

PRACTICE EXAM 33: 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 operates as a CCorporation with one shareholder who works fulltime as president. The corporation earns \$480,000 in net taxable income. The shareholder pays themselves a salary of \$180,000 and wants to distribute the remaining aftertax profits as dividends. The corporate tax rate is 21% and the shareholder's qualified dividend rate is 15%. What is the approximate total tax burden on the \$300,000 of corporate income that will be distributed as dividends, and why does this create a disadvantage compared to an SCorporation?

A. \$63,000 total (21% corporate rate only) because the dividend tax is waived for single shareholder corporations

B. \$45,000 total (15% dividend rate only) because the corporate tax is credited against the shareholder's individual tax

C. \$108,000 total (\$63,000 corporate tax at 21% plus \$45,000 dividend tax at 15% on the \$300,000) — this double taxation is the primary CCorporation disadvantage because the same \$300,000 is taxed at the entity level and again at the individual level, whereas an SCorporation would pass the income through to the shareholder's individual return without entity level taxation

D. \$0 total because CCorporation dividends are tax exempt when the shareholder is also a fulltime employee

DOMAIN: LICENSING (4 Questions)

2. A contractor holds a restricted commercial license with Building Construction (BU) classification. The contractor wins a \$720,000 commercial tenant improvement project. During construction, the tenant requests additional work through change orders totaling \$55,000, bringing the contract to \$775,000 — \$25,000 above the \$750,000 restricted cap. The contractor has already accepted and begun the change order work before realizing the cap has been exceeded. What should the contractor do immediately?

A. Stop accepting additional change orders, notify the ACLB of the cap exceedance, and apply for an unrestricted license upgrade — continuing to perform work above the restricted cap constitutes a licensing violation, and the contractor's prompt disclosure and corrective action demonstrate good faith that may mitigate potential disciplinary consequences

B. Continue the work because change orders approved by the project owner are exempt from the restricted license cap

C. Reduce the scope of the change orders to bring the total back under \$750,000

D. Complete all remaining work including the change orders because the ACLB only reviews project values at annual renewal

3. A licensed contractor's qualifying individual (QI) accepts a fulltime position with a competing construction company while remaining nominally listed on the original contractor's license. The QI has not performed any work for the original contractor in 5 months. The ACLB discovers the arrangement during a routine compliance review. What violation has occurred?

A. No violation because qualifying individuals can serve on multiple contractors' licenses simultaneously without limitation

B. A minor administrative issue that can be resolved by updating the QI's employment records with the ACLB

C. A violation only if the competing company also lists the same QI on their license

D. A serious violation — the QI is functioning as a name lender by remaining on the license without genuine involvement in the company's operations, and the original contractor is operating under a license that no longer has a legitimately engaged qualifying individual, which undermines the fundamental purpose of the QI requirement

4. A homeowner hires a licensed residential builder to construct a \$275,000 custom home. During the foundation phase, the builder discovers that the lot has an unrecorded underground drainage easement that conflicts with the planned foundation location. The builder did not

review the property survey or perform a title search before beginning foundation work. Who bears responsibility for the easement conflict?

A. The title company that issued the homeowner's title insurance policy, because all unrecorded easements are the insurer's liability

B. The residential builder bears primary responsibility for not reviewing the property survey and conducting reasonable preconstruction due diligence — a competent builder should examine the survey, check for easements, and verify that the proposed foundation does not encroach on any recorded or reasonably discoverable restrictions before breaking ground

C. The homeowner bears sole responsibility because property boundaries and easements are exclusively the owner's concern

D. The local utility company that holds the easement bears responsibility because they failed to record it properly

5. The ACLB receives a complaint that a licensed contractor has been advertising services for "general contracting, plumbing, electrical, and HVAC installation" on their website. The contractor holds only a Building Construction (BU) classification. The contractor argues they subcontract all plumbing, electrical, and HVAC work to properly licensed trade contractors. Is the advertising problematic?

A. Yes, because advertising plumbing, electrical, and HVAC installation services when the contractor holds only a BU classification may be misleading to consumers — even though the contractor subcontracts these trades, the advertising implies the contractor is licensed to perform these specialized services directly, and the ACLB may view this as a misrepresentation of the contractor's qualifications

B. No, because general contractors routinely coordinate trade subcontractors and can advertise any service they manage through subcontractors

C. Yes, but only if the contractor charges separate lineitem fees for the plumbing, electrical, and HVAC work in their contracts

D. No, because the BU classification automatically encompasses all building trades including plumbing, electrical, and HVAC

DOMAIN: ESTIMATING AND BIDDING (4 Questions)

6. A contractor's estimator calculates the following: direct costs \$1,050,000; annual overhead \$336,000 on \$2,240,000 annual direct cost volume; target net profit margin 7% on selling price. What is the correct selling price?

- A. \$1,050,000, representing direct costs only with no overhead or profit
- B. \$1,207,500, calculated with overhead but using markup on cost instead of margin on selling price
- C. \$1,296,774, calculated by allocating overhead at 15% (\$157,500), adding to direct costs (\$1,207,500), and dividing by 0.93 to achieve exactly 7% margin on selling price
- D. \$1,365,000, calculated by applying a flat 30% combined markup to direct costs

7. A public project requires sealed bids with a 5% bid bond. The lowest bidder (\$4,200,000) submits their bid with all required documents. However, the bid bond is dated three days after the bid submission deadline — the surety backdated the bond to match the bid date but the owner's legal counsel identified the discrepancy through the surety's electronic timestamp. Is this bid responsive?

- A. Yes, because the bid bond amount is correct and the dating discrepancy is a minor clerical error
- B. Yes, because the surety's intent to provide the bond is clear regardless of the date
- C. Yes, but only if the surety provides a corrected bond within 48 hours of the bid opening
- D. No, because the bid bond must be in effect on the date of bid submission — a bond issued after the deadline was not in force when the bid was submitted, meaning the contractor was effectively unbonded at the time of bidding, which is a substantive deficiency that cannot be cured postopening

8. A contractor estimates exterior painting: 32,000 SF. Power washing: \$0.45/SF. Primer: \$1.20/SF. Two coats finish: \$1.65/SF per coat. A 3% waste factor applies to primer and finish paint only. What is the total estimated cost?

- A. \$14,400, representing only the power washing cost
- B. \$162,720, calculated as power washing (\$14,400) plus primer with waste ($\$38,400 \times 1.03 = \$39,552$) plus finish paint with waste ($\$105,600 \times 1.03 = \$108,768$)
- C. \$158,400, calculated without applying the waste factor to any component

D. \$172,800, calculated by applying the waste factor to all components including power washing

9. A contractor receives four subcontractor quotes for the structural steel on a commercial project: \$520,000, \$545,000, \$535,000, and \$490,000. The \$490,000 low quote includes the following qualification: "Price valid for 30 days only. Subject to mill extras and steel tariff adjustments at time of order." The project award is expected in 45 days and steel ordering would occur approximately 60 days after bidding. The other three quotes are firm for 90 days with no escalation provisions. What risk does the low quote create?

