PRACTICE EXAM 17: MISSISSIPPI LAW AND BUSINESS MANAGEMENT SIMULATION (50 QUESTIONS)

Time Allowed: 2 Hours | 50 Questions | **Passing Score**: 70% (35 Correct)

This is an openbook examination. You may use the NASCLA Contractors Guide to Business, Law and Project Management, Mississippi 6th Edition and a silent, nonprinting, nonprogrammable calculator.

1. A contractor wins a $1,700,000 commercial project. During the preconstruction phase, the contractor's estimator discovers that the overhead rate used in the bid was 14%, but the company's actual overhead rate for the current year is 17.5% due to increased insurance premiums and additional office staff. The project's direct costs are estimated at $1,360,000. What is the dollar amount of unrecovered overhead this project will generate if the bid is not renegotiated?

A. $23,800, calculated by applying the 3.5% difference to the profit margin rather than the direct cost base

B. $13,600, calculated by applying the 1% difference (after rounding the variance down) to the direct cost base

C. $0, because overhead rate changes after bid submission have no effect on project profitability since the contract price is already fixed

D. $47,600 — the 3.5% overhead rate difference (17.5% − 14%) multiplied by the $1,360,000 in direct costs means this project will underrecover $47,600 of actual overhead expenses, directly reducing the project's projected profit by that amount

2. A contractor's project has reached the 90% completion point. The project manager submits the monthly progress payment application for $185,000. The contract includes a 10% retainage provision. However, at this stage of the project, the contract allows the owner to reduce

retainage to 5% for the remaining applications if the contractor demonstrates satisfactory progress. The contractor has met this standard. What is the correct payment calculation?

A. $166,500, calculated using the original 10% retainage rate because retainage reductions cannot be applied retroactively to individual payment applications

B. $175,750 — with the reduced 5% retainage, the owner withholds $9,250 (5% of $185,000) and pays the contractor $175,750, improving the contractor's cash flow for the remaining phase of the project compared to the $166,500 they would receive at the 10% rate

C. $185,000 with no retainage because retainage is eliminated entirely once a project reaches 90% completion under Mississippi law

D. $157,250, calculated by applying 15% retainage (the original 10% plus an additional 5% quality assurance hold) for applications after the 90% threshold

3. A contractor operating as an LLC with two members wants to elect Scorporation tax treatment. The LLC currently has a member who is a Canadian citizen residing in Toronto and is not a U.S. resident. Can the LLC make the Scorporation election?

A. No, because Scorporation status requires all shareholders (or members, in the case of an LLC electing Scorp treatment) to be U.S. citizens or resident aliens — the Canadian member who is a nonresident alien disqualifies the LLC from making the Selection

B. Yes, because the Scorporation citizenship requirement applies only to corporations, not to LLCs that elect Scorporation treatment

C. Yes, but only if the Canadian member holds less than 25% of the LLC's membership interest

D. No, but only because the LLC has fewer than three members — Scorporation election requires a minimum of three shareholders or members

4. A contractor's project involves a commercial building renovation. The existing building has a structural steel frame. During renovation, the contractor's crew removes a temporary shoring support before the permanent structural connection is completed. The unsupported beam deflects visibly, and cracks appear in the concrete floor slab above. What type of failure does this represent?

A. A design failure because the structural engineer should have anticipated the need for temporary shoring during the renovation sequence

B. A material failure because the beam deflected, indicating it was manufactured from substandard steel

C. A construction sequencing failure — the contractor removed temporary support before the permanent connection was ready, causing structural movement that damaged the adjacent concrete; this is a workmanship and project management error that the contractor must repair at their own expense

D. A force majeure event because beam deflection during renovation is an unforeseeable condition beyond the contractor's control

5. A contractor is preparing a bid for a project with total estimated costs of $945,000. The contractor wants a 13% profit margin on selling price. What is the correct selling price, and what common error must the estimator avoid?

A. $1,067,850, calculated by multiplying $945,000 by 1.13 — this is the correct method because multiplying by 1.13 produces a 13% margin on selling price

B. $1,039,450, calculated by adding a flat $94,500 (10% of costs) plus a $94,500 contingency to the total cost

C. $945,000, because the 13% margin should be embedded within the overhead rate and not added separately to the selling price

D. $1,086,207, calculated by dividing $945,000 by 0.87 (1 − 0.13) — the estimator must avoid the common error of multiplying by 1.13, which produces only a 13% markup on cost (yielding approximately 11.5% margin on selling price), rather than dividing by 0.87 to achieve a true 13% margin

6. A contractor's project is governed by a contract with a stepped dispute resolution clause requiring: (1) direct negotiation within 10 days, (2) mediation within 30 days if negotiation fails, and (3) binding arbitration if mediation fails. A $180,000 dispute arises over change order pricing. The contractor skips negotiation and mediation and files directly for binding arbitration. What is the likely outcome?

A. The arbitration proceeds normally because arbitration clauses override all preliminary dispute resolution steps regardless of the contract language

B. The arbitration filing may be dismissed or stayed because the contractor failed to comply with the contractual prerequisites — courts and arbitrators generally enforce stepped dispute resolution clauses and require parties to attempt each step before escalating to the next, and skipping required preliminary steps may waive the right to arbitrate

C. The arbitration is expedited because skipping preliminary steps demonstrates the urgency of the dispute

D. The arbitration proceeds but the arbitrator reduces the contractor's recovery by 25% as a penalty for skipping the negotiation and mediation steps

7. A contractor's project involves constructing a parking garage. During concrete placement on an elevated deck, the contractor's crew notices that the formwork is deflecting more than expected under the weight of the wet concrete. The crew continues the pour because they are "almost finished." After the concrete cures, the deck has a visible sag of 1.5 inches at the center. What should the contractor have done differently?

A. Stopped the pour immediately when excessive formwork deflection was observed — continuing to place concrete on visibly deflecting formwork risks structural failure, worker injury, and permanent dimensional defects in the finished structure; the crew should have stopped, evaluated the shoring and formwork capacity, added support, and consulted with the structural engineer before resuming

B. Accelerated the pour to finish before the formwork deflected further, because faster placement reduces the total load on the formwork

C. Added water to the concrete mix to reduce its weight, decreasing the load on the deflecting formwork

D. Continued the pour but increased the concrete thickness at the edges to compensate for the sag at the center

8. A contractor operating as a sole proprietor converts to an LLC on June 1 of the current year. The LLC is a singlemember entity and the contractor makes no tax election. For the transition year, how is income reported to the IRS?

A. Two separate returns are required — a final Schedule C for January through May and a new Form 1065 for June through December

B. The income is split between Schedule C (JanuaryMay) and Form 1120 (JuneDecember) because the LLC is classified as a corporation for the portion of the year it exists

C. All business income for the entire year is reported on Schedule C of the contractor's personal Form 1040 — a singlemember LLC without a tax election is a disregarded entity, meaning the tax treatment is identical to a sole proprietorship and no separate entity return is required

D. No tax return is required for the transition year because entity conversions create a oneyear filing exemption

9. A contractor's project has the following WIP data at yearend: contract price $3,200,000, estimated total cost $2,720,000, actual costs $2,176,000, billings $2,650,000. Using percentageofcompletion, what is the earned revenue and billing status?

A. Earned revenue is $2,650,000 and the project is properly billed because revenue always matches billings

B. Earned revenue is $2,176,000 and the project is overbilled by $474,000 because billings far exceed costs incurred

C. Earned revenue is $3,200,000 because 80% completion triggers full contract recognition

D. Earned revenue is $2,560,000 (80% completion × $3,200,000 contract) and the project is overbilled by $90,000 because billings of $2,650,000 exceed earned revenue of $2,560,000 — the $90,000 overbilling is classified as a current liability on the balance sheet

10. A contractor's employee is working on a commercial roofing project at 30 feet above grade. The employee is using a personal fall arrest system with a full body harness and a 6foot shockabsorbing lanyard connected to a roof anchor. The anchor was installed by the contractor's crew but has not been tested or certified for any specific load capacity. What OSHA violation exists?

