

# PRACTICE EXAM 18: 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 is hired to manage a phased commercial development consisting of three buildings. Phase 1 (\$400,000) is contracted first, Phase 2 (\$350,000) three months later, and Phase 3 (\$450,000) six months after that. Each phase has a separate contract. The contractor's license has a \$500,000 monetary limitation. Midway through the project, the owner proposes combining all three phases into a single \$1,200,000 contract for administrative convenience. Under Alabama licensing law, what problem does the consolidation create?

A. Combining the three separate contracts into a single \$1,200,000 contract would exceed the contractor's \$500,000 monetary limitation — while each original contract was individually within the limit, the consolidated contract requires a license upgrade to at least \$1,200,000 before the consolidation can proceed

B. Contract consolidation is always prohibited under Alabama licensing law regardless of the dollar amounts

C. The consolidation has no licensing impact because the original contracts were all below the monetary limit

D. Consolidated contracts are exempt from monetary limitations under Alabama's administrative convenience rule

2. Under Alabama law, a contractor who performs emergency repairs after a natural disaster (tornado, hurricane, flooding) may encounter situations where normal licensing verification is impractical due to infrastructure damage. The Governor declares a state of emergency. Under

Alabama's emergency management framework, how might the state of emergency affect licensing enforcement?

- A. All licensing requirements are permanently eliminated for any work performed during a declared emergency
- B. Only outofstate contractors are exempt from licensing during emergencies with Alabama contractors still regulated
- C. During a declared state of emergency, the Governor or relevant authorities may temporarily modify licensing requirements to facilitate rapid disaster response — this may include expedited licensing processes, temporary permits for outofstate contractors, or deferred enforcement; however, the modifications are temporary and normal licensing requirements resume after the emergency period
- D. States of emergency have no effect on any licensing requirement and all rules remain fully enforced

3. A licensed contractor in Alabama discovers that a competitor is advertising construction services and bidding on projects using a license number that belongs to a different company. The competitor's own license was revoked six months ago. Under Alabama licensing law, what offense has the competitor committed?

- A. Using another company's license number is a minor administrative error with no legal consequences at all
- B. The competitor has committed only a copyright violation for using another company's license number
- C. Only the company whose license number is being misused may file a complaint with the Board
- D. The competitor has committed multiple offenses: performing or soliciting construction work with a revoked license, fraudulently using another entity's license number, and potentially committing identity fraud — these violations may result in criminal prosecution, civil liability, and permanent disqualification from future licensure

4. Under Alabama licensing regulations, a contractor's license renewal requires the submission of updated financial information. If the contractor's financial condition has deteriorated significantly since the last renewal — net worth has dropped below the minimum requirement — what action may the Board take?

A. The Board must renew the license regardless of the financial deterioration because the license was valid previously

B. The Board may deny renewal or reduce the contractor's monetary limitation to a level commensurate with the current financial condition — the financial requirements are ongoing obligations, not onetime qualifications, and the contractor must maintain adequate financial capacity throughout the license period

C. Financial deterioration has no effect on license renewal because financial statements are reviewed only once

D. The Board may only request a new financial statement but has no authority to change the license classification

5. A contractor holds an Alabama general contractor's license and also operates a real estate development company. The contractor purchases land, obtains permits, and constructs commercial buildings for sale as a developerbuilder. Under Alabama licensing law, does the contractor need any additional license or registration to act as a developerbuilder?

A. The contractor should verify whether Alabama requires separate developer registration or compliance with real estate development regulations in addition to the contractor's license — while the contractor's license authorizes the construction work, the development activities (land purchase, marketing, sales) may trigger additional regulatory requirements under Alabama's real estate or development laws

B. The contractor's license covers all development activities including real estate sales without exception

C. Developerbuilders are completely exempt from all state and local licensing requirements in Alabama

D. Only contractors with unlimited license classifications may engage in any development activities

6. Under Alabama law, the Licensing Board has the authority to require a contractor to post a "surety bond" as a condition of licensing or as a disciplinary sanction. If the Board requires a surety bond as a condition of a probationary license, what is the purpose of this bond?

A. The bond replaces the contractor's workers' compensation insurance during the probation period

B. The bond provides funding for the Board's annual conference and educational programs

C. The bond serves only as a financial guarantee that the contractor will attend all Board hearings

D. The surety bond provides financial protection for consumers who may be harmed by the contractor's deficient performance during the probation period — if the contractor fails to complete contracted work or causes financial harm, affected consumers may make claims against the bond to recover their losses

7. A contractor's license application is denied by the Alabama Licensing Board. The contractor believes the denial was arbitrary and not supported by the evidence. Under Alabama's Administrative Procedure Act, what is the contractor's first step in challenging the denial through the administrative review process?

A. The contractor must file a lawsuit directly in Alabama Circuit Court as the mandatory first step

B. The contractor must request a formal administrative hearing before the Board or an administrative law judge, where the contractor may present evidence, call witnesses, and challenge the Board's reasoning — this administrative hearing must be exhausted before the contractor may seek judicial review in court

C. The contractor must appeal directly to the Alabama Supreme Court with no intermediate steps required

D. The contractor must wait two years and reapply with no right to challenge the original denial decision

8. Under Alabama licensing law, a contractor who obtains a license through the reciprocity agreement with Mississippi is subject to the same ongoing obligations as a contractor who obtained the license through the standard application process. If the contractor's Mississippi license is suspended, what effect might this have on the Alabama reciprocal license?

A. The Mississippi suspension has no effect because the Alabama license is completely independent once issued

B. The Alabama license is automatically upgraded when the Mississippi license is suspended for any reason

C. The Alabama Board may review the contractor's Alabama license status based on the Mississippi suspension — since the Alabama license was obtained through reciprocity based on the Mississippi license, the suspension of the underlying credential may trigger a Board review and potential disciplinary action on the Alabama license

D. Only criminal convictions in Mississippi affect the Alabama license and administrative suspensions do not

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

9. A contractor is preparing a bid for a commercial project that requires "commissioning" of all building systems. The specifications require an independent thirdparty commissioning agent engaged by the owner, but the contractor must coordinate with the commissioning agent and provide labor and equipment for functional performance testing. Under standard estimating practice, what commissioningrelated costs should the contractor include in the bid?

