

# PRACTICE EXAM 14: OREGON CCB SIMULATION (80 QUESTIONS)

---

**Recommended Time: 200 Minutes | Passing Score: 56/80 (70%)**

1. A sole proprietor operating a residential construction business in Oregon wants to protect personal assets from business liabilities. Which business structure change would provide personal liability protection while still allowing single-member ownership?

- A. Convert to a general partnership with a family member listed as a silent partner
- B. Register a trade name with the Oregon Secretary of State to separate business identity
- C. Form a single-member limited liability company and register it with the Secretary of State
- D. Obtain additional umbrella insurance coverage on the existing sole proprietorship structure

2. A contractor's employee suffers a back injury while lifting materials on a jobsite. The contractor has workers' compensation coverage. Within what time frame must the employer file a report of the injury with their workers' compensation insurer under Oregon law?

- A. Within seventy-two hours of learning about the injury from the employee or a witness
- B. Within thirty calendar days of the date the injury occurred on the project site
- C. Within seven calendar days but only if the employee misses more than three consecutive shifts
- D. Within five days of the employer's knowledge of the claim or injury as required by Oregon statute

3. A general contractor on a public works project discovers that a first-tier subcontractor has been paying workers below the prevailing wage rate established by BOLI for the project. What is the general contractor's potential liability?

- A. The general contractor may be held jointly liable for the unpaid prevailing wages owed to the subcontractor's workers on the project
- B. The general contractor bears no liability because each subcontractor is independently responsible for their own payroll compliance

- C. The general contractor is liable only if they had documented written knowledge of the wage violation before it occurred
- D. The general contractor must pay a flat penalty to BOLI but has no obligation to the underpaid workers themselves

4. A contractor is preparing an estimate for a residential kitchen remodel. The homeowner has provided architectural drawings and finish selections. Which estimating approach will produce the most reliable cost projection for this scope of work?

- A. An analogous estimate based on the total cost of a similar kitchen remodel completed within the last year
- B. A parametric estimate using a regional cost-per-square-foot multiplier applied to the kitchen floor area
- C. A rough order-of-magnitude estimate derived from the contractor's general experience with kitchen projects
- D. A detailed unit-cost estimate that quantifies every material, labor hour, and equipment item required for each task

5. An Oregon contractor holds a residential-only CCB license. A commercial property owner asks the contractor to build out a retail storefront. How should the contractor respond?

- A. Accept the project because a residential license automatically permits commercial work under fifty thousand dollars
- B. Accept the project but hire a commercially licensed subcontractor to supervise the work and pull permits
- C. Decline the project because performing commercial work under a residential-only license violates Oregon CCB law
- D. Accept the project after notifying the CCB in writing and paying an additional commercial endorsement fee

6. A contractor hires a worker and classifies the individual as an independent contractor. Under Oregon law, which factor most strongly indicates that the worker should instead be classified as an employee?

- A. The worker uses specialized tools that they personally own and maintain at their own expense
- B. The contractor controls when, where, and how the worker performs the assigned construction tasks
- C. The worker holds an active CCB license and carries their own general liability insurance policy

D. The worker advertises services to the general public and maintains contracts with multiple clients

7. A homeowner signs a contract for a bathroom remodel totaling eighteen thousand dollars. Three weeks into the project, the homeowner decides to cancel the contract without cause. Under Oregon law, what is the contractor's right regarding the cancellation?

A. The contractor must refund all payments received regardless of the work already completed on the project

B. The contractor may charge a cancellation fee equal to twenty-five percent of the remaining contract balance

C. The contractor may retain payment for all work completed and materials procured to date under the contract terms

D. The contractor must stop work immediately and may not bill for any work performed during the final week

8. An employer on a construction site must maintain an OSHA 300 log. Which of the following workplace incidents is required to be recorded on the OSHA 300 log?

A. A work-related injury that requires medical treatment beyond basic first aid or results in days away from work

B. Any workplace incident that involves a verbal safety warning issued by the site superintendent to a crew member

C. A near-miss event where a tool falls from scaffolding but does not strike any worker or cause property damage

D. An employee complaint about uncomfortable temperatures inside an enclosed work area during summer months

9. A contractor submits a bid on a public school construction project in Oregon. The bid documents require a bid bond equal to ten percent of the bid amount. The contractor's bid is two hundred thousand dollars. What happens if the contractor is awarded the project but refuses to enter into the contract?

A. The contractor forfeits only the actual administrative costs the school district incurred in rebidding the project

B. The surety may be required to pay up to the bond amount to compensate the school district for the difference between the withdrawn bid and the next lowest responsible bid

C. The contractor receives a formal warning from the CCB but retains the right to bid on future public projects

D. The school district must re-advertise the project and the original contractor faces no financial consequence

10. A contractor is scheduling a commercial tenant improvement project and identifies that the HVAC installation cannot begin until the framing and rough electrical are complete. This relationship between activities is best described as which type of dependency?

A. A resource dependency where multiple trades compete for the same equipment or crew availability

B. A discretionary dependency based on the project manager's preferred construction sequence and workflow

C. An external dependency created by permit approval timelines outside the contractor's direct control

D. A mandatory finish-to-start dependency dictated by the physical and technical requirements of the work

11. A residential contractor in Oregon receives a complaint from a homeowner alleging defective roof installation. The CCB initiates a complaint process. What is the maximum amount the CCB may award from the contractor's surety bond to resolve a residential claim?

A. The maximum award is limited to fifty thousand dollars per claim regardless of the bond amount on file

B. The maximum award is limited to the face amount of the contractor's surety bond on file with the CCB

C. The maximum award is limited to the original contract price minus any payments already made by the homeowner

D. There is no maximum because the surety company must cover all proven damages regardless of bond limits

12. A contractor is working on a project with a contract value of forty-five thousand dollars. The homeowner requests an addition to the scope that will add twelve thousand dollars. Oregon law requires which of the following before the contractor proceeds?