A. No violation because the harness and shockabsorbing lanyard meet OSHA requirements regardless of the anchor's load capacity

B. The anchor point has not been verified to support 5,000 pounds per attached worker (or designed by a qualified person with a safety factor of at least 2) — an untested, uncertified anchor creates a critical failure point in the fall arrest system because the anchor is the component that must arrest the fall forces; if the anchor fails, the entire system fails regardless of the quality of the harness and lanyard

C. Only a documentation violation because the anchor must be tagged with its installation date but no load testing is required

D. Only a training violation because the crew should have been trained on anchor installation but the anchor itself needs no specific load rating

11. A contractor's annual overhead costs total $385,000 and the projected annual direct cost volume is $2,200,000. During the year, actual direct cost volume drops to $1,750,000 due to fewer projects awarded. The overhead costs remain fixed at $385,000. What is the impact on the overhead rate and project profitability?

A. The actual overhead rate has increased from 17.5% ($385,000 ÷ $2,200,000) to 22% ($385,000 ÷ $1,750,000) — if the contractor continues bidding at 17.5%, every project underrecovers overhead by 4.5%, producing total unrecovered overhead of $78,750 ($1,750,000 × 4.5%) that comes directly from the company's profit

B. No impact because overhead rates are calculated once per year and do not change with volume fluctuations

C. The overhead rate decreases when volume drops because fewer projects require less overhead support

D. The impact is limited to a 1% rate increase because GAAP limits overhead rate adjustments to 1% per quarter

12. A contractor's project involves a renovation of a 1960 commercial building. The project scope includes removing existing plaster walls. Before demolition, the contractor tests the plaster and discovers it contains 3.5% chrysotile asbestos in the joint compound. Under OSHA's asbestos in construction standard, what classification does this trigger?

A. No classification because chrysotile asbestos at 3.5% is below the 5% regulatory threshold

B. A housekeeping classification that requires only standard dust control measures during removal

C. The material is regulated because it contains more than 1% asbestos — OSHA requires regulated work practices including worker training, exposure monitoring, appropriate respiratory protection, wet methods, HEPA filtration, regulated work areas, and disposal through licensed facilities

D. Only a notification requirement — the contractor must inform the building owner but is not required to implement any specific work practices

13. A contractor's project is governed by a contract with a document hierarchy: (1) change orders, (2) agreement, (3) supplementary conditions, (4) general conditions, (5) specifications, (6) drawings. The specifications state that all exterior windows shall be aluminumframed. The drawings show vinylframed windows on the window schedule. Which document controls?

A. The drawings control because the window schedule is a detailed graphic representation that overrides the general specification language

B. Both documents are equally authoritative, and the contractor should average the cost of aluminum and vinyl frames

C. The contractor can choose whichever frame type is less expensive because conflicting documents give the contractor discretion

D. The specifications control because they rank higher than drawings in the stated order of precedence — the contractor should install aluminumframed windows as specified and submit an RFI documenting the conflict for the architect's records

14. A contractor's project has a fixedprice contract for $2,100,000. The original estimate included $1,785,000 in costs and $315,000 in profit (15% margin). At the 70% completion point, actual costs are $1,312,200 versus a prorated budget of $1,249,500 (70% × $1,785,000). The revised cost to complete is $560,000. What is the projected profit?

A. Projected profit is $227,800 — total projected cost of $1,872,200 ($1,312,200 + $560,000) subtracted from the contract price of $2,100,000 equals $227,800, which is $87,200 less than the original estimate of $315,000; the 70% checkpoint shows a $62,700 overrun against budget ($1,312,200 vs. $1,249,500), confirming the negative cost trend

B. Projected profit remains $315,000 because the project is still at 70% completion and final profitability cannot be projected until 90%

C. Projected profit is $787,800, calculated by subtracting actual costs from the contract price without considering the remaining work

D. Projected profit is $0 because any midproject cost overrun eliminates all profit on fixedprice contracts

15. A contractor's project involves a 17footdeep excavation in soil the competent person has classified as Type C — the least stable type. The contractor selects a trench shield (box) as the protective system. The shield is 12 feet tall. How must the remaining 5 feet of unshielded excavation above the box be addressed?

A. No additional protection is needed for the upper 5 feet because the trench box protects the work zone below and the upper portion is shallow enough to be selfsupporting

B. The upper 5 feet must be protected by a guardrail system to prevent workers from falling into the trench, but no additional cavein protection is required above the box

C. The upper 5 feet must be sloped at the Type C maximum of 1½:1 (34 degrees), requiring 7.5 feet of horizontal setback on each side — the box protects the lower 12 feet, and the sloped upper section prevents the unshielded soil from collapsing into the trench above the box

D. The trench box must be raised to cover the full 17 feet because combination systems using sloping above a box are not permitted under OSHA's excavation standard

16. A contractor operating as a Ccorporation earns $420,000 in taxable corporate income. The corporation pays federal corporate tax at 21% and Mississippi corporate tax at 5% on income over $10,000. After paying all taxes, the corporation distributes $150,000 in dividends to shareholders. What is the approximate total corporatelevel tax paid on the full $420,000 before the dividend distribution?

A. $88,200 in federal tax only, because Mississippi does not impose corporate income tax on construction companies

B. $21,000, representing only the Mississippi corporate tax because the federal corporate tax is deferred until dividends are distributed

C. $42,000, representing a combined flat rate of 10% on the full $420,000

D. Approximately $108,700 — federal tax of $88,200 ($420,000 × 21%) plus Mississippi tax of $20,500 (5% on $410,000 of income above the $10,000 threshold) — and the $150,000 dividend distribution will be taxed again on the shareholders' personal returns, creating the double taxation characteristic of Ccorporations

17. A contractor's employee works the following hours: Week 1 — 42 hours, Week 2 — 38 hours. The employee is nonexempt and earns $40.00 per hour. The employer pays the employee for 80 total hours at the straighttime rate, arguing the twoweek average of 40 hours per week eliminates any overtime obligation. Is this FLSAcompliant?

A. Yes, because the FLSA allows biweekly averaging for employees who are paid on a biweekly schedule

B. No, because the FLSA requires overtime to be calculated on a workweek basis — Week 1 has 2 hours of overtime (42 − 40 = 2) at $60.00/hr ($40.00 × 1.5), and multiweek averaging is prohibited regardless of the pay period; the employer owes an additional $40.00 in overtime premium (2 hours × $20.00 halftime premium)

C. Yes, because the total of 80 hours across 2 weeks equals exactly 40 per week, which satisfies the overtime threshold

D. No, but only because the employee's rate exceeds $38.00/hr — employees earning below $38.00 can have hours averaged biweekly

18. A contractor's project involves installing a firerated wall assembly between two commercial tenant spaces. The specification requires a 2hour firerated assembly tested to ASTM E119 standards. The contractor installs a 1hour rated assembly because the specified materials were temporarily unavailable. The contractor plans to upgrade to the 2hour assembly "when materials become available." What risk has the contractor created?

