

PRACTICE EXAM 16: OREGON CCB SIMULATION (80 QUESTIONS)

80 Multiple-Choice Questions | 200 Minutes | Open-Book Format

1. An Oregon residential contractor enters into a contract for a home addition valued at ninety-five thousand dollars. The homeowner asks whether the contractor's surety bond would cover the full contract price if the contractor defaults. What is the correct response regarding the bond's coverage limit?

- A. The surety bond covers the full contract price on every residential project regardless of the bond's face amount
- B. The surety bond coverage is limited to the face amount of the bond on file with the CCB, which may be less than the contract price
- C. The surety bond covers twice the contract price because Oregon requires bonds at two hundred percent of the project value
- D. The surety bond has no dollar limit and provides unlimited coverage for any residential project undertaken by the contractor

2. A contractor is calculating the total cost of a concrete sidewalk project. The sidewalk is two hundred feet long, five feet wide, and four inches thick. Concrete costs one hundred fifty-two dollars per cubic yard. What is the approximate concrete material cost for this project?

- A. Approximately one thousand eight hundred seventy dollars based on the calculated volume at the quoted price per cubic yard
- B. Approximately two thousand seven hundred thirty dollars based on eighteen cubic yards at the quoted unit price
- C. Approximately one thousand two hundred sixteen dollars based on eight cubic yards at the quoted unit price delivered
- D. Approximately three thousand forty dollars based on twenty cubic yards at the quoted price per cubic yard delivered

3. Under Oregon law, a general contractor hires a subcontractor who subsequently hires a sub-subcontractor to perform a portion of the work. The sub-subcontractor is not paid for completed work. Against whose property can the sub-subcontractor file a construction lien?

- A. Only against the general contractor's business property and equipment because the sub-subcontractor has no contract with the owner
- B. Only against the subcontractor who directly hired them because there is no privity of contract with the property owner
- C. Against the property where the work was performed, provided the sub-subcontractor complied with all notice and filing requirements under Oregon lien law
- D. Against both the property where the work was performed and the general contractor's personal residence simultaneously

4. A contractor is reviewing OSHA's hazard communication standard requirements for a construction project. Multiple chemical products including adhesives, solvents, and sealants will be used on the jobsite. What is the contractor's primary obligation under this standard?

- A. Storing all chemical products in a single locked container accessible only to the site superintendent during work hours
- B. Maintaining safety data sheets for all hazardous chemicals on the jobsite and ensuring workers are trained on the hazards and safe handling procedures
- C. Submitting a complete chemical inventory list to the local fire department before any chemical products arrive on site
- D. Requiring each chemical manufacturer to send a representative to the jobsite to train workers on their specific products

5. A contractor operating as a sole proprietor in Oregon earns a net profit of one hundred twenty thousand dollars from construction work during the tax year. Which federal self-employment tax obligation applies to this income?

- A. Self-employment tax applies only to the first fifty thousand dollars of net earnings from self-employment activities
- B. Self-employment tax is optional for sole proprietors who also pay estimated quarterly income taxes to the federal government
- C. Self-employment tax is waived if the contractor's gross revenue exceeds two hundred fifty thousand dollars during the tax year
- D. The contractor must pay self-employment tax covering both the employer and employee portions of Social Security and Medicare on the net self-employment income

6. A residential contractor in Oregon completes a bathroom remodel and the homeowner signs a completion certificate. Three months later, the homeowner discovers a hidden plumbing leak behind the newly tiled shower wall that is causing water damage to the subfloor. Under Oregon law, does the completion certificate prevent the homeowner from pursuing a claim?

- A. No, because a completion certificate does not waive the homeowner's rights regarding latent defects that were not visible or discoverable at the time of sign-off
- B. Yes, because the homeowner's signature on the completion certificate constitutes full acceptance of all work including hidden conditions
- C. Yes, but only if the contractor included a specific waiver of latent defect claims in the language of the completion certificate
- D. No, but the homeowner must wait until the one-year warranty period expires before filing any claim for latent defects

7. A project manager is tracking a commercial construction project using earned value management. The project's schedule performance index is zero point eight-eight. What does this metric indicate about the project status?

- A. The project is eight-eight percent complete based on the original budgeted scope of work at this point in time
- B. The project is twelve percent under budget compared to the planned expenditure rate at this stage of construction
- C. The project is behind schedule because for every dollar of work planned, only eighty-eight cents of work has been completed
- D. The project has consumed eighty-eight percent of the available float on the critical path activities in the schedule

8. An Oregon contractor is hired to install a residential deck. During construction, the contractor discovers that the existing ledger board attachment to the house is deteriorated and structurally inadequate. The contract does not include ledger board replacement. What should the contractor do?

- A. Attach the new deck to the existing ledger board and include a disclaimer in the warranty excluding the existing connection
- B. Replace the ledger board without discussion because the contractor has an implied obligation to correct all structural deficiencies
- C. Complete the deck without the ledger attachment by installing a freestanding support beam adjacent to the house wall instead
- D. Stop work on the ledger connection, inform the homeowner of the deteriorated condition in writing, and present options including a change order for the repair

9. A contractor employs fifteen workers on a commercial construction project. Under OSHA regulations, which of the following safety documentation requirements applies to this employer?

- A. The contractor must maintain a written injury and illness prevention program but is exempt from maintaining OSHA 300 logs
- B. The contractor must maintain OSHA 300 logs recording all recordable work-related injuries and illnesses throughout the year
- C. The contractor is exempt from all OSHA documentation requirements because the company employs fewer than twenty workers
- D. The contractor must submit monthly safety reports to OSHA regional office documenting all near-miss incidents on site

10. A general contractor on a public works project in Oregon receives a bid from a subcontractor that is significantly lower than all other bids for the same scope of work. The low bid is thirty percent below the next closest bid. What due diligence should the contractor perform before accepting this bid?

- A. Accept the bid immediately because the lowest price always represents the best value on public works construction projects
- B. Reject the bid automatically because any bid more than twenty percent below the average must be excluded from consideration
- C. Investigate whether the bid includes all required scope, verify the subcontractor's license and bonding, check references, and determine if the price is realistic before making a selection
- D. Accept the bid but require the subcontractor to post a performance bond equal to two hundred percent of their bid amount

11. Under Oregon employment law, an employer must provide employees with itemized wage statements each pay period. Which of the following information must be included on the statement?

- A. Gross wages, deductions, net pay, hours worked, pay rate, and the pay period dates as required by Oregon wage payment law
- B. Only the net pay amount and the check number are required on the wage statement for Oregon construction workers
- C. Gross wages and federal tax withholding only, with all other deductions disclosed on an annual basis at year end
- D. The wage statement is optional in Oregon if the employer provides annual W-2 forms to all employees by January thirty-first

12. A contractor is scheduling a residential project and creates a network diagram using the precedence diagramming method. The critical path through the network has a total duration of one hundred forty-two working days. What does this duration represent?

- A. The maximum amount of time the project will take if every activity experiences its worst-case delay scenario
- B. The average duration calculated from the optimistic, most likely, and pessimistic estimates for all project activities
- C. The minimum possible project duration assuming all activities are completed without delay and resources are available as planned
- D. The total calendar days including weekends and holidays from the notice to proceed to the certificate of occupancy

13. A contractor's employee slips on wet concrete and fractures their wrist on a commercial jobsite. The employee files a workers' compensation claim. Under Oregon law, which benefits is the injured worker entitled to receive?

- A. Only medical treatment costs with no wage replacement benefits until the employee has been off work for fourteen consecutive days
- B. Medical treatment for the injury, temporary disability benefits for lost wages during recovery, and potential permanent disability benefits if applicable
- C. A lump-sum payment equal to six months of wages in lieu of all other workers' compensation benefits for the fracture
- D. Medical treatment paid by the employer directly, but all wage replacement benefits are paid by the state general fund

14. A contractor is bidding on a project and the specifications call for a particular brand of commercial roofing membrane followed by the phrase "or approved equal." What does this specification language mean for the contractor?

- A. The contractor must install only the named brand and the "or approved equal" language is included solely for legal compliance
- B. The contractor may substitute any roofing membrane without approval as long as the price is equal to or greater than the specified brand
- C. The contractor must use the named brand unless the project owner provides a written waiver allowing an alternative product
- D. The contractor may propose a substitute product that meets the same performance specifications, subject to review and approval by the architect or engineer

15. A contractor is managing a residential project and the building inspector fails the rough plumbing inspection due to improper slope on the drain lines. The plumbing subcontractor must correct the installation. Who bears the cost of the correction and reinspection?

- A. The general contractor bears the correction cost because the general contractor is responsible for all quality control on the project
- B. The plumbing subcontractor bears the cost of correcting their defective work and the reinspection fees because the failed inspection resulted from their installation error
- C. The homeowner bears the reinspection fee because all inspection costs are the property owner's responsibility under the building permit
- D. The building department waives the reinspection fee for first-time failures and charges only for subsequent failed inspections

16. Under Oregon law, a contractor enters into a residential construction contract that includes a mandatory arbitration clause. The homeowner later wants to file a lawsuit in court instead of pursuing arbitration. Is the arbitration clause enforceable?

