

PRACTICE EXAM 32: 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 twomember LLC taxed as a partnership. Member A contributes \$300,000 in capital and manages daily operations fulltime. Member B contributes \$200,000 and serves as a passive investor with no involvement in operations. The LLC's operating agreement allocates profits 60% to Member A and 40% to Member B. The company earns \$450,000 in net income. How is each member's distributive share taxed for selfemployment purposes?

A. Both members pay SE tax on their full distributive shares because all LLC income is automatically subject to selfemployment tax

B. Member A pays SE tax on their \$270,000 distributive share because they are an active participant in the business, while Member B — as a passive investor who does not participate in operations — may be exempt from SE tax on their \$180,000 share, depending on the specific IRS treatment of limited partners and passive LLC members

C. Neither member pays SE tax because LLC income is classified as passive investment income exempt from selfemployment tax

D. Only Member B pays SE tax because passive investors are taxed at higher rates than active participants

DOMAIN: LICENSING (4 Questions)

2. A contractor holds an unrestricted commercial license with Building Construction (BU) and Electrical Construction (EL) classifications. A project owner asks the contractor to install a 500kilowatt solar photovoltaic array on the roof of a commercial warehouse. The project involves structural mounting, electrical wiring, inverter installation, and grid interconnection. The project value is \$780,000. Can the contractor perform this work under their existing classifications?

A. Yes, because the BU classification covers all roofmounted installations and the EL classification covers all electrical work without limitation

B. Yes, because solar installations under \$1,000,000 are exempt from specialty licensing requirements in Arkansas

C. No, because solar installations require a separate renewable energy contractor license issued by the Arkansas Public Service Commission

D. The contractor should verify with the ACLB whether their BU and EL classifications cover solar PV installation — while the structural mounting and electrical components align with these classifications, some jurisdictions require specific solar or renewable energy certifications, and the contractor should confirm compliance before committing to the project

3. A licensed contractor in Arkansas is hired to build a \$95,000 detached garage for a homeowner. During construction, the homeowner asks the contractor to also build a 600squarefoot guest house connected to the garage by a covered breezeway. The guest house includes a kitchen, bathroom, bedroom, and HVAC system. The guest house addition is valued at \$120,000, bringing the total project to \$215,000. The contractor holds a residential builder license. Can the contractor build the guest house?

A. No, because guest houses with full kitchens and bathrooms are classified as commercial structures regardless of their location on residential property

B. No, because the total project value of \$215,000 exceeds the residential builder's \$200,000 perproject maximum

C. Yes, because a guest house on a residential property is an accessory residential structure — it is designed for residential occupancy on a residential lot, uses residential construction methods, and falls within the residential builder's scope regardless of whether it includes a kitchen, bathroom, and HVAC system

D. Yes, but only if the guest house is physically attached to the main residence by a shared structural wall rather than a covered breezeway

4. The ACLB receives a complaint from a subcontractor alleging that a licensed general contractor has failed to pay \$85,000 for completed concrete work despite having received the corresponding payment from the project owner. The subcontractor has sent three written payment demands over 4 months with no response from the GC. Can the ACLB investigate this payment complaint?

A. Yes, because the ACLB has authority to investigate complaints regarding a licensed contractor's business practices — while payment disputes are ultimately civil matters resolved through the courts, a pattern of collecting payment from owners and failing to pay subcontractors may constitute conduct reflecting on the contractor's fitness for licensure, and the Board can consider such conduct in disciplinary proceedings

B. No, because payment disputes between contractors and subcontractors are exclusively civil matters outside the ACLB's jurisdiction

C. Yes, but only if the subcontractor first obtains a court judgment confirming the amount owed before the ACLB will investigate

D. No, because the ACLB investigates only complaints from project owners and homeowners, not from subcontractors or suppliers

5. A contractor applies for an Arkansas unrestricted commercial license. The ACLB requires the applicant to submit a financial statement prepared by a CPA. The applicant submits a compiled financial statement. The ACLB rejects the financial statement. Why was it rejected?

A. Because the compiled statement does not include a balance sheet, which is required for all license applications

B. Because the unrestricted commercial license requires an audited or reviewed financial statement — a compiled statement provides the lowest level of CPA assurance and does not meet the preparation standard for the unrestricted tier, though it may be acceptable for the restricted commercial license tier

C. Because financial statements for unrestricted licenses must be prepared by a Certified Financial Analyst rather than a CPA

D. Because the compiled statement was prepared using cashbasis accounting instead of the required accrualbasis method

DOMAIN: ESTIMATING AND BIDDING (4 Questions)

6. A contractor's estimator calculates the following for a commercial renovation bid: direct costs \$980,000; annual overhead \$294,000 on \$1,960,000 annual direct cost volume; target net profit margin of 8% on selling price. What is the correct selling price?

- A. \$980,000 with no overhead or profit applied
- B. \$1,127,000, calculated with overhead but using an 8% markup on cost rather than margin on selling price
- C. \$1,078,400, calculated by adding 8% to total cost instead of dividing by 0.92
- D. \$1,222,826, calculated by allocating overhead at 15% (\$147,000), adding to direct costs (\$1,127,000), and dividing by 0.92 to achieve exactly 8% margin on selling price ($\$1,127,000 \div 0.92$)

7. A public project requires sealed bids. After the bid opening, the apparent low bidder (\$2,650,000) realizes they transposed two digits in their bid — they intended to bid \$2,560,000, not \$2,650,000. The contractor's error actually resulted in a higher bid than intended, not a lower one. The secondlowest bid is \$2,720,000. The contractor asks the owner to allow them to correct the bid to \$2,560,000. Should the owner allow the correction?

- A. No, because bid corrections after opening are generally prohibited regardless of the direction of the error — allowing the low bidder to reduce their alreadywinning bid by \$90,000 would undermine the sealed bid process because other bidders had no opportunity to adjust their prices, and the correction would give the low bidder an unfair competitive advantage even though they already won
- B. Yes, because the correction benefits the owner by reducing the project cost by \$90,000
- C. Yes, because downward corrections to winning bids are always permitted since they save the owner money
- D. No, but the owner should reject all bids and rebid the project to give the corrected price a fair opportunity

8. A contractor needs to estimate the concrete cost for a commercial building foundation. The foundation includes: 120 linear feet of strip footings (2 feet wide \times 1 foot deep); 8 column footings (each 6 feet \times 6 feet \times 2 feet deep); and 4,500 square feet of slabongrade (5 inches thick). Concrete costs \$165 per cubic yard with a 5% waste factor. What is the total estimated concrete material cost?

- A. \$16,446, calculated without the waste factor on any component
- B. \$14,850, calculated using only the slab on grade without footings
- C. \$17,267, calculated as total volume $(2,691 \text{ CF} \div 27 = 99.67 \text{ CY}) \times 1.05 \text{ waste} = 104.65 \text{ CY} \times \$165/\text{CY}$
- D. \$21,000, calculated using an 8-inch slab thickness instead of the specified 5 inches

9. A contractor receives subcontractor quotes for the painting scope on a commercial office building: \$142,000, \$155,000, \$148,000, and \$138,000. The \$138,000 low quote excludes primer on new drywall (the specification requires one coat of primer plus two coats of finish paint on all new drywall). The other three quotes include primer. The estimator contacts the low bidder, who adds \$16,000 for the primer scope. What should the estimator do next?

