

# PRACTICE EXAM 31: 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 and is considering converting to an LLC with SCorporation tax election. The contractor's CPA explains that the conversion affects liability protection, tax treatment, and administrative requirements. Which statement most accurately describes a key disadvantage of the SCorporation election that the contractor should weigh against the FICA tax savings?

A. The SCorporation election eliminates the contractor's ability to deduct business expenses on their individual tax return

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

C. The SCorporation election limits the company to a maximum of 5 shareholders and prohibits foreign ownership

D. The SCorporation election requires formal payroll administration — including W2 processing, quarterly Form 941 filings, annual Form 940 filings, workers' compensation coverage on the owner's salary, and compliance with all employer payroll tax obligations — adding administrative cost and complexity that reduces the net benefit of the FICA savings

## **DOMAIN: LICENSING (4 Questions)**

2. A contractor holds a restricted commercial license. The contractor signs a \$700,000 contract for a commercial office renovation. During construction, the project owner requests additional work through four change orders: CO#1 (\$12,000), CO#2 (\$18,000), CO#3 (\$15,000), and CO#4 (\$22,000). After CO#3, the cumulative contract value reaches \$745,000. After CO#4, it reaches \$767,000. At what point does the contractor have a licensing compliance issue?

A. After CO#1, because any change order on a restricted license project triggers a compliance review

B. After CO#4, when the cumulative contract value of \$767,000 exceeds the \$750,000 restricted license cap — the contractor should have recognized that CO#4 would push the total past the cap and contacted the ACLB before accepting it

C. Only at project completion when the final contract value is reported to the ACLB on the annual renewal

D. After CO#2, because the restricted license includes a 5% change order buffer that is exceeded by the cumulative \$30,000 in change orders

3. A contractor holds a valid Arkansas residential builder license. A commercial property owner asks the contractor to renovate the kitchen in a small restaurant — replacing flooring, cabinets, countertops, and a commercial exhaust hood. The renovation is valued at \$65,000. The restaurant occupies a standalone commercial building. Can the contractor perform this work?

A. No, because a restaurant kitchen renovation in a commercial building is commercial construction work regardless of the similarity to residential kitchen renovation — the building's commercial occupancy classification determines the licensing requirement, not the nature of the interior work

B. Yes, because kitchen renovation techniques are identical in residential and commercial applications

C. Yes, because standalone commercial buildings under 2,500 square feet are classified as residential for licensing purposes

D. No, but the contractor can perform the work if they subcontract the commercial exhaust hood installation to a licensed mechanical contractor

4. The ACLB conducts an audit of a licensed contractor and discovers that the contractor's \$10,000 surety bond has expired. The contractor's license renewal is current and all other

requirements are met. The bond expired 4 months ago and the contractor has been performing active construction work during the lapse. What action can the ACLB take?

A. No action because the surety bond is a onetime requirement at initial licensure and does not require renewal

B. A warning letter advising the contractor to renew the bond within 90 days with no further consequences

C. The ACLB can take disciplinary action because maintaining a valid surety bond is a continuing condition of licensure — operating with an expired bond for 4 months may result in sanctions including fines, suspension, or requirements to cease all construction activity until the bond is reinstated

D. Only a \$100 late renewal fee assessed against the bond, with no impact on the contractor's license status

5. A contractor's qualifying individual (QI) is arrested and charged with a felony for embezzling \$150,000 from a previous employer (a different construction company). The charges are pending and the QI has not been convicted. The ACLB learns of the arrest through a media report. Can the Board take any action before a conviction?

A. No, because the ACLB cannot take action based on criminal charges alone — only a final conviction triggers the Board's authority to act

B. No, because the alleged crime occurred at a different company and has no connection to the QI's current employer

C. Yes, but only if the QI voluntarily discloses the arrest to the ACLB before the Board discovers it independently

D. The ACLB may investigate the matter and evaluate whether the pending charges raise concerns about the QI's fitness to serve in that role — while a pending charge is not a conviction, the Board has investigatory authority to determine whether the circumstances warrant interim action such as requiring the contractor to designate an alternate QI pending resolution of the criminal case

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

6. A contractor's estimator is calculating the selling price for a project with \$1,120,000 in direct costs. The contractor's annual overhead is \$348,000 on annual direct cost volume of

\$2,320,000. The contractor wants a net profit margin of 6% on selling price. What is the correct selling price?

- A. \$1,120,000 with no markup
- B. \$1,370,213, calculated by allocating overhead at 15% (\$168,000), adding to direct costs (\$1,288,000 total cost), and dividing by 0.94 to achieve exactly 6% margin on selling price
- C. \$1,288,000, with overhead but without the profit margin adjustment
- D. \$1,456,000, calculated by applying a flat 30% combined markup to direct costs

7. A public project bid opening reveals four bids: \$3,100,000, \$3,250,000, \$3,180,000, and \$3,400,000. The apparent low bidder (\$3,100,000) discovers after the opening that they omitted the fire protection (sprinkler) scope from their bid — a \$120,000 error. The contractor notifies the owner within 2 hours and requests bid withdrawal. The bid documents require a 5% bid bond (\$155,000). Under common law principles governing bid mistakes, what factors will determine whether withdrawal is permitted?

- A. Whether the contractor's profit margin would turn negative if they were forced to honor the bid at \$3,100,000
- B. Whether the fire protection subcontractor confirms in writing that the quote was not included in the general contractor's bid
- C. Whether the error was clerical rather than judgmental (omitting an entire scope section is typically clerical), whether the error is material (\$120,000 on \$3.1M = 3.9%), whether the contractor requested withdrawal promptly (2 hours), and whether the owner can award to the next bidder without unconscionable prejudice — these are the standard equitable factors for bid mistake relief
- D. Whether at least two other bidders also omitted the fire protection scope, establishing an industrywide pricing confusion

8. A contractor needs to estimate the labor cost for framing 16,000 square feet of interior metal stud partition walls in a commercial building. The framing crew consists of 6 carpenters at a loaded rate of \$46.00 per hour each. The crew's combined daily productivity is 400 square feet per 8hour day. What is the estimated total labor cost?

- A. \$88,320, calculated as: total days =  $16,000 \div 400 = 40$  days; total labor hours = 40 days  $\times$  8 hours  $\times$  6 workers = 1,920 hours; total cost =  $1,920 \times \$46.00 = \$88,320$
- B. \$29,440, calculated using only 2 workers instead of the full 6worker crew
- C. \$44,160, calculated using only half the working days

D. \$110,400, calculated by adding a 25% productivity loss factor to account for normal construction inefficiency

9. A contractor receives three subcontractor quotes for the structural steel on a commercial project: \$485,000, \$510,000, and \$495,000. All three quotes are from reputable fabricators. However, the \$485,000 low quote includes a critical qualification: "Price subject to steel mill price adjustment at time of fabrication order." The other two quotes are firmfixed prices with no escalation clauses. What should the estimator consider?