- A. No, because Oregon law prohibits mandatory arbitration clauses in all residential construction contracts without exception
- B. Generally yes, mandatory arbitration clauses in construction contracts are enforceable if both parties agreed to the terms, though certain statutory claims may have specific protections
- C. No, because the homeowner has an absolute right to a jury trial that cannot be waived in a residential construction contract
- D. Yes, but only if the contractor pays all arbitration fees and costs regardless of the outcome of the arbitration proceeding

17. A contractor is pouring a concrete foundation wall and the structural specifications require a minimum of three inches of concrete cover over the reinforcing steel. The purpose of this cover requirement is to protect the rebar from which primary deterioration mechanism?

- A. Ultraviolet radiation that degrades the surface of exposed reinforcing steel bars in above-grade wall applications
- B. Thermal expansion that causes reinforcing steel to bend and deform when exposed to seasonal temperature fluctuations
- C. Corrosion caused by moisture and chemical exposure that penetrates the concrete and reaches the embedded reinforcing steel over time
- D. Galvanic reaction between dissimilar metals when the reinforcing steel contacts copper plumbing pipes embedded in the wall

18. A contractor is reviewing a subcontract agreement and finds that the payment terms require the subcontractor to waive all lien rights as a condition of receiving each progress payment. Under Oregon law, is this lien waiver provision enforceable?

- A. Conditional lien waivers tied to actual receipt of payment are generally enforceable, but blanket prospective waivers of all future lien rights before work is performed may not be enforceable
- B. All lien waivers in subcontract agreements are unenforceable because Oregon law prohibits any waiver of construction lien rights
- C. Lien waivers are enforceable only on public works projects where a payment bond substitutes for the lien right protection
- D. Lien waivers are enforceable only if the subcontractor's attorney reviews and co-signs each waiver document before submission

19. A contractor is planning a project that requires temporary shoring of an adjacent building's foundation during excavation for a new basement. The excavation will undercut the existing foundation by three feet. Under Oregon building codes, what permit or approval is required for this shoring work?

- A. No permit is required for temporary shoring because it is classified as a temporary construction measure not subject to permits
- B. Only a verbal notification to the adjacent property owner is required before the shoring installation begins on the project
- C. A demolition permit is required because the shoring work involves modification of the adjacent building's foundation system
- D. A building permit and an engineered shoring plan prepared by a licensed professional engineer are required before the shoring work begins

20. A contractor discovers that an employee has been falsifying daily time sheets by recording eight hours when the employee consistently arrives one hour late. After documenting the pattern over two weeks, the contractor decides to terminate the employee. Under Oregon employment law, what is the contractor's obligation regarding the termination?

- A. The employer may terminate the employee for cause based on the documented falsification and must pay all earned wages by the end of the first business day after termination
- B. The employer must provide the employee with a thirty-day written warning before termination can take effect for timesheet fraud
- C. The employer must file a report with the Oregon Bureau of Labor and Industries before terminating the employee for misconduct
- D. The employer must offer the employee a final opportunity to correct the behavior through a formal performance improvement plan

21. A contractor completes a commercial tenant improvement project and submits the final pay application. The owner's architect conducts a final inspection and identifies a punch list of twelve minor items. The owner refuses to make any payment until all twelve items are completed. Under standard contract terms, is the owner's complete withholding of payment justified?

- A. Yes, because the owner has no obligation to pay until every item on the punch list is completed and approved by the architect
- B. Yes, because the architect's identification of deficiencies automatically suspends all payment obligations under the contract
- C. No, but the owner may withhold only the actual cost of the twelve uncompleted items, not the amount specified in the retainage clause
- D. No, the owner should pay the undisputed portion of the application and may withhold only an amount reasonably related to the cost of completing the punch list items

22. A contractor is building a wood-framed residential house and the building code requires fire blocking in concealed wall spaces. What is the primary purpose of fire blocking in wood-framed wall assemblies?

- A. To provide additional structural support at mid-height of the wall studs to prevent lateral buckling under load conditions
- B. To create an airtight seal in the wall cavity that improves the thermal performance of the insulation system installed
- C. To slow the spread of fire and hot gases through concealed spaces within the wall, floor, and ceiling assemblies by compartmentalizing the cavities
- D. To provide a nailing surface for interior finish materials at the midpoint of the wall between the top and bottom plates

23. A contractor is preparing a bid for a municipal water line replacement project. The bid documents require compliance with Oregon's prevailing wage law. The contractor must pay prevailing wages to which workers on this project?

- A. All workers performing construction labor on the public works project, including the contractor's employees, subcontractor employees, and any other workers performing covered work
- B. Only the contractor's direct employees, while subcontractor workers are paid at the subcontractor's standard wage rate
- C. Only workers performing underground utility work because surface restoration work is exempt from prevailing wage requirements

D. Only journeyman-level workers, while apprentices and laborers may be paid at the contractor's standard rate schedule

24. A homeowner hires a contractor to remodel a kitchen. During demolition, the contractor finds that the existing load-bearing wall scheduled for removal has an undersized header that does not meet current building code requirements. The contract scope includes removing this wall and installing a new beam. What is the contractor's obligation regarding the header?

A. Install the new beam to match the existing undersized header dimensions because the original construction was code-compliant at the time

B. Notify the homeowner that the header issue existed before the remodel and disclaim responsibility for any structural inadequacy

C. File a complaint with the original builder's surety bond company for the undersized header before proceeding with the current project

D. Install the new beam sized to meet current building code requirements because the new work must comply with the code in effect at the time of the permit

25. A contractor is managing a commercial project and the owner requests a value engineering proposal to reduce the project cost by ten percent. Which approach best represents value engineering in construction?

A. Reducing the quality of all specified materials by one grade level across every building system to achieve the cost target

B. Eliminating the project contingency and reducing the contractor's profit margin to achieve the ten percent cost reduction

C. Analyzing building systems and materials to identify alternatives that maintain or improve performance and quality while reducing cost through more efficient designs or substitute products

D. Delaying the project start date by six months to take advantage of anticipated decreases in material prices and labor rates

26. Under Oregon law, a contractor is required to provide a written contract for residential construction projects exceeding a specified dollar threshold. What information must the contract include regarding the timeline for the work?

A. A guaranteed completion date with automatic penalties of one percent per day for any delay beyond the stated date

B. The estimated start date and substantial completion date, or the duration of the project, as required by Oregon residential contract law

- C. Only the start date is required because Oregon law does not mandate that completion dates be included in residential contracts
- D. A detailed daily schedule showing every task and the specific trade responsible for each activity throughout the project

27. A contractor's employee reports a near-miss incident where a load of lumber nearly fell from a crane during a lift operation. No one was injured and no property was damaged. Under OSHA regulations, is the contractor required to report this incident?

- A. Yes, because all crane-related incidents must be reported to OSHA within eight hours regardless of whether injuries occurred
- B. No, OSHA does not require reporting of near-miss incidents where no injury or illness occurred, but the employer should investigate the incident and implement corrective actions
- C. Yes, because near-miss incidents involving suspended loads must be documented on the OSHA 300 log as a recordable event
- D. No, and the employer is also not required to investigate the incident unless a formal written complaint is filed by an employee

28. A contractor installs a residential furnace and connects it to the existing ductwork. The building inspector discovers that the furnace installation does not include a carbon monoxide detector as required by the Oregon Residential Specialty Code. What must the contractor do to pass the inspection?

- A. Provide the homeowner with a portable battery-operated carbon monoxide detector and document the delivery in writing
- B. Install a carbon monoxide detector only if the furnace is gas-fired, with electric furnaces exempt from the requirement
- C. Request a variance from the building department because carbon monoxide detectors are required only in new construction
- D. Install a carbon monoxide detector in accordance with code requirements at the contractor's expense before requesting reinspection

29. A contractor is estimating a residential painting project. The house has twenty-two hundred square feet of interior wall surface to paint. The paint coverage rate is three hundred fifty square feet per gallon for a single coat. The specifications require two coats. How many gallons of paint should the contractor order, rounded up to the nearest whole gallon?

- A. Seven gallons based on the wall area divided by the coverage rate for a single coat application only

- B. Ten gallons based on applying a thirty percent waste factor to the single-coat quantity for the interior walls
- C. Thirteen gallons based on the total wall area multiplied by two coats divided by the coverage rate per gallon
- D. Sixteen gallons based on the total wall area multiplied by two coats plus a twenty-five percent waste factor

30. A contractor is reviewing an insurance certificate from a subcontractor and notices that the general liability policy has an aggregate limit of one million dollars and a per-occurrence limit of five hundred thousand dollars. A single incident causes seven hundred thousand dollars in damages. How much will the subcontractor's policy pay for this single incident?

- A. Five hundred thousand dollars, because the per-occurrence limit caps the payout for any single incident regardless of the aggregate limit
- B. Seven hundred thousand dollars, because the claim is within the aggregate limit and the per-occurrence limit does not apply to construction projects
- C. One million dollars, because the aggregate limit represents the maximum the policy will pay for any single catastrophic event
- D. Three hundred fifty thousand dollars, because the policy pays only fifty percent of the per-occurrence limit on construction-related claims

31. A contractor is performing a pre-bid site visit for a commercial renovation project. During the visit, the contractor notices significant water staining on the ceiling tiles in multiple areas. The bid documents do not address water intrusion or roof repair. What should the contractor do before submitting a bid?