- A. The contractor should include only the cost of attending the commissioning kickoff meeting at the start
- B. The commissioning agent's fee should be included in the contractor's bid as a direct construction cost item
- C. No commissioning costs should be included because all testing is performed by the owner's agent at no cost
- D. The contractor should include costs for coordinating with the commissioning agent, providing labor to assist with functional performance testing, scheduling testing activities into the construction schedule, providing temporary instrumentation for testing, and potentially rescheduling other work around testing windows — the contractor's commissioning support is a real cost

10. A contractor's estimator is calculating the cost of "dewatering" for a commercial building foundation that will be constructed below the water table. The geotechnical report shows the water table at 4 feet below existing grade, and the foundation excavation extends to 10 feet below grade. Under standard estimating practice, what dewatering costs should the estimator include?

- A. No dewatering costs are needed because the water table always drops during construction automatically
- B. The estimator should include costs for well points or sump pumps, pump operation (fuel or electricity), discharge piping, sediment control for the discharge water, NPDES permit compliance, monitoring of adjacent structures for settlement, and the duration of dewatering operations (which may extend from excavation through foundation completion)
- C. Only the cost of a single sump pump needs to be included regardless of water table depth or flow rate
- D. Dewatering costs are always paid directly by the project owner and excluded from the contractor's bid

11. A contractor submits a bid on a public project in Alabama. The instructions to bidders require that the bid be submitted in a "sealed envelope clearly marked with the project name, bid date, and the contractor's name." The contractor submits the bid in a sealed envelope but fails to include the contractor's name on the outside. Under Alabama's competitive bidding procedures, what may happen?

A. The omission has no consequence and all sealed bids are opened regardless of envelope markings

B. The bid may be rejected as nonconforming because the instructions to bidders specified required envelope markings — while some jurisdictions treat envelope marking deficiencies as minor informalities that may be waived, others strictly enforce the instructions; the contractor risks rejection for failing to comply with a clearly stated submission requirement

C. Only the project name must appear on the envelope and the contractor's name is always optional

D. The bid is automatically awarded the contract because unmarked envelopes receive priority in Alabama

12. A contractor is preparing a bid for a commercial renovation project where the specifications require "phased construction" — the contractor must complete each floor of a five-story building while the remaining floors remain occupied. Each floor phase is 6 weeks. Under standard estimating practice, what additional costs does phased construction add compared to constructing the entire building at once?

A. Phased construction always reduces total cost because the contractor works on smaller areas at a time

B. Phased construction adds costs for repeated mobilization and demobilization of trades for each phase, extended total project duration (30 weeks versus the 1215 weeks needed if all floors were vacant), temporary barriers and protection between construction and occupied areas, noise and dust control, afterhours work premium if noisy operations must occur outside business hours, and reduced productivity from working in confined areas adjacent to occupied spaces

C. Phased construction adds only a 1% premium to the base cost regardless of the number of phases

D. The only additional cost is a single set of temporary barriers used for all five phases simultaneously

13. A contractor's estimator receives a "solesource" specification for a customengineered curtain wall system from a single manufacturer. Only one manufacturer can provide the specified system. Under standard estimating practice, what risk does a solesource specification create for the contractor's bid?

A. Solesource specifications reduce costs because the contractor only needs to obtain one quote from one supplier

B. Solesource specifications create no risk because the manufacturer always provides competitive pricing

C. Solesource specifications are prohibited on all construction projects under Alabama competitive bidding law

D. Solesource specifications eliminate competitive pricing leverage — the manufacturer faces no competition and may price the product at a premium; the contractor cannot shop for alternatives, and if the manufacturer's lead time is long, there are no backup suppliers to accelerate delivery

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

14. Under Alabama's mechanics' lien law, a contractor files a mechanics' lien and then enters into a written settlement agreement with the property owner. The settlement agreement specifies that the contractor will release the lien upon receiving a \$60,000 payment within 30 days. The owner makes the payment on day 35 — five days late. Under Alabama contract law, must the contractor release the lien?

A. The fiveday delay automatically voids the entire settlement agreement and the full lien is reinstated

B. The contractor may retain the lien permanently because the owner missed the exact payment deadline

C. The contractor must release the lien because the fiveday delay is a minor, immaterial breach — the owner substantially performed the settlement agreement by making the full payment only slightly late; unless the settlement specified that "time is of the essence" for the payment deadline, the minor delay likely does not justify refusing to release the lien

D. The settlement agreement is void because it was not notarized by a licensed Alabama notary public

15. A property owner in Alabama hires a general contractor to build a \$500,000 commercial building. The GC hires a plumbing subcontractor who completes \$60,000 of work but is not paid. The plumbing subcontractor files a mechanics' lien for \$60,000. Meanwhile, the property owner has paid the GC \$450,000 of the \$500,000 contract price. Under Alabama's mechanics' lien law, what is the maximum amount the property owner may owe on the plumber's lien?

- A. The owner owes the full \$60,000 regardless of how much has been paid to the GC on the prime contract
- B. The owner has no liability because all payments were made to the GC in accordance with the prime contract
- C. The owner's liability is always limited to exactly 10% of the original contract price under Alabama lien law
- D. The owner's liability on the subcontractor's lien is generally limited to the amount remaining unpaid under the prime contract (\$50,000 in this case) — the owner cannot be forced to pay more than the owner owes under the prime contract, though the specific liability depends on whether the subcontractor properly preserved lien rights through preliminary notice

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

16. A contractor's financial advisor explains the concept of "cost of capital" — the return the company must earn on its invested capital to satisfy its investors and lenders. The company's weighted average cost of capital (WACC) is 12%. Under financial management principles, how does the WACC affect project selection decisions?

- A. The contractor should accept only projects with an expected return on investment that exceeds the 12% WACC — projects that earn less than the cost of capital destroy value because the company earns less than what its capital providers require; WACC serves as the minimum acceptable return threshold for project evaluation
- B. WACC has no relevance to project selection and is used only for determining employee salaries
- C. Projects should be accepted regardless of the expected return as long as they generate any revenue
- D. WACC applies only to publicly traded construction companies and has no application to private contractors

17. A contractor reviews the company's "asset utilization" metrics and discovers that the equipment fleet utilization rate is only 55% — meaning the company's equipment is productive only 55% of the available time. The remaining 45% represents idle equipment that is not generating revenue. Under financial management principles, what financial impact does low equipment utilization create?

