

# PRACTICE EXAM 34: ARKANSAS BUSINESS AND LAW SIMULATION (50 QUESTIONS)

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**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 sole proprietor contractor earns \$300,000 in net business income. The contractor's CPA advises forming an LLC with SCorporation election and setting a reasonable salary at \$150,000, taking the remaining \$150,000 as a distribution. The contractor asks how much they would save annually in selfemployment taxes compared to remaining a sole proprietor. Approximately how much does the SCorporation structure save, and what is the primary tradeoff?

A. Approximately \$21,195 in annual FICA savings on the \$150,000 distribution (avoiding the 15.3% SE tax on the portion below the wage base and 2.9% on the excess), but the tradeoff is mandatory payroll administration including W2 processing, quarterly 941 filings, annual 940 filings, workers' compensation on the salary, and compliance with all employer payroll obligations

B. \$0 because the IRS treats all LLC income identically regardless of the SCorporation election

C. \$45,900 calculated at 15.3% on the full \$300,000 because the SCorporation eliminates all employment taxes

D. \$7,500 representing a flat annual tax credit available to all SCorporation shareholders

**DOMAIN: LICENSING (4 Questions)**

2. A contractor holds a restricted commercial license with a Highway Construction (HY) classification. The contractor bids on and wins a \$680,000 project to build a concrete box culvert and associated roadway approach work for a county government. During construction, the county adds a pedestrian bridge adjacent to the culvert through a \$90,000 change order. The revised contract value is \$770,000. The restricted license caps projects at \$750,000. What should the contractor have done before accepting the change order?

A. Nothing, because highway construction change orders are exempt from the restricted license cap

B. Accepted the change order because the original bid was under \$750,000 and change orders cannot create licensing violations

C. Recognized that the \$90,000 change order would push the contract value above the \$750,000 cap and contacted the ACLB before accepting — either to apply for an unrestricted license upgrade or to obtain Board guidance on how to proceed without creating a licensing violation

D. Rejected the pedestrian bridge because bridges require a separate Bridge Construction classification

3. A licensed contractor in Arkansas is approached by an outofstate developer who wants the contractor to perform a \$2,100,000 commercial project in Tennessee. Tennessee requires a separate state contractor's license. The contractor does not hold a Tennessee license. The developer says: "Just pull permits under our company name — we have a Tennessee license." What risk does this arrangement create for the Arkansas contractor?

A. No risk because the developer's Tennessee license covers all parties working on the project

B. Significant risk — performing construction work under another entity's license is a form of name lending/license fraud that violates both Tennessee and Arkansas licensing laws, and the Arkansas contractor could face ACLB disciplinary action for participating in a fraudulent licensing arrangement even though the work occurs in another state

C. Risk limited to a fine from the Tennessee licensing board with no impact on the Arkansas license

D. No risk because outofstate work is outside the ACLB's jurisdiction entirely

4. The ACLB conducts a random financial review of a licensed contractor and discovers that the contractor's net worth has dropped from \$85,000 (at the time of license renewal 6 months

ago) to \$28,000 due to project losses. The unrestricted commercial license requires a minimum net worth of \$50,000. What action can the Board take?

A. No action because the ACLB reviews financial status only at the time of annual renewal, not during the license period

B. A warning letter advising the contractor to restore net worth within 12 months

C. No action because the \$50,000 minimum applies only to initial license applications, not to ongoing operations

D. The ACLB can take action because maintaining minimum financial qualifications is a continuing condition of licensure — operating below the \$50,000 net worth minimum may result in license suspension, a requirement to provide additional financial security, or downgrade to the restricted tier until the financial position is restored

5. A contractor holds both a residential builder license and a restricted commercial license. A church asks the contractor to build a \$420,000 fellowship hall with a commercial kitchen, assembly hall, restrooms, and a small office. The building will be used for church events, community meetings, and occasional meal service. Which license applies to this project?

A. The restricted commercial license applies because a church fellowship hall is a commercial occupancy — the building's institutional and public assembly use places it outside the residential classification regardless of the construction methods, and the \$420,000 value is within the restricted commercial cap of \$750,000

B. The residential builder license applies because the fellowship hall uses residential construction methods (wood framing, residentialstyle kitchen)

C. Neither license applies because religious buildings require a special institutional construction license

D. Either license can be used because fellowship halls are classified as mixeduse structures

#### **DOMAIN: ESTIMATING AND BIDDING (4 Questions)**

6. A contractor's estimator is preparing a bid for a commercial building. The project includes 9,500 square feet of structural steel deck with concrete topping. The metal deck costs \$8.50 per square foot installed. The concrete topping is 3 inches thick at \$172 per cubic yard with a 4% waste factor. Finishing labor is \$1.90 per square foot. What is the total estimated cost for the deck system?

A. \$80,750, representing only the metal deck without concrete topping or finishing

- B. \$98,800, calculated without the waste factor on concrete and without finishing labor
- C. \$114,535, calculated as metal deck (\$80,750) plus concrete with waste ( $91.48 \text{ CY} \times \$172 = \$15,735$ ) plus finishing labor (\$18,050)
- D. \$130,000, calculated using a 6inch topping thickness instead of the specified 3 inches

7. A public project requires all bidders to submit a list of subcontractors who will perform work exceeding 5% of the contract value. The apparent low bidder lists "TBD" (to be determined) for the mechanical subcontractor, which represents 18% of the total bid. The bid documents require the actual subcontractor name, license number, and scope for all listed trades. Is the bid responsive?

- A. Yes, because "TBD" indicates the contractor intends to solicit competitive mechanical quotes after award, which benefits the owner
- B. No, because listing "TBD" instead of an actual subcontractor name, license number, and scope fails to comply with the mandatory subcontractor listing requirement — the bid documents require specific identification of subcontractors performing more than 5% of the work, and "TBD" does not satisfy this requirement
- C. Yes, because the 5% threshold applies only to subcontractors who have already been selected, not to trades still under negotiation
- D. No, but the contractor can provide the subcontractor information within 10 days of the bid opening to cure the deficiency

8. A contractor needs to estimate the labor cost for installing 20,000 square feet of suspended acoustical ceiling tile in a commercial office building. The ceiling installation crew consists of 5 workers at a loaded rate of \$42.00 per hour each. The crew's combined daily productivity is 500 square feet per 8hour day. What is the estimated total labor cost?

- A. \$33,600, calculated using only 2 workers instead of the specified 5worker crew
- B. \$50,400, calculated using a 6hour day instead of an 8hour day
- C. \$84,000, calculated by doubling the estimated duration to account for aboveceiling coordination
- D. \$67,200, calculated as: total days =  $20,000 \div 500 = 40$  days; total labor hours =  $40 \times 8 \times 5 = 1,600$  hours; total cost =  $1,600 \times \$42.00 = \$67,200$

9. A contractor is bidding on a commercial renovation and receives two electrical subcontractor quotes: Sub A at \$285,000 (firm price, 90day validity, includes all specification requirements) and Sub B at \$258,000 (price valid 21 days, excludes fire alarm, excludes lowvoltage wiring).

The fire alarm and lowvoltage wiring scopes total approximately \$42,000 based on historical pricing. What should the estimator do?

