

# PRACTICE EXAM 19: OHIO BUSINESS AND LAW SIMULATION (50 QUESTIONS)

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## 50 Questions — 120 Minutes Recommended

1. An Ohio electrical contractor operates as a sole proprietorship with eight employees. The contractor's personal residence is worth \$350,000 with \$200,000 in equity. A jobsite accident results in a \$600,000 judgment that exceeds the contractor's \$500,000 CGL policy limit by \$100,000. The contractor has \$15,000 in personal savings. Under a sole proprietorship, what personal assets are exposed to satisfy the \$100,000 excess judgment?

- A. Only the \$15,000 in personal savings because Ohio homestead exemptions fully protect the residence from business judgments
- B. Only business assets because Ohio law prohibits creditors from attaching a sole proprietor's personal assets for business debts
- C. All personal assets including the home equity and savings because a sole proprietorship provides no legal separation between business and personal assets
- D. Only assets specifically used in the electrical business because the judgment arose from commercial operations

2. An Ohio contractor operates as a Ccorporation and earns \$450,000 in taxable income. The corporation pays the twentyone percent corporate tax and retains all aftertax profits. The sole shareholder takes a salary of \$140,000 but no dividends. Three years later, the corporation has accumulated \$900,000 in retained earnings. The shareholder asks an accountant whether the accumulated earnings create any tax risk. What is the accountant's most likely concern?

- A. No concern because Ccorporations can accumulate unlimited retained earnings without tax consequences
- B. The shareholder may owe personal income tax on the accumulated earnings even though no dividends were distributed
- C. The accumulated earnings will be automatically converted to dividends after three years of retention

D. The corporation may face the accumulated earnings tax if the IRS determines that profits are being retained beyond the reasonable needs of the business to avoid shareholderlevel dividend taxation

3. A contractor's business plan projects Year 1 revenue of \$1,100,000. The plan identifies \$380,000 in fixed overhead costs (office rent, insurance, nonfield salaries, vehicle leases) and projects a gross profit margin of twentytwo percent. What is the breakeven revenue and does the projected Year 1 revenue exceed it?

A. Breakeven is approximately \$1,727,273 and the projected \$1,100,000 revenue falls significantly short meaning the company will lose money in Year 1 unless it generates substantially more revenue or reduces overhead

B. Breakeven is \$380,000 equal to the fixed overhead which is easily exceeded by the projected revenue

C. Breakeven is \$1,100,000 because the projected revenue exactly equals breakeven

D. Breakeven cannot be calculated without knowing the variable cost per project

4. An Ohio contractor applies for an OCILB refrigeration license. The contractor has four years and ten months of documented refrigeration trade experience. The OCILB requires five years. The contractor's application is submitted on January 15 with the experience ending December 31 of the prior year — two months short of the fiveyear requirement. What is the likely outcome?

A. The application is approved because four years and ten months rounds up to five years under OCILB's rounding policy

B. The application may be denied or deferred because the documented experience is two months short of the fiveyear requirement

C. The application is automatically approved with a provisional license valid for two months until the experience requirement is fully met

D. The OCILB waives the remaining two months because the applicant is within ninety percent of the requirement

5. An OCILBlicensed plumbing contractor hires a new tradesperson to work on commercial plumbing installations. Under ORC Chapter 4740, the tradesperson works under the contractor's license. The contractor assigns the tradesperson to a commercial project and leaves the jobsite. The tradesperson

makes a critical installation error that causes a pipe failure and water damage. Who does the OCILB hold responsible for the tradesperson's work?

- A. Only the tradesperson because the tradesperson performed the actual installation
- B. Only the project owner because the owner hired the contractor and accepted responsibility for all work
- C. Neither party because installation errors are covered by the contractor's insurance not by the licensing board
- D. The licensed contractor because the contractor is responsible for all work performed under the contractor's license including work by tradespersons employed by the contractor

6. A contractor's estimator receives a bid request for a commercial HVAC project. The specifications include a performance specification requiring the HVAC system to maintain a temperature differential of no more than two degrees Fahrenheit between any two points in the occupied space. The estimator prices a standard HVAC system that meets the equipment specifications but may not achieve the twodegree performance requirement without additional zoning controls. What risk does this create?

- A. The contractor may be responsible for additional work at no extra cost if the installed system fails to meet the twodegree performance specification because the bid did not account for the controls needed to achieve the specified performance
- B. No risk because performance specifications are advisory and the contractor is only required to furnish the specified equipment
- C. The risk is limited to a warranty callback during the first year that is covered by the manufacturer
- D. The architect is solely responsible for the performance specification and the contractor bears no risk for system performance

7. A contractor submits a bid on a public library project. The Instructions to Bidders require the bid to be submitted on the owner's bid form. The contractor submits the bid on the contractor's own company letterhead instead of the owner's form, but includes all required information including the base bid, alternates, bid bond, and addendum acknowledgments. Is the bid responsive?

- A. Yes because all required information is included regardless of the form used
- B. Yes because the contractor's letterhead is an acceptable substitute for the owner's bid form on public projects

- C. The bid may be rejected as nonresponsive because the Instructions to Bidders specifically required the owner's bid form and using a different format is a material deviation from the bidding requirements
- D. The bid is automatically accepted because substance prevails over form in public bidding

8. A general contractor on a commercial project enters into a cost-plus-fixed-fee subcontract with a mechanical subcontractor. The fixed fee is \$45,000. During the project, the subcontractor's actual costs are \$320,000 — \$40,000 more than the original \$280,000 estimate. The subcontractor requests an increase in the fixed fee proportional to the cost increase. The GC declines. Is the subcontractor entitled to a fee increase?

- A. Yes because cost-plus contracts automatically adjust the fee proportionally when costs increase
- B. No because the fee is fixed by contract and does not change when actual costs exceed the original estimate — the subcontractor agreed to perform for the \$45,000 fee regardless of cost fluctuations
- C. Yes but only if the cost increase exceeds twenty percent of the original estimate
- D. No but the subcontractor can terminate the subcontract if costs exceed the estimate by more than fifteen percent

9. A construction contract provides that all disputes will be resolved through binding arbitration under the rules of the American Arbitration Association. A \$340,000 payment dispute arises. The contractor files for arbitration. The owner argues that the dispute should go to mediation first because mediation is a less expensive and less adversarial process. The contract does not require mediation. Can the owner compel mediation before arbitration?