A. Low equipment utilization improves profitability because idle equipment requires no fuel or maintenance

B. Low utilization has no financial impact because owned equipment costs the same whether used or idle

C. Low equipment utilization is always preferable because it extends the useful life of all equipment

D. Low equipment utilization means the company is carrying the fixed costs of ownership (depreciation, insurance, storage, financing) on equipment that is generating revenue only 55% of the time — the idle 45% represents unrecovered capital investment; the contractor should evaluate whether to sell underutilized equipment, increase utilization through better scheduling, or switch to rental for intermittently needed equipment

18. A contractor's accountant prepares a "commonsize income statement" that expresses each line item as a percentage of total revenue. Under financial analysis principles, what insight does a commonsize income statement provide?

A. A commonsize statement provides only the total dollar amount of revenue with no other useful information

B. The commonsize format reveals the proportional relationship between each cost category and revenue — for example, if direct labor is 35% of revenue and increasing over time while the industry average is 28%, it identifies labor cost as a specific area requiring management attention; the percentage format enables meaningful comparisons between periods and against industry benchmarks regardless of company size

C. Commonsize statements are identical to standard income statements with no additional analytical value

D. The commonsize format applies only to companies with revenue exceeding \$100,000,000 annually

19. A contractor's job cost report shows that a project has a "billing adjustment" of negative \$30,000. The project manager learns that the architect reduced the certified amount on the last

pay application by \$30,000 because the architect determined that the contractor had overbilled for concrete work. Under standard construction accounting, how should the contractor handle this billing adjustment?

- A. The contractor should ignore the adjustment because the architect has no authority to reduce pay applications
- B. The contractor should dispute the adjustment with the owner through formal correspondence
- C. The contractor should adjust the project's billing records to reflect the \$30,000 reduction, investigate whether the overbilling was an error or a legitimate disagreement about the percentage complete, and if the contractor believes the architect's assessment is incorrect, submit supporting documentation in the next pay application with a detailed explanation of the work completed
- D. Billing adjustments are always final and the contractor must accept them without any right to challenge

20. A contractor's financial statement shows "longterm debt" of \$800,000 consisting of equipment loans (\$500,000) and a commercial mortgage on the office building (\$300,000). The contractor's annual net income is \$200,000. Under financial management principles, what is the "debt payoff ratio" and what does it indicate?

- A. The debt payoff ratio is 4.0 years ( $\$800,000 \div \$200,000$ ), indicating that at the current income level, it would take four years to pay off all longterm debt if the entire net income were applied to debt reduction — this ratio helps evaluate whether the company's debt level is manageable relative to its earnings capacity
- B. The debt payoff ratio is 0.25 indicating the company can pay off all debt in one quarter
- C. The debt payoff ratio measures only the mortgage balance and excludes all equipment loan obligations
- D. The debt payoff ratio cannot be calculated without knowing the company's total annual revenue amount

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

21. Under federal tax law, a contractor who hires seasonal construction workers for a specific project must determine the proper tax treatment of "signing bonuses" paid to attract skilled

tradespeople during a labor shortage. The contractor pays a \$2,000 signing bonus to each of 10 carpenters. Under IRS rules, how must the signing bonuses be treated?

- A. Signing bonuses are classified as nontaxable gifts and are exempt from all payroll tax withholding
- B. Signing bonuses are deductible by the employer but not reportable as income to the employee
- C. Signing bonuses are taxable wages subject to all applicable payroll tax withholding (federal income tax, Social Security, Medicare, and state income tax) — the bonus is included in the employee's W2 as compensation; the employer also owes the employer's share of FICA on the bonus amount
- D. Signing bonuses are taxable only if they exceed \$5,000 per employee during the calendar year

22. A contractor's workers' compensation insurance carrier offers a "dividend program" that returns a percentage of the premium to the contractor if the loss ratio (claims paid divided by premium earned) is below a specified threshold during the policy year. Under standard workers' compensation insurance practice, what is a typical dividend program structure?

- A. All workers' compensation carriers must pay dividends regardless of loss ratio or claims experience
- B. Dividends are paid only to contractors with annual premiums exceeding \$1,000,000 per policy year
- C. Dividend programs eliminate the need for all safety programs because the financial incentive alone reduces claims
- D. Only the insurance carrier may unilaterally decide whether to offer dividends with no policyholder input

23. Under Alabama law, an employer who classifies a worker as an "independent contractor" must ensure the classification is correct. The Alabama Department of Labor audits the contractor and reclassifies three workers from independent contractors to employees. Under Alabama's unemployment insurance (SUTA) system, what financial consequence does this reclassification create?

- A. No financial consequence results from worker reclassification under Alabama's unemployment system
- B. The reclassification is advisory only and has no effect on the contractor's SUTA tax obligations at all
- C. Reclassification applies only to federal taxes and has no impact on Alabama state unemployment taxes
- D. The contractor owes back SUTA taxes on the reclassified workers' wages for the entire period of misclassification, plus penalties and interest for late payment — the reclassified workers are now eligible for unemployment benefits that may increase the contractor's experience rating and future SUTA tax rate

24. A contractor's CGL insurance policy contains an "occurrence" coverage trigger. A construction defect (leaking roof) is caused by work performed in 2023 but is not discovered until 2025. Under occurrencebased CGL coverage, which policy year responds to this claim?

- A. The 2025 policy responds because the claim was filed during the 2025 policy period when discovered
- B. The 2023 policy responds because the "occurrence" (the defective roofing installation) took place in 2023 — under occurrencebased coverage, the policy that was in effect when the negligent work was performed covers the resulting claim, regardless of when the defect is discovered or the claim is filed
- C. Neither policy responds because there is a twoyear gap between the occurrence and the discovery
- D. Both the 2023 and 2025 policies respond equally with coverage split 50/50 between the two policy years

25. Under federal tax law, a contractor must properly account for "retainage payable" — amounts withheld from subcontractor payments. Under the accrual method of accounting, when does the contractor recognize the expense for retainage payable to subcontractors?

- A. Retainage payable is recognized as an expense when the subcontractor's work is performed and the liability is established — even though the cash is not paid until substantial completion, the obligation to pay the retainage exists as soon as the work is done and the retainage is withheld

- B. Retainage payable is never recorded as an expense and is permanently excluded from all financial statements
- C. Retainage payable is recognized as revenue rather than expense on the contractor's financial statements
- D. Retainage payable is recognized only after the warranty period expires and the owner releases the retainage

26. A contractor's insurance broker recommends an "equipment breakdown" (boiler and machinery) insurance policy for the company's permanent office and shop building. Under standard insurance practice, what does equipment breakdown insurance cover that the standard commercial property policy does not?