- A. Normalize both quotes to comparable scope — Sub B's adjusted price is approximately \$300,000 (\$258,000 + \$42,000 for excluded scope), making Sub A's complete \$285,000 quote the better value with lower risk due to its 90day firm pricing and complete scope coverage
- B. Use Sub B's \$258,000 quote because it is the lowest price and the excluded scope can be negotiated after award
- C. Average the two quotes at \$271,500 and use the average as the electrical budget
- D. Reject both quotes and request new pricing from at least three additional electrical subcontractors

**DOMAIN: CONTRACT MANAGEMENT (8 Questions)**

10. A contractor on a fixedprice commercial project encounters a 4inchthick concrete slab during demolition where the contract documents showed a 2inch mud slab. The thicker slab requires heavier demolition equipment and additional disposal costs totaling \$28,000. The contract includes a differing site conditions clause. Under this clause, is the contractor entitled to additional compensation?

- A. No, because experienced demolition contractors should anticipate variations in existing slab thickness
- B. No, because the \$28,000 amount is too small to qualify as a material difference under the differing site conditions clause
- C. Yes, because the contract documents represented a 2inch mud slab and the actual condition (4inch structural slab) differs materially from what was represented — the contractor relied on the document representation when pricing the demolition, and the thicker slab required different equipment and produced more waste
- D. Yes, but only if the contractor can prove the slab was poured at a different thickness than originally designed

11. A general contractor receives a change order adding \$175,000 of additional exterior cladding. The contractor will subcontract \$140,000 of metal panel installation and selfperform \$35,000 of structural framing for the panel supports. The contract allows 15% markup on selfperformed work and 8% on subcontracted work. What is the total billable change order amount?

- A. \$175,000 with no markup applied
- B. \$191,450, calculated as selfperformed ( $\$35,000 \times 1.15 = \$40,250$ ) plus subcontracted ( $\$140,000 \times 1.08 = \$151,200$ )
- C. \$201,250, calculated at 15% on the full \$175,000
- D. \$183,750, calculated at a blended 5% markup

12. A project owner issues a written directive requiring all construction workers to wear highvisibility safety vests meeting ANSI Class 3 standards on the jobsite. The original contract required only ANSI Class 2 vests. Class 3 vests cost approximately \$15 more per vest than Class 2. The contractor has 45 workers on the project and estimates the upgrade cost at \$675 plus administrative time. What should the contractor do?

- A. Comply immediately and absorb the \$675 cost because the amount is too small to warrant a change order
- B. Refuse to comply because the contract specifies Class 2 vests and the owner cannot change safety equipment requirements
- C. Purchase Class 3 vests and deduct the cost from the owner's retainage without a formal change order
- D. Submit a change order for the cost difference — while \$675 is relatively small, the principle is important because the owner's postcontract directive to upgrade from Class 2 to Class 3 vests constitutes a change to the contract conditions, and documenting even small changes maintains the integrity of the change order process and prevents accumulation of uncompensated scope changes

13. A subcontractor on a commercial project provides a 2year warranty on their fire protection (sprinkler) installation. Twentytwo months after substantial completion, a sprinkler head in a storage room activates without a fire — flooding the room and causing \$35,000 in property damage. Investigation reveals the sprinkler head was a 155°F ordinarytemperature head installed in a location where the specification required a 200°F intermediatetemperature head. The storage room's HVAC unit produces ambient temperatures near 150°F. What caused the activation?

- A. The wrong temperature rating sprinkler head was installed — a 155°F head in a location with ambient temperatures near 150°F activated because the temperature approached its activation threshold, while the specified 200°F head would not have activated under these normal operating conditions, making this a workmanship defect covered by the warranty
- B. The HVAC system malfunctioned and produced abnormally high temperatures that would have activated any sprinkler head
- C. The sprinkler head was defective from the manufacturer regardless of its temperature rating

D. The building owner's failure to maintain the HVAC system caused the ambient temperature to exceed normal operating ranges

14. A contractor completes a commercial building. The oneyear warranty expires on June 15. On June 1 — fourteen days before expiration — the building owner discovers that the rooftop air conditioning units are producing excessive vibration that has loosened mounting bolts and cracked the concrete equipment pads. The owner notifies the contractor on June 3. The contractor responds: "We'll add you to our schedule but we can't get there until July 10." Has the warranty claim been preserved despite the July 10 repair date?

A. No, because the contractor must complete all warranty repairs before the June 15 expiration

B. No, because HVAC vibration issues are classified as equipment maintenance rather than construction warranty defects

C. Yes, because the owner discovered the defect on June 1 and notified the contractor on June 3 — both within the warranty period — which preserves the claim, and the contractor is obligated to repair the vibration damage regardless of whether the actual repair occurs after the warranty expiration date

D. Yes, but only if the owner obtains an independent engineering evaluation of the vibration before June 15

15. A contractor on a commercial project receives a verbal directive from the owner's project manager to relocate an interior staircase from the south side to the north side of the building. The estimated cost is \$65,000. The contractor begins preliminary work based on the verbal directive. Two weeks later, the owner's president states that the project manager had no authority to direct scope changes — only the president can authorize change orders. The contractor has incurred \$18,000 in costs. What is the contractor's situation?

A. The contractor has a strong position because any verbal directive from any project team member is always binding on the owner

B. The contractor's position depends on whether the contract designates the project manager as an authorized representative — if the project manager lacks change order authority, the contractor should have verified the directive's authorization before proceeding, though the contractor may still pursue recovery under apparent authority or unjust enrichment theories for the \$18,000 incurred

C. The contractor can recover the full \$65,000 estimated cost because the verbal directive constitutes a binding commitment regardless of the project manager's authority level

D. The contractor has no right to any compensation because verbal directives are unenforceable under all circumstances

16. A project architect issues a nonconformance report stating that the installed curtain wall gaskets are EPDM rubber instead of the specified silicone gaskets. EPDM has lower UV resistance and shorter service life than silicone in exposed exterior applications. The curtain wall installation covers 6,000 square feet across three floors and is 90% complete. What is the likely outcome?

A. The architect will accept the EPDM gaskets because both materials provide adequate weathersealing

B. The architect will require a credit for the material cost difference and allow the EPDM gaskets to remain

C. The architect will allow the EPDM gaskets with an extended warranty from the curtain wall subcontractor covering the reduced service life

D. The architect will likely require removal and replacement of all EPDM gaskets with the specified silicone gaskets at the curtain wall subcontractor's expense — because EPDM's lower UV resistance in an exterior curtain wall application will lead to premature gasket failure, water infiltration, and warranty claims that the building owner should not bear due to an unauthorized material substitution

17. A contractor on a timeandmaterials contract bills the owner for carpenter labor at \$78 per hour. The contract specifies: "Labor shall be billed at actual loaded rates as documented in the contractor's certified payroll records." The owner's auditor reviews the certified payroll and finds the actual loaded carpenter rate (wages plus burden) is \$62 per hour. The contractor argues the \$78 rate includes a \$16 per hour markup for supervision and administrative overhead. What is the correct billing rate?