- A. Yes because mediation is always required as a prerequisite to arbitration in commercial construction disputes
- B. Yes because the AAA rules require mediation before arbitration for disputes exceeding \$200,000
- C. No but the parties may voluntarily agree to mediate before proceeding with the contractually mandated arbitration
- D. No because the contract specifies arbitration as the dispute resolution method and does not require mediation as a prerequisite — the owner cannot add a step not included in the contract

10. A contractor on a commercial project receives a written directive from the project owner to install upgraded lighting fixtures throughout the building. The contractor's original scope specified standard fixtures at \$85,000. The upgraded fixtures will cost \$135,000 — a \$50,000 increase. The contract requires written change orders for all modifications. The contractor installs the upgraded fixtures based on the owner's written directive but does not submit a formal change order request within the contractual fourteenday period. Six weeks later, the contractor submits the change order. The owner refuses to pay the \$50,000 increase. What is the contractor's primary procedural problem?

- A. The contractor has no procedural problem because the owner's written directive constitutes an automatic change order
- B. The contractor failed to submit the formal change order request within the fourteenday contractual deadline and the late submission may result in waiver of the right to additional compensation
- C. The contractor should have refused to install the upgraded fixtures until a signed change order was in place
- D. The contractor's only recourse is through the CGL insurance policy because the directive was from the owner

11. A project's CPM schedule shows that Activities A through E are on the critical path with a total duration of 120 days. Activity F is a noncritical activity with eight days of total float. The project manager decides to reassign two workers from Activity F to Activity C (a critical path activity) to accelerate Activity C by three days. As a result, Activity F takes twelve additional days to complete. What is the net effect on the project completion date?

- A. The project completion date improves by three days because the critical path was shortened from 120 to 117 days and Activity F's delay is absorbed within its original eight days of float plus the three additional days gained
- B. The project completion date worsens by one day because Activity F's twelveday extension exceeds its eightday float by four days minus the three days gained on the critical path
- C. The project completion date worsens by four days because Activity F's delay creates a new critical path
- D. The project completion date is unchanged because the three days gained on Activity C exactly offset the float consumed by Activity F

12. A contractor on a commercial project maintains a comprehensive RFI log. At project completion, the log shows seventyfive RFIs submitted over fourteen months. The contractor's project manager notices that twentytwo of the seventyfive RFIs were responded to between fifteen and thirtyfive days — exceeding the contract's tenday response requirement. The contractor did not submit individual delay claims for any of the late RFI responses during construction. Can the contractor aggregate the late responses into a single delay claim at project completion?

- A. Yes because the RFI log documents all delays and aggregation is the standard method for presenting RFIrelated claims
- B. The claim may be barred because the contract likely required delay claims to be submitted within a specified timeframe after each individual delay event and the contractor failed to provide timely notice for each late response
- C. Yes because the architect's pattern of late responses constitutes a systemic breach that can only be identified in aggregate
- D. No because RFI response times are advisory and do not create enforceable delay obligations

13. A contractor's CGL policy has a \$2,000,000 peroccurrence limit, a \$4,000,000 general aggregate, and a \$4,000,000 productscompleted operations aggregate. During the policy year, the contractor has two claims from ongoing operations: Claim 1 for \$1,500,000 and Claim 2 for \$1,800,000. Each claim is from a separate occurrence. What is the total payout from the CGL?

- A. \$3,300,000 because each claim is within the peroccurrence limit and the combined \$3,300,000 is within the \$4,000,000 general aggregate
- B. \$2,000,000 because the peroccurrence limit caps each claim at \$1,000,000
- C. \$4,000,000 because the general aggregate limits all payouts regardless of individual claim amounts
- D. \$3,300,000 because the first claim pays \$1,500,000 (within peroccurrence) and the second pays \$1,800,000 (within peroccurrence) and the combined total is within the general aggregate

14. An Ohio contractor has a workers' compensation base premium of \$58,000 and an EMR of 1.22. A safety consultant proposes a \$15,000 annual safety program that is projected to reduce the EMR to 0.85 within three years. What is the projected annual premium savings at the 0.85 EMR compared to the current 1.22 EMR?

- A. \$21,460 calculated as the difference between the premium at 1.22 EMR and the premium at 0.85 EMR

- B. \$7,540 calculated as the base premium multiplied by the difference between the two EMR values divided by two
- C. \$21,460 representing  $(\$58,000 \times 1.22)$  minus  $(\$58,000 \times 0.85)$  which is \$70,760 minus \$49,300
- D. \$15,000 equal to the cost of the safety program because premium savings always equal program costs

15. A commercial construction contract requires the contractor to furnish a payment bond equal to one hundred percent of the contract price. The contract price is \$1,200,000. A secondtier material supplier provides \$65,000 in plumbing fixtures to a firsttier subcontractor. The subcontractor does not pay the supplier. The supplier served a Notice of Furnishing to the property owner on the private project. Can the supplier file a claim against the payment bond in addition to pursuing a mechanic's lien?

- A. On a private project, payment bonds are contractual instruments and the supplier's ability to claim against the bond depends on the specific bond language regarding who qualifies as a claimant
- B. Yes because all payment bonds on private projects automatically cover all parties who furnish labor or materials
- C. No because private project payment bonds protect only firsttier subcontractors with direct contracts
- D. No because the supplier must choose between the mechanic's lien and the bond claim and cannot pursue both

16. Under OSHA's construction standards, a contractor is performing concrete formwork on a commercial project. The formwork extends twenty feet above grade. Workers are required to walk along the top of the formwork to install reinforcing steel. The contractor provides personal fall arrest systems. One worker's harness is four years old and shows visible signs of wear — frayed stitching, cracked Dring housing, and faded webbing. The competent person inspects the harness and tags it as defective. What must happen next?

- A. The harness can be repaired with reinforcing stitching and returned to service after the repair is inspected
- B. The harness can be used for one more shift while a replacement is ordered because the competent person is monitoring
- C. The worker should use the harness without the lanyard connected until the replacement arrives
- D. The defective harness must be removed from service permanently and destroyed or clearly marked as unusable and the worker must be provided a replacement harness before returning to work at height

17. An OSHA compliance officer inspects a commercial construction site and observes that the contractor's hazard communication program consists of a binder containing Safety Data Sheets organized alphabetically. The binder is located in the site superintendent's locked office. The superintendent is present on site during work hours but occasionally leaves for meetings. The inspector asks three workers where the SDSs are kept and none of them know. What violations exist?

- A. A recordkeeping violation for not maintaining the SDS binder in a fireproof cabinet
- B. Multiple violations including failure to train employees on the location and availability of SDSs and potentially inadequate accessibility because the locked office may not provide immediate access when the superintendent is away
- C. No violations because the SDSs are maintained on site in an organized manner
- D. A single labeling violation because the binder should be labeled "HazCom" not "Safety Data Sheets"

18. An Ohio contractor's employee sustains a workplace injury that requires emergency surgery, three days of hospitalization, and six weeks of recovery before returning to modified duty. The employee files a workers' compensation claim. Under Ohio's workers' compensation system, what types of benefits is the employee entitled to receive?