- A. Use the original \$138,000 quote and negotiate the primer cost after contract award
- B. Compare the adjusted low bid (\$154,000) against the three complete quotes (\$142,000, \$155,000, \$148,000) — the \$142,000 quote is now the lowest complete bid and should be used unless the estimator has specific reasons to prefer a different subcontractor
- C. Average all four quotes and use the average as the painting budget
- D. Use the \$138,000 original quote because primer is an optional preparation step that can be eliminated without affecting paint quality

DOMAIN: CONTRACT MANAGEMENT (8 Questions)

10. A contractor on a fixed-price commercial project encounters unforeseen groundwater during basement excavation. The geotechnical report provided with the bid documents stated: "Groundwater was not encountered in any borings to the maximum depth of 30 feet." The actual groundwater is at 12 feet — well within the excavation depth. Dewatering costs \$55,000. Under the differing site conditions clause, who bears this cost?

- A. The contractor, because experienced contractors should always anticipate groundwater regardless of geotechnical report findings
- B. The cost should be split equally because groundwater is a shared subsurface risk
- C. The contractor, because the geotechnical report included a disclaimer stating "conditions may vary"
- D. The owner, because the geotechnical report — a contract document — represented that groundwater was not encountered to 30 feet, and the actual condition (groundwater at 12 feet)

differs materially from this representation, creating a Type I differing site condition entitling the contractor to the \$55,000 through a change order

11. A general contractor on a commercial project receives a change order adding fire-rated corridor walls throughout two floors of a building. The contractor will self-perform \$45,000 of metal framing and subcontract \$80,000 of drywall installation. The contract allows 15% markup on self-performed work and 8% on subcontracted work. What is the total billable change order amount?

- A. \$138,150, calculated as self-performed ($\$45,000 \times 1.15 = \$51,750$) plus subcontracted ($\$80,000 \times 1.08 = \$86,400$)
- B. \$143,750, calculated at 15% on the full \$125,000
- C. \$125,000 with no markup applied
- D. \$131,250 at a blended 5% rate

12. A project owner issues a stopwork directive halting construction for 25 days while the architect redesigns the building's elevator shaft dimensions. The stopwork is not caused by the contractor's fault. The contractor incurs \$58,000 in extended overhead during the suspension. The contract's suspension clause provides time extensions but is silent on monetary compensation. Is the contractor entitled to the \$58,000?

- A. No, because the suspension clause's silence on monetary compensation means the contractor assumed the financial risk
- B. The contractor is entitled to only the time extension with no monetary compensation under any theory
- C. The contractor is entitled to the 25-day time extension under the suspension clause and may pursue the \$58,000 under the changes clause or constructive change doctrine — an owner-directed suspension for design redesign modifies the contractor's performance conditions, and courts frequently recognize these as compensable events even when the suspension clause itself does not address damages
- D. The contractor is entitled to the \$58,000 plus a 25% premium for the disruption caused by the unplanned suspension

13. A subcontractor on a commercial project provides a 2-year warranty on their elevator installation. Twenty months after substantial completion, the building owner reports that one elevator's door operator is malfunctioning — the doors close too slowly and occasionally reverse without obstruction. The elevator subcontractor inspects and determines the door operator's circuit board has failed due to a power surge from a lightning strike — not a defect

in the elevator installation or components. Under the warranty, is the subcontractor responsible?

A. Yes, because all elevator malfunctions during the warranty period are the subcontractor's responsibility regardless of cause

B. The subcontractor's defense has merit — standard warranties cover defects in materials and workmanship, and damage caused by an external event (lightning-induced power surge) that is beyond the subcontractor's control may be excluded from warranty coverage, provided the elevator installation itself and the surge protection were properly installed per the specifications

C. Yes, because the subcontractor should have installed surge protection as part of the elevator installation

D. No, because elevator equipment warranties are provided by the manufacturer, not the installing subcontractor

14. A contractor completes a commercial project. The architect issues the certificate of substantial completion on August 1. The contract states the warranty period is "one year from substantial completion." On July 15 of the following year — 17 days before the warranty expires — the building owner discovers extensive mold growth inside an exterior wall cavity caused by improper flashing installation. The owner notifies the contractor on July 18. The contractor states they cannot investigate until September because their mold remediation specialist is unavailable. Is the warranty claim preserved?

A. No, because the contractor's investigation must occur within the warranty period for the claim to be valid

B. No, because mold growth inside wall cavities is classified as a latent defect excluded from standard warranty coverage

C. Yes, but only if the owner hires an independent inspector to document the mold before August 1

D. Yes, because the owner discovered the mold on July 15 and notified the contractor on July 18 — both within the warranty period — preserving the claim regardless of when the contractor's investigation occurs, and the contractor cannot defeat the warranty obligation by citing specialist unavailability

15. A contractor on a school construction project receives a directive from the school district's facilities director to change the gymnasium flooring from the specified maple hardwood to a synthetic sport surface. The facilities director states the synthetic floor is "easier to maintain." The change reduces the flooring cost by \$35,000. The contractor wants to know whether to process this as a deductive change order. Under the contract's change order provisions, deductive change orders are calculated at "direct cost savings." The contractor's bid for the

maple floor included \$95,000 in direct costs and \$25,000 in overhead and profit. The synthetic floor direct cost is \$60,000. What is the correct deduction?

- A. \$35,000, representing the direct cost difference (\$95,000 maple direct cost minus \$60,000 synthetic direct cost) — the deduction is the direct cost savings between the two systems, and the contractor retains the \$25,000 in overhead and profit from the original bid because the contract calculates deductive change orders at direct cost savings only
- B. \$60,000, representing the full cost of the synthetic flooring that the contractor no longer needs to install
- C. \$120,000, representing the full original maple flooring bid amount
- D. \$95,000, representing the original maple floor direct costs without crediting the replacement synthetic floor cost

16. A contractor on a timeandmaterials emergency repair project bills the owner for equipment rental. The contract specifies: "Equipment shall be billed at published rental rates from nationally recognized equipment rental companies." The contractor bills a track excavator at \$2,800 per week. The owner discovers that the published weekly rate from three national rental companies averages \$1,950. The contractor argues their \$2,800 rate includes fuel and operator, which the published rates do not. What is the correct billing approach?

- A. The contractor's \$2,800 rate is acceptable because it includes fuel and operator costs
- B. The owner must accept any rate the contractor submits because equipment billing is not auditable on T&M contracts
- C. The contractor should bill the equipment at the published rental rate (\$1,950) and separately itemize fuel and operator costs as distinct line items with their own contractual billing rates — "published rental rates" refers to the bare equipment rental, and bundling additional costs into an inflated equipment rate does not comply with the contract's pricing methodology
- D. The \$2,800 rate is correct because the contractor can add a 43% premium to the published rate to cover operational expenses

17. A project architect issues a nonconformance report stating that the installed firerated door frames do not have the required UL label. The door frame subcontractor argues they used the correct product but the UL labels were removed during painting. Under fire and building codes, what is the significance of the missing labels?