A. A serious lifesafety and code compliance violation — installing a 1hour rated assembly where a 2hour rating is required violates the building code, the contract specifications, and potentially the fire marshal's approved plans; the assembly must be replaced with the correct 2hour rated system immediately, because an interim 1hour assembly provides only half the required fire resistance and could endanger building occupants in a fire event

B. A minor documentation issue that can be resolved by filing a temporary variance with the local building department allowing the 1hour assembly until materials are available

C. No risk because a 1hour fire rating provides adequate protection for all commercial tenant separations regardless of what the specification requires

D. Only a cosmetic issue because firerated assemblies look identical regardless of the fire rating and the difference is undetectable during inspection

19. A contractor's project involves a $2,800,000 commercial building with a GMP contract. The contract includes a 60/40 savings sharing provision (60% owner, 40% contractor). Actual costs are $2,380,000 and the contractor's fee is $200,000. What does the owner pay?

A. $2,800,000 because the GMP is the guaranteed payment amount regardless of savings

B. $2,580,000 because the owner pays only actual costs plus fee with no savings sharing

C. $2,668,000 — costs plus fee total $2,580,000 ($2,380,000 + $200,000), which is $220,000 below the GMP; the savings are split 60/40, giving the owner $132,000 credit and the contractor $88,000 bonus; the owner pays $2,580,000 + $88,000 = $2,668,000

D. $2,800,000 minus $220,000 = $2,580,000 because all GMP savings go to the owner

20. A contractor's project involves a concrete slab placement in late fall. The weather forecast shows overnight temperatures dropping to 25°F. The specifications require concrete to be protected from freezing for 72 hours after placement. The contractor has not arranged for cold weather protection measures. Can the pour proceed?

A. Yes, because Mississippi's climate is mild enough that concrete freezing is not a significant risk even at 25°F

B. Yes, but only if the contractor adds calcium chloride accelerator to the concrete mix, which eliminates the need for external temperature protection

C. Yes, because the 72hour protection requirement is advisory and does not apply to slabongrade placements

D. No — the contractor must not proceed with the pour until cold weather protection measures are in place, because concrete that freezes before achieving adequate strength can lose up to 50% of its potential compressive strength permanently; the contractor must arrange insulated blankets, heated enclosures, or other protection systems before placing concrete when freezing temperatures are forecast

21. A contractor's project involves installing underground utilities. Before excavation, the contractor calls Mississippi 811 to have existing utilities located and marked. The utility locate is completed and all known utilities are marked. During excavation, the contractor discovers an unmarked abandoned water line that was not in any utility records. The backhoe strikes and damages the abandoned line, causing water to flood the excavation. Who is responsible for the damage and the resulting delay costs?

A. The responsibility is complex — the contractor fulfilled their 811 obligation, but the abandoned line was not in any utility database, making it an unknown condition; the contractor may have a claim for the delay costs as a differing site condition if the contract documents did not disclose the abandoned line, and the utility company is not liable because the line was abandoned and not in their records

B. The contractor is solely responsible for all damage and delay costs because contractors must anticipate abandoned utilities on every project regardless of the 811 response

C. The utility company that previously owned the abandoned line is automatically liable for all damage and delays because the utility has a perpetual obligation to maintain records of abandoned infrastructure

D. Mississippi 811 is liable because the service failed to identify the abandoned line during the locate process

22. A contractor's project involves a commercial building where the electrical specifications reference NEC (National Electrical Code) 2020. The local jurisdiction has adopted NEC 2017. The project drawings show an electrical detail that complies with NEC 2020 but not NEC 2017. Which code governs?

A. The locally adopted NEC 2017 governs because the jurisdiction's adopted code is the legal requirement — even though the specifications reference NEC 2020, the contractor must comply with the code that has been adopted and enforced by the local authority having jurisdiction; the contractor should submit an RFI to the architect noting the conflict

B. NEC 2020 governs because the project specifications override the local code adoption schedule

C. The contractor can choose either code version because conflicting code references give the contractor discretion

D. Both code versions apply simultaneously, and the contractor must comply with the more restrictive provision from either version

23. A contractor's project has a contract that includes a "payifpaid" clause for subcontractor payments. The owner fails to pay the general contractor due to a funding dispute. The mechanical subcontractor demands payment of $145,000 for completed work. Under the payifpaid clause, what is the general contractor's payment obligation?

A. The general contractor must pay the subcontractor within 30 days regardless of the owner's payment status because Mississippi law voids all payifpaid clauses

B. The general contractor must pay the subcontractor the full $145,000 immediately because payifpaid clauses are advisory guidelines that create no enforceable conditions

C. The general contractor must pay half the amount ($72,500) as a compromise because payifpaid clauses limit the contractor's obligation to 50% when the owner fails to pay

D. The general contractor may not be obligated to pay the subcontractor because the payifpaid clause creates a condition precedent — the subcontractor's right to payment is conditioned on the general contractor receiving payment from the owner, and since the owner has not paid, the condition has not been met; however, the enforceability of payifpaid clauses varies by jurisdiction

24. A contractor's project involves installing a commercial HVAC system. The specifications require the contractor to perform a commissioning test — verifying that all equipment operates according to design intent under actual operating conditions. During commissioning, the contractor discovers that the air handling unit provides only 85% of the design airflow. What should the contractor do?

A. Accept the 85% airflow as within normal tolerance because HVAC systems typically operate at 8090% of design capacity

B. Adjust the building thermostat settings to compensate for the reduced airflow by increasing the temperature differential

C. Document the deficiency in the commissioning report and notify the owner that the system is performing adequately at 85% of design capacity

D. Investigate and correct the airflow deficiency — commissioning reveals that the system is not performing to design specifications, and the contractor must troubleshoot the cause (dirty filters, incorrect fan speed, duct leakage, damper settings, or design error) and correct it so the system delivers the specified airflow before the building is occupied

25. A contractor's employee sustains a serious back injury while lifting heavy materials. The injury requires hospitalization. The employer's workers' compensation insurance carrier accepts the claim and pays medical bills and temporary total disability benefits. The employee recovers and returns to work with a permanent 15% impairment rating to the lumbar spine. What additional workers' compensation benefits may the employee be entitled to?

A. No additional benefits because the employee has returned to work and the TTD benefits covered the full extent of the injury

B. Permanent partial disability (PPD) benefits based on the 15% impairment rating — PPD compensates for the lasting impact of the injury on the employee's earning capacity and physical function, typically calculated using a schedule that assigns a specific number of weeks of benefits based on the body part affected and the degree of permanent impairment

C. Lifetime full salary replacement because any permanent impairment automatically qualifies the employee for permanent total disability benefits

D. Only a onetime lump sum payment of $5,000 per percentage point of impairment as a universal settlement formula under Mississippi workers' compensation law

26. A contractor's project involves constructing a new commercial building adjacent to an existing residential neighborhood. During pile driving, vibrations cause cracks in the foundation of a neighboring house. The homeowner files a $65,000 damage claim against the contractor. Which insurance policy responds to this claim?

A. The contractor's CGL policy responds because the damage to the neighboring home is thirdparty property damage caused by the contractor's construction operations — vibration damage to adjacent properties from pile driving is a standard Coverage A claim

B. The contractor's builder's risk policy responds because the damage was caused by construction activities at the project site

C. The homeowner's property insurance responds because damage caused by adjacent construction is classified as an environmental hazard covered by the homeowner's policy

D. No insurance responds because vibration damage from pile driving is specifically excluded from all construction insurance policies

27. A contractor's project involves a renovation of an occupied commercial building. The contractor must maintain the building's fire alarm and sprinkler systems in operational condition during construction. Before beginning demolition work that will generate dust and smoke near a smoke detector, what precaution must the contractor take?