A. A verbal agreement witnessed by a third party present at the time the scope change is discussed on site

B. A written change order signed by both the homeowner and the contractor documenting the new scope, cost, and timeline

C. An email from the homeowner confirming approval is sufficient without a formal written change order document

D. CCB notification within five business days of the homeowner's verbal authorization to proceed with the change

13. A general contractor on a commercial project receives a claim from a concrete subcontractor for additional compensation due to delays caused by the owner's late approval of shop drawings. What contract provision most directly addresses this situation?

A. A no-damage-for-delay clause that limits the subcontractor's remedy to a time extension only

B. A pay-if-paid clause that conditions subcontractor payment on the contractor's receipt of payment from the owner

C. An indemnification clause that shifts all liability for design errors to the architectural firm of record

D. The delay is governed by the differing site conditions clause in the original prime contract agreement

14. Under Oregon law, a contractor is required to provide homeowners with specific information before entering into a residential construction contract. Which of the following must the contractor include in the written contract?

A. A disclosure of any lawsuits filed against the contractor within the past five calendar years in Oregon courts

B. The contractor's federal employer identification number and the company's annual gross revenue from last year

C. A guarantee that the project will increase the home's appraised value by at least the amount of the contract

D. The contractor's CCB license number, the notice of owner's rights, and information about complaint procedures

15. A contractor plans to excavate a trench six feet deep for a utility installation. The soil is classified as Type B under OSHA's soil classification system. Which protective measure is acceptable for this trench?

A. No protective system is required for Type B soil when the trench will be open for fewer than twenty-four hours

B. Sloping the trench walls at an angle no steeper than one horizontal to one vertical from the bottom of the excavation

C. Placing a single sheet of plywood against each trench wall to prevent soil from falling onto workers below

D. Stacking sandbags along the top edge of the trench to redirect surface water away from the excavation walls

16. A contractor is managing cash flow on a large project and needs to track costs by category. Which cost tracking method provides the most detailed breakdown of where project funds are being spent?

A. A single general ledger entry recording total monthly expenditures for the entire project as one line item

B. A bank reconciliation statement comparing cleared checks against the total contract amount each billing period

C. A job cost accounting system that assigns every expense to specific cost codes within the project budget

D. A quarterly profit-and-loss statement showing net income from all active projects combined for the period

17. A contractor discovers an underground storage tank during excavation on a residential lot. No environmental assessment was performed before construction began. What is the contractor's immediate legal obligation under Oregon environmental law?

A. Stop work in the affected area and report the discovery to the Oregon Department of Environmental Quality

B. Remove the tank immediately to prevent further contamination and dispose of it at the nearest landfill facility

C. Cover the tank with excavated soil and continue work in a different area of the lot until the owner decides

D. Document the discovery with photographs and resume excavation as long as no visible leaking is detected

18. A framing subcontractor on a residential project provides a preliminary lien notice to the homeowner. Under Oregon construction lien law, when must this notice be delivered to preserve the subcontractor's lien rights on a residential project?

A. Within thirty calendar days after the subcontractor completes all work and demobilizes from the project site

B. Within eight business days of first furnishing labor, materials, equipment, or services to the residential project

C. Before the building permit is issued by the local jurisdiction for the residential construction project

D. At the time the subcontract agreement is signed by both the general contractor and the subcontractor

19. A contractor's employee is diagnosed with carpal tunnel syndrome caused by repetitive motions performed during work. Under Oregon workers' compensation law, how is this condition classified?

A. As a non-compensable pre-existing condition unrelated to workplace activities or employment duties

B. As an occupational disease that is compensable under workers' compensation if caused by employment activities

C. As a personal health issue that must be covered by the employee's private health insurance provider

D. As an acute injury that is only compensable if it occurred during a single identifiable workplace incident

20. A contractor bills a homeowner based on the percentage of work completed each month. In month three, the contractor reports sixty percent completion and invoices accordingly, but an independent inspection reveals only forty-two percent of the work is actually finished. This billing practice is best described as which of the following?

A. Overbilling, which constitutes a potentially deceptive trade practice and may violate Oregon contractor regulations

B. Acceptable front-loading that is standard practice in residential construction payment applications

C. A legitimate billing strategy that accounts for materials purchased but not yet installed on the project

D. A minor administrative error that can be corrected by adjusting the next month's progress billing amount

21. A general contractor's project schedule shows a task with five days of total float. If this task is delayed by three days, what impact does this have on the overall project completion date?

A. No impact because the delay consumes only three of the available five days of float for that task path

B. The project completion date extends by three days because any delay automatically extends the critical path

C. No impact on the completion date but the contractor must pay liquidated damages for the three-day delay

D. The project completion date extends by three days minus any concurrent delays on parallel activity paths

22. An Oregon contractor is bidding a project that requires both a performance bond and a payment bond. What is the fundamental difference between these two types of bonds?

A. A performance bond protects the owner's lenders while a payment bond protects the project's design team

B. A performance bond guarantees timely completion while a payment bond guarantees the quality of materials used

C. A performance bond covers construction defects discovered after occupancy while a payment bond covers warranty items

D. A performance bond guarantees the contractor will complete the work per the contract while a payment bond guarantees payment to subcontractors and suppliers

23. A contractor is calculating the area of a triangular gable wall to determine how much siding material is needed. The base of the triangle measures twenty-four feet and the height from the base to the peak is eight feet. How many square feet of siding are required to cover this gable?

A. One hundred ninety-two square feet based on the full rectangular area of the gable wall section

B. Ninety-six square feet based on one-half of the base multiplied by the height of the triangular shape

C. Sixty-four square feet based on the height multiplied by the height again for the triangular wall area

D. One hundred twenty square feet based on the average of the base and height multiplied by two sides

24. A commercial construction project experiences a two-week delay because the architect issues revised structural drawings after steel fabrication has already begun. Who typically bears financial responsibility for this type of delay?