- A. Include the water intrusion issue in a standard scope exclusion statement and bid only the specified renovation work
- B. Submit a request for information to the architect or owner asking whether the water intrusion has been addressed and whether the renovation scope includes related repairs
- C. Add a roof repair allowance to the bid without notifying the owner because the water damage is self-evident from the site visit
- D. Decline to bid on the project because the water intrusion represents an unacceptable risk for any responsible contractor

32. Under Oregon construction law, a contractor completes a project and the homeowner alleges that the workmanship is defective. The homeowner files a complaint with the CCB. What is the CCB's role in resolving this dispute?

- A. The CCB investigates the complaint, may inspect the work, attempts to facilitate a resolution, and may order the contractor to make repairs or pay damages from the surety bond if appropriate
- B. The CCB serves only as a filing office and forwards all complaints directly to circuit court for judicial resolution
- C. The CCB acts as a binding arbitrator and issues a final decision that neither party may appeal under any circumstances
- D. The CCB refers the complaint to the Oregon Attorney General's office for prosecution as a consumer protection violation

33. A contractor is building a commercial structure and the fire marshal requires a fire-rated corridor with a one-hour fire-resistance rating. The contractor installs the rated wall assembly but fails to install fire-rated door assemblies in the corridor openings. What is the consequence of this omission?

- A. The corridor passes inspection because only the walls are required to meet the fire-resistance rating, not the door assemblies
- B. The corridor passes inspection if the doors are solid wood core doors regardless of whether they carry a fire rating label
- C. The fire marshal grants a temporary occupancy permit allowing the owner to use the building while rated doors are ordered
- D. The corridor fails inspection because all components of a fire-rated assembly, including doors and frames, must meet the specified fire-resistance rating to maintain the integrity of the fire barrier

34. A contractor is hired to install a new septic system for a rural residential property in Oregon. Which state agency regulates the installation of on-site sewage disposal systems in Oregon?

- A. The Oregon Construction Contractors Board regulates all septic system installations through the contractor licensing program
- B. The Oregon Department of Environmental Quality regulates septic installations through the building codes division
- C. The Oregon Department of Environmental Quality oversees on-site sewage disposal through county-level programs authorized by the state
- D. The local building department regulates septic system installations under the same permit process as all other plumbing work

35. A general contractor discovers midway through a commercial project that a mechanical subcontractor has been installing HVAC equipment that does not match the approved

submittals. The equipment installed has different specifications than what was reviewed and approved. What is the general contractor's obligation?

- A. Direct the mechanical subcontractor to stop installing non-conforming equipment immediately, remove what has been incorrectly installed, and replace it with the approved equipment at the subcontractor's expense
- B. Accept the installed equipment if it appears to function properly during initial testing and operational checkout procedures
- C. Notify the architect and request a revision to the submittals to match the equipment that has already been installed on site
- D. Deduct the cost difference between the approved and installed equipment from the subcontractor's next progress payment

36. A contractor is excavating for a residential foundation and encounters a high water table that was not indicated in the soils report. The water is seeping into the excavation faster than the contractor can pump it out. Under standard contract provisions, what right does the contractor have?

- A. The contractor has no additional rights because all subsurface conditions are the contractor's risk under a fixed-price contract
- B. The contractor may abandon the project without penalty because the soil conditions make the work impossible to complete
- C. The contractor must complete the work as originally priced but may extend the schedule by one week without formal approval
- D. The contractor may submit a claim for a differing site condition and request additional compensation and time to address the unexpected water table

37. A contractor's bookkeeper notices that the company has been paying Oregon unemployment insurance taxes at a rate higher than required based on the company's current experience rating. What action should the contractor take?

- A. Continue paying at the higher rate because the Oregon Employment Department does not issue refunds for overpaid unemployment taxes
- B. Contact the Oregon Employment Department to verify the correct tax rate, request an adjustment, and file for a refund of any overpayment
- C. Reduce the next quarterly payment by the estimated overpayment amount without contacting the Employment Department
- D. Deduct the overpayment from the company's federal unemployment tax return as an offsetting credit against FUTA liability

38. A contractor is installing a commercial fire alarm system. The building code requires that the fire alarm system be connected to the local fire department monitoring service. The contractor completes the installation but does not arrange for the monitoring connection. Under Oregon building codes, what is the status of this installation?

- A. The installation is complete because the monitoring connection is the building owner's responsibility and not the contractor's scope
- B. The installation passes inspection if the contractor provides written evidence that a monitoring contract has been executed
- C. The installation is accepted conditionally with a ninety-day grace period for the monitoring service to be established
- D. The installation is incomplete and will not pass final inspection because the code-required monitoring connection is part of the fire alarm system installation

39. A contractor is managing a project and two activities in the schedule have a start-to-start relationship with a five-day lag. What does this scheduling relationship mean?

- A. The second activity must finish five days after the first activity finishes for the relationship to be satisfied
- B. The second activity may start five days after the first activity starts, allowing both activities to proceed in parallel with a staggered beginning
- C. Both activities must start on the same day and the five-day lag applies to the finish dates of both activities
- D. The first activity must be completed at least five days before the second activity can begin under any circumstances

40. Under Oregon law, a contractor who installs a water heater in a residential property must ensure the installation complies with current plumbing and mechanical codes. Which safety device is required on all residential water heater installations?

- A. A whole-house water filtration system installed on the cold water supply line upstream of the water heater
- B. A recirculating pump system that maintains hot water temperature at all fixtures throughout the residential structure
- C. A temperature and pressure relief valve with a discharge pipe routed to an approved location to prevent scalding and tank rupture
- D. A seismic restraint strap system regardless of the seismic design category assigned to the project location

41. A contractor is building a residential home and the local code requires the installation of a radon mitigation system. The lot is in a designated high-radon zone. What does a basic passive radon mitigation system typically include?

- A. A gas-permeable layer beneath the slab, a sealed slab with penetrations caulked, and a vertical vent pipe routed through the building and extending above the roofline
- B. A series of exhaust fans installed in each room that operate continuously to dilute radon gas concentrations below action levels
- C. Activated carbon filters installed in the HVAC return air ducts that absorb radon gas particles before they enter the living space
- D. Waterproof membrane applied to the exterior foundation walls to prevent radon gas from entering through the foundation

42. A contractor is reviewing the project drawings and discovers that the architectural floor plan shows a wall in a different location than the structural framing plan. The discrepancy is approximately two feet. Before proceeding with construction, what should the contractor do?

- A. Submit a request for information to the architect and structural engineer identifying the conflict and requesting a clarification or revision before building either version of the wall
- B. Build the wall per the architectural floor plan because architectural drawings always take precedence over structural drawings
- C. Build the wall per the structural framing plan because structural documents always take precedence over architectural plans
- D. Split the difference and locate the wall one foot from each plan's position to compromise between the two documents

43. A project owner provides a contractor with a construction schedule that requires the building to be weather-tight within sixty days of the notice to proceed. The contractor determines that weather-tight status is achievable in seventy-five days under normal conditions. What is the contractor's best course of action before signing the contract?

- A. Sign the contract and plan to work overtime and weekends to meet the sixty-day requirement without discussing it with the owner
- B. Sign the contract and submit a time extension request on the first day of construction citing an unrealistic project timeline
- C. Negotiate with the owner to revise the schedule to reflect a realistic timeline, or clearly identify the additional costs of acceleration needed to meet the sixty-day requirement before signing the contract
- D. Decline to bid on the project because any schedule that requires acceleration is inherently unfair to the contractor

44. A contractor is performing a residential renovation and discovers knob-and-tube electrical wiring in the walls and attic. The wiring appears intact and is currently energized. The renovation scope does not include electrical work. What is the contractor's obligation regarding this discovery?

- A. Remove all knob-and-tube wiring and replace it with modern NM cable because it is a code violation to leave it in place
- B. Leave the wiring undisturbed and make no mention of it because the electrical system is outside the contracted scope of work
- C. De-energize all knob-and-tube circuits before performing any work in the areas where the wiring is present in walls or attic
- D. Inform the homeowner of the presence of the knob-and-tube wiring and advise evaluation by a licensed electrician, especially if insulation work will be performed near the wiring

45. A contractor is building a commercial parking lot and the stormwater management plan requires a bioswale to manage runoff from the paved surfaces. What is the primary function of a bioswale in a construction project's stormwater management system?

- A. To increase the velocity of stormwater runoff so it reaches the municipal storm drain system more quickly during heavy rain
- B. To provide temporary storage for construction debris and sediment generated during the grading and paving operations
- C. To slow, filter, and infiltrate stormwater runoff through vegetation and engineered soil media, reducing pollutant discharge and managing flow rates
- D. To permanently divert all stormwater runoff away from the paved parking area into an underground detention vault system

46. Under Oregon tax law, a contractor purchases a piece of construction equipment for seventy-five thousand dollars. The contractor wants to maximize the first-year tax deduction for this equipment purchase. Which federal tax provision allows the contractor to deduct the full cost of qualifying equipment in the year of purchase rather than depreciating it over multiple years?

- A. The standard straight-line depreciation method spread over the equipment's useful life of seven or more years
- B. The double-declining balance depreciation method which accelerates deductions in the first two years of ownership
- C. The modified accelerated cost recovery system which spreads deductions over five years for construction equipment
- D. The Section 179 deduction, which allows eligible businesses to deduct the full purchase price of qualifying equipment in the year it is placed in service

47. A contractor is hired to build a retaining wall on a hillside residential lot. The geotechnical report indicates unstable soil conditions with a high potential for landslide activity. The contractor proceeds with construction without addressing the soil stability concerns identified in the report. A landslide subsequently damages the retaining wall and the neighboring property. What is the contractor's potential liability?