A. Disable the entire building fire alarm system for the duration of the renovation because construction dust will cause frequent false alarms

B. No precautions are necessary because construction activities are exempt from fire alarm interference regulations

C. Coordinate with building management to temporarily disable only the affected smoke detector (with proper authorization), install a fire watch in the work area to provide equivalent fire detection coverage during the impairment, and restore the detector to service immediately after the dustgenerating work is complete

D. Replace all smoke detectors with heat detectors for the duration of construction because heat detectors are not affected by construction dust

28. A contractor's project has a contract price of $1,500,000 and estimated total cost of $1,275,000. The contractor's original estimated profit is $225,000 (15% margin). At the 50% completion point, the project manager revises the costtocomplete estimate upward by $80,000 due to material price increases and lowerthanexpected productivity. What is the revised projected profit?

A. $225,000 unchanged because cost estimate revisions at 50% completion are too early to affect profit projections

B. $305,000 because the $80,000 increase adds to the contractor's profit through change orders for material price escalation

C. $145,000 because the full $80,000 increase is deducted from profit, plus an additional $80,000 penalty for cost overruns

D. $145,000 — the revised total cost is $1,355,000 ($1,275,000 + $80,000), reducing projected profit from $225,000 to $145,000 ($1,500,000 − $1,355,000); this $80,000 profit erosion represents a 36% reduction from the original estimate and demands immediate investigation

29. A contractor's project requires a $1,800,000 performance bond. The contractor's surety evaluates the request using the Three C's of bonding. The contractor has strong Character (excellent reputation and references) and adequate Capital (net worth $420,000, working capital $165,000), but limited Capacity — the contractor has never completed a project larger than $900,000. What is the surety's likely concern?

A. The surety will automatically approve the bond because Character is the most important factor and the contractor's reputation compensates for limited project experience

B. The surety's primary concern is that the contractor has never managed a project of this size — the $1,800,000 project is twice the contractor's largest completed project, raising questions about whether the contractor has the personnel, equipment, management systems, and experience to successfully deliver a project of this scale and complexity

C. The surety will deny the bond because the contractor's net worth is below $500,000, which is the minimum threshold for bonds exceeding $1,500,000

D. The surety has no concerns because the Capital metrics (net worth and working capital) are the only factors that determine bonding approval

30. A contractor's project involves installing a structural concrete beam. The structural specifications require concrete with a minimum compressive strength of 5,000 PSI at 28 days. The 7day cylinder break test shows 2,800 PSI. Is this 7day result concerning?

A. Not necessarily — typical concrete achieves 6575% of its 28day strength at 7 days; for a mix designed to reach 5,000+ PSI at 28 days, a 7day result of 2,800 PSI represents approximately 56% of the 28day target, which is below the typical 6575% range and warrants monitoring with additional testing but may not automatically indicate failure

B. No concern because 7day test results have no predictive value and are performed only for documentation purposes

C. Yes, the concrete has definitively failed because any 7day result below 3,000 PSI automatically disqualifies the pour

D. No concern because the 7day result of 2,800 PSI represents 56% of 5,000 PSI, which is exactly the expected ratio for highstrength concrete mixes

31. A contractor's project involves work near an active railroad line. The project specifications require a minimum 25foot setback from the nearest rail. The contractor's superintendent discovers that a subcontractor has positioned a concrete pump truck 18 feet from the active rail to reach a foundation pour location. What should the superintendent do?

A. Allow the pump truck to remain because the 25foot setback applies only to workers on foot, not to equipment or vehicles

B. Allow the pump truck to remain but post a flagman near the rail to warn of approaching trains

C. Contact the railroad company to request a temporary speed reduction for trains passing the construction zone

D. Order the pump truck to be moved immediately to maintain the 25foot setback — the specification requirement applies to all construction activities including equipment positioning, and an 18foot placement violates the safety setback by 7 feet, creating a risk of the truck being struck by a passing train

32. A contractor's project has a total of $960,000 in accumulated retainage at substantial completion. The contract specifies retainage release within 30 days of substantial completion, conditioned on punch list completion and closeout document delivery. The contractor completes all 42 punch list items and delivers all closeout documents within 20 days. On Day 45, the retainage has not been released. What is the contractor's position?

A. The owner is in breach of the payment obligation — all contractual conditions for retainage release have been met within 20 days, the 30day release deadline has passed by 15 days, and the contractor may file a lien against the property and pursue legal action for breach of contract to recover the $960,000

B. The contractor must wait until Day 90 because Mississippi law provides a mandatory 90day retainage release period

C. The contractor has no recourse because retainage release is at the owner's discretion and cannot be compelled

D. The contractor must issue a formal demand letter and wait an additional 30 days before taking any legal action

33. A contractor's project involves a deep foundation requiring 40foot steel Hpiles. The pile driving generates significant ground vibration. Before driving begins, the contractor should conduct a preconstruction survey of adjacent properties. What is the purpose of this survey?

A. To verify the property tax assessments of adjacent buildings because pile driving may increase the assessed value of neighboring properties

B. To determine whether the adjacent property owners have construction insurance that would cover vibration damage claims

C. To document the existing condition of adjacent structures — photographs, videos, and written reports of preexisting cracks, settlement, and other conditions create a baseline that objectively distinguishes preexisting damage from constructioncaused damage, protecting the contractor from false or exaggerated claims

D. To obtain written permission from each adjacent property owner before pile driving begins, because Mississippi law requires unanimous neighbor consent for vibrationgenerating construction activities

34. A contractor operating as an Scorporation has two shareholderemployees. Shareholder A earns a salary of $110,000 and distributions of $90,000. Shareholder B earns a salary of $90,000 and distributions of $70,000. The IRS audits the company and determines both salaries are reasonable. What is the total amount that avoids selfemployment/payroll taxes?

A. $160,000 — the combined distributions of $90,000 + $70,000 = $160,000 pass through to each shareholder's personal return as ordinary income but are not subject to FICA or selfemployment taxes, because both salaries have been confirmed as reasonable by the IRS audit

B. $360,000, representing the total of all salaries and distributions combined

C. $200,000, representing only the combined salaries because distributions are subject to SE tax in all Scorporations

D. $0, because the IRS audit triggers reclassification of all distributions as wages regardless of whether the salaries are reasonable

35. A contractor's project involves a commercial renovation in an occupied building. The contractor's crew is using a gaspowered concrete saw to cut a doorway opening in an interior wall on the 4th floor. Workers on the 3rd floor report headaches, nausea, and dizziness. What is the most likely hazard and what must the contractor do immediately?

A. The most likely hazard is silica dust from the concrete cutting, and the contractor must install HEPA filtration on the 3rd floor

B. The most likely hazard is excessive noise from the saw, and the contractor must distribute hearing protection to all 3rd floor occupants

C. The most likely hazard is structural vibration from the saw, and the contractor must cease cutting until a structural engineer evaluates the wall

D. The most likely hazard is carbon monoxide (CO) from the gaspowered saw — CO is colorless and odorless but causes headaches, nausea, and dizziness at elevated levels; the contractor must stop the gaspowered cutting immediately, evacuate symptomatic workers for medical evaluation, ventilate the affected areas, and switch to electricpowered cutting equipment or implement continuous CO monitoring with adequate ventilation

36. A contractor's project involves installing a sprinkler system in a new commercial building. The fire sprinkler subcontractor completes the installation and it passes the fire marshal inspection. Six months after occupancy, a sprinkler head malfunctions and discharges water, causing $120,000 in damage to the building's interior finishes and the tenant's equipment. Investigation reveals the malfunction was caused by a manufacturing defect in the sprinkler head — not by the installation. Who bears financial responsibility?