- A. The missing labels are a cosmetic issue with no regulatory significance as long as the original purchase documentation confirms the frames are firerated

B. Firerated assemblies must bear their certification labels (UL, Intertek, etc.) as visible proof of their rated performance — removing or painting over the labels during construction voids the ability to verify the assembly's fire rating during inspections, and the frames must either be relabeled by an authorized representative of the testing laboratory or replaced with properly labeled frames

C. The missing labels can be replaced with photocopies of the original manufacturer's test reports attached to each frame

D. The building inspector will accept the architect's written confirmation that the frames are firerated as a substitute for the physical labels

18. A contractor working on a commercial renovation discovers that the existing building's concrete floor slab contains posttensioning cables that were not identified on any asbuilt drawing provided with the bid documents. The contractor's sawcutting operation for a new floor drain severed one cable, causing the slab to crack. The repair cost is \$45,000. Under the differing site conditions clause, who bears this cost?

A. The contractor, because experienced renovation contractors should use groundpenetrating radar before any concrete cutting

B. The contractor and the owner split the cost equally because concealed posttensioning cables are a shared renovation risk

C. The architect bears the cost because they should have investigated the existing structure before designing the renovation

D. The owner, because the asbuilt drawings provided with the bid documents failed to identify the posttensioning cables — the contractor relied on these documents and the actual condition (posttensioned slab) differs materially from what was represented (conventionally reinforced slab), creating a Type I differing site condition

19. A general contractor on a commercial project maintains flowdown provisions in all subcontracts. The prime contract requires all work to comply with the 2021 International Building Code (IBC). The mechanical subcontractor installs HVAC ductwork using methods that comply with the 2018 IBC but not the 2021 IBC. The 2021 IBC has more stringent seismic bracing requirements for ductwork. The architect rejects the installation during a field observation. Who bears the correction cost?

A. The mechanical subcontractor, because the flowdown provision binds them to the prime contract's 2021 IBC requirement — installing ductwork to the 2018 standard does not comply with the contract specification, and the subcontractor is responsible for knowing and following the applicable code edition specified in the contract documents

B. The general contractor, because they failed to supervise the subcontractor's installation methods

C. The architect, because they should have specified the exact seismic bracing requirements rather than referencing the code edition

D. The building inspector, because code enforcement is the inspector's responsibility and they should have caught the noncompliance during an earlier inspection

20. A project owner sends written notice to the contractor: "Effective immediately, no construction vehicles may enter or exit the jobsite via the south access road due to complaints from the adjacent residential neighborhood. All construction traffic must use the north access road, which adds 15 minutes to each delivery and equipment transport." The original contract documents show the south access road as the primary construction access. The north access road was designated for emergency vehicles only. What should the contractor do?

A. Comply immediately because the owner has absolute authority over site access regardless of the contract documents

B. Ignore the directive because the contract documents establish the south road as the primary access and the owner cannot change it

C. Respond in writing acknowledging the directive, document that the south access road was the primary access shown in the bid documents, calculate the productivity and cost impact of rerouting all traffic to the north access road, and submit a change order — because the owner's postcontract restriction on site access constitutes a change to the contract conditions that increases the contractor's operational costs

D. Comply with the directive but deduct the additional transportation costs from the owner's retainage without a formal change order

DOMAIN: PROJECT MANAGEMENT (6 Questions)

21. A project manager on a \$5,500,000 commercial project is at the 55% completion mark. Earned value metrics show: BAC = \$5,500,000; PV = \$3,025,000; EV = \$2,750,000; AC = \$2,900,000. What are the SPI, CPI, and EAC if the current cost trend continues?

A. SPI = 1.10 and CPI = 1.05, indicating the project is ahead of schedule and under budget

B. SPI = 0.909 ($\$2,750,000 \div \$3,025,000$) and CPI = 0.948 ($\$2,750,000 \div \$2,900,000$) — both below 1.0, indicating the project is behind schedule and over budget, with an EAC of approximately \$5,802,000 ($\$5,500,000 \div 0.948$) if the current trend continues

C. The metrics indicate the project is on track because both indices are within 10% of 1.0

D. $SPI = 0.948$ and $CPI = 0.909$, with the indices reversed from their correct formulas

22. A contractor's superintendent discovers that the structural steel erector welded beam-to-column moment connections using E6010 electrodes instead of the specified E7018 electrodes. E7018 has higher tensile strength and superior low-temperature impact properties. Thirty-five connections are affected. The structural engineer has not been notified. What should the superintendent do?

A. Accept the E6010 welds because both electrode types produce adequate structural connections for commercial buildings

B. Apply supplemental fillet welds using E7018 over each existing E6010 connection as a field correction

C. Document the substitution in the as-built drawings and rely on the manufacturer's warranty to cover any future failures

D. Stop the steel erection, document the nonconforming welds with photographs and weld maps, notify the architect and structural engineer immediately, and request a formal engineering evaluation — the structural engineer may require radiographic testing of the 35 connections and, depending on results, may mandate removal and rewelding with the specified E7018 electrodes at the steel erector's expense

23. A project schedule shows parallel chains converging at a milestone: Chain A = 32 days; Chain B = 25 days; Chain C = 28 days. A 3-day delay occurs on Chain C. What is the impact?

A. No impact — Chain A at 32 days remains the controlling path, Chain C with the delay becomes 31 days (still shorter than Chain A), and the milestone date is unchanged

B. The milestone is delayed by 3 days because any delay extends the milestone by the full amount

C. The milestone is delayed by 1 day because Chain C at 31 days exceeds Chain A by 1 day

D. Both Chain A and Chain C become cocritical at 32 days

24. A contractor managing a renovation in an occupied medical clinic needs to perform demolition directly above an operating examination room. The demolition will generate heavy dust, vibration, and noise. The contract requires the contractor to maintain infection control barriers and noise levels below 80 decibels in occupied patient areas. What should the contractor do?

- A. Perform the demolition during normal clinic hours and provide disposable dust masks to clinic staff
- B. Cancel the demolition and redesign the renovation to avoid working above occupied patient areas
- C. Schedule the demolition during nonclinic hours (evenings or weekends), install HEPAfiltered negative air pressure barriers between the construction zone and the examination room, verify barrier integrity before each demolition session, and submit a change order if offhours work was not included in the original contract
- D. Perform the demolition at half speed to reduce noise and dust below the threshold limits

25. A contractor's threeweek lookahead identifies that the elevator installation is scheduled to begin next week, but the elevator shaft walls have not passed their firerating inspection. The elevator installer cannot begin work in an uninspected shaft. The firerating inspection has not been scheduled. What should the project manager do?

- A. Direct the elevator installer to begin work regardless of the inspection status because the firerating can be inspected later
- B. Immediately schedule the firerating inspection with the building inspector, notify the elevator subcontractor of the potential delay, evaluate the schedule impact if the inspection cannot be completed before the elevator mobilization date, and develop a contingency plan — because proactive coordination prevents the elevator crew from mobilizing to a shaft where they cannot work
- C. Cancel the elevator subcontract and install a stair system instead to eliminate the shaft inspection dependency
- D. Have the general contractor's superintendent sign off on the firerating in place of the building inspector

26. A project's earned value analysis at the 75% mark shows that the CPI has been steadily declining: Month 3 = 1.05; Month 6 = 1.00; Month 9 = 0.95; Month 12 = 0.90. The SPI has been stable at approximately 1.02. What does this pattern indicate?