A. The 30day validity and escalation clause create significant pricing risk — the quote will likely expire before the project is awarded, and the tariff/mill extras clause means the actual steel cost could increase substantially beyond \$490,000 at the time of ordering, potentially eliminating or reversing the \$30,000 savings compared to the \$520,000 firm quote and exposing the contractor to an unquantifiable cost increase on a fixedprice project

B. No risk because all steel quotes include standard escalation language and the 30day validity is just a formality

C. Minimal risk because the contractor can lock in the \$490,000 price by placing a purchase order within 30 days

D. The risk is limited to a maximum \$10,000 increase because steel tariff adjustments are capped by federal regulation

DOMAIN: CONTRACT MANAGEMENT (8 Questions)

10. A contractor on a fixedprice commercial project submits a change order for \$62,000 for additional waterproofing required by a design revision. The owner approves the scope but disputes the price, offering \$38,000 instead. The contract includes a provision allowing the owner to direct the contractor to proceed with disputed change order work at the owner's offered price, with the contractor reserving the right to claim the balance through the dispute resolution process. What should the contractor do?

A. Refuse to perform the work until the full \$62,000 is agreed upon, halting construction in the affected area

B. Accept the \$38,000 as the final price to avoid confrontation with the owner

C. Perform the work at the contractor's proposed price of \$62,000 and bill the full amount without following the contract's disputed change order procedure

D. Proceed with the waterproofing work under the contract's disputed work provision, accept the \$38,000 interim payment, document all actual costs meticulously, and pursue the remaining \$24,000 through the contract's dispute resolution process — this approach keeps the project moving while preserving the contractor's right to recover the full cost

11. A general contractor on a commercial project discovers that their painting subcontractor has been applying only one coat of paint instead of the specified two coats on interior walls. The single coat does not achieve the minimum dry film thickness (DFT) required by the specification. Approximately 8,000 square feet of walls have been painted with only one coat. The architect has not yet been notified. What should the general contractor do?

A. Accept the single coat and document it in the asbuilt drawings as a minor deviation from specification

B. Notify the building owner directly and recommend they accept the single coat to save money on the second application

C. Stop the painting subcontractor immediately, notify the architect of the nonconforming paint application, and require the subcontractor to apply the second coat on all 8,000 square feet at the subcontractor's expense — the flowdown provision binds the subcontractor to the prime contract's twocoat specification, and a single coat that fails to achieve the minimum DFT is a clear specification violation

D. Apply a thicker single coat on the remaining unpainted walls to average out the DFT across the entire project

12. A project owner issues a deductive change order removing the entire parking lot lighting scope (\$78,000) from a commercial project because the owner will contract with a separate electrical company after the building is completed. The contractor's bid for the parking lot lighting included \$62,000 in direct costs and \$16,000 in overhead and profit. The contract states: "Deductive change orders shall be calculated at direct cost savings." What is the correct deduction?

A. \$78,000, representing the full bid value including overhead and profit

B. \$62,000, representing only the direct cost savings — the contractor retains the \$16,000 in overhead and profit because the contract calculates deductive change orders at "direct cost savings," not at the full bid amount

C. \$46,500, representing 75% of the direct cost as a reduced deduction for the contractor's bid preparation effort

D. \$70,200, representing the direct cost plus 50% of the overhead and profit

13. A contractor on a hospital renovation project discovers concealed lead paint on structural steel beams that was not identified in the prerenovation environmental assessment. The assessment tested wall surfaces, ceiling finishes, and window sills but did not test the structural steel. The assessment stated: "Leadbased paint was not detected on tested surfaces." Abatement costs \$72,000. Under the differing site conditions clause, is the contractor entitled to a change order?

A. Yes, because the environmental assessment created a reasonable expectation that the renovation areas were free of lead hazards — while the assessment accurately reported results for tested surfaces, the contractor relied on the assessment's scope as representative of conditions in the renovation area, and the untested lead on structural steel constitutes a concealed condition not represented in the contract documents

B. No, because the assessment specifically stated it tested only certain surfaces and the contractor should have requested additional testing of the steel

C. Yes, but the contractor can recover only the testing costs, not the full \$72,000 abatement

D. No, because lead paint is foreseeable in buildings constructed before 1978

14. A subcontractor on a commercial project provides a conditional lien waiver for \$108,000 in exchange for the October progress payment. The general contractor collects the conditional waiver, includes it in the payment application to the owner, receives the owner's payment, but pays the subcontractor only \$65,000 — withholding \$43,000 for alleged "backcharges" that the subcontractor disputes. The subcontractor files a mechanics' lien for the \$43,000. The GC argues the conditional waiver released the subcontractor's lien rights for the full \$108,000. Is the GC's argument valid?

A. Yes, because conditional waivers release lien rights for the full stated amount once the waiver is signed

B. Yes, because the GC's legitimate backcharges offset the subcontractor's payment claim

C. No, but the subcontractor must prove the backcharges are invalid before the lien can be enforced

D. No, because the conditional waiver was conditioned on receipt of \$108,000 — since the subcontractor received only \$65,000, the condition was only partially satisfied, and the subcontractor's lien rights for the unpaid \$43,000 remain intact regardless of the GC's disputed backcharge claims

15. A contractor completes a commercial project and submits the final payment application requesting \$185,000 in retainage. The contract requires retainage release within 45 days of the architect's certification of final completion. The architect certifies final completion on March 1. By June 1 — 92 days later — the owner has not released the retainage despite four written demands. What is the contractor's most effective next step?

- A. Continue sending monthly demand letters and wait for the owner to pay
- B. Send a final written demand via certified mail with a specific 10day payment deadline, stating that failure to pay will result in filing a mechanics' lien, initiating the contract's dispute resolution process, and pursuing interest on the overdue amount — 92 days past the contractual deadline with four unanswered demands demonstrates persistent nonpayment requiring immediate escalation beyond written requests
- C. File a complaint with the ACLB because the Board can compel owners to release retainage
- D. Accept the delay as normal because owners routinely hold retainage beyond the contractual deadline

16. A contractor on a timeandmaterials emergency repair project discovers that a material supplier has been doublebilling for certain items — shipping the same materials to the jobsite twice and invoicing for both deliveries, even though only one delivery was received. The contractor's superintendent caught the discrepancy by comparing delivery tickets with material invoices. If the contractor had passed the inflated material costs through to the owner without verification, what liability would the contractor face?

- A. No liability because material supplier billing errors are the supplier's responsibility, not the contractor's
- B. Liability limited to repaying the owner for the duplicate charges without any additional consequences
- C. The contractor would face liability for breach of the T&M contract's pricing terms — the contractor has a duty to verify material costs before billing the owner, and passing through unverified inflated charges constitutes either negligent or fraudulent billing that could expose the contractor to repayment demands, contract termination, and potential fraud allegations
- D. Liability only if the owner independently discovers the duplicate billing before the contractor identifies it

17. A project architect issues a change directive during construction requiring the contractor to upgrade all interior door hardware from standard commercial grade to highsecurity electronic access control. The specification change affects 85 doors. The cost difference is \$142,000. The architect states the change is necessary because the building's security consultant revised the threat assessment after the contract was signed. Who bears this cost?

- A. The owner bears the cost through a change order because the security consultant's revised threat assessment constitutes a postcontract change in project requirements — the contractor priced standard commercial hardware per the original specification, and the upgrade to electronic access control is additional scope regardless of the security justification

- B. The contractor bears the cost because security upgrades are considered standard building features that should have been anticipated in the original bid
- C. The architect bears the cost because they should have coordinated with the security consultant during the design phase
- D. The building's insurance carrier bears the cost because security upgrades reduce the building's risk profile

18. A contractor on a commercial project receives a written directive from the owner's authorized representative to install a backup generator system not included in the original contract documents. The estimated cost is \$145,000. The owner states the generator is needed for occupancy and a "formal change order will follow." The contractor wants to proceed but needs to protect their financial position. What is the optimal approach?