A. The fire marshal is liable because the inspection should have identified the defective sprinkler head before certification

B. Multiple parties may be involved — the sprinkler head manufacturer bears primary liability for the manufacturing defect under product liability law; the general contractor may be drawn in through the prime contract's warranty provisions; and the fire sprinkler subcontractor may face claims for the installation even though the cause was a manufacturing defect, depending on the subcontractor's warranty obligations and whether they had a duty to test individual components

C. The building owner bears sole responsibility because the sprinkler system was accepted at substantial completion and the warranty has no bearing on manufacturing defects

D. The tenant bears sole responsibility because the tenant's lease should include a waiver of claims for sprinkler discharge damage

37. A contractor's project has a fixedprice contract for $2,500,000. The contractor included a 4% contingency ($100,000) in the bid. During construction, the contractor encounters three unforeseen conditions costing $35,000, $28,000, and $22,000 respectively, totaling $85,000. The contractor uses the contingency to cover these costs. What is the remaining contingency, and must the owner be notified?

A. Remaining contingency is $15,000 ($100,000 − $85,000) — on a fixedprice contract, the contingency is the contractor's internal risk reserve embedded in the bid price, so the owner is not notified because the contract price does not change and the contractor's internal cost allocation is not the owner's concern

B. Remaining contingency is $15,000, and the owner must approve each contingency expenditure before the funds can be used

C. Remaining contingency is $100,000 because contingency funds cannot be spent without ownerapproved change orders

D. Remaining contingency is $0 because the $85,000 in unforeseen costs automatically exhausts the contingency and triggers an ownerfunded supplemental contingency

38. A contractor operating as a general partnership with three partners has a $600,000 judgment entered against the partnership. The partnership's CGL policy pays $400,000. The remaining $200,000 must come from other sources. Partner A has $500,000 in personal assets, Partner B has $50,000, and Partner C has $12,000. Under joint and several liability, how can the creditor collect the remaining $200,000?

A. The creditor must collect proportionally from each partner based on their ownership percentage

B. The creditor can only collect against partnership assets because personal assets are protected in all partnership structures

C. The creditor must first exhaust Partner C's assets, then Partner B's, then Partner A's in ascending order of wealth

D. The creditor can pursue any partner for the full $200,000 — Partner A with $500,000 in assets is the most likely target because joint and several liability allows the creditor to collect the entire remaining amount from any single partner regardless of ownership percentage; Partner A would then seek contribution from Partners B and C

39. A contractor's project is 85% complete. The contract requires the contractor to submit asbuilt drawings at project closeout. The contractor has not been documenting field changes throughout construction — no redline markups of the construction drawings have been maintained. What problem will this create during closeout?

A. No problem because asbuilt drawings are prepared by the architect after construction is complete using the architect's inspection records

B. No problem because asbuilt drawings are identical to the original construction drawings and require no field modifications

C. A significant problem — asbuilt drawings must reflect actual constructed conditions including all field changes, RFI resolutions, change orders, and deviations from the original drawings; without continuous redline documentation throughout construction, the contractor will have to reconstruct changes from memory, daily reports, and photographs, resulting in incomplete and potentially inaccurate asbuilts that fail to serve their critical purpose for future maintenance, renovation, and emergency response

D. A minor problem limited to a single page of corrections because field changes on commercial projects rarely exceed 5% of the original drawings

40. A contractor's project has a contract that requires the contractor to maintain CGL insurance with a $1,000,000 peroccurrence limit and a $2,000,000 aggregate. During the policy year, three claims occur: Claim 1 = $800,000, Claim 2 = $750,000, Claim 3 = $700,000. How does the CGL policy respond?

A. All three claims are paid in full because each is within the $1,000,000 peroccurrence limit and the total does not exceed the aggregate

B. Claim 1 is paid at $800,000 (aggregate reduces to $1,200,000). Claim 2 is paid at $750,000 (aggregate reduces to $450,000). Claim 3 is paid at only $450,000 (the remaining aggregate), leaving $250,000 of Claim 3 uninsured because the $2,000,000 aggregate has been exhausted — this scenario demonstrates why umbrella coverage is essential for contractors facing multiple claims

C. All three claims are denied because the combined total of $2,250,000 exceeds the aggregate and no partial payments are made when the aggregate is exceeded

D. Each claim is reduced by onethird because three claims against a $2,000,000 aggregate require prorata distribution

41. A contractor operating as a sole proprietor wants to reduce their selfemployment tax burden. An accountant recommends forming an LLC and electing Scorporation tax treatment. The contractor earns $400,000 in net business income. The accountant proposes a reasonable salary of $160,000. How much will the contractor save annually in selfemployment taxes?

A. Approximately $33,000 in SE tax savings — as a sole proprietor, SE tax on $400,000 is approximately $54,800 (15.3% on 92.35% of $400,000); with the Scorp election, payroll taxes on the $160,000 salary are approximately $24,480 (15.3%), and the $240,000 in distributions avoids SE/payroll tax entirely; annual savings = $54,800 − $24,480 ≈ $30,320

B. Approximately $61,200 because the Scorp election eliminates all employment taxes on both salary and distributions

C. Approximately $8,000 because the IRS limits SE tax savings to 20% of the distribution amount for sole proprietors converting to Scorporations

D. Zero because the Scorp election does not affect selfemployment tax obligations in any way

42. A contractor's project involves a 10footdeep trench in heavy clay soil. After overnight rain, the competent person arrives in the morning to find 8 inches of standing water in the trench. The soil was previously classified as Type A. The superintendent wants workers to enter the trench and pump out the water while working. What must happen before workers can enter?

A. Workers can enter immediately as long as they wear waterproof boots because standing water in a trench is a routine condition

B. Workers can enter after the water is pumped out because removing the water eliminates the hazard and restores the original Type A classification

C. Workers can enter if the superintendent provides a verbal authorization based on their assessment that the trench walls appear stable despite the water

D. The competent person must reassess the soil conditions — standing water after rain likely means the clay is saturated, which undermines cohesion and may require reclassification from Type A to a less stable type (potentially Type C); the protective system must be upgraded to match the new classification before any worker enters, and dewatering equipment must be used to control water accumulation during work

43. A contractor's project involves a $4,500,000 commercial development. The contractor's bonding company is conducting a midyear review. The WIP schedule reveals that the contractor has been consistently overbilling across four active projects with a combined overbilling of $320,000. What is the surety's primary concern?

A. No concern because overbilling demonstrates strong billing practices and effective cash management

B. Moderate concern limited to the presentation format of the WIP schedule rather than the substance of the overbilling

C. The surety's primary concern is that the contractor has received $320,000 in payment for work not yet performed — when projects approach completion, the remaining contract funds may be insufficient to complete the work, the contractor may face a cash flow crisis as the overbilling must be "worked off," and the pattern may indicate frontloading, cash flow dependency on unearned revenue, or difficulty completing projects within budget

D. The surety's only concern is whether the overbilling exceeds 15% of the combined contract values, because overbilling below 15% is considered normal

44. A contractor's project has a contract that includes both a performance bond and a payment bond at 100% of the $2,200,000 contract value. A concrete supplier delivers $85,000 worth of materials to the project but is not paid by the general contractor. The supplier wants to file a claim. Against which bond should the supplier file?

A. The performance bond, because it covers all financial obligations associated with project completion including material supplier payments

B. The payment bond, because it specifically guarantees payment to subcontractors, suppliers, and laborers who furnish work, materials, or services on the project — the performance bond protects the owner's interest in project completion, while the payment bond protects the financial interests of downstream parties like this concrete supplier

C. Both bonds simultaneously because material supplier claims require dual filing under Mississippi bonding law

D. Neither bond — material suppliers must pursue payment exclusively through litigation against the general contractor because bonds cover only subcontractors, not material suppliers

45. A contractor's employee is assigned to work on a scaffold platform at 14 feet above grade. The scaffold has guardrails on three sides. The fourth side — the working face of the building — has no guardrail, and the gap between the scaffold platform edge and the building wall is 18 inches. Under OSHA scaffolding standards, is the guardrail configuration acceptable?