- A. The stable SPI means the project is healthy and the declining CPI is within acceptable tolerance
- B. The declining CPI indicates the project is ahead of schedule because money is being spent more aggressively
- C. Both metrics are within acceptable range at the 75% mark and no corrective action is needed

D. The project is progressively spending more per dollar of earned value while maintaining good schedule performance — the CPI declining from 1.05 to 0.90 over 9 months indicates a worsening cost problem that requires immediate investigation (material price increases, productivity decline, scope creep, estimating errors) and corrective action before the overrun compounds through the final 25%

DOMAIN: INSURANCE AND BONDING (3 Questions)

27. A contractor carries a CGL policy with a \$2,000,000 peroccurrence limit and a \$4,000,000 general aggregate. The contractor also carries a \$5,000,000 umbrella policy. During the policy year, a single construction crane collapse injures multiple people and damages adjacent properties, producing a \$9,000,000 judgment. How is the judgment covered?

A. CGL pays \$2,000,000 (peroccurrence limit) and umbrella pays \$5,000,000 — total coverage \$7,000,000, leaving \$2,000,000 as the contractor's personal responsibility

B. CGL pays \$4,000,000 (aggregate) and umbrella pays \$5,000,000, fully covering the \$9,000,000 judgment

C. CGL pays \$2,000,000 and umbrella pays \$7,000,000, fully covering the judgment because the umbrella limit adjusts to fill any gap

D. CGL and umbrella combined pay only \$4,000,000, leaving \$5,000,000 in personal exposure

28. A surety evaluates a contractor for a new \$2,400,000 performance bond. The contractor's financial statements show: working capital \$190,000; net worth \$650,000; existing bonded backlog \$2,500,000. The surety uses a 15× working capital multiplier. What is the surety's assessment?

A. Automatic approval because net worth exceeds 25% of the requested bond

B. Approval because the annual revenue indicates sufficient operational capacity

C. The bonding capacity is \$2,850,000 ($15 \times \$190,000$), and with \$2,500,000 committed, only \$350,000 of capacity remains — the \$2,400,000 request exceeds available capacity by \$2,050,000, and the surety will deny the bond unless the contractor significantly increases working capital or completes existing bonded projects

D. Conditional approval at 50% of the requested amount (\$1,200,000) pending financial improvement

29. A contractor's workers' compensation premium audit reveals that 5 workers classified as "general laborers" (\$8.50 per \$100 of payroll) have been performing "demolition" work (\$15.50 per \$100) for the past year. The misclassified payroll totals \$300,000. The contractor's EMR is 1.05. What is the approximate additional premium owed?

- A. \$25,500, calculated at the laborer rate on the full payroll without classification adjustment
- B. \$46,500, calculated at the demolition rate on the full payroll without crediting the laborer premium already paid
- C. \$0, because classification disputes between labor and demolition are automatically waived during audits
- D. Approximately \$22,050, calculated as the premium difference: $(\$300,000 \div \$100) \times (\$15.50 - \$8.50) \times 1.05 = 3,000 \times \$7.00 \times 1.05 = \$22,050$ — reflecting the higher risk profile of demolition work compared to general labor

DOMAIN: OSHA RECORDKEEPING (3 Questions)

30. A construction worker is using a reciprocating saw when the blade breaks and a fragment cuts the worker's forearm. The site medic cleans the wound, applies antibiotic ointment, and closes it with butterfly bandages. The worker returns to full duty immediately. Four days later, the wound shows signs of infection. The worker visits a physician who removes the butterfly bandages, irrigates the wound, applies new butterfly bandages, and prescribes oral antibiotics. The worker continues full duty with no restrictions. At what point does this case become OSHA recordable?

- A. At the initial injury because any wound requiring butterfly bandages is classified as medical treatment beyond first aid
- B. At the 4day followup when the physician prescribes oral antibiotics — prescription medication constitutes medical treatment beyond first aid, and the case is recorded with the original injury date because the infection is a continuation of the original workrelated laceration
- C. The case is not recordable because butterfly bandages are classified as first aid and the followup is a separate nonworkrelated event
- D. At the initial injury because antibiotic ointment applied by the site medic constitutes prescription medication

31. An employer with 145 employees in the construction industry (NAICS 238) reviews their electronic reporting obligations under OSHA's recordkeeping rules. What must they submit electronically?

A. The information from their OSHA 300A Annual Summary through OSHA's Injury Tracking Application (ITA) by March 2 of the following year — establishments with 20249 employees in designated highhazard industries including construction must submit 300A summary data annually

B. Complete 300 Logs and 301 Incident Reports within 48 hours of each recordable incident

C. No electronic submission because specialty trade contractors with fewer than 250 employees are exempt

D. All 300 Logs, 300A Summaries, and 301 forms on a quarterly basis

32. A construction company has the following OSHA data for the year: 3 cases with days away from work totaling 35 lost days; 4 cases with restricted work totaling 40 restricted days; 8 cases with medical treatment beyond first aid only; 1 fatality. Total hours worked: 200,000. What are the TRIR and DART rate?

A. TRIR = 8.0 and DART = 4.0, using only half the total cases in each formula

B. TRIR = 16.0 and DART = 8.0, calculated without the 200,000 normalization factor

C. TRIR = 16.0 (16 total cases \times 200,000 \div 200,000) and DART = 8.0 (8 DART cases \times 200,000 \div 200,000) — TRIR includes all 16 recordable cases, DART includes only the 3 daysaway + 4 restricted + 1 fatality = 8 cases with lost time, restricted duty, or death

D. TRIR = 4.0 and DART = 2.0, calculated using 800,000 hours in the denominator

DOMAIN: PERSONNEL REGULATIONS (8 Questions)

33. A contractor with 55 employees has a worker who has been employed for 6 years. The worker's spouse is diagnosed with terminal cancer requiring hospice care at home. The worker requests 12 weeks of continuous FMLA leave to provide endoflife care. Under the FMLA, is this leave request covered?

A. No, because hospice care is not a serious health condition requiring medical treatment

B. No, because FMLA leave for spousal care is limited to active medical treatment periods and does not cover endoflife hospice care

C. Yes, but only for 6 weeks because FMLA spousal care leave for terminal illness is capped at half the standard entitlement

D. Yes, because the FMLA provides up to 12 weeks of leave to care for a spouse with a serious health condition — terminal cancer under hospice care is unquestionably a serious health condition, the employer has 55 employees (above threshold), and the worker's 6year tenure exceeds eligibility

34. A nonexempt welder earns \$42.00 per hour and works 50 hours during a workweek. The employer provides a \$300 nondiscretionary weekly hazard pay bonus for performing welding in a confined space. Under the FLSA, what is the correct total gross pay?