A. Use the \$485,000 quote because it is the lowest price and escalation clauses are standard in steel fabrication

B. Use the \$510,000 quote because it is the highest and therefore the safest option for the contractor's budget

C. Average all three quotes and use \$496,667 as the steel budget to hedge against the escalation risk

D. Evaluate the risk of the \$485,000 quote's escalation clause against the \$10,000 premium for the \$495,000 firmfixed quote — a steel price increase of just 2% (\$9,700) would eliminate the savings, and the firmfixed price provides budget certainty that protects the contractor's margin on a fixedprice project

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

10. A contractor on a fixedprice commercial project encounters rock during foundation excavation. The geotechnical report provided with the bid documents indicated "dense clay throughout the foundation footprint" with no mention of rock. The rock removal costs \$68,000. The contractor provides written notice to the owner within 5 days of discovery (within the contractual 21day notice period). The owner argues the contractor should have drilled test borings before bidding to verify the geotechnical report. Under the differing site conditions clause, is the owner's argument valid?

A. Yes, because contractors performing foundation work must always verify geotechnical reports through independent testing

B. No, because the geotechnical report is a contract document that the contractor is entitled to rely upon — the report represented "dense clay throughout," the actual condition (rock) differs materially from this representation, and the contractor is not required to conduct independent geotechnical investigations to verify the accuracy of the owner's provided report

C. Yes, because rock is a foreseeable subsurface condition that experienced contractors should anticipate regardless of what the geotechnical report indicates

D. No, but the contractor can recover only 50% of the \$68,000 because subsurface risk is always shared equally

11. A general contractor on a commercial project receives a change order adding \$95,000 of additional site work. The contractor will subcontract the earthwork (\$60,000) and selfperform the concrete curbing (\$35,000). The contract allows 15% markup on selfperformed work and 8% on subcontracted work. What is the total billable change order amount?

A. \$95,000 with no markup

B. \$109,250 at 15% on the full amount

C. \$105,050, calculated as selfperformed ( $\$35,000 \times 1.15 = \$40,250$ ) plus subcontracted ( $\$60,000 \times 1.08 = \$64,800$ )

D. \$99,750 at a blended 5% rate

12. A project owner terminates a contractor for convenience at the 55% completion mark on a \$4,000,000 project. The contractor has completed \$2,200,000 of work, has \$120,000 in noncancelable material commitments, and estimates \$55,000 in demobilization costs. The contractor's estimated profit on the full project was \$400,000 (10%). Under a standard termination for convenience provision, what is the contractor entitled to?

A. \$2,375,000 plus a reasonable profit on work performed — the contractor receives payment for completed work (\$2,200,000), material commitments (\$120,000), demobilization costs (\$55,000), and a fair profit on the work performed, but does not receive anticipated profit on the unperformed 45% of the contract

B. The full \$4,000,000 contract price because the owner's unilateral termination constitutes breach

C. \$2,200,000 for work completed only with no reimbursement for materials, demobilization, or profit

D. \$2,375,000 plus the full \$400,000 estimated profit because the owner broke the contract

13. A contractor working on a hospital addition discovers that the existing building's fire alarm system uses a proprietary protocol that is incompatible with the new fire alarm system specified in the contract documents. Integrating the two systems requires a specialized protocol converter costing \$42,000 that was not included in the original specifications. The architect acknowledges the compatibility issue was not addressed in the design. Under the Spearin Doctrine, who bears this cost?

- A. The fire alarm manufacturer, because they should have designed their system to be compatible with all existing protocols
- B. The contractor, because experienced hospital contractors should anticipate fire alarm compatibility issues
- C. The cost should be split between the contractor, architect, and owner in equal thirds
- D. The owner bears the cost through a change order because the Spearin Doctrine establishes that the owner impliedly warrants the adequacy of the plans and specifications — the architect's design failed to address the compatibility between the existing and new fire alarm systems, and the contractor relied on this implied warranty when pricing the bid

14. A subcontractor on a commercial project provides a conditional lien waiver for \$95,000 in exchange for the September progress payment. The general contractor receives the conditional waiver, includes it in their payment application to the owner, and receives the owner's payment — but does not pay the \$95,000 to the subcontractor. Two months later, the subcontractor files a mechanics' lien. The GC argues the lien waiver bars the subcontractor's lien rights. Is the GC's argument valid?

- A. Yes, because all lien waivers — conditional and unconditional — permanently extinguish lien rights once signed
- B. No, because the conditional waiver was expressly conditioned on receipt of the \$95,000 payment — since the subcontractor never received the payment, the condition was not satisfied, the waiver never became effective, and the subcontractor's lien rights remain intact
- C. Yes, because the GC's receipt of the owner's payment satisfies the waiver's payment condition
- D. No, but only if the subcontractor notified the GC of the unpaid status within 30 days of signing the waiver

15. A contractor on a commercial project receives a written directive from the owner to install a security camera system not included in the original contract. The estimated cost is \$75,000. The contractor responds in writing: "We acknowledge your directive and will proceed with the security system installation. This constitutes additional scope requiring a change order. We will track all costs on a timeandmaterials basis and submit a change order upon completion." The contractor completes the installation at an actual cost of \$82,000. Is the contractor entitled to the \$82,000?

- A. Yes, because the contractor properly documented the directive as additional scope, stated they would track costs, and preserved their right to compensation — the written

acknowledgment, the notation that the work is a change order, and the T&M cost tracking create a documented record that supports the contractor's \$82,000 claim even though a formal change order was not executed before the work began

B. No, because the contractor should have refused to begin work until a formal change order with an agreed price was fully executed

C. Yes, but only for the original \$75,000 estimate because the contractor's estimate constitutes a binding price cap

D. No, because the owner's written directive is not a valid change order unless it includes a price and the owner's signature on a formal change order form

16. A project architect conducts a routine site observation and discovers that the roofing subcontractor has installed a black TPO membrane instead of the specified white TPO membrane. The color difference affects the building's energy performance — white TPO reflects solar heat while black TPO absorbs it, significantly increasing cooling costs. The roofing installation is complete and the membrane has been fully adhered. What is the likely outcome?

A. The architect will accept the black membrane because TPO color is an aesthetic preference with no performance impact

B. The architect will require a credit for the energy performance difference but allow the black membrane to remain

C. The architect will likely require removal and replacement with the specified white membrane at the roofing subcontractor's expense — because the color difference is not merely aesthetic but directly affects the building's thermal performance and energy costs, and the unauthorized substitution does not meet the contract specification regardless of the installation quality

D. The architect will allow the black membrane and issue a design bulletin changing the specification to match

17. A contractor completes a commercial building and the architect issues the certificate of substantial completion on November 1. The oneyear warranty period runs through November 1 of the following year. On October 20 — twelve days before the warranty expires — the building owner notices extensive cracking in the polished concrete lobby floor. The cracks appear to be caused by improper joint spacing during the original concrete placement. The owner notifies the contractor on October 22. The contractor schedules a repair assessment for November 15. Is the warranty claim preserved?

A. No, because the contractor must complete all warranty repairs before the November 1 expiration date

B. No, because concrete floor cracking is classified as normal material behavior that is excluded from warranty coverage

C. Yes, but only if the owner obtains an independent engineering report confirming the improper joint spacing before November 1

D. Yes, because the owner discovered the cracking on October 20 and provided notice on October 22 — both within the warranty period — which preserves the warranty claim, and the contractor cannot defeat the obligation by scheduling the assessment after the expiration date

18. A contractor on a timeandmaterials contract bills the owner for material purchases including a 15% markup as specified in the contract. The owner's auditor reviews the material invoices and discovers that the contractor received a 5% volume discount from the material supplier but billed the owner at the prediscount price plus the 15% markup. The contract states materials are billed at "actual cost plus 15%." What is the correct billing basis?

