

PRACTICE EXAM 22: 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 sole proprietorship earning \$280,000 in annual net income. The contractor's CPA presents a comparison showing that converting to an LLC with SCorporation election and paying a reasonable salary of \$160,000 would save approximately \$18,360 annually in selfemployment taxes on the \$120,000 taken as distributions. The contractor asks what the primary disadvantage of the SCorporation election would be. What is the most significant operational disadvantage?

A. The SCorporation election prevents the contractor from deducting any business expenses on their individual tax return

B. The SCorporation election requires the contractor to pay corporate income tax at 21% on all business income before distributions

C. The SCorporation election requires formal payroll processing, W2 issuance, quarterly payroll tax filings (Form 941), annual unemployment tax filings (Form 940), workers' compensation coverage on the owner's salary, and compliance with all employer payroll obligations — adding administrative complexity and cost that must be weighed against the FICA tax savings

D. The SCorporation election limits the contractor to a maximum of \$500,000 in annual revenue before the election is automatically revoked

DOMAIN: LICENSING (4 Questions)

2. A contractor holds a restricted commercial license and is managing a \$720,000 commercial project. During construction, the owner approves three change orders: CO #1 adds \$15,000, CO #2 adds \$22,000, and CO #3 adds \$18,000. The revised contract value is now \$775,000. The restricted license caps individual projects at \$750,000. At what point did the contractor have a licensing obligation to address the cap exceedance?

A. At the approval of CO #2, when the cumulative change orders (\$37,000) pushed the total contract value to \$757,000 — exceeding the \$750,000 cap, the contractor should have immediately notified the ACLB and either applied for an unrestricted license upgrade or obtained Board guidance before accepting additional change orders that would breach the project value cap

B. Only at project completion when the final contract value is calculated for the ACLB annual report

C. At the approval of CO #3 because only the third change order pushed the value above \$750,000

D. The contractor has no obligation because change orders are excluded from the project value calculation under the restricted license rules

3. A contractor applies for an Arkansas commercial license. The ACLB application requires the contractor to provide a \$10,000 surety bond. The contractor's insurance broker explains the purpose of the surety bond. Which statement most accurately describes the bond's purpose?

A. The bond insures the contractor against financial losses caused by project delays or cost overruns

B. The bond guarantees the contractor's employees will be paid their full wages on every project

C. The bond provides workers' compensation coverage for the contractor's employees as a supplement to the standard policy

D. The bond provides a financial guarantee to protect the public — if the contractor violates licensing laws, engages in fraud, or fails to fulfill contractual obligations, affected parties may file a claim against the bond to recover damages up to the \$10,000 penal sum

4. A contractor with a residential remodeler license is hired to renovate a singlefamily home's kitchen and master bathroom for \$85,000. During construction, the homeowner asks the contractor to also convert the attached garage into a home office — adding walls, insulation, drywall, flooring, electrical outlets, and a minisplit HVAC unit. The garage conversion adds

\$40,000 to the project, bringing the total to \$125,000. Can the contractor perform the garage conversion under their residential remodeler license?

A. No, because the total project value of \$125,000 exceeds the residential remodeler's \$100,000 maximum project limit

B. Yes, because converting an attached garage into a living space within an existing home is residential remodeling — it is an alteration and improvement to an existing residential structure, and the residential remodeler license covers this type of work regardless of whether the total project value exceeds any assumed cap

C. No, because garage conversions require a separate commercial license due to the change of use from storage to habitable space

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

5. A licensed contractor in Arkansas discovers that one of their competitors has been advertising contractor services and performing construction work valued at \$85,000 on a commercial property without holding any Arkansas contractor's license. What options does the licensed contractor have to address this situation?

A. The licensed contractor can file a complaint with the ACLB reporting the unlicensed activity — the Board has authority to investigate and take enforcement action against individuals performing construction work that requires licensing without holding a valid license, including issuing ceaseanddesist orders and pursuing civil penalties

B. The licensed contractor has no standing to report competitors because licensing enforcement is exclusively initiated by consumers who have been directly harmed

C. The licensed contractor must file a civil lawsuit against the unlicensed competitor because the ACLB does not investigate complaints from competing contractors

D. The licensed contractor can only report the unlicensed activity to local law enforcement, which handles all construction licensing violations as criminal matters

DOMAIN: ESTIMATING AND BIDDING (4 Questions)

6. A contractor estimates flooring work for 12,000 SF. Existing flooring removal: 400 SF/hour, 2person crew, \$36/hour loaded rate per worker. New flooring installation: 80 SF/hour, 3person crew, \$44/hour loaded rate per worker. What is the total estimated labor cost?

A. \$19,800, calculated using only the installation labor without including the removal cost

- B. \$2,160, calculated using only the removal labor without including the installation cost
- C. \$21,960, calculated as removal ($12,000 \div 400 = 30$ hours \times 2 workers \times \$36=\$2,160) plus installation ($12,000 \div 80 = 150$ hours \times 3 workers \times \$44=\$19,800), totaling \$21,960
- D. \$26,400, calculated by applying the installation crew's rate and size to both the removal and installation activities

7. A contractor submits the lowest bid on a public highway project at \$5,800,000. The secondlowest bid is \$6,150,000. After the bid opening, the contractor discovers a \$350,000 error — their estimator priced the bridge deck overlay at \$45 per square yard instead of the correct \$95 per square yard for the specified highperformance concrete overlay. The contractor requests withdrawal. Under common law principles governing bid mistakes on public projects, what factors will the court or administrative body evaluate?

- A. Whether the contractor's profit margin on the project exceeds 5%, because only unprofitable bids qualify for withdrawal
- B. Whether the bid was the lowest by a percentage exceeding the standard deviation of all bids received
- C. Whether at least three other bidders made similar errors, establishing an industrywide pricing confusion
- D. Whether the error was clerical or mathematical rather than judgmental, whether the error was material in amount (\$350,000 on a \$5.8M bid is 6%), whether withdrawal was requested promptly, and whether the public entity can reaward to the next bidder without unconscionable harm — these factors determine whether equitable relief from the bid is appropriate

8. A contractor is estimating a commercial project and receives the following subcontractor quotes for the mechanical (HVAC) work: Sub A — \$425,000; Sub B — \$465,000; Sub C — \$440,000; Sub D — \$380,000. Sub D's quote is significantly lower than the other three. The contractor has never worked with Sub D before. Sub D's quote does not include startup, commissioning, or the building automation system integration that the other three quotes include. What should the estimator do?

- A. Use Sub D's \$380,000 quote because competitive bidding requires using the lowest subcontractor price to produce the most competitive overall bid
- B. Contact Sub D to verify their scope of work, identify the excluded items (startup, commissioning, BAS integration), obtain pricing for the missing scope, and then compare Sub D's complete price against the other three complete quotes — because an incomplete subcontractor quote produces an incomplete bid that will result in cost overruns when the excluded scope must be performed

- C. Average all four quotes and use \$427,500 as the mechanical budget in the bid
- D. Discard Sub D's quote entirely without investigation because the lowest quote is always suspect

9. A public project bid opening reveals the following: Contractor A bids \$3,400,000 with all documents complete; Contractor B bids \$3,280,000 with a minor clerical error — the bid bond amount is listed as \$32,800 instead of the required \$328,000, but the actual bid bond certificate attached is for the correct amount of \$328,000. Can the owner accept Contractor B's bid?