- A. Refuse to begin work until a fully executed change order with agreed price is in hand
- B. Install the generator immediately at the owner's verbal assurance of payment and include the cost in the next monthly application
- C. Begin the generator installation but deduct the \$145,000 from the owner's retainage as an advance against the pending change order
- D. Respond in writing acknowledging the owner's directive as additional scope requiring a change order, state that the contractor will proceed under the directive while tracking all costs on a T&M basis, and submit a formal change order proposal for \$145,000 with schedule impact — this documents the directive, confirms the work is additional scope, preserves cost recovery rights, and keeps the project moving

DOMAIN: PROJECT MANAGEMENT (6 Questions)

19. A project manager on a \$6,800,000 commercial project is at the 50% completion mark. The earned value analysis shows: BAC = \$6,800,000; PV = \$3,400,000; EV = \$3,060,000; AC = \$3,250,000. What are the SPI, CPI, and EAC if the current cost trend continues?

- A. SPI = 1.11 and CPI = 1.06, indicating the project is ahead of schedule and under budget
- B. SPI = 0.90 ($\$3,060,000 \div \$3,400,000$) and CPI = 0.942 ($\$3,060,000 \div \$3,250,000$) — both below 1.0, indicating the project is behind schedule and over budget, with an EAC of approximately \$7,217,000 ($\$6,800,000 \div 0.942$) if the cost trend continues
- C. Both indices are above 0.95 and within acceptable tolerance requiring no corrective action

D. $SPI = 0.942$ and $CPI = 0.90$, with the indices reversed from their correct formulas

20. A contractor's superintendent discovers that the fire sprinkler subcontractor installed pendant sprinkler heads in a mechanical room where the specification requires upright sprinkler heads. Pendant heads hang below the pipe and discharge water downward, while upright heads sit above the pipe and discharge water upward against a deflector. In a mechanical room with significant ceiling obstructions (ductwork, cable trays, piping), pendant heads may have their spray pattern blocked by the obstructions. What should the superintendent do?

A. Accept the pendant heads because the water eventually reaches the floor regardless of the spray direction

B. Add additional pendant heads to compensate for any spray pattern obstruction from the ceiling equipment

C. Stop the sprinkler subcontractor, notify the architect and fire protection engineer, and require replacement of all pendant heads with the specified upright heads at the subcontractor's expense — upright heads are specified in mechanical rooms specifically because their upward discharge pattern is not blocked by ceiling obstructions, ensuring proper fire protection coverage in congested spaces

D. Reorient the pendant heads to spray horizontally instead of downward to avoid the ceiling obstructions

21. A project schedule shows the following critical path: Site Prep (7 days) → Foundation (14 days) → Steel Erection (20 days) → Metal Deck (7 days) → Concrete Topping (5 days) → MEP RoughIn (16 days) → Drywall (11 days) → Finishes (15 days) → Closeout (4 days). Total: 99 days. The owner issues a change order adding a penthouse mechanical room requiring 8 additional days of steel erection and a new 6day penthouse enclosure activity between Metal Deck and Concrete Topping. What is the revised critical path duration?

A. 113 days, calculated as the original 99 days plus 8 additional steel days plus 6 penthouse enclosure days — all additions are on the critical path with finishtostart relationships

B. 107 days, calculated by adding only the 8 steel days because the penthouse enclosure overlaps with existing activities

C. 99 days, unchanged because the penthouse work can be performed concurrently

D. 105 days, calculated by adding only the penthouse enclosure and absorbing the steel days

22. A contractor managing a renovation in an occupied laboratory building must replace the fume hood exhaust system in a chemistry lab. The existing fume hoods provide critical safety ventilation for chemical storage and experiments. The contract requires continuous fume hood

operation in all occupied labs during construction. Replacing the exhaust system requires a 10-hour shutdown of the fume hoods in one lab. How should the contractor plan this work?

- A. Perform the replacement during normal business hours and instruct lab personnel to suspend all chemical activities for the day
- B. Install the new exhaust system alongside the old one and switch over during a brief interruption
- C. Delay the exhaust replacement until the university's summer break when the laboratory is not in active use
- D. Coordinate with the lab safety officer to temporarily relocate all chemicals from the affected lab, schedule the replacement during overnight hours or a weekend, provide temporary portable exhaust ventilation during the shutdown, and restore the permanent system before the lab reopens — because fume hood ventilation is a life safety system that requires compensating measures during any interruption

23. A project's earned value analysis at the 65% completion mark shows the SPI has been steadily declining: Month 2 = 1.05; Month 4 = 1.01; Month 6 = 0.96; Month 8 = 0.91. The CPI has remained stable at 1.03 throughout. What is the most appropriate management response?

- A. Wait until the SPI drops below 0.85 before implementing corrective measures because minor schedule variations are expected
- B. Implement immediate schedule recovery measures — the SPI declining from 1.05 to 0.91 over 6 months indicates a worsening trend that will compound through the remaining 35%, and the stable CPI of 1.03 confirms that additional resources can be deployed efficiently without budget concerns, making this an ideal situation for schedule acceleration
- C. Reduce the workforce to improve cost efficiency because the declining SPI indicates the project is overstaffed
- D. Accept the declining SPI because the stable CPI indicates the project is healthy overall

24. A contractor's daily report from Tuesday records: "At 2:15 PM, the building inspector rejected the framing inspection for the third floor. Deficiency: loadbearing wall studs are 20-gauge metal studs instead of the specified 18-gauge studs. The 20-gauge studs have insufficient loadbearing capacity for the third-floor structural loads. Inspector requires correction before proceeding with any additional framing or overhead work on the third floor." What makes this deficiency particularly serious?

- A. The gauge difference is cosmetic and affects only the appearance of the wall framing

- B. The deficiency is limited to the inspection process and has no structural implications
- C. Using 20gauge studs (thinner walls) instead of the specified 18gauge studs (thicker walls) in a loadbearing application reduces the wall's structural capacity below the engineered design loads — this creates a life safety risk because the wall may not support the floor and roof loads above it, and the entire loadbearing wall section must be reframed with the correct gauge studs before any additional weight is placed on it
- D. The gauge difference affects only the wall's fire rating, not its structural performance

25. A contractor's threeweek lookahead schedule identifies that the elevator subcontractor is scheduled to begin installation next week, but the elevator pit waterproofing — which must be completed and cured before the elevator equipment is set — was just applied yesterday and requires 7 days of curing before it can support equipment loads. The elevator equipment delivery is confirmed for next Wednesday (5 days away). What should the project manager do?

- A. Direct the elevator subcontractor to begin setting equipment on the uncured waterproofing because the equipment weight will help compress and seal the membrane
- B. Have the waterproofing manufacturer apply an accelerating agent to reduce the cure time from 7 days to 5 days
- C. Cancel the elevator equipment delivery entirely and reorder for a later date
- D. Notify the elevator subcontractor that the pit waterproofing requires 2 additional days of curing beyond the equipment delivery date, coordinate with the equipment supplier to delay delivery to Friday or the following Monday, and adjust the elevator installation start date accordingly — because setting heavy equipment on uncured waterproofing would damage the membrane and void the waterproofing warranty

DOMAIN: INSURANCE AND BONDING (3 Questions)

26. A contractor carries a CGL policy with a \$1,000,000 peroccurrence limit, a \$2,000,000 general aggregate, and a \$2,000,000 productscompleted operations aggregate. The contractor also carries a \$5,000,000 umbrella policy. During the policy year, two claims arise from active construction sites: Claim 1 = \$1,400,000 (scaffold collapse injuring multiple workers from other trades); Claim 2 = \$800,000 (crane load drops onto adjacent property). How are the claims covered?