A. The steel fabricator bears the cost because they should have confirmed the drawings before starting fabrication

B. The general contractor absorbs the cost as part of the overall project contingency built into their original bid

C. The project owner bears the cost because the architect is the owner's agent and the design change originated from the owner's team

D. Each party bears their own costs equally under the standard shared-risk provisions of most commercial contracts

25. Under Oregon law, which of the following types of construction work requires a CCB license?

- A. All construction work performed for compensation requires a CCB license unless specifically exempted by statute
- B. Work performed by a homeowner on a property they plan to sell within twelve months of completing the work
- C. Only work valued above five thousand dollars requires a CCB license in the state of Oregon
- D. Only new construction requires a CCB license while repair and maintenance work is exempt from licensing

26. A contractor receives a stop-work order from a local building inspector citing a code violation discovered during a framing inspection. Which action should the contractor take first?

- A. Cease all work covered by the stop-work order immediately and review the specific violation cited by the inspector
- B. Continue framing work on unaffected portions of the building while disputing the cited violation with the inspector
- C. Contact the homeowner to inform them of the delay before reviewing the specific code violation that was cited
- D. File a formal appeal with the state building codes division before taking any corrective action on the site

27. A contractor is reviewing a subcontract agreement and finds a pay-if-paid clause. What does this clause mean for the subcontractor?

- A. The subcontractor receives payment on the same schedule as the general contractor regardless of owner payment
- B. The subcontractor's right to payment is conditioned on the general contractor first receiving payment from the project owner for the subcontractor's portion of work
- C. The subcontractor receives payment within thirty days of invoice submission regardless of the owner's payment status
- D. The subcontractor must provide a partial lien waiver before each progress payment is processed and released

28. An Oregon contractor hires a sixteen-year-old for summer employment on a construction site. Under Oregon child labor laws, which restriction applies to this worker?

- A. The minor is prohibited from operating power-driven woodworking machinery, hoisting equipment, and performing roofing or excavation work
- B. The minor may perform any construction task as long as they complete an eight-hour safety orientation before starting
- C. The minor is restricted only from working more than forty hours per week but faces no task-specific limitations
- D. The minor may perform all tasks except electrical work and is limited to twenty-five hours per week during school

29. A contractor's project budget includes a line item for project overhead at twelve percent of direct costs. Which of the following is properly classified as project overhead rather than a direct cost?

- A. Wages paid to a carpenter for framing walls on the specific project during their scheduled shift hours
- B. The cost of concrete delivered to the project site for the foundation pour on the scheduled pour date
- C. Rental fees for a backhoe used exclusively on this project during the two-week excavation phase of work
- D. The project superintendent's salary, temporary site office rental, and jobsite portable toilet service fees

30. A contractor is required to maintain an asbestos-free work environment on a renovation project. During demolition of interior walls, workers discover material that appears to contain asbestos. What must the contractor do before work can continue in that area?

- A. Notify the building owner that asbestos removal is outside the contractor's scope and is the owner's responsibility
- B. Stop work in the affected area and have the suspect material tested by a certified laboratory before proceeding with any further demolition or disturbance
- C. Remove the suspect material using standard dust-control measures and dispose of it in sealed plastic bags
- D. Continue demolition while requiring workers to wear standard dust masks until test results are returned

31. A contractor submits a progress payment application to the project owner on a commercial job. The owner withholds ten percent of each payment as retainage. Under Oregon law, when must the owner release retainage to the contractor?

- A. Retainage must be released within thirty days after the contractor submits the final pay application for the job
- B. Retainage must be released within fifteen days after the owner occupies or begins using the completed building
- C. Retainage must be released immediately upon the architect's issuance of the certificate of substantial completion
- D. Retainage must be released in accordance with the contract terms and applicable Oregon statutes governing retainage on the project type

32. A contractor is developing a safety program for a new construction company. Under OSHA regulations, which element is the foundation of an effective workplace safety program?

- A. Purchasing the most expensive personal protective equipment available on the market for every employee
- B. Requiring every employee to sign a liability waiver before beginning work on any construction project
- C. Management commitment and employee involvement in hazard identification, prevention, and training programs
- D. Hiring a full-time safety officer for every project regardless of the number of workers on the site

33. An Oregon contractor completes a residential roofing project and the homeowner refuses to make the final payment. The contractor wants to file a construction lien. What is the deadline for filing a residential construction lien in Oregon after the contractor last furnished labor or materials?

- A. Seventy-five days after the date the contractor last provided labor, materials, equipment, or services to the project
- B. Thirty calendar days after the contractor sends a written demand for final payment to the homeowner's address
- C. One hundred twenty days after the project reached substantial completion as certified by the building inspector
- D. Sixty calendar days after the contractor files a complaint with the Oregon Construction Contractors Board

34. A project manager is using earned value management to track a commercial project. The budgeted cost of work scheduled is one hundred fifty thousand dollars, and the budgeted cost of work performed is one hundred thirty-five thousand dollars. What is the schedule variance?

- A. The schedule variance is positive fifteen thousand dollars indicating the project is ahead of schedule
- B. Negative fifteen thousand dollars, indicating the project is behind schedule because less work was completed than planned
- C. Zero because the actual cost must be known before schedule variance can be accurately calculated
- D. Positive fifteen thousand dollars indicating the project is under budget by that amount at this point in time

35. Under Oregon employment law, an employer must provide employees with a meal period. After how many consecutive hours of work must a meal period be provided?

- A. After six consecutive hours of work, the employer must provide an unpaid meal period of at least thirty minutes
- B. After four consecutive hours of work, the employer must provide a paid fifteen-minute break for meal time
- C. After eight consecutive hours of work, the employer must provide two separate thirty-minute meal periods
- D. Meal periods are only required for employees under eighteen years of age regardless of shift length worked

36. A contractor is pouring a concrete foundation in cold weather with ambient temperatures forecasted to drop below thirty-five degrees Fahrenheit overnight. Which cold weather concrete practice is most important to prevent damage?

