

PRACTICE EXAM 14 — QUESTIONS 1-50

Format: Hypothesis-Reasoning Questions — each item presents a hypothesis, observation, or claim about a construction or business situation. Select the option that best provides the supporting reasoning, identifies the most likely cause, or correctly explains the principle behind the outcome.

1. A contractor's bids consistently come in 10 percent higher than competitors on similar commercial work, yet the firm reports thin profit margins. Which reasoning best identifies the most likely cause?

- A. The firm's direct labor productivity exceeds industry standards by a significant margin
- B. The firm has eliminated all overhead allocation from its bid pricing structure
- C. The firm is over-allocating indirect costs to small jobs, inflating bid prices while still under-recovering on actual firm overhead through poor cost coding
- D. The firm uses the wrong unit of measure on takeoff sheets across all bid categories

2. A subcontractor on a private commercial project performs \$80,000 of work, the GC is paid in full by the owner, but the GC never pays the sub. The sub recorded a mechanic's lien within 90 days of last work but failed to commence enforcement suit within 6 months of filing. The sub's lien is no longer enforceable. Which reasoning best supports this conclusion?

- A. Under SC Code Title 29 Chapter 5, both the 90-day filing deadline and the 6-month enforcement deadline are strict statutory limits; missing either one permanently extinguishes the lien claim
- B. The sub's failure to provide a preliminary notice within 30 days of starting work eliminated the lien rights from the outset of the project
- C. The sub's lien rights transferred automatically to the surety on the payment bond, so the sub must now pursue the surety directly
- D. The 6-month enforcement deadline applies only to public projects under SC law, not to private commercial work

3. A project is 60 percent complete by schedule but only 45 percent complete by actual progress at the same review date. The PM hypothesizes that the project will finish late. Which reasoning best supports the hypothesis?

- A. The schedule percent complete is always higher than actual percent complete on construction projects by design
- B. The 15-point gap indicates the work is behind schedule; without crashing or fast-tracking, the project will likely finish behind the planned completion date
- C. The earned value method requires a 20-point gap to indicate schedule slippage; this project is on track and will finish on time
- D. Schedule percent complete is irrelevant to forecasting completion when actual costs are within budget

4. A contractor's CGL policy denies coverage on a claim for damage to the contractor's own installed work caused by a defective subcontractor. The contractor is surprised because they had paid premiums in full. Which reasoning best explains the denial?

- A. CGL policies cover all damage caused by any party at any time during construction without exception
- B. CGL excludes damage to the contractor's own work product (the "your work" exclusion); coverage typically applies to third-party damage and injury, not to the cost of redoing the contractor's own work
- C. The denial is improper and the contractor should immediately sue the carrier for bad faith claims handling
- D. The claim should have been filed against the builder's risk policy because builder's risk covers all defects regardless of cause

5. A contractor estimates \$200,000 in direct costs and applies a 25 percent markup. The bid price is \$250,000. A competing GC notes that the actual margin on this job is only 20 percent. The contractor is confused because they applied 25 percent. Which reasoning best explains the discrepancy?

- A. The competitor made an arithmetic error; a 25 percent markup is always equal to a 25 percent margin on sale price
- B. The contractor failed to include contingency in the bid, which would have raised the margin to 25 percent

C. A 25 percent markup on cost yields a margin of 20 percent on sale price; $\$50,000 \text{ profit} \div \$250,000 \text{ sale} = 20 \text{ percent}$, while $\$50,000 \div \$200,000 \text{ cost} = 25 \text{ percent}$

D. The contractor should have applied a 30 percent margin to achieve the desired 25 percent markup outcome

6. An SC contractor purchases \$50,000 of lumber from an out-of-state supplier who does not collect SC sales tax. The contractor installs the lumber into a residential addition project. The SC Department of Revenue assesses use tax on the contractor. Which reasoning best supports the assessment?

A. The contractor is exempt from sales and use tax because the lumber became part of real property after installation

B. SC contractors are end consumers of materials; use tax applies to out-of-state purchases where SC sales tax was not collected at point of sale by the supplier

C. Use tax applies only to material purchases over \$100,000 in a single transaction under SC law

D. The out-of-state supplier should pay the tax to SC DOR, not the contractor receiving the materials

7. An SC contractor classifies a journeyman carpenter as an independent contractor on Form 1099-NEC. The IRS reclassifies the worker as an employee, triggering back FICA and FUTA liability. Which reasoning best supports the IRS reclassification?

A. All carpenters are statutorily classified as employees under IRS rules regardless of working conditions

B. The contractor failed to issue the worker a Form W-2 alongside the 1099-NEC

C. The IRS common-law test focuses on behavioral control, financial control, and the relationship; a journeyman working set hours under direct supervision on the contractor's projects typically fails the independent-contractor test

D. Independent contractor status is automatically revoked after 90 days on the same project under IRS guidance

8. A GC's bid is the lowest at \$480,000, but the owner rejects it because the contingency line item is shown as zero. The owner awards to the second-lowest bidder at \$520,000. Which reasoning best supports the owner's decision?

- A. Public bidding rules require all bids to include exactly a 10 percent contingency to be considered responsive
- B. The lowest bidder forfeited the right to award by listing zero contingency on the bid form
- C. A zero contingency suggests the bidder has not adequately accounted for risk or scope uncertainty, which raises concerns about future change orders, cost overruns, or quality of takeoff
- D. Contingency must equal exactly 5 percent of direct cost on commercial projects under SC procurement rules

9. An owner attempts to terminate a contractor for cause without providing the 7-day written cure notice required by AIA A201. The contractor sues and wins damages for wrongful termination. Which reasoning best supports the contractor's recovery?

- A. AIA A201 requires written notice and a 7-day cure period before termination for cause; skipping the cure period converts the termination into a breach by the owner, exposing the owner to wrongful termination damages
- B. Termination for cause requires only verbal notice and takes immediate effect under AIA A201
- C. The contractor's claim should have been submitted to the IDM first; the lawsuit is procedurally improper without that step
- D. SC law does not enforce cure-period requirements in private commercial construction contracts

10. A contractor begins demolition of an old commercial building without notifying any regulator. Asbestos-containing materials are present but the contractor was unaware. EPA cites the contractor under NESHAP. Which reasoning best supports the citation?