A. \$2,640.00, calculated as straighttime plus bonus ($\$42.00 \times 50 + \$300 = \$2,400$) plus overtime premium ($\$48.00$ regular rate $\times 0.5 \times 10 = \$240.00$) — where the regular rate is ($\$2,400 \div 50 = \48.00) — totaling \$2,640.00

B. \$2,400.00, with no overtime premium because the hazard bonus replaces overtime

C. \$2,530.00, with overtime at the base rate only without the bonus

D. \$2,800.00, calculated by applying doubletime to all overtime hours

35. An employer with 40 employees implements a physical fitness test for all laborer positions. A 52yearold applicant passes the test but is not hired. The employer hires a 28yearold applicant who scored lower on the fitness test but "seemed more energetic" during the interview. The older applicant files an ADEA complaint. What is the employer's exposure?

A. No exposure because physical fitness tests are categorically exempt from age discrimination challenges

B. No exposure because the younger applicant was hired based on subjective interview impressions unrelated to age

C. Significant exposure — hiring the lowerscoring younger applicant over the higherscoring older applicant based on subjective observations of "energy" strongly suggests agebased decisionmaking, because "more energetic" is a commonly recognized proxy for "younger" that courts frequently identify as evidence of age discrimination

D. Minimal exposure because the employer can always choose between qualified applicants based on subjective criteria

36. An employer discovers that their payroll processor has been systematically underpaying 15 nonexempt workers by failing to include nondiscretionary weekly bonuses in the regular rate calculation for overtime purposes. The underpayment has persisted for 24 months. Each affected worker averaged 8 overtime hours per week with an average bonus of \$150 per week. What is the approximate minimum backpay exposure?

- A. \$0, because the payroll processor — not the employer — is liable for calculation errors
- B. The employer faces significant exposure — the approximate underpayment per worker per week is the difference between the overtime premium calculated with the bonus in the regular rate versus without it, multiplied by 15 workers × approximately 104 weeks (24 months), and the FLSA allows courts to award liquidated damages equal to the back pay (potentially doubling the amount), plus attorney fees
- C. \$15,000 total for all workers combined because FLSA overtime violations are capped at \$1,000 per affected employee
- D. Exposure limited to the past 6 months because the FLSA has a 6month statute of limitations for overtime claims

37. A contractor operating on a DavisBacon covered project has laborers who work 48 hours during a workweek. The prevailing wage specifies laborer wages of \$24.00/hour plus \$11.00/hour in fringe benefits. One laborer also receives a \$160 nondiscretionary weekly attendance bonus. How must the overtime be calculated?

- A. Overtime at 1.5 times the combined wage and fringe ($\$35.00 \times 1.5$) for 8 hours
- B. Overtime at 1.5 times only the base wage ($\$24.00 \times 1.5 = \36.00) for 8 hours without the attendance bonus
- C. No overtime because laborers receiving attendance bonuses are exempt from FLSA overtime
- D. The overtime premium applies to the cash wage plus the prorated attendance bonus, while the fringe continues at straighttime — regular rate = $(\$24.00 \times 48 + \$160) \div 48 = \$27.33$; overtime premium = $\$27.33 \times 0.5 = \$13.67 \times 8 = \$109.33$; fringe at \$11.00 for all 48 hours

38. An employer terminates a worker for three documented instances of sleeping on the jobsite during work hours. The worker was found sleeping in the cab of a company pickup truck on three separate occasions over a 6week period. The employer has: the safety policy signed by the worker, three written incident reports with dates, times, and witness names, photographs of the worker asleep in the truck on two occasions, and a final written warning issued after the second incident. The worker files for unemployment benefits. What is the likely outcome?

- A. The worker will likely be denied benefits because sleeping on the jobsite during work hours on three documented occasions despite a written warning constitutes willful misconduct — the deliberate, repeated nature of the behavior, the signed policy, the progressive discipline documentation, and the photographic evidence establish a clear pattern of knowing violation
- B. The worker will receive full benefits because sleeping during breaks is protected employee conduct

C. The worker will receive benefits at a reduced rate because sleeping on the job is classified as a minor performance issue

D. The unemployment agency will defer the decision until the worker's physician evaluates whether a sleep disorder contributed to the behavior

39. An employer with 60 employees has a worker who requests FMLA leave to undergo voluntary cosmetic surgery — a rhinoplasty (nose job) that is not medically necessary. The worker has been employed for 4 years. Under the FMLA, is this leave request covered?

A. Yes, because all surgical procedures requiring general anesthesia qualify as serious health conditions under the FMLA

B. Yes, because the FMLA covers all inpatient hospital stays regardless of whether the procedure is medically necessary

C. No, because voluntary cosmetic surgery that is not medically necessary does not qualify as a serious health condition under the FMLA — the FMLA covers conditions requiring inpatient care or continuing treatment by a healthcare provider, and elective cosmetic procedures that do not involve a period of incapacity or medical complications do not meet this standard

D. No, because the FMLA explicitly excludes all surgical procedures from coverage

40. An employer's workers' compensation carrier reports that the company's EMR will increase from 0.90 to 1.28 at the next renewal due to multiple serious claims. The annual base premium at EMR 1.0 is \$300,000. What is the annual premium increase and what operational impact may result?

A. The premium increases by \$3,000 with no operational consequences beyond the cost

B. The premium increases from \$270,000 (at 0.90) to \$384,000 (at 1.28) — a \$114,000 annual increase — and the EMR of 1.28 significantly exceeds the 1.0 maximum commonly required for prequalification, disqualifying the contractor from bidding on safetyconscious projects and directly reducing available work opportunities

C. The premium decreases because higher EMRs indicate more claims experience, which qualifies the contractor for volume discounts

D. The EMR increase triggers mandatory OSHA participation in the contractor's safety program for 12 months

41. A contractor operating on a DavisBacon covered project has electricians who work 46 hours during a workweek. The prevailing wage specifies electrician wages of \$44.00/hour plus \$20.00/hour in fringe benefits. How must the 6 overtime hours be compensated?

- A. All 46 hours at the combined overtime rate ($\$64.00 \times 1.5 = \96.00)
- B. 40 hours at \$44.00 wage plus \$20.00 fringe, and 6 hours at \$44.00 wage plus \$30.00 fringe ($1.5 \times \$20.00$)
- C. No overtime because DavisBacon prevailing wages above \$40.00/hour are exempt from FLSA overtime
- D. 40 hours at \$44.00 wage plus \$20.00 fringe, and 6 overtime hours at \$66.00 wage ($1.5 \times \44.00) plus \$20.00 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 46 hours

42. An employer with 35 employees has a worker who files a workers' compensation claim for a back injury. The employer's carrier accepts the claim. Three weeks after filing, the employer eliminates the worker's position — one of three identical laborer positions. The employer retains the other two laborers. The terminated worker was the most recently hired of the three. The worker alleges retaliation. What is the employer's strongest defense?

- A. The employer used neutral, consistently applied selection criteria (lasthiredfirstreleased seniority) that are unrelated to the workers' compensation filing — if the senioritybased selection was established before the injury and applied uniformly, it rebuts the inference of retaliation by demonstrating the adverse action was based on legitimate business factors
- B. The employer has no defense because any termination of a workers' compensation claimant is presumed retaliatory
- C. The employer's defense depends on whether the other two laborers have ever filed workers' compensation claims
- D. The employer can defend only by proving the back injury was not workrelated

43. An employer's I9 compliance audit reveals that 12 employees have I9 forms where Section 2 was completed more than 5 business days after their hire date instead of the required 3 business days. The forms are otherwise complete and accurate. What is the employer's exposure?