- A. Protecting freshly placed concrete from freezing by using insulated blankets, heated enclosures, or other approved cold weather methods during the initial curing period
- B. Adding extra water to the concrete mix to compensate for the reduced hydration rate caused by cold temperatures
- C. Pouring the concrete directly onto frozen ground to take advantage of the cold soil as a natural curing retarder
- D. Reducing the concrete thickness by twenty percent because cold temperatures increase the compressive strength faster

37. A commercial project owner requests that the contractor accelerate the schedule to complete the project two weeks early. The contract does not include an acceleration clause. What is the contractor's best course of action?

- A. Negotiate a change order with the owner that specifies the additional costs and any revised terms resulting from acceleration

- B. Refuse to accelerate because the original contract completion date is the only enforceable project deadline
- C. Accelerate the work and submit a claim for additional costs after the project reaches substantial completion
- D. Hire additional subcontractors immediately and invoice the owner for the overtime at the end of each pay period

38. A contractor is bidding on a prevailing wage project and must calculate the total hourly labor cost for a journeyman carpenter. The base wage is forty-two dollars per hour and the fringe benefit rate is eighteen dollars and fifty cents per hour. What is the minimum total hourly compensation the contractor must pay?

- A. Forty-two dollars per hour because fringe benefits may be provided through insurance and retirement plans instead of cash wages
- B. The minimum total hourly compensation is forty-two dollars base wage plus the full fringe benefit rate totaling sixty dollars and fifty cents per hour
- C. Forty-two dollars per hour plus half of the fringe benefit rate for a total of fifty-one dollars and twenty-five cents per hour
- D. Sixty dollars and fifty cents per hour but only if the worker is employed full-time and has completed a ninety-day probationary period

39. A contractor is planning a residential addition that will encroach on the property setback line established by local zoning ordinance. What must the contractor obtain before proceeding with construction?

- A. A building permit waiver signed by the adjacent property owners acknowledging the reduced setback distance
- B. A zoning variance or other appropriate approval from the local planning or zoning authority before construction begins
- C. Written confirmation from the CCB that the reduced setback does not violate the contractor's license conditions
- D. An engineering certification confirming the structural integrity of the addition at the reduced setback distance

40. A contractor employs twenty-five workers and is notified that OSHA will conduct an inspection of the jobsite. Under OSHA regulations, which right does the contractor have during the inspection?

- A. The right to refuse the inspection and demand that OSHA obtain an administrative warrant before entering the site

- B. The right to postpone the inspection for up to seventy-two hours to prepare required documentation and records
- C. The right to have an attorney present and to decline to answer any questions during the walkaround inspection
- D. The right to accompany the compliance officer during the walkaround but not to refuse entry without a warrant

41. A contractor includes a contingency allowance of five percent in a project estimate. Under which circumstance is it appropriate to use contingency funds during construction?

- A. To cover the cost of upgraded finish materials that the homeowner selects after the contract is already signed
- B. To cover unforeseen conditions or risks that were not specifically identified during the estimating and bidding phase
- C. To increase the contractor's profit margin if the project is completed under budget with unused allowance funds
- D. To pay for permit fees that the contractor forgot to include in the original line-item estimate for the project

42. A contractor is demolishing a structure built in the early nineteen sixties. Which hazardous material is most likely to be present in the building's insulation, floor tiles, and pipe wrapping based on the construction era?

- A. Volatile organic compounds from latex-based interior paint applied throughout the building's finished spaces
- B. Asbestos-containing materials commonly used in insulation, vinyl floor tiles, and pipe wrapping in buildings constructed before nineteen eighty
- C. Polychlorinated biphenyls from the building's residential grade electrical wiring insulation throughout all circuits
- D. Radon gas trapped inside the concrete foundation walls from naturally occurring uranium deposits in the aggregate

43. Under Oregon construction law, when is a contractor permitted to assign the contract to another contractor without the owner's consent?

- A. When the original contractor maintains supervisory oversight of the assignee's work throughout the project duration
- B. When the assignee holds an equal or higher classification CCB license than the original contractor on file

- C. A contractor is generally not permitted to assign a contract without the written consent of the project owner
- D. When the remaining contract balance is less than ten thousand dollars and the project is past fifty percent completion

44. A contractor needs to calculate payroll for an employee who worked forty-six hours during a single workweek. The employee's regular hourly rate is thirty-two dollars. Under Oregon overtime law for non-exempt employees, what is the employee's gross pay for the week?

- A. One thousand five hundred sixty-eight dollars, calculated as forty hours at thirty-two dollars plus six hours at forty-eight dollars per hour
- B. One thousand four hundred seventy-two dollars, calculated as forty-six hours at the regular rate of thirty-two dollars per hour
- C. One thousand six hundred dollars, calculated as fifty hours at thirty-two dollars per hour using a rounded work week
- D. One thousand two hundred eighty dollars, calculated as forty hours at thirty-two dollars with no overtime premium paid

45. A contractor is awarded a project with a stipulated sum contract. During excavation, the contractor encounters rock that was not indicated on the geotechnical report or contract documents. Under standard contract provisions, this situation is classified as which of the following?

- A. An owner-caused delay that automatically entitles the contractor to additional compensation without documentation
- B. A contractor's assumption of risk that is included within the original stipulated sum contract price for excavation
- C. A force majeure event that suspends all contract obligations until the unforeseen condition is fully resolved
- D. A differing site condition that may entitle the contractor to additional compensation and a time extension through a change order

46. A contractor employs a safety manager who conducts weekly toolbox talks on the jobsite. Which topic should be prioritized when workers are assigned to perform trenching operations for the first time?

- A. Soil classification, protective systems, means of egress, and hazardous atmosphere recognition specific to trenching and excavation work
- B. Material handling techniques and proper lifting mechanics for moving excavated soil with wheelbarrows

- C. First aid procedures for treating heat-related illness during warm weather conditions on outdoor job sites
- D. The importance of wearing high-visibility clothing when working near vehicle traffic on public roadways

47. A contractor is reviewing a construction contract and finds an indemnification clause that requires the contractor to hold the owner harmless from all claims arising from the contractor's work. What type of risk does this clause transfer to the contractor?