- A. The contractor had a complete defense because they were unaware of the asbestos presence at the start of work
- B. NESHAP applies only to building owners, not to demolition contractors performing the actual work
- C. EPA citations require proof of actual contamination of air or soil before being issued
- D. NESHAP requires written notification at least 10 working days before regulated demolition or renovation activity; the contractor's failure to inspect for and notify of asbestos triggers liability regardless of awareness

11. On a 90-day project schedule, Activity X has 5 days of total float and 3 days of free float. The PM hypothesizes that delaying Activity X by 4 days will not delay project completion but will delay the immediate successor. Which reasoning best supports this hypothesis?

A. Both float values are irrelevant once construction begins because float consumes during execution and is not recoverable

B. Total float of 5 days means project completion is unaffected; free float of 3 days means a 4-day delay consumes only one day of total float

C. Free float of 3 days means the successor will start late by 7 days, which contradicts the PM's hypothesis entirely

D. Total float of 5 days exceeds the 4-day delay (no project delay); free float of 3 days is exceeded by 4 days, so the immediate successor is delayed by 1 day

12. A contractor's takeoff for a concrete slab shows 150 cubic yards. The actual pour requires 168 cubic yards. The contractor hypothesizes that takeoff error caused the shortage. Which reasoning best supports an alternative explanation?

A. Concrete typically requires a 5–10 percent waste factor for spillage, formwork variation, and over-excavation; 168 yards on a 150-yard theoretical takeoff represents about 12 percent waste, suggesting takeoff was correct but waste was under-budgeted

B. Concrete suppliers always over-deliver by 20 percent as standard industry practice on every order

C. The pour required formwork redesign mid-project, which doubled the volume requirement on the spot

D. The contractor should have ordered 200 cubic yards regardless of takeoff calculations or waste factors

13. A contractor and owner enter into an oral agreement for a \$250,000 commercial renovation. The owner later disputes the scope and refuses to pay. The contractor sues to enforce the oral agreement. Which reasoning best explains why the contractor faces significant difficulty?

A. Oral contracts are automatically void in South Carolina for any contract amount above \$500

B. SC law requires all construction contracts to be in writing regardless of value or scope

C. The dispute must be resolved through arbitration before the contractor can file suit in court

D. Oral contracts may be legally enforceable in SC, but proving scope and terms is extremely difficult without written documentation; the contractor's case depends on evidence such as witnesses, drawings, change orders, and partial performance

14. A contractor's WIP report shows underbilling of \$180,000 across active jobs. The CFO hypothesizes this represents a cash flow problem. Which reasoning best supports this hypothesis?

A. Underbilling indicates revenue has been over-recognized in prior periods and must be reversed through the books

B. Underbilling means the contractor has earned revenue that has not yet been billed to or collected from owners, creating a working capital strain because the firm must fund completed work from its own resources

C. Underbilling is irrelevant to cash flow and affects only year-end tax reporting categories on the income statement

D. Underbilling triggers automatic lien rights against owners under standard SC contract provisions

15. A material supplier to a subcontractor on a private commercial project files a mechanic's lien against the property for \$35,000 unpaid material balance. The GC paid the sub in full. The owner claims the lien is invalid because the owner paid the GC. Which reasoning best supports the supplier's lien rights?

A. SC mechanic's lien rights extend to suppliers and subs furnishing labor or materials to improve the property; the owner's payment to the GC and the GC's payment to the sub do not extinguish the supplier's direct lien claim against the property

B. Suppliers have no lien rights in SC and the recorded claim must be released immediately

C. Lien rights apply only when the owner has not yet paid the general contractor in full

D. The supplier must first sue the sub in court before recording any lien against the property

16. A contractor's surety pays \$200,000 on a payment bond claim after the contractor defaulted on subcontractor payments. The surety then sues the contractor's individual owners for reimbursement. Which reasoning best supports the surety's recovery action?

A. Surety bonds operate identically to insurance and the carrier absorbs the loss without further action

- B. A surety bond is a three-party guarantee; the surety has indemnity rights against the principal (and any individual indemnitors who signed personal guarantees) for amounts paid on bonded claims
- C. The surety's recovery is limited to the contractor's posted collateral, with no personal liability available to the surety
- D. The surety must wait until the contractor files bankruptcy before seeking reimbursement from any party

17. A pay-if-paid clause in a subcontract states: "Payment to the Subcontractor is contingent upon receipt of payment from the Owner; receipt of payment by the Contractor from the Owner is a condition precedent to any payment obligation to the Subcontractor." The owner defaults and goes bankrupt. The GC refuses to pay the sub. Which reasoning best explains the typical legal consequence?

- A. Pay-if-paid clauses are universally unenforceable in all jurisdictions regardless of how clearly the language is drafted
- B. The sub may always recover from the GC despite the clause because contractors bear ultimate payment risk on private work
- C. The clause is a pay-when-paid timing provision and only delays the timing of the payment obligation
- D. A properly drafted pay-if-paid clause shifts the risk of owner insolvency to the subcontractor; many courts enforce such clauses if the condition-precedent language is clear and unambiguous

18. A contractor submits a low bid of \$620,000 on a public project. After award, the contractor realizes a \$40,000 quantity error in the takeoff that would have raised the bid to \$660,000. The contractor requests bid withdrawal. Which reasoning best supports the standard outcome?

- A. Bid errors of any kind allow automatic withdrawal without any consequence to the bidder
- B. The contractor must perform at the erroneous price with no recourse against the owner or the bond
- C. The owner can choose to enforce the bid bond without permitting any withdrawal regardless of error type
- D. Public bidding generally permits withdrawal only for clerical or quantity errors that are demonstrable, prompt, and made in good faith; the contractor must provide written notice and supporting evidence before award and may forfeit the bid bond

19. An architect issues a Certificate for Payment for \$150,000 on a contractor's pay application. The owner refuses to pay, citing alleged defective work that the architect did not flag. The contract is AIA A201. Which reasoning best supports the contractor's right to insist on payment?

- A. The architect's certificate is advisory only and does not obligate the owner to pay under any AIA A201 provision
- B. Under AIA A201, the architect's certificate represents that the work has been performed as represented and is a condition precedent to the owner's payment obligation; the owner generally cannot withhold certified amounts unilaterally without following the contract's withholding procedures
- C. The owner has absolute discretion to refuse certified amounts under standard construction industry practice
- D. The contractor must accept the owner's defective-work claim and resubmit the pay application

20. A project's critical path is 180 days. The PM crashes three critical activities by adding overtime labor, reducing the critical path to 165 days. After implementation, the project still runs late by 8 days. The PM hypothesizes that a non-critical activity became critical. Which reasoning best supports this hypothesis?