- A. Yes, because the bid bond certificate for the correct amount is attached to the bid — the numerical error on the bid form is a minor clerical inconsistency that does not affect the substance of the bid security, and the owner can accept the bid based on the actual bond certificate rather than the transposed number on the form
- B. No, because any discrepancy between the bid form and the attached documents makes the entire bid nonresponsive
- C. Yes, but only if Contractor B submits a corrected bid form within 48 hours of the opening
- D. No, because bid bond amounts must match exactly between the bid form and the certificate

DOMAIN: CONTRACT MANAGEMENT (8 Questions)

10. A contractor on a fixed-price commercial project submits a change order for \$38,000 to address a design error — the structural drawings show a beam connection detail that the structural engineer acknowledges is incorrect and must be redesigned. The owner approves the change order but wants to deduct the cost from the architect's fee rather than paying the contractor from the project budget. Under the contract relationships, how is the \$38,000 typically handled?

- A. The owner deducts the cost directly from the architect's next invoice and instructs the contractor to collect from the architect
- B. The architect's professional liability insurance carrier pays the contractor directly for design error costs
- C. The owner pays the contractor \$38,000 through the change order process and separately pursues recovery from the architect or the architect's professional liability insurance — the contractor's contract is with the owner, not the architect, and the owner cannot redirect the contractor to collect from a third party

D. The contractor must sue the architect directly because design error costs are not recoverable through the owner

11. A general contractor's subcontract with an HVAC subcontractor includes a liquidated damages flowdown clause that states: "If the Contractor is assessed liquidated damages by the Owner for late completion caused by the Subcontractor's delay, the Subcontractor shall be liable to the Contractor for the liquidated damages assessed." The HVAC subcontractor's late completion causes the overall project to finish 18 days late, and the owner assesses \$54,000 in liquidated damages (\$3,000/day). Can the general contractor pass the liquidated damages through to the HVAC subcontractor?

A. No, because liquidated damages can only be assessed by project owners against general contractors and cannot be passed to subcontractors

B. No, because the subcontractor did not separately agree to the daily liquidated damages rate in their own subcontract

C. Yes, but only for 50% of the assessed amount because shared responsibility is implied in all subcontract relationships

D. Yes, if the flowdown clause clearly establishes the subcontractor's liability for liquidated damages resulting from their delay, and the general contractor can demonstrate that the subcontractor's late completion was the actual cause of the project delay — the flowdown clause creates a contractual basis for passing the damages through

12. A contractor working on a commercial renovation project discovers that existing floor joists are infested with termites — a condition not disclosed in any contract document and not visible during the preconstruction walkthrough because the joists were concealed behind finished surfaces. The contract includes a differing site conditions clause. The contractor estimates the repair will cost \$72,000. The owner argues that the contractor's bid should have included a contingency for "typical renovation risks." Is the owner's position valid?

A. Yes, because experienced renovation contractors should always include contingencies for insect damage in older buildings

B. No, because concealed termite damage not disclosed in the contract documents and not visible during the walkthrough is a Type I differing site condition — the actual condition differs materially from what was represented (or not represented) in the contract documents, and the contractor is entitled to rely on the absence of disclosed defects in the existing structure

C. Yes, because the contractor should have conducted a termite inspection before submitting their bid

D. No, but the contractor can only recover 50% of the repair cost because existing condition risks are shared equally

13. A construction contract includes a dispute resolution clause requiring: (1) direct negotiation between the parties for 30 days; (2) mediation for up to 60 days; (3) binding arbitration if mediation fails. A \$200,000 dispute arises over contested change orders. The contractor wants to skip negotiation and mediation and proceed directly to arbitration because they believe the owner is acting in bad faith. Can the contractor bypass the first two steps?

A. No, because the contract establishes a mandatory sequential process — bypassing the required negotiation and mediation steps may result in the arbitrator dismissing or staying the case until the prerequisite steps are completed, regardless of the contractor's belief about the owner's good faith

B. Yes, because an allegation of bad faith automatically accelerates disputes to binding arbitration

C. Yes, because disputes exceeding \$150,000 are exempt from mandatory prearbitration steps under AAA rules

D. No, but the contractor can substitute litigation for arbitration if they believe the owner is acting in bad faith

14. A project architect conducts a site observation and issues a nonconformance report stating that the installed roofing membrane does not match the approved shop drawing — specifically, the membrane's thickness is 45 mil instead of the specified 60 mil. The roofing subcontractor argues that 45 mil is "industry standard" and provides adequate performance. Under the contract, who determines whether the thinner membrane is acceptable?

A. The roofing subcontractor, because their industry expertise qualifies them to determine appropriate membrane thickness

B. The building inspector, because membrane thickness is a code compliance issue determined exclusively during the building inspection

C. The architect, because the contract grants the architect authority to interpret the specifications and determine whether work conforms — the specification calls for 60 mil, the installed product is 45 mil, and the architect's determination that the work does not conform is within their contractual authority

D. The membrane manufacturer, because their product warranty determines the minimum acceptable thickness for the application

15. A contractor on a school construction project receives a directive from the owner to accelerate the schedule by 45 days. The owner does not issue a formal change order for the acceleration. The contractor complies by adding overtime, hiring additional crews, and paying premium prices for expedited material deliveries. The acceleration costs total \$165,000. After the project is completed 45 days early, the contractor submits a change order for the \$165,000

acceleration cost. The owner refuses to pay, arguing they never authorized a change order. What is the contractor's strongest argument for recovering the acceleration costs?

- A. The contractor cannot recover because they should have insisted on a formal change order before accelerating
- B. The contractor's argument depends on whether the owner verbally praised the early completion, which would constitute ratification of the acceleration costs
- C. The contractor can recover only the overtime premium, not the additional crew or material costs
- D. The contractor's strongest argument is constructive acceleration — the owner's directive to compress the schedule by 45 days constituted a constructive change that required additional resources, and the contractor's compliance with the directive and documented acceleration costs establish the basis for recovery even without a formal change order

16. A subcontractor on a commercial project submits a payment application for \$110,000. The general contractor's project manager verifies that \$95,000 of work is properly completed but identifies \$15,000 of work that does not conform to the approved shop drawings. The project manager approves \$95,000 and withholds \$15,000 pending correction of the nonconforming work. The subcontractor argues the full \$110,000 should be paid because the nonconforming work is "close enough." How should this dispute be resolved?

- A. The general contractor should pay the full \$110,000 to maintain the business relationship and pursue correction through a separate backcharge
- B. The general contractor's proportionate withholding is appropriate — paying \$95,000 for conforming work and withholding \$15,000 for nonconforming work is a measured response that compensates the subcontractor for satisfactory work while creating financial incentive to correct the deficiencies, and "close enough" does not satisfy the contract's specification requirements
- C. The general contractor should withhold the entire \$110,000 until every item of the subcontractor's work conforms perfectly to every specification
- D. The dispute should be submitted directly to binding arbitration because payment disputes cannot be resolved through direct communication

17. A contractor completes a commercial building and the architect issues the certificate of substantial completion. The contract requires the contractor to provide operation and maintenance (O&M) manuals, asbuilt drawings, warranties, and training for the building owner's maintenance staff as conditions of final payment. The contractor submits the final payment application requesting \$320,000 in retainage but has not yet provided the O&M manuals or conducted the training. Can the owner withhold final payment?

- A. Yes, because the contract establishes specific closeout deliverables as conditions precedent to final payment — the O&M manuals and training are contractual requirements that must be satisfied before the owner is obligated to release the retainage, and the contractor should complete these deliverables promptly to trigger the final payment obligation
- B. No, because retainage must be released within 30 days of substantial completion regardless of outstanding closeout items
- C. Yes, but only the portion of retainage attributable to the O&M manuals and training, not the full \$320,000
- D. No, because O&M manuals and training are postcompletion services that are not part of the construction contract

DOMAIN: PROJECT MANAGEMENT (6 Questions)

18. A project manager on a 20month commercial project is at the 10month midpoint. The earned value analysis shows: BAC = \$10,000,000; PV = \$5,000,000; EV = \$4,500,000; AC = \$4,800,000. The SPI is 0.90 and the CPI is 0.9375. Using these metrics, what are the Schedule Variance (SV), Cost Variance (CV), and the Estimate at Completion (EAC)?