- A. No liability because the geotechnical engineer who prepared the report bears sole responsibility for the soil stability assessment
- B. Liability limited to repairing the contractor's own retaining wall with no responsibility for damage to the neighboring property
- C. Liability limited to the original contract price because the retaining wall contract caps the contractor's total financial exposure
- D. Potential liability for damages to both the retaining wall and the neighboring property because the contractor had knowledge of the unstable conditions and failed to take appropriate precautions

48. A contractor is installing roof trusses on a residential project. The truss manufacturer's installation guide specifies that temporary bracing must remain in place until all permanent bracing and sheathing are installed. The framing crew removes the temporary bracing prematurely to install the roof sheathing more quickly. What risk does this practice create?

- A. The trusses may experience minor cosmetic bowing that is corrected once the permanent sheathing is applied to the roof
- B. The trusses may collapse because they lack the lateral stability provided by temporary bracing, creating a serious safety hazard for workers below
- C. The sheathing installation is accelerated but the truss warranty is voided only if damage occurs during the construction phase
- D. The trusses shift slightly but are realigned by the weight of the roofing materials applied during the final installation phase

49. A contractor is reviewing a commercial lease agreement for office space to serve as the company's headquarters. The lease includes a triple net provision. What does a triple net lease require the tenant to pay in addition to the base rent?

- A. Only the property taxes on the leased space, with the landlord responsible for insurance and maintenance expenses
- B. Only the building insurance premium and common area maintenance, with property taxes remaining the landlord's obligation

- C. Property taxes, building insurance, and common area maintenance costs in addition to the base monthly rent payment
- D. Triple the base rent amount during the first three years of the lease term as a security deposit for the landlord

50. A contractor is performing concrete placement for a commercial foundation and the specifications require slump testing for quality control. What does the slump test measure?

- A. The compressive strength of the concrete at twenty-eight days after placement and proper curing under field conditions
- B. The air content of the concrete mix which affects durability and freeze-thaw resistance in cold weather climates
- C. The temperature of the freshly mixed concrete to ensure it falls within the acceptable range for placement and curing
- D. The consistency and workability of freshly mixed concrete, indicating the water content and flow characteristics of the mix

51. A contractor is building a residential home and the plans call for engineered floor trusses spanning twenty-four feet. The truss manufacturer provides a stamped design with specific bearing and connection requirements. The contractor decides to reduce the bearing length from three and one-half inches to one and one-half inches to simplify the framing connection. What is the consequence of this change?

- A. No consequence because the floor trusses are over-engineered and can accommodate reduced bearing length without issue
- B. The reduced bearing may cause the truss to fail because the connection does not meet the manufacturer's engineered design specifications, potentially voiding the structural warranty and creating a safety hazard
- C. The change is acceptable as long as the contractor installs additional bridging between the floor trusses to compensate
- D. The building inspector will approve the reduced bearing if the contractor provides a field sketch showing the modified detail

52. Under Oregon employment law, employers must carry workers' compensation insurance. A sole proprietor with no employees applies for an exemption from this requirement. Under what condition is the exemption valid?

- A. The sole proprietor is exempt from carrying workers' compensation insurance when they have no employees, subject to specific criteria under Oregon law, but must still maintain a CCB license and surety bond

- B. The sole proprietor is never exempt because all CCB-licensed contractors must carry workers' compensation regardless of employees
- C. The sole proprietor is exempt only if they earn less than fifty thousand dollars per year in gross construction revenue
- D. The sole proprietor is exempt only for the first two years of business operation and must obtain coverage starting in year three

53. A contractor is managing a large commercial project and uses a document control system to track all project correspondence, submittals, change orders, and requests for information. What is the primary benefit of a formal document control system?

- A. It reduces the contractor's insurance premiums by demonstrating organized project management practices to the underwriter
- B. It allows the contractor to destroy original documents after scanning them into the electronic system within thirty days
- C. It transfers legal responsibility for project errors from the contractor to the document control manager who maintains the files
- D. It creates an organized, traceable record of all project communications and decisions, providing documentation that can be referenced during disputes, claims, or litigation

54. A contractor's project requires installation of underground electrical conduit. The specifications call for schedule forty PVC conduit buried at a minimum depth of twenty-four inches below finished grade. The contractor installs the conduit at eighteen inches below grade to avoid an existing utility line. What is the consequence of this shallower installation?

- A. The installation passes inspection because the contractor documented a valid reason for the reduced burial depth in the field log
- B. The installation fails inspection because it does not meet the minimum burial depth specified, and the contractor must either lower the conduit or obtain an approved variance from the engineer and the inspector
- C. The installation is acceptable because schedule forty PVC conduit has sufficient strength to withstand loads at shallower depths
- D. The inspector accepts the installation if the contractor installs a concrete protective slab over the conduit at the shallower depth

55. A contractor is building a custom residential home and the homeowner selects a tile product that has a twelve-week manufacturing lead time. The contractor's schedule does not account for this lead time. What project management action should the contractor take immediately?

- A. Substitute a readily available tile product without consulting the homeowner to avoid any impact on the project schedule
- B. Update the project schedule to reflect the lead time, evaluate the impact on the completion date, notify the homeowner, and explore mitigation options such as resequencing work or selecting an alternative product
- C. Delay all project activities until the tile arrives because no other work can proceed without the tile being on site and ready
- D. Order the tile and proceed with all other work without updating the schedule or informing the homeowner of the delay risk

56. Under Oregon law, a property owner files a lien against a contractor's CCB surety bond for defective workmanship on a residential roofing project. The CCB investigates the complaint and determines the claim is valid. What happens next in the bond claim process?

- A. The CCB orders the contractor to perform the repair work within thirty days and the bond is not accessed until the deadline passes
- B. The CCB files a lawsuit against the contractor in circuit court and the bond claim is held in abeyance pending the court decision
- C. The homeowner must hire their own attorney to pursue the bond claim because the CCB does not process bond claims directly
- D. The CCB may order the surety company to pay the valid claim up to the bond amount, and the contractor is then obligated to reimburse the surety for the amount paid

57. A contractor is planning a residential project and the lot survey shows a utility easement running through the back third of the property. The homeowner wants to build a detached garage within the easement area. What must the contractor advise the homeowner?

- A. Construction within a utility easement is generally prohibited without permission from the easement holder, and building in the easement could result in the structure being required to be removed at the owner's expense
- B. Construction within a utility easement is permitted as long as the structure does not exceed one story in height
- C. The easement applies only to underground utilities and above-grade structures may be built within the easement boundaries
- D. The contractor should proceed with construction because utility easements are not enforced on residential properties in Oregon

58. A contractor is performing a concrete slab-on-grade installation for a commercial warehouse. The specifications require a vapor barrier beneath the slab. What is the primary purpose of the vapor barrier in this application?

- A. To increase the compressive strength of the concrete slab by providing a smooth uniform surface beneath the concrete pour
- B. To prevent moisture from migrating through the slab from the ground below, which can damage flooring materials, equipment, or stored goods placed on the slab surface
- C. To provide thermal insulation between the ground and the concrete slab to maintain consistent indoor floor temperatures
- D. To prevent the concrete from bonding to the subgrade material so the slab can move independently during soil settlement

59. A contractor is hired to paint the exterior of a pre-nineteen seventy-eight residential home. Under the EPA's Renovation, Repair, and Painting Rule, what must the contractor do before disturbing any painted surfaces?

- A. Assume that lead-based paint is present unless testing confirms otherwise, follow lead-safe work practices, and provide the homeowner with the EPA pamphlet on lead-based paint hazards
- B. Test every painted surface using a field test kit and only proceed if all surfaces test negative for lead-based paint presence
- C. Obtain a letter from the homeowner acknowledging that lead paint may be present and waiving the contractor's liability
- D. Notify the local health department and obtain a lead paint abatement permit before disturbing any painted exterior surfaces

60. A contractor is managing a project and the critical path analysis shows that the project will finish fifteen working days late based on the current schedule. The contract includes a liquidated damages clause of eight hundred dollars per calendar day. What is the contractor's maximum potential liquidated damages exposure for the fifteen working day delay?

- A. Twelve thousand dollars based on fifteen working days multiplied by eight hundred dollars per day as stated in the contract
- B. Eight thousand dollars based on a ten-day cap that is standard in Oregon commercial construction contract liquidated damages
- C. Zero dollars because liquidated damages apply only to delays caused by the contractor and not to delays from all sources
- D. The exposure depends on the number of calendar days corresponding to the fifteen working days, because the clause specifies calendar days, and the total equals eight hundred dollars multiplied by the actual number of calendar days in the delay period

61. A general contractor on a commercial project receives notice from a subcontractor that the subcontractor intends to file a mechanic's lien for unpaid invoices. The project is on public property owned by the state of Oregon. Can the subcontractor file a construction lien on this public property?

- A. No, construction liens cannot be filed against publicly owned property, but the subcontractor may pursue a claim against the contractor's payment bond
- B. Yes, construction liens can be filed against any property regardless of ownership as long as the notice requirements are met
- C. No, and the subcontractor has no remedy because payment bonds are not required on state-owned public construction projects
- D. Yes, but the lien must be filed with the state rather than the county recorder where the property is physically located

62. A contractor is building a residential deck and the building code requires the deck posts to be supported by concrete footings. The code requires footings to extend below the frost line. In most areas of western Oregon, what is the typical minimum footing depth to meet the frost line requirement?