- A. Equipment breakdown covers only loss of inventory stored in the contractor's warehouse facility
- B. Equipment breakdown covers only fire damage to the building's structural frame and exterior walls
- C. Equipment breakdown insurance covers mechanical, electrical, and pressure equipment failures from internal causes (such as motor burnout, electrical arcing, compressor failure, boiler explosion) — the standard property policy excludes these internal equipment failures, covering only external perils like fire and windstorm
- D. Equipment breakdown coverage is identical to standard property insurance with no additional coverage

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

27. Under the Fair Labor Standards Act, a nonexempt construction worker is required to attend a mandatory safety training class on Saturday morning. The training lasts 4 hours (8 AM to noon). The worker already worked 40 hours during the regular MondaythroughFriday workweek. Under FLSA, how must the employer compensate the worker for the Saturday training?

- A. Saturday training is always unpaid because it occurs outside the regular workweek schedule
- B. The 4 hours of mandatory training on Saturday are compensable work time and must be paid at the overtime rate (1.5× the regular rate) because the worker has already worked 40 hours during the workweek — mandatory training that is required by the employer is compensable work time under FLSA

C. Only the first 2 hours of Saturday training are compensable with the remaining 2 hours unpaid

D. Saturday training is compensable only if the worker volunteers to attend rather than being required

28. A contractor employs a worker who requests a "reasonable accommodation" under the ADA for a medical condition that limits the worker's ability to climb ladders. The worker's current position as a framing carpenter requires daily ladder use. Under ADA requirements, what must the employer evaluate?

A. The employer must terminate the worker immediately because ladder climbing is essential to carpentry

B. The employer must assign the worker to operate heavy equipment regardless of the worker's qualifications

C. The employer is required to accommodate all requests regardless of cost or impact on business operations

D. The employer must determine whether ladder climbing is an "essential function" of the framing carpenter position — if it is, the employer must evaluate whether a reasonable accommodation exists (such as using lifts instead of ladders, reassignment to a groundlevel carpentry position, or modification of the work process) that would enable the worker to perform the job without imposing undue hardship

29. Under OSHA's construction safety standards, employers must provide "potable water" for drinking at the construction site. Under OSHA's sanitation requirements, what specific standards must the drinking water supply meet?

A. Potable drinking water must be provided in sanitary containers that are clearly marked, equipped with a tap or fountain that prevents contamination, kept at a reasonable temperature, and located within a reasonable distance of the work areas — common (shared) drinking cups are prohibited; individual disposable cups must be provided along with a receptacle for used cups

B. Workers may drink from any available water source on the construction site without restrictions

C. Only bottled water from a retail store satisfies OSHA's potable water requirement on construction sites

D. OSHA has no requirements for drinking water on construction sites under any regulation or standard

30. A contractor's HR manager discovers that the company has been requiring all job applicants to submit to a medical examination before a conditional job offer has been made. Under the Americans with Disabilities Act, what violation has occurred?

A. Preoffer medical examinations are always permitted for construction jobs regardless of ADA requirements

B. Preoffer medical examinations are permitted only for applicants over the age of 50 under ADA rules

C. The ADA prohibits medical examinations before a conditional job offer is made — employers may conduct medical examinations only after extending a conditional offer of employment, and the examination must be required of all entering employees in the same job category; preoffer medical inquiries violate the ADA's protections against disabilitybased discrimination in hiring

D. Only drug testing is prohibited before a conditional offer and all other medical examinations are permitted

31. Under Alabama's workers' compensation law, an injured worker who disputes the employer's decision to deny a workers' compensation claim has the right to pursue the claim through a specific legal process. Under Alabama law, where does a disputed workers' compensation claim get adjudicated?

A. Disputed workers' compensation claims in Alabama are adjudicated through the Alabama workers' compensation court system — the worker files a complaint, and the case is heard by a workers' compensation judge who evaluates the medical evidence, determines compensability, and issues a ruling that may be appealed through the court system

B. All disputed claims are automatically resolved in favor of the employer without any adjudication

C. Only the Alabama Department of Labor may resolve disputed workers' compensation claims

D. Disputed claims must be resolved through binding arbitration with no court involvement permitted

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

32. A contractor is managing a commercial project and the mechanical subcontractor submits a "time impact analysis" (TIA) demonstrating that a 15day delay to the HVAC equipment delivery (caused by the owner's late equipment selection) delayed the project's critical path by 12 days. Under standard schedule analysis practice, why might the delay impact (12 days) be less than the actual delivery delay (15 days)?

- A. Time impact analyses always reduce the delay impact by exactly 3 days as a standard adjustment factor
- B. The delay to subsequent activities may be less than the full 15 days because the contractor mitigated the impact
- C. The 12day critical path impact is less than the 15day delivery delay because the HVAC equipment delivery had 3 days of total float before the delay occurred — the first 3 days of the 15day delay consumed the available float without affecting the critical path, and only the remaining 12 days extended the project completion date
- D. Time impact analyses always exaggerate the delay and the actual impact is always zero on every project

33. A contractor is implementing a "change management" system for a commercial project. The system tracks all changes from initial identification through pricing, approval, and implementation. Under standard project management practice, why is a formal change management system essential?

- A. Change management systems serve only as billing tools for generating additional invoices to the owner
- B. Change management systems are required only on government contracts and have no private sector use
- C. Change management is unnecessary because all changes are automatically included in the original contract
- D. A formal change management system ensures that every change is identified, documented, priced, and approved before work proceeds — without a system, unauthorized changes accumulate, costs go unrecovered, schedule impacts are not tracked, and disputes arise over what was and was not included in the original scope

34. A contractor's project manager is evaluating the "productivity factor" for concrete formwork installation on a commercial project. The estimated productivity was 250 square feet per crewday, but actual production is averaging only 180 square feet per crewday — a 28% productivity loss. Under standard project management practice, what steps should the project manager take to investigate and address this productivity shortfall?

A. The 28% productivity loss is within normal tolerance and requires no investigation or corrective action

B. The project manager should investigate the root causes (crew composition, material availability, work area congestion, weather, rework requirements, design complexity, supervision quality), implement targeted corrective measures for identified causes, adjust the cost-to-complete forecast to reflect actual productivity, and document the investigation for potential change order claims if the loss is caused by owner-directed changes

C. The project manager should terminate the entire formwork crew and hire a replacement immediately

D. Productivity shortfalls can only be addressed by reducing the quality standards for the formwork installation

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

35. Under Alabama contract law, a contractor receives a "notice of intent to terminate for default" from the project owner. The notice gives the contractor 14 days to cure the alleged default (failure to maintain adequate progress). The contractor believes the slow progress is caused by the owner's failure to provide timely design clarifications. Under standard contract provisions, what should the contractor do during the 14-day cure period?