A. The contractor should bill at the prediscount price because volume discounts are earned through the contractor's purchasing power and are a benefit of the contractor's business operations

B. The contractor must bill at the discounted (actual) price plus 15% — the contract states "actual cost plus 15%," and the actual cost the contractor paid is the discounted price, not the list price, so billing at the prediscount price overstates the actual cost and violates the contract's pricing terms

C. The contractor can choose either the prediscount or discounted price because the contract does not specifically address volume discounts

D. The volume discount should be split equally between the contractor and the owner as a shared benefit

19. A subcontractor on a commercial project completes their scope of work and requests final payment including retainage. The general contractor has received the corresponding retainage from the owner. The GC withholds the subcontractor's retainage, stating: "We are holding your retainage until the architect issues the final certificate of completion for the entire project, which may take 3 to 6 months." The subcontract requires retainage release within 30 days of the subcontractor's completion of their scope. Is the GC's withholding justified?

A. No, because the subcontract establishes a 30day retainage release timeline tied to the subcontractor's completion of their own scope — the GC cannot unilaterally extend this timeline to match the overall project closeout schedule, and the GC has already received the funds from the owner

B. Yes, because retainage is not released until the entire project achieves final completion regardless of individual subcontractor completion dates

C. No, but only if the subcontractor files a formal written demand specifying the exact amount owed

D. Yes, because the GC needs the retainage as security against potential coordination deficiencies between trades that may not surface until final project closeout

20. A project owner issues a change order deleting the entire landscaping scope (\$140,000) from a commercial project because the owner has hired a separate landscape contractor. The contractor's bid for the landscaping included \$112,000 in direct costs and \$28,000 in overhead and profit. The contract's deductive change order provision states: "Deductive change orders shall be calculated at direct cost savings only." What deduction applies?

A. \$140,000, representing the full bid amount including overhead and profit

B. \$70,000, representing 50% of the bid amount as a compromise deduction

C. \$112,000, representing the direct cost savings only — the contractor retains the \$28,000 in overhead and profit because the contract specifies deductive change orders at "direct cost savings," not at the full bid value

D. \$126,000, representing the direct costs plus 50% of the overhead and profit

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

21. A project manager on a \$7,500,000 commercial project is at the 60% completion mark. The earned value analysis shows: BAC = \$7,500,000; PV = \$4,500,000; EV = \$4,125,000; AC = \$4,350,000. The SPI is 0.917 and the CPI is 0.948. What is the EAC and what does it indicate?

A. EAC = \$7,125,000, indicating the project will finish under budget by \$375,000

B. EAC = \$7,500,000, equal to the original budget because midpoint variances always selfcorrect

C. EAC = \$8,175,000, calculated using the SPI instead of the CPI

D. EAC = \$7,911,000 ( $\$7,500,000 \div 0.948$ ), indicating the project will exceed the budget by approximately \$411,000 if the current cost inefficiency continues — both the SPI (0.917) and CPI (0.948) below 1.0 confirm the project is both behind schedule and over budget, requiring immediate corrective action

22. A contractor's superintendent discovers that the electrical subcontractor installed standard residentialgrade receptacles in patient care areas of a hospital addition instead of the specified hospitalgrade receptacles. Hospitalgrade receptacles have superior grounding, retention force,

and durability required for medical equipment connections. Approximately 180 receptacles have been installed. What should the superintendent do?

A. Accept the residentialgrade receptacles because they provide adequate power for standard electrical equipment

B. Stop the electrical subcontractor, document the nonconforming installation, and require replacement of all 180 receptacles with hospitalgrade units at the subcontractor's expense — hospitalgrade receptacles are specifically required in patient care areas for equipment safety, and residentialgrade outlets do not meet the code requirements for these critical locations

C. Apply a hospitalgrade face plate over the residentialgrade receptacles to satisfy the specification

D. Accept the residentialgrade receptacles in nonpatientcare areas and replace only those in direct patient contact zones

23. A project schedule shows two parallel chains converging at a milestone: Chain 1 = 20 days remaining; Chain 2 = 26 days remaining. A 4day delay occurs on Chain 1. What is the impact on the milestone?

A. No impact — Chain 2 at 26 days remains the controlling path, and Chain 1 with the 4day delay becomes 24 days, still shorter than Chain 2, so the milestone date is unchanged

B. The milestone is delayed by 4 days because any delay to any converging chain extends the milestone

C. The milestone is delayed by 2 days because the delay pushes Chain 1 past Chain 2 by 2 days

D. Both chains become cocritical at 26 days, meaning any further delay to either chain will extend the milestone

24. A contractor managing a renovation in an occupied elementary school must perform fire alarm testing that will trigger audible alarms throughout the building for approximately 90 minutes. The contract requires 48hour advance written notice to the school principal before any activities that disrupt normal school operations. The fire alarm contractor wants to begin testing tomorrow morning during school hours. What should the contractor do?

A. Proceed with the testing because fire alarm testing is a regulatory requirement that overrides the 48hour notice provision

B. Notify the principal verbally today and proceed with testing tomorrow because verbal notice satisfies the intent of the notification requirement

C. Postpone the fire alarm testing until the 48-hour written notice requirement can be satisfied — notify the principal in writing immediately, schedule the testing for at least 48 hours later, and coordinate the timing to minimize disruption to classroom instruction, ideally scheduling the test during a noninstructional period

D. Proceed with testing but limit the duration to 30 minutes to minimize the disruption to the school

25. A contractor's three-week lookahead schedule identifies that the concrete subcontractor's next pour — a structural elevated slab — is scheduled for next Wednesday. The weather forecast shows a 70% probability of heavy rain on Wednesday and Thursday. The concrete specification prohibits placement during active precipitation. What should the project manager do?

A. Proceed with the Wednesday pour and cover the fresh concrete with plastic sheeting if rain begins

B. Wait until Monday to check the updated forecast before making any scheduling decisions

C. Cancel the concrete pour permanently and substitute a precast plank system to eliminate weather dependency

D. Proactively reschedule the pour to Friday (when the forecast shows clear weather), notify the concrete supplier of the date change, coordinate the formwork and rebar inspection for Thursday, and document the weather-based schedule adjustment in the daily report — because placing structural concrete during active precipitation violates the specification and creates quality risks that are more expensive to remediate than a 2-day rescheduling delay

26. A project's earned value analysis at the 70% mark shows the SPI has been declining steadily: Month 3 = 1.02; Month 5 = 0.98; Month 7 = 0.94; Month 9 = 0.89. The CPI has remained stable at approximately 1.01 throughout. What does this pattern indicate and what is the most appropriate response?