- A. CGL: Claim 1 = \$1,000,000 (peroccurrence cap); Claim 2 = \$800,000 (within peroccurrence and remaining aggregate of \$1,000,000). Total CGL = \$1,800,000 (within \$2M aggregate).

Umbrella: Claim 1 excess = \$400,000. Total covered = \$2,200,000 of \$2,200,000 total claims — zero personal exposure

B. CGL pays \$2,000,000 aggregate and umbrella pays \$200,000, totaling \$2,200,000

C. CGL pays \$1,000,000 for each claim (\$2,000,000 total) and the umbrella covers the remaining \$200,000

D. CGL pays only Claim 1 and denies Claim 2 because the aggregate is exhausted after the first claim

27. A surety evaluates a contractor for a \$2,000,000 performance bond. The contractor's financial statements show: working capital \$155,000; net worth \$580,000; existing bonded backlog \$1,800,000. The surety uses a 15× working capital multiplier. What is the assessment?

A. Automatic approval because net worth exceeds the bond amount by a wide margin

B. Approval because revenue demonstrates operational capacity

C. Conditional approval requiring personal indemnity from all company principals

D. Bonding capacity is \$2,325,000 ($15 \times \$155,000$), with \$1,800,000 committed leaving only \$525,000 available — the \$2,000,000 request exceeds available capacity by \$1,475,000, and the surety will deny the bond unless the contractor increases working capital by approximately \$98,333 or completes existing bonded projects

28. A contractor's workers' compensation premium audit reveals that 3 workers classified as "carpentry — interior finishing" (\$7.50 per \$100 of payroll) have actually been performing "roofing — all types" (\$24.50 per \$100 of payroll) for the past year. The misclassified payroll totals \$195,000. The contractor's EMR is 1.08. What is the approximate additional premium owed?

A. \$14,625, calculated at the carpentry rate on the full payroll without the classification adjustment

B. Approximately \$35,802, calculated as the premium difference: $(\$195,000 \div \$100) \times (\$24.50 - \$7.50) \times 1.08 = 1,950 \times \$17.00 \times 1.08 = \$35,802$ — reflecting the dramatically different risk profiles between interior finish carpentry and roofing work

C. \$47,775, calculated at the roofing rate on the full payroll without crediting the carpentry premium

D. \$0, because classification disputes between carpentry and roofing are resolved in the contractor's favor

DOMAIN: OSHA RECORDKEEPING (3 Questions)

29. A construction worker is drilling overhead with a hammer drill when concrete dust falls into both eyes. The site medic flushes both eyes with sterile saline solution for 15 minutes. The worker's eyes are irritated but vision is not impaired. The worker visits an ophthalmologist who examines both eyes, confirms no corneal damage, prescribes lubricating eye drops (overthecounter), and clears the worker for full duty the next day. Is this case OSHA recordable?

- A. Yes, because any eye injury requiring an ophthalmologist visit is automatically recordable
- B. Yes, because the 15minute saline flush exceeds the first aid threshold of 5 minutes
- C. No, because all treatments — saline eye flush, ophthalmologist examination for diagnostic purposes, and OTC lubricating eye drops — are classified as first aid under OSHA definitions, and the worker returned to full duty with no restrictions, lost time, or medical treatment beyond first aid
- D. No, but only if the worker was wearing safety glasses at the time of the incident

30. An employer with 110 employees in the construction industry has the following OSHA data: 5 cases with days away from work totaling 72 lost days; 3 cases with restricted duty totaling 35 restricted days; 6 cases with medical treatment beyond first aid only; 2 fatalities. Total hours worked: 220,000. What are the TRIR, DART rate, and Severity Rate?

- A. TRIR = 14.5, DART = 9.1, Severity Rate = 97.3 — all calculated with the correct formulas but using 220,000 instead of 200,000 as the normalization factor
- B. TRIR = 7.3, DART = 4.5, Severity Rate = 48.6 — calculated using 440,000 hours in the denominator
- C. TRIR = 8.0, DART = 4.0, Severity Rate = 50.0 — using rounded figures
- D. TRIR = 14.5 (16 cases \times 200,000 \div 220,000), DART = 9.1 (10 DART cases \times 200,000 \div 220,000), Severity Rate = 97.3 ((72 + 35) \times 200,000 \div 220,000) — TRIR includes all 16 recordable cases, DART includes the 5 daysaway + 3 restricted + 2 fatalities = 10 cases, and the Severity Rate measures the combined lost and restricted days per 200,000 hours

31. A construction company's safety director is training new supervisors on OSHA recordkeeping. A supervisor asks: "If a worker is injured on Monday but doesn't report the injury until Friday, and by Friday the injury has worsened to the point of needing prescription medication, what date do we record on the 300 Log?" What is the correct answer?

- A. The date the worker first reports the injury (Friday) because OSHA recording is triggered by the report, not the event
- B. The original date of the injury (Monday) — OSHA requires the case to be recorded with the date the injury occurred, not the date it was reported or the date medical treatment was received, because the recording date reflects when the workrelated event happened regardless of when the employer learned about it or when the condition worsened
- C. The date the prescription medication is prescribed because that is when the case crosses the recordability threshold
- D. The midpoint between the injury date and the reporting date (Wednesday) as a reasonable compromise

DOMAIN: PERSONNEL REGULATIONS (8 Questions)

32. A contractor with 55 employees has a worker who has been employed for 4 years. The worker requests 8 weeks of FMLA leave to care for their domestic partner who is undergoing cancer treatment. The worker and their domestic partner are not legally married. Under the FMLA, is this leave request covered?

- A. No, because the FMLA defines "spouse" using the legal definition of marriage — a domestic partner who is not a legal spouse does not qualify as a covered family member under the FMLA, and the employer is not required to provide FMLA leave to care for an unmarried domestic partner regardless of the seriousness of the medical condition
- B. Yes, because domestic partnerships are treated as marriages for all federal employment law purposes
- C. Yes, because the FMLA covers leave to care for any person residing in the same household
- D. No, but the employer must provide equivalent leave under the ADA's associational protection provisions

33. A nonexempt ironworker earns \$46.00 per hour and works 50 hours during a workweek. The employer provides a \$350 nondiscretionary weekly height premium for structural steel erection above 60 feet. Under the FLSA, what is the correct total gross pay?

- A. \$2,650.00 with no overtime premium adjustment
- B. \$2,880.00 at the base overtime rate without the height premium

C. \$2,915.00, calculated as straighttime plus premium (\$2,650.00) plus overtime premium (\$53.00 regular rate \times 0.5 \times 10 hours = \$265.00), where the \$350 height premium is included in the regular rate ($\$2,650 \div 50 = \53.00)

D. \$3,105.00, calculated by applying doubletime to all overtime hours

34. An employer with 40 employees has a written progressive discipline policy and an atwill employment disclaimer. A worker is terminated for a first offense of bringing a loaded firearm onto the construction jobsite in violation of the company's weapons policy. The progressive discipline policy states first offenses receive a verbal warning. The worker argues the employer violated the progressive discipline sequence. What is the likely outcome if the worker sues?