A. The contract specifies billing at "actual loaded rates as documented in certified payroll records" — the certified payroll shows \$62 per hour as the actual loaded rate, and the contractor cannot add an undisclosed \$16 markup beyond the documented rate unless the contract specifically authorizes a separate supervision or overhead charge

B. \$78 per hour because the contractor has discretion to set their own billing rates on T&M contracts

C. \$70 per hour as a compromise between the documented rate and the contractor's billed rate

D. \$62 per hour for straighttime hours and \$78 per hour for overtime hours because the markup applies only to premiumtime work

18. A contractor working on a school project encounters unexpected contaminated soil during site excavation. The environmental assessment provided with the bid documents stated: "No contamination was detected in soil samples collected from the construction area." Testing of the discovered soil reveals petroleum hydrocarbons from a former underground storage tank.

The remediation cost is \$110,000. Under the differing site conditions clause, who bears the cost?

- A. The contractor, because experienced site contractors should always anticipate potential contamination
- B. The cost should be shared equally between the contractor and the owner
- C. The owner, because the environmental assessment represented the soil as uncontaminated — the actual condition (petroleum-contaminated soil) differs materially from this representation, the contractor relied on the assessment when pricing the bid, and the contamination constitutes a Type I differing site condition
- D. The testing laboratory that performed the original environmental assessment, because they failed to detect the contamination

19. A general contractor's subcontract with a concrete subcontractor includes a paywhenpaid clause requiring payment within 10 days of the GC receiving corresponding owner payment. The owner pays the GC on May 5. The GC does not pay the concrete subcontractor until June 25 — 51 days after receiving the owner's payment. The subcontractor demands interest on the late payment. Is the subcontractor entitled to interest?

- A. No, because paywhenpaid clauses establish only a sequencing mechanism with no enforceable timeline
- B. Yes, because the clause requires payment within 10 days — the deadline was May 15, making the June 25 payment 41 days late, and the subcontractor is entitled to interest on the overdue amount from the May 15 deadline through the June 25 payment date
- C. No, because interest on construction contract payments requires a separate interest provision and cannot be implied from a paywhenpaid clause
- D. Yes, but only at the federal funds rate because construction contract interest rates are federally regulated

20. A project owner issues a change order deleting the entire exterior signage package (\$65,000) from a commercial project. The contractor's bid included \$52,000 in direct costs and \$13,000 in overhead and profit. The contract states: "Deductive change orders shall be calculated at direct cost savings." What deduction applies?

- A. \$65,000, representing the full bid amount
- B. \$32,500, representing 50% of the bid amount as a standard deductive change order discount
- C. \$58,500, representing the direct costs plus half the overhead and profit

D. \$52,000, representing the direct cost savings only — the contractor retains the \$13,000 in overhead and profit because the contract calculates deductive change orders at "direct cost savings," not at the full bid value

**DOMAIN: PROJECT MANAGEMENT (6 Questions)**

21. A project manager on a \$7,000,000 commercial project calculates earned value at the 60% mark: BAC = \$7,000,000; PV = \$4,200,000; EV = \$3,850,000; AC = \$4,050,000. What are the SPI, CPI, and EAC?

- A. SPI = 0.917 ( $\$3,850,000 \div \$4,200,000$ ) and CPI = 0.951 ( $\$3,850,000 \div \$4,050,000$ ) — both below 1.0, indicating the project is behind schedule and over budget, with an EAC of approximately \$7,361,000 ( $\$7,000,000 \div 0.951$ ) if the cost trend continues
- B. SPI = 1.09 and CPI = 1.05, indicating the project is ahead of schedule and under budget
- C. The metrics indicate the project is on track because both indices are within 10% of 1.0
- D. SPI = 0.951 and CPI = 0.917, with the indices reversed from their correct formulas

22. A contractor's superintendent discovers that the masonry subcontractor has been using Type N mortar throughout the exterior brick veneer instead of the specified Type S mortar. Type S has significantly higher compressive and tensile bond strength than Type N. The superintendent has not notified the architect. Approximately 3,500 square feet of veneer has been installed. What should the superintendent do?

- A. Accept the Type N mortar and apply a surface sealant to compensate for the reduced bond strength
- B. Document the mortar substitution in the asbuilt drawings and address the issue during the warranty period if problems arise
- C. Stop the masonry subcontractor immediately, notify the architect, and request a structural evaluation — because Type N mortar's lower compressive and tensile bond strength may not meet the structural requirements for exterior veneer in the specified wind load zone, and the architect must determine whether the 3,500 square feet requires removal and reinstallation with Type S at the subcontractor's expense
- D. Allow the Type N mortar to remain in areas below 8 feet and replace only the mortar above 8 feet where wind loads are higher

23. A project schedule shows the following critical path: Excavation (8 days) → Foundation (16 days) → Steel (22 days) → Roofing (9 days) → MEP (17 days) → Drywall (11 days) → Finishes (16 days) → Closeout (4 days). Total: 103 days. A 5day ownercaused delay occurs during Foundation and a separate 3day weather delay occurs during Steel. What is the revised project duration?

A. 103 days, unchanged because the two delays occurred on different activities and cancel each other out

B. 111 days, calculated as the original 103 days plus the 5day owner delay plus the 3day weather delay — both delays are on the critical path, they occur at different times on different activities, and each independently extends the project completion date

C. 108 days, calculated by adding only the 5day owner delay because weather delays are absorbed by the schedule contingency

D. 106 days, calculated by adding only the 3day weather delay because ownercaused delays are the contractor's responsibility to mitigate

24. A contractor managing a renovation in an occupied law office building needs to replace the server room's dedicated HVAC unit. The server room requires continuous climate control to protect sensitive legal data stored on the servers. The contract requires maintaining server room temperature below 72°F at all times during construction. Replacing the HVAC unit requires a 6hour system shutdown. How should the contractor plan this work?

A. Perform the replacement during normal business hours and instruct the IT staff to shut down the servers during the HVAC changeover

B. Install the new HVAC unit alongside the existing one and switch over during a brief 30second interruption

C. Delay the HVAC replacement until a holiday weekend when the servers can be safely powered down

D. Provide a temporary portable cooling unit sufficient to maintain the server room below 72°F during the 6hour shutdown, schedule the replacement during offhours to minimize risk, and coordinate with the building's IT manager on timing — because uncontrolled temperature rises in a server room can cause data loss and hardware damage

25. A contractor's threeweek lookahead schedule identifies that the concrete subcontractor's next pour — a secondfloor elevated slab — is scheduled for next Tuesday. The structural engineer's posttensioning cable inspection must be completed before the pour. The posttensioning subcontractor completed cable installation yesterday (Wednesday) but has not scheduled the inspection. The inspector requires 48 hours' advance notice. What should the project manager do?

- A. Contact the building inspector immediately to schedule the posttensioning inspection for Monday at the latest, coordinate with the concrete supplier to confirm Tuesday delivery, and prepare a contingency plan to postpone the pour to Wednesday or Thursday if the inspection cannot be completed by Monday — because pouring concrete over uninspected posttensioning cables creates a structural compliance issue that cannot be corrected after placement
- B. Proceed with the Tuesday pour and schedule the inspection for after the concrete has cured
- C. Cancel the posttensioning and redesign the slab as conventionally reinforced concrete
- D. Have the contractor's quality control manager perform the cable inspection in place of the building inspector

**DOMAIN: INSURANCE AND BONDING (3 Questions)**

26. A contractor carries a CGL policy with a \$1,000,000 peroccurrence limit and a \$2,000,000 general aggregate. The contractor also carries a \$5,000,000 umbrella policy. During the policy year, three separate incidents occur on active construction sites: Incident 1 = \$700,000 (pedestrian injury); Incident 2 = \$1,200,000 (adjacent building damage from pile driving); Incident 3 = \$500,000 (visitor injury from unmarked excavation). How are the claims covered?