A. The stable CPI means the project is healthy and the declining SPI will self-correct in the final 30%

B. The declining SPI indicates improving cost efficiency because the project is becoming more productive

C. The project is falling progressively further behind schedule while maintaining excellent cost control — the SPI declining from 1.02 to 0.89 over 6 months indicates a worsening schedule problem that requires immediate recovery measures, and the stable CPI suggests additional resources can be deployed efficiently without budget concerns

D. Both metrics are within acceptable tolerance and no corrective action is warranted until the project reaches 90% completion

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

27. A contractor carries a CGL policy with a \$1,000,000 peroccurrence limit and a \$2,000,000 general aggregate. The contractor also carries a \$5,000,000 umbrella policy. During the policy year, two incidents occur: Incident 1 produces a \$1,800,000 judgment (scaffold collapse injuring multiple workers from other trades); Incident 2 produces a \$900,000 judgment (property damage to adjacent building from crane operation). How are the claims covered?

A. CGL pays: Incident 1 = \$1,000,000 (peroccurrence cap); Incident 2 = \$900,000 (within peroccurrence limit and remaining aggregate of \$1,000,000). Total CGL = \$1,900,000 (within \$2M aggregate). Umbrella pays: Incident 1 excess = \$800,000. Total covered = \$2,700,000 of \$2,700,000 total claims — zero personal exposure

B. CGL pays \$2,000,000 aggregate and the umbrella covers the remaining \$700,000

C. CGL pays \$1,000,000 per occurrence for each incident and the umbrella pays nothing because the claims fall within the CGL limits

D. The CGL and umbrella combined pay only \$2,000,000, leaving \$700,000 in personal exposure

28. A surety evaluates a contractor for a \$2,800,000 performance bond. The contractor's financial statements show: working capital \$210,000; net worth \$720,000; existing bonded backlog \$2,400,000. The surety uses a 15× working capital multiplier. What is the surety's likely assessment?

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

B. Approval because the total capacity exceeds the single bond request

C. Conditional approval with a personal indemnity agreement from all principals

D. The bonding capacity is \$3,150,000 ( $15 \times \$210,000$ ), and with \$2,400,000 committed, only \$750,000 remains — the \$2,800,000 request exceeds available capacity by \$2,050,000, and the surety will deny the bond unless the contractor substantially increases working capital or completes existing projects

29. A contractor's workers' compensation premium audit reveals that 4 workers classified as "painting" (\$6.50 per \$100 of payroll) have actually been performing "structural steel erection" (\$28.50 per \$100 of payroll) for the past year. The misclassified payroll totals \$280,000. The contractor's EMR is 1.12. What is the approximate additional premium owed?

A. \$18,200, calculated at the painting rate on the full payroll without the classification adjustment

B. Approximately \$69,043, calculated as the premium difference:  $(\$280,000 \div \$100) \times (\$28.50 - \$6.50) \times 1.12 = 2,800 \times \$22.00 \times 1.12 = \$69,043$  — reflecting the vast risk difference between indoor painting and structural steel erection at height

C. \$79,800, calculated at the steel erection rate on the full payroll without crediting the painting premium already paid

D. \$0, because classification disputes between painting and steel erection are automatically resolved in the contractor's favor

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

30. A construction worker is carrying a bundle of rebar when they trip and fall, landing on their knee. The knee swells immediately. The site medic applies ice and a nonrigid elastic knee wrap. The worker visits an occupational health clinic where the doctor orders Xrays (negative for fracture), prescribes OTC ibuprofen, and recommends continued use of the elastic knee wrap. The worker returns to full duty the next day with no restrictions. Is this case OSHA recordable?

A. No, because all treatments received — ice, nonrigid elastic wrap, diagnostic Xrays, and OTC medication — are classified as first aid under OSHA definitions, the worker returned to full duty with no restrictions, and no recordable outcome occurred

B. Yes, because the knee swelling constitutes a significant injury requiring automatic recording

C. Yes, because the Xrays constitute diagnostic medical treatment beyond first aid

D. No, but only if the worker signed a waiver declining further medical evaluation

31. An employer with 160 employees in the construction industry (NAICS 236) wants to confirm their OSHA electronic reporting obligations. What must they submit?

A. Complete 300 Logs and 301 Incident Reports within 7 days of each recordable incident

B. No electronic submission because construction employers with fewer than 250 employees are exempt

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

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

32. A construction worker develops a skin rash after exposure to a new adhesive product used on the jobsite. The worker visits a physician who diagnoses workrelated allergic contact dermatitis, prescribes a prescriptionstrength hydrocortisone cream, and clears the worker to return to full duty wearing protective gloves. The worker returns to work the next day. Is this case OSHA recordable?

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

B. No, because skin rashes from adhesive exposure are classified as environmental conditions exempt from recording

C. Yes, but only if the employer failed to provide material safety data sheets for the adhesive product

D. Yes, because the case meets two independent recordability criteria — the physiandiagnosed workrelated illness (contact dermatitis) is a significant diagnosis, and the prescribed hydrocortisone cream is a prescription medication constituting medical treatment beyond first aid — either trigger independently makes the case recordable

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

33. A contractor with 60 employees has a carpenter who has worked for the company for 5 years. The carpenter's elderly father is diagnosed with Alzheimer's disease and requires increasing levels of daily care. The carpenter requests intermittent FMLA leave to attend to the father's medical appointments and assist with daily care needs approximately 6 hours per week. Under the FMLA, is this request covered?

A. No, because Alzheimer's disease is a chronic condition requiring continuous care, not intermittent medical appointments

B. Yes, because the FMLA provides intermittent leave when medically necessary to care for a parent with a serious health condition — Alzheimer's disease is a serious health condition, the

employer has 60 employees (above threshold), the carpenter has 5 years of tenure (exceeding eligibility), and the weekly 6hour schedule is deducted from the 12week entitlement

C. No, because intermittent leave for parental care is limited to hospitalization periods and does not cover ongoing outpatient care needs

D. Yes, but only for the first 4 weeks because FMLA intermittent leave for elder care has a 160hour annual maximum

34. A nonexempt mason earns \$38.00 per hour and works 48 hours during a workweek. The employer provides a \$260 nondiscretionary weekly production bonus for exceeding the minimum daily block count. Under the FLSA, what is the correct total gross pay?

A. \$2,257.68, calculated as straighttime plus bonus (\$2,084.00) plus overtime premium ( $\$43.42 \text{ regular rate} \times 0.5 \times 8 \text{ hours} = \$173.68$ ), where the \$260 bonus is included in the regular rate ( $\$2,084 \div 48 = \$43.42$ )

B. \$2,084.00, with no overtime premium because the production bonus replaces the overtime obligation

C. \$2,192.00, calculated with overtime at the base rate only without the bonus in the regular rate

D. \$2,344.00, calculated by applying timeandahalf to all 48 hours at the base rate

35. An employer with 35 employees has a worker who files a workers' compensation claim for a hand injury. The employer's workers' comp carrier accepts the claim and begins paying benefits. While the worker is on modified duty, their supervisor begins assigning them to the most unpleasant tasks (cleaning portable toilets, sorting construction debris in the rain), publicly criticizing their work quality in front of other workers, and documenting minor infractions that were previously tolerated for all employees. Under workers' compensation antiretaliation law, what is the employer's exposure?