- A. Medical benefits covering all reasonable and necessary treatment plus temporary total disability wage replacement benefits for the period the employee is unable to work
- B. Only medical benefits because Ohio workers' compensation does not provide wage replacement
- C. Medical benefits plus a lumpsum settlement calculated at three times the employee's annual salary
- D. Only wage replacement benefits because medical costs are covered by the employer's group health insurance

19. A contractor on a commercial project reaches substantial completion. The architect issues the Certificate of Substantial Completion on July 1. The contract provides for release of fifty percent of retainage at substantial completion. Total accumulated retainage is \$96,000. The owner releases \$48,000. The punch list contains thirtyfive items. The contractor completes all punch list items by August 10 and submits all closeout documents by August 20. The architect issues the final certificate on August 25. The contract requires final payment within thirty days. When is the deadline for the owner to release the remaining \$48,000?

- A. August 10 which is thirty days after substantial completion on July 1

- B. August 20 which is the date the contractor submitted all closeout documents
- C. September 24 which is thirty days after the architect issued the final certificate on August 25
- D. July 31 which is thirty days after the initial retainage release

20. A contractor on a commercial renovation project discovers that the building's existing fire escape does not meet current code requirements. The project specifications do not address the existing fire escape. The contractor believes the owner may need to upgrade the fire escape as part of the renovation. The contractor does not notify the owner or architect of the potential code issue. After the renovation is complete, the building inspector identifies the fire escape deficiency during the final inspection and requires a \$45,000 upgrade. Who is likely responsible for the cost?

- A. The contractor is responsible because the contractor should have identified and corrected all code deficiencies during the renovation
- B. The building inspector is responsible because the fire escape should have been flagged during the permit review before construction began
- C. The architect is responsible because the architect should have addressed all code compliance issues during the design phase
- D. The owner is likely responsible for the cost because the existing fire escape was not part of the contractor's scope and the architect and code official should have identified the deficiency during design and permitting — though the contractor may face criticism for not raising the issue

21. A contractor's surety company reviews the contractor's financial statements and identifies the following trend: revenue has declined fifteen percent over two years, but the contractor has maintained the same overhead structure without reductions. The contractor's current overhead is \$480,000 and the gross profit margin has remained at eighteen percent. What financial risk does this trend create?

- A. No risk because a stable gross profit margin indicates the contractor is managing costs effectively despite declining revenue
- B. Minimal risk because overhead can be adjusted quickly if revenue continues to decline
- C. The risk is limited to reduced bonding capacity which affects only the contractor's ability to bid on large projects
- D. The contractor is approaching or may have already fallen below breakeven because declining revenue against fixed overhead means less gross profit is available to cover unchanged overhead costs

22. An Ohio contractor earns \$2,900,000 in annual gross receipts from commercial plumbing. The contractor's spouse operates a separate consulting business earning \$180,000 in gross receipts. The contractor and spouse file a joint personal income tax return. For Ohio Commercial Activity Tax purposes, how are the two businesses' gross receipts treated?

- A. Combined at \$3,080,000 because joint filers must combine all business income for CAT purposes
- B. The plumbing business reports \$2,900,000 and the consulting business reports \$180,000 separately because the CAT is assessed at the business entity level not the individual filer level
- C. Each business files its own CAT return because the CAT is assessed separately on each business entity regardless of the owners' personal tax filing status
- D. Only the larger business is subject to CAT because the consulting business falls below the \$500,000 threshold

23. An Ohio contractor purchases \$42,000 in electrical materials from an Ohio supplier and pays full Ohio sales tax. The materials are installed on a commercial project for a state university that holds a valid sales tax exemption. After installation, the contractor discovers the exemption and wants to recover the sales tax paid. The purchase occurred four months ago. Can the contractor recover the tax?

- A. Yes because the contractor may present the university's exemption certificate to the supplier for a credit or file a refund claim with the Ohio Department of Taxation even though the purchase occurred four months ago
- B. No because exemption certificates must be presented at the exact time of purchase with no retroactive application
- C. Yes but only if the refund amount exceeds \$5,000
- D. No because four months exceeds the sixtyday window for sales tax refund claims

24. A subcontractor on a private commercial project serves a Notice of Furnishing on Day 20 — within the twentyoneday window. The subcontractor works for seven months. At the end of the project, the general contractor issues a conditional final lien waiver to the subcontractor along with the final payment check. The subcontractor signs the conditional waiver and deposits the check. Two weeks later, the check bounces due to insufficient funds in the GC's account. What is the status of the subcontractor's lien rights?

- A. The lien rights are permanently released because the subcontractor signed the waiver and deposited the check

- B. The conditional waiver is not effective because the condition — actual receipt of payment — was not satisfied when the check bounced and the subcontractor's lien rights remain intact
- C. The lien rights are released for the amount of the check but the subcontractor can file a new lien for the bounced check amount
- D. The subcontractor must wait thirty days after the check bounces before the conditional waiver becomes void

25. A general contractor on a private commercial project pays all subcontractors and obtains unconditional final lien waivers from each. However, one subcontractor failed to pay a \$28,000 invoice to a material supplier who had served a timely Notice of Furnishing. The supplier files a mechanic's lien against the property. The property owner demands that the GC resolve the lien. What is the GC's exposure?

- A. Zero because the GC obtained unconditional waivers from all subcontractors which automatically cover all downstream suppliers
- B. Zero because the supplier's lien is invalid since the GC paid the subcontractor in full
- C. The GC has potential contractual exposure to the owner because the GC may be responsible under the prime contract for ensuring all parties are paid and the supplier's valid lien encumbers the owner's property
- D. The GC faces exposure of \$28,000 to the supplier through a direct payment obligation under the subcontract's flowdown provisions

26. A contractor files a mechanic's lien for \$115,000 on a commercial property on April 1. The contractor serves the owner on April 25. The contractor and owner negotiate for four years without resolution. On March 25 of Year 5 — one week before the fouryear anniversary of the filing — the contractor files a foreclosure lawsuit. Is the lawsuit timely?

- A. No because Ohio requires foreclosure within three years of the lien filing date
- B. Yes because Ohio allows six years from the date of lien filing to commence foreclosure and the lawsuit at approximately four years is within the sixyear window
- C. No because the fouryear negotiation period consumed the enforcement deadline
- D. Yes because the ongoing negotiations tolled the enforcement deadline indefinitely

27. Under the percentage of completion method, a contractor has a project with a contract price of \$1,350,000 and original estimated total cost of \$1,080,000. At the end of the fiscal year, costs incurred to date total \$810,000. The contractor receives a change order adding \$120,000 to the contract price and \$100,000 to the estimated total cost. What is the revised percentage complete, revised expected total profit, and revised revenue recognized to date?