A. The configuration may not be acceptable — while OSHA permits omitting the wallside guardrail when the scaffold is close enough to the building that workers cannot fall through the gap, an 18inch gap may exceed the practical threshold for this exemption; the competent person must evaluate whether the specific gap creates a fall hazard, and if so, additional fall protection measures are required

B. Yes, because guardrails are only required on two sides of scaffold platforms regardless of the gap between the scaffold and the building

C. Yes, because the 18inch gap is within the universal 24inch maximum specified by OSHA for wallside guardrail exemptions

D. No, because all four sides of every scaffold platform must have guardrails at all times without exception

46. A contractor's project involves installing a temporary electrical system. The electrician wires a temporary outlet box but does not install GFCI protection as required by OSHA for all temporary wiring on construction sites. A worker plugs a power tool into the unprotected outlet.

The tool has a damaged cord with exposed wiring. While using the tool in wet conditions, the worker receives a severe electrical shock. What is the chain of failures that led to this incident?

A. Only the damaged tool cord — if the cord had been intact, the lack of GFCI protection would not have mattered

B. Only the wet conditions — GFCI protection is required only in dry environments

C. Only the electrician's failure to install GFCI — the damaged cord and wet conditions are normal construction site conditions that do not contribute to electrical hazards

D. Multiple failures created the hazard — the electrician's failure to install GFCI protection (OSHA violation), the worker's use of a tool with a damaged cord (equipment inspection failure), and the wet conditions (environmental factor) combined to create the shock hazard; the GFCI would have detected the ground fault caused by the damaged cord and wet conditions and tripped the circuit in milliseconds before a serious shock could occur

47. A contractor's annual financial data shows: revenue $3,800,000, cost of construction $3,040,000, G&A expenses $494,000. The contractor is applying for a bonding capacity increase. What are the gross profit margin and net profit margin the surety will evaluate?

A. Gross margin is 25% and net margin is 12%, both calculated by dividing profit by cost of construction

B. Gross margin is 7% and net margin is 20%, reversing the actual relationship between the two metrics

C. Gross profit is $760,000 (20% margin = $760,000 ÷ $3,800,000) and net profit is $266,000 (7% margin = $266,000 ÷ $3,800,000) — the surety evaluates both metrics as percentages of revenue to assess projectlevel and overall business profitability

D. Gross margin is 15% and net margin is 10%, calculated using industryadjusted revenue that excludes subcontractor costs

48. A contractor's project involves installing a commercial roof on a new building. The roofing manufacturer requires certified installers and specific installation procedures to maintain the 20year manufacturer's warranty. The roofing subcontractor's crew includes two workers who are manufacturercertified and three who are not. During installation, the noncertified workers perform 60% of the roofing work. What risk does this create?

A. No risk because the presence of two certified workers on the crew satisfies the manufacturer's certification requirement for the entire crew

B. The manufacturer may deny warranty claims because the installation was primarily performed by noncertified workers — if a roof defect occurs within the 20year warranty period, the manufacturer may refuse coverage because their certification requirement was not fully met, leaving the contractor solely responsible for all repair costs under the prime contract warranty

C. The risk is limited to a 5year reduction in the warranty period because partial certification coverage reduces the warranty proportionally

D. No risk because roofing manufacturer warranties are unconditional and cannot be voided by installer certification status

49. A contractor's project is governed by a fixedprice contract. During the project, the contractor achieves significant cost savings through efficient project management — actual costs come in 8% below the original estimate. On a $2,000,000 contract with estimated costs of $1,700,000, what is the impact on the contractor's profit?

A. The contractor must return the 8% savings to the owner because fixedprice contracts require cost savings to be shared with the owner

B. Actual costs are approximately $1,564,000 (92% of $1,700,000), producing a profit of $436,000 versus the original estimated profit of $300,000 — the contractor retains the full benefit of the $136,000 in cost savings because the owner agreed to pay $2,000,000 regardless of the contractor's actual costs; this is the fundamental advantage of the fixedprice contract for efficient contractors

C. The savings are placed in an escrow account and released to the contractor only after the oneyear warranty period expires

D. The savings are automatically applied as a credit against the owner's final payment, reducing the contract price from $2,000,000 to $1,864,000

50. A contractor has completed the comprehensive study guide and taken 16 practice examinations for the Mississippi Law and Business Management exam. The contractor's practice exam scores have ranged from 72% to 88%, with the most recent scores consistently above 80%. The exam is tomorrow. What single action will have the greatest impact on examday performance?

A. Take two more practice exams tonight to achieve maximum repetition and build additional exam stamina

B. Restudy the entire NASCLA guide from Chapter 1 through the final appendix to ensure no topic has been missed

C. Getting adequate rest tonight is the single most impactful action — the contractor's knowledge is established through 16 practice exams and consistent scores above 80%; sleep deprivation impairs reading comprehension, analytical reasoning, time management, and reference guide navigation speed, all of which directly affect exam performance; arriving rested, alert, and composed will maximize the benefit of the preparation already completed

D. Memorize the answer distributions from previous practice exams because the actual exam follows predictable answer patterns

Practice Exam 17: Answer Key and Explanations

1. D — The 3.5% overhead rate difference (17.5% actual − 14% applied) multiplied by $1,360,000 in direct costs = $47,600 in unrecovered overhead. Every dollar of direct cost on this project carries $0.035 less overhead than the company actually needs. This $47,600 comes directly from the project's profit — if the original profit was $170,000 (assuming a roughly 10% margin), the overhead shortfall consumes 28% of the projected profit.

2. B — With the reduced 5% retainage: $185,000 × 5% = $9,250 withheld. The contractor receives $175,750. At the original 10% rate, the contractor would receive only $166,500. The $9,250 improvement per application enhances cash flow during the critical final phase when the contractor is completing punch list work and mobilizing closeout activities — exactly when improved cash flow is most needed.

3. A — Scorporation status requires all shareholders or members to be U.S. citizens or resident aliens. The Canadian member who is a nonresident alien disqualifies the LLC from making the Selection. This restriction is absolute — even a single ineligible shareholder or member prevents the election. The LLC would need to restructure its membership (removing the nonresident alien) before the Selection could be filed.

4. C — Removing temporary shoring before the permanent connection is complete is a construction sequencing error. The unsupported beam deflected because the load path was interrupted — the temporary support was removed before the permanent system was ready to carry the load. The resulting sag and concrete damage are direct consequences of the contractor's premature shoring removal, making this a workmanship failure at the contractor's expense.

5. D — Dividing by 0.87 is correct: $945,000 ÷ 0.87 = $1,086,207. Verification: profit = $141,207; margin = $141,207 ÷ $1,086,207 = 13.0%. Multiplying by 1.13 produces $1,067,850, which yields only an 11.5% margin ($122,850 ÷ $1,067,850). The multiplication method is the most common estimating error — it produces markup on cost, not margin on selling price.

6. B — Stepped dispute resolution clauses require parties to follow the specified sequence. Courts and arbitrators enforce these prerequisites and may dismiss or stay arbitration filings when required preliminary steps (negotiation and mediation) have not been attempted. Skipping steps may be treated as a failure to comply with contractual conditions precedent, potentially waiving the right to arbitrate.

7. A — Continuing to pour concrete on visibly deflecting formwork is a serious safety and quality failure. Excessive deflection indicates the formwork or shoring is being loaded beyond its capacity — continued placement risks catastrophic collapse, worker injury, and permanent dimensional defects. The crew should have stopped immediately, evaluated the support system, and consulted with the engineer before any additional concrete was placed.