- A. SV = +\$500,000 (ahead of schedule), CV = +\$300,000 (under budget), EAC = \$9,500,000
- B. SV = \$300,000, CV = \$500,000, EAC = \$11,200,000 (incorrect calculations using reversed formulas)
- C. SV = \$500,000 (behind schedule: $EV - PV$), CV = \$300,000 (over budget: $EV - AC$), and EAC = \$10,666,667 ($BAC \div CPI$: $\$10,000,000 \div 0.9375$) — indicating the project is both behind schedule and over budget, and will finish approximately \$667,000 over the original budget if the current cost trend continues
- D. SV and CV are both zero because the project is at the exact midpoint and variances are not meaningful until 75% completion

19. A contractor is managing a fasttrack commercial project where construction has begun while the interior design is only 65% complete. The structural frame is erected and the exterior envelope is being installed. The interior designer issues a design bulletin changing the ceiling heights from 9 feet to 10 feet throughout the second and third floors. The mechanical, electrical, and plumbing roughin on these floors has already been designed for 9foot ceilings. What is the primary impact of this ceiling height change?

- A. No impact because ceiling height changes are aesthetic decisions that do not affect MEP systems already roughed in

B. Minimal impact because the MEP systems can be adjusted by extending vertical runs by 12 inches at each fixture location

C. The impact is limited to the ceiling grid system and does not affect any aboveceiling MEP components

D. Significant impact — the 12inch ceiling height increase requires redesigning and relocating all MEP systems that were designed for 9foot ceilings, including HVAC duct routing, sprinkler head locations, lighting fixture heights, electrical conduit runs, and plumbing vent connections, creating a major change order for the demolition and reinstallation of completed roughin work

20. A project superintendent discovers that the electrical subcontractor's crew has been installing conduit runs using standard EMT (electrical metallic tubing) in an area where the specifications require rigid metal conduit (RMC). Approximately 600 linear feet of EMT has been installed where RMC is required. The difference in material cost is approximately \$4,800, but the labor to remove the EMT and install RMC will cost approximately \$18,000. What should the superintendent do?

A. Stop the electrical subcontractor immediately, document the nonconforming installation, notify the architect through an RFI or nonconformance report, and require the electrical subcontractor to remove the EMT and install the specified RMC at the subcontractor's sole expense — the subcontractor made an unauthorized substitution that does not meet the specification

B. Accept the EMT installation because the cost difference is only \$4,800 and both conduit types provide adequate protection for the wiring

C. Apply a credit to the owner for the \$4,800 material cost difference and allow the EMT to remain

D. Document the substitution in the asbuilt drawings and address the issue during the warranty period if problems arise

21. A project schedule shows Activity F with an early start of Day 70, early finish of Day 85, late start of Day 75, and late finish of Day 90. The project manager wants to delay Activity F's start by 3 days to allow a predecessor activity to complete quality testing. After the 3day delay, what is Activity F's remaining float?

A. 5 days, unchanged from the original float because delaying the start does not consume float

B. 2 days remaining — the original total float was 5 days (late start 75 minus early start 70), and the 3day delay consumed 3 days of float, leaving only 2 days before the activity reaches its late start date and becomes critical

C. 8 days because the delay creates additional flexibility between the new start date and the late finish

D. 0 days because any intentional delay to a scheduled activity eliminates all available float

22. A contractor's project manager receives the following call from the concrete supplier on a Thursday afternoon: "We are unable to deliver the 250 cubic yards of structural concrete scheduled for your Monday morning pour due to a cement shortage at our plant. The earliest we can deliver is the following Thursday." The Monday pour is on the critical path. The project manager has 3 business days (Friday, Monday morning, and Monday afternoon) to resolve the situation before the scheduled pour. What actions should the project manager take?

A. Accept the oneweek delay and adjust the project schedule by 7 days

B. Cancel the concrete pour permanently and redesign the structural system to use precast elements

C. Wait until Monday morning to see if the supplier can resolve the shortage over the weekend

D. Immediately contact alternative concrete suppliers to determine if the 250 cubic yards can be sourced elsewhere for Monday delivery, notify the owner of the potential delay, evaluate the schedule impact if the alternative sourcing fails, and prepare a contingency plan for the Thursday delivery — taking all actions in parallel because the 3day window requires simultaneous pursuit of multiple solutions

23. A contractor's daily report from Tuesday records: "At 10:45 AM, a 12inch water main broke during excavation for the new building foundation. The water main was not shown on any utility locates, not depicted on the civil drawings, and not identified in the utility survey provided with the bid documents. City water department responded at 11:30 AM and confirmed the main is an abandoned line that was never properly documented or decommissioned. Excavation in the affected area is suspended until the city completes emergency repairs." What elements of this daily report entry have the greatest legal significance?

A. The city water department's response time of 45 minutes, which may support a claim for emergency response delays

B. The excavation suspension, which documents lost productivity that can be claimed as a delay damage

C. The statements that the water main was not shown on utility locates, civil drawings, or the utility survey — these establish the factual basis for a differing site conditions claim by documenting that the contractor relied on contract documents that failed to identify an existing utility, and the city's confirmation that the line was undocumented strengthens the claim

D. The specific time (10:45 AM) and date (Tuesday), which are relevant only for insurance reporting purposes

24. A project owner requests that the contractor provide a detailed cost breakdown for a \$95,000 change order. The contractor's breakdown shows: labor \$32,000, materials \$28,000, equipment \$8,000, subcontractor markup 10% on \$15,000 subcontracted portion (\$1,500), overhead 12% on direct costs (\$8,160), and profit 5% on total (\$4,633). The owner challenges the overhead and profit percentages. Under the contract's change order provisions, what determines the allowable markup?

A. The specific markup percentages stated in the contract's change order provisions control — if the contract specifies 15% combined overhead and profit on selfperformed work and 10% on subcontracted work, those contractual rates govern regardless of the contractor's actual overhead rate or desired profit margin, and neither party can unilaterally impose different percentages

B. Industry standard markups of 25% overhead and 10% profit apply regardless of what the contract states

C. The owner has absolute discretion over change order markups and can approve any percentage they choose

D. The contractor's actual audited overhead rate and marketstandard profit margin always override the contract's stated percentages

25. A contractor working on a hospital addition project needs to connect new sanitary sewer lines to the existing hospital sewer system. The connection requires a 4hour shutdown of the existing system. The contract requires 72hour advance notice to the hospital for any utility shutdowns affecting patient care areas. The contractor's plumbing subcontractor wants to make the connection this Friday but the 72hour notice was not provided. What should the contractor do?

A. Proceed with the connection on Friday because a 4hour shutdown is minor and will not significantly affect hospital operations

B. Postpone the sewer connection until the 72hour notice requirement can be satisfied — notify the hospital administration immediately, schedule the shutdown for the following Tuesday at the earliest, and coordinate the timing to minimize impact on patient care operations

C. Have the plumbing subcontractor make the connection during nighttime hours when fewer patients are affected

D. Submit an emergency work order to the hospital that waives the 72hour notice requirement for sewer connections

DOMAIN: INSURANCE AND BONDING (3 Questions)

26. A contractor carries a CGL policy with a \$2,000,000 peroccurrence limit. The contractor's umbrella policy has a \$5,000,000 limit. The CGL policy includes a pollution exclusion. During excavation on a commercial project, the contractor's backhoe ruptures an unmarked underground fuel oil tank, releasing 500 gallons of heating oil into the soil. The cleanup cost is \$180,000 and the adjacent property owner claims \$90,000 in property damage from the contamination. The contractor also carries a separate pollution liability policy with a \$1,000,000 limit. How are the claims likely covered?