- A. Revised percentage 68.64%, revised expected profit \$290,000, revised revenue approximately \$1,009,524 calculated as  $(\$810,000 \div \$1,180,000) \times \$1,470,000$
- B. Revised percentage 75%, revised expected profit \$270,000, revised revenue \$1,102,500
- C. Revised percentage 68.64%, revised expected profit \$270,000, revised revenue approximately \$1,009,524
- D. Revised percentage 60%, revised expected profit \$290,000, revised revenue \$882,000

28. A contractor's balance sheet shows current assets of \$560,000, current liabilities of \$390,000, noncurrent assets of \$340,000, and longterm liabilities of \$225,000. What is the working capital, current ratio, and the bonding capacity under a fifteen times working capital guideline?

- A. Working capital \$170,000, current ratio 1.44, bonding capacity \$2,550,000
- B. Working capital \$560,000, current ratio 2.33, bonding capacity \$8,400,000
- C. Working capital \$170,000, current ratio 1.44, bonding capacity \$2,550,000
- D. Working capital \$115,000, current ratio 1.29, bonding capacity \$1,725,000

29. Under OSHA's excavation standard, a contractor excavates a trench that is nine feet deep in Type B soil. OSHA's maximum allowable slope for Type B soil is one horizontal to one vertical (45 degrees). The contractor slopes the trench walls at an angle steeper than 45 degrees — approximately 60 degrees from horizontal. An OSHA inspector measures the slope angle. What citation will the inspector issue?

- A. An other than serious citation because the slope deviation is minor and no injury has occurred
- B. A de minimis violation that requires no corrective action because the trench has not collapsed
- C. No citation because the competent person on site approved the steeper slope based on field conditions
- D. A serious citation because the slope exceeds the maximum allowable angle for Type B soil creating a substantial probability of a cave-in that could cause death or serious injury

30. An Ohio employer with fiftyfive employees hires a worker on Monday. The worker presents a valid U.S. passport for the I9 form. The employer completes Section 1 on Monday. On which day must Section 2 be completed at the latest?

- A. Monday — the same day as Section 1 because both sections must be completed simultaneously
- B. Thursday — three business days after the date of hire counting Tuesday as Day 1, Wednesday as Day 2, and Thursday as Day 3
- C. The following Monday — five business days after the date of hire
- D. Within thirty days of the date of hire consistent with the standard I9 completion timeline

31. A nonexempt electrician earns a base rate of \$40.00 per hour. During a single workweek, the electrician works fortyfour hours and receives a \$300 nondiscretionary safety bonus for maintaining a perfect safety record during the week. Under the FLSA, what is the correct regular rate and overtime pay?

- A. Regular rate is \$40.00 and overtime is \$60.00 per hour for four hours totaling \$240.00 in overtime premium
- B. Regular rate is \$40.00 and overtime is \$240.00 total because bonuses are excluded from the regular rate
- C. Regular rate is approximately \$46.82 and the overtime premium for four hours is approximately \$93.64
- D. Regular rate is \$40.00 plus \$6.82 bonus allocation and the total overtime premium must be recalculated based on the adjusted regular rate

32. An Ohio contractor operating as an S corporation pays the sole shareholderemployee a salary of \$110,000 and takes \$95,000 in distributions. The contractor contributes \$18,000 to a SEPIRA. Which amounts are subject to FICA payroll taxes?

- A. Only the \$110,000 salary is subject to FICA while the \$95,000 distributions and \$18,000 SEPIRA contribution are not
- B. Both the salary and distributions totaling \$205,000 are subject to FICA
- C. The \$110,000 salary minus the \$18,000 SEPIRA contribution for a net of \$92,000
- D. Only the \$95,000 in distributions is subject to FICA because salary is taxed differently in an S corp

33. An Ohio contractor earns \$5,800,000 in annual gross receipts. The Ohio CAT rate of 0.26% applies to taxable gross receipts above \$1,000,000. The contractor also owes the annual minimum tax of approximately \$800. What is the total approximate annual CAT liability?

- A. \$15,080 calculated as 0.26% of the full \$5,800,000
- B. \$12,480 calculated as 0.26% of \$4,800,000 with no minimum tax
- C. \$13,280 calculated as \$800 minimum tax plus 0.26% of \$4,800,000
- D. \$13,280 calculated as the minimum tax of \$800 plus 0.26% of \$4,800,000 (\$12,480) totaling \$13,280

34. An Ohio employer terminates a worker who had filed an OSHA safety complaint two weeks earlier. The employer claims the termination was due to excessive tardiness documented over three months. The employee claims retaliation under Section 11(c) of the OSH Act. What is the most important evidence in determining whether the termination was retaliatory?

- A. Whether the OSHA complaint was ultimately found to be valid because retaliation claims require a substantiated safety violation
- B. Whether the employer maintained consistent documentation of the tardiness issue that predates the OSHA complaint establishing a legitimate nonretaliatory basis for the termination
- C. Whether the employer has an antiretaliation policy posted in the employee handbook
- D. Whether the twoweek gap between the complaint and termination is sufficient to establish temporal proximity

35. A contractor on a commercial project reaches substantial completion. The contract provides for a oneyear warranty from substantial completion. Eight months into the warranty period, the owner discovers a roof leak. The contractor investigates and determines the leak is caused by damage from the owner's maintenance contractor who improperly cleaned the roof drains and damaged the roofing membrane. Who is responsible for the repair?

- A. The owner is responsible because the damage was caused by the owner's maintenance contractor not by a defect in the contractor's original work and the warranty covers defects in the contractor's workmanship not damage caused by others
- B. The contractor is responsible because the warranty requires the contractor to repair all roof issues during the warranty period regardless of cause

- C. The roofing manufacturer is responsible because the membrane failed during the warranty period
- D. Both the contractor and the owner share responsibility equally because the leak occurred during the warranty period

36. Under OSHA's Hazard Communication Standard, a contractor maintains SDSs for all chemicals on the jobsite. A new worker begins work on Monday. The contractor plans to provide HazCom training on Friday. On Wednesday, the worker uses a concrete curing compound that causes skin irritation. The worker did not receive training on this chemical before using it. What OSHA violation occurred?

- A. A recordkeeping violation for not maintaining the SDS for the curing compound
- B. A labeling violation for not having the curing compound properly labeled
- C. A training violation because the employer must provide HazCom training before employees work with or are exposed to hazardous chemicals not five days after they begin work
- D. No violation because scheduling training within the first week satisfies OSHA's reasonable training timeframe

37. A contractor's project manager tracks earned value on a commercial project. At month nine, planned value is \$900,000, earned value is \$810,000, and actual cost is \$850,000. The cost performance index is 0.953 and the schedule performance index is 0.90. If the project continues at the current CPI, what is the estimated cost at completion for a project with a total budget of \$1,200,000?

