

PRACTICE EXAM 10: ARKANSAS BUSINESS AND LAW SIMULATION (50 QUESTIONS)

Total Questions: 50 | **Time Limit:** 2 Hours | **Passing Score:** 70% (35/50)

This practice exam mirrors the official Arkansas Contractor Business and Law Examination in format, domain weighting, and difficulty. Answer all questions by selecting the single best answer.

DOMAIN: BUSINESS ORGANIZATION (1 Question)

1. A contractor forms an LLC in Arkansas with two members — each owning 50%. The members draft an operating agreement that designates Member A as the manager responsible for all daily business decisions, while Member B serves as a passive investor. Two years later, Member B makes a \$150,000 purchase commitment on behalf of the LLC without Member A's knowledge or consent. Under a manager-managed LLC structure governed by the operating agreement, who has the authority to bind the LLC?

A. Only the designated manager (Member A) has authority to bind the LLC in a manager-managed structure, and Member B's unauthorized purchase may not be binding on the LLC depending on the third party's knowledge of the management structure

B. Both members always have equal authority to bind the LLC regardless of the operating agreement provisions

C. Neither member can bind the LLC because all purchase commitments require a unanimous vote of all members

D. Member B has full authority because 50% ownership automatically confers equal binding authority regardless of the management designation

DOMAIN: LICENSING (4 Questions)

2. A contractor's CPA prepares the financial statement required for an ACLB commercial license application. The CPA prepares a compiled financial statement. The contractor is applying for an unrestricted commercial license. What problem will the ACLB identify with this application?

A. A compiled statement is acceptable for all commercial license tiers as long as it shows the required net worth

B. The compiled statement must be accompanied by three years of federal tax returns to be accepted for any commercial tier

C. An unrestricted commercial license requires an audited or reviewed financial statement — a compiled statement is acceptable only for the restricted commercial tier

D. The CPA must be a resident of Arkansas for the financial statement to be accepted by the ACLB

3. A licensed residential remodeler takes on a project to convert a residential property into a commercial yoga studio. The conversion involves structural modifications, new commercial HVAC installation, and reconfiguration of the building's electrical service to meet commercial occupancy requirements. The total project value is \$95,000. Does the contractor's residential remodeler license authorize this work?

A. Yes, because the building was originally residential and the remodeler's license covers all work on formerly residential structures

B. Yes, because the project value is under \$100,000, which is the threshold where commercial licensing requirements begin

C. Yes, but only if the contractor subcontracts the HVAC and electrical work to properly licensed trade contractors

D. No, because converting a residential property to commercial use constitutes commercial construction, and the project exceeds the \$50,000 commercial licensing threshold — requiring a commercial contractor's license

4. A contractor with a valid Arkansas commercial license subcontracts the electrical work on a project to an electrician who claims to be licensed but is actually operating with an expired license. The building inspector discovers the expired license during a rough-in inspection. What is the general contractor's exposure?

- A. No exposure, because the general contractor verified the subcontractor's credentials at the time of hiring and the subsequent lapse is the subcontractor's sole responsibility
 - B. The general contractor may face ACLB disciplinary action for aiding unlicensed contracting activity, because the general contractor is responsible for ensuring that all subcontractors on their projects maintain valid, current licenses throughout the duration of the work
 - C. The exposure is limited to a \$500 administrative fine payable to the local building department
 - D. The general contractor's only obligation is to notify the ACLB within 30 days and replace the subcontractor on future projects
5. The Arkansas Contractors Licensing Board issues four main license classifications. Which classification has the LOWEST financial qualification requirements and does NOT require the applicant to pass the Business and Law Examination?

- A. The Home Improvement Specialty license, which does not require the Business and Law exam, does not require a CPA financial statement, and has a filing fee of \$50 — the least demanding classification in terms of both financial and examination requirements
- B. The Residential Remodeler license, which requires four years of experience but waives the exam for applicants with more than ten years of documented trade experience
- C. The Restricted Commercial license, which allows applicants to substitute a surety bond for the financial statement and waives the exam for NASCLA-certified contractors
- D. The Residential Builder license, which requires only two years of experience and a basic financial disclosure form instead of a CPA-prepared statement

DOMAIN: ESTIMATING AND BIDDING (4 Questions)

6. A contractor is calculating the selling price for a project. The total estimated cost (including direct costs, project overhead, and company overhead allocation) is \$725,000. The contractor wants a net profit margin of 8% on the selling price. A common error is to simply add 8% of cost to arrive at the selling price. What is the mathematically correct selling price to achieve an 8% margin on selling price?
- A. \$783,000, calculated by adding 8% of the estimated cost (\$58,000) to the cost — which actually produces only a 7.4% margin on selling price
 - B. \$798,750, calculated by adding 10.17% to the cost, which approximates but does not precisely achieve the 8% target
 - C. \$725,000, because the overhead allocation already includes the desired profit component within its calculation

D. \$788,043, calculated by dividing the total estimated cost by $(1 - 0.08)$: $\$725,000 \div 0.92 = \$788,043$, which produces exactly 8% margin on the selling price

7. A contractor submits a sealed bid on a public water treatment facility project. The bid documents state: "Bids received after 2:00 PM local time on March 15 will not be accepted." The contractor's courier arrives at the bid submission location at 2:03 PM — three minutes past the deadline. The contractor's bid is the lowest by \$180,000. Should the owner accept this bid?

A. Yes, because a three-minute delay is de minimis and rejecting the lowest bid over such a minor technicality wastes taxpayer money

B. The owner should refuse to accept this late bid because the deadline stated in the bid documents is absolute on public projects — accepting a late bid, even by three minutes, would undermine the integrity of the sealed bid process and could expose the owner to protests from other bidders

C. Yes, but only if the bid envelope was sealed and the courier can provide a timestamped receipt proving the bid was in transit before the deadline

D. The owner should accept the bid conditionally and allow the other bidders to revise their prices downward to match within 48 hours

8. A contractor needs to estimate the cost of excavating a building foundation. The plans show the excavation dimensions as 120 feet long, 60 feet wide, and 8 feet deep. The excavated soil expands approximately 25% when removed from the ground (swell factor). The contractor needs to estimate the number of truck loads required to haul the excavated material. Each truck carries 12 cubic yards. How many cubic yards of excavated material (after swell) must be hauled?

A. 2,133 cubic yards, calculated at the in-place (bank) volume without the swell factor

B. 1,600 cubic yards, calculated by applying a compaction factor instead of a swell factor to the bank volume

C. 2,667 cubic yards, calculated by first determining the bank volume ($120 \times 60 \times 8 = 57,600$ cubic feet $\div 27 = 2,133$ cubic yards) and then applying the 25% swell factor ($2,133 \times 1.25$)

D. 3,200 cubic yards, calculated by applying a 50% swell factor to account for both expansion and moisture content

9. A contractor reviews a set of project specifications and finds that Division 09 (Finishes) specifies a particular brand of commercial carpet tile followed by the phrase "or approved equal." A competitor's carpet tile costs 30% less and meets all performance specifications. What does the "or approved equal" language allow the contractor to do?

- A. Propose the less expensive substitute to the architect for review and approval before the bid deadline, and if approved, use the lower-cost product — the "or equal" clause allows substitutions but requires the architect's determination that the proposed product meets the specification requirements
- B. Automatically use the less expensive product without notification because any product meeting the performance specifications qualifies as an "equal"
- C. Use the less expensive product only if the cost savings are passed through to the owner as a deductive change order
- D. Propose the substitute only after the contract is awarded, because substitution requests during bidding are prohibited

DOMAIN: CONTRACT MANAGEMENT (8 Questions)

10. A construction project owner wants to begin construction before the design is fully complete in order to meet an aggressive occupancy deadline. The owner selects a contractor based on qualifications and negotiates a cost-plus-fixed-fee contract with a GMP to be established when the design reaches 75% completion. What project delivery method is being used?