A. No exposure because supervisors have full discretion over work assignments during modified duty periods

B. No exposure because the adverse treatment must include actual termination to constitute retaliation

C. Significant exposure — the temporal proximity between the workers' compensation filing and the pattern of adverse treatment (demeaning assignments, public criticism, selective documentation of minor infractions) creates a strong inference of retaliation, and the employer must provide credible nonretaliatory reasons for the changed treatment to rebut this inference

D. Minimal exposure because modifiedduty workers are expected to perform any available tasks regardless of how unpleasant

36. A contractor operating on a DavisBacon covered project employs electricians who work 50 hours during a workweek. The prevailing wage specifies electrician wages of \$46.00/hour plus \$21.00/hour in fringe benefits. One electrician also receives a \$225 nondiscretionary weekly certification premium for maintaining current master electrician credentials. How must the overtime be calculated?

- A. Overtime at 1.5 times the combined wage and fringe ( $\$67.00 \times 1.5$ ) for 10 hours
- B. Overtime at 1.5 times only the base wage ( $\$46.00 \times 1.5 = \$69.00$ ) for 10 hours without the certification premium
- C. No overtime because electricians receiving certification premiums are classified as exempt professionals
- D. The overtime premium applies to the cash wage plus the prorated certification premium, while the fringe continues at straighttime — regular rate =  $(\$46.00 \times 50 + \$225) \div 50 = \$50.50$ ; overtime premium =  $\$50.50 \times 0.5 = \$25.25 \times 10 = \$252.50$ ; fringe at \$21.00 for all 50 hours

37. An employer terminates a worker for violating the company's zerotolerance policy on workplace violence. The worker was involved in a physical altercation with a coworker — the worker threw a punch that struck the coworker in the face, causing a laceration requiring 5 sutures. The employer has the zerotolerance policy signed by the worker, three eyewitness statements, and the injured coworker's medical documentation. The terminated worker files for unemployment benefits. What is the likely outcome?

- A. The worker will receive full benefits because the other coworker may have provoked the altercation
- B. The worker will likely be denied benefits because initiating physical violence in the workplace constitutes willful misconduct — throwing a punch that causes facial injuries requiring sutures is a deliberate, knowing violation of a serious workplace rule, and the signed policy, eyewitness statements, and medical evidence establish clear disqualifying misconduct
- C. The worker will receive benefits at a reduced rate because workplace altercations are classified as mutual misconduct
- D. The unemployment agency will defer the decision until criminal assault charges are resolved

38. An employer with 55 employees has a worker who requests 10 weeks of FMLA leave to undergo treatment for severe clinical depression at an inpatient psychiatric facility. The worker has been employed for 7 years. Under the FMLA, is this leave request covered?

- A. Yes, because inpatient treatment for a mental health condition at a healthcare facility qualifies as a serious health condition under the FMLA — the employer has 55 employees

(above threshold), the worker's 7year tenure exceeds eligibility, and the FMLA covers mental health conditions on equal footing with physical conditions when they involve inpatient care or continuing treatment

B. No, because the FMLA covers only physical health conditions and explicitly excludes mental health treatment

C. Yes, but only for 4 weeks because FMLA leave for mental health treatment is capped at half the standard 12week entitlement

D. No, because inpatient psychiatric treatment is covered under the ADA's reasonable accommodation provisions rather than the FMLA

39. An employer's I9 audit reveals that 10 employees have I9 forms where the employer accepted expired documents during the original Section 2 verification. Five employees are U.S. citizens whose driver's licenses expired after the I9 was completed. Five employees are noncitizens whose Employment Authorization Documents expired after the I9 was completed. Which employees require reverification?

A. All 10 employees must be reverified because any expired document invalidates the original I9

B. Only the 5 U.S. citizens because their expired driver's licenses must be updated with current photos for identification purposes

C. Only the 5 noncitizen employees whose Employment Authorization Documents expired — U.S. citizens have permanent work authorization that never expires, and the expiration of a citizen's identity document does not affect their work authorization, while noncitizens with timelimited work authorization must be reverified when their authorization documents expire

D. None of the employees require reverification because I9 verification is a onetime event at the time of hiring

40. An employer with 40 employees has a worker who has exhausted 12 weeks of FMLA leave following a hip replacement. The worker's physician releases them to return with a permanent restriction: no repetitive bending or crouching. The worker's regular job as a plumber requires constant bending and crouching in tight spaces. Under the ADA, what must the employer do?

A. Immediately terminate the worker because they cannot perform the essential bending and crouching functions of the plumber position

B. Hold the plumber position open for an additional 12 weeks beyond the FMLA entitlement

C. Create a new plumbing position that eliminates all bending and crouching requirements

D. Engage in the ADA interactive process to evaluate whether the restriction can be reasonably accommodated — potential accommodations include reassignment to available positions that do not require repetitive bending (estimating, project coordination, supply management, prefabrication), and the employer must explore all options before concluding accommodation is impossible

41. An employer discovers that their payroll department has been paying 12 nonexempt construction workers a flat daily rate of \$300 regardless of hours worked. Workers routinely work 10-hour days (50 hours per week). Under the FLSA, what violation has occurred?

A. No violation because flat daily rates are a permissible payment method under the FLSA

B. The flat daily rate may violate the FLSA overtime provisions because the \$300/day translates to \$30/hour for 10-hour days, and workers who exceed 40 hours per week are owed overtime at 1.5 times their regular rate — paying a flat \$300 for days exceeding 8 hours without additional overtime compensation for hours over 40 per week deprives workers of their statutory overtime rights

C. The violation is limited to the difference between \$300/day and the federal minimum wage

D. No violation because construction workers are exempt from overtime under the FLSA's manual labor exclusion

42. An employer with 30 employees has a written antiharassment policy requiring all complaints to be reported to the HR manager. A worker reports sexual harassment by their supervisor to the company president because the HR manager is the harasser's spouse. The president tells the worker to "work it out" with the supervisor and takes no action. The worker files an EEOC charge. What is the employer's exposure?

A. Significant exposure — the employer had actual knowledge of the harassment through the worker's report to the company president, and the president's failure to investigate or take corrective action constitutes a failure to exercise reasonable care to prevent and correct harassment, regardless of the policy's designated reporting channel, because the worker's alternative reporting path was reasonable given the conflict of interest

B. No exposure because the worker did not follow the policy's designated reporting procedure (reporting to HR)

C. Minimal exposure because the company president is not the designated complaint recipient under the antiharassment policy

D. Exposure only if the worker was ultimately terminated as a result of the harassment

43. A contractor operating on a DavisBacon covered project has laborers who work 46 hours during a workweek. The prevailing wage specifies laborer wages of \$24.00/hour plus \$11.00/hour in fringe benefits. How must the 6 overtime hours be compensated?