- A. CGL pays all three claims in full because each is within the peroccurrence limit
- B. CGL pays \$2,000,000 aggregate total and umbrella pays the remaining \$400,000
- C. CGL pays: Incident 1 = \$700,000; Incident 2 = \$1,000,000 (peroccurrence cap); Incident 3 = \$300,000 (remaining aggregate). Total CGL = \$2,000,000. Umbrella pays: Incident 2 excess = \$200,000; Incident 3 excess = \$200,000. Total covered = \$2,400,000 of \$2,400,000 — zero personal exposure
- D. CGL pays \$1,000,000 per incident for each of the three, totaling \$3,000,000

27. A surety evaluates a contractor for a \$2,600,000 performance bond. The contractor's financial statements show: working capital \$200,000; net worth \$690,000; existing bonded backlog \$2,600,000. The surety uses a 15× working capital multiplier. What is the assessment?

- A. Automatic approval because the contractor's net worth demonstrates financial stability
- B. Approval because the total capacity exceeds the single bond request
- C. The surety will approve if the contractor provides personal guarantees from all principals
- D. Bonding capacity is \$3,000,000 ( $15 \times \$200,000$ ), with \$2,600,000 committed leaving only \$400,000 — the \$2,600,000 request exceeds available capacity by \$2,200,000, and the surety

will deny the bond unless the contractor substantially increases working capital or completes existing bonded projects

28. A contractor's workers' compensation premium audit reveals that 4 workers classified as "interior painting" (\$6.00 per \$100 of payroll) have been performing "structural demolition" (\$19.00 per \$100 of payroll) for the past year. The misclassified payroll totals \$240,000. The contractor's EMR is 1.15. What is the approximate additional premium owed?

A. Approximately \$35,880, calculated as the premium difference:  $(\$240,000 \div \$100) \times (\$19.00 - \$6.00) \times 1.15 = 2,400 \times \$13.00 \times 1.15 = \$35,880$  — reflecting the substantially higher risk of structural demolition compared to interior painting

B. \$14,400, calculated at the painting rate on the full payroll without the classification adjustment

C. \$45,600, calculated at the demolition rate on the full payroll without crediting the painting premium

D. \$0, because classification adjustments between painting and demolition are waived during audits

### **DOMAIN: OSHA RECORDKEEPING (3 Questions)**

29. A construction worker is using a pneumatic framing nailer when a nail ricochets off a metal connector and embeds in the worker's forearm. The site medic cannot remove the nail. The worker is transported to the emergency room where the physician removes the nail under local anesthesia, irrigates the wound, closes it with 5 sutures, and prescribes oral antibiotics. The worker returns to full duty the next day. Is this case OSHA recordable?

A. No, because the worker returned to full duty the next day with no lost time or restricted activity

B. Yes, because multiple treatments independently trigger recordability — the sutures constitute medical treatment beyond first aid (butterfly bandages and wound closure strips are first aid, but sutures are not), and the prescription antibiotics also constitute medical treatment beyond first aid, making the case recordable regardless of the worker's return to full duty

C. No, because the nail was a ricochet rather than a directfire injury, which classifies it as an equipment malfunction exempt from recording

D. Yes, but only because the suture count exceeded 3, triggering the laceration severity threshold

30. An employer with 135 employees in the construction industry (NAICS 237 — Heavy and Civil Engineering Construction) reviews their OSHA electronic reporting obligations. What must they submit?

- A. Complete 300 Logs and 301 forms within 48 hours of each recordable incident
- B. No electronic submission because civil engineering contractors are exempt from electronic reporting
- C. All 300 Logs, 300A Summaries, and 301 forms on a quarterly basis
- D. The information from their OSHA 300A Annual Summary electronically through OSHA's Injury Tracking Application by March 2 of the following year — establishments with 20249 employees in designated highhazard industries including NAICS 237 must submit 300A summary data annually

31. A construction worker develops persistent numbness in their right hand after months of operating a concrete vibrator. A physician diagnoses workrelated handarm vibration syndrome (HAVS), prescribes a prescription antiinflammatory medication, and restricts the worker from operating vibrating equipment for 6 weeks. The worker is reassigned to nonvibrating duties. How should this case be classified on the OSHA 300 Log?

- A. Not recordable because the worker continued working without missing any days
- B. "Other recordable" because the prescription medication is the only recordability trigger
- C. "Restricted work or job transfer" because the worker was restricted from vibrating equipment and reassigned — the restriction from routine job functions is the most significant recordable outcome, taking precedence over "other recordable" even though the prescription medication independently triggers recordability
- D. "Days away from work" because occupational vibration disorders are automatically classified in the most severe category

**DOMAIN: PERSONNEL REGULATIONS (8 Questions)**

32. A contractor with 55 employees has a project superintendent who earns \$2,000 per week. The superintendent manages all field operations, directs 30 field workers, has authority to hire temporary laborers and recommend termination of permanent employees, and spends approximately 25% of the workweek performing physical construction work alongside the crew. Under the FLSA, is the superintendent exempt from overtime?

A. Yes, because the superintendent meets all executive exemption elements — salary of \$2,000/week exceeds the \$684 threshold, primary duty is management, regularly directs more than 2 employees, has hiring authority and makes effective termination recommendations, and performing 25% physical work does not disqualify a construction superintendent whose primary duty remains management

B. No, because spending 25% of the workweek on physical labor disqualifies the executive exemption

C. Yes, but only if the superintendent's salary exceeds \$2,500 per week because construction managers have a higher exemption threshold

D. No, because the superintendent can only recommend terminations rather than independently authorize them

33. A nonexempt pipe fitter earns \$40.00 per hour and works 48 hours during a workweek. The employer provides a \$275 nondiscretionary weekly specialization bonus for maintaining current medical gas piping certification. Under the FLSA, what is the correct total gross pay?

A. \$2,195.00 with no overtime premium

B. \$2,377.92, calculated as straighttime plus bonus (\$2,195.00) plus overtime premium ( $\$45.73 \text{ regular rate} \times 0.5 \times 8 \text{ hours} = \$182.92$ ), where the \$275 bonus is included in the regular rate ( $\$2,195 \div 48 = \$45.73$ )

C. \$2,320.00, calculated with base overtime rate only without the certification bonus

D. \$2,560.00, calculated by applying doubletime to all overtime hours

34. An employer with 40 employees terminates a 54-year-old master electrician with 12 years of consistently excellent performance reviews. The employer replaces them with a 29-year-old journeyman electrician at a 35% lower salary, citing "operational efficiency." The terminated electrician files an ADEA complaint. The employer argues the replacement's lower salary demonstrates costcutting, not age discrimination. Under the ADEA, what is the most critical flaw in the employer's defense?