A. The contractor should immediately accelerate work to demonstrate progress while simultaneously submitting a written response documenting the owner's role in causing the delay — the response should identify specific design clarification delays, their impact on the schedule, and request that the termination notice be withdrawn; the contractor should cure what can be cured while preserving the right to claim that the delay was excusable

B. The contractor should stop all work and wait for the 14-day period to expire before taking any action

C. The contractor should file for bankruptcy to protect against the termination's financial consequences

D. The contractor should immediately begin removing all equipment from the site during the cure period

36. A contractor signs a construction contract that includes a "claims notice" provision requiring the contractor to submit written notice of any claim within 21 days of the event giving rise to the claim. The contractor experiences a differing site conditions event on March 1 but does not submit the required notice until April 15 — 45 days later. Under standard contract provisions, what risk does the late notice create?

A. The 21day notice requirement is merely a suggestion with no enforcement consequence for late filing

B. The late notice has no effect because Alabama law prohibits all claims notice deadlines in construction

C. The contractor receives an automatic 30day extension to all notice deadlines under standard provisions

D. The contractor's claim may be waived or barred due to the late notice — many contracts strictly enforce claims notice provisions, and failure to provide notice within the specified timeframe may constitute a waiver of the claim regardless of its merit; even if the claim is valid, the contractor may lose the right to recover

37. Under Alabama contract law, a contractor enters into a "designassist" contract where the contractor provides design input during the design phase to improve constructability, reduce costs, and optimize the construction schedule. Under this arrangement, who retains ultimate design responsibility?

A. The contractor assumes full design responsibility by providing designassist services on the project

B. The designassist role is identical to a full designbuild contract with no distinction in responsibility

C. The architect (or engineer of record) retains ultimate design responsibility — the contractor's designassist role provides constructability input and value engineering suggestions, but the design professional makes the final design decisions and stamps the construction documents; the contractor does not assume design liability for providing advisory input

D. Neither the architect nor the contractor has design responsibility in a designassist arrangement

38. A contractor completes a project and the owner requests a "certificate of occupancy" inspection from the building official. The building official discovers that the fire alarm system has not been tested and certified. Under standard contract provisions, who is responsible for

scheduling and completing the fire alarm testing before the certificate of occupancy can be issued?

A. The contractor is responsible for ensuring all building systems are tested, inspected, and certified as required by the building code before the certificate of occupancy inspection — the fire alarm testing must be completed by the fire alarm subcontractor and certified by the appropriate authority before the building official will issue the CO

B. The building official is responsible for testing all building systems including the fire alarm during inspection

C. The property owner must hire a separate testing company after the contractor completes all other work

D. Fire alarm testing is optional and the certificate of occupancy may be issued without it on any project

39. Under Alabama contract law, a contractor who discovers that the owner has breached the contract (such as consistently failing to make timely progress payments) may have the right to suspend work. Under standard contract provisions (AIA A201), what conditions must exist before the contractor may suspend work for nonpayment?

A. The contractor may suspend work immediately upon missing a single payment by even one day

B. The contractor must provide written notice to the owner and architect of the payment deficiency and must allow a specified cure period (typically 7 days under AIA A201) before suspending work — the notice must identify the unpaid amounts and the contractor's intent to suspend if payment is not received; suspension without proper notice may constitute a breach by the contractor

C. The contractor may never suspend work for nonpayment and must continue until the project is complete

D. Only the architect may authorize the contractor to suspend work for the owner's nonpayment

40. A contractor is reviewing a proposed contract that includes a "dispute review advisor" (DRA) — a single neutral expert who serves throughout the project to provide informal dispute resolution recommendations. Under standard construction practice, how does a DRA differ from a full dispute review board (DRB)?

- A. A DRA and a DRB are identical in structure, cost, and function with no differences between them
- B. A DRB always consists of exactly five members while a DRA always consists of three members
- C. DRAs are required by Alabama law on all commercial projects while DRBs are optional and voluntary
- D. A DRA is a single neutral expert (rather than a threemember board) who provides quicker, less formal, and less expensive dispute resolution recommendations — the DRA is better suited for smaller projects where the cost of a full threemember DRB is disproportionate to the project value

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

41. A contractor operates as a CCorporation and wants to distribute \$100,000 of corporate profits to the sole shareholder. The corporation has already paid corporate income tax on this \$100,000 at the 21% federal rate (\$21,000). When the remaining \$79,000 is distributed as a dividend, the shareholder must pay personal income tax on the dividend. Under current federal tax law, what is the approximate total tax burden on this \$100,000 of corporate profit?

- A. The \$100,000 faces only the 21% corporate tax (\$21,000) with no additional personal tax on the dividend
- B. The total tax burden is approximately 100% because corporations pay 100% of their profits in federal taxes
- C. The \$79,000 dividend is taxfree because the corporation already paid income tax on the entire amount
- D. The total combined tax burden is approximately 3640% — the corporation pays 21% (\$21,000), and the shareholder pays qualified dividend tax of approximately 1520% on the \$79,000 distribution (\$11,850\$15,800), for a combined federal tax of approximately \$32,850\$36,800 on the original \$100,000 of profit

42. A contractor is considering forming a "professional corporation" (PC) instead of a standard business corporation for a designbuild construction company. Under Alabama law, what distinction exists between a professional corporation and a standard business corporation?

A. Professional corporations and standard business corporations are identical with no legal distinction

B. A professional corporation is organized to provide licensed professional services (such as architecture, engineering, or accounting) — if the designbuild contractor provides licensed architectural or engineering services, a professional corporation may be required for the design services component; the key distinction is that shareholders must hold the relevant professional licenses

C. Professional corporations are prohibited in Alabama and only standard corporations may be formed

D. Only companies with annual revenue exceeding \$25,000,000 may form as professional corporations

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

43. A contractor is constructing a commercial building and the project involves "hot work" (welding, cutting, brazing) in an area adjacent to installed spray polyurethane foam (SPF) insulation. Under OSHA's fire protection standards and standard risk management practice, what specific precaution must the contractor take?