A. All 46 hours at the overtime rate of \$36.00 wage ( $\$24.00 \times 1.5$ ) plus \$16.50 fringe ( $\$11.00 \times 1.5$ )

B. 40 hours at \$24.00 wage plus \$11.00 fringe, and 6 hours at \$24.00 wage plus \$16.50 fringe ( $\$11.00 \times 1.5$ )

C. 40 hours at \$24.00 wage plus \$11.00 fringe, and 6 overtime hours at \$36.00 wage ( $1.5 \times \$24.00$ ) plus \$11.00 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

D. No overtime because laborers on DavisBacon projects with prevailing wages under \$25.00/hour are exempt from FLSA overtime

44. An employer terminates a 56yearold estimator with 15 years of excellent performance reviews. The employer replaces them with a 30yearold college graduate at a 45% lower salary, citing "cost reduction" as the reason. Under the ADEA, what combination of evidence would most strongly support an age discrimination claim?

A. Evidence that the replacement employee graduated from a more prestigious university than the terminated estimator

B. Testimony from the terminated estimator's coworkers that they personally believe age was a factor

C. Evidence that the employer has never posted a written antiagediscrimination policy

D. A pattern of replacing older workers with younger, cheaper replacements across the company, combined with the 15 years of excellent reviews contradicting any performance justification, the "cost reduction" rationale that correlates age/tenure with salary, and direct evidence of agerelated comments by decisionmakers such as "we need to get younger and more techsavvy"

45. An employer with 50 employees has a written atwill employment disclaimer in the handbook. A supervisor tells a newly hired apprentice: "You've got a job here for life as long as you show up." Fourteen months later, the apprentice is terminated during a reduction in force. The apprentice sues, claiming the supervisor's promise created a binding employment contract. What is the most likely outcome?

A. The apprentice will prevail because the supervisor's verbal promise creates an enforceable oral contract that supersedes the written atwill disclaimer

- B. The written atwill disclaimer will likely prevail over the supervisor's informal oral statement — courts generally uphold clear, conspicuous written atwill provisions over casual verbal assurances, particularly when the employee acknowledged receiving the handbook, though the employer should train supervisors to avoid making employment guarantees that could undermine the atwill relationship
- C. The court will award the apprentice 6 months of severance as a compromise between the atwill disclaimer and the verbal promise
- D. The outcome depends solely on whether the supervisor had explicit authority to make binding employment commitments

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

46. A contractor's WIP report shows Project Kappa: revised contract \$2,200,000; estimated total cost \$1,870,000; costs to date \$1,309,000; billings to date \$1,400,000. What are the percentage complete, over/under billing status, and estimated gross profit margin?

- A. 70% complete ( $\$1,309,000 \div \$1,870,000$ ), underbilled by \$140,000 (earned revenue of \$1,540,000 minus billings of \$1,400,000), with a 15% estimated gross profit margin ( $\$330,000 \div \$2,200,000$ )
- B. 60% complete, overbilled by \$91,000, gross margin 12%
- C. 75% complete, billings match earned revenue exactly, gross margin 18%
- D. 70% complete, overbilled by \$140,000, gross margin 10%

47. A contractor uses the percentageofcompletion method on a \$3,800,000 project with estimated costs of \$3,230,000. At end of Year 1, costs incurred total \$1,615,000. At end of Year 2, cumulative costs total \$2,584,000. Estimated total cost has not changed. What is the revenue recognized in Year 2 only?

- A. \$1,900,000, equal to Year 1 revenue repeated
- B. \$3,040,000, representing cumulative revenue through Year 2 without subtracting Year 1
- C. \$1,140,000, calculated as Year 2 cumulative revenue (\$3,040,000 at 80% complete) minus Year 1 revenue (\$1,900,000 at 50% complete) — revenue is recognized incrementally
- D. \$969,000, equal to the costs incurred in Year 2 only

48. A contractor's cash flow analysis projects: beginning cash \$55,000; collections \$610,000; retainage releases \$30,000; credit line draws \$90,000. Outflows: payroll \$425,000; materials/subcontractors \$285,000; overhead \$66,000; equipment \$30,000; taxes \$20,000. What is the projected ending cash position?

- A. Positive \$150,000, calculated by excluding equipment and tax payments
- B. Positive \$55,000, unchanged from beginning balance
- C. Positive \$610,000, using only the collections total
- D. Negative \$41,000, calculated as total inflows (\$785,000) minus total outflows (\$826,000) — the contractor faces a \$41,000 shortfall requiring additional financing, accelerated collections, or expenditure adjustments

49. A contractor's balance sheet shows: current assets \$860,000; current liabilities \$640,000; total assets \$2,000,000; total liabilities \$1,480,000. The contractor applies for an unrestricted commercial license. Do they meet the ACLB financial requirements?

- A. No, because the current ratio of 1.34 is below the ACLB's minimum of 1.5
- B. Yes, because net worth is \$520,000 ( $\$2,000,000 - \$1,480,000$ ), exceeding the \$50,000 minimum, and working capital is \$220,000 ( $\$860,000 - \$640,000$ ), demonstrating adequate liquidity — provided the financial statement is audited or reviewed and cash meets the \$25,000 minimum
- C. No, because working capital of \$220,000 does not meet the \$250,000 minimum for unrestricted licenses
- D. Yes, but only with personal guarantees from company officers

50. A contractor's income statement shows: total revenue \$5,400,000; cost of construction \$4,590,000; G&A expenses \$486,000. What are the gross profit, gross margin, net income, and net margin?

- A. Gross profit \$810,000 (15%), net income \$324,000 (6%) — calculated as: revenue minus cost = \$810,000;  $\$810,000 \div \$5,400,000 = 15\%$  gross margin;  $\$810,000$  minus  $\$486,000 = \$324,000$  net income;  $\$324,000 \div \$5,400,000 = 6\%$  net margin
- B. Gross profit \$486,000 (9%), net income \$0 (0%)
- C. Gross profit \$810,000 (15%), net income \$486,000 (9%)
- D. Gross profit \$540,000 (10%), net income \$54,000 (1%)