- A. \$1,200,000 because the project will selfcorrect and finish on budget
- B. \$1,258,826 calculated by dividing the total budget by the CPI indicating the project will exceed the budget
- C. \$1,080,000 calculated by multiplying the total budget by the SPI
- D. Approximately \$1,259,181 calculated by dividing the total budget of \$1,200,000 by the CPI of 0.953 indicating the project is trending over budget at completion

38. A contractor on a commercial project maintains a photographic log of all concealed mechanical systems before walls are closed. The log includes dated photographs showing pipe material labels, joint types, support spacing, and insulation installation. Two years after project completion, the owner alleges the contractor used nonspecified pipe material. The contractor produces photographs showing

the correct pipe specification labels. The owner's attorney argues the photographs only show labels not actual pipe material. What is the evidentiary strength of these photographs?

- A. The photographs are worthless because labels can be applied to any pipe regardless of the underlying material
- B. The photographs provide strong but not conclusive evidence because they document the specified material labels at the time of installation and are corroborated by the concealment timeline in the daily reports showing the work was inspected before closing
- C. The photographs are conclusive proof that eliminates any possibility of nonconforming materials
- D. The photographs are inadmissible because the contractor has a financial interest in the outcome

39. A contractor's employee is working on a commercial project when a coworker accidentally drops a wrench from an upper level, striking the employee on the hard hat. The employee reports dizziness and a headache. The company physician examines the employee and recommends observation for twentyfour hours but prescribes no medication, provides no treatment, and assigns no work restrictions. The employee returns to full duty the next day. Under OSHA recordkeeping rules, is this injury recordable?

- A. No because the physician provided only observation with no prescription medication, no medical treatment beyond first aid, and no work restrictions and the employee returned to full duty with no lost time
- B. Yes because any head injury from a falling object is automatically recordable regardless of treatment
- C. Yes because the twentyfourhour observation period constitutes lost time even though no treatment was provided
- D. No because hard hat injuries are excluded from OSHA recordkeeping requirements

40. An Ohio employer with thirty employees has a workers' compensation claim from an employee who slipped on ice in the company parking lot before the work shift began. The employee was walking from the personal vehicle to the building entrance at 6:45 AM — fifteen minutes before the scheduled 7:00 AM shift start. The employer contests the claim arguing the injury occurred before work hours began. Under Ohio workers' compensation law, is the injury compensable?

- A. No because the injury occurred fifteen minutes before the scheduled work shift and is therefore outside the scope of employment

- B. No because parking lot injuries are categorically excluded from Ohio workers' compensation coverage
- C. The injury is likely compensable because traveling through the employer's parking lot to reach the workplace is generally considered to be within the course of employment under the premises doctrine even if it occurs before the shift begins
- D. The injury is compensable only if the employer required the employee to arrive fifteen minutes early for a preshift meeting

41. A contractor's surety company reviews the contractor's financial statements and notes that the contractor's annual revenue has grown from \$2,000,000 to \$3,800,000 in two years while working capital has remained flat at \$120,000. The surety's bonding capacity guideline is fifteen times working capital. What concern does this rapid growth create?

- A. The bonding capacity of \$1,800,000 is insufficient to support the contractor's \$3,800,000 revenue level and the contractor may not be able to bond new projects without increasing working capital
- B. The revenue growth demonstrates the contractor's competitive strength and should result in automatic bonding capacity increases
- C. No concern because bonding capacity is based on revenue not working capital
- D. The flat working capital indicates the contractor is being appropriately conservative with growth

42. Under the Miller Act, a firsttier subcontractor on a federal project completes \$280,000 of electrical work and is not paid. The subcontractor wants to file a payment bond lawsuit. What is the earliest the lawsuit can be filed and what is the latest?

- A. Immediately upon nonpayment with no waiting period and the deadline is two years from last furnishing
- B. Thirty days after providing written notice to the prime with the deadline being six months from last furnishing
- C. Sixty days after last furnishing with the deadline being one year from project completion
- D. The lawsuit cannot be filed earlier than ninety days after the date of last furnishing and must be filed no later than one year after the date of last furnishing

43. A contractor on a commercial project submits progress payment application number ten on September 1. The contract requires payment within thirty days. On October 5 — thirtyfour days later — the contractor has not received payment. The contractor calls the owner who says the check is "being processed." The contractor takes no further action. On November 1, the contractor still has not been paid. The contractor sends a written demand letter threatening to stop work if payment is not received within seven days. What procedural step did the contractor miss?

A. The contractor should have sent the written demand letter promptly after the thirtyday payment period expired on October 1 rather than waiting an additional month because delays in asserting payment rights can weaken the contractor's position

B. The contractor should have filed a mechanic's lien on October 2 — the day after the payment was due

C. The contractor should have contacted the architect to certify the payment before sending the demand letter

D. The contractor should have stopped work immediately on October 2 without any written notice

44. An Ohio contractor operates in four different Ohio municipalities during the same quarter. The contractor employs fifteen workers who travel between jobsites in different cities. The contractor discovers that municipal income tax has been withheld only for the city where the company office is located — not for the cities where the work is actually performed. What compliance issue exists?

A. No issue because the employer's office location determines municipal tax withholding for all employees

B. No issue because construction workers who travel between municipalities are exempt from local income tax

C. The contractor has been withholding incorrectly because Ohio municipal income tax must be withheld based on where the work is actually performed not where the employer's office is located

D. The contractor must withhold at the highest municipal rate among all four cities and remit to a single municipality

45. A contractor's job cost report at month ten of a fourteenmonth project shows: original budget \$890,000, approved changes \$65,000, revised budget \$955,000, costs to date \$745,000, estimated to complete \$240,000, projected total \$985,000. The contract price is \$1,050,000. What are the projected variance and projected profit?

- A. Projected variance is \$30,000 over the revised budget and projected profit is \$65,000
- B. Projected variance is \$30,000 under the revised budget and projected profit is \$95,000
- C. The project is unprofitable because the projected total exceeds the contract price
- D. Projected variance is \$30,000 over the revised budget ( $\$985,000 - \$955,000$ ) and projected profit is \$65,000 ( $\$1,050,000 - \$985,000$ ) indicating the project is over budget but still profitable

46. A contractor operating as a partnership with three equal partners earns \$660,000 in net income. Partner A contributes sixty hours per week, Partner B contributes forty hours, and Partner C contributes twenty hours. The partnership agreement specifies equal profit sharing. For federal income tax purposes, what income does each partner report?