A. The employer failed to post the position externally before hiring the younger replacement

B. The journeyman's lack of master electrician credentials makes the replacement underqualified

C. The terminated electrician has a longer commute than the replacement, creating a geographic discrimination claim

D. The "operational efficiency" rationale is undermined by the 12 years of excellent reviews (contradicting any performance justification) and by replacing a master electrician with a

lowercredentialed journeyman — cost savings achieved specifically by substituting an older, higherpaid, highercredentialed worker with a younger, cheaper, lessqualified replacement strongly suggests age was the butfor cause of the termination

35. An employer with 30 employees has a worker who files a workers' compensation claim for a shoulder injury. The employer's carrier accepts the claim. While the worker is on modified duty, the employer's safety director begins requiring the worker to submit daily activity logs documenting every task performed — a requirement not imposed on any other employee. The worker alleges this constitutes retaliation. Is the claim viable?

A. Yes, because imposing unique documentation requirements on a single employee immediately after they file a workers' compensation claim creates an inference of retaliation — the selective imposition of daily activity logs that no other employee must submit, combined with the temporal proximity to the comp filing, suggests the employer is singling out the worker for adverse treatment in response to the claim

B. No, because daily activity logs are a standard modifiedduty management tool used for all workers' compensation claimants

C. No, because documentation requirements are administrative actions that do not constitute adverse employment actions under antiretaliation law

D. Yes, but only if the worker can prove the safety director explicitly stated the logs were imposed because of the comp claim

36. A contractor operating on a DavisBacon covered project has carpenters who work 50 hours during a workweek. The prevailing wage specifies carpenter wages of \$40.00/hour plus \$18.00/hour in fringe benefits. One carpenter also receives a \$190 nondiscretionary weekly attendance bonus. How must the overtime be calculated?

A. Overtime at 1.5 times the combined wage and fringe ( $\$58.00 \times 1.5$ ) for 10 hours

B. Overtime at 1.5 times only the base wage ( $\$40.00 \times 1.5 = \$60.00$ ) without the attendance bonus

C. The overtime premium applies to the cash wage plus the prorated attendance bonus, while the fringe continues at straighttime — regular rate =  $(\$40.00 \times 50 + \$190) \div 50 = \$43.80$ ; overtime premium =  $\$43.80 \times 0.5 = \$21.90 \times 10 = \$219.00$ ; fringe at \$18.00 for all 50 hours

D. No overtime because carpenters receiving attendance bonuses are exempt from FLSA overtime

37. An employer terminates a worker for chronic tardiness — arriving 1530 minutes late 4 times per week over a 10week period. The employer has: time clock records documenting every

late arrival, three written warnings issued during the period, the worker's signed acknowledgment of the attendance policy, and a final written warning stating that any additional tardiness would result in termination. The worker files for unemployment benefits. What is the likely outcome?

A. The worker will receive benefits because tardiness caused by traffic conditions is a mitigating circumstance that precludes a finding of misconduct

B. The worker will likely be denied benefits because the documented pattern of chronic tardiness (4 times per week for 10 weeks) despite three written warnings and a final warning constitutes willful disregard for the employer's known attendance requirements — the time clock records, progressive discipline, signed policy, and final warning establish disqualifying misconduct

C. The worker will receive benefits at a reduced rate because attendance violations are classified as minor performance issues

D. The unemployment agency will defer the decision pending the employer's submission of traffic data for the worker's commute route

38. An employer with 60 employees has a worker who requests FMLA leave to undergo bariatric (weight loss) surgery. The worker has been employed for 5 years. The surgery requires 3 days of hospitalization and 4 weeks of postsurgical recovery. Under the FMLA, is this leave request covered?

A. No, because bariatric surgery is an elective procedure that does not qualify as a serious health condition

B. No, because the FMLA covers only conditions that prevent the employee from performing their job functions, and obesity alone is not a qualifying condition

C. Yes, but only for the 3day hospitalization period, not for the 4week recovery

D. Yes, because the surgery involves inpatient hospital care (3day hospitalization) and a period of incapacity requiring continuing treatment — any condition requiring overnight hospitalization qualifies as a serious health condition under the FMLA regardless of whether the surgery is considered "elective," and the subsequent recovery period is covered as part of the continuing treatment

39. An employer's I9 audit reveals that their HR representative has been requiring applicants with accented English to provide additional documentation beyond what is required on the I9 form — specifically, requesting birth certificates in addition to the documents the applicants presented from the List of Acceptable Documents. This practice has affected 16 applicants over the past year. Under IRCA, what violation has occurred?

- A. Document abuse discrimination — selectively requiring additional documentation based on an applicant's accent constitutes national origin discrimination in the I9 process, because employees have the right to choose which acceptable documents to present, and the employer cannot demand specific additional documents based on the applicant's speech patterns or perceived national origin
- B. No violation because birth certificates are acceptable I9 documents and requiring additional verification demonstrates thorough compliance
- C. A violation only if the affected applicants were ultimately denied employment based on the additional documentation requirement
- D. A minor procedural issue that can be corrected through a staff training session with no penalty exposure

40. An employer with 50 employees has a worker who has exhausted 12 weeks of FMLA leave following back surgery. The worker's physician releases them with a permanent restriction: no lifting more than 25 pounds. The worker's regular job as a masonry laborer requires lifting concrete blocks weighing up to 70 pounds. Under the ADA, what must the employer evaluate?

- A. Whether the worker can be terminated immediately because they cannot perform the essential lifting function
- B. Whether the worker qualifies for Social Security Disability benefits
- C. Whether the 25pound lifting restriction can be reasonably accommodated through reassignment to available positions (mortar mixing station, material coordination, layout and measuring), mechanical lifting aids, or job restructuring — the employer must engage in the interactive process before concluding accommodation is impossible
- D. Whether to create a new lightduty masonry position permanently

41. An employer discovers that 10 nonexempt workers have been systematically denied overtime pay for the past 18 months. Each worker averaged 6 overtime hours per week at an average base rate of \$34.00 per hour. What is the approximate minimum backpay exposure under the FLSA?

- A. \$39,780, using only half the affected workers in the calculation
- B. Approximately \$79,560 in minimum back pay ( $\$17.00$  overtime premium  $\times$  6 hours  $\times$  10 workers  $\times$  78 weeks), with potential FLSA liquidated damages doubling the amount to \$159,120, plus the employees' attorney fees
- C. \$159,120, representing only the liquidated damages without the underlying back pay

D. \$0, because the payroll error was unintentional and the employer acted in good faith

42. An employer with 35 employees has a worker who reports sexual harassment by a coworker to the HR director. The HR director investigates, confirms the harassment through witness statements, and issues a written warning to the harasser. Two weeks later, the same harasser resumes the offensive behavior. The worker reports again. The HR director issues a second written warning. What is the employer's exposure?

A. No exposure because the employer investigated and took corrective action (written warnings) on both occasions

B. No exposure because the harasser is a coworker rather than a supervisor, which reduces the employer's liability

C. Minimal exposure because the employer followed its progressive discipline process

D. Significant exposure because the employer's corrective action (written warnings) was demonstrably ineffective — the harassment resumed after the first warning, indicating written warnings alone were insufficient to stop the behavior, and the employer had a duty to escalate the discipline (suspension, termination, mandatory training) after the first corrective action failed to prevent recurrence

43. A contractor operating on a DavisBacon covered project has electricians who work 46 hours during a workweek. The prevailing wage specifies electrician wages of \$46.00/hour plus \$21.00/hour in fringe benefits. How must the 6 overtime hours be compensated?