- A. Design-bid-build, where the design must be 100% complete before bidding and construction begin
- B. Integrated project delivery, where the owner, architect, and contractor share all risks and profits equally
- C. Construction management at risk (CMAR), where the contractor provides preconstruction services during design development and assumes cost risk at the GMP
- D. Design-build, where a single entity is responsible for both the design and construction under one contract

11. A general contractor's subcontract with a painting subcontractor contains the following clause: "Subcontractor shall not be entitled to payment for any work until Owner has made payment to Contractor for such work." This language is most accurately classified as what type of payment provision?

- A. A retainage clause that withholds a percentage of each payment until the painting work reaches completion
- B. A joint check clause that requires the owner to issue payments jointly to the contractor and the painting subcontractor

C. A progress payment clause establishing a standard 30-day billing cycle between the contractor and subcontractor

D. A pay-if-paid clause that makes the owner's payment to the general contractor a condition precedent to the subcontractor's right to receive payment — potentially eliminating the contractor's payment obligation if the owner never pays

12. A contractor on a fixed-price commercial project submits a change order request for \$28,000 to address unforeseen rock encountered during foundation excavation. The contract contains a differing site conditions clause. The geotechnical report provided with the bid documents indicated clay soil throughout the excavation depth. The owner's construction manager rejects the change order, arguing that the contractor should have anticipated rock because the project is located in a region known for rocky terrain. Under the differing site conditions clause, whose position is stronger?

A. The owner's position is stronger because contractors in rocky regions have a duty to anticipate subsurface rock regardless of what the geotechnical report indicates

B. The contractor's position is stronger because the differing site conditions clause protects the contractor when actual conditions differ materially from those represented in the contract documents — the geotechnical report specifically indicated clay, not rock

C. Neither party has a strong position because subsurface conditions are always an uninsurable shared risk

D. The owner's position is stronger because geotechnical reports are advisory only and do not constitute contract representations

13. A contractor receives a written notice from the project owner stating that the contractor has materially breached the contract by installing non-conforming structural steel connections. The notice gives the contractor 14 days to cure the deficiency. The contractor believes the connections comply with the specifications and wants to dispute the allegation. What should the contractor do during the 14-day cure period?

A. Respond in writing within the cure period disputing the owner's characterization, provide documentation supporting the contractor's position that the connections comply with the specifications, and request an independent inspection or testing to resolve the factual dispute — while simultaneously taking prudent protective measures in case the dispute is not resolved favorably

B. Ignore the notice because the contractor's own quality control has already verified the connections meet specifications

C. Immediately remove and replace all structural steel connections to avoid the risk of termination, even if the contractor believes they are compliant

D. File a mechanics' lien within the 14-day period as a preemptive measure against the owner's potential withholding of payment

14. A project architect issues a bulletin during construction changing the exterior cladding from brick veneer to a fiber cement panel system. The change significantly reduces the cost of the exterior wall system. The contractor argues they should retain the cost savings as additional profit since they bid the more expensive brick system. Under standard change order provisions, who receives the benefit of the cost reduction?

A. The contractor retains all savings because the original bid price was accepted and any cost reductions belong to the performing party

B. The savings are split 50/50 between the owner and contractor as an incentive for the contractor to identify value engineering opportunities

C. The architect receives the savings because the design change was the architect's professional recommendation

D. The owner receives the benefit through a deductive change order, because the design change originated from the owner's side and the contract price should be adjusted to reflect the reduced scope — though the contractor may retain their overhead and profit margin depending on the contract terms

15. A subcontractor on a large commercial project has not been paid by the general contractor for four consecutive months despite submitting timely payment applications. The subcontractor's total outstanding balance is \$220,000. The subcontractor wants to stop work until they are paid. Under most standard subcontract provisions, what steps should the subcontractor take before stopping work?

A. Stop work immediately without notice because non-payment for four months is an obvious breach that requires no formal notification

B. Provide written notice to the general contractor that the subcontractor intends to suspend work if payment is not received within a specified period (typically 7 to 14 days), because most subcontracts require prior written notice before work can be suspended for non-payment

C. File a lawsuit against the general contractor before stopping work because court authorization is required to suspend performance under a subcontract

D. Continue working indefinitely regardless of non-payment because subcontractors have no right to suspend work under any circumstances

16. A construction contract includes a "no damage for delay" clause. During construction, the owner directs the contractor to stop work for 6 weeks while the architect redesigns a major building system. The stop-work order is issued unilaterally by the owner and is not caused by

any act or omission of the contractor. The contractor incurs \$180,000 in standby costs during the 6-week suspension. Does the "no damage for delay" clause bar the contractor's monetary claim?

A. The owner's unilateral stop-work directive for redesign purposes is not a simple "delay" — it constitutes active interference with the contractor's performance

B. Yes, the clause absolutely bars all monetary claims for any delay regardless of the cause or circumstances

C. No, because all no-damage-for-delay clauses are void and unenforceable as a matter of law in every jurisdiction

D. Yes, but only if the owner provides the contractor with a corresponding time extension equal to the suspension period

17. An owner on a commercial renovation project wants to hire the general contractor's project superintendent away from the contractor's company during active construction. The superintendent has extensive knowledge of the project and the owner believes the superintendent would be more effective working directly for them. Does the construction contract typically address this situation?

A. Many construction contracts contain a "key personnel" or "non-solicitation" provision that prohibits the owner from soliciting or hiring the contractor's key employees during the project and for a specified period afterward, specifically to prevent this type of disruption

B. Construction contracts never address employee solicitation because employment decisions are outside the scope of construction law

C. The owner can hire any individual they choose because employees have the constitutional right to change employers at any time

D. The contractor's only remedy is to increase the superintendent's salary to prevent them from leaving voluntarily

18. A contractor working on a multi-year commercial project receives the following monthly progress payment: gross amount earned \$320,000, less 10% retainage (\$32,000), less previous payments of \$0 (first application), equals current payment due of \$288,000. The owner pays \$288,000 on time. Three months later, a subcontractor who worked on the project during the first month files a mechanics' lien for \$45,000 against the owner's property, alleging the general contractor did not pay them. What obligation did the owner likely fail to require?

A. The owner should have required the contractor to provide a building permit number on the payment application

B. The owner should have conducted a jobsite inspection before approving the payment application

C. The owner should have required lien waivers from the general contractor and all subcontractors before releasing each progress payment, which would have revealed the non-payment issue before the lien was filed

D. The owner should have required the contractor to post a completion bond before the first payment was processed

19. A construction contract states that all disputes "shall be resolved exclusively through binding arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association." After a dispute arises, the contractor discovers that the arbitration filing fees and arbitrator costs will exceed \$25,000. The contractor argues that the cost of arbitration is prohibitively expensive and wants to file a lawsuit in court instead. Can the contractor avoid the arbitration clause?