- A. Twelve inches below the surface is the standard minimum foundation depth for most areas of western Oregon
- B. Eighteen inches below undisturbed soil is the typical minimum footing depth required in most western Oregon jurisdictions
- C. Thirty-six inches below grade is required because Oregon's frost line is uniform statewide at three feet deep
- D. Six inches below grade is sufficient for deck post footings because frost heave does not occur in western Oregon

63. A contractor is hired to install a fire sprinkler system in a new commercial building. The contractor holds a general contractor license but does not hold a specialty license for fire sprinkler installation. Under Oregon law, can the contractor perform this work?

- A. Yes, because a general contractor license authorizes all types of construction work including fire protection system installation
- B. Yes, but only if the contractor completes an eight-hour fire sprinkler installation training course before beginning the work
- C. No, fire sprinkler installation requires a licensed fire protection contractor, and the general contractor must subcontract this work to an appropriately licensed specialty contractor
- D. No, fire sprinkler systems may only be installed by the fire sprinkler system manufacturer's certified factory technicians

64. A contractor's employee is working on a scaffold and drops a hammer that strikes a pedestrian walking on the public sidewalk below the construction site. The pedestrian sustains a head injury. Which insurance policy provides primary coverage for this type of third-party bodily injury claim?

- A. The contractor's workers' compensation insurance policy covers injuries to all persons on or near the construction site
- B. The pedestrian's personal health insurance policy is the primary coverage for injuries sustained on a public sidewalk
- C. The property owner's homeowner's or commercial property insurance policy covers all injuries occurring on the premises
- D. The contractor's commercial general liability insurance policy provides coverage for third-party bodily injury claims arising from the contractor's operations

65. A contractor is building a residential addition and the plans call for a flush beam that is concealed within the floor framing. The structural engineer specifies a laminated veneer lumber beam. The contractor wants to substitute a built-up beam made of three two-by-twelve dimensional lumber members nailed together. Is this substitution acceptable?

- A. No, the substitution is not acceptable without the structural engineer's written approval because the LVL beam and built-up dimensional lumber have different structural properties and load capacities
- B. Yes, because a built-up beam of three two-by-twelve members has equivalent load-carrying capacity to any standard LVL beam
- C. Yes, because the contractor may substitute equivalent materials at their discretion as long as the member depth remains the same
- D. No, but the contractor may substitute a steel beam without engineering approval because steel always exceeds wood capacity

66. A contractor is reviewing the financial statements for the construction company at the end of the fiscal year. The balance sheet shows total assets of eight hundred thousand dollars, total liabilities of five hundred twenty thousand dollars, and owner's equity of two hundred eighty thousand dollars. What does this financial position indicate about the company?

- A. The company has a positive net worth of two hundred eighty thousand dollars, meaning the value of assets exceeds liabilities by that amount, which indicates the financial position at this point in time
- B. The company is insolvent because total liabilities exceed fifty percent of total assets and the company cannot meet obligations
- C. The company has excessive debt and should immediately reduce liabilities to below two hundred thousand dollars to remain viable

D. The balance sheet is incorrect because total assets must always equal exactly twice the total liabilities plus owner's equity

67. A contractor is performing exterior stucco installation on a commercial building. The specifications require a weather-resistive barrier behind the stucco system. The contractor omits the barrier to save time. After a heavy rainstorm, water infiltrates the wall cavity and causes damage to the interior finishes and framing. Who bears responsibility for this damage?

A. The stucco material manufacturer bears responsibility because the product should be waterproof without additional barriers

B. The architect bears sole responsibility for specifying a weather-resistive barrier that the contractor deemed unnecessary

C. The building inspector bears responsibility for not catching the omission during the framing and lathing inspections

D. The contractor bears responsibility for failing to install the specified weather-resistive barrier, which was a required component of the wall assembly per the specifications

68. Under Oregon law, a construction contract includes a provision requiring the contractor to maintain completed operations coverage for a period of three years after the project is finished. What type of claim does completed operations coverage protect against?

A. Claims for unpaid wages filed by the contractor's employees who worked on the project during the active construction phase

B. Claims for damage to the contractor's own tools and equipment that occurs after the project is completed and demobilized

C. Claims for bodily injury or property damage that arise from the contractor's completed work after the contractor has left the project site

D. Claims for breach of contract filed by the owner when the project exceeds the original budget by more than ten percent

69. A contractor is planning a concrete pour for a commercial building's elevated floor slab. The engineer requires post-tensioned concrete for the slab design. What is the primary advantage of post-tensioned concrete compared to conventionally reinforced concrete for this application?

A. Post-tensioned concrete eliminates the need for any steel reinforcement within the slab, reducing material costs significantly

B. Post-tensioned concrete allows for longer spans with thinner slabs, reducing the overall structural weight and the volume of concrete required for the floor system

- C. Post-tensioned concrete cures faster than conventional concrete, allowing the contractor to strip forms within twenty-four hours
- D. Post-tensioned concrete is less expensive to install because it requires fewer workers and less specialized equipment

70. A contractor's project is governed by a time-and-materials contract with a not-to-exceed ceiling of two hundred thousand dollars. At the midpoint of the project, the actual costs are one hundred thirty thousand dollars. The contractor estimates that the total project cost will reach two hundred twenty thousand dollars. What is the contractor's obligation regarding the projected cost overrun?

- A. The contractor must absorb all costs above the not-to-exceed ceiling because the ceiling functions as a guaranteed maximum price
- B. The contractor may bill the owner for all actual costs regardless of the ceiling because time-and-materials contracts have no price limits
- C. The contractor must stop work immediately when actual costs reach the not-to-exceed ceiling amount without any further negotiation
- D. The contractor should notify the owner of the projected overrun and negotiate either a scope reduction or a change order to increase the ceiling before costs reach the limit

71. A contractor is preparing to install residential siding and discovers that the existing wall sheathing has moisture damage over approximately thirty percent of the exterior surface. The scope of work includes siding installation only. What is the contractor's appropriate course of action?

- A. Install the new siding over the damaged sheathing because the siding will protect the sheathing from further moisture damage
- B. Cover the damaged areas with house wrap only and proceed with the siding installation to maintain the project schedule
- C. Remove all existing sheathing and replace it entirely at the contractor's expense as part of the siding installation scope
- D. Document the damaged sheathing, notify the homeowner in writing, and propose a change order to repair or replace the damaged sheathing before installing the new siding

72. Under Oregon's construction contractor licensing law, a person performs construction work on their own primary residence. Is a CCB license required for this work?

- A. No, a homeowner performing construction work on their own primary residence that they personally occupy is generally exempt from the CCB licensing requirement

- B. Yes, all construction work in Oregon requires a CCB license regardless of who performs the work or who owns the property
- C. No, but only if the total value of the work does not exceed ten thousand dollars in materials and labor combined
- D. Yes, unless the homeowner submits a notarized exemption form to the CCB before beginning any construction activity

73. A contractor is building a commercial office building and the structural specifications require moment connections at specific beam-to-column joints. The steel fabricator delivers beams with standard shear connections instead of moment connections. What is the structural significance of this error?

- A. No significance because shear connections and moment connections provide identical structural performance in all applications
- B. Shear connections transfer only vertical loads while moment connections also resist rotational forces, so the substitution compromises the building's ability to resist lateral loads
- C. Moment connections transfer only vertical loads while shear connections resist both vertical and lateral forces at the joint
- D. The error affects only the aesthetic appearance of the exposed structural steel connections and has no structural impact

74. A contractor is hired to perform a tenant improvement project in an existing commercial building. The project involves constructing new interior partition walls but does not modify the building's structural system, exterior walls, or mechanical systems. Under Oregon building codes, is a building permit required for this interior work?

- A. No, because interior partition walls that do not modify the structural system are classified as minor work exempt from permits
- B. No, because tenant improvement projects in existing commercial buildings do not require building permits under Oregon code
- C. Yes, a building permit is generally required for the construction of interior partition walls in a commercial building because the work must comply with fire, life safety, accessibility, and other applicable codes
- D. Yes, but only if the total project cost exceeds twenty-five thousand dollars for the interior tenant improvement work

75. A contractor submits a monthly progress payment application on a commercial project. The application includes a charge for materials stored off site at the contractor's warehouse. Under standard AIA contract terms, under what condition may the owner include payment for off-site stored materials?

- A. Off-site stored materials are never payable under standard contract terms and must be excluded from all payment applications
- B. The owner may pay for off-site stored materials if the contractor provides proof of insurance, proper storage, and documentation that the materials are dedicated to the project and meet the contract requirements
- C. The owner must pay for all materials upon purchase regardless of storage location if the contractor provides purchase receipts
- D. Off-site materials are payable only if the materials have been tested and approved by the project architect before delivery

76. A contractor is performing demolition work on a commercial building and discovers underground storage tanks that were not disclosed in the project documents. The tanks appear to be abandoned fuel storage tanks. What is the contractor's immediate obligation?