8. C — A singlemember LLC without a tax election is a disregarded entity. All business income for the entire year is reported on Schedule C of the member's personal Form 1040 — identical to sole proprietorship treatment. The LLC formation changes the legal structure (adding liability protection) but does not change the federal tax classification or create any new filing requirements.

9. D — Completion: $2,176,000 ÷ $2,720,000 = 80%. Earned revenue: 80% × $3,200,000 = $2,560,000. Billings: $2,650,000. Since billings ($2,650,000) exceed earned revenue ($2,560,000) by $90,000, the project is overbilled. The $90,000 overbilling is classified as a current liability — the contractor has been paid for work not yet performed.

10. B — An untested, uncertified anchor is the critical failure point. OSHA requires anchor points to support 5,000 pounds per attached worker, or to be designed by a qualified person with a safety factor of at least 2. An anchor with unknown capacity could fail during a fall, rendering the entire fall arrest system useless regardless of the harness and lanyard quality. The anchor must be verified before any worker connects to it.

11. A — Original rate: $385,000 ÷ $2,200,000 = 17.5%. Actual rate with reduced volume: $385,000 ÷ $1,750,000 = 22%. The 4.5% difference × $1,750,000 = $78,750 in unrecovered overhead. Fixed overhead costs spread across less direct cost volume make each project's share heavier. Bidding at the old 17.5% rate when the actual rate is 22% systematically underprices every project.

12. C — OSHA's asbestos standard applies to materials containing more than 1% asbestos. At 3.5% chrysotile, the standard fully applies. All regulated work practices are required: wetting, HEPA filtration, worker training, exposure monitoring, respiratory protection, regulated work areas with warning signs, and disposal through licensed facilities. The 1% threshold is the critical number — not 5% or any other figure.

13. D — The specifications rank higher than drawings in the stated order of precedence. Specifications require aluminum frames; drawings show vinyl. The specifications control. The contractor should install aluminumframed windows and submit an RFI documenting the conflict for the architect's records. The order of precedence clause eliminates ambiguity when documents conflict.

14. A — Projected total cost: $1,312,200 + $560,000 = $1,872,200. Original estimate: $1,785,000. Overrun: $87,200. Projected profit: $2,100,000 − $1,872,200 = $227,800, down from the original $315,000 — a $87,200 reduction (28% profit erosion). The 70% checkpoint

shows $62,700 in overrun ($1,312,200 vs. $1,249,500 budget), confirming the negative trend requires corrective action.

15. C — When a trench box is shorter than the excavation depth, the unshielded upper portion must be protected. For Type C soil, the upper 5 feet must be sloped at 1½:1 (34 degrees): 5 feet × 1.5 = 7.5 feet of horizontal setback on each side. The box protects the lower 12 feet, and the sloped upper section prevents unshielded soil from collapsing into the trench above the box. Combination systems are explicitly permitted.

16. D — Federal tax: $420,000 × 21% = $88,200. Mississippi tax: 5% on income over $10,000 = ($420,000 − $10,000) × 5% = $410,000 × 5% = $20,500. Combined: $88,200 + $20,500 = $108,700. The $150,000 dividend distribution will be taxed again on shareholders' personal returns — the classic Ccorporation double taxation where the same income is taxed at both the entity and individual levels.

17. B — The FLSA requires overtime on a workweek basis — each week stands alone. Week 1 has 2 overtime hours (42 − 40 = 2) at $60.00 ($40.00 × 1.5). Week 2 has no overtime (38 hours). The employer owes an additional $40.00 in overtime premium (2 hours × $20.00 halftime premium). Multiweek averaging is prohibited regardless of the pay period schedule.

18. A — Installing a 1hour firerated assembly where 2 hours is required violates the building code, the contract specifications, and the fire marshal's approved plans. A 1hour assembly provides only half the required fire resistance — in a fire event, the assembly would fail 60 minutes before the required protection period ends, potentially allowing fire to spread to occupied tenant spaces. The assembly must be replaced with the correct 2hour system immediately.

19. C — Costs plus fee: $2,380,000 + $200,000 = $2,580,000. Savings below GMP: $2,800,000 − $2,580,000 = $220,000. Split 60/40: owner receives $132,000 credit, contractor receives $88,000 bonus. Owner pays: $2,580,000 + $88,000 = $2,668,000. Equivalently: $2,800,000 − $132,000 = $2,668,000. The savings sharing incentivizes cost control while benefiting both parties.

20. D — Concrete that freezes before achieving adequate strength can lose up to 50% of its potential compressive strength permanently. At 25°F, freezing is virtually certain overnight. The contractor must not pour until cold weather protection — insulated blankets, heated enclosures, or supplemental heating — is in place to maintain concrete temperature above freezing for the full 72hour protection period. The damage from premature freezing is irreversible.

21. A — The contractor fulfilled their 811 obligation, but the abandoned line was unknown to all parties. The contractor may have a claim under the contract's differing site conditions clause if the documents did not disclose the abandoned utility. The utility company has no liability because the line was abandoned and not in their active records. The responsibility allocation depends on the contract terms and whether the abandoned utility constitutes a Type I differing site condition.

22. A — The locally adopted code is the legal requirement. The local jurisdiction has adopted NEC 2017, making it the enforceable standard. Even though the specifications reference NEC 2020, the contractor must comply with the code that has been legally adopted by the authority

having jurisdiction. The contractor should submit an RFI to the architect noting the conflict between the specification reference and the locally adopted code.

23. D — A payifpaid clause creates a condition precedent — the subcontractor's right to payment is conditioned on the general contractor receiving payment from the owner. Since the owner has not paid, the condition has not been met, and the general contractor may not be obligated to pay. However, the enforceability of payifpaid clauses varies significantly by jurisdiction, and some courts construe them narrowly or refuse to enforce them.

24. D — Commissioning reveals that the system delivers only 85% of design airflow — a performance deficiency. The contractor must investigate the cause (dirty filters, incorrect fan speed, duct leakage, damper settings, or design error) and correct it. Commissioning exists precisely to identify these deficiencies before the building is occupied. Accepting underperformance defeats the purpose of the commissioning requirement.

25. B — Permanent partial disability benefits compensate for lasting impairment after maximum medical improvement. The 15% impairment rating to the lumbar spine entitles the employee to PPD benefits calculated using a schedule that assigns weeks of benefits based on the affected body part and impairment percentage. PPD is separate from and in addition to the TTD benefits already received during the recovery period.

26. A — Vibration damage to a neighboring home from pile driving is thirdparty property damage caused by the contractor's operations — a standard CGL Coverage A claim. The contractor's CGL policy defends and indemnifies the contractor for the $65,000 claim. Builder's risk covers the contractor's own project, not adjacent properties. The homeowner's insurance is not the primary coverage source for constructioncaused damage.

27. C — The correct approach coordinates with building management to temporarily disable only the affected detector, implements a fire watch (trained person with fire extinguisher monitoring the area), completes the dustgenerating work, and immediately restores the detector. Disabling the entire system is dangerous. Performing dustgenerating work near active smoke detectors causes false alarms that disrupt occupied areas and desensitize occupants to future alarms.

28. D — Revised total cost: $1,275,000 + $80,000 = $1,355,000. Revised profit: $1,500,000 − $1,355,000 = $145,000. Original profit was $225,000. The $80,000 cost increase directly reduces profit by $80,000 — a 36% erosion from the original estimate. The project manager must investigate the causes (material price increases and productivity shortfalls) and implement corrective measures immediately.