A. Yes, because arbitration costs exceeding \$10,000 automatically void the arbitration clause and restore the parties' right to litigate

B. The contractor is not automatically entitled to avoid the clause simply because of arbitration costs — however, in rare cases courts have found arbitration clauses unconscionable when the costs effectively deny access to a dispute resolution forum, particularly for smaller claims

C. Yes, because the contractor did not specifically agree to pay arbitration costs and the owner must bear the full expense

D. The arbitration clause is always absolutely enforceable regardless of cost because the parties freely agreed to it when they signed the contract

20. A general contractor discovers that their concrete subcontractor has been submitting inflated payment applications — billing for 85% completion on work that is actually only 60% complete. The general contractor has been including these inflated numbers in their own applications to the owner. When the owner's construction manager audits the billings and discovers the over-billing, what is the general contractor's exposure?

A. The owner may demand repayment of the over-billed amount, withhold future payments until the over-billing is recovered, and potentially pursue breach of contract claims — because the general contractor has a duty to verify the accuracy of all billing submitted to the owner, including subcontractor progress claims

B. The general contractor has no exposure because the subcontractor's billing fraud is solely the subcontractor's responsibility

C. The owner's only remedy is to terminate the concrete subcontractor directly since the fraud originated with the subcontractor

D. The general contractor's exposure is limited to a written reprimand from the owner with no financial consequences

DOMAIN: PROJECT MANAGEMENT (6 Questions)

21. A project manager discovers that sustained overtime of 55 hours per week has been in effect for the past six weeks on a commercial building project. The superintendent reports that despite the additional hours, the project has not gained any ground against the schedule — productivity per hour has declined significantly since the overtime began. What is the most likely explanation for this phenomenon?

A. The workers are deliberately slowing down to protest the mandatory overtime schedule

B. The equipment on the project has not been maintained properly during the extended work hours

C. Research consistently shows that sustained overtime beyond 4 to 6 weeks causes fatigue, reduced alertness, increased errors, and higher accident rates — the productivity loss per hour eventually offsets the additional hours worked, resulting in little or no net gain in total output despite significantly higher labor costs

D. The building inspector is causing delays by requiring additional inspections during the extended work hours

22. A project schedule includes the following parallel activities during weeks 8 through 12: electrical rough-in on the first floor, plumbing rough-in on the first floor, HVAC duct installation on the first floor, and fire sprinkler installation on the first floor. All four trades will be working simultaneously in the same spaces. What coordination challenge does this concurrent scheduling create?

A. No challenge, because modern building codes require sufficient space for all trade systems to coexist without conflict

B. Scheduling four trades in the same space simultaneously creates minimal impact because each trade works independently

C. The primary challenge is "crew stacking" — multiple trades working in the same confined spaces simultaneously, which reduces productivity for all trades due to physical congestion, tool and material conflicts, access limitations, and increased potential for damage to other trades' installed work

D. The only challenge is noise levels, which can be managed with hearing protection for all workers in the area

23. A contractor's three-week look-ahead schedule identifies that a critical delivery of custom structural steel is expected in week 2. The steel fabricator contacts the contractor and reports that the delivery will be delayed by one week due to a raw material shortage. The structural steel installation is on the critical path. What should the project manager do immediately?

A. Wait for the steel to arrive and adjust the schedule afterward because one-week delays are within normal construction tolerance

B. Notify the owner immediately, evaluate the schedule impact, explore expediting options with the fabricator, identify whether any non-critical activities can be advanced to productive use during the delay week, and prepare a recovery plan to mitigate the one-week critical path delay

C. Terminate the steel fabricator's contract and source the steel from an alternative supplier who can deliver on the original schedule

D. Proceed with other scheduled activities and allow the steel installation to float until the delivery arrives

24. A project superintendent reviews the daily reports for the past month and notices that the average workforce on site has been 35 workers, but the original staffing plan called for 45 workers during this phase of construction. The project is beginning to fall behind schedule. What is the most likely cause-and-effect relationship?

A. The workforce is performing well and the schedule delay is unrelated to staffing levels

B. The 10-worker shortfall is reducing the productive capacity of the project, directly contributing to the schedule delay — the superintendent should investigate whether the shortfall is caused by subcontractor mobilization delays, labor market shortages, or insufficient crew sizing and take corrective action to bring staffing up to the planned level

C. The staffing plan was overstated and 35 workers is the optimal crew size for this phase of construction

D. The schedule delay is caused by material delivery problems that would exist regardless of the number of workers on site

25. A project manager reviews the cost report at the 70% completion mark of a \$3,000,000 commercial project. Original estimated cost: \$2,550,000. Actual costs to date: \$1,890,000. Estimated cost for the work completed (70% of \$2,550,000): \$1,785,000. The project manager

calculates a cost variance of -\$105,000 (unfavorable). If the current cost trend continues, what is the projected cost at completion?

A. Approximately \$2,700,000, calculated by projecting the current cost overrun rate (\$105,000 over budget at 70% complete) through the remaining 30% of the project — indicating the project will exceed the original \$2,550,000 estimate by approximately \$150,000

B. \$2,550,000, because cost overruns in the first 70% are always offset by efficiencies in the final 30% of construction

C. \$3,000,000, because all fixed-price projects cost exactly the contract value regardless of internal cost performance

D. \$2,340,000, because the remaining 30% of work will cost less due to economies of scale in the final construction phase

26. A contractor is building a commercial office building and the concrete foundation pour is scheduled for next Tuesday. The weather forecast shows a 90% chance of rain on Tuesday with temperatures dropping to 34°F overnight. The concrete supplier confirms they can deliver, but the contractor's superintendent is concerned about the weather conditions. What is the most appropriate decision?

A. Proceed with the pour because modern concrete admixtures can handle any weather condition without affecting quality

B. Proceed with the pour but add extra workers to finish before the rain begins in the afternoon

C. Postpone the pour to a day with favorable weather conditions, document the decision and the weather forecast in the daily report, and adjust the schedule accordingly — because rain during placement and near-freezing temperatures during initial curing can seriously compromise concrete quality and strength

D. Pour only half the foundation on Tuesday and the remaining half when the weather improves later in the week

27. A contractor's daily report from a Monday includes the entry: "Owner's representative visited the site at 10:30 AM and verbally instructed the superintendent to relocate the loading dock doors from the east elevation to the north elevation. Superintendent acknowledged the instruction and noted that this change will affect the structural framing, the MEP rough-in, and the site paving plan." What is the critical next step?

A. The superintendent must immediately follow up the verbal instruction with a written notice to the owner confirming the directive, identifying it as a scope change, and stating that a change order proposal will be submitted before any work on the relocation begins

B. Proceed with the relocation immediately because verbal instructions from the owner's representative are binding change orders

C. Ignore the verbal instruction because only the architect can authorize design changes on a commercial project

D. Complete the loading dock as originally designed and address the owner's request during the punch list phase

28. A project is in the closeout phase. The contractor has completed all punch list items, submitted as-built drawings and O&M manuals, and the architect has issued the certificate of final completion. The contractor submits their final payment application requesting release of the remaining retainage of \$180,000. The owner delays payment for 60 days beyond the contractual payment period, citing "internal budget review." What recourse does the contractor have?

A. The contractor should file a formal written demand for payment citing the specific contract provisions that obligate the owner to pay within the contractual timeframe, and if payment is not forthcoming, pursue the contractual dispute resolution process and consider filing a mechanics' lien if the filing deadline has not expired

B. The contractor has no recourse because final payment timing is entirely at the owner's discretion after project completion

C. The contractor should accept the delay because challenging the owner could jeopardize future business opportunities

D. The contractor's only option is to file a complaint with the ACLB because payment disputes are within the Board's exclusive jurisdiction

DOMAIN: INSURANCE AND BONDING (3 Questions)

29. A contractor carries a CGL policy with a \$1,000,000 per-occurrence limit and a \$2,000,000 general aggregate limit. The contractor also carries a \$5,000,000 umbrella policy. During the policy year, three separate incidents produce claims: Claim 1 = \$800,000; Claim 2 = \$1,200,000; Claim 3 = \$900,000. How are the claims covered across the two policies?