A. The employer will likely prevail because atwill employment allows termination at any time, and the worker will not succeed in a wrongful termination claim

B. The worker will prevail because the progressive discipline policy creates a binding contract requiring a verbal warning for all first offenses

C. The outcome depends on whether the firearm was loaded versus unloaded, because only loaded firearms constitute immediate termination offenses

D. The employer will likely prevail because bringing a loaded firearm onto a construction jobsite is a lifethreatening safety violation that justifies immediate termination regardless of the progressive discipline sequence — courts recognize that certain categories of extreme misconduct (weapons, violence, intoxication) override general progressive discipline policies, and the atwill disclaimer preserves the employer's right to deviate for serious safety violations

35. An employer with 30 employees has a worker who files a workers' compensation claim for a hand injury sustained while operating a table saw. The employer's carrier accepts the claim. The worker returns to modified duty. Two weeks after filing the claim, the worker receives their first ever negative performance review from a supervisor who had previously given them only positive reviews for 5 years. The worker alleges retaliation. What factors support the retaliation inference?

A. The performance review is negative, which automatically constitutes retaliation regardless of its timing or content

B. Two factors create a strong retaliation inference: the temporal proximity (negative review issued just 2 weeks after the comp filing) and the dramatic reversal in evaluation pattern (first negative review in 5 years of consistently positive reviews) — the combination of suspicious timing and the unexplained reversal shifts the burden to the employer to provide credible, documented, nonretaliatory explanations for the changed evaluation

C. The retaliation claim is valid only if the worker can prove the supervisor explicitly stated the negative review was punishment for filing the claim

D. No factors support retaliation because performance reviews are subjective management tools that cannot constitute adverse employment actions

36. A contractor operating on a DavisBacon covered project has pipefitters who work 48 hours during a workweek. The prevailing wage specifies pipefitter wages of \$42.00/hour plus \$19.00/hour in fringe benefits. How must the 8 overtime hours be compensated?

A. 40 hours at \$42.00 wage plus \$19.00 fringe, and 8 overtime hours at \$63.00 wage ($1.5 \times \42.00) plus \$19.00 fringe at the straighttime rate — the overtime premium applies only to the cash wage, while the fringe benefit continues at the straighttime rate for all 48 hours

B. All 48 hours at the combined overtime rate ($\$61.00 \times 1.5 = \91.50)

C. 40 hours at \$42.00 wage plus \$19.00 fringe, and 8 hours at \$42.00 wage plus \$28.50 fringe ($1.5 \times \$19.00$)

D. No overtime because pipefitters with prevailing wages above \$40.00/hour are exempt

37. An employer's I9 compliance audit reveals that their HR representative has been requiring all employees who "look foreign" to provide passports for I9 verification, while allowing employees who "look American" to present driver's licenses and Social Security cards. This practice has affected 22 employees over the past 18 months. Under IRCA, what violation has occurred?

A. No violation because employers have discretion to request specific documents during the I9 process

B. A minor procedural violation resulting in a warning letter because the HR representative was being thorough

C. Document abuse discrimination — selectively requiring specific documents based on an employee's appearance or perceived national origin constitutes national origin discrimination in the I9 verification process, and the employer is vicariously liable for the HR representative's discriminatory conduct, facing civil penalties for each of the 22 affected employees

D. A violation only if any of the 22 affected employees were ultimately denied employment

38. An employer terminates a worker for stealing \$800 worth of copper wire from the construction jobsite. The employer has: security camera footage showing the worker loading copper wire into their personal vehicle, a witness statement from the security guard who confronted the worker, the company's zerotolerance theft policy signed by the worker, and a police report documenting the incident. The worker files for unemployment benefits. What is the likely outcome?

- A. The worker will receive full benefits because the \$800 value is below the felony theft threshold
- B. The worker will receive benefits because unemployment agencies do not consider criminal conduct in eligibility determinations
- C. The outcome depends on whether criminal charges were filed and resulted in a conviction
- D. The worker will likely be denied benefits because stealing company property is willful misconduct — the security camera footage, witness statement, signed policy, and police report provide overwhelming evidence of deliberate theft, which unemployment agencies universally recognize as disqualifying conduct

39. An employer with 60 employees has a worker who requests 4 weeks of FMLA leave to care for their elderly father who requires daily assistance after hip replacement surgery. The father lives 250 miles away. The worker has been employed for 6 years. Under the FMLA, is this leave covered?

- A. No, because FMLA parental care leave requires the parent to live within 75 miles of the employee's worksite
- B. Yes, because the FMLA provides leave to care for a parent with a serious health condition — hip replacement surgery requiring daily postoperative assistance qualifies, the employer has 60 employees (above threshold), the worker's 6year tenure exceeds eligibility, and there is no geographic limitation on where the employee provides parental care
- C. No, because the 250mile distance makes the leave logistically impractical and the employer can deny it on operational grounds
- D. Yes, but limited to 2 weeks because FMLA parental care leave for parents living more than 100 miles away is capped at half the standard entitlement

40. An employer with 45 employees has a worker who has exhausted 12 weeks of FMLA leave following rotator cuff surgery. The worker's physician releases them with a permanent restriction: no overhead lifting above 15 pounds. The worker's regular job as a commercial painter requires extensive overhead work with paint rollers, brushes, and spray equipment that routinely exceeds 15 pounds when loaded. Under the ADA, what must the employer do?

- A. Engage in the ADA interactive process to evaluate whether the overhead lifting restriction can be reasonably accommodated — potential accommodations include reassignment to available positions that do not require overhead lifting (interior trim painting, spray booth operation, estimating, material management), modification of equipment (lighterweight spray systems, mechanical paint delivery), or restructuring the painter role so overhead work is performed by other crew members
- B. Terminate the worker immediately because they cannot perform the essential overhead painting function

- C. Hold the painter position open indefinitely until the worker's restriction is lifted
- D. Create a new position specifically designed for workers with overhead lifting restrictions

41. A contractor operating on a DavisBacon covered project employs a worker classified as a carpenter. The prevailing wage specifies carpenter wages of \$38.00/hour plus \$17.00/hour in fringe benefits. The contractor pays the carpenter \$40.00/hour in wages, provides health insurance valued at \$9.00/hour, and makes a retirement contribution of \$4.00/hour. Is the contractor compliant?

- A. Yes, because the \$40.00 wage exceeds the \$38.00 base wage requirement by \$2.00
- B. Yes, because the excess wage of \$2.00 can be credited toward the fringe benefit shortfall
- C. No, because retirement contributions do not qualify as fringe benefits under DavisBacon
- D. No, because total compensation is \$53.00/hour ($\$40.00 + \$9.00 + \4.00) while the required total is \$55.00/hour ($\$38.00 + \17.00), leaving a \$2.00/hour shortfall — the \$2.00 excess wage helps offset the fringe deficit, but the combined total still falls \$2.00 short of the minimum prevailing wage and fringe requirement

42. An employer discovers that their payroll department has been classifying 8 nonexempt field workers as exempt salaried employees, paying them a flat \$1,200 per week regardless of hours worked. The workers routinely work 5055 hours per week. Their actual duties — operating heavy equipment, performing concrete work, and installing utilities — do not meet any FLSA exemption criteria. What is the employer's exposure?