A. 40 hours at \$46.00 wage plus \$21.00 fringe, and 6 overtime hours at \$69.00 wage ( $1.5 \times \$46.00$ ) plus \$21.00 fringe at the straighttime rate — the overtime premium applies only to the cash wage, while the fringe contribution continues at the straighttime rate for all 46 hours

B. All 46 hours at the combined overtime rate ( $\$67.00 \times 1.5 = \$100.50$ )

C. 40 hours at \$46.00 plus \$21.00, and 6 hours at \$46.00 plus \$31.50 ( $1.5 \times \$21.00$ )

D. No overtime because electricians with prevailing wages above \$45.00/hour are exempt

44. An employer with 55 employees has a worker who requests FMLA leave to attend weekly physical therapy sessions for a workrelated knee injury. The therapy sessions are 90 minutes each, twice per week, for an estimated 12 weeks. Under the FMLA, can the worker take intermittent leave for these sessions?

A. No, because intermittent FMLA leave is not available for the employee's own medical treatment

B. No, because workrelated injuries are covered exclusively by workers' compensation and cannot also trigger FMLA leave

C. Yes, because the FMLA provides intermittent leave when medically necessary for the employee's own serious health condition — a knee injury requiring continuing treatment through regular physical therapy sessions qualifies, and FMLA leave can run concurrently with workers' compensation leave when both apply to the same condition

D. Yes, but only for the first 6 weeks because FMLA intermittent leave for physical therapy is capped at half the standard entitlement

45. An employer terminates a worker for violating the company's zerotolerance substance abuse policy. The worker tested positive for opioids. The worker presents a valid prescription for the opioid medication from their physician for a documented chronic pain condition. The worker was not impaired at work. Under the ADA, what is the employer's exposure?

A. No exposure because zerotolerance drug policies override all ADA protections

B. Potential exposure for disability discrimination — the ADA protects employees who use legally prescribed medications for documented medical conditions, and terminating an employee for a positive drug test caused by a lawful prescription without engaging in the interactive accommodation process may constitute disability discrimination, particularly when the worker was not impaired at work

C. No exposure because opioids are Schedule II controlled substances that are illegal regardless of prescription status

D. Exposure only if the worker was impaired on the jobsite at the time of the drug test

#### **DOMAIN: FINANCIAL MANAGEMENT (5 Questions)**

46. A contractor's WIP report shows Project Nu: revised contract \$3,200,000; estimated total cost \$2,720,000; costs to date \$1,904,000; billings to date \$2,350,000. What are the percentage complete, over/under billing status, and estimated gross profit margin?

A. 60% complete, underbilled by \$110,000, gross margin 12%

B. 75% complete, billings match earned revenue, gross margin 18%

C. 70% complete, underbilled by \$110,000, gross margin 15%

D. 70% complete ( $\$1,904,000 \div \$2,720,000$ ), overbilled by \$110,000 (billings of \$2,350,000 minus earned revenue of \$2,240,000), with a 15% estimated gross profit margin ( $\$480,000 \div \$3,200,000$ )

47. A contractor uses the percentage of completion method on a \$2,800,000 project with estimated costs of \$2,380,000. At end of Year 1, costs total \$1,190,000. The estimator revises total cost to \$2,520,000 due to material escalation. What is the cumulative profit through Year 1 under the revised estimate?

- A. \$132,222, calculated as: revised profit = \$280,000; revised % complete = 47.2%; cumulative profit =  $47.2\% \times \$280,000 = \$132,222$  — compared to \$210,000 originally recognized, requiring a downward adjustment of approximately \$77,778 in Year 2
- B. \$210,000, based on the original estimate without revision
- C. \$280,000, representing the full revised profit recognized immediately
- D. \$0, because cost revisions require complete suspension of profit recognition

48. A contractor's cash flow analysis projects: beginning cash \$80,000; collections \$700,000; retainage releases \$50,000; credit line draws \$100,000. Outflows: payroll \$475,000; materials/subcontractors \$330,000; overhead \$75,000; equipment \$38,000; taxes \$25,000. What is the projected ending cash position?

- A. Positive \$180,000, calculated by excluding equipment and tax payments
- B. Positive \$80,000, unchanged from beginning balance
- C. Negative \$13,000, calculated as total inflows (\$930,000) minus total outflows (\$943,000) — the contractor faces a \$13,000 shortfall requiring additional financing or expenditure reduction
- D. Positive \$930,000, using only the inflow total

49. A contractor's balance sheet shows: current assets \$1,020,000; current liabilities \$760,000; total assets \$2,350,000; total liabilities \$1,720,000. The surety uses 15× working capital. Existing bonded backlog is \$3,000,000. A new project requires a \$1,000,000 bond. Can the contractor obtain it?

- A. Yes, because the total capacity exceeds combined bonded work
- B. The bonding capacity is \$3,900,000 ( $15 \times \$260,000$ ), with \$3,000,000 committed leaving \$900,000 — insufficient for the \$1,000,000 bond by \$100,000, requiring the contractor to increase working capital by approximately \$6,667 or complete existing projects to free capacity
- C. No, because the debt to equity ratio disqualifies the contractor
- D. Yes, because net worth of \$630,000 supports the additional bond

50. A contractor's income statement shows: total revenue \$6,400,000; cost of construction \$5,440,000; G&A expenses \$576,000. What are the gross profit, gross margin, net income, and net margin?

A. Gross profit \$576,000 (9%), net income \$0 (0%)

B. Gross profit \$1,280,000 (20%), net income \$704,000 (11%)

C. Gross profit \$960,000 (15%), net income \$576,000 (9%)

D. Gross profit \$960,000 (15%), net income \$384,000 (6%) — calculated as: revenue minus cost = \$960,000;  $\$960,000 \div \$6,400,000 = 15\%$  gross margin;  $\$960,000$  minus  $\$576,000 = \$384,000$  net income;  $\$384,000 \div \$6,400,000 = 6\%$  net margin

## Practice Exam 34: Answer Key and Explanations

**1. A** — As a sole proprietor, the full \$300,000 is subject to SE tax. Under the S Corporation election, only the \$150,000 salary is subject to FICA while the \$150,000 distribution avoids employment taxes, saving approximately \$21,195. The tradeoff is mandatory payroll administration — W2 processing, quarterly 941s, annual 940, workers' comp on salary, and full employer compliance obligations.

**2. C** — The \$90,000 change order pushed the contract from \$680,000 to \$770,000, exceeding the \$750,000 restricted cap by \$20,000. The contractor should have recognized the cap exceedance before accepting the change order and contacted the ACLB for guidance — either applying for an unrestricted upgrade or obtaining interim authorization.

**3. B** — Performing work under another entity's license is license fraud that violates both Tennessee and Arkansas law. The Arkansas contractor could face ACLB disciplinary action for participating in a fraudulent arrangement even though the work occurs out of state. The ACLB may consider willingness to operate illegally in another jurisdiction as reflecting on the contractor's professional integrity.