A. The CGL pays all three claims in full (\$2,900,000 total) because the combined per-occurrence and aggregate limits exceed the total claims

B. The CGL pays \$2,800,000 and the umbrella pays \$100,000 for a total of \$2,900,000

C. Claim 1: CGL pays \$800,000. Claim 2: CGL pays \$1,000,000 (per-occurrence cap), umbrella pays \$200,000. Claim 3: CGL aggregate has \$200,000 remaining, CGL pays \$200,000, umbrella pays \$700,000. Total CGL: \$2,000,000. Total umbrella: \$900,000. Grand total: \$2,900,000

D. The CGL pays only Claim 1 (\$800,000) and the umbrella pays Claims 2 and 3 in full because the umbrella replaces the CGL once the first claim is processed

30. A contractor wants to bid on a state-funded community center project requiring performance and payment bonds at 100% of the contract value (\$2,800,000). The contractor's surety sets bonding capacity at 15 times working capital. The contractor's current balance sheet shows working capital of \$225,000 and they have \$1,200,000 in existing bonded work in progress. Can the contractor obtain bonds for this project?

A. Yes, because the contractor's net worth exceeds the 10% minimum required by most sureties for public project bonds

B. Yes, because the surety evaluates only the new project in isolation and does not consider existing bonded work

C. No, because the contractor's total bonded work would exceed their capacity — existing work (\$1,200,000) plus new project (\$2,800,000) = \$4,000,000, which exceeds the bonding capacity of \$3,375,000 ($15 \times \$225,000$)

D. No, because the contractor's bonding capacity of \$3,375,000 is sufficient for either the existing work or the new project alone, but their financial statements must be updated before the surety will issue any additional bonds

31. A contractor's workers' compensation policy has a base premium calculated on \$1,800,000 in annual payroll across three classification codes: carpentry (\$12.50 per \$100 of payroll on \$800,000), concrete (\$15.00 per \$100 on \$600,000), and general labor (\$8.00 per \$100 on \$400,000). The contractor's EMR is 0.88. What is the approximate annual premium?

A. \$222,640, calculated by applying the classification rates to each payroll category without the EMR adjustment

B. \$195,923, calculated by applying the classification rates and then multiplying by the EMR of 0.88 — which provides a 12% discount below the manual premium

C. \$253,000, calculated by applying a single blended rate across all payroll categories

D. \$158,400, calculated using only the lowest classification rate applied to the total payroll

DOMAIN: OSHA RECORDKEEPING (3 Questions)

32. A construction company's safety director conducts annual OSHA recordkeeping training for all supervisors. During the training, a supervisor asks whether a workplace injury that results in the worker being placed on "light duty" — performing their regular job but with a

restriction on lifting more than 25 pounds — is recordable. The worker normally lifts materials weighing up to 75 pounds as part of their regular duties. What is the correct answer?

- A. Yes, because the 25-pound lifting restriction prevents the worker from performing the full range of their routine job functions, which constitutes "restricted work activity" — one of the recordable outcomes that triggers an entry on the OSHA 300 Log
- B. No, because the worker is still reporting to work and performing their job, which means no lost time has occurred
- C. No, because light duty assignments are classified as first aid under OSHA's recordkeeping definitions
- D. Yes, but only if the restriction lasts more than 7 consecutive calendar days

33. An employer's OSHA 300A Summary for the previous calendar year shows the following totals: 4 cases with days away from work, 3 cases with job transfer or restriction, 6 cases with other recordable injuries (medical treatment beyond first aid only), and 0 fatalities. The company's employees worked 500,000 total hours during the year. What is the company's Days Away, Restricted, or Transferred (DART) rate?

- A. 5.2, calculated using all 13 recordable cases in the DART formula
- B. 2.8, calculated as $(7 \text{ DART cases} \times 200,000) \div 500,000$ — because the DART rate includes only cases involving days away from work, restricted work, or job transfer ($4 + 3 = 7$), not cases involving medical treatment only
- C. 1.6, calculated using only the 4 cases with days away from work and excluding restricted duty cases
- D. 3.6, calculated by including the 6 medical treatment cases in the DART numerator along with the lost-time and restricted cases

34. A construction worker is diagnosed with carpal tunnel syndrome by a physician. The physician determines the condition is work-related, caused by years of repetitive motion from operating vibrating power tools. The worker has not missed any work and continues performing their regular duties. The physician prescribes a wrist splint to be worn during work. Is this case OSHA recordable?

- A. No, because the worker has not missed any work time and continues performing their regular job duties without restriction
- B. No, because carpal tunnel syndrome is a pre-existing condition that cannot be attributed to workplace activities
- C. No, because wrist splints are classified as first aid under OSHA's recordkeeping definitions

D. Yes, for multiple independent reasons — the physician-diagnosed work-related illness constitutes a significant diagnosis, and the prescribed wrist splint (a rigid means of immobilization) constitutes medical treatment beyond first aid — either trigger alone would make the case recordable

DOMAIN: PERSONNEL REGULATIONS (8 Questions)

35. A construction company with 48 employees receives an FMLA leave request from a carpenter who wants 8 weeks off to care for a newborn child. The carpenter has worked for the company for 2 years. The employer denies the request. Is the denial lawful?

A. The denial may be unlawful if the employer meets the 50-employee threshold under different counting rules — however, with only 48 employees, the employer may fall below the FMLA's 50-employee coverage threshold, which would make the denial lawful because the FMLA does not apply to employers with fewer than 50 employees within a 75-mile radius

B. The denial is automatically unlawful because all employers must provide FMLA leave for the birth of a child regardless of company size

C. The denial is lawful because FMLA leave for childcare is available only to the birth mother, not to other parents

D. The denial is unlawful because the 2-year employment tenure exceeds the FMLA eligibility requirement and overrides the employer size threshold

36. A non-exempt laborer earns \$20.00 per hour. During a workweek, the laborer works 45 hours of regular construction duties. The employer also requires the laborer to attend a 3-hour mandatory safety training session on Saturday morning. Under the FLSA, how many total hours must be compensated, and how many of those hours are at the overtime rate?

A. 48 total compensable hours with 8 hours at overtime rate, because mandatory training is "hours worked" under the FLSA and all hours exceeding 40 in the workweek must be paid at 1.5 times the regular rate

B. 45 hours compensable with 5 hours at overtime, because the Saturday training is voluntary and does not count as hours worked

C. 48 hours compensable but all at the straight-time rate, because training hours are exempt from overtime calculations

D. 45 hours compensable with 5 at overtime rate, because mandatory training counts toward regular hours but not toward the overtime threshold

37. An employer discovers that a supervisor has been making unwanted sexual comments to a female employee for the past three months. The employee reported the behavior to the supervisor's manager two months ago, but no action was taken. The employee has now filed a charge with the EEOC. What is the employer's legal exposure?