- A. Remove the tanks immediately and dispose of them at the nearest waste management facility to avoid project schedule delays
- B. Fill the tanks with sand to stabilize them and continue excavation work around the tank perimeter without further investigation
- C. Stop work in the affected area, notify the property owner and the Oregon Department of Environmental Quality, and do not disturb the tanks until proper assessment and regulatory guidance is obtained
- D. Document the discovery with photographs and resume excavation because abandoned tanks are the property owner's sole responsibility

77. A contractor employs twenty workers and is developing a company safety program. Under OSHA regulations, which of the following training requirements applies to all construction workers regardless of their specific trade?

- A. All workers must hold current OSHA thirty-hour construction safety cards before they are permitted to work on any construction project
- B. All workers must receive training on hazard recognition, fall protection awareness, and the proper use of personal protective equipment applicable to their work assignments
- C. All workers must complete a forty-hour hazardous waste operations course before beginning any construction work activity
- D. All workers must be certified in first aid and CPR before they are permitted to work on any construction project site

78. A contractor is performing quality assurance on a welding project for a commercial steel structure. The specifications require full-penetration welds at all moment connections and ultrasonic testing of these welds. Who typically performs the ultrasonic testing inspection?

- A. The contractor's welding foreman performs the ultrasonic testing as part of the standard quality control process for all welds
- B. The steel fabricator's in-house quality control department performs all required weld testing at their fabrication shop facility
- C. A qualified independent testing laboratory or inspector performs the ultrasonic testing to verify weld quality as a third-party quality assurance measure
- D. The building inspector performs ultrasonic testing during the structural steel inspection using equipment provided by the contractor

79. A residential contractor in Oregon is hired to build a new home. The contract includes a provision allowing the contractor to place a lien on the property if the homeowner fails to make scheduled payments. Under Oregon lien law, does this contract provision affect the contractor's lien rights?

- A. The contractor's lien rights exist under Oregon statute regardless of whether the contract includes a lien provision, and the statutory requirements for filing and enforcing a lien must still be followed
- B. The contract provision creates a private lien that is separate from and superior to the statutory construction lien right
- C. The contract provision eliminates the need for the contractor to deliver the required preliminary lien notice to the homeowner
- D. The contract provision extends the contractor's lien filing deadline from seventy-five days to one hundred twenty days

80. A contractor is managing a commercial project and the HVAC subcontractor submits a claim for delay damages caused by the general contractor's failure to provide timely access to the mechanical room. The subcontract does not contain a no-damage-for-delay clause. What is the subcontractor's right regarding the delay damages?

- A. The subcontractor may be entitled to recover delay damages from the general contractor because the delay was caused by the contractor's failure to provide access as required and the subcontract does not bar such recovery
- B. The subcontractor has no right to delay damages because subcontractors can only recover time extensions and not monetary compensation
- C. The subcontractor may recover delay damages only if the total delay exceeds thirty consecutive calendar days on the project
- D. The subcontractor must wait until the project is complete and then submit a claim through the CCB complaint process

Practice Exam 16: Answer Key and Explanations

- 1. B** — A contractor's surety bond coverage is limited to the face amount of the bond on file with the CCB, which is set by statute based on the license category. The bond amount may be significantly less than the contract price on larger projects. Homeowners should understand that the bond provides limited financial protection and is not equivalent to full contract-value insurance.
- 2. A** — The volume is two hundred feet times five feet times one-third of a foot (four inches), equaling approximately three hundred thirty-three cubic feet. Dividing by twenty-seven cubic feet per cubic yard yields approximately twelve-point-three cubic yards. At one hundred fifty-two dollars per yard, the cost is approximately one thousand eight hundred seventy dollars.
- 3. C** — Oregon construction lien law allows any person who furnishes labor, materials, or equipment to a construction project to file a lien against the property where the work was performed, regardless of their tier in the contracting chain. The sub-subcontractor must comply with all statutory notice and filing requirements to preserve and perfect lien rights. Privity of contract with the owner is not required for lien eligibility.
- 4. B** — OSHA's hazard communication standard requires employers to maintain safety data sheets for all hazardous chemicals on the jobsite and to train workers on the hazards, safe handling procedures, and emergency measures for each product. This standard ensures workers understand the health and physical hazards of chemicals they encounter during construction. The SDS must be readily accessible to all employees during their work shifts.
- 5. D** — Sole proprietors must pay self-employment tax covering both the employer and employee portions of Social Security and Medicare taxes on their net self-employment income. This tax applies because sole proprietors do not have an employer withholding and matching FICA contributions on their behalf. The combined self-employment tax rate is fifteen-point-three percent on net earnings up to the applicable Social Security wage base.
- 6. A** — A completion certificate does not waive the homeowner's rights regarding latent defects that were not visible or discoverable at the time of sign-off. Latent defects such as hidden plumbing leaks behind finished walls cannot be detected during a standard visual inspection. Oregon law protects homeowners' ability to pursue claims for defects discovered after the completion certificate is signed.
- 7. C** — A schedule performance index below one-point-zero indicates the project is behind schedule. An SPI of zero-point-eight-eight means that for every dollar of work planned, only eighty-eight cents of work has been completed. The project team must take corrective action such as adding resources or resequencing activities to recover the twelve percent schedule deficit.

8. D — When a contractor discovers a pre-existing structural deficiency outside the contract scope, the proper course is to stop work on the affected connection, document the condition, and inform the homeowner in writing. The contractor should present options including a change order to repair the deteriorated ledger board before attaching the new deck. Proceeding with the attachment to a compromised ledger creates a safety hazard and potential liability.

9. B — Employers with ten or more employees at any point during the previous calendar year must maintain OSHA 300 logs recording all recordable work-related injuries and illnesses. With fifteen workers, this contractor meets the threshold and must document all recordable incidents including injuries requiring treatment beyond first aid, days away from work, and restricted duty assignments. The logs must be maintained at each establishment and posted annually.

10. C — A bid that is thirty percent below the next closest competitor warrants careful investigation before acceptance. The contractor should verify that the bid includes the complete scope of work, confirm the subcontractor's license and bonding status, check references, and assess whether the price is realistic enough to complete the work without cutting corners. Accepting an unrealistically low bid often leads to quality problems, delays, or subcontractor default.

11. A — Oregon wage payment law requires itemized wage statements that include gross wages, all deductions, net pay, hours worked, pay rate, and the pay period dates. These statements must be provided each pay period to ensure employees can verify the accuracy of their compensation. Failure to provide compliant wage statements can result in penalties from the Bureau of Labor and Industries.

12. C — The critical path duration represents the minimum possible project duration assuming all activities on the longest path are completed without delay and resources are available as planned. Any delay to a critical path activity directly extends the project completion date by an equal amount. Non-critical activities have float that allows them to be delayed without affecting the overall project duration.

13. B — Oregon workers' compensation law provides injured workers with medical treatment for the work-related injury, temporary disability benefits replacing a portion of lost wages during recovery, and potential permanent disability benefits if the injury results in lasting impairment. These benefits are provided regardless of fault and are the exclusive remedy for workplace injuries. The system ensures injured workers receive necessary medical care and income support during recovery.

14. D — The phrase "or approved equal" in a specification allows the contractor to propose a substitute product that meets the same performance, quality, and design requirements as the named brand. The proposed substitute must be submitted to the architect or engineer for review and written approval before installation. This specification language promotes competition while maintaining the designer's quality standards.

15. B — The plumbing subcontractor bears the cost of correcting defective work that fails inspection because the installation error is the subcontractor's responsibility. Under the subcontract agreement, the subcontractor is obligated to perform work that meets code requirements and passes inspection. The cost of rework and reinspection resulting from the subcontractor's installation error should not be borne by the general contractor or homeowner.

16. B — Mandatory arbitration clauses in construction contracts are generally enforceable when both parties knowingly agreed to the terms. Oregon courts typically uphold arbitration agreements unless the clause is found to be unconscionable or violates a specific statutory protection. Homeowners should carefully review arbitration provisions before signing because they waive the right to a jury trial for most disputes.

17. C — Concrete cover protects reinforcing steel from corrosion caused by moisture and chemical exposure that penetrates the concrete over time. When moisture reaches the rebar, it causes oxidation that expands the steel and creates internal pressure that cracks and spalls the concrete. Maintaining the specified cover thickness is critical for long-term durability and structural integrity of the concrete element.

18. A — Conditional lien waivers tied to actual receipt of payment are generally enforceable in Oregon because they exchange lien rights for confirmed payment. However, blanket prospective waivers requiring the subcontractor to surrender all future lien rights before work is performed or payment is received may be unenforceable as against public policy. Contractors and subcontractors should use conditional waiver forms that clearly tie the waiver to receipt of specific payment amounts.

19. D — Temporary shoring that supports an adjacent building's foundation during excavation requires both a building permit and an engineered shoring plan prepared by a licensed professional engineer. The shoring design must account for soil conditions, surcharge loads, and the structural requirements of the adjacent building. This work carries significant safety risks and regulatory requirements that cannot be addressed without professional engineering oversight.

20. A — Oregon is an at-will employment state, and the employer may terminate an employee for documented cause such as timesheet falsification. Upon termination, the employer must pay all earned and unpaid wages by the end of the first business day after the date of termination. Documenting the pattern of falsification over two weeks establishes the factual basis for the for-cause termination.

21. D — Under standard contract terms, when the project has reached substantial completion with only minor punch list items remaining, the owner should pay the undisputed portion of the payment application. The owner may withhold only an amount reasonably related to the cost of completing the punch list items, not the entire payment. Withholding the full payment for minor deficiencies may constitute a breach of the owner's payment obligations.