- A. Crashing always shortens projects without any side effects on other activities or float values
- B. Adding overtime labor reduces actual activity durations to zero in CPM modeling
- C. When critical activities are compressed, previously non-critical activities with low float may become critical themselves; the new critical path may run through different activities, causing delay if those new critical activities slip
- D. Crashing causes the schedule to revert to its original duration after a short period

21. An SC contractor files Form 941 quarterly. The fourth-quarter filing is due January 31. The contractor misses the deadline by 15 days. The IRS assesses a failure-to-file penalty plus interest. Which reasoning best explains the assessment?

- A. The IRS waives penalties for first-time late filings without exception under standard administrative practice
- B. Form 941 is not required for SC contractors who file SC withholding returns instead
- C. Form 941 reports quarterly federal income tax and FICA withholdings; late filing triggers a percentage-based penalty (typically 5 percent per month up to 25 percent) plus interest on the unpaid tax balance

D. The penalty applies only to firms with more than 50 employees on the payroll at year-end

22. A contractor's bid for a steel-framed warehouse comes in at \$1.2 million. The owner's independent estimator pegs the project at \$850,000. The contractor reviews the bid and discovers the steel material line item was double-counted. Which reasoning best supports the corrective action?

A. Double-counting a major material line item systematically inflates the bid; the contractor should issue a written withdrawal/correction request to the owner before award, supported by the takeoff documentation showing the error

B. The contractor must honor the inflated bid because all bids are binding regardless of error type or magnitude

C. The contractor should secretly reduce actual costs to match the inflated bid by substituting lower-quality materials

D. The contractor should split the difference with the owner via a side letter agreement outside the bid documents

23. A general contractor and subcontractor sign a subcontract with a flow-down clause that incorporates "all terms of the prime contract" into the subcontract. The owner-GC prime contract has a 30-day pay application cycle. The subcontract is silent on pay cycle. Which reasoning best supports applying the 30-day cycle to the sub?

A. Flow-down clauses transfer only termination rights to the subcontract, not payment or schedule terms

B. The sub is entitled to weekly payment under SC law regardless of any prime contract terms incorporated

C. Flow-down clauses generally incorporate the prime contract's substantive terms into the subcontract; absent contrary subcontract language, the prime's 30-day pay cycle applies to the sub

D. The 30-day pay cycle is per se unenforceable in subcontracts and the sub may demand immediate payment on submission

24. A contractor's balance sheet shows current assets of \$500,000 and current liabilities of \$400,000. The bank's underwriter calculates a current ratio of 1.25 and characterizes this as marginal liquidity. Which reasoning best explains the underwriter's view?

- A. Current ratio = current assets ÷ current liabilities = 1.25; construction lenders typically prefer ratios of 1.5 to 2.0 because retainage, slow pay, and disputed billings can quickly erode liquidity below 1.0 without notice
- B. A current ratio above 1.0 is always considered acceptable to construction lenders without qualification
- C. The underwriter should use the quick ratio instead of current ratio, which would produce a higher number
- D. The 1.25 ratio indicates excessive leverage that requires immediate debt repayment by the contractor

25. A subcontractor records a mechanic's lien on the wrong property by recording the lien against the lot adjacent to where the work was performed. The owner of the actual project property demands the lien be released. Which reasoning best supports the demand?

- A. The lien is fully enforceable regardless of the property description error under SC recording statutes
- B. The lien automatically transfers to the correct property upon discovery and notice to the clerk
- C. The county recording office is responsible for correcting any clerical errors after the fact
- D. A mechanic's lien must accurately identify the property improved; a lien recorded against the wrong property fails to attach to the actual improved property and the lienor must re-record within the 90-day statutory window or lose lien rights entirely

26. An SC contractor's OSHA 300 Log for the prior calendar year shows 4 recordable incidents and total hours worked of 200,000. The total recordable incident rate (TRIR) is 4.0. A competitor reports a TRIR of 2.0 and bids on the same projects. Which reasoning best explains the competitive impact?

- A. $TRIR = (\text{recordables} \times 200,000) \div \text{total hours} = (4 \times 200,000) \div 200,000 = 4.0$; many owners (especially industrial and federal) require pre-qualification with TRIR below industry benchmarks of 2.0–3.0, and a 4.0 may disqualify the contractor from bidding
- B. TRIR has no bearing on bid eligibility for construction projects in any sector or jurisdiction
- C. TRIR is calculated only on fatalities and serious injury cases, not on all recordable incidents
- D. The contractor with the higher TRIR receives bid preference under OSHA contractor evaluation rules

27. A change order proposal from the contractor for \$45,000 sits unsigned for 60 days while the contractor is directed to proceed with the work. The owner later refuses to sign and disputes the price. The contractor hypothesizes a constructive change has occurred. Which reasoning best supports this hypothesis?

- A. The constructive change doctrine requires a signed written change order before any recovery is available
- B. The contractor's only remedy is to stop work until the change order is signed by the owner
- C. Constructive change applies only to design-build contracts, not to stipulated-sum construction work
- D. A constructive change occurs when the owner directs additional or different work without issuing a formal change order; if the contractor performs the directed work, the contractor may recover the reasonable value of the work even without a signed change order, provided proper notice and documentation procedures are followed

28. A contractor's unit-price bid for excavation is \$12 per cubic yard against an estimated 5,000 cubic yards. The actual quantity excavated is 7,500 cubic yards. The contract is unit-price, not lump sum. The owner pays \$90,000 ($7,500 \times \12). The contractor objects. Which reasoning best supports the owner's position?

- A. Unit-price contracts pay the actual quantity at the contracted unit rate; the contractor accepted unit-price terms and the additional quantity is paid at the bid rate without further entitlement, absent an "unbalanced bid" or "differing quantity" clause
- B. The contractor is entitled to renegotiate the unit rate upward for any quantity exceeding the original estimate
- C. Unit-price contracts automatically convert to lump sum once estimated quantities are exceeded
- D. The owner must pay double the unit rate for any excess quantities under SC contract law

29. A contractor disturbs 1.5 acres of soil on a construction project but has not obtained a Construction General Permit (CGP) under NPDES. EPA issues a Notice of Violation. Which reasoning best supports the violation?