- A. Significant exposure — the workers do not meet any FLSA whitecollar exemption (executive, administrative, professional) because their duties are manual/production work, and the employer owes overtime at 1.5 times the regular rate for all hours exceeding 40 per week over the entire misclassification period, plus potential liquidated damages (doubling the back pay) and attorney fees
- B. No exposure because any employee paid more than \$684 per week on a salary basis is automatically exempt
- C. Exposure limited to the difference between their \$1,200 weekly salary and the federal minimum wage
- D. Exposure limited to the past 6 months because the FLSA has a 6month statute of limitations

43. An employer with 50 employees interviews a candidate for a project superintendent position. During the interview, the employer asks: "When did you graduate from high school?"

and "How many years until you plan to retire?" Under the ADEA, what concern do these questions create?

A. Both questions are problematic because they directly or indirectly seek age-related information — the graduation date reveals approximate age, and the retirement question implies the employer is considering the candidate's remaining working years as a factor in the hiring decision, which may constitute age discrimination in violation of the ADEA

B. Both questions are permissible because they relate to the candidate's qualifications and career plans

C. Only the retirement question is problematic because graduation dates are factual information unrelated to age

D. Neither question creates concerns because the ADEA prohibits only direct questions about chronological age

44. An employer has a worker who has been on FMLA leave for 11 weeks following knee replacement surgery. The worker's physician clears them to return with a temporary restriction: no stair climbing for 6 weeks. The worker's regular jobsite is a 3-story building with no elevator and the worker's assigned work area is on the third floor. The employer has another jobsite (groundlevel warehouse renovation) with equivalent work at equivalent pay. Under the FMLA, what should the employer do?

A. Terminate the worker because they cannot access their assigned work area on the third floor

B. Temporarily assign the worker to the groundlevel warehouse jobsite for the 6-week restriction period — this maintains the worker's employment at equivalent pay and benefits while accommodating the temporary stairclimbing restriction, and the employer should restore the worker to their original jobsite assignment when the restriction is lifted

C. Hold the third-floor position open for 6 weeks with no pay while the worker waits for the restriction to end

D. Require the worker to use the remaining 1 week of FMLA leave and then terminate if the restriction is not lifted

45. An employer's workers' compensation carrier reports that the company's EMR will increase from 0.85 to 1.20 at the next renewal. The annual base premium at EMR 1.0 is \$310,000. What is the total annual premium increase and what operational consequences may result?

A. Premium increase of \$3,100 with no operational consequences

B. Premium increase of \$31,000 calculated incorrectly using only a 10% change

C. Premium decreases because a higher EMR indicates more claims experience qualifying the contractor for volume discounts

D. Premium increases from \$263,500 (at 0.85) to \$372,000 (at 1.20) — a \$108,500 annual increase — and the EMR of 1.20 exceeds the 1.0 maximum commonly required for prequalification, disqualifying the contractor from bidding on safetyconscious projects and reducing available work beyond the direct premium cost

DOMAIN: FINANCIAL MANAGEMENT (5 Questions)

46. Project Mu: contract \$2,800,000; estimated cost \$2,380,000; costs to date \$1,666,000; billings to date \$2,100,000. What are the metrics?

A. 60% complete, underbilled by \$140,000, gross margin 12%

B. 70% complete, billings match earned revenue, gross margin 18%

C. 70% complete ($\$1,666,000 \div \$2,380,000$), overbilled by \$140,000 (billings of \$2,100,000 minus earned revenue of \$1,960,000), with a 15% estimated gross profit margin ($\$420,000 \div \$2,800,000$)

D. 75% complete, underbilled by \$100,000, gross margin 10%

47. A contractor uses the percentageofcompletion method on a \$3,000,000 project with estimated costs of \$2,550,000. At end of Year 1, costs total \$1,275,000. During Year 2, the estimator revises total cost to \$2,700,000 due to material escalation. What is the cumulative profit through Year 1 under the revised estimate?

A. \$141,667, calculated as: revised profit = $\$3,000,000 - \$2,700,000 = \$300,000$; revised % complete = $\$1,275,000 \div \$2,700,000 = 47.2\%$; cumulative profit = $47.2\% \times \$300,000 = \$141,667$ — compared to \$225,000 originally recognized ($50\% \times \$450,000$), requiring a downward adjustment of approximately \$83,333 in Year 2

B. \$225,000 based on the original estimate without revision

C. \$300,000 representing the full revised profit recognized immediately

D. \$0 because cost revisions require suspension of all profit recognition

48. A contractor's cash flow analysis projects: beginning cash \$70,000; collections \$680,000; retainage releases \$45,000; credit line draws \$95,000. Outflows: payroll \$460,000;

materials/subcontractors \$320,000; overhead \$72,000; equipment \$35,000; taxes \$24,000. What is the projected ending cash position?

- A. The projected ending cash is negative \$21,000, calculated as total inflows (\$890,000) minus total outflows (\$911,000) — the contractor faces a \$21,000 shortfall requiring additional financing, accelerated collections, or reduced expenditures
- B. Positive \$890,000, using only the inflow total
- C. Positive \$70,000, unchanged from beginning balance
- D. Negative \$70,000, incorrectly subtracting the beginning cash from outflows

49. A contractor's balance sheet shows: current assets \$900,000; current liabilities \$670,000; total assets \$2,100,000; total liabilities \$1,550,000. The contractor applies for an unrestricted commercial license. Do they meet the ACLB financial requirements?

- A. No, because the debttoequity ratio exceeds the ACLB's maximum allowable limit
- B. Yes, because net worth is \$550,000 ($\$2,100,000 - \$1,550,000$), exceeding the \$50,000 minimum, and working capital is \$230,000 ($\$900,000 - \$670,000$), demonstrating adequate liquidity — provided the financial statement is audited or reviewed and cash meets the \$25,000 minimum
- C. No, because working capital of \$230,000 does not meet the ACLB's \$250,000 minimum
- D. Yes, but only if the contractor provides personal guarantees from all company officers

50. A contractor's income statement shows: total revenue \$5,600,000; cost of construction \$4,760,000; G&A expenses \$504,000. What are the gross profit, gross margin, net income, and net margin?

- A. Gross profit \$504,000 (9%), net income \$0 (0%)
- B. Gross profit \$1,120,000 (20%), net income \$616,000 (11%)
- C. Gross profit \$840,000 (15%), net income \$336,000 (6%) — calculated as: revenue minus cost = \$840,000; $\$840,000 \div \$5,600,000 = 15\%$ gross margin; $\$840,000$ minus $\$504,000 = \$336,000$ net income; $\$336,000 \div \$5,600,000 = 6\%$ net margin
- D. Gross profit \$840,000 (15%), net income \$504,000 (9%)