- A. Only the risk of property damage to the owner's existing structures adjacent to the new construction work area
- B. Only the risk of bodily injury to the contractor's employees that occurs during the normal course of project work
- C. The risk of third-party claims including bodily injury and property damage arising from the contractor's operations as specified in the clause
- D. All financial risk for the entire project including design errors and owner-directed changes to the contract scope

48. An Oregon contractor wants to advertise services online. Under CCB regulations, which information must be included in the contractor's advertising?

- A. The contractor's CCB license number must be included in all advertising as required by Oregon contractor regulations
- B. The contractor's surety bond company name and the face amount of the bond must appear in all advertisements
- C. The contractor's net worth and annual revenue figures must be disclosed in all digital advertising materials
- D. Only the contractor's business name is required because the CCB license number is only needed on written contracts

49. A general contractor on a residential project discovers that the plumbing subcontractor has been performing work without maintaining the required workers' compensation coverage. What is the general contractor's potential liability?

- A. The general contractor has no liability because each subcontractor is solely responsible for their own coverage status
- B. The general contractor may become the statutory employer and be liable for workers' compensation claims filed by the uninsured subcontractor's workers
- C. The general contractor is liable only if they had written notice of the coverage lapse more than ten business days ago

D. The general contractor's liability is limited to reimbursing the CCB for any administrative fines assessed against the subcontractor

50. A contractor is evaluating two pieces of equipment for purchase. Machine A costs sixty thousand dollars with a useful life of ten years. Machine B costs forty-five thousand dollars with a useful life of six years. Using straight-line depreciation with no salvage value, what is the annual depreciation expense for Machine A?

A. Forty-five hundred dollars per year based on dividing the purchase price by the useful life in years plus a contingency

B. Seven thousand five hundred dollars per year calculated by dividing the purchase price by the useful life of six years

C. Twelve thousand dollars per year calculated by dividing the purchase price by the useful life of five years

D. Six thousand dollars per year calculated by dividing the sixty-thousand-dollar cost by the ten-year useful life

51. Under Oregon law, what is the purpose of the Construction Contractors Board's surety bond requirement for licensed contractors?

A. To provide a source of funds to compensate property owners, subcontractors, and material suppliers who suffer financial loss due to the contractor's failure to perform or pay

B. To guarantee that the contractor will complete every project on time regardless of circumstances or conditions

C. To fund the CCB's annual operating budget through bond premium assessments collected from all licensed contractors

D. To ensure that the contractor maintains a minimum net worth sufficient to cover any active project's full value

52. A contractor is installing a temporary electrical panel on a construction site. Under OSHA electrical safety standards, which protective measure is required for all temporary wiring used on construction sites?

A. All temporary circuits must be protected by an electrician who remains on site during all hours of active work

B. All temporary wiring must be rated for permanent installation even when used only during the construction phase

C. Ground-fault circuit interrupter protection must be provided on all one hundred twenty-volt, single-phase, fifteen- and twenty-ampere receptacle outlets

D. Temporary wiring must be replaced with permanent wiring within thirty calendar days of initial installation on site

53. A contractor enters into a cost-plus contract with a fee of fifteen percent of direct costs. The total direct costs at project completion are two hundred eighty thousand dollars. What is the contractor's total fee for the project?

A. Forty-two thousand dollars calculated by multiplying the percentage fee by the total project direct costs

B. Twenty-eight thousand dollars calculated by applying ten percent to the total direct costs instead of fifteen percent

C. Forty-two thousand dollars based on the fixed-fee percentage applied to the documented and approved direct costs

D. Fifty-six thousand dollars calculated by applying the fee percentage to both direct and indirect project costs combined

54. A contractor is building a deck attached to a residential structure. The local building department requires a permit for the deck construction. If the contractor builds the deck without obtaining the required permit, what potential consequences may the contractor face?

A. The contractor may receive a verbal warning from the building department but no monetary penalties for a first offense

B. The contractor may be assessed a monetary penalty by the building department for unpermitted work and may also face complaints filed with the CCB

C. No consequences apply because deck construction is classified as minor work exempt from permit requirements in Oregon

D. The contractor's CCB license is automatically suspended for thirty days upon discovery of unpermitted construction work

55. A contractor is preparing a project schedule and identifies that the electrical rough-in, plumbing rough-in, and HVAC rough-in can all occur simultaneously after framing is complete. These three activities represent which type of scheduling relationship?

A. Parallel activities that can be performed concurrently because they share the same predecessor but are independent of each other

B. Sequential activities that must be completed one after another in a specific predetermined trade order

C. Critical path activities that collectively determine the minimum possible duration of the entire project schedule

D. Milestone activities that mark the completion of a major project phase before the next phase can begin

56. Under Oregon employment law, which of the following is an employer required to provide to workers as part of the state's final paycheck requirements when an employee is terminated without cause?

A. A severance payment equal to two weeks of the employee's regular wages in addition to all earned wages owed

B. All earned and unpaid wages must be paid no later than the end of the first business day after the date of termination

C. A written letter of recommendation along with the final paycheck within five business days of the termination date

D. All earned wages within thirty calendar days of the termination date plus accrued but unused sick leave balances

57. A contractor is waterproofing a below-grade foundation wall. Which waterproofing method provides a continuous barrier against hydrostatic pressure from groundwater on the exterior of the foundation?

A. Applying a membrane waterproofing system to the exterior face of the foundation wall below grade with proper drainage board and footer drain installation

B. Painting the interior face of the foundation wall with latex-based waterproofing paint after the wall has fully cured

C. Installing interior French drains along the perimeter of the basement floor slab to redirect groundwater to a sump

D. Adding a water-reducing admixture to the concrete mix during the foundation pour to reduce wall permeability

58. A contractor is managing a project and discovers that a key material has a twelve-week lead time that was not accounted for in the original schedule. Which action should the contractor take first?