- A. NPDES coverage is voluntary for construction sites under 5 acres of disturbance area
- B. EPA must prove actual water contamination before issuing a Notice of Violation under the CWA
- C. Construction projects disturbing 1 acre or more (including portions of larger common plans of development) require NPDES Construction General Permit coverage; the 1.5-acre disturbance exceeds the threshold, triggering permit and SWPPP obligations
- D. CGP coverage applies only to highway and DOT projects, not to commercial site work

30. An SC contractor with 6 full-time employees does not carry workers compensation insurance. An employee is injured on the job and files for benefits. The state imposes statutory penalties on the contractor. Which reasoning best supports the penalty?

- A. SC requires workers compensation coverage only for firms with 25 or more employees on the payroll
- B. SC requires workers compensation coverage when an employer has four or more regular employees; failure to provide coverage exposes the employer to direct liability for medical costs, lost wages, and statutory penalties imposed by the SC Workers Compensation Commission
- C. Workers compensation insurance is voluntary in SC for all private employers regardless of headcount
- D. The penalty applies only to construction firms operating across state lines or on federal projects

31. A project schedule shows the foundation activity has an estimated duration of 14 days. The PM uses PERT and inputs: optimistic = 10, most likely = 14, pessimistic = 24. The PERT expected duration is 15 days, not 14. The PM hypothesizes that PERT incorporates pessimistic risk asymmetrically. Which reasoning best supports this hypothesis?

- A. PERT applies equal weights to optimistic and pessimistic estimates, so the expected duration equals the simple arithmetic average of all three values
- B. PERT discards the most likely estimate entirely and uses only the optimistic and pessimistic values in the formula
- C. PERT is identical to a simple arithmetic average and would produce 16, not 15, on these inputs
- D. PERT expected duration = $(O + 4M + P) \div 6 = (10 + 56 + 24) \div 6 = 15$; the 4× weight on most-likely combined with equal weights on the two extremes pulls the expected value toward the pessimistic side when P-M is larger than M-O

32. A contractor names an owner as additional insured on the contractor's CGL policy. A third party injured on the project sues the owner directly. The owner tenders the claim to the contractor's CGL carrier, which accepts the defense. Which reasoning best supports the carrier's acceptance?

- A. Additional insureds have identical coverage rights as named insureds in all situations without limitation
- B. CGL carriers must defend any claim against an additional insured regardless of policy terms or endorsement scope

C. Additional-insured status applies only after the named insured is first found liable in a separate proceeding

D. Additional-insured endorsements typically extend coverage to the named additional insured for liability arising from the named insured's (contractor's) operations; if the third-party injury arises from the contractor's work, the owner's tender is properly accepted

33. A contractor bidding a \$500,000 fixed-price project applies a 4 percent contingency (\$20,000). The PM later argues the contingency should have been 8 percent based on the project's design uncertainty and unfamiliar site conditions. Which reasoning best supports the PM's view?

A. Contingency reflects the contractor's risk allowance for unknowns; on projects with high design uncertainty or unfamiliar site conditions, an 8 percent contingency is more defensible than 4 percent because the probability and magnitude of cost variations are higher

B. Contingency must always equal exactly 10 percent of the bid price regardless of project risk profile

C. Contingency is the same line item as profit margin and is set by firm policy independent of project risk

D. Contingency is not allowed in fixed-price bids under SC commercial procurement law

34. A liquidated damages clause specifies \$1,500 per day for late completion. The contractor finishes 30 days late. The owner withholds \$45,000 from final payment. The contractor sues, arguing actual damages were only \$10,000. Which reasoning best supports the typical court outcome?

A. Liquidated damages clauses are enforced if the daily amount is a reasonable forecast of likely damages and actual damages are difficult to ascertain at contract signing; courts generally do not require the LD amount to match actual damages, so \$45,000 is recoverable absent evidence of a penalty

B. The owner must reduce the LD amount to actual proven damages of \$10,000 in all cases

C. LD clauses are per se unenforceable in SC construction contracts and the owner must release the \$45,000 withhold

D. The contractor is entitled to a 50 percent reduction in LD whenever actual damages are less than half of the LD amount

35. A construction firm pays \$25,000 to a sole proprietor subcontractor for cleaning services during the year. The firm does not issue Form 1099-NEC. The IRS assesses penalties for failure to file. Which reasoning best supports the assessment?

- A. Sole proprietor subcontractors are categorically exempt from Form 1099-NEC reporting requirements
- B. Form 1099-NEC must be filed for nonemployee compensation of \$600 or more paid to an unincorporated payee in the course of trade or business; the \$25,000 cleaning payment far exceeds the threshold
- C. The \$600 reporting threshold applies only to corporate payees, not to sole proprietors or partnerships
- D. Form 1099-NEC was discontinued years ago and replaced entirely by Form 1099-MISC for all payments

36. A contractor's pre-bid review estimates 320 labor hours for framing at \$35 per hour fully burdened, totaling \$11,200. The site supervisor argues the figure should be \$14,000 because productivity on the project will be lower than standard due to overhead obstructions. Which reasoning best supports the supervisor's view?

- A. Labor productivity factors must be adjusted for site conditions that reduce efficiency (overhead obstructions, restricted access, congestion); a 25 percent productivity loss on 320 hours adds roughly 80 hours, raising the line to about \$14,000
- B. Labor hours are fixed by trade standards regardless of site conditions and should not be adjusted in estimates
- C. The supervisor should compensate by reducing crew size, not by adjusting the labor estimate upward in the bid
- D. Adjusting labor estimates for productivity is prohibited under generally accepted estimating practices in commercial work

37. A construction contract specifies "time is of the essence" and includes a no-damage-for-delay clause. The owner causes a 60-day delay through late drawing releases. The contractor sues for delay damages of \$90,000. Which reasoning best explains the typical outcome?