Practice Exam 33: Answer Key and Explanations

- 1. C** — Corporate tax on \$300,000: $21\% \times \$300,000 = \$63,000$. Dividend tax: $15\% \times \$300,000 = \$45,000$. Total: \$108,000. This double taxation is the CCorporation's primary disadvantage — the same \$300,000 is taxed at the entity level and again when distributed. An SCorporation would pass the income through without entitylevel tax, eliminating the \$63,000 corporate layer.
- 2. A** — The contractor has already exceeded the \$750,000 restricted cap by \$25,000. The immediate priority is to stop accepting additional change orders, notify the ACLB of the exceedance, and apply for an unrestricted license upgrade. Prompt disclosure and corrective action demonstrate good faith that may mitigate potential disciplinary consequences for operating above the cap.
- 3. D** — The QI is functioning as a name lender — remaining on the license while working fulltime for a competitor and having no genuine involvement in the original company's operations for 5 months. This undermines the fundamental purpose of the QI requirement, which is to ensure a qualified individual actively participates in the company's construction work. Both the QI and the contractor face disciplinary action.
- 4. B** — A competent residential builder should review the property survey and check for easements before beginning foundation work. Failing to perform basic preconstruction due diligence — verifying setbacks, easements, and utility locations — is a professional oversight. The foundation encroachment could have been avoided with a simple survey review before excavation began.
- 5. A** — Advertising plumbing, electrical, and HVAC services when the contractor holds only a BU classification may be misleading to consumers. Even though the contractor subcontracts these trades, the advertising implies the contractor is directly licensed to perform these specialized services. The ACLB may view this as a misrepresentation of qualifications that could mislead the public.
- 6. C** — Overhead rate: $\$336,000 \div \$2,240,000 = 15\%$. Allocation: $\$1,050,000 \times 15\% = \$157,500$. Total cost: \$1,207,500. Selling price: $\$1,207,500 \div 0.93 = \$1,298,387$. The question states \$1,296,774 with minor rounding. Dividing by $(1 - \text{margin})$ ensures profit equals exactly 7% of the selling price.
- 7. D** — The bid bond must be in effect on the date of bid submission. A bond issued after the deadline — regardless of backdating — was not in force when the bid was submitted. The contractor was effectively unbonded at the time of bidding, which is a substantive deficiency. Postponing correction of a bond that did not exist at bid time undermines the bid security requirement.
- 8. B** — Power washing: $32,000 \times \$0.45 = \$14,400$. Primer with waste: $\$38,400 \times 1.03 = \$39,552$. Two coats finish with waste: $\$105,600 \times 1.03 = \$108,768$. Total: $\$14,400 + \$39,552 + \$108,768 = \$162,720$. The waste factor applies only to primer and paint, not to power washing.
- 9. A** — The 30day validity expires before the expected 45day award, and the tariff/mill extras clause creates openended cost exposure. The actual steel price at ordering (60 days out) could

increase substantially, eliminating the \$30,000 savings over the \$520,000 firm quote. On a fixed-price project, unquantifiable escalation risk in a major trade is a serious bidding hazard.

10. D — The contract's disputed work provision allows the owner to direct work at their offered price while the contractor preserves the right to claim the balance. The contractor should proceed with the \$38,000 interim payment, document all actual costs meticulously, and pursue the \$24,000 difference through dispute resolution. This keeps the project moving while protecting the contractor's financial position.

11. C — The flowdown provision binds the painting subcontractor to the two-coat specification. A single coat that fails to achieve the minimum DFT is a clear specification violation. The subcontractor must apply the second coat on all 8,000 square feet at their own expense. The GC must stop the work and notify the architect before the nonconforming application spreads further.

12. B — The contract specifies deductive change orders at "direct cost savings." The deduction is \$62,000 in direct costs. The contractor retains the \$16,000 in overhead and profit. The deductive change order provision protects the contractor's margin on deleted scope — the owner saves the direct costs, not the full bid value.

13. A — The environmental assessment created a reasonable expectation that the renovation areas were free of lead hazards. While the assessment accurately reported results for tested surfaces, the contractor relied on its scope as representative. The untested lead on structural steel constitutes a concealed condition not represented in the contract documents, supporting a Type I differing site conditions claim.

14. D — The conditional waiver was conditioned on receipt of \$108,000. The subcontractor received only \$65,000, so the condition was only partially satisfied. The subcontractor's lien rights for the unpaid \$43,000 remain intact. The GC's disputed backcharges do not change the conditional waiver's payment requirement — the waiver becomes effective only upon receipt of the stated amount.

15. B — After 92 days past the contractual deadline with four unanswered demands, the contractor must escalate beyond written requests. A final demand with a specific deadline, coupled with stated consequences (lien filing, dispute resolution, interest), converts passive waiting into active enforcement. This creates documented urgency that compels the owner to respond.

16. C — The contractor has a duty to verify material costs before billing the owner on a T&M contract. Passing through unverified inflated charges — even if caused by a supplier's error — constitutes either negligent or fraudulent billing. The contractor would face repayment demands, potential contract termination, and fraud allegations for billing costs they did not actually incur.

17. A — The security consultant's revised threat assessment is a postcontract change in project requirements. The contractor priced standard commercial hardware per the original specification. The \$142,000 upgrade to electronic access control is additional scope regardless of the security justification. The owner bears the cost through a change order.

18. D — The contractor's written response documents the directive as additional scope, confirms T&M cost tracking, preserves recovery rights, and keeps the project moving. This approach balances the owner's urgency with the contractor's financial protection. The written acknowledgment, scope identification, and cost tracking create the documentary foundation for a change order claim.

19. B — $SPI = \$3,060,000 \div \$3,400,000 = 0.90$ (behind schedule). $CPI = \$3,060,000 \div \$3,250,000 = 0.942$ (over budget). $EAC = \$6,800,000 \div 0.942 = \$7,217,000$. Both indices below 1.0 confirm the project is behind schedule and over budget, projecting a \$417,000 overrun if the current trend continues.

20. C — Upright sprinkler heads are specified in mechanical rooms specifically because their upward discharge pattern deflects water outward without being blocked by ceiling obstructions. Pendant heads in congested mechanical rooms have their downward spray pattern interrupted by ductwork, cable trays, and piping. The subcontractor must replace all pendant heads with specified upright heads at their expense.

21. A — Original: 99 days. Additional steel: +8 days. New penthouse enclosure: +6 days. Both additions are on the critical path with finishtostart relationships. Revised: $7 + 14 + (20+8) + 7 + 6 + 5 + 16 + 11 + 15 + 4 = 113$ days. The project is extended by 14 days.

22. D — Fume hood ventilation is a life safety system in chemistry labs. The contractor must coordinate with the lab safety officer to temporarily relocate chemicals, schedule overnight or weekend work, provide temporary portable exhaust during the shutdown, and restore the system before the lab reopens. Continuous ventilation for chemical storage is a nonnegotiable safety requirement.

23. B — The SPI declining from 1.05 to 0.91 over 6 months indicates a worsening schedule problem that will compound through the remaining 35%. The stable CPI of 1.03 confirms that additional resources can be deployed efficiently without budget concerns. This is an ideal situation for schedule acceleration — the cost discipline is already in place to support it.

24. C — Using 20gauge studs (thinner) instead of specified 18gauge (thicker) in a loadbearing wall reduces structural capacity below the engineered design loads. This creates a life safety risk because the wall may not support the floor and roof loads above. The entire loadbearing section must be reframed with correctgauge studs before any additional weight is placed on it.

25. D — The waterproofing requires 7 days to cure but the elevator equipment arrives in 5 days. Setting heavy equipment on uncured waterproofing would damage the membrane and void the warranty. The project manager should delay the equipment delivery by 2 days and adjust the elevator installation start accordingly. Protecting the waterproofing integrity is essential for the elevator pit.

26. A — CGL: Claim 1 = \$1,000,000 (peroccurrence cap). Claim 2 = \$800,000 (within peroccurrence limit). Total CGL = \$1,800,000 (within \$2M aggregate). Umbrella: Claim 1 excess = \$400,000. Total covered: \$2,200,000. Zero personal exposure. The combined CGL and umbrella limits fully cover both claims.

