition to it. Every dollar spent on defense reduces the coverage available for the claim itself. For complex litigation with high defense costs, this can significantly erode the available coverage.

**25. A** — Offsite gym membership reimbursements are generally taxable compensation under current IRS rules. While employerprovided onpremises athletic facilities may be excluded from income, offsite gym memberships paid by the employer are taxable fringe benefits that must be included on the employee's W2.

**26. D** — Nonrenewal forces the contractor to find replacement coverage, often at higher premiums or with less favorable terms. The nonrenewal becomes part of the contractor's insurance history. The contractor may face higher deductibles, lower limits, specific exclusions, or coverage through surplus lines carriers at premium rates.

#### **DOMAIN 6: PERSONNEL AND LABOR LAW (Questions 27–31)**

**27. B** — FLSA overtime is calculated weekly. Week 1: 40 regular hours  $\times$  \$26 = \$1,040 + 5 overtime hours  $\times$  \$39 = \$195, total \$1,235. Week 2: 40 regular hours  $\times$  \$26 = \$1,040 + 10 overtime hours  $\times$  \$39 = \$390, total \$1,430. Combined period total: \$1,235 + \$1,430 = \$2,665.

**28. C** — The employer must evaluate accommodation under both workers' compensation and ADA frameworks. Under workers' compensation, modified duty or alternative positions may be offered. Under ADA, reasonable accommodations including reassignment to a vacant position must be considered. Both systems may apply simultaneously.

**29. A** — OSHA's silica standard provides a Table 1 approach specifying engineering controls for common tasks. Full implementation of Table 1 controls eliminates the need for exposure monitoring. Alternatively, the contractor may measure actual exposure and implement controls based on measured levels. Table 1 provides a simplified compliance pathway.

**30. D** — At 19, the worker is not subject to FLSA child labor restrictions (which apply to minors under 18). However, the employer must ensure the worker has received proper equipment operation training and is competent per OSHA requirements. Age alone does not determine competency — training and demonstrated skill are required regardless of age.

#### **DOMAIN 7: PROJECT MANAGEMENT (Questions 31–34)**

**31. C** — Medical surveillance for lead includes initial and periodic blood lead level testing, physical examination, medical history review, and additional testing as recommended by the

physician. Workers with BLLs at or above 50 µg/dL must be removed from lead exposure. The employer pays all medical surveillance costs.

**32. A** — The monthly schedule narrative should describe work accomplished, explain critical path changes, identify behindschedule activities, describe delay causes, present recovery plans, forecast the completion date, and highlight upcoming risks. The narrative provides context that the CPM diagram alone cannot convey.

**33. D** — LRM means deferring noncritical decisions until the latest point at which they can be made without negatively impacting the project. This maximizes information gathering before committing resources, reduces rework from premature decisions, and enables betterinformed choices. The decision must be made before it constrains downstream activities.

**34. B** — The project manager must maintain detailed RFI tracking showing submission dates, contractual deadlines, actual response dates, days late, affected work activities, and cumulative impact. This documentation supports delay claims and demonstrates that the contractor diligently pursued timely responses from the architect.

#### **DOMAIN 8: CONTRACT MANAGEMENT (Questions 35–40)**

**35. C** — The owner's knowing concealment of contamination while representing the site as "clean" constitutes fraudulent misrepresentation. The contractor relied on this false representation when pricing the project. The contractor may recover remediation costs, lost profits, and potentially punitive damages for the owner's deliberate fraud.

**36. A** — Valid backcharges require documentation: written notice to the subcontractor, a reasonable cure opportunity, actual costs incurred by the GC, and the contractual basis for the obligation. Backcharges without proper notice and cost documentation are difficult to enforce and may be successfully challenged by the subcontractor.

**37. D** — The owner may assign the right to receive benefits (the completed building) but generally may not delegate obligations (payment duty) without the contractor's consent. The contractor bargained based on the original owner's creditworthiness. Delegating the payment obligation to an unknown party changes the fundamental economics of the contract.

**38. B** — The sevenyear period ensures records are available throughout the statute of limitations for written contracts (six years in Alabama) plus a margin. Records support tax audits (IRS requires four years), warranty claims, latent defect litigation, and insurance claims that may surface years after completion.

**39. A** — The contractor may recover for extra work directed by an authorized representative even without a formal change order, if the representative had actual or apparent authority, the work was outside the original scope, and the owner received the benefit. However, proceeding without written authorization creates significant documentation and proof challenges.

**40. C** — The contractor may request that the architect independently evaluate substantial completion criteria. If the architect determines the project qualifies, the certificate may be issued. If the dispute persists, the contractor pursues resolution through the contract's dispute process while continuing to address legitimate deficiencies.

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**48. C** — PCBcontaining caulk must be carefully removed to minimize contamination spread, workers must be protected, removed material must be characterized for PCB concentration, and disposal must comply with TSCA regulations. Building surfaces that contacted the PCB caulk may also require remediation depending on contamination levels.

**49. D** — An effective heat illness prevention program includes adequate water (one quart per worker per hour), shade or cool rest areas, work/rest schedules based on heat index, gradual acclimatization for new workers, training on symptom recognition, and emergency response procedures. Alabama's hot, humid climate makes heat illness prevention essential.

**50. B** — Observable field evidence of contamination (chemical odor) overrides the supplier's certification. The contractor must stop placement, segregate suspect material, document conditions, notify the owner and environmental consultant, and arrange for laboratory testing. Placing contaminated fill creates environmental liability for both the contractor and property owner.