- A. The "time is of the essence" provision automatically voids any no-damage-for-delay clause within the same contract
- B. The contractor must recover all delay damages caused by the owner regardless of contract language to the contrary
- C. A no-damage-for-delay clause typically limits the contractor's monetary recovery for delays, even if caused by the owner; courts generally enforce these clauses but may carve out exceptions for active interference, bad faith, or unreasonable delays, depending on jurisdiction

D. The contractor is entitled to terminate the contract for any delay regardless of cause or duration

38. A subcontractor records a mechanic's lien for \$60,000 on a private commercial project. The owner deposits a release bond of \$90,000 (150 percent of lien amount) with the court. The lien is removed from the property record. The subcontractor hypothesizes that the lien claim is now extinguished. Which reasoning best refutes this hypothesis?

A. Release bonds in SC may only be filed on state-owned property, not on private commercial work

B. The underlying lien claim is automatically extinguished when a release bond is deposited with the court

C. The subcontractor's lien rights transferred to the owner of the bond, not against the property or the bond itself

D. Bonding off transfers the lien from the property to the release bond as security; the underlying claim remains alive and the subcontractor must still pursue enforcement against the bond within the statutory enforcement window to collect

39. A PM is asked to choose between crashing and fast-tracking to save 15 days on a project running behind. The PM hypothesizes that fast-tracking creates more design coordination risk while crashing creates more direct cost risk. Which reasoning best supports this hypothesis?

A. Both techniques create identical risk profiles and the choice between them is arbitrary at the PM's discretion

B. Crashing creates design coordination risk; fast-tracking creates direct cost risk, opposite to the PM's hypothesis

C. Fast-tracking overlaps sequential phases (such as starting construction before design is complete), which can introduce rework if downstream design changes; crashing adds resources (overtime, additional crews) which directly raises labor and material costs

D. Both techniques reduce project scope and are financially equivalent in their impact on the contractor's bottom line

40. A contractor's income statement shows \$5 million revenue and \$4.6 million total expenses, leaving \$400,000 net income (8 percent margin). The balance sheet shows \$3 million total assets and \$2.1 million total equity. The bank calculates a return on equity (ROE) of 19 percent. The CFO hypothesizes this ROE indicates healthy financial performance for a construction firm. Which reasoning best supports the CFO's view?

A. ROE below 5 percent indicates outstanding performance for a construction firm by industry benchmarks

B. $ROE = \text{net income} \div \text{equity} = \$400,000 \div \$2.1 \text{ million} \approx 19 \text{ percent}$; construction firm ROE benchmarks typically range from 12 to 20 percent, so a 19 percent figure indicates the firm is generating returns at or above industry norm

C. ROE is irrelevant to construction firm performance evaluation and lenders ignore it during underwriting

D. ROE above 50 percent is the required minimum to be considered healthy financial performance in construction

41. A contractor's mediation under AIA A201 fails to resolve a dispute. The contract requires mediation as a condition precedent to arbitration. The contractor files in court instead of arbitration. The owner moves to compel arbitration. Which reasoning best supports the motion?

A. Court filings always supersede contractual arbitration clauses regardless of the contract language or dispute type

B. AIA A201 typically requires arbitration as the binding dispute resolution mechanism after mediation fails (or as elected); a court has no jurisdiction over disputes covered by a valid arbitration clause and will typically grant a motion to compel arbitration

C. Mediation always satisfies the dispute resolution requirement, making arbitration optional after one session

D. The contractor must complete a second round of mediation before filing in any forum under AIA A201

42. A contractor includes a 1.5 percent bond cost line item in a bid for a \$2 million project. The actual bid bond plus performance bond plus payment bond total cost from the surety is \$35,000. Which reasoning best supports the 1.5 percent estimate as appropriate?

A. Surety bond cost typically runs 1 to 3 percent of contract value, varying by contractor financials, project size, and surety underwriting; on \$2 million, a 1.5 percent allowance equals \$30,000, closely matching the actual \$35,000 within typical estimating tolerance

B. Bond cost is always exactly 0.5 percent of contract value regardless of project size, contractor financials, or underwriting outcome

C. Bond cost is not a recoverable bid line item under SC procurement rules and must be absorbed entirely by profit

D. Bond cost equals 10 percent of contract value for all SC contractors as a statutory minimum

43. An SC contractor hires a new employee and completes I-9 Section 1 on day 1. Section 2 is completed by the HR manager on day 5. ICE conducts an audit and issues a Notice of Inspection finding. Which reasoning best supports the finding?

- A. I-9 Section 2 has no deadline for employer completion under federal immigration regulations
- B. The 7-day deadline applies to all I-9 sections and the employer complied with the rule
- C. Section 2 must be completed by the employer within 3 business days of the employee's start date; completion on day 5 exceeds the deadline and constitutes a technical I-9 violation subject to per-form penalties
- D. Section 2 must be completed before Section 1, so the order of completion is the violation cited by ICE

44. A subcontractor in SC files a mechanic's lien 100 days after the last day of work. The owner moves to discharge the lien. Which reasoning best supports the discharge?

- A. SC mechanic's liens may be filed within 180 days of last work under Title 29 Chapter 5
- B. SC Code Title 29 Chapter 5 requires the lien Statement of Account to be filed within 90 days of the last day of work on the project; a 100-day delay exceeds the statutory window and the lien is invalid
- C. The lien is valid because the 6-month enforcement deadline from the filing date has not yet run
- D. Mechanic's liens may be filed at any time before final completion of the project under SC practice

45. A contractor performing a commercial roof replacement disturbs material containing 2 percent asbestos by weight. The superintendent argues the material is below the 1 percent threshold and NESHAP does not apply. Which reasoning best refutes the superintendent's argument?

- A. The 1 percent NESHAP threshold applies only to friable insulation materials, not to roofing materials of any type
- B. NESHAP applies only when asbestos content exceeds 10 percent by weight in the building material in question
- C. The contractor must obtain owner consent before applying any NESHAP threshold to project materials
- D. NESHAP defines asbestos-containing material as material containing more than 1 percent asbestos by weight; the 2 percent content exceeds the threshold and triggers NESHAP requirements including notification, handling, and disposal protocols regardless of the superintendent's assertion

46. A contractor's bid for a sitework package totals \$400,000. The breakdown shows \$250,000 direct cost, \$80,000 overhead allocation, \$20,000 contingency, and \$50,000 profit. The owner's value engineer asks why the profit is only 12.5 percent of the bid price. Which reasoning best explains the contractor's figure?