A. Substitute a readily available alternative material without notifying the owner or architect about the specification change

B. Evaluate the impact of the lead time on the project schedule and notify the owner of the potential delay along with proposed mitigation options

C. Delay all work on the project until the specified material arrives rather than risk installing the wrong product

D. Place the material order and begin work on unrelated project phases without updating the schedule or notifying anyone

59. Under Oregon tax law, a construction contractor purchases materials for installation in a customer's property. How are these materials typically taxed?

A. Oregon assesses a use tax on all construction materials at the point of installation into real property improvements

B. Oregon imposes a contractor-specific materials tax of three percent on all supplies purchased for active construction projects

C. Oregon does not impose a general sales tax, so materials purchased in Oregon are generally not subject to a state sales tax

D. Construction materials are exempt from all state and local taxation in Oregon regardless of where they are purchased

60. A contractor is building a commercial structure and the structural engineer specifies number four rebar at twelve-inch spacing for a concrete slab. The contractor's crew installs number three rebar at eighteen-inch spacing instead. What is the primary concern with this substitution?

A. The reduced rebar size and increased spacing compromise the structural capacity of the slab below the engineered design requirements

B. The substitution is acceptable because number three rebar is a standard upgrade over number four in most applications

C. The wider spacing improves concrete flow around the reinforcement and produces a stronger finished slab overall

D. The only concern is aesthetic because the rebar size does not affect the structural performance of the concrete slab

61. A contractor receives a notice from the Oregon Department of Revenue stating that the business owes unpaid payroll taxes that were withheld from employee wages but not remitted. These withheld taxes are legally classified as which of the following?

A. Income taxes owed by the employees that become the employer's personal debt only upon formal assessment by the state

B. Estimated quarterly tax payments that may be deferred until the end of the contractor's fiscal year without penalty

C. Business operating expenses that are deductible from the contractor's gross income on the company's annual tax return

D. Trust fund taxes held by the employer on behalf of the employees and the government, for which the employer has a fiduciary obligation to remit

62. A contractor needs to install fall protection for workers on a commercial roof that has a parapet wall around the perimeter. The parapet wall is forty-two inches high and constructed of solid masonry. Under OSHA regulations, does this parapet wall satisfy the guardrail requirement for fall protection?

- A. No, because OSHA requires a manufactured guardrail system and does not recognize masonry walls as fall protection
- B. The parapet wall must be at least thirty-nine inches high to meet the guardrail requirement and a forty-two-inch wall satisfies this standard
- C. Yes, but only if a midrail is installed at twenty-one inches above the roof surface in addition to the existing parapet wall
- D. No, because parapet walls only qualify as fall protection on residential structures and not on commercial buildings

63. A contractor signs a subcontract that includes a dispute resolution clause requiring binding arbitration. If a payment dispute arises between the contractor and the subcontractor, what does this clause mean?

- A. Both parties must attempt mediation first and may proceed to litigation if mediation fails within sixty calendar days
- B. The subcontractor waives all lien rights by agreeing to the arbitration clause in the signed subcontract agreement
- C. Either party may choose to bypass arbitration and file a lawsuit in circuit court if the amount in dispute exceeds twenty-five thousand
- D. The dispute must be resolved through a binding arbitration proceeding and the arbitrator's decision is generally final and enforceable

64. A contractor is estimating the cost of a concrete driveway. The driveway is sixty feet long, twelve feet wide, and four inches thick. Concrete costs one hundred forty-five dollars per cubic yard. What is the material cost for the concrete?

- A. One thousand two hundred eighty-five dollars and seventy-five cents based on the calculated volume and price per yard
- B. Two thousand one hundred seventy-five dollars based on fifteen cubic yards of concrete at the quoted unit price
- C. One thousand two hundred ninety-three dollars based on approximately eight-point-nine cubic yards at the quoted price per yard
- D. One thousand seven hundred forty dollars based on twelve cubic yards of concrete at the quoted unit price per yard

65. A contractor's employee is working in a confined space classified as a permit-required confined space under OSHA regulations. Which of the following is a mandatory requirement for entry into this type of space?

- A. The contractor must provide atmospheric monitoring equipment but is not required to assign a standby attendant outside
- B. The entry supervisor may authorize entry verbally without completing a written entry permit for spaces under twenty feet deep
- C. Workers may enter the space after a single initial atmospheric test even if conditions inside the space may change
- D. A written entry permit must be completed and an attendant must be stationed outside the space during all entry operations

66. A contractor is reviewing the project specifications and finds that a particular section references the use of proprietary products by brand name. Under standard construction contract terms, what is the contractor's option regarding substitutions?

- A. The contractor must install only the specified brand and has no right to request a substitution under any circumstances
- B. The contractor may submit a substitution request to the architect or engineer for review and approval of an equivalent product
- C. The contractor may substitute any product of equal or greater cost without submitting a formal request for approval
- D. Substitutions are only permitted on public works projects and are prohibited on all privately funded construction projects

67. A contractor operating as a sole proprietor dies unexpectedly during an active residential project. Under Oregon CCB law, what happens to the contractor's license?

- A. The license terminates upon the death of the sole proprietor and cannot be transferred to another individual or entity
- B. The license automatically transfers to the contractor's surviving spouse for a period of one calendar year from date of death
- C. The license remains active for six months to allow the estate to complete all projects currently under contract
- D. The CCB assigns the license to the surety bond company until all active projects reach substantial completion

68. A contractor is planning a project and uses a work breakdown structure to organize the scope. What is the primary purpose of a work breakdown structure in construction project management?

- A. To establish the contractual payment schedule between the owner and the general contractor for progress billing
- B. To rank subcontractors in order of importance based on their contract value relative to the total project budget
- C. To assign specific workers to each trade activity based on their experience level and hourly compensation rate
- D. To decompose the total project scope into smaller, manageable work packages that can be estimated, scheduled, and controlled

69. Under Oregon law, a homeowner hires a contractor to build a detached garage. The contract price is twenty-eight thousand dollars. The contractor collects a five-thousand-dollar down payment before beginning any work. Has the contractor violated Oregon's down payment regulations?