A. No exposure because the employee should have filed the EEOC charge immediately rather than reporting internally first

B. Significant exposure because the employer had actual knowledge of the harassment through the internal report and failed to take prompt and appropriate corrective action — the two-month delay in responding demonstrates a failure to fulfill the employer's obligation to prevent and correct workplace harassment

C. Minimal exposure because the harassment consisted only of verbal comments and did not involve physical contact

D. Exposure only if the supervisor is a C-level executive; harassment by mid-level supervisors does not create employer liability

38. A contractor classifies a worker as an independent contractor. The worker signs an independent contractor agreement, receives a 1099-NEC, provides their own hand tools, and has a separate business license. However, the worker reports to the contractor's jobsite daily at 7:00 AM, takes direction from the contractor's foreman on which tasks to perform, works exclusively for this contractor, and has been doing so for 18 months continuously. If the IRS audits this arrangement, what is the most likely outcome?

A. The IRS will accept the classification because the worker has a separate business license and provides their own hand tools

B. The IRS will accept the classification because the independent contractor agreement creates a binding legal presumption

C. The IRS will likely accept the classification because the combination of the signed agreement, 1099 filing, and business license creates a three-factor safe harbor

D. The IRS will likely reclassify the worker as an employee based on the behavioral control indicators (daily schedule, direction from foreman) and the relationship factors (exclusive work for one contractor for 18 continuous months) — these factors outweigh the paperwork and self-supplied hand tools

39. An employer has 55 employees and a comprehensive employee handbook that includes an at-will employment disclaimer, anti-harassment policy, drug-free workplace policy, progressive discipline policy, and safety rules. A new employee receives the handbook on their first day but is not asked to sign an acknowledgment of receipt. Six months later, the employee

is terminated for violating the drug-free workplace policy. The employee claims they never received or read the handbook. What is the employer's vulnerability?

A. Without a signed acknowledgment of receipt, the employer cannot prove the employee received the handbook, which weakens the employer's position in defending the termination — always require signed acknowledgments from every employee upon receipt of the handbook and upon any updates

B. No vulnerability exists because distributing the handbook creates a presumption of receipt that does not require documentation

C. The vulnerability is minimal because the drug-free workplace policy is implied in all construction employment relationships

D. The employer is fully protected because the at-will employment disclaimer in the handbook allows termination for any reason without documentation

40. A contractor's workers' compensation carrier reports that the contractor's EMR has increased from 0.95 to 1.18 over the past year due to two serious lost-time injuries. Beyond the premium increase, what additional business impact will the higher EMR create?

A. The contractor may be disqualified from bidding on projects where owners or general contractors set maximum EMR thresholds — commonly 1.0 — as a prequalification requirement, directly reducing the contractor's available work opportunities in addition to the increased insurance costs

B. The higher EMR triggers an automatic OSHA inspection of all active jobsites within 30 days

C. The EMR increase requires the contractor to reduce their workforce by the same percentage to maintain their bonding capacity

D. The higher EMR has no impact beyond the premium increase because EMR is used exclusively for insurance rating purposes

41. Under the Davis-Bacon Act, a contractor on a federally funded project must submit certified payroll reports. What specific information must be included on each certified payroll report?

A. Only the total dollar amount paid to each worker for the week and the worker's job classification

B. Each worker's name, address, Social Security number (or last four digits), job classification, hourly wage rate, hours worked each day, gross pay, deductions, and net pay — and the report must be certified as accurate by the contractor or an authorized officer under penalty of perjury

- C. Only the number of workers on site each day and the total payroll amount for the week
- D. The workers' names and job classifications only, with detailed pay information submitted separately on a confidential supplemental form

42. A contractor with 30 employees terminates a 50-year-old Hispanic male estimator and replaces him with a 28-year-old white female with less experience but a lower salary expectation. The terminated estimator believes the decision was motivated by both age and race. Which federal anti-discrimination laws potentially apply to this termination?

- A. Both Title VII (prohibiting race and national origin discrimination, applicable to employers with 15+ employees) and the ADEA (prohibiting age discrimination against individuals 40+, applicable to employers with 20+ employees) — the terminated estimator may have claims under both statutes based on the factual circumstances
- B. Only the ADEA applies because age discrimination claims take legal priority over race discrimination claims
- C. Only Title VII applies because the terminated employee's race is the primary protected characteristic and age claims are secondary
- D. Neither law applies because the employer has fewer than 50 employees, which is the minimum threshold for both statutes

43. A project owner requires all contractors to carry CGL insurance with the owner named as an additional insured. The contractor's insurance broker adds the owner to the policy using a standard "additional insured — owners, lessees, or contractors" endorsement. One year after project completion, a pedestrian is injured by a piece of the building's facade that falls onto the sidewalk. The pedestrian sues both the owner and the contractor. Does the additional insured endorsement protect the owner for this post-completion claim?

- A. Yes, if the endorsement includes completed operations coverage — some additional insured endorsements cover only ongoing operations and expire when the project is finished, while others extend to completed operations claims
- B. No, because additional insured status always terminates at project completion regardless of the endorsement language
- C. Yes, because all additional insured endorsements automatically include completed operations coverage as a standard provision
- D. No, because additional insured coverage applies only to claims filed during the construction phase, not after the project is delivered

44. A contractor's project superintendent requires all workers to wear high-visibility safety vests on the jobsite. A new worker refuses to wear the vest, claiming it causes skin irritation. The superintendent sends the worker home without pay. Under OSHA regulations and employment law, what should have happened instead?

A. The superintendent handled the situation correctly because PPE requirements are non-negotiable and workers who refuse can be sent home without pay

B. The superintendent should have explored reasonable alternatives — such as providing a different style of vest, allowing the worker to wear a long-sleeved shirt under the vest, or offering a hypoallergenic vest — before taking disciplinary action, because PPE requirements must be met but the employer should attempt to accommodate legitimate medical or physical issues

C. The worker has the right to refuse any PPE that causes discomfort without any employment consequences

D. The superintendent should have filed an OSHA complaint against the worker for refusing to comply with safety requirements

45. A contractor hires 20 workers for a 6-month bridge construction project. The contractor classifies all workers as independent contractors, issues 1099-NEC forms, and does not withhold any taxes or provide workers' compensation insurance. The workers report to the jobsite at 6:30 AM daily, use the contractor's equipment exclusively, follow the foreman's detailed daily instructions, and are paid weekly based on hours logged. A worker is seriously injured in a fall. What is the contractor's exposure?

A. No exposure because the 1099 classification and signed independent contractor agreements establish the workers' independent status

B. Massive exposure — the IRS will likely reclassify all 20 workers as employees, the workers' compensation commission will assess penalties for failure to carry coverage, the injured worker may file a negligence lawsuit (not limited to workers' comp because no policy existed), and the contractor faces back taxes with Trust Fund Recovery Penalties

C. Exposure limited to the injured worker's medical bills, which will be covered by the worker's own health insurance

D. Moderate exposure limited to reclassification penalties for the injured worker only, with the remaining 19 workers' classification unaffected

DOMAIN: FINANCIAL MANAGEMENT (5 Questions)

46. A contractor's project has a contract value of \$1,800,000 with estimated total costs of \$1,530,000 using the percentage-of-completion method. At the end of Year 1, costs incurred total \$765,000. During Year 1, the contractor billed \$820,000. What is the earned revenue, the over/under billing status, and the estimated gross profit recognized in Year 1?

- A. Earned revenue \$765,000, under-billed by \$55,000, gross profit \$0
- B. Earned revenue \$1,800,000, over-billed by \$980,000, gross profit \$270,000
- C. Earned revenue \$820,000, billings match earned revenue exactly, gross profit \$55,000
- D. Earned revenue \$900,000 (50% complete \times \$1,800,000), under-billed by \$80,000 (\$900,000 earned minus \$820,000 billed), and gross profit of \$135,000 (50% \times \$270,000 estimated total profit)

47. A contractor's balance sheet shows the following: total assets \$2,800,000, total liabilities \$2,100,000, current assets \$1,450,000, current liabilities \$1,050,000. The contractor is applying for an unrestricted commercial license from the ACLB. Do they meet the financial requirements?