A. Hot work near SPF insulation requires enhanced fire precautions because SPF is a combustible material — the contractor must clear all combustible materials (including exposed SPF) from the hot work area or protect them with fire-rated barriers, establish a dedicated fire watch during and for 30 minutes after hot work, have fire extinguishing equipment immediately available, and verify that the hot work area is free of flammable vapors

B. Hot work may be performed directly adjacent to SPF insulation with no fire precautions of any type

C. Only the SPF insulation installer may perform hot work near installed insulation under any OSHA standard

D. Hot work is prohibited on all commercial construction projects within 1,000 feet of any insulation material

44. Under Alabama law, a contractor who operates a construction crane within the flight path of a nearby airport must comply with FAA regulations regarding temporary structures that could affect air navigation. Under FAA requirements, what notification must the contractor provide?

- A. No notification is required because construction cranes are too small to affect aircraft navigation safety
- B. Only the airport control tower must be notified verbally before each crane lift during the construction period
- C. The contractor must file FAA Form 74601 (Notice of Proposed Construction or Alteration) with the FAA if the crane exceeds certain height thresholds relative to the airport — the FAA evaluates whether the crane poses a hazard to air navigation and may impose conditions such as marking, lighting, or operational restrictions
- D. FAA notifications apply only to permanent structures and never to temporary construction equipment

45. A contractor's risk management plan identifies "errors and omissions in the bid documents" as a significant risk. The contractor discovers numerous conflicts between the architectural and structural drawings after award. Under standard risk management practice, what proactive step should the contractor take during the preconstruction phase to manage this risk?

- A. The contractor should begin construction immediately and address conflicts only as they are encountered
- B. Drawing conflicts always resolve themselves during construction and require no proactive management
- C. Only the architect is responsible for document quality and the contractor has no preconstruction obligations
- D. The contractor should conduct a thorough preconstruction document review (including BIM clash detection if available), identify all conflicts and ambiguities, submit RFIs for resolution before affected work begins, and document the time and cost impact of resolving document errors — proactive identification prevents costly fieldlevel surprises

46. A contractor is evaluating the company's "insurance program efficiency" by comparing the total insurance cost to the total claims recovered over the past five years. The company paid \$1,600,000 in total premiums and received \$400,000 in total claim recoveries. Under standard risk management analysis, what does this 25% recovery ratio indicate?

- A. A 25% recovery ratio is excellent and indicates the company's insurance program is perfectly optimized

B. The 25% recovery ratio means the company spent \$4 in premiums for every \$1 recovered in claims — while a low recovery ratio is preferable to a high one (high claims indicate safety problems), the contractor should evaluate whether the insurance limits, deductibles, and coverages are optimally structured; some premium costs (like liability insurance) protect against catastrophic losses that may never occur

C. The recovery ratio has no analytical value for evaluating the insurance program's costeffectiveness

D. A 25% ratio always indicates the company should cancel all insurance policies to save on premium costs

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

47. Under OSHA's construction safety standards, a contractor must implement a "lead exposure control plan" when workers are exposed to lead during construction activities such as demolition of leadpainted structures, cutting or welding leadpainted steel, or abrasive blasting of leadcoated surfaces. Under OSHA's lead standard for construction (29 CFR 1926.62), what is the action level that triggers specific employer obligations?

A. The action level for lead exposure in construction is 30 micrograms per cubic meter ( $30 \mu\text{g}/\text{m}^3$ ) as an 8hour timeweighted average — when employee exposure reaches or exceeds this level, the employer must implement exposure monitoring, medical surveillance, and other protective measures even though the level is below the permissible exposure limit (PEL) of  $50 \mu\text{g}/\text{m}^3$

B. There is no action level for lead in construction and the employer has no obligations until the PEL is exceeded

C. The action level is  $500 \mu\text{g}/\text{m}^3$  which is reached only during extreme demolition activities

D. Lead exposure monitoring is optional and employers may choose whether to test for lead on any project

48. A contractor is performing renovation work in a building constructed in 1955 and discovers that the existing window glazing putty contains asbestos. Under OSHA's asbestos construction standard, what classification of asbestos work applies to the removal of asbestoscontaining window glazing compound?

A. Window glazing putty is never regulated as asbestoscontaining material regardless of its actual composition

B. Removal of asbestos window glazing is classified as Class IV work (maintenance and custodial activities)

C. Removal of asbestoscontaining window glazing is typically classified as Class III asbestos work (repair and maintenance operations involving small amounts of ACM) — Class III requires specific controls including wet methods, local exhaust ventilation, HEPA vacuuming, and worker training, but does not require the full negativepressure enclosure of Class I work

D. All windowrelated asbestos work is classified as Class I regardless of the material type or quantity

49. Under EPA's stormwater management regulations, a contractor's SWPPP must include a "stabilization plan" for exposed soil areas that will remain disturbed during construction. Under current NPDES CGP requirements, within what timeframe must the contractor initiate stabilization measures on disturbed areas where construction activity has temporarily or permanently ceased?

A. Stabilization must be initiated within 30 calendar days of the last disturbance activity on the area

B. Stabilization is required only after the entire project is complete with no interim requirements for any area

C. No stabilization timeframe exists under the NPDES CGP and the contractor may leave soil exposed indefinitely

D. Stabilization measures must generally be initiated within 14 calendar days of the last construction activity on the disturbed area — stabilization includes seeding, mulching, erosion control blankets, or other methods that prevent soil erosion from exposed surfaces; some areas (arid regions, frozen conditions) may have modified timeframes

50. A contractor is constructing a commercial building and must dispose of empty paint cans, solvent containers, and adhesive buckets from the construction site. Under EPA's hazardous waste regulations and ADEM requirements, how must empty chemical containers be managed?

A. All empty chemical containers must be handled as hazardous waste regardless of residual content

B. Containers that are "RCRA empty" (all material has been removed through standard practices such as pouring, pumping, or scraping, with no more than one inch of residue remaining or no more than 3% by weight of the container's capacity) may be disposed of as nonhazardous solid waste — containers that are not properly emptied and still contain hazardous residue must be managed as hazardous waste

C. Empty containers may be buried on the construction site in an unlined pit without environmental concern

D. All containers regardless of contents must be returned to the original manufacturer for proper disposal

## Practice Exam 18: Answer Key and Explanations

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

1. A — Combining three separate contracts into a single \$1,200,000 contract creates a new agreement that exceeds the \$500,000 monetary limitation. While each original contract was individually compliant, the consolidated contract requires a license upgrade. The contractor must obtain the upgrade before executing the consolidated agreement.