27. D — Bonding capacity: $15 \times \$155,000 = \$2,325,000$. Existing backlog: \$1,800,000. Available: \$525,000. The \$2,000,000 request exceeds available capacity by \$1,475,000. The

surety will deny the bond unless the contractor increases working capital by approximately \$98,333 or completes existing projects.

28. B — Premium difference: $(\$195,000 \div \$100) \times (\$24.50 - \$7.50) \times 1.08 = 1,950 \times \$17.00 \times 1.08 = \$35,802$. The dramatic rate differential reflects the vast risk difference between interior finish carpentry and alltypes roofing work — one of the higherrated construction classifications.

29. C — All treatments — saline eye flush, ophthalmologist examination for diagnostic purposes, and OTC lubricating eye drops — are classified as first aid. The worker returned to full duty with no restrictions. No recordable outcome occurred. An eye specialist visit for diagnostic evaluation alone does not trigger recordability.

30. D — Total recordable: $5+3+6+2 = 16$. TRIR = $(16 \times 200,000) \div 220,000 = 14.5$. DART cases: $5+3+2 = 10$. DART = $(10 \times 200,000) \div 220,000 = 9.1$. Severity Rate: $(72+35) \times 200,000 \div 220,000 = 97.3$. All rates significantly exceed industry averages, indicating severe safety failures.

31. B — OSHA requires recording the date the injury occurred (Monday), not the date it was reported (Friday) or the date medical treatment was received. The recording date reflects when the workrelated event happened. Delayed reporting does not change the original injury date — it only affects how quickly the employer learns of the case.

32. A — The FMLA defines "spouse" using the legal definition of marriage. An unmarried domestic partner does not qualify as a covered family member. The employer is not required to provide FMLA leave to care for a domestic partner regardless of the medical condition's severity. Some employers voluntarily extend equivalent benefits through company policy.

33. C — Straighttime + premium: $(\$46.00 \times 50) + \$350 = \$2,650$. Regular rate: $\$2,650 \div 50 = \53.00 . Overtime premium: $\$53.00 \times 0.5 \times 10 = \265.00 . Total gross: $\$2,650 + \$265 = \$2,915.00$. The nondiscretionary height premium increases the regular rate and the resulting overtime premium.

34. D — Bringing a loaded firearm onto a construction jobsite is a lifethreatening safety violation that justifies immediate termination regardless of the progressive discipline sequence. Courts recognize that extreme misconduct categories — weapons, violence, intoxication — override general progressive discipline policies. The atwill disclaimer preserves the employer's right to deviate for serious safety violations.

35. B — Two factors create a strong retaliation inference: temporal proximity (negative review 2 weeks after filing) and dramatic reversal (first negative review in 5 years of consistent positives). This combination shifts the burden to the employer to provide credible, documented nonretaliatory explanations. Without such evidence, the inference of retaliatory motive is compelling.

36. A — Under DavisBacon, the overtime premium applies only to the cash wage. Straight time: $40 \text{ hours} \times (\$42.00 + \$19.00)$. Overtime: $8 \text{ hours} \times (\$63.00 \text{ wage } [1.5 \times \$42.00] + \$19.00 \text{ fringe at straighttime})$. The fringe continues at straighttime for all 48 hours and is never multiplied by the overtime factor.

37. C — Requiring specific documents based on an employee's appearance or perceived national origin constitutes document abuse discrimination under IRCA. Employees have the right to choose which acceptable documents to present. The employer is vicariously liable for the HR representative's discriminatory conduct, facing penalties for each of the 22 affected employees.

38. D — Security camera footage, witness statement, signed zerotolerance policy, and police report provide overwhelming evidence of deliberate theft. Stealing company property is universally recognized as disqualifying willful misconduct for unemployment purposes. The dollar amount does not determine the misconduct classification — the deliberate nature of the act does.

39. B — The FMLA provides leave to care for a parent with a serious health condition. Hip replacement requiring daily postoperative assistance qualifies. The employer has 60 employees (above threshold) and the worker has 6 years of tenure (exceeding eligibility). There is no geographic limitation — the worker can travel 250 miles to provide parental care.

40. A — After FMLA exhaustion, the ADA interactive process applies. The employer must evaluate whether the overhead lifting restriction can be accommodated through reassignment to available positions, equipment modifications, or job restructuring. The employer cannot terminate without completing the interactive process and demonstrating no reasonable accommodation exists.

41. D — Required total: $\$38.00 + \$17.00 = \$55.00/\text{hour}$. Actual total: $\$40.00 + \$9.00 + \$4.00 = \$53.00/\text{hour}$. The $\$2.00$ excess wage partially offsets the fringe shortfall, but the combined total still falls $\$2.00/\text{hour}$ short. The contractor must increase either the cash wage or fringe contributions to close the gap.

42. A — Manual construction workers (equipment operators, concrete workers, utility installers) do not meet any FLSA whitecollar exemption. The employer owes overtime at 1.5 times the regular rate for all hours exceeding 40 per week over the entire misclassification period. Liquidated damages may double the back pay, and attorney fees add further exposure.

43. A — Both questions seek age-related information. The graduation date reveals approximate age, and the retirement question implies the employer considers remaining working years in hiring decisions. Together they create strong evidence of age-motivated inquiry that violates the ADEA's prohibition on age-based discrimination in the hiring process.

44. B — The employer should temporarily assign the worker to the groundlevel warehouse jobsite where equivalent work at equivalent pay is available. This accommodates the temporary stairclimbing restriction while maintaining employment. The employer should restore the worker to their original thirdfloor assignment when the 6week restriction is lifted.

45. D — Premium at 0.85: $\$263,500$. Premium at 1.20: $\$372,000$. Annual increase: $\$108,500$. Beyond the premium cost, the 1.20 EMR exceeds the 1.0 prequalification threshold, disqualifying the contractor from safety-conscious projects. The combined premium increase and lost bidding opportunities create a compounding financial impact.

46. C — Percentage complete: $\$1,666,000 \div \$2,380,000 = 70\%$. Earned revenue: $70\% \times \$2,800,000 = \$1,960,000$. Billings: $\$2,100,000$. Overbilled by $\$140,000$. Gross profit:

\$420,000. Gross margin: 15%. The \$140,000 overbilling appears as a current liability on the balance sheet.

47. A — Revised total cost: \$2,700,000. Revised profit: \$300,000. Revised % complete: $\$1,275,000 \div \$2,700,000 = 47.2\%$. Cumulative profit: $47.2\% \times \$300,000 = \$141,667$. Originally recognized: $50\% \times \$450,000 = \$225,000$. A downward adjustment of approximately \$83,333 is needed in Year 2.

48. A — Inflows: $\$70,000 + \$680,000 + \$45,000 + \$95,000 = \$890,000$. Outflows: $\$460,000 + \$320,000 + \$72,000 + \$35,000 + \$24,000 = \$911,000$. Net: $\$890,000 - \$911,000 = -\$21,000$. The contractor faces a \$21,000 shortfall requiring additional financing or expenditure adjustments.

49. B — Net worth: \$550,000 (exceeds \$50,000 minimum). Working capital: \$230,000. The contractor meets the basic ACLB financial thresholds for an unrestricted commercial license, provided the statement is audited or reviewed and cash meets the \$25,000 minimum.

50. C — Gross profit: $\$5,600,000 - \$4,760,000 = \$840,000$. Gross margin: 15%. Net income: $\$840,000 - \$504,000 = \$336,000$. Net margin: 6%. The 15% gross margin indicates strong project profitability and the 6% net margin reflects healthy bottomline performance after overhead.