- A. No, because the current ratio of 1.38 does not meet the ACLB's minimum current ratio requirement of 1.5
- B. Yes, because the net worth of \$700,000 exceeds the \$50,000 minimum and the working capital of \$400,000 demonstrates adequate short-term liquidity — assuming the financial statement is audited or reviewed and cash/cash equivalents meet the \$25,000 minimum
- C. No, because the total liabilities exceed 50% of total assets, which disqualifies the contractor under the ACLB's debt-to-asset ratio requirement
- D. Yes, because the total assets of \$2,800,000 alone satisfy all ACLB financial requirements for an unrestricted commercial license

48. A contractor's income statement for the fiscal year shows: total contract revenue \$8,500,000; cost of construction \$7,225,000; G&A expenses \$850,000. The contractor wants to compare their performance against industry benchmarks. What are the gross profit margin and net profit margin?

- A. Gross margin 15.0% ($\$1,275,000 \div \$8,500,000$) and net margin 5.0% ($\$425,000 \div \$8,500,000$) — the gross margin indicates project-level profitability while the net margin reflects bottom-line performance after all overhead is deducted

B. Gross margin 10.0% and net margin 5.0%, calculated by distributing G&A expenses across both margin calculations

C. Gross margin 5.0% and net margin 15.0%, with net margin always exceeding gross margin in construction

D. Gross margin 15.0% and net margin 10.0%, calculated by excluding half of G&A from the net income calculation

49. A contractor maintains a \$500,000 line of credit secured by accounts receivable. The bank's borrowing base formula limits draws to 80% of accounts receivable that are less than 90 days old. The contractor's current accounts receivable aging shows: \$400,000 current (0-30 days), \$180,000 at 31-60 days, \$95,000 at 61-90 days, and \$45,000 over 90 days. What is the maximum amount the contractor can draw on the line of credit?

A. \$500,000, equal to the full line of credit because the total receivables exceed the line limit

B. \$400,000, calculated as 80% of the total receivables portfolio regardless of aging

C. \$540,000, calculated as 80% of all receivables under 90 days ($\$400,000 + \$180,000 + \$95,000 = \$675,000 \times 0.80$), but capped at the \$500,000 line limit — so the maximum draw is \$500,000

D. \$360,000, calculated as 80% of only the current receivables ($\$400,000 + \$180,000 = \$580,000 \times 0.80 = \$464,000$)

50. A contractor's cash flow forecast projects the following for the next quarter: collections from accounts receivable \$620,000; retainage releases \$45,000; new draws on line of credit \$100,000. Projected outflows: payroll \$380,000; materials and subcontractors \$310,000; overhead \$95,000; debt service \$40,000; estimated tax payment \$28,000. Current cash balance is \$35,000. What is the projected ending cash position?

A. Negative \$53,000, indicating the contractor will exhaust all cash and credit resources before the end of the quarter

B. Negative \$18,000, calculated incorrectly by omitting the current cash balance from the projection

C. Positive \$82,000, calculated by overestimating collections and underestimating outflows

D. Negative \$53,000, calculated as total inflows ($\$620,000 + \$45,000 + \$100,000 + \$35,000$ current cash = \$800,000) minus total outflows ($\$380,000 + \$310,000 + \$95,000 + \$40,000 + \$28,000 = \$853,000$) = $-\$53,000$

Let me recheck: Total inflows including current cash: $\$620,000 + \$45,000 + \$100,000 + \$35,000 = \$800,000$. Total outflows: $\$380,000 + \$310,000 + \$95,000 + \$40,000 + \$28,000 = \$853,000$. Net: $\$800,000 - \$853,000 = -\$53,000$. Both A and D show $-\$53,000$. Let me differentiate:

50. A contractor's cash flow forecast projects the following for the next quarter: collections from accounts receivable $\$620,000$; retainage releases $\$45,000$; new draws on line of credit $\$100,000$. Projected outflows: payroll $\$380,000$; materials and subcontractors $\$310,000$; overhead $\$95,000$; debt service $\$40,000$; estimated tax payment $\$28,000$. Current cash balance is $\$35,000$. What is the projected ending cash position?

A. Positive $\$47,000$, calculated by excluding the estimated tax payment from the outflow projections

B. Positive $\$82,000$, calculated by double-counting the retainage release as both an inflow and a reduction in outflows

C. Negative $\$18,000$, calculated by omitting the current cash balance and the line of credit draw from the inflow projections

D. Negative $\$53,000$, calculated as total available funds ($\$800,000$) minus total outflows ($\$853,000$), indicating the contractor must arrange additional financing or reduce expenditures to avoid a cash shortfall

Practice Exam 10: Answer Key and Explanations

1. A — In a manager-managed LLC, only the designated manager has authority to bind the LLC in the ordinary course of business. Member B, as a passive investor in a manager-managed structure, does not have apparent authority to make purchase commitments on behalf of the LLC. The operating agreement's designation of Member A as the sole manager controls, though the enforceability against a third party depends on whether the third party knew of the management structure.

2. C — An unrestricted commercial license requires an audited or reviewed financial statement — a higher verification standard than the compiled statement acceptable for the restricted commercial tier. Both tiers require the same $\$50,000$ net worth with $\$25,000$ in cash, but the CPA verification level is the critical distinction. Submitting a compiled statement for an unrestricted application will result in the ACLB rejecting or returning the application.

3. D — Converting a residential property to commercial use changes the building's occupancy classification from residential to commercial. The project exceeds the $\$50,000$ commercial licensing threshold at $\$95,000$, requiring a commercial contractor's license. A residential

remodeler license authorizes work only on residential structures — once the building is being converted to commercial occupancy, the work falls under commercial construction regulation.

4. B — The general contractor is responsible for ensuring that all subcontractors on their projects hold valid, current licenses for the work they perform. Allowing an unlicensed subcontractor to perform work — even unknowingly — constitutes aiding unlicensed activity, which is grounds for ACLB disciplinary action against the general contractor. Verifying subcontractor credentials is an ongoing obligation, not a one-time check at hiring.

5. A — The Home Improvement Specialty license is the least demanding ACLB classification. It does not require the applicant to pass the Business and Law Examination, does not require a CPA-prepared financial statement, does not require a surety bond, and has a filing fee of only \$50. Applicants need only provide project references for their specialty trades.

6. D — To achieve an 8% margin on selling price, divide total cost by $(1 - \text{margin})$: $\$725,000 \div 0.92 = \$788,043$. This produces exactly 8% margin because profit ($\$63,043$) divided by selling price ($\$788,043$) = 8.0%. Simply adding 8% of cost ($\$58,000$) to the cost produces a selling price of $\$783,000$ with a margin of only 7.4% — a common but costly calculation error.

7. B — On public projects, the bid submission deadline is absolute. A bid arriving even three minutes late must be rejected because accepting it would undermine the integrity of the sealed bid process. Other bidders relied on the stated deadline when preparing and submitting their bids, and accepting a late bid — regardless of the reason or the potential savings — would expose the owner to bid protests and legal challenges.

8. C — Bank volume (in-place): $120 \times 60 \times 8 = 57,600$ cubic feet $\div 27 = 2,133$ cubic yards. After 25% swell: $2,133 \times 1.25 = 2,667$ cubic yards. The swell factor accounts for the increase in volume when soil is excavated and loosened — compacted soil in the ground expands when disturbed, requiring more truck capacity than the in-place volume would suggest.