2. C — During a declared state of emergency, authorities may temporarily modify licensing requirements to facilitate rapid disaster response. This may include expedited licensing, temporary permits for outofstate contractors, or deferred enforcement. However, these modifications are temporary and normal requirements resume after the emergency period ends.

3. D — The competitor has committed multiple serious offenses: soliciting work with a revoked license, fraudulently using another entity's license number, and potentially committing identity fraud. These violations carry criminal penalties, civil liability, and permanent disqualification from future licensure. Using another company's license number is never a minor issue.

4. B — Financial requirements are ongoing obligations, not onetime qualifications. If the contractor's net worth drops below the minimum, the Board may deny renewal or reduce the monetary limitation to match the current financial condition. The contractor must maintain adequate financial capacity throughout the entire license period.

5. A — While the contractor's license authorizes construction work, the development activities (land purchase, marketing, sales) may trigger separate regulatory requirements under Alabama's real estate or development laws. The contractor should verify whether additional registration or licensing is required for the development component.

6. D — The surety bond provides financial protection for consumers during the probation period. If the contractor fails to complete work or causes financial harm, affected consumers may make claims against the bond. This protects the public while allowing the contractor to continue operating under Board supervision.

**7. B** — The administrative hearing is the mandatory first step. The contractor must exhaust administrative remedies before seeking judicial review. At the hearing, the contractor may present evidence, call witnesses, and challenge the Board's reasoning. Only after the administrative process is complete may the contractor appeal to court.

**8. C** — Since the Alabama license was obtained through reciprocity based on the Mississippi license, suspension of the underlying credential may trigger a Board review. The Alabama Board may investigate whether the Mississippi suspension reflects conduct that would also warrant disciplinary action in Alabama.

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

**9. D** — The contractor must include costs for coordinating with the commissioning agent, providing labor for functional testing, scheduling testing activities, providing temporary instrumentation, and potentially rescheduling work around testing windows. These are real costs that the contractor incurs even though the commissioning agent is engaged by the owner.

**10. B** — Dewatering costs include well points or sump pumps, pump operation, discharge piping, sediment control, NPDES permit compliance, monitoring of adjacent structures, and the duration of operations. With the water table 6 feet above the foundation level, continuous dewatering is required from excavation through foundation completion.

**11. B** — Failure to comply with clearly stated submission requirements may result in bid rejection. While some jurisdictions treat envelope marking as a minor informality, others strictly enforce the instructions to bidders. The contractor risks nonresponsiveness for an easily preventable omission.

**12. B** — Phased construction adds significant costs: repeated mobilization for each phase, extended total duration, temporary barriers between phases, noise and dust control, afterhours work premiums, and reduced productivity from working in confined areas adjacent to occupied spaces. These costs can substantially exceed a singlephase construction approach.

**13. D** — Solesource specifications eliminate competitive pricing leverage. The manufacturer faces no competition and may charge premium prices. The contractor has no alternative suppliers if lead times are long, delivery is delayed, or the product is discontinued. This pricing and schedule vulnerability must be factored into the bid.

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

**14. C** — A fiveday delay in a 30day payment deadline is likely a minor, immaterial breach. The owner substantially performed by making the full payment only slightly late. Unless the settlement agreement specified "time is of the essence" for the payment deadline, the minor delay probably does not justify refusing to release the lien.

**15. D** — The owner's liability on the subcontractor's lien is generally limited to the amount remaining unpaid under the prime contract — \$50,000 in this case (\$500,000 \$450,000 paid). The owner cannot be forced to pay more than the owner owes under the prime contract, though specific liability depends on whether the subcontractor properly preserved lien rights.

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

**16. A** — Projects with expected returns below the 12% WACC destroy value because the company earns less than its capital providers require. WACC serves as the minimum hurdle rate for project acceptance. Only projects exceeding this threshold create value for the company's investors and justify the capital investment.

**17. D** — Low utilization means the company carries ownership costs (depreciation, insurance, storage, financing) on equipment generating revenue only 55% of the time. The idle 45% represents unrecovered capital. The contractor should evaluate selling underutilized equipment, improving scheduling, or switching to rental for intermittent needs.

**18. B** — The commonsize format expresses each line item as a percentage of revenue, revealing proportional relationships and trends. If direct labor is 35% of revenue versus an industry average of 28%, labor cost is identified as a specific improvement target. This format enables meaningful comparisons regardless of company size.

**19. C** — The contractor should adjust billing records to reflect the reduction, investigate whether the overbilling was an error or a legitimate disagreement, and if the assessment is incorrect, submit supporting documentation with the next pay application. Simply accepting or ignoring the adjustment are both inappropriate responses.

**20. A** — The debt payoff ratio of 4.0 years ( $\$800,000 \div \$200,000$ ) indicates that applying the entire net income to debt reduction would retire all longterm debt in four years. This ratio helps evaluate whether the debt level is manageable relative to earnings capacity. A ratio exceeding 57 years may indicate excessive leverage.

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

**21. C** — Signing bonuses are taxable wages subject to all payroll tax withholding — federal income tax, Social Security, Medicare, and state income tax. The bonus is reported on the employee's W2 as compensation. The employer also owes the employer's share of FICA on the bonus amount.

**22. D** — Dividend programs are offered at the carrier's discretion based on the overall profitability of the workers' compensation program. The carrier evaluates the loss ratio and may return a percentage of premium when claims are low. The policyholder generally cannot demand dividends — they are a discretionary reward for favorable loss experience.

**23. D** — Reclassification from independent contractor to employee triggers back SUTA taxes on all wages for the misclassification period, plus penalties and interest. The reclassified workers become eligible for unemployment benefits, which may increase the contractor's experience rating and future SUTA tax rate.

**24. B** — Under occurrencebased coverage, the policy in effect when the negligent work was performed responds to resulting claims. The 2023 policy covers the defective roofing installation because the "occurrence" (negligent installation) took place in 2023, regardless of when the leak was discovered or the claim was filed.

**25. A** — Under the accrual method, retainage payable is recognized as an expense when the subcontractor's work is performed and the obligation to pay is established. The liability exists as soon as the work is done and the retainage is withheld, even though the cash payment occurs later at substantial completion.

**26. C** — Equipment breakdown insurance covers mechanical, electrical, and pressure equipment failures from internal causes — motor burnout, electrical arcing, compressor failure, boiler explosion. The standard property policy covers only external perils (fire, windstorm) and specifically excludes these internal equipment failures.