- A. The CGL policy covers both the cleanup and the property damage because the pollution was caused by the contractor's construction operations
- B. The pollution liability policy covers the \$180,000 cleanup cost, while the CGL policy may cover the \$90,000 thirdparty property damage claim if it qualifies as a "sudden and accidental" pollution event under the CGL's pollution exclusion exception — the two policies address different aspects of the pollution loss
- C. Neither policy covers the loss because underground tank ruptures are excluded from all construction insurance policies
- D. The umbrella policy covers both claims because it sits above all underlying policies and has no pollution exclusion

27. A surety evaluates a contractor for a new \$3,500,000 performance bond. The contractor's financial statements show working capital of \$280,000, net worth of \$750,000, and current bonded workinprogress of \$2,800,000. The surety uses a multiplier of 15 times working capital. What is the surety's likely assessment?

- A. Approval because working capital capacity (\$4,200,000) exceeds the requested \$3,500,000 bond
- B. Approval because net worth of \$750,000 exceeds 10% of the requested bond amount
- C. Denial because the contractor has no bonded work experience and is requesting their first bond
- D. Likely denial or conditional approval — while the total bonding capacity based on working capital is \$4,200,000 ($15 \times \$280,000$), the existing \$2,800,000 in bonded work leaves only \$1,400,000 of available capacity, which is insufficient for a \$3,500,000 bond, and the contractor would need to increase working capital or complete existing bonded projects before the surety would approve this bond

28. A contractor's workers' compensation EMR calculation is based on claims experience from a specific lookback period. The contractor had a \$350,000 losttime claim three years ago when a worker fell from scaffolding and suffered a spinal injury. The claim has been closed. How does this single large claim affect the EMR calculation compared to multiple smaller claims totaling the same amount?

A. A single large claim has a proportionally smaller impact on the EMR than multiple small claims totaling the same dollar amount — the EMR calculation uses a "split point" that divides each claim into primary (first dollar portion given full weight) and excess (remainder given reduced weight) components, so a \$350,000 single claim has much of its value in the excess layer where it receives reduced weighting, while multiple small claims would each be counted primarily in the primary layer at full weight

B. A single large claim and multiple small claims totaling the same amount produce identical EMR impacts because only the total dollar amount matters

C. A single large claim has a greater impact because the EMR formula penalizes claim severity more heavily than claim frequency

D. Neither large claims nor small claims affect the EMR because the calculation is based solely on the number of OSHA recordable incidents, not on claim costs

29. A project owner requires the general contractor to provide a payment bond at 100% of the \$2,400,000 contract value. A material supplier furnishes \$55,000 in custom architectural precast panels directly to the general contractor. The contractor fails to pay the supplier. The supplier wants to file a payment bond claim. The supplier's last delivery was 85 days ago. Under the Miller Act framework for payment bond claims by firsttier claimants (those with direct contracts with the bonded contractor), is the supplier's claim timely?

A. No, because firsttier claimants must file bond claims within 60 days of the last delivery

B. No, because material suppliers cannot file payment bond claims — only subcontractors who perform labor have bond claim rights

C. Yes, because firsttier claimants who have a direct contract with the bonded general contractor generally do not need to provide the preliminary written notice required of secondtier claimants, and they typically have up to one year from the last date they furnished materials to file a lawsuit on the payment bond — the 85day period is well within the filing deadline

D. Yes, but only if the supplier filed a preliminary notice with the general contractor within 30 days of the first delivery

DOMAIN: OSHA RECORDKEEPING (3 Questions)

30. A construction worker is struck in the chest by a piece of lumber that falls from an overhead platform. The worker reports chest pain and difficulty breathing. The site medic calls 911 and the worker is transported to the hospital by ambulance. At the hospital, the ER physician orders a chest Xray and CT scan, both of which reveal no fractures or internal injuries. The doctor prescribes overthecounter ibuprofen and releases the worker. The worker returns to full duty the next day with no restrictions. Is this case OSHA recordable?

A. Yes, because any injury requiring ambulance transport is automatically recordable under OSHA's construction standards

B. Yes, because the CT scan constitutes medical treatment beyond first aid that triggers recordability

C. No, because the worker returned to full duty the next day with no lost time, restrictions, or medical treatment beyond first aid

D. No, because the treatments received — Xray and CT scan for diagnostic purposes and overthecounter medication — are all classified as first aid under OSHA's recordkeeping definitions, and no recordable outcome occurred (no lost time, no restricted duty, no medical treatment beyond first aid, no significant diagnosis)

31. An employer has 28 employees in the construction industry. During the year, the company has 3 recordable injuries resulting in a total of 25 lost workdays. The employees worked 56,000 total hours. What is the company's Severity Rate?

A. 10.7, calculated using the TRIR formula with the number of recordable cases in the numerator

B. 89.3, calculated as $(25 \text{ lost workdays} \times 200,000) \div 56,000$ — the Severity Rate measures the total number of lost workdays per 200,000 hours worked, indicating the magnitude and duration of injuries rather than just the frequency of incidents

C. 3.0, equal to the number of recordable injuries without any normalization for hours worked

D. 25.0, equal to the raw number of lost workdays without normalization

32. A construction company's safety director is training supervisors on OSHA recordkeeping. A supervisor asks: "If an employee is injured at work and goes to the emergency room, is the case automatically recordable just because they went to the ER?" What is the correct answer?

A. No — visiting an emergency room does not automatically make a case recordable, because OSHA recordability is determined by the treatment received and the outcome, not by the location where treatment occurs — if the ER provides only firstaidlevel treatment (Xrays for diagnosis, OTC medication, bandaging) and the worker returns to full duty with no restrictions, the case is not recordable despite the ER visit

B. Yes, because all emergency room visits are classified as medical treatment beyond first aid under OSHA regulations

C. Yes, because the ambulance transport that typically precedes an ER visit constitutes a recordable medical event

D. No, but only if the employee is released from the ER within 4 hours of arrival

DOMAIN: PERSONNEL REGULATIONS (8 Questions)

33. A contractor with 65 employees has a carpenter who has worked for the company for 4 years. The carpenter's 16yearold son is diagnosed with leukemia requiring extended chemotherapy. The carpenter requests 10 weeks of FMLA leave to care for the son during treatment. Under the FMLA, is this leave request covered?

A. No, because FMLA leave to care for a child applies only to children under the age of 12

B. No, because the FMLA covers leave to care for a child only if the child is incapable of selfcare due to a disability, and a 16yearold undergoing chemotherapy may or may not meet this standard

C. Yes, because the FMLA provides up to 12 weeks of leave to care for a "son or daughter" with a serious health condition — a 16yearold undergoing chemotherapy for leukemia has a serious health condition, the employer exceeds the 50employee threshold, and the carpenter's 4year tenure exceeds the eligibility requirements

D. Yes, but only for 4 weeks because FMLA leave for children over 12 is limited to the period of hospitalization

34. A nonexempt ironworker earns \$44.00 per hour and works 52 hours during a workweek. The employer provides a \$250 nondiscretionary hazard pay bonus for working on a particularly dangerous elevated steel erection assignment. Under the FLSA, how is the overtime calculated?