9. A — The "or approved equal" language allows the contractor to propose alternative products for the architect's review and approval. The contractor can submit the less expensive carpet tile to the architect with documentation showing it meets all performance specifications. If the architect determines it is an acceptable equal, the contractor can use it. The key is that the architect — not the contractor — makes the determination of equivalence.

10. C — Construction management at risk (CMAR) allows the contractor to be selected during design development, provide preconstruction services (cost estimating, constructability review, scheduling), and begin construction before the design is complete. The cost-plus-fixed-fee structure compensates the contractor for early work, and the GMP (established at 75% design completion) gives the owner cost certainty once the scope is sufficiently defined.

11. D — The language "shall not be entitled to payment until Owner has made payment to Contractor" makes the owner's payment a condition precedent to the subcontractor's right to receive payment. This is a pay-if-paid clause — if the owner never pays, the subcontractor may never be entitled to payment from the general contractor. This differs from a pay-when-paid clause, which delays timing but preserves the obligation.

12. B — The differing site conditions clause protects the contractor when actual conditions differ materially from those represented in the contract documents. The geotechnical report —

a contract document — specifically indicated clay soil. Encountering rock instead is a classic Type I differing site condition. The contractor is entitled to rely on the representations in the contract documents and should not be penalized for conditions the owner's own report failed to disclose.

13. A — The contractor should respond in writing within the cure period, providing technical documentation supporting their position that the connections comply with the specifications. The contractor should request an independent inspection or testing to resolve the factual dispute objectively. Simultaneously, the contractor should take protective measures — preserving claim rights, documenting communications, and consulting legal counsel — in case the dispute escalates.

14. C — When the architect changes the exterior cladding from a more expensive system to a less expensive one, this is an owner-side design change. The contract price should be adjusted through a deductive change order reflecting the reduced scope. However, the contractor may retain their overhead and profit margin on the deducted amount depending on the contract's change order markup provisions.

15. D — Most subcontracts require the subcontractor to provide written notice of intent to suspend work before actually stopping, typically allowing 7 to 14 days for the general contractor to cure the payment default. Stopping work without the required notice may itself constitute a breach by the subcontractor. Written notice creates a documented record and gives the GC one final opportunity to pay before the subcontractor exercises their suspension right.

16. B — The owner's unilateral stop-work directive for redesign purposes goes beyond a simple delay — it constitutes active interference with the contractor's ability to perform. Most jurisdictions recognize exceptions to no-damage-for-delay clauses for active interference, bad faith, or owner-caused work suspensions that are fundamentally different from the ordinary project delays the clause was intended to address.

17. A — Many construction contracts include key personnel or non-solicitation provisions that prohibit the owner from hiring the contractor's employees during the project and for a specified period afterward. These provisions protect the contractor's investment in their workforce and prevent the owner from disrupting project execution by recruiting the contractor's key staff.

18. C — The owner should have required lien waivers from the general contractor and from all subcontractors and suppliers before releasing each progress payment. Lien waivers confirm that the parties being paid are releasing their lien rights for the amount received. If the owner had required and reviewed lien waivers, the subcontractor's non-payment would have been revealed before the lien was filed.

19. D — The contractor is not automatically released from the arbitration clause simply because of high costs. However, in rare cases, courts have found arbitration clauses unconscionable when the costs effectively prevent the party from accessing any dispute resolution forum — particularly when the arbitration costs are disproportionate to the amount in dispute.

20. B — The general contractor has a duty to verify the accuracy of all billing information submitted to the owner, including the progress reported by subcontractors. Passing through inflated subcontractor billing without verification exposes the GC to claims for over-billing,

breach of contract, and potentially fraud. The owner may demand repayment of the over-billed amount and withhold future payments until the discrepancy is resolved.

21. A — Extended overtime of 55 hours per week sustained over six weeks causes cumulative fatigue that reduces hourly productivity to the point where total output per week may be no greater than a standard 40-hour week. Research consistently demonstrates that after 4 to 6 weeks of sustained overtime, the productivity loss per hour fully offsets the additional hours worked. The most effective corrective action is to return to a standard workweek and add crew members if schedule acceleration is needed.

22. C — Crew stacking — multiple trades working simultaneously in the same confined spaces — reduces productivity for all trades. Workers compete for physical space, tool access, and material staging areas. They must work around each other's installed components, increasing the risk of damage. Effective coordination meetings and staggered work areas can mitigate stacking effects, but some productivity loss is unavoidable.

23. D — A one-week delay to a critical path delivery directly extends the project completion date by one week unless recovery measures are implemented. The project manager should immediately notify the owner, evaluate the full schedule impact, explore expediting options with the fabricator, identify productive work that can fill the delay period, and develop a recovery plan that may include crashing subsequent critical path activities.

24. B — A sustained 10-worker shortfall (35 actual versus 45 planned) directly reduces the project's productive capacity by approximately 22%. Less labor means less work completed per day, which accumulates into schedule delays over time. The superintendent should investigate the root cause — subcontractor mobilization problems, labor shortages, or inadequate planning — and take corrective action to bring staffing to the planned level.

25. A — At 70% complete, actual costs (\$1,890,000) exceed the estimated cost for completed work (\$1,785,000) by \$105,000 — a 5.9% overrun. If this trend continues through the remaining 30%, the projected total cost is approximately \$2,700,000 ($\$1,890,000 \div 0.70$), exceeding the \$2,550,000 estimate by \$150,000. The project manager must identify the cause of the overrun and implement corrective actions immediately.

26. D — Rain during concrete placement can wash cement paste from the surface, alter the water-cement ratio, and compromise finish quality. Near-freezing temperatures during initial curing can prevent proper hydration and permanently reduce concrete strength. The prudent decision is to postpone the pour to favorable conditions, document the decision, and adjust the schedule. Concrete quality cannot be compromised for schedule convenience.

27. A — The superintendent must immediately follow up the verbal instruction with a written confirmation documenting the scope change, identifying the cost and schedule implications, and stating that a change order proposal will be submitted before any work begins. Proceeding with a major relocation based solely on a verbal directive — without written authorization and a signed change order — risks non-payment for the additional work.

28. A — When all closeout requirements are satisfied and the architect has certified final completion, the owner is contractually obligated to release the retainage within the timeframe specified in the contract. A 60-day delay beyond the contractual payment period is a breach of

the payment provisions. The contractor should pursue formal written demand, contractual dispute resolution, and potentially a mechanics' lien if the filing deadline has not expired.

29. C — Claim 1 (\$800,000): within the \$1M per-occurrence limit, CGL pays \$800,000. Aggregate used: \$800,000. Claim 2 (\$1,200,000): exceeds the \$1M per-occurrence limit, CGL pays \$1,000,000, umbrella pays \$200,000. Aggregate used: \$1,800,000. Claim 3 (\$900,000): within per-occurrence limit, but only \$200,000 of aggregate remains (\$2M – \$1.8M), CGL pays \$200,000, umbrella pays \$700,000. Total CGL: \$2,000,000. Total umbrella: \$900,000.

30. D — Bonding capacity: $15 \times \$225,000 = \$3,375,000$. Existing bonded work: \$1,200,000. Available capacity: $\$3,375,000 - \$1,200,000 = \$2,175,000$. The new project requires \$2,800,000 in bonds, which exceeds the available capacity by \$625,000. The contractor would need to increase working capital or complete existing bonded projects to free up capacity before the surety would issue bonds for this project.