**4. D** — Maintaining minimum financial qualifications is a continuing condition of licensure. A net worth drop from \$85,000 to \$28,000 — well below the \$50,000 minimum — may result in license suspension, additional financial security requirements, or downgrade to the restricted tier. The ACLB is not limited to reviewing finances only at annual renewal.

**5. A** — A church fellowship hall is a commercial occupancy — its institutional and public assembly use places it outside the residential classification. The \$420,000 value is within the restricted commercial cap of \$750,000. Construction methods (wood framing, residential-style kitchen) do not change the building's commercial classification.

**6. C** — Metal deck:  $9,500 \times \$8.50 = \$80,750$ . Concrete:  $9,500 \times (3/12) \div 27 = 87.96 \text{ CY} \times 1.04 = 91.48 \text{ CY} \times \$172 = \$15,735$ . Finishing:  $9,500 \times \$1.90 = \$18,050$ . Total:  $\$114,535$ . Each component is calculated separately with the waste factor applied only to the concrete volume.

**7. B** — Listing "TBD" instead of an actual subcontractor name, license number, and scope fails to comply with the mandatory listing requirement. The bid documents require specific identification of subcontractors performing more than 5% of the work. A placeholder does not satisfy this requirement and renders the bid nonresponsive.

**8. D** — Total days:  $20,000 \div 500 = 40$  days. Total hours:  $40 \times 8 \times 5$  workers = 1,600 hours. Cost:  $1,600 \times \$42.00 = \$67,200$ . The productivity rate represents the combined crew output, so total labor must include all workers' hours over the full duration.

**9. A** — Sub B's adjusted price ( $\$258,000 + \$42,000 = \$300,000$ ) exceeds Sub A's complete  $\$285,000$  quote. Sub A also provides 90day firm pricing versus Sub B's 21day validity. The complete, firmpriced quote at  $\$285,000$  delivers both lower cost and lower risk than the incomplete, shortvalidity alternative.

**10. C** — The contract documents showed a 2inch mud slab. The actual 4inch structural slab differs materially from this representation. The contractor relied on the document when pricing demolition — thicker concrete requires heavier equipment and produces more disposal volume. This is a classic Type I differing site condition.

**11. B** — Selfperformed:  $\$35,000 \times 1.15 = \$40,250$ . Subcontracted:  $\$140,000 \times 1.08 = \$151,200$ . Total:  $\$40,250 + \$151,200 = \$191,450$ . The different markup rates apply to each category based on who performs the work. The contractor earns 15% only on their selfperformed portion.

**12. D** — While  $\$675$  is a small amount, the owner's postcontract directive to upgrade from Class 2 to Class 3 vests constitutes a change to contract conditions. Documenting even small changes maintains change order process integrity and prevents accumulation of uncompensated scope changes that erode the contractor's margin over time.

**13. A** — A  $155^\circ\text{F}$  sprinkler head in a location with ambient temperatures near  $150^\circ\text{F}$  activated because the temperature approached its threshold. The specified  $200^\circ\text{F}$  head would not have activated under normal conditions. Installing the wrong temperature rating is a workmanship defect — the subcontractor selected the incorrect head for the environmental conditions.

**14. C** — The owner discovered the defect on June 1 and notified the contractor on June 3 — both within the warranty period ending June 15. Timely notification preserves the claim. The contractor cannot defeat the warranty by scheduling the repair after expiration — the claim was properly made within the warranty period.

**15. B** — The contractor's position depends on whether the contract designates the project manager as an authorized representative for change orders. If the PM lacks this authority, the contractor should have verified before proceeding. The contractor may pursue recovery under apparent authority or unjust enrichment for the  $\$18,000$  incurred, but the position is weakened by failure to verify authorization.

**16. D** — EPDM's lower UV resistance in an exposed exterior curtain wall will lead to premature gasket failure, water infiltration, and warranty claims. This is not merely a material substitution — it directly affects the building's longterm weatherproofing performance. The architect will likely require replacement with specified silicone gaskets at the subcontractor's expense.

**17. A** — The contract specifies billing at "actual loaded rates as documented in certified payroll records." The certified payroll shows \$62/hour. The contractor cannot add an undisclosed \$16 markup beyond the documented rate. If the contractor wants to bill supervision or overhead separately, the contract must specifically authorize those charges.

**18. C** — The environmental assessment represented the soil as uncontaminated. Petroleum hydrocarbons from a former UST constitute an actual condition that differs materially from this representation. The contractor relied on the assessment when pricing. This is a Type I differing site condition, and the \$110,000 remediation is the owner's responsibility.

**19. B** — The paywhenpaid clause requires payment within 10 days of receiving owner payment. The deadline was May 15 (May 5 + 10 days). Payment on June 25 is 41 days late. The subcontractor is entitled to interest from the May 15 deadline through the June 25 payment date for the breach of the contractual payment timeline.

**20. D** — The contract specifies deductive change orders at "direct cost savings." The deduction is \$52,000 in direct costs. The contractor retains the \$13,000 in overhead and profit. The deductive change order provision protects the contractor's margin on deleted scope.

**21. A** —  $SPI = \$3,850,000 \div \$4,200,000 = 0.917$  (behind schedule).  $CPI = \$3,850,000 \div \$4,050,000 = 0.951$  (over budget).  $EAC = \$7,000,000 \div 0.951 = \$7,361,000$ . Both indices below 1.0 confirm the project is behind schedule and over budget, projecting a \$361,000 overrun.

**22. C** — Type N mortar has significantly lower compressive and tensile bond strength than Type S. In exterior veneer exposed to wind loads, the reduced bond strength may not meet structural requirements. The superintendent must stop work, notify the architect, and request a structural evaluation. The 3,500 SF may require removal and reinstallation with Type S.

**23. B** — Original: 103 days. Owner delay: +5 days during Foundation. Weather delay: +3 days during Steel. Both delays are on the critical path at different times on different activities. Each independently extends completion. Revised:  $103 + 5 + 3 = 111$  days.

**24. D** — The server room requires continuous temperature control below 72°F. A temporary portable cooling unit maintains the environment during the 6hour shutdown. Offhours scheduling minimizes risk, and IT coordination ensures data protection. Uncontrolled temperature rises in server rooms can cause hardware damage and data loss.

**25. A** — The inspector requires 48 hours' notice, and the pour is scheduled for Tuesday. The project manager must schedule the inspection for Monday at the latest by contacting the inspector immediately. Pouring over uninspected posttensioning cables creates a structural compliance issue that cannot be corrected after concrete placement.

**26. C** — CGL: Incident 1 = \$700,000 (within limit). Incident 2 = \$1,000,000 (peroccurrence cap). Incident 3 = \$300,000 (remaining aggregate: \$2M – \$700K – \$1M = \$300K). Total CGL = \$2,000,000. Umbrella: Incident 2 excess (\$200,000) + Incident 3 excess (\$200,000) = \$400,000. Total covered: \$2,400,000. Zero exposure.

**27. D** — Bonding capacity:  $15 \times \$200,000 = \$3,000,000$ . Existing: \$2,600,000. Available: \$400,000. The \$2,600,000 request exceeds available capacity by \$2,200,000. The surety will deny unless the contractor substantially increases working capital or completes existing projects.