A. Overtime is calculated at 1.5 times the base rate (\$66.00) for 12 hours, and the \$250 bonus is added separately without affecting the overtime calculation

B. The \$250 bonus eliminates the overtime obligation because hazard pay bonuses replace the overtime premium for dangerous work

C. Overtime is calculated only on the first 8 overtime hours because the hazard bonus covers the premium on the remaining 4 hours

D. The \$250 bonus must be included in the regular rate: regular rate = $(\$44.00 \times 52 + \$250) \div 52 = \$48.81$; overtime premium = $\$48.81 \times 0.5 = \$24.40 \times 12 \text{ hours} = \292.85 in additional overtime premium beyond the straighttime earnings and bonus

35. An employer with 30 employees implements a physical fitness test for all construction laborers. The test requires applicants to: carry 70 pounds for 100 feet, climb a 28-foot extension ladder, and maintain balance on a 4-inch beam at a height of 3 feet for 60 seconds. A female applicant who cannot complete the 70-pound carry requirement files a Title VII complaint alleging the test has a disparate impact on women. What must the employer prove to defend the test?

A. That the test was developed by a licensed occupational therapist and has been validated through a peer-reviewed study

B. That the physical fitness test is job-related and consistent with business necessity — meaning the 70-pound carry, ladder climbing, and beam balance requirements reflect actual physical demands of the laborer position, the test is applied uniformly to all applicants regardless of gender, and no less discriminatory alternative testing method would equally serve the employer's legitimate safety needs

C. That an equal percentage of male and female applicants pass the test, proving there is no statistical disparity

D. That the female applicant was offered a reasonable accommodation to complete the test and refused

36. An employer with 55 employees has a worker who has been on FMLA leave for 11 weeks following back surgery. The worker's physician clears the worker to return but with a permanent lifting restriction of 25 pounds. The worker's regular job as a concrete laborer requires lifting up to 80 pounds. Under the combined FMLA and ADA framework, what are the employer's obligations?

A. The employer must evaluate whether the 25-pound permanent lifting restriction can be reasonably accommodated under the ADA — potential accommodations include reassignment to an available vacant position that fits the restriction, job restructuring, or providing mechanical lifting aids, and the employer must engage in the interactive process before concluding that accommodation is not possible

B. The employer can immediately terminate the worker because they cannot perform the essential functions of their original position

C. The employer must hold the concrete laborer position open indefinitely until the worker can return without restrictions

D. The FMLA requires the employer to create a new position that accommodates the worker's permanent restriction

37. A contractor's HR manager discovers that the company has been paying two female electricians \$3.50 per hour less than male electricians performing identical work with comparable experience, certifications, and performance ratings. The pay disparity has existed for 22 months. What is the employer's minimum backpay exposure under the Equal Pay Act?

A. $\$3.50 \text{ per hour} \times \text{average weekly hours} \times 22 \text{ months} \times 2 \text{ workers}$, with no additional damages available under the Equal Pay Act

B. $\$3.50 \text{ per hour} \times \text{average weekly hours} \times 22 \text{ months} \times 2 \text{ workers}$, plus a potential equal amount in liquidated damages (effectively doubling the back pay) because the Equal Pay Act allows courts to award liquidated damages for willful violations

C. $\$3.50 \text{ per hour} \times \text{average weekly hours} \times 22 \text{ months} \times 2 \text{ workers}$, capped at \$50,000 per employee under the Equal Pay Act's statutory damage limit

D. Only the difference from the past 6 months because the Equal Pay Act has a 6month statute of limitations for filing claims

38. An employer terminates a worker for violating the company's safety policy — specifically, the worker removed a machine guard from a table saw and operated the saw without the guard. The worker had been trained on the policy, signed an acknowledgment, and received one prior written warning for a different safety violation. The worker files for unemployment benefits. What is the likely outcome?

A. The worker will receive full benefits because the employer cannot prove the worker intended to cause harm

B. The worker will receive benefits at a reduced rate because the safety violation was only a second offense

C. The outcome depends on whether the employer filed a police report for the safety violation

D. The worker will likely be denied benefits because removing a safety guard and operating power equipment without it constitutes willful misconduct — the deliberate removal of a safety device, combined with documented training and a prior safety warning, establishes knowing violation of a serious safety rule

39. A contractor operating on a DavisBacon covered project has carpenters who work 50 hours during a workweek. The prevailing wage determination specifies carpenter wages of \$38.00/hour plus \$17.00/hour in fringe benefits. How must the 10 overtime hours be compensated?

- A. All 50 hours at the combined rate of \$55.00 (wage + fringe) multiplied by 1.5 for the overtime hours
- B. 40 hours at \$38.00 wage plus \$17.00 fringe, and 10 overtime hours at \$57.00 wage ($1.5 \times \38.00) plus \$17.00 fringe at the straighttime rate — the overtime premium applies only to the cash wage, while the fringe benefit contribution continues at the straighttime rate for all 50 hours
- C. 40 hours at \$38.00 wage plus \$17.00 fringe, and 10 overtime hours at \$38.00 wage plus \$25.50 fringe ($1.5 \times \$17.00$) — the overtime premium applies only to the fringe benefit, not the cash wage
- D. No overtime is owed because DavisBacon projects use a different overtime calculation method that exempts the first 10 overtime hours per week

40. An employer's I9 compliance audit reveals that 15 current employees have I9 forms that list documents which have since expired. Ten of the employees are U.S. citizens who presented expired driver's licenses as List B documents. Five employees are noncitizen permanent residents whose Employment Authorization Documents (EAD cards) expired after the I9 was completed. Which employees require reverification?

- A. Only the 5 noncitizen employees whose EAD cards expired require reverification — U.S. citizens have permanent work authorization that never expires, and the expiration of a citizen's driver's license does not affect their work authorization, while noncitizen employees whose work authorization documents expire must be reverified to confirm ongoing work eligibility
- B. All 15 employees must be reverified because expired documents of any type invalidate the original I9
- C. None of the employees require reverification because I9 verification is a onetime event at the time of hiring
- D. Only the 10 U.S. citizens require reverification because citizen documents expire more frequently than permanent resident documents

DOMAIN: FINANCIAL MANAGEMENT (5 Questions)

41. A contractor's WIP report shows Project Zeta: revised contract \$2,800,000; estimated total cost \$2,380,000; costs to date \$1,666,000; billings to date \$2,100,000. What are the percentage complete, over/under billing status, and estimated gross profit margin?

- A. 60% complete, underbilled by \$140,000, gross margin 12%
- B. 70% complete, billings match earned revenue, gross margin 18%
- C. 70% complete ($\$1,666,000 \div \$2,380,000$), overbilled by \$140,000 (billings of \$2,100,000 minus earned revenue of \$1,960,000), with a 15% estimated gross profit margin ($\$420,000 \div \$2,800,000$)
- D. 75% complete, underbilled by \$100,000, gross margin 10%

42. A contractor uses the percentage of completion method on a \$4,000,000 project with estimated total costs of \$3,400,000. At the end of Year 1, costs incurred total \$1,700,000. At the end of Year 2, cumulative costs total \$2,720,000 and the project is still in progress. The estimated total cost has not changed. What is the revenue recognized in Year 2 only?

- A. \$2,000,000, equal to the Year 1 revenue repeated in Year 2
- B. \$3,200,000, representing the full cumulative revenue through Year 2 without subtracting Year 1
- C. \$1,700,000, equal to the costs incurred in Year 2 only
- D. \$1,200,000, calculated as Period 2 cumulative revenue ($\$3,200,000$ at 80% complete) minus Period 1 revenue ($\$2,000,000$ at 50% complete) — the POC method recognizes revenue incrementally by subtracting previously recognized amounts from the cumulative earned total

43. A contractor's cash flow analysis reveals the following monthly pattern: average monthly collections \$520,000; average monthly payroll \$280,000; average monthly materials/subcontractor payments \$260,000; average monthly overhead \$65,000; average monthly equipment payments \$25,000. The contractor's current cash balance is \$40,000. What is the monthly cash surplus or deficit, and what does the pattern indicate?