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

**27. B** — Mandatory training required by the employer is compensable work time under FLSA. Since the worker already completed 40 regular hours, the 4 hours of Saturday training are overtime hours paid at 1.5× the regular rate. Employers cannot avoid overtime by scheduling mandatory training outside the regular workweek.

**28. D** — The employer must first determine whether ladder climbing is an "essential function" of the framing carpenter position. If it is, the employer must evaluate whether reasonable accommodations exist (using lifts, reassignment to groundlevel work, process modifications) that would enable job performance without imposing undue hardship.

**29. A** — OSHA requires potable water in sanitary, clearly marked containers with taps or fountains that prevent contamination. Common drinking cups are prohibited — individual disposable cups must be provided with a receptacle for used cups. Water must be kept at a reasonable temperature and located within reasonable distance of work areas.

**30. C** — The ADA prohibits medical examinations before a conditional job offer is extended. Employers may conduct medical examinations only after a conditional offer, and the examination must be required of all entering employees in the same job category. Preoffer medical inquiries violate ADA protections against disabilitybased hiring discrimination.

**31. A** — Disputed Alabama workers' compensation claims are adjudicated through the workers' compensation court system. The injured worker files a complaint, and the case is heard by a workers' compensation judge who evaluates medical evidence, determines compensability, and issues a ruling. The decision may be appealed through the court system.

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

**32. C** — The HVAC equipment delivery had 3 days of float before the delay occurred. The first 3 days of the 15day delay consumed the available float without affecting the critical path. Only the remaining 12 days extended the project completion date. This is why time impact analyses must be performed on the schedule as it existed when the delay occurred.

**33. D** — A formal change management system ensures every change is identified, documented, priced, and approved before work proceeds. Without systematic tracking, unauthorized changes accumulate, costs go unrecovered, schedule impacts are missed, and disputes arise about the original versus changed scope.

**34. B** — The project manager must investigate root causes (crew composition, material availability, congestion, weather, rework, design complexity, supervision quality), implement targeted corrective measures, adjust the cost-to-complete forecast, and document findings for potential claims if the productivity loss is caused by owner-directed changes or design deficiencies.

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

**35. A** — The contractor should simultaneously accelerate work to demonstrate good faith while documenting the owner's contribution to the delay. The written response must identify specific design clarification delays and their schedule impact. The contractor should cure what can be cured while preserving the argument that the delay was excusable.

**36. D** — Many contracts strictly enforce claims notice provisions. Failure to provide notice within 21 days may waive the claim regardless of merit. Even a valid differing site conditions claim may be lost if the contractor fails to comply with the contractual notice deadline. Timely notice is a prerequisite to recovery.

**37. C** — In a design-assist arrangement, the architect retains ultimate design responsibility. The contractor provides constructability input and value engineering suggestions, but the design professional makes final design decisions and stamps the construction documents. The contractor does not assume design liability for providing advisory input.

**38. A** — The contractor is responsible for ensuring all systems are tested, inspected, and certified before the certificate of occupancy inspection. The fire alarm testing must be completed by the subcontractor and certified by the appropriate authority. The building official will not issue the CO without verified fire alarm functionality.

**39. B** — Under AIA A201, the contractor must provide written notice of the payment deficiency and allow a specified cure period (typically 7 days) before suspending work. The notice must identify unpaid amounts and the intent to suspend if not cured. Suspension without proper notice may constitute a breach by the contractor.

**40. D** — A DRA is a single neutral expert providing quicker, less formal, and less expensive dispute resolution than a three-member DRB. The DRA is better suited for smaller projects where the cost of a full DRB is disproportionate. Both approaches provide realtime dispute resolution during construction rather than after completion.

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

**41. D** — C Corporation double taxation produces a combined burden of approximately 36.4%. The corporation pays 21% (\$21,000), and the shareholder pays qualified dividend tax of 15.2% on the \$79,000 distribution (\$11,850/\$15,800). The total combined federal tax on \$100,000 of profit is approximately \$32,850/\$36,800.

**42. B** — A professional corporation is organized to provide licensed professional services. If the design-build contractor provides licensed architectural or engineering services, a professional corporation may be required. The key distinction is that shareholders must hold the relevant professional licenses to practice through the PC structure.

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

**43. A** — SPF insulation is combustible and hot work nearby requires enhanced fire precautions. The contractor must clear or protect combustible materials, establish a fire watch during and after hot work, have extinguishing equipment ready, and verify the area is free of flammable vapors. SPF fires can spread rapidly and produce toxic smoke.

**44. C** — FAA Form 74601 must be filed when construction cranes exceed height thresholds near airports. The FAA evaluates whether the crane poses a hazard to air navigation and may impose marking, lighting, or operational restrictions. Failing to notify the FAA creates both safety hazards and regulatory violations.

**45. D** — A thorough preconstruction document review identifies conflicts and ambiguities before construction begins. Submitting RFIs for resolution during preconstruction prevents costly field surprises. BIM clash detection accelerates the identification process. Proactive resolution costs a fraction of reactive fieldlevel conflict resolution.

**46. B** — The 25% recovery ratio means \$4 in premiums for every \$1 recovered. While a low ratio is preferable (fewer claims indicate good safety), the contractor should evaluate whether coverage limits, deductibles, and policy structure are optimally configured. Some premiums protect against catastrophic losses that may never occur but would be financially devastating.

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

**47. A** — The action level for lead in construction is  $30 \mu\text{g}/\text{m}^3$  as an 8hour TWA. At this level (below the PEL of  $50 \mu\text{g}/\text{m}^3$ ), the employer must implement exposure monitoring, medical surveillance, and other protective measures. The action level triggers proactive protections before the more restrictive PEL is reached.

**48. C** — Removal of asbestoscontaining window glazing is typically Class III work (repair and maintenance operations involving small amounts of ACM). Class III requires wet methods, local exhaust ventilation, HEPA vacuuming, and worker training. It does not require the full negativepressure enclosure of Class I work.

**49. D** — Stabilization must generally be initiated within 14 calendar days of the last construction activity on disturbed areas. Stabilization methods include seeding, mulching, erosion control blankets, or other measures that prevent soil erosion. Modified timeframes may apply for arid regions or frozen ground conditions.

**50. B** — Containers that are "RCRA empty" (properly emptied through standard practices with no more than one inch of residue or 3% by weight remaining) may be disposed of as nonhazardous solid waste. Containers that still hold hazardous residue exceeding these thresholds must be managed as hazardous waste under RCRA regulations.