## Practice Exam 31: Answer Key and Explanations

- 1. D** — The S-Corporation election requires formal payroll administration including W-2 processing, quarterly Form 941 filings, annual Form 940 filings, workers' compensation on the owner's salary, and full employer payroll tax compliance. These administrative costs and complexities reduce the net benefit of the FICA savings on distributions. The contractor must weigh the tax savings against the ongoing payroll administration burden.
- 2. B** — The restricted license caps individual projects at \$750,000. After CO#3, the cumulative value was \$745,000 — still under the cap. CO#4 (\$22,000) pushed the total to \$767,000, exceeding the cap by \$17,000. The contractor should have recognized that CO#4 would breach the threshold and contacted the ACLB before accepting it.
- 3. A** — A restaurant kitchen renovation in a standalone commercial building is commercial construction work regardless of the similarity to residential kitchen work. The building's commercial occupancy classification — not the nature of the interior renovation — determines the licensing requirement. The residential builder license does not authorize work in commercial occupancy buildings.
- 4. C** — Maintaining a valid surety bond is a continuing condition of licensure, not a one-time requirement. Operating for 4 months with an expired bond constitutes a licensing violation. The ACLB can impose sanctions including fines, suspension, or requiring the contractor to cease all activity until the bond is reinstated.
- 5. D** — The ACLB has investigatory authority to evaluate whether pending felony charges raise concerns about the QI's fitness to serve. While a pending charge is not a conviction, embezzlement of \$150,000 from a construction company is directly relevant to the QI's trustworthiness. The Board may require an interim alternate QI pending resolution of the criminal case.
- 6. B** — Overhead rate:  $\$348,000 \div \$2,320,000 = 15\%$ . Allocation:  $\$1,120,000 \times 15\% = \$168,000$ . Total cost:  $\$1,288,000$ . Selling price:  $\$1,288,000 \div 0.94 = \$1,370,213$ . Dividing by  $(1 - \text{margin})$  ensures profit equals exactly 6% of the selling price rather than 6% of cost.
- 7. C** — Courts evaluate bid mistake claims using four equitable factors: the error was clerical (omitting an entire scope section), the error is material ( $\$120,000$  on  $\$3.1\text{M} = 3.9\%$ ), withdrawal was requested promptly (2 hours), and the owner can award to the next bidder without unconscionable prejudice. These are the standard criteria for equitable relief from bid mistakes.
- 8. A** — Total days:  $16,000 \div 400 = 40$  days. Total hours:  $40 \times 8 \times 6$  workers = 1,920 hours. Cost:  $1,920 \times \$46.00 = \$88,320$ . The productivity rate represents the combined output of all 6 workers, so total labor must include the full crew's time over the entire duration.
- 9. D** — The \$485,000 quote's escalation clause creates budget uncertainty on a fixed-price project. A steel price increase of just 2% (\$9,700) would eliminate the \$10,000 savings over the \$495,000 firm-fixed quote. The firm-fixed price provides certainty that protects the contractor's margin, making the \$10,000 premium a worthwhile risk-mitigation investment.

**10. B** — The geotechnical report is a contract document representing "dense clay throughout." The actual condition (rock) differs materially from this representation. The contractor is entitled to rely on the owner-provided report and is not required to conduct independent geotechnical investigations. This is a classic Type I differing site condition entitling the contractor to the \$68,000 through a change order.

**11. C** — Self-performed:  $\$35,000 \times 1.15 = \$40,250$ . Subcontracted:  $\$60,000 \times 1.08 = \$64,800$ . Total:  $\$40,250 + \$64,800 = \$105,050$ . The different markup rates apply to each category based on who performs the work. The contractor earns 15% only on work they self-perform and 8% on subcontracted portions.

**12. A** — Under termination for convenience, the contractor receives payment for completed work (\$2,200,000), material commitments (\$120,000), demobilization (\$55,000), plus a reasonable profit on the work performed. The contractor does not receive anticipated profit on the unperformed 45%. This is the key financial distinction between convenience termination and breach of contract.

**13. D** — The Spearin Doctrine establishes that the owner impliedly warrants the adequacy of plans and specifications. The architect's design failed to address the compatibility between the existing proprietary fire alarm protocol and the new system. The contractor relied on this implied warranty when pricing the bid. The \$42,000 protocol converter is the owner's responsibility through a change order.

**14. B** — The conditional waiver was expressly conditioned on receipt of the \$95,000 payment. Since the subcontractor never received the payment, the condition was never satisfied, the waiver never became effective, and the subcontractor's lien rights remain intact. Conditional waivers are specifically designed to prevent exactly this situation — a GC collecting the waiver without making the payment.

**15. A** — The contractor properly documented the directive as additional scope, stated they would track costs on T&M, and preserved their right to compensation. The written acknowledgment, change order notation, and cost tracking create a documented record supporting the \$82,000 claim. While a formal change order would be stronger, the contractor's contemporaneous documentation is substantial.

**16. C** — The color difference between black and white TPO is not merely aesthetic — it directly affects the building's thermal performance. White TPO reflects solar heat while black TPO absorbs it, significantly increasing cooling costs. The unauthorized substitution does not meet the specification, and the architect will likely require removal and replacement at the roofing subcontractor's expense.

**17. D** — The owner discovered the cracking on October 20 and notified the contractor on October 22 — both within the one-year warranty period ending November 1. Timely notification within the warranty period preserves the claim. The contractor cannot defeat the warranty obligation by scheduling the assessment after the expiration date.

**18. B** — The contract states materials are billed at "actual cost plus 15%." The actual cost is the discounted price the contractor paid, not the pre-discount list price. Billing at the pre-discount price overstates the actual cost and violates the contract's pricing terms. The 15% markup applies to the price the contractor actually paid after the volume discount.

**19. A** — The subcontract establishes a 30-day retainage release timeline tied to the subcontractor's completion of their own scope. The GC cannot unilaterally extend this to match the overall project closeout. The GC has received the corresponding funds from the owner and has no contractual basis for holding the subcontractor's earned retainage for 3-6 additional months.

**20. C** — The contract specifies deductive change orders at "direct cost savings." The deduction is \$112,000 in direct costs. The contractor retains the \$28,000 in overhead and profit. The deductive change order provision protects the contractor's margin on deleted scope — the owner saves the direct costs, not the full bid value.

**21. D** —  $EAC = \$7,500,000 \div 0.948 = \$7,911,000$ . The project will exceed the budget by approximately \$411,000 if the current cost inefficiency continues. SPI of 0.917 confirms the project is also behind schedule. Both indices below 1.0 at the 60% mark require immediate corrective action on both cost and schedule.

**22. B** — Hospital-grade receptacles have superior grounding, retention force, and durability required for medical equipment in patient care areas. Residential-grade outlets do not meet the code requirements for these critical locations. All 180 receptacles must be replaced with hospital-grade units at the electrical subcontractor's expense.

**23. A** — Chain 2 at 26 days is the controlling path. Chain 1 with the 4-day delay becomes 24 days, still shorter than Chain 2. The milestone date is unchanged. However, Chain 1's float has been reduced from 6 days to 2 days, bringing it closer to critical status and requiring monitoring.

**24. C** — The 48-hour written notice requirement cannot be waived for convenience. The contractor must notify the principal in writing immediately and schedule the testing at least 48 hours later. The testing should be coordinated during a non-instructional period to minimize classroom disruption. Verbal notice does not satisfy a written notice requirement.

**25. D** — The contractor should proactively reschedule the pour to Friday when clear weather is forecast, coordinate the inspection for Thursday, and notify the concrete supplier. Placing structural concrete during active precipitation violates the specification and creates quality risks. A 2-day rescheduling delay is far less costly than remediating defective concrete.

**26. C** — The SPI declining from 1.02 to 0.89 over 6 months indicates a worsening schedule problem. The stable CPI of 1.01 shows excellent cost control. The project needs schedule recovery measures — additional crews, overtime, re-sequencing. The stable CPI suggests resources can be deployed efficiently without budget concerns.

**27. A** — CGL: Incident 1 = \$1,000,000 (per-occurrence cap). Incident 2 = \$900,000 (within per-occurrence limit). Total CGL = \$1,900,000 (within \$2M aggregate). Umbrella: Incident 1 excess = \$800,000. Total covered: \$2,700,000. Zero personal exposure. The combined CGL and umbrella limits fully cover both claims.

**28. D** — Bonding capacity:  $15 \times \$210,000 = \$3,150,000$ . Existing backlog: \$2,400,000. Available: \$750,000. The \$2,800,000 request exceeds available capacity by \$2,050,000. The surety will deny the bond unless the contractor substantially increases working capital or completes existing projects to free capacity.