- A. Profit margin must always equal at least 25 percent of bid price on all commercial construction work
- B. The contractor must increase profit to 30 percent to make the bid acceptable under standard practice
- C. Profit margin is calculated as $\text{profit} \div \text{bid price} = \$50,000 \div \$400,000 = 12.5$ percent; this falls within typical construction profit margin ranges (8 to 15 percent) for competitive commercial work, and is appropriate given the firm's overhead recovery and risk profile
- D. Profit margins below 20 percent of bid price indicate the contractor is bidding below cost

47. An "or equal" specification names "Brand X" insulation but allows equivalent products. The contractor proposes "Brand Y" with the same R-value and thickness. The architect rejects the substitution without explanation. The contractor hypothesizes the rejection is improper. Which reasoning best supports the hypothesis?

- A. "Or equal" specifications require the architect to accept any substitution proposed by the contractor without review
- B. "Or equal" specifications obligate the architect to evaluate proposed substitutions for substantial equivalence; arbitrary rejection without articulating how the proposed product fails the equivalence standard may breach the substitution-review obligation
- C. Substitution requests are advisory only and the architect has absolute discretion to deny without explanation
- D. The contractor must accept the architect's substitution decision regardless of the substantive merit of the request

48. An SC contractor collects \$10,000 in sales tax from a customer on a home addition project, treating the work as a retail sale. The Department of Revenue reverses the treatment and issues a refund to the customer, then assesses tax against the contractor's material supplier purchases. Which reasoning best supports the DOR action?

- A. The contractor properly collected sales tax from the customer and the DOR action is improper
- B. Home addition projects are entirely exempt from SC sales and use tax under SC Code provisions

- C. The customer must pay sales tax directly on labor and materials installed in the addition
- D. SC contractors are end consumers of materials installed into real property — they pay sales tax to the supplier on materials and do not collect sales tax from the customer on the installed work; the contractor's collection was improperly applied, and the tax liability runs to the material purchases

49. A general contractor receives an architect's RFI response that changes a specified wall thickness from 6 inches to 8 inches. The change has cost and schedule implications. The contractor proceeds with the 8-inch wall without executing a change order, then later submits a claim for the cost differential. Which reasoning best supports the contractor's claim?

- A. RFI responses that materially alter the contract scope or specifications typically constitute a constructive change; if the contractor provides timely notice and documentation, the contractor may recover the reasonable cost of the changed work even without a formal change order, though best practice remains to insist on a signed change order before proceeding
- B. RFI responses are binding on the contractor without any compensation right under standard construction contracts
- C. The contractor forfeits all claims by proceeding with any directed work without first obtaining a signed change order
- D. RFI responses cannot legally modify the contract scope or specifications under any circumstance whatsoever

50. A contractor's cash basis income for the year is \$200,000 but the accrual basis income is \$350,000. The CFO hypothesizes that the firm has significant outstanding receivables and accrued revenue not yet collected. Which reasoning best supports this hypothesis?

- A. Cash basis and accrual basis accounting always produce identical income figures in any reporting period
- B. Accrual basis recognizes revenue when earned regardless of cash collection; the \$150,000 gap between accrual (\$350,000) and cash (\$200,000) income indicates the firm has earned more than collected — primarily through unbilled work, outstanding pay applications, or accounts receivable not yet paid
- C. Cash basis income exceeding accrual basis by 75 percent is the normal pattern for SC construction firms
- D. The discrepancy must be reversed in the next accounting period to balance the two reporting methods

PRACTICE EXAM 14: ANSWER KEY AND EXPLANATIONS

- 1. C** — Over-allocation of indirect costs to specific jobs is the most likely cause. When a firm distributes overhead disproportionately or assigns too much to particular bid categories, the bid totals inflate while actual overhead recovery remains spotty, producing high prices but thin margins. The fix is recalibrating the overhead allocation method (e.g., labor-hour basis, revenue basis) to align bid recovery with actual firm spending.
- 2. A** — SC Code Title 29 Chapter 5 imposes two strict deadlines on mechanic's liens: filing within 90 days of last work and enforcement suit within 6 months of filing. Missing either deadline permanently extinguishes the lien regardless of merit of the underlying claim. Both deadlines run independently and neither can be tolled by ongoing negotiations or partial payment offers.
- 3. B** — A 15-point gap between planned and actual progress is a clear schedule slippage indicator and a forecast of late completion absent recovery action. Earned value reporting flags this gap as schedule variance, and the project will finish behind plan unless the contractor crashes critical activities or fast-tracks subsequent work to recover the lost days.
- 4. B** — The CGL "your work" exclusion bars coverage for damage to the insured contractor's own completed work product. CGL is designed for third-party bodily injury and property damage to others, not for the contractor's cost of redoing defective work. Contractors needing protection against subcontractor defects should look to subcontractor warranty rights and indemnification, not CGL.
- 5. C** — Markup and margin produce different percentages from the same dollar profit. $\$50,000 \div \$200,000$ cost = 25 percent markup, while $\$50,000 \div \$250,000$ sale price = 20 percent margin. Confusing the two systematically under-recovers profit when the contractor intends to earn a target margin on sales.
- 6. B** — SC treats contractors as end consumers of materials installed into real property, so the tax obligation runs to the contractor on material purchases. Use tax fills the gap when out-of-state suppliers do not collect SC sales tax at point of sale, and the contractor must self-remit through MyDORWAY. The tax burden is the same whether materials are bought in-state or out-of-state.
- 7. C** — The IRS common-law test evaluates behavioral control, financial control, and the relationship between the worker and the firm. A journeyman working scheduled hours under direct supervision on the firm's projects typically fails the test because the firm controls how, when, and where the work is done. Reclassification triggers back FICA, FUTA, and potential penalties for misclassification.
- 8. C** — A zero contingency in a competitive bid raises red flags about risk preparation and takeoff quality. Owners reasonably interpret it as either an aggressive risk position that may lead to change order disputes or a sign the bidder overlooked uncertainties in the scope. Awarding to the second-lowest bidder protects the owner from downstream cost and schedule risk.
- 9. A** — AIA A201 requires written notice and a 7-day cure period before termination for cause. Skipping the cure step converts what was framed as a for-cause termination into a wrongful termination, exposing the owner to damages for the contractor's anticipated profit and unrecovered costs. The cure period exists precisely to give the contractor a chance to correct the cited default.

10. D — NESHAP requires written notification at least 10 working days before regulated demolition or renovation. The duty includes inspecting for asbestos-containing materials and notifying EPA (or the state delegated authority) regardless of contractor awareness. Lack of knowledge is not a defense; the obligation to inspect and notify is the regulatory baseline.