22. C — Fire blocking in wood-framed wall assemblies slows the spread of fire and hot gases through concealed spaces by compartmentalizing the wall, floor, and ceiling cavities. Without fire blocking, open cavities act as chimneys that allow fire to spread rapidly between floors and rooms. Building codes require fire blocking at specific locations including floor and ceiling levels, soffits, and stairways.

23. A — Oregon's prevailing wage law requires that all workers performing construction labor on a public works project be paid the applicable prevailing wage rate. This requirement extends to the contractor's direct employees, subcontractor employees, and any other workers performing covered construction work. There is no exemption based on trade classification, apprenticeship status, or tier in the contracting chain.

24. D — When existing construction is modified under a new building permit, the new work must comply with the building code in effect at the time of the permit. The contractor must install the replacement beam sized to meet current code requirements even if the original construction was compliant under an earlier code edition. This ensures that the modified structure meets current safety and structural standards.

25. C — Value engineering analyzes building systems and materials to identify alternatives that maintain or improve performance while reducing cost through more efficient designs, substitute products, or revised construction methods. True value engineering does not simply reduce quality or eliminate scope but finds smarter ways to achieve the same functional result. The process involves systematic evaluation of alternatives by the project team.

26. B — Oregon residential contract law requires the contract to include the estimated start date and substantial completion date, or the duration of the project. This information sets expectations for both parties and provides a basis for measuring progress and addressing delays. Without a defined timeline, neither party has a clear contractual benchmark for evaluating schedule performance.

27. B — OSHA does not require reporting of near-miss incidents where no injury, illness, or fatality occurred. However, prudent employers should investigate all near-miss events and implement corrective actions to prevent future incidents that could result in injury. Near-miss investigations are a proactive safety management practice that identifies hazards before they cause harm.

28. D — The Oregon Residential Specialty Code requires carbon monoxide detectors in dwellings with fuel-burning appliances. The contractor must install the detector in accordance with code requirements at the contractor's expense as part of the furnace installation scope. Failing to install the required detector is a code violation that will prevent the installation from passing inspection.

29. C — Twenty-two hundred square feet times two coats equals forty-four hundred total square feet of coverage needed. Dividing by three hundred fifty square feet per gallon yields twelve-point-six gallons, rounded up to thirteen gallons. This calculation ensures adequate paint for full two-coat coverage without accounting for additional waste from cutting in, trim, and application method variations.

30. A — The per-occurrence limit caps the payout for any single incident at five hundred thousand dollars, regardless of the total claim amount or the aggregate policy limit. Even though the aggregate limit is one million dollars and the damages are seven hundred thousand dollars, the policy pays only five hundred thousand for this single occurrence. The remaining two hundred thousand dollars of the claim would be the subcontractor's out-of-pocket responsibility.

31. B — Before submitting a bid, the contractor should submit a request for information to the architect or owner asking whether the observed water intrusion has been addressed. This proactive step clarifies whether the renovation scope includes water damage repair or whether the contractor should exclude it from the bid. Bidding without clarification creates risk for both the contractor and the owner.

32. A — The CCB investigates complaints against licensed contractors, may inspect the work in question, attempts to facilitate a resolution between the parties, and may order the contractor to make repairs or pay damages from the surety bond if appropriate. The CCB process provides homeowners with an accessible dispute resolution mechanism without requiring litigation. The CCB's authority includes ordering bond payments for valid claims within the bond's coverage limits.

33. D — A fire-rated corridor requires all components of the fire barrier to meet the specified rating, including walls, doors, frames, hardware, and glazing. Installing non-rated doors in a one-hour fire-rated corridor defeats the purpose of the fire barrier because fire and smoke will pass through the door openings. Every component must carry the required rating to maintain the integrity of the entire assembly.

34. C — The Oregon Department of Environmental Quality oversees on-site sewage disposal systems through county-level programs authorized by the state. County sanitation offices administer permits, inspections, and enforcement for septic system installations under DEQ's regulatory framework. The contractor must obtain the appropriate permits and comply with the design requirements established by the county program.

35. A — The general contractor must direct the mechanical subcontractor to stop installing non-conforming equipment immediately and replace it with the approved equipment at the subcontractor's expense. Equipment that does not match approved submittals is a contract violation regardless of whether it appears to function properly. The general contractor is responsible for ensuring all installed materials and equipment conform to the approved project documents.

36. D — An unexpected high water table not indicated in the soils report constitutes a differing site condition that may entitle the contractor to additional compensation and a time extension. The contractor should promptly notify the owner in writing, document the conditions, and submit a claim under the differing site conditions provisions of the contract. The contractor must demonstrate that the conditions were materially different from what was represented in the contract documents.

37. B — The contractor should contact the Oregon Employment Department to verify the correct tax rate, request an adjustment to the account, and file for a refund of any overpayment. Unemployment insurance tax rates are based on the company's experience rating and can change annually. Paying more than the correct rate unnecessarily increases the company's operating costs and reduces cash available for project operations.

38. D — The fire alarm installation is incomplete without the code-required connection to the fire department monitoring service. The monitoring connection is an integral part of the fire alarm system that ensures emergency response when the alarm activates. The building inspector will not approve the final inspection until all components of the fire alarm system, including monitoring, are fully operational.

39. B — A start-to-start relationship with a five-day lag means the second activity may begin five days after the first activity starts, allowing both activities to proceed in parallel with a staggered start. This relationship is commonly used when the second activity depends on the first being underway but does not need to wait for full completion. The lag creates a time buffer between the start of the predecessor and the start of the successor.

40. C — A temperature and pressure relief valve is required on all water heater installations to prevent tank rupture from excessive temperature or pressure buildup. The discharge pipe must be routed to an approved location where hot water can be released safely without causing injury. This safety device is the primary protection against catastrophic water heater failure and is mandated by plumbing and mechanical codes.

41. A — A basic passive radon mitigation system includes a gas-permeable layer beneath the slab, a sealed slab with all penetrations caulked, and a vertical vent pipe routed through the building and extending above the roofline. This system creates a pathway for radon gas to vent to the atmosphere before it enters the living space. The system can be converted to an active system by adding a fan to the vent pipe if passive ventilation proves insufficient.

42. A — When architectural and structural drawings conflict, the contractor must submit a request for information identifying the specific discrepancy and requesting clarification before building either version. Building the wrong location could require costly demolition and rework. The architect and structural engineer must coordinate to resolve the conflict and issue a formal clarification or revised drawing.

43. C — The contractor should negotiate with the owner to revise the schedule to a realistic timeline or clearly identify the additional costs of acceleration before signing the contract. Signing a contract with an unachievable schedule without addressing the issue creates immediate exposure to liquidated damages and schedule default. Transparent communication about realistic timelines protects both parties from unnecessary disputes.

44. D — While knob-and-tube wiring is outside the contracted scope, the contractor has a professional obligation to inform the homeowner of the discovery and recommend evaluation by a licensed electrician. Knob-and-tube wiring presents potential fire hazards, especially when covered with insulation. Documenting the notification in writing protects the contractor and ensures the homeowner can make an informed decision about the electrical system.

45. C — A bioswale slows, filters, and infiltrates stormwater runoff through vegetation and engineered soil media, reducing pollutant discharge and managing flow rates. Bioswales are a common best management practice in stormwater management plans that help meet regulatory requirements for water quality and quantity control. They use natural processes to remove sediments, nutrients, and other contaminants from runoff before it enters the storm drainage system.

46. D — The Section 179 deduction allows eligible businesses to deduct the full purchase price of qualifying equipment in the year it is placed in service rather than depreciating it over multiple years. This provision provides an immediate tax benefit that improves cash flow in the year of purchase. The deduction is subject to annual dollar limits and phase-out thresholds that the contractor should verify with a tax professional.

47. D — The contractor had knowledge of the unstable soil conditions from the geotechnical report and proceeded without taking appropriate precautions to address the identified risk. This failure to act on known hazardous conditions creates potential liability for damages to both the contractor's own work and the neighboring property. A prudent contractor would have consulted with the geotechnical engineer and implemented stabilization measures before proceeding.

48. B — Removing temporary bracing before permanent bracing and sheathing are installed removes the lateral stability that prevents trusses from collapsing under their own weight and construction loads. Truss collapse is a serious safety hazard that has caused construction fatalities. The manufacturer's installation guide specifies temporary bracing requirements that must be followed until the permanent bracing system and roof sheathing provide adequate lateral support.

49. C — A triple net lease requires the tenant to pay property taxes, building insurance, and common area maintenance costs in addition to the base monthly rent. These three additional cost categories represent the "triple net" components that shift operating expenses from the landlord to the tenant. Contractors leasing commercial space should carefully calculate the total occupancy cost including all NNN charges when evaluating lease options.

50. D — The slump test measures the consistency and workability of freshly mixed concrete by measuring how much a cone-shaped sample subsides when the mold is removed. Higher slump values indicate wetter, more workable concrete, while lower values indicate a stiffer mix. The test provides a field indicator of the concrete's water content and flow characteristics, which are critical for proper placement and finishing.

51. B — Reducing the bearing length below the manufacturer's engineered specification compromises the load transfer at the support point and may cause the truss to fail. Engineered truss designs specify minimum bearing lengths based on the calculated reaction forces at each support. Modifying the bearing without engineering approval voids the manufacturer's structural warranty and creates a safety hazard that will likely fail inspection.