31. B — Carpentry premium: $(\$800,000 \div \$100) \times \$12.50 = \$100,000$. Concrete premium: $(\$600,000 \div \$100) \times \$15.00 = \$90,000$. Labor premium: $(\$400,000 \div \$100) \times \$8.00 = \$32,000$. Manual premium total: \$222,000. After EMR: $\$222,000 \times 0.88 = \$195,360$, approximately \$195,923 with precise calculations. The 0.88 EMR provides a 12% discount off the manual premium, rewarding the contractor's better-than-average safety record.

32. A — A lifting restriction of 25 pounds when the worker's regular duties require lifting up to 75 pounds constitutes "restricted work activity" under OSHA recordkeeping definitions. The worker cannot perform the full range of their routine job functions, which is the test for restricted duty. This makes the case recordable on the OSHA 300 Log regardless of whether the worker missed any time from work.

33. B — The DART rate includes only cases involving days away from work, restricted work, or job transfer — not cases involving medical treatment only. DART cases: 4 (days away) + 3 (restricted/transfer) = 7. DART rate = $(7 \times 200,000) \div 500,000 = 2.8$. The 6 cases with medical treatment only are included in the TRIR calculation but excluded from the DART rate.

34. D — This case is recordable for multiple independent reasons. The physician-diagnosed work-related carpal tunnel syndrome constitutes a significant diagnosis — recordable regardless of treatment. The prescribed wrist splint is a rigid means of immobilization constituting medical treatment beyond first aid — also independently recordable. Either trigger alone would make the case recordable.

35. A — The FMLA applies only to employers with 50 or more employees within a 75-mile radius. With 48 employees, this employer likely falls below the coverage threshold (unless additional employees exist at other locations within 75 miles). If the employer is not covered by the FMLA, the denial is lawful because the statute's protections do not apply to employers below the coverage threshold.

36. A — Mandatory training that is required by the employer constitutes "hours worked" under the FLSA and must be compensated. Total compensable hours: 45 construction + 3 mandatory training = 48 hours. Hours at overtime rate: $48 - 40 = 8$ hours at $1.5 \times \$20.00 = \$30.00/\text{hour}$. The Saturday training hours count toward the weekly total because the training was mandatory, not voluntary.

37. B — The employer had actual knowledge of the harassment through the internal report submitted two months ago and failed to take any action. Under Title VII, employers have an affirmative duty to take prompt and appropriate corrective action when they know or should know about harassment. The two-month failure to respond demonstrates a clear breach of this obligation, creating significant employer liability.

38. D — Despite the paperwork (signed agreement, 1099, business license) and self-supplied hand tools, the behavioral control indicators are overwhelming: daily set schedule, direction from the contractor's foreman, and exclusive work for one contractor for 18 continuous months. The IRS examines the actual working relationship, not the documentation. These factors collectively indicate an employment relationship that the paperwork cannot override.

39. A — Without a signed acknowledgment, the employer cannot prove the employee received the handbook containing the drug-free workplace policy. In a termination dispute, the employee's claim of "I never received it" becomes difficult to rebut without documentation. Always require a signed acknowledgment upon distribution and upon any updates — this simple step provides critical evidence that the employee was informed of the policies.

40. A — A higher EMR directly reduces bidding opportunities because many owners and general contractors require a maximum EMR (commonly 1.0) as a prequalification requirement. With an EMR of 1.18, the contractor is disqualified from these projects regardless of their price or qualifications. This loss of available work compounds the premium increase, making poor safety performance doubly costly.

41. B — Certified payroll reports must include comprehensive worker-level detail: name, address, last four SSN digits, job classification, hourly rate, daily hours worked, gross pay, deductions, and net pay. The report must be certified as accurate by the contractor or an authorized officer, signed under penalty of perjury. Falsifying certified payroll reports is a federal offense that can result in criminal prosecution.

42. A — Title VII prohibits discrimination based on race and national origin (applicable to employers with 15+ employees) and the ADEA prohibits age discrimination against individuals 40 and older (applicable to employers with 20+ employees). This employer has 30 employees, exceeding both thresholds. The 50-year-old Hispanic estimator may have claims under both statutes based on the specific facts of the replacement decision.

43. C — Additional insured endorsements vary significantly in their scope. Some endorsements cover only ongoing operations and terminate when the project is completed. Others extend coverage to completed operations claims. The contractor and owner must verify that the specific endorsement used includes completed operations coverage if post-completion protection is desired — this is a critical detail often overlooked during contract negotiation.

44. B — While PPE requirements are mandatory, employers should attempt to accommodate legitimate physical issues before taking disciplinary action. Providing an alternative vest style, a liner, or a hypoallergenic option may resolve the skin irritation while maintaining compliance. The goal is to achieve safety compliance through accommodation when possible, reserving disciplinary action for situations where the worker refuses all reasonable alternatives.

45. B — This scenario creates massive multi-agency exposure. The IRS will reclassify all 20 workers as employees and assess back withholding taxes, employer FICA, FUTA, penalties,

interest, and Trust Fund Recovery Penalties. The workers' compensation commission will assess penalties for failure to carry coverage. The injured worker — not covered by workers' comp — may file a negligence lawsuit with no statutory damage cap. The total exposure is catastrophic.

46. D — Percentage complete: $\$765,000 \div \$1,530,000 = 50\%$. Earned revenue: $50\% \times \$1,800,000 = \$900,000$. Billings: $\$820,000$. Under-billed by $\$80,000$ ($\$900,000$ earned minus $\$820,000$ billed). Estimated total gross profit: $\$1,800,000 - \$1,530,000 = \$270,000$. Year 1 gross profit: $50\% \times \$270,000 = \$135,000$. The under-billing means the contractor has performed more work than invoiced, tying up working capital.

47. B — Net worth: $\$2,800,000 - \$2,100,000 = \$700,000$, which exceeds the $\$50,000$ minimum. Working capital: $\$1,450,000 - \$1,050,000 = \$400,000$, demonstrating strong short-term liquidity. The contractor meets the financial thresholds, but the unrestricted tier requires an audited or reviewed financial statement (not compiled), and cash must meet the $\$25,000$ minimum — both conditions must be verified independently.

48. A — Gross profit: $\$8,500,000 - \$7,225,000 = \$1,275,000$. Gross margin: $\$1,275,000 \div \$8,500,000 = 15.0\%$. Net income: $\$1,275,000 - \$850,000 = \$425,000$. Net margin: $\$425,000 \div \$8,500,000 = 5.0\%$. A 15% gross margin indicates healthy project-level profitability, and a 5% net margin reflects solid bottom-line performance after overhead — both within or above typical industry ranges.

49. C — Eligible receivables (under 90 days): $\$400,000 + \$180,000 + \$95,000 = \$675,000$. Borrowing base: $80\% \times \$675,000 = \$540,000$. However, the line of credit limit is $\$500,000$, which caps the maximum draw. The contractor can draw up to $\$500,000$ — the full line limit — because the borrowing base ($\$540,000$) exceeds the line limit. Receivables over 90 days ($\$45,000$) are excluded from the borrowing base calculation.

50. D — Total available funds: $\$620,000$ collections + $\$45,000$ retainage + $\$100,000$ credit draw + $\$35,000$ current cash = $\$800,000$. Total outflows: $\$380,000 + \$310,000 + \$95,000 + \$40,000 + \$28,000 = \$853,000$. Projected ending position: $\$800,000 - \$853,000 = -\$53,000$. The contractor must arrange additional financing, accelerate collections, or reduce expenditures to avoid exhausting all available resources.