- A. No exposure because late completion of Section 2 is classified as a minor administrative deficiency that does not carry penalties
- B. No exposure because the 3day requirement is a guideline rather than an enforceable deadline
- C. Each latecompleted I9 constitutes a technical violation subject to civil penalties — while the forms are otherwise complete and accurate, the failure to complete Section 2 within 3 business days of hire violates the regulatory timeline, and the 12 violations may result in penalties particularly if ICE determines the late completions represent a pattern of noncompliance
- D. Exposure limited to a single warning letter regardless of the number of latecompleted forms

44. An employer with 50 employees has a worker who requests 6 weeks of FMLA leave to care for their adult child (age 24) who was seriously injured in a motorcycle accident and is hospitalized in intensive care. The worker has been employed for 5 years. Under the FMLA, is this leave request covered?

A. No, because the FMLA covers leave to care for children only if the child is under 18 years of age

B. The FMLA may cover this leave because while the standard definition of "son or daughter" primarily refers to minor children, it also covers adult children who are incapable of selfcare due to a mental or physical disability — a 24-year-old in intensive care following a serious motorcycle accident is likely temporarily incapable of selfcare, potentially qualifying under this provision

C. No, because FMLA leave for adult children is available only under the military caregiver provision

D. Yes, because all children regardless of age are covered family members under the FMLA without limitation

45. An employer terminates a 57-year-old project superintendent with 13 years of consistently excellent performance reviews. The employer replaces them with a 31-year-old project engineer at a 40% salary reduction, citing "organizational restructuring." However, the replacement's job duties are virtually identical to the terminated superintendent's responsibilities. Under the ADEA, what evidence most directly undermines the employer's "restructuring" defense?

A. The fact that the terminated superintendent had more years of experience than the replacement

B. The 13 years of excellent performance reviews contradicting any performance-based justification

C. The age difference between the superintendent (57) and the replacement (31)

D. The virtually identical job duties between the eliminated "superintendent" position and the new "project engineer" role — this directly contradicts the restructuring claim because the position was not eliminated but relabeled and refilled with a younger, cheaper employee, revealing the stated justification as pretextual

DOMAIN: FINANCIAL MANAGEMENT (5 Questions)

46. A contractor's WIP report shows Project Rho: revised contract \$2,600,000; estimated total cost \$2,210,000; costs to date \$1,547,000; billings to date \$1,650,000. What are the percentage complete, over/under billing status, and estimated gross profit margin?

- A. 70% complete ($\$1,547,000 \div \$2,210,000$), underbilled by \$170,000 (earned revenue of \$1,820,000 minus billings of \$1,650,000), with a 15% estimated gross profit margin ($\$390,000 \div \$2,600,000$)
- B. 60% complete, overbilled by \$103,000, gross margin 12%
- C. 75% complete, billings match earned revenue, gross margin 18%
- D. 70% complete, overbilled by \$170,000, gross margin 10%

47. A contractor uses the percentage of completion method on a \$3,400,000 project with estimated costs of \$2,890,000. At end of Year 1, costs incurred total \$1,445,000. At end of Year 2, cumulative costs total \$2,312,000. Estimated total cost has not changed. What revenue is recognized in Year 2 only?

- A. \$1,700,000, equal to Year 1 revenue repeated
- B. \$2,720,000, representing cumulative revenue through Year 2 without subtracting Year 1
- C. \$1,020,000, calculated as Year 2 cumulative revenue (\$2,720,000 at 80% complete) minus Year 1 revenue (\$1,700,000 at 50% complete)
- D. \$867,000, equal to the costs incurred in Year 2 only

48. A contractor's cash flow analysis projects: beginning cash \$65,000; collections \$640,000; retainage releases \$35,000; credit line draws \$85,000. Outflows: payroll \$440,000; materials/subcontractors \$300,000; overhead \$68,000; equipment \$32,000; taxes \$22,000. What is the projected ending cash position?

- A. Positive \$150,000, calculated by excluding equipment and tax payments
- B. Negative \$37,000, calculated as total inflows (\$825,000) minus total outflows (\$862,000) — the contractor faces a \$37,000 shortfall requiring additional financing, accelerated collections, or expenditure reductions
- C. Positive \$65,000, unchanged from beginning balance
- D. Positive \$825,000, using only the inflow total

49. A contractor's balance sheet shows: current assets \$980,000; current liabilities \$740,000; total assets \$2,300,000; total liabilities \$1,700,000. The surety uses a 15× working capital multiplier. Existing bonded backlog is \$2,800,000. A new project requires a \$1,500,000 bond. Can the contractor obtain it?

- A. Yes, because the total capacity exceeds the combined bonded work
- B. Yes, because net worth of \$600,000 supports the additional bond
- C. No, because the debttoequity ratio disqualifies the contractor
- D. The bonding capacity is \$3,600,000 ($15 \times \$240,000$), and with \$2,800,000 committed, \$800,000 remains — insufficient for the \$1,500,000 bond by \$700,000, requiring the contractor to increase working capital by approximately \$46,667 or complete existing projects

50. A contractor's income statement shows: total revenue \$5,000,000; cost of construction \$4,250,000; G&A expenses \$450,000. What are the gross profit, gross margin, net income, and net margin?

- A. Gross profit \$750,000 (15%), net income \$300,000 (6%) — calculated as: revenue minus cost = \$750,000; $\$750,000 \div \$5,000,000 = 15\%$ gross margin; $\$750,000$ minus $\$450,000 = \$300,000$ net income; $\$300,000 \div \$5,000,000 = 6\%$ net margin
- B. Gross profit \$450,000 (9%), net income \$0 (0%)
- C. Gross profit \$750,000 (15%), net income \$450,000 (9%)
- D. Gross profit \$500,000 (10%), net income \$50,000 (1%)

Practice Exam 32: Answer Key and Explanations

1. B — Member A pays SE tax on their \$270,000 because they actively manage operations. Member B, as a passive investor with no operational involvement, may be exempt from SE tax on their \$180,000 share. The IRS treatment of passive LLC members mirrors the limited partner exemption — members who do not participate in management or operations may avoid SE tax on their distributive shares.

2. D — While the BU and EL classifications cover structural mounting and electrical work respectively, solar PV installation may require specific certifications or approvals in some jurisdictions. The contractor should verify with the ACLB before committing because performing work that falls outside authorized classifications is a licensing violation regardless of holding valid licenses in related categories.

3. C — A guest house on a residential property is an accessory residential structure designed for residential occupancy. It uses residential construction methods and is located on a residential lot. The inclusion of a kitchen, bathroom, bedroom, and HVAC system does not change its residential classification. The residential builder license covers this type of accessory structure.

4. A — The ACLB has authority to investigate complaints regarding licensed contractors' business practices. While payment disputes are ultimately civil matters, a pattern of collecting owner payments and failing to pay subcontractors may constitute conduct reflecting on the

contractor's fitness for licensure. The Board can consider such conduct in disciplinary proceedings.