11. D — Total float (5 days) is the activity's delay tolerance against project completion; free float (3 days) is the delay tolerance against the immediate successor. A 4-day delay falls within total float (no project impact) but exceeds free float by 1 day (immediate successor delayed by 1 day). The two floats independently quantify the two distinct delay impacts.

12. A — Concrete waste of 5–10 percent is typical for spillage, formwork variation, and over-excavation. The 12 percent variance between the 150-yard takeoff and 168-yard actual pour suggests the takeoff measured in-place volume correctly but the waste factor was under-budgeted. Estimating practice typically applies a waste multiplier rather than blaming pure takeoff error when variance lands in the normal range.

13. D — Oral construction contracts may be enforceable in SC, but proof of scope and terms is extraordinarily difficult without writing. The contractor must rely on partial performance, witnesses, drawings, change orders, and other circumstantial evidence to establish what was agreed. This evidentiary burden is why written contracts are universally recommended on commercial work.

14. B — Underbilling represents work performed that has not yet been billed or collected, so the firm is financing completed work from its own working capital. The \$180,000 underbilled position means the firm has earned revenue but has not yet generated the cash to fund it, creating a real liquidity strain even when the income statement looks healthy.

15. A — SC mechanic's lien rights extend independently to suppliers and subs in the chain of improvement, not just to those in direct contract with the owner. The owner's payment to the GC and the GC's payment to the sub do not defeat the supplier's direct lien claim against the property. The supplier's lien runs against the property itself, not against any specific party's payment status.

16. B — A surety bond is a three-party guarantee where the surety can pursue recovery from the principal (and individual indemnitors) for amounts paid on bonded claims. Unlike insurance, where the carrier absorbs the loss, surety bonds reserve indemnity rights against the bonded party. Personal guarantees signed by owners typically extend that recovery right to individuals.

17. D — A properly drafted pay-if-paid clause creates a true condition precedent to the GC's payment obligation, shifting owner insolvency risk to the subcontractor. Many courts enforce such clauses when the condition-precedent language is unambiguous, though some jurisdictions limit or reject the doctrine entirely. The sub bears the credit risk of the owner, not the GC.

18. D — Public bidding generally permits withdrawal only for clerical or quantity errors that are demonstrable, prompt, and made in good faith. The contractor must typically provide written notice and supporting evidence before award and may still forfeit the bid bond as the price of withdrawal. Courts balance the bidder's mistake against the integrity of the public bidding process.

19. B — Under AIA A201, the architect's Certificate for Payment represents that the certified work has been performed, and it is a condition precedent to the owner's payment obligation. The owner cannot withhold certified amounts unilaterally without following the contract's withholding procedures (notice, basis, and amount). Bypassing those procedures exposes the owner to a breach claim.

20. C — Crashing the original critical path can elevate a previously non-critical activity (with low float) into the new critical path. The PM must monitor float on all paths during compression; if the new critical activity slips, the project delays again despite the original recovery effort. CPM updates should always be re-run after schedule compression.

21. C — Form 941 reports quarterly federal income tax and FICA withholdings on a calendar-quarter cycle, with Q4 due January 31. Failure-to-file triggers a percentage-based penalty (typically 5 percent per month up to 25 percent) plus interest on the unpaid tax balance. The penalty applies to all employers regardless of headcount when filing is late.

22. A — A double-counted material line item is a demonstrable arithmetic error in the takeoff and is a recognized basis for bid correction or withdrawal. The contractor should issue a written request to the owner before award, supported by takeoff documentation showing the duplication, so the owner can rebid or accept a corrected number. Concealing or absorbing the error invites cost and quality problems downstream.

23. C — Flow-down clauses generally incorporate the prime contract's substantive terms (payment cycle, dispute resolution, change order procedures, etc.) into the subcontract. Absent contrary subcontract language, the prime's 30-day pay cycle applies to the sub by reference. Flow-downs are read broadly unless the subcontract specifically carves out a term.

24. A — Current ratio = current assets ÷ current liabilities = $\$500,000 \div \$400,000 = 1.25$. Construction lenders typically prefer ratios of 1.5 to 2.0 because retainage, slow pay, and disputed billings can quickly erode liquidity below 1.0 without warning. A 1.25 ratio leaves limited cushion against working capital surprises.

25. D — A mechanic's lien must accurately identify the property improved; a lien recorded against the wrong property fails to attach to the actual improved property. The lienor must re-record within the 90-day statutory window or lose lien rights entirely. Recording errors do not transfer automatically and the clerk has no duty to correct after-the-fact.

26. A — $TRIR = (\text{recordables} \times 200,000) \div \text{total hours} = (4 \times 200,000) \div 200,000 = 4.0$. Many industrial and federal owners require pre-qualification with TRIR below industry benchmarks of 2.0 to 3.0, so a 4.0 may disqualify the contractor from bidding altogether. Safety performance metrics drive bidding eligibility on increasingly broad swaths of commercial work.

27. D — Constructive change doctrine permits recovery when the owner directs additional or different work without issuing a formal change order, provided the contractor follows proper notice and documentation procedures. The contractor's recovery is the reasonable value of the work, even absent a signed change order, because the owner's conduct effectively modified the contract. Notice timing under the contract is critical.

28. A — Unit-price contracts pay the actual quantity at the contracted unit rate. The contractor accepted unit-price terms knowing quantities might vary; the additional quantity is paid at the bid rate without further entitlement absent specific differing-quantity or unbalanced-bid clauses. This is the structural risk allocation of unit-price contracts.

29. C — Construction projects disturbing 1 acre or more (including portions of larger common plans of development) require NPDES Construction General Permit coverage. The 1.5-acre disturbance exceeds the threshold and triggers permit, NOI submission, and SWPPP obligations. The contractor cannot avoid coverage by claiming the site is small relative to other industrial activities.

30. B — SC requires workers compensation coverage when an employer has four or more regular employees. At 6 employees, the contractor is over the threshold. Failure to provide coverage exposes the employer to direct liability for medical costs and lost wages, plus statutory penalties imposed by the SC Workers Compensation Commission. The four-employee trigger is strict and applies regardless of contractor type.