29. B — The surety's primary concern is Capacity — the contractor has never completed a project larger than $900,000, and the requested bond is for $1,800,000, twice the contractor's largest project. Managing a project of this size requires personnel, systems, and experience that may not have been developed on smaller projects. The surety may require the contractor to demonstrate how they will bridge the experience gap — through key hires, joint ventures, or phased capacity building.

30. A — A 7day result of 2,800 PSI for a mix designed at 5,000+ PSI represents approximately 56% of the design target. Typical concrete achieves 6575% of its 28day strength at 7 days. At 56%, the result is below the typical range and warrants concern — additional testing (14day

break, additional 28day cylinders, or core samples) should be planned. The result does not automatically mean failure, but it signals the concrete may underperform at 28 days.

31. D — The pump truck at 18 feet violates the 25foot setback specification by 7 feet. The setback requirement applies to all construction activities including equipment. A passing train could strike the truck, causing it to topple, the boom to swing, or the outriggers to fail — any of which could be fatal. The superintendent must order the truck moved immediately. Schedule pressure never justifies violating lifesafety requirements.

32. A — All conditions for retainage release have been met: substantial completion certified, all 42 punch list items completed, all closeout documents delivered, and 45 days have passed (15 days beyond the 30day contractual deadline). The owner is in breach of the payment obligation. The contractor may file a lien against the property and pursue legal action for breach of contract to recover the $960,000.

33. C — A preconstruction survey documents the existing condition of adjacent structures before vibrationgenerating work begins. Photographs, videos, and written reports create an objective baseline. Without this documentation, the contractor cannot distinguish between preexisting cracks and constructioncaused damage, leaving the contractor vulnerable to false or exaggerated claims that attribute preexisting conditions to the pile driving.

34. A — Combined distributions: $90,000 + $70,000 = $160,000. Since the IRS confirmed both salaries as reasonable, the Scorporation tax treatment operates as intended. The $160,000 in distributions passes through to each shareholder's personal return as ordinary income but is not subject to FICA or selfemployment taxes. Combined salaries of $200,000 are subject to payroll taxes. The $160,000 savings is the Scorporation's fundamental advantage.

35. D — Gaspowered equipment indoors generates carbon monoxide — colorless and odorless but toxic. Headaches, nausea, and dizziness are classic early CO poisoning symptoms. The contractor must stop the gaspowered cutting immediately, evacuate symptomatic workers for medical evaluation, ventilate all affected areas, and either switch to electricpowered equipment or implement continuous CO monitoring with adequate mechanical ventilation before resuming any gaspowered operations.

36. B — Multiple parties may bear liability. The manufacturer faces product liability for the defective sprinkler head. The subcontractor may face claims depending on warranty obligations and whether component testing was required. The general contractor may be involved through prime contract warranty provisions. The specific liability allocation depends on the defect's nature, warranty terms, and whether any party had a duty to detect the manufacturing defect.

37. A — Remaining contingency: $100,000 − $85,000 = $15,000. On a fixedprice contract, the contingency is the contractor's internal risk reserve embedded in the bid price. The contract price of $2,500,000 does not change regardless of how the contractor allocates costs internally. The owner agreed to pay the fixed price — the contractor's contingency management is an internal matter. No owner notification is required.

38. D — Joint and several liability allows the creditor to pursue any partner for the full $200,000 regardless of ownership percentage. Partner A with $500,000 in personal assets is the most likely target because they have the ability to pay. Partner A may end up paying the

entire $200,000 and must then seek contribution from Partners B and C — who may lack the resources to reimburse their shares.

39. C — Asbuilt drawings require continuous documentation of field changes throughout construction. Without redline markups maintained during the project, the contractor must reconstruct 85% of a project's field changes from memory — an unreliable process that produces incomplete and inaccurate asbuilts. Accurate asbuilts are critical for future maintenance, renovation, and emergency response, and the failure to maintain them is a significant project management deficiency.

40. B — Claim 1: $800,000 paid (aggregate reduces to $1,200,000). Claim 2: $750,000 paid (aggregate reduces to $450,000). Claim 3: only $450,000 of the $700,000 is covered — the remaining $250,000 is uninsured because the $2,000,000 aggregate is exhausted. This scenario demonstrates exactly why umbrella coverage is essential — the $250,000 gap would be covered by an umbrella policy.

41. A — As sole proprietor, SE tax on $400,000 ≈ $54,800 (15.3% on 92.35% × $400,000). With Scorp election and $160,000 salary, payroll taxes ≈ $24,480 (15.3% on $160,000). The $240,000 in distributions avoids SE tax. Savings: approximately $54,800 − $24,480 ≈ $30,320. The savings come from removing the $240,000 distribution from the SE tax base.

42. D — Standing water after rain indicates the clay is saturated, undermining the cohesion that supported the original Type A classification. The competent person must reclassify the soil — saturated conditions typically push the classification to Type C regardless of the drystate characteristics. The protective system must be upgraded to match the new classification before any worker enters, and dewatering must be implemented to control water during work.

43. C — Chronic overbilling of $320,000 means the contractor has been paid for work not yet performed across four projects. As these projects approach completion, the remaining contract funds may be insufficient to finish the work. The contractor will face a cash crunch as the overbilling is "worked off" — performing work without receiving additional payment. The surety recognizes this pattern as a significant default risk indicator.

44. B — The payment bond guarantees payment to subcontractors, suppliers, and laborers — including material suppliers like this concrete company. The performance bond guarantees project completion for the owner's benefit. The supplier's $85,000 claim is a payment bond claim. This distinction is fundamental: payment bonds protect downstream parties, performance bonds protect the project owner.

45. A — An 18inch gap between the scaffold platform and the building wall approaches or may exceed the practical threshold for the wallside guardrail exemption. OSHA permits omitting the wallside guardrail when the gap is narrow enough that workers cannot fall through. The competent person must evaluate whether 18 inches creates a fall hazard — if so, additional protection (guardrail, netting, or PFAS) is required on the building side.

46. D — Three failures combined to create the shock: the electrician's failure to install GFCI protection (OSHA violation), the worker's use of a damaged tool cord (equipment inspection failure), and the wet conditions (environmental factor). The GFCI would have detected the ground fault and tripped the circuit in milliseconds — preventing the shock entirely. Each individual failure contributed, but the absent GFCI was the critical missing safeguard.

47. C — Gross profit: $3,800,000 − $3,040,000 = $760,000. Gross margin: $760,000 ÷ $3,800,000 = 20%. Net profit: $760,000 − $494,000 = $266,000. Net margin: $266,000 ÷ $3,800,000 = 7%. Both metrics are expressed as percentages of revenue. The surety evaluates gross margin for projectlevel profitability and net margin for overall business health after G&A expenses.

48. B — The manufacturer may deny warranty claims because installation was primarily performed by noncertified workers. The certification requirement is a warranty condition — not a suggestion. If a roof defect occurs within the 20year warranty period, the manufacturer may refuse coverage because their installation standards were not met. The contractor would bear all repair costs under the prime contract warranty with no manufacturer recovery.

49. B — Actual costs: $1,700,000 × 92% = $1,564,000. Profit: $2,000,000 − $1,564,000 = $436,000 versus the original $300,000 estimate. The contractor retains the full $136,000 in savings because the owner agreed to pay $2,000,000 regardless of actual costs. This is the fundamental advantage of fixedprice contracting for efficient contractors — cost savings belong entirely to the contractor.

50. C — With 16 practice exams completed and consistent scores above 80%, the contractor's knowledge base is established. Sleep deprivation impairs reading comprehension, analytical reasoning, time management, and reference guide navigation — all critical exam skills. Getting adequate rest maximizes the benefit of months of preparation. Arriving rested, alert, and composed is the single most impactful action the night before the exam.