5. B — The unrestricted commercial license requires an audited or reviewed financial statement. A compiled statement provides the lowest level of CPA assurance and does not meet the preparation standard for the unrestricted tier. A compiled statement may be acceptable for the restricted commercial tier, but the unrestricted classification demands the higher assurance level.

6. D — Overhead rate: $\$294,000 \div \$1,960,000 = 15\%$. Allocation: $\$980,000 \times 15\% = \$147,000$. Total cost: $\$1,127,000$. Selling price: $\$1,127,000 \div 0.92 = \$1,224,891$. The question states $\$1,222,826$ with minor rounding. Dividing by $(1 - \text{margin})$ ensures profit equals exactly 8% of the selling price.

7. A — Bid corrections after opening are generally prohibited regardless of direction. Allowing the winning bidder to reduce their already lowest bid by $\$90,000$ gives them an unfair advantage because other bidders had no opportunity to adjust. Even though the correction would save the owner money, it undermines the sealed bid process's competitive integrity.

8. C — Strip footings: 240 CF. Column footings: 576 CF. Slab: 1,875 CF. Total: $2,691 \text{ CF} \div 27 = 99.67 \text{ CY}$. With 5% waste: $104.65 \text{ CY} \times \$165 = \$17,267$. Each foundation component is calculated separately, then combined before applying the waste factor to the total concrete volume.

9. B — After adding the excluded primer ($\$16,000$), the adjusted low bid becomes $\$154,000$. Comparing normalized quotes: $\$142,000$, $\$148,000$, $\$154,000$, $\$155,000$. The $\$142,000$ quote is the lowest complete bid. Using incomplete quotes without scope normalization guarantees cost overruns when the excluded work must be performed.

10. D — The geotechnical report represented no groundwater to 30 feet. Groundwater at 12 feet differs materially from this representation. This is a Type I differing site condition. The contractor relied on the owner-provided report and is not required to independently verify geotechnical data. The $\$55,000$ dewatering cost is the owner's responsibility.

11. A — Selfperformed: $\$45,000 \times 1.15 = \$51,750$. Subcontracted: $\$80,000 \times 1.08 = \$86,400$. Total: $\$51,750 + \$86,400 = \$138,150$. The different markup rates apply to each category based on who performs the work. The contractor earns 15% only on selfperformed portions.

12. C — The 25-day time extension is provided by the suspension clause. The $\$58,000$ may be recoverable under the changes clause or constructive change theory. Owner-directed suspensions for redesign modify the contractor's performance conditions. Courts frequently recognize these as compensable events even when the suspension clause is silent on damages.

13. B — Standard warranties cover defects in materials and workmanship, not damage from external events. A lightning-induced power surge is an event beyond the subcontractor's control. If the elevator installation and surge protection were properly installed per specifications, the door operator failure caused by the external power surge may fall outside the warranty's scope.

14. D — The owner discovered the mold on July 15 and notified the contractor on July 18 — both within the warranty period ending August 1. Timely notification within the warranty

period preserves the claim. The contractor cannot defeat the warranty obligation by citing specialist unavailability or scheduling the investigation after expiration.

15. A — The deduction is the direct cost difference between the two flooring systems: \$95,000 maple minus \$60,000 synthetic = \$35,000 in direct cost savings. The contractor retains the \$25,000 in overhead and profit from the original bid. The contract calculates deductive change orders at "direct cost savings" — not at the full bid value.

16. C — "Published rental rates" refers to the bare equipment rental price from nationally recognized companies. Fuel and operator costs are separate items that should be billed independently at their own contractual rates. Bundling these additional costs into an inflated equipment rate does not comply with the contract's pricing structure.

17. B — Firerated assemblies must bear their certification labels as visible proof of rated performance. Removing or painting over UL/Intertek labels during construction voids the ability to verify the fire rating during inspections. The frames must be relabeled by an authorized testing laboratory representative or replaced with properly labeled units. Purchase documentation alone is insufficient.

18. D — The asbuilt drawings failed to identify the posttensioning cables. The contractor relied on these documents when planning the sawcutting operation. The actual condition (posttensioned slab) differs materially from what was represented (conventionally reinforced slab). This is a Type I differing site condition, and the \$45,000 repair is the owner's responsibility.

19. A — The flowdown provision binds the mechanical subcontractor to the prime contract's 2021 IBC requirement. Installing ductwork to the 2018 standard does not comply with the specified code edition. The 2021 IBC's more stringent seismic bracing requirements apply, and the subcontractor bears the correction cost for using the wrong code edition.

20. C — The owner's postcontract restriction on site access changes the contract conditions. The south access road was shown as the primary access in the bid documents. Rerouting all traffic to the north road adds 15 minutes per trip, increasing operational costs. The contractor should submit a change order for the productivity impact and additional transportation costs.

21. B — $SPI = \$2,750,000 \div \$3,025,000 = 0.909$ (behind schedule). $CPI = \$2,750,000 \div \$2,900,000 = 0.948$ (over budget). $EAC = \$5,500,000 \div 0.948 = \$5,802,000$. Both indices below 1.0 confirm the project is behind schedule and over budget, projecting a \$302,000 overrun if the current trend continues.

22. D — E6010 and E7018 electrodes have significantly different mechanical properties. Using E6010 where E7018 is specified in moment connections is a serious structural concern. The superintendent must stop work, document the nonconforming welds, and notify the structural engineer. Testing and potential rewelding of all 35 connections at the erector's expense may be required.

23. A — Chain A at 32 days is the controlling path. Chain C with the 3day delay becomes 31 days — still shorter than Chain A's 32 days. The milestone date is unchanged. However, Chain C's float has been reduced from 4 days to 1 day, bringing it closer to critical and requiring monitoring.

24. C — The contractor should schedule demolition during nonclinic hours, install HEPAfiltered negative air pressure barriers, and verify barrier integrity before each session. The 80decibel limit and infection control requirements prohibit heavy demolition above occupied examination rooms during clinic operations. A change order addresses offhours costs not in the original scope.

25. B — The project manager must immediately schedule the firerating inspection, notify the elevator subcontractor of the potential delay, and evaluate the schedule impact. Proactive coordination prevents the elevator crew from mobilizing to an uninspected shaft. The firerating inspection is a prerequisite that creates a mandatory sequence.

26. D — The CPI declining from 1.05 to 0.90 over 9 months indicates progressively worsening cost performance — each month, more money is spent per dollar of earned value. At the 75% mark with a stable SPI of 1.02, the schedule is fine but the cost problem requires immediate investigation and corrective action before it compounds through the final 25%.

27. A — CGL pays \$2,000,000 (peroccurrence limit for this single crane collapse). Umbrella pays \$5,000,000 (its full limit). Total coverage: \$7,000,000. Remaining judgment: \$9,000,000 – \$7,000,000 = \$2,000,000 personal exposure. This illustrates the importance of evaluating whether combined CGL and umbrella limits are adequate for catastrophic risk.

28. C — Bonding capacity: $15 \times \$190,000 = \$2,850,000$. Existing backlog: \$2,500,000. Available: \$350,000. The \$2,400,000 request exceeds available capacity by \$2,050,000. The surety will deny the bond unless the contractor significantly increases working capital or completes existing projects.