31. D — $PERT \text{ expected duration} = (O + 4M + P) \div 6 = (10 + 56 + 24) \div 6 = 90 \div 6 = 15$. The formula's 4× weight on most-likely combined with equal weights on the two extremes pulls the expected value toward the pessimistic side when the pessimistic-to-mode gap exceeds the mode-to-optimistic gap. This asymmetry is exactly why PERT is preferred over arithmetic average for risk-aware scheduling.

32. D — Additional-insured endorsements typically extend coverage to the named additional insured for liability arising from the named insured's (contractor's) operations. When the third-party injury arises from the contractor's work, the owner's tender to the CGL carrier is properly accepted under the endorsement. Coverage scope is defined by the specific endorsement language, not by named-insured status generally.

33. A — Contingency is the contractor's risk allowance for project unknowns and should scale with project risk profile. On work with high design uncertainty or unfamiliar site conditions, an 8 percent allowance is more defensible than a 4 percent allowance because the probability and magnitude of cost variations are higher. Contingency sizing is judgment-based, not formula-based.

34. A — Liquidated damages clauses are enforced if the daily amount is a reasonable forecast of likely damages at the time of contracting and actual damages are difficult to ascertain. Courts generally do not require the LD amount to match actual damages at the time of breach. The \$45,000 is recoverable unless the contractor can show the clause functions as a penalty rather than a reasonable forecast.

35. B — Form 1099-NEC must be filed for nonemployee compensation of \$600 or more paid to an unincorporated payee in the course of trade or business. The \$25,000 cleaning payment far exceeds the threshold, triggering the filing requirement. Penalties accrue per-form for failure to file, regardless of intent or whether the payee reported the income.

36. A — Labor productivity factors must be adjusted for site conditions that reduce efficiency such as overhead obstructions, restricted access, and congestion. A 25 percent productivity loss on 320 hours adds roughly 80 hours, raising the labor line to about \$14,000. Productivity adjustments are a routine and necessary step in detailed labor estimating.

- 37. C** — A no-damage-for-delay clause typically limits the contractor's monetary recovery for delays, even if caused by the owner's late drawing release. Courts generally enforce these clauses, though many jurisdictions carve out exceptions for active interference, bad faith, fundamental breach, or unreasonably long delays. The contractor may still recover time relief (extensions) under these clauses, just not money.
- 38. D** — Bonding off transfers the lien from the property to the release bond as security, clearing the property's title. The underlying lien claim remains alive, however, and the subcontractor must still pursue enforcement against the bond within the statutory enforcement window to collect. The bond simply changes the source of recovery from the real estate to the bond itself.
- 39. C** — Fast-tracking overlaps sequential phases such as starting construction before design is complete, which can introduce rework if downstream design changes invalidate earlier construction. Crashing adds resources (overtime, additional crews) that directly raise labor and material costs. The PM's hypothesis correctly identifies the distinct risk profiles of the two compression techniques.
- 40. B** — $ROE = \text{net income} \div \text{equity} = \$400,000 \div \$2.1 \text{ million} \approx 19 \text{ percent}$. Construction firm ROE benchmarks typically range from 12 to 20 percent, so a 19 percent figure indicates returns at or above industry norm. The CFO's interpretation is sound and supports the firm's positioning for bonding capacity and lender confidence.
- 41. B** — AIA A201 typically requires arbitration (when elected) as the binding dispute resolution mechanism after mediation fails. A court has no jurisdiction over disputes covered by a valid arbitration clause and will generally grant a motion to compel arbitration under the Federal Arbitration Act and state arbitration statutes. The contractor's court filing violates the contractual dispute resolution sequence.
- 42. A** — Surety bond cost typically runs 1 to 3 percent of contract value, varying by contractor financials, project size, and surety underwriting. On a \$2 million project, a 1.5 percent allowance equals \$30,000, closely matching the actual \$35,000 within typical estimating tolerance. The bond-cost estimate is reasonable given current surety market conditions.
- 43. C** — Section 2 must be completed by the employer within 3 business days of the employee's start date. Completion on day 5 exceeds the deadline and constitutes a technical I-9 violation subject to per-form penalties. The 3-day rule is a strict deadline and ICE audits cite even small overruns as paperwork violations.
- 44. B** — SC Code Title 29 Chapter 5 requires the lien Statement of Account to be filed within 90 days of the last day of work. A 100-day delay exceeds the statutory window and renders the lien invalid. The 6-month enforcement deadline becomes irrelevant once the underlying 90-day filing deadline has been missed; both deadlines apply independently and the first one missed is fatal.
- 45. D** — NESHP defines asbestos-containing material as material containing more than 1 percent asbestos by weight. The 2 percent content exceeds the regulatory threshold and triggers NESHP requirements including notification, handling, and disposal protocols. The superintendent's argument inverts the threshold and would result in noncompliance.

46. C — Profit margin = profit ÷ bid price = \$50,000 ÷ \$400,000 = 12.5 percent. This falls within the typical construction profit margin range of 8 to 15 percent for competitive commercial work and is appropriate given the firm's overhead recovery and risk profile. Profit margin should be evaluated against industry benchmarks, not against arbitrary minimums.

47. B — "Or equal" specifications obligate the architect to evaluate proposed substitutions for substantial equivalence (R-value, thickness, performance, code compliance, etc.). Arbitrary rejection without articulating how the proposed product fails the equivalence standard may breach the substitution-review obligation. The contractor's challenge is procedurally sound when the architect provides no substantive evaluation.

48. D — SC contractors are end consumers of materials installed into real property: they pay sales tax to the supplier on material purchases and do not collect sales tax from the customer on the installed work. The contractor's collection from the customer was improper, and the tax liability runs to the contractor's material purchases instead. The DOR's reversal properly applies SC's end-consumer treatment of contractors.

49. A — RFI responses that materially alter contract scope or specifications typically constitute a constructive change. With timely notice and documentation, the contractor may recover the reasonable cost of the changed work even without a formal change order. Best practice remains to insist on a signed change order before proceeding, but recovery is not categorically barred by absence of one.

50. B — Accrual basis recognizes revenue when earned regardless of cash collection. The \$150,000 gap between accrual (\$350,000) and cash (\$200,000) income indicates the firm has earned more than it has collected — primarily through unbilled work, outstanding pay applications, or accounts receivable not yet paid. The pattern is typical for active construction firms and reflects timing differences, not accounting error.