**29. B** — Premium difference:  $(\$280,000 \div \$100) \times (\$28.50 - \$6.50) \times 1.12 = 2,800 \times \$22.00 \times 1.12 = \$69,043$ . The massive rate differential reflects the vast difference in risk between indoor painting and structural steel erection at height — one of the most hazardous construction classifications.

**30. A** — All treatments — ice, non-rigid elastic wrap, diagnostic X-rays, and OTC ibuprofen — are classified as first aid under OSHA definitions. The worker returned to full duty with no restrictions. No recordable outcome occurred. The knee swelling alone does not trigger recordability without a recordable treatment or outcome.

**31. C** — Establishments with 20-249 employees in designated high-hazard industries including construction (NAICS 236) must submit 300A Annual Summary data electronically through OSHA's ITA by March 2 of the following year. With 160 employees in construction, this employer meets the electronic reporting threshold.

**32. D** — The case meets two independent recordability criteria: physician-diagnosed work-related contact dermatitis (significant diagnosis) and prescribed hydrocortisone cream (prescription medication — medical treatment beyond first aid). Either trigger independently makes the case recordable regardless of the worker's return to full duty.

**33. B** — The FMLA provides intermittent leave when medically necessary to care for a parent with a serious health condition. Alzheimer's disease is a serious health condition. The employer has 60 employees (above threshold) and the carpenter has 5 years of tenure (exceeding eligibility). The weekly 6-hour schedule is deducted incrementally from the 12-week entitlement.

**34. A** — Straight-time + bonus:  $(\$38.00 \times 48) + \$260 = \$2,084$ . Regular rate:  $\$2,084 \div 48 = \$43.42$ . Overtime premium:  $\$43.42 \times 0.5 \times 8 = \$173.68$ . Total gross:  $\$2,084 + \$173.68 = \$2,257.68$ . The non-discretionary production bonus increases the regular rate and the resulting overtime premium.

**35. C** — The temporal proximity between the workers' compensation filing and the pattern of adverse treatment creates a strong inference of retaliation. Demeaning assignments, public criticism, and selective documentation of minor infractions — particularly when other employees are not treated similarly — support the retaliation claim. The employer must provide credible non-retaliatory explanations.

**36. D** — Under Davis-Bacon, the overtime premium applies to cash wage plus prorated non-discretionary bonuses. Regular rate:  $(\$46.00 \times 50 + \$225) \div 50 = \$50.50$ . Overtime premium:  $\$50.50 \times 0.5 \times 10 = \$252.50$ . Fringe at \$21.00 straight-time for all 50 hours. The certification premium increases the effective overtime cost.

**37. B** — Throwing a punch that causes facial injuries requiring sutures is a deliberate, knowing violation of a serious workplace rule. The signed policy, eyewitness statements, and medical documentation establish clear disqualifying misconduct. Initiating physical violence in the workplace is among the most recognized categories of willful misconduct for unemployment purposes.

**38. A** — Inpatient treatment for a mental health condition at a healthcare facility qualifies as a serious health condition under the FMLA. The employer has 55 employees (above threshold)

and the worker has 7 years of tenure (exceeding eligibility). The FMLA covers mental health conditions — including clinical depression — on equal footing with physical conditions.

**39. C** — U.S. citizens have permanent work authorization that never expires. The expiration of identity documents (driver's licenses) does not affect their work authorization and does not require re-verification. Non-citizens with time-limited Employment Authorization Documents must be re-verified when those documents expire. Re-verifying citizens may violate IRCA's anti-discrimination provisions.

**40. D** — After FMLA exhaustion, the ADA interactive process applies. The employer must evaluate whether the bending/crouching restriction can be accommodated through reassignment to positions not requiring these movements — estimating, project coordination, supply management, or prefabrication. The employer cannot terminate without first completing the interactive process.

**41. B** — The flat daily rate may violate FLSA overtime provisions. Workers routinely working 50-hour weeks at \$300/day (\$30/hour for 10-hour days) are owed overtime at 1.5 times their regular rate for hours exceeding 40. Paying a flat \$300 regardless of hours deprives workers of statutory overtime rights for the 10 hours per week above 40.

**42. A** — The employer had actual knowledge through the report to the company president. The president's dismissal ("work it out") demonstrates failure to investigate or take corrective action. The worker's alternative reporting path was reasonable given the conflict of interest (HR manager is the harasser's spouse). The employer's liability attaches regardless of the designated reporting channel.

**43. C** — Under Davis-Bacon, the overtime premium applies only to the cash wage. Straight time: 40 hours  $\times$  (\$24.00 + \$11.00). Overtime: 6 hours  $\times$  (\$36.00 wage [1.5  $\times$  \$24.00] + \$11.00 fringe at straight-time). The fringe benefit continues at straight-time for all 46 hours and is never multiplied by the overtime factor.

**44. D** — The strongest evidence combines: a pattern of replacing older workers with younger ones, 15 years of excellent reviews contradicting performance justification, "cost reduction" rationale correlating salary with age, and direct age-related comments by decision-makers. Together these create compelling circumstantial and direct evidence that age was the but-for cause.

**45. B** — Courts generally uphold clear written at-will disclaimers over informal verbal statements. The handbook's at-will provision typically controls over a supervisor's casual promise. However, employers should train supervisors to avoid employment guarantees that could undermine the at-will relationship and create litigation exposure.

**46. A** — Percentage complete:  $\$1,309,000 \div \$1,870,000 = 70\%$ . Earned revenue:  $70\% \times \$2,200,000 = \$1,540,000$ . Billings: \$1,400,000. Under-billed by \$140,000. Gross profit: \$330,000. Gross margin: 15%. The under-billing means the contractor has performed \$140,000 more work than invoiced.

**47. C** — Year 1: 50% complete ( $\$1,615,000 \div \$3,230,000$ ). Revenue =  $50\% \times \$3,800,000 = \$1,900,000$ . Year 2: 80% complete ( $\$2,584,000 \div \$3,230,000$ ). Cumulative revenue =  $80\% \times \$3,800,000 = \$3,040,000$ . Year 2 incremental:  $\$3,040,000 - \$1,900,000 = \$1,140,000$ .

**48. D** — Inflows:  $\$55,000 + \$610,000 + \$30,000 + \$90,000 = \$785,000$ . Outflows:  $\$425,000 + \$285,000 + \$66,000 + \$30,000 + \$20,000 = \$826,000$ . Net:  $\$785,000 - \$826,000 = -\$41,000$ . The contractor faces a \$41,000 shortfall requiring additional financing or expenditure adjustments.

**49. B** — Net worth: \$520,000 (exceeds \$50,000 minimum). Working capital: \$220,000. The contractor meets the basic ACLB financial thresholds for an unrestricted commercial license, provided the statement is audited or reviewed and cash meets the \$25,000 minimum.

**50. A** — Gross profit:  $\$5,400,000 - \$4,590,000 = \$810,000$ . Gross margin: 15%. Net income:  $\$810,000 - \$486,000 = \$324,000$ . Net margin: 6%. The 15% gross margin indicates strong project profitability and the 6% net margin reflects healthy bottom-line performance after overhead.