- A. No, because the contract specifically states the down payment amount and the homeowner agreed to the terms in writing
- B. No, because the down payment limit applies only to contracts exceeding fifty thousand dollars in total project value
- C. Yes, because contractors are prohibited from collecting any down payment on residential projects in the state of Oregon
- D. Yes, because Oregon law limits the initial down payment to one thousand dollars or ten percent of the contract price, whichever is less, unless different terms are specified in the written contract

70. A contractor is reviewing an OSHA citation received after a jobsite inspection. The citation is classified as a "serious" violation. What does this classification mean under OSHA's enforcement framework?

- A. The violation poses an immediate danger of death and the worksite must be evacuated until the hazard is fully abated
- B. The violation is a minor paperwork deficiency that carries no monetary penalty but requires correction within thirty days
- C. A hazard exists that could cause death or serious physical harm and the employer knew or should have known about the condition
- D. The violation is a repeated offense that occurred within three years of a previous citation for the same type of hazard

71. A contractor is performing a preconstruction review of a residential project and determines that a survey of the property is needed to confirm boundary locations before foundation work begins. Who is typically responsible for providing the property survey?

- A. The general contractor includes the survey cost in the project estimate as a direct construction cost line item
- B. The property owner is responsible for providing the survey as it defines the legal boundaries where construction will occur
- C. The local building department provides the survey as part of the building permit application and review process
- D. The architect includes the survey in the design documents as part of the site analysis and civil engineering scope

72. Under Oregon construction lien law, a property owner may protect against liens filed by subcontractors or suppliers by requiring the general contractor to provide which of the following documents with each progress payment request?

- A. Lien waivers from subcontractors and material suppliers confirming they have been paid for work and materials provided to date
- B. A notarized affidavit from the general contractor's surety bond company certifying that all project debts have been paid
- C. A certificate from the CCB confirming no complaints have been filed against the contractor during the current billing period
- D. Bank statements from the general contractor showing sufficient funds to cover all outstanding subcontractor invoices

73. A general contractor discovers that a completed section of drywall installation has moisture damage due to a roof leak that occurred over the weekend. The contractor's builder's risk insurance policy is current. Which of the following accurately describes the coverage situation?

- A. Builder's risk typically covers the installed work and materials on site against risks including water damage from weather events
- B. The drywall subcontractor's general liability policy is the only applicable coverage for damage to their installed work
- C. Builder's risk insurance covers only the building's structural frame and does not extend to interior finish materials
- D. The homeowner's property insurance is responsible for covering all damage that occurs during the construction period

74. A contractor is preparing a bid and needs to calculate the labor productivity rate for a framing crew. The historical data shows that a four-person crew can frame one hundred sixty linear feet of exterior wall per eight-hour day. What is the labor productivity rate per person per hour?

- A. Forty linear feet per person per hour based on dividing the total output by the number of crew members only
- B. Twenty linear feet per person per hour based on the total daily output divided by the crew size only
- C. Five linear feet per person per hour based on dividing the total daily output by both the number of crew members and the number of hours worked
- D. Ten linear feet per person per hour based on dividing the total output by the hours worked only without crew size

75. A contractor is installing a new electrical service panel in a residential home. Under the National Electrical Code as adopted in Oregon, what is the minimum service entrance conductor size for a two-hundred-ampere residential service?

- A. Number four AWG copper conductors are adequate for a two-hundred-ampere residential service installation
- B. Number six AWG copper conductors meet the minimum requirement for a standard two-hundred-ampere residential service
- C. Number one AWG copper conductors are sufficient for a two-hundred-ampere residential electrical service panel
- D. Number two-ought AWG copper or number four-ought AWG aluminum conductors are typically required for a two-hundred-ampere residential service

76. A contractor is managing a multi-trade project and two subcontractors are in a dispute over work sequencing that is causing project delays. What is the general contractor's role in resolving this dispute?

- A. The general contractor should wait for the subcontractors to resolve the dispute between themselves without intervention
- B. The general contractor should terminate both subcontract agreements and hire replacement subcontractors immediately
- C. The general contractor has the authority and obligation to coordinate and direct the work sequence among all subcontractors to maintain the project schedule
- D. The general contractor should refer the dispute to the project architect for resolution as the design professional of record

77. An Oregon contractor is performing a home energy retrofit and installs insulation that does not meet the R-value specified in the Oregon energy code. What is the potential consequence of this non-compliant installation?

- A. The contractor may be required to remove and replace the non-compliant insulation to meet the code-required R-value and may face a code violation from the building inspector
- B. The contractor faces no consequence because energy code requirements are advisory recommendations and not enforceable standards
- C. The building inspector may issue a conditional certificate of occupancy allowing the homeowner to occupy while the contractor appeals
- D. The homeowner must file a separate complaint with the Oregon Department of Energy because the building inspector has no jurisdiction

78. A contractor hires a new field superintendent and provides them with authority to approve minor field changes up to a specified dollar amount. This delegation of authority is an example of which management concept?

- A. Span of control that limits the number of direct reports to maintain effective communication within the organization
- B. An exculpatory clause that transfers all financial liability from the contractor to the superintendent for approved changes
- C. Delegated authority with defined limits that allows field personnel to make decisions within established parameters
- D. A joint venture arrangement between the contractor and superintendent for profit sharing on field change approvals

79. A contractor is bidding a project and the specifications call for LEED Silver certification. Which additional cost category must the contractor include in the estimate that would not be required on a non-LEED project?

- A. Standard building permit fees assessed by the local jurisdiction for all commercial construction projects in Oregon
- B. General liability insurance premiums at the standard rate for commercial construction projects of similar scope and value
- C. Workers' compensation insurance premiums calculated at the applicable rate for each trade classification on the project
- D. LEED documentation, commissioning, enhanced energy modeling, sustainable material premiums, and construction waste diversion costs

80. A contractor completes a residential construction project and the homeowner identifies a list of minor deficiencies during the final walkthrough. The contractor and homeowner create a written list of items to be corrected. This document is commonly known as which of the following?