- A. Surplus of \$520,000 because collections represent the contractor's total monthly income
- B. Deficit of \$110,000, calculated as collections ($\$520,000$) minus total outflows ($\$280,000 + \$260,000 + \$65,000 + \$25,000 = \$630,000$) = negative \$110,000 per month — indicating the contractor is spending \$110,000 more per month than they collect, a chronic cash drain requiring immediate attention
- C. Surplus of \$240,000 because collections exceed payroll by \$240,000
- D. Deficit of \$40,000 equal to the current cash balance because the monthly pattern is consuming the entire cash reserve

44. A contractor's balance sheet shows: current assets \$950,000; current liabilities \$720,000; total assets \$2,200,000; total liabilities \$1,650,000. The contractor is applying for an unrestricted commercial license. Do they meet the ACLB financial requirements?

A. Yes, because net worth is \$550,000 ($\$2,200,000 - \$1,650,000$), exceeding the \$50,000 minimum, and working capital is \$230,000 ($\$950,000 - \$720,000$), demonstrating adequate liquidity — provided the financial statement is audited or reviewed and cash meets the \$25,000 minimum

B. No, because the debttoequity ratio of 3.0 exceeds the ACLB's maximum allowable ratio

C. No, because working capital of \$230,000 does not meet the ACLB's \$250,000 minimum for unrestricted licenses

D. Yes, but only if the contractor provides personal guarantees from all company officers

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

A. Gross profit \$504,000 (9%), net income \$0 (0%)

B. Gross profit \$1,120,000 (20%), net income \$616,000 (11%)

C. Gross profit \$840,000 (15%), net income \$336,000 (6%) — calculated as: revenue – cost of construction = \$840,000 gross profit; $\$840,000 \div \$5,600,000 = 15\%$ gross margin; $\$840,000 - \$504,000$ G&A = \$336,000 net income; $\$336,000 \div \$5,600,000 = 6\%$ net margin

D. Gross profit \$840,000 (15%), net income \$504,000 (9%)

DOMAIN: TAX LAWS (5 Questions)

46. A contractor organized as a sole proprietorship earns \$240,000 in net selfemployment income. The contractor's CPA calculates selfemployment tax using the 92.35% adjustment. The Social Security wage base is \$168,600. The contractor has no W2 income from any other source. Approximately how much is the total selfemployment tax?

A. \$36,720, calculated at the flat 15.3% rate on the full \$240,000 without the wage base cap or the 92.35% adjustment

B. \$29,544, calculated at the flat 15.3% rate on the adjusted income ($\$240,000 \times 0.9235 = \$221,640$) without applying the wage base cap

C. \$18,000, calculated at a reduced 7.5% rate because selfemployed individuals pay only the employee share of FICA

D. Approximately \$27,484 — calculated by applying the 92.35% adjustment to get \$221,640 of taxable selfemployment income, then applying 12.4% Social Security tax on the first \$168,600 (\$20,906), plus 2.9% Medicare tax on the full \$221,640 (\$6,428), plus the additional 0.9% Medicare surtax on selfemployment income exceeding \$200,000 (approximately \$150 on the adjusted excess) — totaling approximately \$27,484

47. An employer with 35 employees makes their payroll tax deposit 22 days late. The deposit amount is \$28,000. Under the IRS graduated penalty structure for late deposits, what penalty rate applies?

A. 10%, applicable to deposits made more than 15 days late but before receiving an IRS notice — the \$28,000 deposit that is 22 days late triggers the 10% penalty rate, resulting in a \$2,800 penalty

B. 2%, applicable to deposits made 15 days late

C. 5%, applicable to deposits made 615 days late

D. 15%, applicable only after the employer receives a formal IRS notice demanding payment

48. A contractor organized as an SCorporation has one shareholder who works fulltime as the company's sole operator. The company earns \$380,000 in net income. The shareholder takes a salary of \$95,000 and a distribution of \$285,000. The IRS determines that a reasonable salary for this role is \$170,000. What is the approximate additional FICA tax exposure on the reclassified amount?

A. \$0, because the IRS cannot reclassify SCorporation distributions as salary
B. Approximately \$11,475 in additional FICA taxes — the IRS will reclassify \$75,000 of distributions as salary (\$170,000 reasonable minus \$95,000 paid), and the combined employer and employee FICA rate of 15.3% on the \$75,000 yields approximately \$11,475, plus penalties and interest on the underreported payroll taxes

C. Approximately \$43,605, calculated at 15.3% on the entire \$285,000 distribution

D. Approximately \$5,738, calculated at half the FICA rate because the IRS assesses only the employer share on reclassified distributions

49. A contractor purchases \$65,000 in lumber, \$15,000 in diesel fuel for equipment, and \$8,000 in office supplies during a single month in Arkansas. Which purchases are subject to Arkansas sales tax?

- A. Only the \$8,000 office supplies because construction materials and equipment fuel are exempt
- B. Only the \$65,000 lumber because it will be permanently incorporated into real property
- C. Only the \$65,000 lumber and \$8,000 office supplies because diesel fuel is exempt under the construction equipment fuel exemption
- D. All three purchases — the \$65,000 lumber (contractor is the consumer of installed materials), the \$15,000 diesel fuel (consumed in business operations), and the \$8,000 office supplies (business consumables) — totaling \$88,000 in taxable purchases at the applicable combined state and local rate

50. A contractor's CPA advises retaining all tax records for 7 years rather than the standard 3year statute of limitations. A partner in the contracting firm asks why 7 years is recommended when the law only requires 3. What is the CPA's most accurate explanation?

- A. The 7year recommendation has no legal basis and is merely the CPA's personal preference for record organization
- B. Federal law requires all construction companies to retain records for 7 years regardless of the type of return filed
- C. The 3year statute applies to accurately filed returns, but if gross income is understated by more than 25%, the IRS has 6 years to assess additional taxes — the 7year recommendation provides a oneyear safety margin beyond this extended assessment period, ensuring the contractor is protected even in worstcase audit scenarios
- D. The 7year period is required by the Arkansas Department of Finance and Administration for all state tax records, regardless of federal requirements

Practice Exam 22: Answer Key and Explanations

1. C — The SCorporation election requires formal payroll processing including W2 issuance, quarterly Form 941 filings, annual Form 940 filings, workers' compensation coverage on the owner's salary, payroll tax deposits, and compliance with all employer obligations. These administrative requirements add complexity and cost — payroll service fees, additional CPA work, and compliance monitoring — that must be weighed against the FICA tax savings on distributions.

2. A — The contractor's licensing obligation arose when CO #2 pushed the total contract value to \$757,000 — exceeding the \$750,000 restricted license cap. At that point, the contractor should have immediately notified the ACLB and either applied for an unrestricted license

upgrade or obtained Board guidance. Waiting until CO #3 or project completion compounds the violation with each additional day of unlicensed activity.

3. D — The \$10,000 surety bond provides a financial guarantee to protect the public. If the contractor violates licensing laws, commits fraud, diverts funds, or fails to fulfill contractual obligations, affected parties can file a claim against the bond to recover damages up to the \$10,000 penal sum. The bond functions as consumer protection, not as insurance for the contractor.

4. B — Converting an attached garage into a home office involves altering and improving an existing residential structure — the definition of residential remodeling. The work remains within the residential remodeler's scope because it is an improvement to an existing home. There is no statutory project value cap for residential remodelers — the license authorizes remodeling work on residential structures.

5. A — Any person — including competing contractors — can file a complaint with the ACLB reporting suspected unlicensed contracting activity. The Board has enforcement authority to investigate complaints, issue ceaseanddesist orders, and pursue civil penalties against individuals performing licensable work without a valid license. Licensing enforcement protects both the public and the competitive integrity of the licensed contractor community.