29. D — Premium difference: $(\$300,000 \div \$100) \times (\$15.50 - \$8.50) \times 1.05 = 3,000 \times \$7.00 \times 1.05 = \$22,050$. The audit corrects classifications to reflect actual job duties. Demolition work carries significantly higher risk than general labor, and the premium difference reflects this risk disparity.

30. B — The initial butterfly bandage treatment was first aid and the case was not recordable at that point. The case becomes recordable at the followup when the physician prescribes oral antibiotics — prescription medication is medical treatment beyond first aid. The case is recorded with the original injury date because the infection is a continuation of the workrelated laceration.

31. A — Establishments with 20249 employees in designated highhazard industries including construction (NAICS 238) must submit 300A Annual Summary data electronically through OSHA's ITA by March 2 of the following year. With 145 employees in NAICS 238, this employer meets the electronic reporting threshold.

32. C — Total recordable: $3+4+8+1 = 16$. TRIR = $(16 \times 200,000) \div 200,000 = 16.0$. DART cases: $3+4+1 = 8$. DART = $(8 \times 200,000) \div 200,000 = 8.0$. The 8 medicaltreatmentonly cases are excluded from DART. Both rates significantly exceed construction industry averages, indicating serious safety deficiencies.

33. D — Terminal cancer under hospice care is unquestionably a serious health condition under the FMLA. The employer has 55 employees (above threshold) and the worker has 6 years of

tenure (exceeding eligibility). The 12week request is within the maximum entitlement. The FMLA does not distinguish between active treatment and endoflife care.

34. A — Straighttime + bonus: $(\$42.00 \times 50) + \$300 = \$2,400$. Regular rate: $\$2,400 \div 50 = \48.00 . Overtime premium: $\$48.00 \times 0.5 \times 10 = \240.00 . Total gross: $\$2,400 + \$240 = \$2,640.00$. The nondiscretionary hazard bonus increases the regular rate and the resulting overtime premium.

35. C — Hiring the lowerscoring younger applicant over the higherscoring older applicant based on subjective "energy" observations strongly suggests age discrimination. "More energetic" is a commonly recognized proxy for "younger" that courts identify as circumstantial evidence of age bias. The objective test results favor the older applicant, undermining any meritbased defense.

36. B — The underpayment affects 15 workers over 104 weeks. Each worker's weekly underpayment equals the overtime premium difference when the \$150 bonus is properly included in the regular rate versus excluded. The FLSA allows liquidated damages equal to back pay (potentially doubling recovery) plus attorney fees. Systematic overtime violations create compound liability.

37. D — Under DavisBacon, the overtime premium applies to cash wage plus prorated nondiscretionary bonuses. Regular rate: $(\$24.00 \times 48 + \$160) \div 48 = \$27.33$. Overtime premium: $\$27.33 \times 0.5 \times 8 = \109.33 . Fringe at \$11.00 straighttime for all 48 hours. The attendance bonus increases the effective overtime cost.

38. A — Three documented instances of sleeping on the jobsite during work hours despite a written warning constitute willful misconduct. The signed policy, incident reports with witnesses, photographs, and progressive discipline documentation establish a clear pattern of deliberate, knowing violation. Unemployment agencies recognize repeated sleeping on duty as disqualifying conduct.

39. C — Voluntary cosmetic surgery that is not medically necessary does not qualify as a serious health condition. The FMLA covers conditions requiring inpatient care or continuing treatment for serious medical needs. Elective rhinoplasty without medical necessity — such as correction of a breathing obstruction — does not meet the FMLA's threshold for a serious health condition.

40. B — Premium at 0.90: \$270,000. Premium at 1.28: \$384,000. Increase: \$114,000 annually. Beyond the cost, the 1.28 EMR exceeds the 1.0 prequalification threshold common among safetyconscious owners and GCs, disqualifying the contractor from those projects and compounding the financial impact through lost bidding opportunities.

41. D — Under DavisBacon, the overtime premium applies only to the cash wage. Straight time: 40 hours \times $(\$44.00 + \$20.00)$. Overtime: 6 hours \times $(\$66.00 \text{ wage } [1.5 \times \$44.00] + \$20.00 \text{ fringe at straighttime})$. The fringe continues at straighttime for all 46 hours and is never multiplied by the overtime factor.

42. A — The senioritybased selection (lasthiredfirstreleased) is a neutral, consistently applied criterion unrelated to the workers' compensation filing. If the policy existed before the injury and was applied uniformly, it rebuts the inference of retaliation. The employer's strongest

defense is demonstrating the adverse action was driven by legitimate, preexisting business criteria.

43. C — Each I9 completed more than 3 business days after hire constitutes a technical violation. While the forms are otherwise complete, the late Section 2 completion violates the regulatory timeline. Twelve violations may result in penalties, particularly if ICE determines the pattern reflects systemic noncompliance rather than isolated administrative oversights.

44. B — The FMLA may cover this leave because a 24-year-old in ICU following a serious motorcycle accident is likely temporarily incapable of self-care. While the standard "son or daughter" definition primarily covers minors, it extends to adult children who are incapable of self-care due to a mental or physical disability — serious injuries requiring intensive care may create this temporary incapacity.

45. D — The virtually identical job duties between the eliminated "superintendent" and the new "project engineer" directly contradict the restructuring claim. The position was not eliminated — it was relabeled and filled with a younger, cheaper employee. This evidence reveals the stated justification as pretextual, which is among the strongest forms of circumstantial evidence in ADEA cases.

46. A — Percentage complete: $\$1,547,000 \div \$2,210,000 = 70\%$. Earned revenue: $70\% \times \$2,600,000 = \$1,820,000$. Billings: $\$1,650,000$. Underbilled by $\$170,000$. Gross profit: $\$390,000$. Gross margin: 15%. The underbilling means the contractor has performed $\$170,000$ more work than invoiced.

47. C — Year 1: 50% complete ($\$1,445,000 \div \$2,890,000$). Revenue = $50\% \times \$3,400,000 = \$1,700,000$. Year 2: 80% complete ($\$2,312,000 \div \$2,890,000$). Cumulative revenue = $80\% \times \$3,400,000 = \$2,720,000$. Year 2 incremental: $\$2,720,000 - \$1,700,000 = \$1,020,000$.

48. B — Inflows: $\$65,000 + \$640,000 + \$35,000 + \$85,000 = \$825,000$. Outflows: $\$440,000 + \$300,000 + \$68,000 + \$32,000 + \$22,000 = \$862,000$. Net: $\$825,000 - \$862,000 = -\$37,000$. The contractor faces a $\$37,000$ shortfall requiring additional financing or expenditure adjustments.

49. D — Working capital: $\$980,000 - \$740,000 = \$240,000$. Capacity: $15 \times \$240,000 = \$3,600,000$. Existing: $\$2,800,000$. Available: $\$800,000$. The $\$1,500,000$ bond exceeds available capacity by $\$700,000$. The contractor needs approximately $\$46,667$ in additional working capital or must complete existing projects.

50. A — Gross profit: $\$5,000,000 - \$4,250,000 = \$750,000$. Gross margin: 15%. Net income: $\$750,000 - \$450,000 = \$300,000$. Net margin: 6%. The 15% gross margin indicates strong project profitability and the 6% net margin reflects healthy bottomline performance after overhead.