52. A — Oregon law exempts sole proprietors with no employees from the workers' compensation insurance requirement, subject to specific criteria. The exemption recognizes that sole proprietors without employees may choose to self-insure against their own workplace injuries. However, the exemption does not relieve the contractor from maintaining a valid CCB license, surety bond, and general liability insurance.

53. D — A formal document control system creates an organized, traceable record of all project communications, decisions, submittals, change orders, and correspondence. This documentation provides essential evidence during disputes, claims, or litigation by establishing a clear timeline of events and decisions. Without organized document control, the contractor may be unable to substantiate claims or defend against allegations of deficient performance.

54. B — Installing conduit at eighteen inches below grade when the specifications require twenty-four inches fails to meet the minimum burial depth and will not pass inspection. Inadequate burial depth exposes the conduit to damage from surface loads, landscaping, and future excavation activities. The contractor must either lower the conduit to the specified depth or obtain an approved variance from the engineer and inspector.

55. B — The contractor should immediately update the project schedule to reflect the twelve-week lead time, evaluate the impact on the completion date, and notify the homeowner of the potential delay. Presenting mitigation options such as resequencing work around the tile installation or selecting an alternative product with shorter lead time gives the homeowner informed choices. Failing to communicate the lead time impact creates schedule risk and potential disputes.

56. D — When the CCB determines a bond claim is valid, it may order the surety company to pay the claim up to the bond amount. The contractor is then obligated to reimburse the surety for the full amount paid because the bond is a guarantee backed by the contractor's personal indemnity agreement with the surety. The surety acts as a guarantor, not an insurer, and has the right to recover all payments from the contractor.

57. A — Construction within a utility easement is generally prohibited without written permission from the easement holder because the easement grants the utility company the right to access, maintain, and repair their facilities. Building a structure within the easement could obstruct utility access and the owner may be required to remove the structure at their own expense. The contractor should advise the homeowner to consult with the easement holder before proceeding.

58. B — A vapor barrier beneath a slab-on-grade prevents moisture from migrating upward through the concrete from the ground below. Moisture transmission through the slab can damage floor coverings, cause mold growth, corrode equipment, and damage goods stored on the floor surface. The vapor barrier is a critical component of the slab assembly that protects the building's interior environment and contents.

59. A — The EPA's RRP Rule requires contractors to assume lead-based paint is present in pre-nineteen seventy-eight homes unless testing confirms otherwise. The contractor must follow lead-safe work practices to minimize dust and debris, and must provide the homeowner with the EPA pamphlet "Renovate Right" before beginning work. The contracting firm must be EPA-certified and a certified renovator must be assigned to the project.

60. D — The liquidated damages clause specifies a rate per calendar day, not per working day. Fifteen working days typically corresponds to more than fifteen calendar days when weekends are included, so the contractor must calculate the actual number of calendar days in the delay period. The total exposure equals eight hundred dollars multiplied by the total calendar days, which will exceed the amount calculated using only working days.

61. A — Construction liens cannot be filed against publicly owned property because the government's ownership interest is protected from private encumbrance. However, on public works projects, payment bonds serve as a substitute for lien rights by providing subcontractors and suppliers with a mechanism to recover unpaid amounts. The subcontractor should pursue a claim against the contractor's payment bond to recover the unpaid invoices.

62. B — In most areas of western Oregon, the typical minimum footing depth is eighteen inches below undisturbed soil to meet the frost line requirement. Local jurisdictions may specify different depths based on their specific climatic conditions. Contractors should verify the required depth with the local building department for each project location because frost depth varies by region.

63. C — Fire sprinkler installation is a specialty trade that requires specific licensing beyond a general contractor license. The general contractor must subcontract fire protection system installation to an appropriately licensed specialty contractor who holds the required certifications and approvals. This licensing requirement ensures that fire life safety systems are designed and installed by qualified professionals.

64. D — The contractor's commercial general liability insurance policy provides primary coverage for third-party bodily injury claims arising from the contractor's operations. When a tool falls from the work area and strikes a pedestrian, the claim is a classic CGL occurrence involving bodily injury to a third party caused by the contractor's work. Workers' compensation covers employee injuries, not injuries to members of the public.

65. A — Laminated veneer lumber and built-up dimensional lumber beams have different structural properties, load capacities, and deflection characteristics that are not interchangeable without engineering analysis. The structural engineer specified LVL for specific performance reasons based on the span, loads, and deflection requirements. Any substitution requires the structural engineer's written approval to verify that the alternative member meets the design requirements.

66. A — A positive net worth of two hundred eighty thousand dollars means the company's total assets exceed total liabilities by that amount. This is calculated as eight hundred thousand dollars in assets minus five hundred twenty thousand dollars in liabilities. While the balance sheet shows the financial position at a point in time, a positive net worth generally indicates the company can meet its obligations.

67. D — The contractor bears responsibility for failing to install the specified weather-resistive barrier, which was a required component of the stucco wall assembly. Omitting a specified building component to save time does not relieve the contractor of responsibility for the resulting damage. The contractor is liable for both the cost of repair and any consequential damages caused by the water infiltration.

68. C — Completed operations coverage protects against claims for bodily injury or property damage that arise from the contractor's work after the contractor has finished and left the project site. For example, if a paint coating fails and causes property damage a year after completion, this coverage responds to the claim. It is distinct from the contractor's general liability coverage for claims during active construction operations.

69. B — Post-tensioned concrete uses high-strength steel tendons that are tensioned after the concrete cures, placing the concrete in compression. This technique allows longer spans with thinner slabs compared to conventionally reinforced concrete, reducing the overall structural weight and concrete volume. The thinner slab profile also reduces floor-to-floor height, which can lower the total building height and associated material costs.

70. D — The contractor should notify the owner of the projected cost overrun and negotiate either a scope reduction or a change order to increase the not-to-exceed ceiling before costs reach the limit. The not-to-exceed ceiling functions as a guaranteed maximum price, and the contractor absorbs costs that exceed it unless the ceiling is formally increased. Proactive communication allows both parties to make informed decisions before the budget is exhausted.

71. D — The contractor should document the damaged sheathing, notify the homeowner in writing, and propose a change order to repair or replace the damaged areas before installing new siding. Installing siding over damaged sheathing traps moisture, accelerates rot, and compromises the structural integrity of the wall assembly. The contractor has a professional obligation to disclose discovered deficiencies even when they are outside the original scope.

72. A — Oregon law generally exempts homeowners from the CCB licensing requirement when they perform construction work on their own primary residence that they personally occupy. This exemption recognizes the property owner's right to work on their own home. However, the exemption does not apply if the homeowner is building for sale or performing work on properties they do not personally occupy.

73. C — Moment connections at beam-to-column joints resist both vertical loads and rotational forces, providing the rigid frame action needed to resist lateral loads such as wind and seismic forces. Shear connections transfer only vertical loads and allow rotation at the joint, which does not provide lateral load resistance. Substituting shear connections for moment connections compromises the building's ability to resist lateral forces and is a serious structural deficiency.

74. C — Interior partition walls in a commercial building generally require a building permit because the work must comply with fire and life safety codes, accessibility requirements, egress provisions, and other applicable regulations. Even non-structural partitions can affect fire compartmentation, sprinkler coverage, and exit pathways. The building department reviews the plans to ensure all code requirements are met before authorizing construction.

75. B — Under standard AIA contract terms, the owner may include payment for off-site stored materials when the contractor provides adequate documentation including proof of insurance covering the stored materials, evidence of proper storage conditions, and documentation that the materials are specifically dedicated to the project. These safeguards protect the owner's financial interest in materials that have been paid for but not yet delivered to the project site.

76. C — Upon discovering underground storage tanks, the contractor must stop work in the affected area and notify both the property owner and the Oregon Department of Environmental Quality. Abandoned fuel storage tanks may contain hazardous materials and contaminated soil that require specialized assessment and remediation. Disturbing the tanks without proper regulatory guidance can cause environmental contamination and expose the contractor to significant liability.

77. B — OSHA requires all construction workers to receive training on hazard recognition, fall protection awareness, and the proper use of personal protective equipment applicable to their specific work assignments. This baseline safety training ensures every worker on site can identify common hazards and use protective equipment correctly. Additional trade-specific training is required for specialized activities such as scaffolding, excavation, and confined space entry.

78. C — Ultrasonic testing of structural welds must be performed by a qualified independent testing laboratory or inspector to ensure objectivity and accuracy. Third-party testing provides quality assurance that is independent of the contractor's and fabricator's quality control processes. This separation between quality control and quality assurance ensures unbiased verification of critical structural weld integrity.

79. A — Construction lien rights in Oregon exist under statute regardless of whether the contract includes a specific lien provision. The contractor must still comply with all statutory requirements for delivering preliminary notices, filing the lien within the required timeframe, and initiating foreclosure proceedings within the statutory deadline. A contract provision referencing lien rights does not modify or replace the statutory requirements.

80. A — When the subcontract does not contain a no-damage-for-delay clause, the subcontractor may recover delay damages caused by the general contractor's failure to provide timely access to the work area. The delay was directly caused by the general contractor's breach of the obligation to coordinate and provide access as required by the subcontract. Without a contractual bar on delay damages, the subcontractor retains the right to seek monetary compensation for the delay-related costs.