**28. A** — Premium difference:  $(\$240,000 \div \$100) \times (\$19.00 - \$6.00) \times 1.15 = 2,400 \times \$13.00 \times 1.15 = \$35,880$ . Structural demolition carries substantially higher risk than interior painting, and the premium difference reflects this risk disparity.

**29. B** — Sutures and prescription antibiotics each independently constitute medical treatment beyond first aid. OSHA's first aid definition includes butterfly bandages and wound closure strips but excludes sutures. Prescription medication also crosses the threshold. The case is recordable regardless of the worker's return to full duty.

**30. D** — Establishments with 20249 employees in designated highhazard industries including NAICS 237 must submit 300A Annual Summary data electronically through OSHA's ITA by March 2 of the following year. With 135 employees in heavy and civil engineering construction, this employer meets the threshold.

**31. C** — The worker was restricted from operating vibrating equipment and reassigned to nonvibrating duties for 6 weeks. "Restricted work or job transfer" is the most significant recordable outcome. The prescription medication independently triggers recordability, but restricted work takes precedence as the more significant classification.

**32. A** — The superintendent meets all executive exemption elements: \$2,000/week salary (above \$684), primary duty is management, directs 30+ employees, has hiring authority and makes effective termination recommendations. Spending 25% on physical work does not disqualify a construction superintendent whose primary duty remains management.

**33. B** — Straighttime + bonus:  $(\$40.00 \times 48) + \$275 = \$2,195$ . Regular rate:  $\$2,195 \div 48 = \$45.73$ . Overtime premium:  $\$45.73 \times 0.5 \times 8 = \$182.92$ . Total gross:  $\$2,195 + \$182.92 = \$2,377.92$ . The nondiscretionary certification bonus increases the regular rate and overtime premium.

**34. D** — The "operational efficiency" defense is undermined by 12 years of excellent reviews contradicting any performance justification and by replacing a master electrician with a lowercredentialed journeyman. Cost savings achieved by substituting an older, higherpaid, highercredentialed worker with a younger, cheaper, lessqualified replacement strongly suggests age was the butfor cause.

**35. A** — Imposing unique daily activity logs on a single employee immediately after a workers' comp filing — when no other employee faces similar requirements — creates a retaliation inference. The selective imposition combined with temporal proximity suggests the employer is singling out the worker for adverse treatment in response to the claim.

**36. C** — Under DavisBacon, the overtime premium applies to cash wage plus prorated nondiscretionary bonuses. Regular rate:  $(\$40.00 \times 50 + \$190) \div 50 = \$43.80$ . Overtime premium:  $\$43.80 \times 0.5 \times 10 = \$219.00$ . Fringe at \$18.00 straighttime for all 50 hours. The attendance bonus increases the effective overtime cost.

**37. B** — Chronic tardiness 4 times per week for 10 weeks despite three warnings and a final warning constitutes willful misconduct. Time clock records, progressive discipline, the signed policy, and the final warning establish a documented pattern of deliberate disregard for known attendance requirements that unemployment agencies classify as disqualifying.

**38. D** — Any condition requiring overnight hospitalization qualifies as a serious health condition under the FMLA. The 3day hospitalization for bariatric surgery meets this threshold regardless of whether the surgery is considered "elective." The 4week recovery period is covered as continuing treatment following the inpatient care.

**39. A** — Requiring additional documentation based on an applicant's accent constitutes document abuse discrimination under IRCA. Employees choose which acceptable documents to present, and the employer cannot demand specific alternatives based on speech patterns or perceived national origin. Each of the 16 affected applicants represents a separate violation.

**40. C** — After FMLA exhaustion, the ADA interactive process applies. The employer must evaluate whether the 25pound restriction can be accommodated through reassignment to available positions, mechanical aids, or job restructuring. The employer cannot terminate without completing the interactive process and demonstrating no reasonable accommodation exists.

**41. B** — Overtime premium:  $\$34.00 \times 0.5 = \$17.00$  per hour. Weekly underpayment per worker:  $\$17.00 \times 6 = \$102$ . Total for 10 workers over 78 weeks:  $\$102 \times 10 \times 78 = \$79,560$ . FLSA liquidated damages may double to \$159,120 plus attorney fees. Systematic overtime violations create compound liability.

**42. D** — The employer's corrective action (written warnings) was demonstrably ineffective — the harassment resumed after the first warning. The employer had a duty to escalate discipline after the initial correction failed. Written warnings alone were insufficient, and the employer should have imposed suspension, termination, or mandatory training to prevent recurrence.

**43. A** — Under DavisBacon, the overtime premium applies only to the cash wage. Straight time: 40 hours  $\times$  ( $\$46.00 + \$21.00$ ). Overtime: 6 hours  $\times$  ( $\$69.00$  wage [ $1.5 \times \$46.00$ ] + \$21.00 fringe at straighttime). The fringe continues at straighttime for all 46 hours.

**44. C** — The FMLA provides intermittent leave when medically necessary for the employee's own serious health condition. A knee injury requiring continuing physical therapy qualifies. FMLA leave can run concurrently with workers' compensation when both apply to the same condition — the two systems are not mutually exclusive.

**45. B** — The ADA protects employees who use legally prescribed medications for documented conditions. Terminating for a positive test caused by a lawful prescription without engaging in the interactive process may constitute disability discrimination — particularly when the worker was not impaired at work. The employer should have explored accommodation before termination.

**46. D** — Percentage complete:  $\$1,904,000 \div \$2,720,000 = 70\%$ . Earned revenue:  $70\% \times \$3,200,000 = \$2,240,000$ . Billings:  $\$2,350,000$ . Overbilled by  $\$110,000$ . Gross profit:  $\$480,000$ . Gross margin:  $15\%$ . The overbilling appears as a current liability on the balance sheet.

**47. A** — Revised total cost:  $\$2,520,000$ . Revised profit:  $\$280,000$ . Revised % complete:  $\$1,190,000 \div \$2,520,000 = 47.2\%$ . Cumulative profit:  $47.2\% \times \$280,000 = \$132,222$ . Originally recognized:  $50\% \times \$420,000 = \$210,000$ . Downward adjustment of approximately  $\$77,778$  needed in Year 2.

**48. C** — Inflows:  $\$80,000 + \$700,000 + \$50,000 + \$100,000 = \$930,000$ . Outflows:  $\$475,000 + \$330,000 + \$75,000 + \$38,000 + \$25,000 = \$943,000$ . Net:  $\$930,000 - \$943,000 = -\$13,000$ . The contractor faces a modest shortfall requiring additional financing or expenditure adjustment.

**49. B** — Working capital:  $\$1,020,000 - \$760,000 = \$260,000$ . Capacity:  $15 \times \$260,000 = \$3,900,000$ . Existing:  $\$3,000,000$ . Available:  $\$900,000$ . The  $\$1,000,000$  bond exceeds available capacity by  $\$100,000$ . The contractor needs approximately  $\$6,667$  in additional working capital or must complete existing projects.

**50. D** — Gross profit:  $\$6,400,000 - \$5,440,000 = \$960,000$ . Gross margin:  $15\%$ . Net income:  $\$960,000 - \$576,000 = \$384,000$ . Net margin:  $6\%$ . The  $15\%$  gross margin indicates strong project profitability and the  $6\%$  net margin reflects healthy bottomline performance.