6. C — Removal: $12,000 \div 400 = 30$ hours \times 2 workers \times \$36 = \$2,160. Installation: $12,000 \div 80 = 150$ hours \times 3 workers \times \$44 = \$19,800. Total: \$2,160 + \$19,800 = \$21,960. Each activity requires its own calculation using the specified crew size, productivity rate, and loaded labor rate. Omitting either activity produces a significantly understated estimate.

7. D — Courts evaluate bid withdrawal requests based on four factors: the error was clerical/mathematical (not judgmental), the error was material (\$350,000 on \$5.8M is 6%), withdrawal was requested promptly after discovery, and the public entity can reaward without unconscionable harm. The \$95 vs. \$45 unit price error for a specific overlay material is a clerical pricing mistake that meets the standard criteria for equitable relief.

8. B — The estimator must normalize the scope before comparing quotes. Sub D's quote excludes startup, commissioning, and BAS integration — significant scope items included by the other three bidders. The estimator should contact Sub D to price the missing scope, then compare all four quotes on an equivalent basis. Using an incomplete quote produces an incomplete bid that guarantees cost overruns.

9. A — The bid bond certificate attached to the bid is for the correct amount of \$328,000. The \$32,800 figure on the bid form is a clerical transposition error — an obvious decimal point mistake. The actual bond security (the certificate) satisfies the requirement, and the numerical error on the form is a minor clerical inconsistency that the owner can waive without affecting the substance of the bid security.

10. C — The contractor's contract is with the owner, not with the architect. The owner must pay the contractor \$38,000 through the standard change order process. The owner then separately pursues recovery from the architect or the architect's professional liability insurance for the design error cost. The contractor cannot be redirected to collect from a third party with whom they have no contractual relationship.

11. D — The flowdown clause creates a contractual basis for passing liquidated damages to the subcontractor whose delay caused the assessment. The GC must demonstrate that the HVAC subcontractor's late completion was the actual cause of the 18day project delay. If the causal link is established and the flowdown clause clearly imposes liability, the \$54,000 assessment can be passed through.

12. B — Concealed termite damage not disclosed in the contract documents and not visible during the preconstruction walkthrough is a Type I differing site condition. The actual condition (termiteinfested joists) differs materially from what was represented (or not represented) in the contract documents. The contractor is entitled to rely on the absence of disclosed defects and should not be required to anticipate undisclosed insect damage.

13. A — The contract establishes a mandatory sequential dispute resolution process. Bypassing required negotiation and mediation steps may result in the arbitrator dismissing or staying the case until the prerequisite steps are completed. The contractor's belief about the owner's bad faith does not override the contractual obligation to follow the prescribed sequence.

14. C — The contract grants the architect authority to interpret specifications and determine whether work conforms. The specification requires 60 mil membrane; the installed product is 45 mil. The architect's determination that the work does not conform is within their contractual authority. The subcontractor's opinion about "industry standard" does not override the projectspecific specification.

15. D — The owner's directive to compress the schedule constituted a constructive change — an owner action that effectively modifies the contract scope without a formal change order. The contractor's compliance with the directive, documented acceleration costs, and the actual early completion establish the basis for recovering the \$165,000. Constructive acceleration is a recognized legal theory in construction claims.

16. B — Paying \$95,000 for conforming work and withholding \$15,000 for nonconforming work is proportionate and appropriate. The subcontractor receives fair compensation for satisfactory work while retaining financial incentive to correct the deficiencies. "Close enough" does not satisfy specification requirements — the contract defines conformance, not the subcontractor's subjective assessment.

17. A — The contract establishes specific closeout deliverables as conditions precedent to final payment. O&M manuals and owner training are contractual requirements that must be completed before the owner is obligated to release retainage. The contractor should complete these deliverables promptly — they represent the contractor's final obligation before the payment trigger is satisfied.

18. C — $SV = EV - PV = \$4,500,000 - \$5,000,000 = -\$500,000$ (behind schedule). $CV = EV - AC = \$4,500,000 - \$4,800,000 = -\$300,000$ (over budget). $EAC = BAC \div CPI = \$10,000,000 \div 0.9375 = \$10,666,667$. The project will finish approximately \$667,000 over budget if the current cost inefficiency continues through completion.

19. D — A 12inch ceiling height increase requires redesigning and relocating all MEP systems designed for 9foot ceilings. HVAC duct routing, sprinkler head elevations, lighting fixture heights, electrical conduit runs, and plumbing vent connections must all be modified. MEP

roughin already completed at the 9foot height must be demolished and reinstalled — a major change order for designchangedriven rework.

20. A — EMT and RMC serve different purposes and have different code applications. The specification requires RMC, and the electrical subcontractor installed EMT without authorization. The superintendent must stop the work, document the nonconformance, and require the subcontractor to remove the EMT and install the specified RMC at the subcontractor's sole expense.

21. B — Original total float: late start (Day 75) minus early start (Day 70) = 5 days. The 3day intentional delay consumed 3 of those 5 days. Remaining float: $5 - 3 = 2$ days. The activity can absorb only 2 more days of delay before it reaches its late start date and becomes critical, at which point any further delay extends the project completion.

22. D — The project manager should immediately contact alternative suppliers to source the 250 cubic yards for Monday, notify the owner of the potential delay, evaluate the schedule impact if alternatives fail, and prepare a contingency plan for the Thursday delivery. The 3day window requires parallel pursuit of all options simultaneously because sequential action wastes precious time.

23. C — The statements that the water main was not shown on utility locates, civil drawings, or the utility survey establish the factual foundation for a differing site conditions claim. The contractor relied on contract documents that failed to identify the existing utility. The city's confirmation that the line was undocumented and never decommissioned strengthens the claim by corroborating that the omission was systemic.

24. A — The contract's change order provisions control the allowable markup percentages. If the contract specifies 15% combined O&P on selfperformed work and 10% on subcontracted work, those rates govern. Neither party can unilaterally impose different percentages — the contractor cannot charge more and the owner cannot pay less than the contractually agreed rates.

25. B — The contract requires 72hour advance notice for utility shutdowns affecting patient care areas. The plumbing subcontractor's request to connect on Friday cannot be accommodated because the notice was not provided. The contractor must notify the hospital immediately and schedule the shutdown for Tuesday at the earliest — the 72hour notice protects patients and staff.

26. B — The CGL's pollution exclusion eliminates coverage for cleanup costs. The pollution liability policy covers the \$180,000 cleanup. The CGL may cover the \$90,000 thirdparty property damage if it qualifies as "sudden and accidental" under the pollution exclusion's limited exception. The two policies address different aspects of pollution losses — cleanup versus thirdparty damages.

27. D — Total bonding capacity: $15 \times \$280,000 = \$4,200,000$. Existing bonded work: \$2,800,000. Available capacity: $\$4,200,000 - \$2,800,000 = \$1,400,000$. The \$3,500,000 bond request exceeds the \$1,400,000 available capacity by \$2,100,000. The contractor must increase working capital or complete existing projects to free capacity before the surety would approve this bond.

28. A — The EMR calculation uses a "split point" that divides each claim into a primary portion (given full weight) and an excess portion (given reduced weight). A single \$350,000 claim has most of its value in the excess layer at reduced weight. Multiple smaller claims totaling \$350,000 would each be counted primarily in the primary layer at full weight, producing a greater EMR impact. The formula penalizes frequency more than severity.

29. C — Firsttier claimants with direct contracts with the bonded general contractor generally do not need to provide the preliminary written notice required of secondtier claimants. They typically have up to one year from the last date they furnished materials to file a lawsuit on the payment bond. At 85 days since last delivery, the supplier is well within the filing deadline.