- A. Partner A reports \$330,000, Partner B reports \$220,000, and Partner C reports \$110,000 based on hours contributed
- B. Each partner reports \$220,000 because the partnership agreement specifies equal profit sharing regardless of hours contributed
- C. Each partner reports \$660,000 because partners are jointly liable for all partnership income
- D. Partner A reports \$396,000 representing sixty percent of income proportional to hours contributed

47. An OSHA inspector observes a contractor's crew working on a commercial roof at a height of eighteen feet. Three workers are wearing personal fall arrest systems properly connected to certified anchorage points. A fourth worker is wearing a harness but the lanyard is disconnected and draped over the worker's shoulder. The competent person is present on the roof but has not noticed the disconnected lanyard. How many OSHA violations may be cited?

- A. At least one violation for the unconnected worker because wearing a harness without connecting the lanyard provides no fall protection and the competent person's failure to identify the condition may also be cited
- B. No violations because three of four workers are properly protected which demonstrates a goodfaith compliance effort
- C. Four violations — one for each worker on the roof because the competent person's oversight failure affects all workers
- D. One violation for the competent person only because the worker's noncompliance is the competent person's responsibility

48. A contractor's financial statements show revenue of \$2,100,000, cost of revenue of \$1,638,000, and general overhead of \$378,000. What is the gross profit margin, net operating income, net profit margin, and breakeven revenue?

- A. Gross margin 22%, net income \$462,000, net margin 22%, breakeven \$1,718,182
- B. Gross margin 18%, net income \$84,000, net margin 4%, breakeven \$2,100,000
- C. Gross margin 22%, net income \$84,000, net margin 4%, breakeven \$1,718,182
- D. Gross margin 22%, net income \$84,000, net margin 4%, breakeven \$2,100,000

49. A contractor on a commercial project completes all work. The owner takes occupancy and begins using the building. The contractor submits the final payment application for \$78,000 in retainage. The owner withholds the entire retainage stating that a warranty claim from six months ago has not been resolved. The contractor argues that the warranty claim (\$12,000 estimated repair cost) does not justify withholding the full \$78,000. What is the appropriate remedy?

- A. The owner should release the retainage minus a reasonable holdback for the warranty issue — approximately \$12,000 to \$18,000 — rather than withholding the entire \$78,000 which is disproportionate to the warranty claim
- B. The owner may withhold the full \$78,000 because any unresolved warranty claim justifies withholding all retainage
- C. The contractor must waive the warranty claim to receive the retainage
- D. The owner and contractor must submit the warranty claim to binding arbitration before any retainage can be released

50. A contractor on a DavisBacon covered federal project submits certified payroll reports weekly. An audit reveals that the contractor classified three workers as "laborers" at \$26.50 per hour when the work they actually performed — operating boom lifts and forklifts — should have been classified as "equipment operators" at \$34.00 per hour. The misclassification has been occurring for twelve weeks. What is the contractor's corrective obligation?

- A. The contractor must reclassify the workers as equipment operators going forward and pay back wages for the \$7.50 per hour differential for all hours worked during the twelve week misclassification period plus submit corrected certified payroll reports

- B. The contractor may continue using the laborer classification because the workers' primary duties include labor tasks
- C. The contractor must pay back wages only from the date the audit was completed going forward
- D. The contractor must terminate the three workers and rehire them under the correct classification

## Practice Exam 19: Answer Key and Explanations

- 1. C** — A sole proprietorship provides no legal separation between the business owner and the business. All personal assets — including the home equity (\$200,000), personal savings (\$15,000), vehicles, investments, and any other property — are exposed to satisfy business judgments. Ohio's homestead exemption provides limited protection but does not fully shield a residence from all creditor claims.
- 2. D** — The IRS imposes an accumulated earnings tax on C-corporations that retain profits beyond the reasonable needs of the business to avoid shareholder-level dividend taxation. With \$900,000 in accumulated retained earnings and no dividends distributed, the IRS may scrutinize whether the accumulation serves a legitimate business purpose such as expansion, equipment purchases, or debt repayment. The penalty tax rate is twenty percent on the excess accumulation.
- 3. A** — Break-even revenue = fixed overhead ÷ gross profit margin = \$380,000 ÷ 0.22 = \$1,727,273. The projected Year 1 revenue of \$1,100,000 falls \$627,273 short of break-even. At twenty-two percent margin on \$1,100,000, the contractor generates only \$242,000 in gross profit against \$380,000 in overhead, producing a \$138,000 loss. The business plan needs significantly higher revenue projections or lower overhead.
- 4. B** — The OCILB requires five years of documented trade experience for the standard licensing pathway. Four years and ten months is two months short. The OCILB does not round up or waive experience requirements. The application may be denied or deferred until the applicant accumulates the full five years of documented experience.
- 5. D** — Under ORC Chapter 4740, the licensed contractor is responsible for all work performed under the contractor's license, including work by tradespersons employed by the contractor. The tradesperson works under the contractor's authority and supervision. When the tradesperson makes an installation error, the OCILB holds the licensed contractor accountable because the license carries the responsibility for quality and compliance.
- 6. A** — A performance specification requires the contractor to achieve a specified result — the two-degree temperature differential. If the installed system fails to meet this standard, the contractor is responsible for additional work to achieve compliance at no extra cost to the owner. Pricing a standard system without accounting for the controls needed to meet the performance requirement creates a significant financial risk.
- 7. C** — The Instructions to Bidders specifically required the owner's bid form. Submitting on different letterhead is a material deviation from the bidding requirements because the owner's form may contain specific certifications, representations, or terms that the contractor's letterhead does not include. On

public projects, material deviations from the Instructions to Bidders typically render the bid non-responsive.

**8. B** — In a cost-plus-fixed-fee contract, the fee is fixed by agreement and does not change when actual costs exceed the original estimate. The subcontractor agreed to perform the work for a \$45,000 fee regardless of cost fluctuations. Cost overruns are reimbursed, but the fee remains \$45,000. If the subcontractor wanted a proportional fee, they should have negotiated a cost-plus-percentage contract.

**9. D** — The contract specifies binding arbitration as the dispute resolution method and does not include mediation as a prerequisite step. The owner cannot unilaterally add a mediation requirement that the contract does not contain. However, the parties may voluntarily agree to mediate before proceeding with arbitration — but the owner cannot compel it.

**10. B** — The contract requires formal change order requests within fourteen days of receiving a directive. The contractor waited six weeks — well beyond the deadline. Even though the owner's written directive clearly directed additional work, the contractor's failure to submit the formal change order within fourteen days may constitute a procedural waiver of the right to additional compensation. Timely notice is essential.

**11. A** — Accelerating Activity C by three days shortens the critical path from 120 to 117 days. Activity F's twelve-day extension (from its original duration) must be evaluated against its available float. Activity F originally had eight days of float, but the critical path reduction to 117 days creates an additional three days of effective float on non-critical paths. Total effective float for Activity F becomes eleven days, absorbing the twelve-day extension with only one day of net impact — but since the critical path was shortened by three days, the net project effect is an improvement of approximately two days.

**12. B** — Most contracts require delay claims to be submitted within a specified period after each individual delay event. The contractor's failure to submit timely individual claims for each of the twenty-two late RFI responses during construction likely waived the right to claim those specific delays. The RFI log documents the delays but does not substitute for contractual notice.

**13. D** — Each claim is evaluated against the per-occurrence limit: Claim 1 at \$1,500,000 is within the \$2,000,000 per-occurrence limit (pays \$1,500,000). Claim 2 at \$1,800,000 is within the \$2,000,000 per-occurrence limit (pays \$1,800,000). Combined total: \$3,300,000. The \$4,000,000 general aggregate is not exceeded. Total payout: \$3,300,000.

**14. C** — Premium at 1.22 EMR:  $\$58,000 \times 1.22 = \$70,760$ . Premium at 0.85 EMR:  $\$58,000 \times 0.85 = \$49,300$ . Annual savings:  $\$70,760 - \$49,300 = \$21,460$ . The \$21,460 in annual premium savings exceeds the \$15,000 program cost by \$6,460, demonstrating a positive return on the safety investment from premium savings alone.

**15. A** — On private projects, payment bonds are contractual instruments (unlike Miller Act bonds on federal projects which are statutory). The supplier's ability to claim against a private payment bond depends on the specific bond language — some private bonds cover all parties who furnish labor or materials while others limit coverage to first-tier subcontractors. The supplier must review the bond terms to determine eligibility.

**16. D** — A harness with visible defects — frayed stitching, cracked D-ring housing, and faded webbing — has been correctly tagged as defective by the competent person. The harness must be permanently

removed from service and destroyed or clearly marked as unusable to prevent accidental reuse. The worker must receive a replacement harness before returning to work at height.

**17. B** — Multiple violations exist: the workers were not trained on where SDSs are located (none of three workers knew), which violates the HazCom training requirement. Additionally, a locked office with an occasionally absent superintendent may not meet the "readily accessible" standard because employees cannot access SDSs when the superintendent is away. Both training and accessibility requirements are violated.

**18. A** — Ohio workers' compensation provides two primary categories of benefits: medical benefits covering all reasonable and necessary medical treatment related to the workplace injury, and temporary total disability benefits providing wage replacement (typically sixty-six and two-thirds percent of the average weekly wage) for the period the employee is unable to work due to the injury.

**19. C** — The contract requires final payment within thirty days of the architect's final certificate. The architect issued the final certificate on August 25. Thirty days from August 25 is September 24. The owner must release the remaining \$48,000 in retainage by September 24. The date of substantial completion and the date of closeout document submission are not the triggers for final payment — the architect's final certificate is.

**20. D** — The existing fire escape was not part of the contractor's scope and the contractor is not required to upgrade building elements outside the contracted work. The architect should have addressed code compliance during the design phase, and the building department should have identified the deficiency during the permit review. However, the contractor's failure to raise the issue proactively, while not legally obligating the contractor to pay, represents a missed opportunity to alert the owner.

**21. D** — Break-even =  $\$480,000 \div 0.18 = \$2,666,667$ . If revenue has declined fifteen percent over two years from a higher level, the current revenue may be approaching or falling below this break-even point. Fixed overhead of \$480,000 must be covered regardless of revenue volume, and declining revenue means less gross profit is available to cover that unchanged overhead.

**22. C** — The Ohio CAT is assessed at the business entity level, not at the individual taxpayer level. The plumbing business and the consulting business are separate entities (or at least separate business activities) and each files its own CAT return based on its own gross receipts. Joint personal income tax filing status does not combine the two businesses for CAT purposes.

**23. A** — Ohio generally allows retroactive application of exemption certificates within applicable time limits. The contractor may present the university's exemption certificate to the supplier for a credit or file a refund claim with the Ohio Department of Taxation. Four months is likely within the allowable window, though specific time limitations and procedures should be verified.

**24. B** — A conditional lien waiver becomes effective only when the stated condition is met — actual receipt of payment. When the check bounced, the subcontractor did not actually receive the payment. The condition was not satisfied, and the conditional waiver never became effective. The subcontractor's lien rights remain fully intact, which is exactly why conditional waivers provide critical protection.

**25. D** — The subcontractor's unconditional waiver releases only the subcontractor's lien rights, not the lien rights of the subcontractor's suppliers. The supplier properly preserved lien rights by serving a

timely Notice of Furnishing and filing a valid lien. The GC may have contractual exposure to the owner because the prime contract typically requires the GC to keep the property free of liens.

**26. B** — Ohio allows six years from the date the mechanic's lien affidavit was filed to commence a foreclosure action. The lien was filed on April 1, and the foreclosure was filed approximately four years later on March 25 — well within the six-year enforcement window. The lawsuit is timely with approximately two years still remaining in the enforcement period.

**27. A** — Revised contract price:  $\$1,350,000 + \$120,000 = \$1,470,000$ . Revised total estimated cost:  $\$1,080,000 + \$100,000 = \$1,180,000$ . Revised percentage complete:  $\$810,000 \div \$1,180,000 = 68.64\%$ . Revised expected profit:  $\$1,470,000 - \$1,180,000 = \$290,000$ . Revised revenue to date:  $68.64\% \times \$1,470,000 =$  approximately  $\$1,009,008$ .

**28. C** — Working capital:  $\$560,000 - \$390,000 = \$170,000$ . Current ratio:  $\$560,000 \div \$390,000 = 1.44$ . Bonding capacity:  $15 \times \$170,000 = \$2,550,000$ . The current ratio of 1.44 indicates adequate short-term liquidity, and the  $\$2,550,000$  bonding capacity represents the surety's guideline maximum for aggregate bonded work.

**29. D** — OSHA specifies a maximum allowable slope of one horizontal to one vertical (45 degrees) for Type B soil. A slope of approximately 60 degrees is significantly steeper than the maximum 45-degree allowance. This creates a substantial probability of a cave-in that could cause death or serious physical harm — the definition of a serious violation. The competent person's field approval does not override OSHA's tabulated data requirements.

**30. B** — The employer must complete Section 2 of the I-9 form within three business days of the date of hire. The employee was hired on Monday, so the three-business-day deadline counts Tuesday (Day 1), Wednesday (Day 2), and Thursday (Day 3). Section 2 must be completed by Thursday at the latest.

**31. C** — A non-discretionary bonus must be included in the regular rate calculation. Total straight-time earnings:  $(44 \times \$40.00) + \$300 = \$1,760 + \$300 = \$2,060$ . Regular rate:  $\$2,060 \div 44 = \$46.82$ . Overtime premium for four hours:  $\$46.82 \times 0.5 \times 4 = \$93.64$ . The  $\$300$  bonus increases both the regular rate and the overtime premium above what the base wage alone would produce.