30. D — Xrays and CT scans for diagnostic purposes are classified as first aid under OSHA rules. Overthecounter ibuprofen is first aid. The worker returned to full duty the next day with no restrictions. No recordable outcome occurred — no lost time, no restricted duty, and no medical treatment beyond first aid. An ER visit alone does not make a case recordable.

31. B — $\text{Severity Rate} = (25 \text{ lost workdays} \times 200,000) \div 56,000 = 89.3$. The severity rate measures the total number of lost workdays per 200,000 hours worked. Unlike the TRIR (which counts incidents), the severity rate measures the magnitude and duration of injuries. A rate of 89.3 indicates that while there were only 3 injuries, they resulted in significant time away from work.

32. A — Visiting an emergency room does not automatically make a case OSHA recordable. Recordability is determined by the treatment received and the outcome, not by the treatment location. If the ER provides only firstaidlevel treatment (diagnostic Xrays, OTC medication, bandaging) and the worker returns to full duty with no restrictions, the case is not recordable despite the ER visit.

33. C — The FMLA provides up to 12 weeks of leave to care for a "son or daughter" with a serious health condition. A 16yearold child undergoing chemotherapy for leukemia unquestionably has a serious health condition. The employer has 65 employees (exceeding the threshold) and the carpenter's 4year tenure exceeds the eligibility requirement. The 10week request is within the 12week maximum.

34. D — Nondiscretionary bonuses must be included in the regular rate. Regular rate: $(\$44.00 \times 52 + \$250) \div 52 = \$48.81/\text{hour}$. Overtime premium: $\$48.81 \times 0.5 = \24.40 per overtime hour $\times 12$ hours = \$292.85 in additional overtime premium. The hazard bonus increases the effective overtime cost above what the base rate alone would produce.

35. B — Under Title VII's disparate impact framework, the employer must prove the physical fitness test is jobrelated and consistent with business necessity. The 70pound carry, ladder climbing, and beam balance requirements must reflect actual physical demands of the laborer position. The test must be applied uniformly regardless of gender, and no less discriminatory alternative must exist that equally serves the legitimate safety need.

36. A — After the 12week FMLA entitlement is exhausted, the analysis shifts to the ADA. The employer must engage in the interactive process to evaluate whether the permanent 25pound lifting restriction can be reasonably accommodated — through reassignment to an available vacant position, job restructuring, or mechanical aids. The employer cannot terminate without first completing the ADA interactive process.

37. B — The Equal Pay Act allows courts to award liquidated damages equal to the backpay amount for willful violations, effectively doubling the recovery. Back pay: $\$3.50/\text{hour} \times \text{average weekly hours} \times \text{approximately 96 weeks (22 months)} \times 2 \text{ workers}$. Liquidated damages potentially equal the same amount. Plus attorney fees and court costs.

38. D — Deliberately removing a machine guard and operating a table saw without it constitutes willful misconduct. The worker was trained, acknowledged the policy, and had a prior safety warning. Removing a safety guard from power equipment is a knowing violation of a serious safety rule that creates immediate danger. Unemployment agencies recognize this type of deliberate safety violation as disqualifying misconduct.

39. B — Under DavisBacon, the overtime premium applies only to the cash wage. Straight time: $40 \text{ hours} \times (\$38.00 \text{ wage} + \$17.00 \text{ fringe})$. Overtime: $10 \text{ hours} \times (\$57.00 \text{ wage } [1.5 \times \$38.00] + \$17.00 \text{ fringe at the straighttime rate})$. The fringe contribution continues at the straighttime rate for all 50 hours and is never multiplied by the overtime factor.

40. A — U.S. citizens have permanent work authorization that never expires — the expiration of their physical identity documents (driver's licenses) does not affect their work authorization and does not require I9 reverification. Noncitizen employees whose work authorization documents (EAD cards) expire must be reverified to confirm ongoing employment eligibility. Reverifying citizens based on document expiration may violate IRCA.

41. C — Percentage complete: $\$1,666,000 \div \$2,380,000 = 70\%$. Earned revenue: $70\% \times \$2,800,000 = \$1,960,000$. Billings: $\$2,100,000$. Overbilled by $\$140,000$ ($\$2,100,000 - \$1,960,000$). Gross profit: $\$2,800,000 - \$2,380,000 = \$420,000$. Gross margin: $\$420,000 \div \$2,800,000 = 15\%$. The $\$140,000$ overbilling appears as a current liability on the balance sheet.

42. D — Year 1: 50% complete ($\$1,700,000 \div \$3,400,000$). Revenue = $50\% \times \$4,000,000 = \$2,000,000$. Year 2: 80% complete ($\$2,720,000 \div \$3,400,000$). Cumulative revenue = $80\% \times \$4,000,000 = \$3,200,000$. Year 2 incremental revenue = $\$3,200,000 - \$2,000,000 = \$1,200,000$. Revenue is recognized incrementally by subtracting previously recognized amounts.

43. B — Collections: $\$520,000$. Outflows: $\$280,000 + \$260,000 + \$65,000 + \$25,000 = \$630,000$. Monthly deficit: $\$520,000 - \$630,000 = -\$110,000$. The contractor spends $\$110,000$ more per month than they collect. At this rate, the $\$40,000$ cash reserve will be exhausted in approximately 11 days. This chronic cash drain requires immediate action — accelerating collections, reducing expenditures, or securing credit.

44. A — Net worth: $\$2,200,000 - \$1,650,000 = \$550,000$, well above the $\$50,000$ minimum. Working capital: $\$950,000 - \$720,000 = \$230,000$, demonstrating adequate liquidity. The contractor meets the ACLB financial thresholds for an unrestricted commercial license, provided the statement is audited or reviewed (not compiled) and cash meets the $\$25,000$ minimum.

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

46. D — Adjusted SE income: $\$240,000 \times 0.9235 = \$221,640$. Social Security (12.4%) on first $\$168,600 = \$20,906$. Medicare (2.9%) on full $\$221,640 = \$6,428$. Additional Medicare surtax (0.9%) on SE income exceeding $\$200,000$ (approximately $\$21,640$ of adjusted excess) = approximately $\$195$. Total: $\$20,906 + \$6,428 + \$195 \approx \$27,529$. The wage base caps Social Security while Medicare has no ceiling.

47. A — The IRS graduated penalty structure assesses 10% on deposits made more than 15 days late but before receiving a formal IRS notice. At 22 days late, the $\$28,000$ deposit triggers the 10% rate: $\$28,000 \times 10\% = \$2,800$ penalty. The penalty escalates to 15% only after the employer receives an IRS notice and still fails to deposit within 10 days.

48. B — The IRS will reclassify $\$75,000$ from distributions to salary ($\$170,000$ reasonable minus $\$95,000$ paid). Combined FICA rate of 15.3% on the $\$75,000$: approximately $\$11,475$ in additional FICA taxes. Plus penalties for failure to withhold and interest on the underreported payroll taxes from the original due dates. The IRS actively audits SCorporations with disproportionate salary to distribution ratios.

49. D — In Arkansas, contractors pay sales tax on all tangible personal property purchased for business use. Lumber ($\$65,000$) is taxable because the contractor is the consumer of installed materials. Diesel fuel ($\$15,000$) is taxable as a business consumable. Office supplies ($\$8,000$) are taxable as business consumables. Total taxable: $\$88,000$ at the applicable combined state and local rate.

50. C — The standard 3 year statute of limitations applies to accurately filed returns. If gross income is understated by more than 25%, the IRS has 6 years to assess additional taxes. The 7 year recommendation provides a one year safety margin beyond this extended assessment period, ensuring the contractor retains documentation for the maximum possible audit exposure.