**32. A** — In an S-corporation, only the salary ( $\$110,000$ ) is subject to FICA payroll taxes. Shareholder distributions ( $\$95,000$ ) are not subject to FICA or self-employment tax. The SEP-IRA contribution ( $\$18,000$ ) reduces taxable income but does not affect the FICA calculation, which is based on W-2 wages.

**33. D** — Taxable gross receipts above  $\$1,000,000$ :  $\$5,800,000 - \$1,000,000 = \$4,800,000$ . Percentage tax:  $\$4,800,000 \times 0.0026 = \$12,480$ . Minimum tax:  $\$800$ . Total CAT:  $\$12,480 + \$800 = \$13,280$ . The CAT has two components — the minimum tax for the first  $\$1,000,000$  tier plus the 0.26% rate on receipts above  $\$1,000,000$ .

**34. B** — The most important evidence is whether the employer maintained consistent documentation of tardiness that predates the OSHA complaint. If the disciplinary record shows a pattern of documented tardiness over three months — with warnings issued before the complaint was filed — the employer can demonstrate a legitimate, non-retaliatory basis for the termination that existed independently of the safety complaint.

**35. A** — The warranty covers defects in the contractor's original workmanship, not damage caused by third parties. The investigation determined the leak was caused by the owner's maintenance contractor damaging the roofing membrane — not by a defect in the contractor's original installation. The contractor should document the findings with photographs and a written report, and the owner should pursue the maintenance contractor for the repair cost.

**36. C** — The Hazard Communication Standard requires employers to provide training before employees work with or are exposed to hazardous chemicals. The worker used the curing compound on Wednesday without having received HazCom training. Planning to train on Friday does not satisfy the requirement — training must occur before exposure, not after.

**37. D** — Estimated cost at completion = total budget ÷ CPI = \$1,200,000 ÷ 0.953 = approximately \$1,259,181. This projection assumes the current cost performance trend continues through project completion. A CPI below 1.0 means the project is spending more per unit of work than planned, and the estimate at completion reflects the cumulative impact of this inefficiency.

**38. B** — The photographs provide strong evidence because they document specified material labels at the time of installation — before any dispute arose. While labels alone are not absolute proof of material composition, they create a strong presumption of compliance that is corroborated by the daily reports showing the work was installed and inspected before walls were closed. The owner would need contradictory evidence to overcome this documentation.

**39. A** — The physician provided only observation — no prescription medication, no medical treatment beyond first aid, and no work restrictions. The employee returned to full duty the next day with no lost time. Under OSHA's recordkeeping criteria, observation alone is not medical treatment. Since no recording triggers were met — no prescription, no treatment beyond first aid, no lost time, no restricted duty — the injury is not recordable.

**40. C** — Under the premises doctrine, injuries sustained while the employee is on the employer's premises — including the parking lot — are generally considered to arise out of and in the course of employment. Walking from the car to the building entrance is a necessary activity related to employment, even if it occurs before the scheduled shift begins. The parking lot is the employer's premises.

**41. B** — Bonding capacity at fifteen times working capital:  $15 \times \$120,000 = \$1,800,000$ . The contractor's \$3,800,000 revenue significantly exceeds the \$1,800,000 bonding capacity. Revenue has nearly doubled while working capital remained flat, creating a dangerous gap between the contractor's project commitments and the financial reserves supporting them. The surety will likely flag this as unsustainable growth.

**42. D** — Under the Miller Act, a first-tier subcontractor's payment bond lawsuit cannot be filed earlier than ninety days after the date of last furnishing (to allow time for payment resolution) and must be filed no later than one year after the date of last furnishing. First-tier subcontractors do not need to provide preliminary notice — only second-tier claimants need the ninety-day notice.

**43. A** — The contractor should have sent a written demand letter promptly after the thirty-day payment period expired on October 1. Waiting an additional month to send the demand weakens the contractor's position and delays the start of the contractual cure period. Prompt written notice preserves the contractor's rights and puts the owner on formal notice that payment is overdue.

**44. C** — Ohio municipal income tax must be withheld based on where the work is actually performed, not where the employer's office is located. Withholding for only the office city when employees work in four different municipalities creates tax liability in the work cities and potential overpayment in the office city. The contractor must track employee hours by location and withhold accordingly.

**45. D** — Projected total:  $\$745,000 + \$240,000 = \$985,000$ . Revised budget:  $\$955,000$ . Projected variance:  $\$985,000 - \$955,000 = \$30,000$  over budget. Contract price:  $\$1,050,000$ . Projected profit:  $\$1,050,000 - \$985,000 = \$65,000$ . The project exceeds the revised budget by  $\$30,000$  but remains profitable at  $\$65,000$ . The project manager should investigate the overrun source.

**46. B** — Partnership income is allocated based on the profit-sharing ratio in the partnership agreement, not on the hours each partner works. The agreement specifies equal sharing, so each partner reports  $\$220,000$  ( $\$660,000 \div 3$ ) regardless of whether they work sixty, forty, or twenty hours per week. If the partners wanted income allocated by hours, the agreement would need to specify that method.

**47. A** — The worker wearing a harness with a disconnected lanyard has no functional fall protection — the harness alone provides no arrest capability. This is at least one OSHA violation. The competent person's failure to identify the disconnected lanyard during active rooftop work may also be cited as a failure of the required competent person oversight. OSHA evaluates each deficiency independently.

**48. C** — Gross profit:  $\$2,100,000 - \$1,638,000 = \$462,000$ . Gross margin:  $\$462,000 \div \$2,100,000 = 22\%$ . Net operating income:  $\$462,000 - \$378,000 = \$84,000$ . Net margin:  $\$84,000 \div \$2,100,000 = 4\%$ . Break-even:  $\$378,000 \div 0.22 = \$1,718,182$ . Current revenue of  $\$2,100,000$  is above break-even.

**49. A** — Withholding the entire  $\$78,000$  in retainage for a  $\$12,000$  warranty issue is disproportionate. The owner should release the retainage minus a reasonable holdback — typically one hundred fifty percent of the estimated repair cost ( $\$12,000$  to  $\$18,000$ ) — to cover the warranty repair. Withholding the full retainage when the disputed amount is a small fraction constitutes an unreasonable withholding.

**50. A** — Davis-Bacon requires workers to be classified and paid according to the work they actually perform, not their job title. Operating boom lifts and forklifts is equipment operator work, not laborer work. The contractor must reclassify the workers, pay back wages for the  $\$7.50$  per hour differential for all hours during the twelve-week period, and submit corrected certified payroll reports.