- A. A certificate of substantial completion issued by the architect certifying the building is ready for its intended use
- B. A warranty claim form submitted by the homeowner to initiate the post-construction defect correction process
- C. A punch list that identifies specific items requiring correction or completion before the project is considered fully finished
- D. A final inspection report generated by the local building inspector documenting all outstanding code violations found

## Practice Exam 14: Answer Key and Explanations

**1. C** — Forming a single-member LLC provides personal liability protection by creating a legal separation between the owner's personal assets and business debts. Unlike a sole proprietorship, an LLC shields the owner's home, personal savings, and other assets from business creditors. Oregon allows single-member LLCs, so the contractor does not need a partner to gain this protection.

**2. D** — Oregon law requires employers to report workplace injuries to their workers' compensation insurer within five days of the employer's knowledge of the injury or claim. Timely reporting ensures the injured worker receives prompt medical treatment and benefits. Failure to report within the required timeframe can result in penalties and delayed benefits for the employee.

**3. A** — On prevailing wage projects, the general contractor may be held jointly liable for unpaid wages owed by subcontractors to their workers. This joint liability provision exists to ensure workers receive the wages they are legally owed regardless of which tier of contractor employed them. General contractors must actively verify that subcontractors comply with prevailing wage requirements.

**4. D** — A detailed unit-cost estimate breaks every task into individual quantities of materials, labor hours, and equipment, producing the most accurate cost projection. For a defined scope like a kitchen remodel with architectural drawings and finish selections, this method accounts for each specific item rather than relying on broad averages. Parametric and analogous methods are less precise because they use generalized multipliers.

**5. C** — Oregon CCB licenses are issued by category, and a residential-only license does not authorize commercial construction work. Performing work outside the scope of the license classification is a violation of Oregon CCB law and can result in penalties, fines, and

disciplinary action. The contractor must obtain the appropriate commercial license endorsement before accepting commercial projects.

**6. B** — The most significant factor distinguishing an employee from an independent contractor under Oregon law is behavioral control. When the hiring party controls when, where, and how the worker performs tasks, the worker is legally an employee. Independent contractors maintain control over their own methods and are not subject to the hiring party's direction on how work is performed.

**7. C** — When a homeowner cancels a contract without cause after work has begun, the contractor is entitled to retain payment for all work completed and materials procured to date. The contractor has performed in good faith and incurred costs that the homeowner authorized under the signed agreement. The specific terms of the contract and Oregon law govern the rights of both parties in a cancellation scenario.

**8. A** — OSHA requires employers to record work-related injuries and illnesses on the OSHA 300 log when they result in medical treatment beyond first aid, days away from work, restricted duty, or job transfer. Near-miss events and minor complaints do not meet the recording criteria. Accurate recordkeeping helps identify workplace hazard patterns and ensures regulatory compliance.

**9. B** — A bid bond guarantees that the contractor will enter into a contract at the bid price if awarded the project. If the contractor withdraws after award, the surety pays the project owner the difference between the withdrawn bid and the next lowest responsible bid, up to the bond amount. This protects the owner from financial loss caused by a bidder's failure to honor their submitted price.

**10. D** — When one activity cannot begin until another is finished due to physical or technical requirements, this is a mandatory finish-to-start dependency. HVAC ductwork cannot be installed until framing provides the structural framework and rough electrical establishes conduit routes. This type of dependency is dictated by the construction sequence rather than by preference or resource availability.

**11. B** — The CCB's authority to award claims from a contractor's surety bond is limited to the face amount of the bond on file. The bond serves as a financial guarantee up to its stated value, and the CCB cannot award more than the bond covers. Bond amounts vary by license category and the contractor's claims history.

**12. B** — Oregon law requires that changes to the scope, cost, or timeline of a construction contract be documented in a written change order signed by both parties before the additional work begins. Verbal agreements and informal emails do not provide adequate legal protection for either the contractor or the homeowner. Written change orders prevent disputes by clearly defining the modified terms.

**13. D** — A no-damage-for-delay clause limits the subcontractor's remedy for owner-caused delays to a time extension only, barring recovery of additional costs. When the owner's late shop drawing approval delays the subcontractor's work, this clause prevents the subcontractor from claiming monetary damages. These clauses are common in commercial construction and shift delay-related financial risk to subcontractors.

**14. D** — Oregon law requires residential construction contracts to include the contractor's CCB license number, a notice of the owner's rights, and information about how to file a complaint with the CCB. These mandatory disclosures protect homeowners by ensuring they can verify the contractor's credentials and know their legal recourse. Failure to include these elements can result in CCB enforcement action.

**15. B** — For Type B soil, OSHA requires trench walls to be sloped at an angle no steeper than one horizontal to one vertical, which equates to a forty-five-degree angle from the bottom of the trench. This slope ratio prevents soil collapse and protects workers inside the excavation. Other acceptable protective methods for Type B soil include shoring and trench shield systems installed per manufacturer specifications.

**16. C** — A job cost accounting system assigns every expenditure to specific cost codes within the project budget, providing a detailed breakdown by category such as labor, materials, equipment, and subcontractor costs. This level of detail allows the contractor to identify cost overruns early and make informed management decisions. General ledger entries and quarterly statements lack the granularity needed for effective project cost control.

**17. A** — When an underground storage tank is discovered during excavation, Oregon environmental law requires the contractor to stop work in the affected area and report the finding to the Oregon Department of Environmental Quality. Disturbing or removing a tank without proper authorization can cause contamination and expose the contractor to significant liability. The DEQ directs the investigation and any required remediation.

**18. B** — Oregon construction lien law requires subcontractors on residential projects to deliver a notice of right to a lien within eight business days of first furnishing labor, materials, equipment, or services. This preliminary notice preserves the subcontractor's right to file a lien if payment is not received. Failure to deliver the notice within the required timeframe may result in the loss of lien rights.

**19. B** — Carpal tunnel syndrome caused by repetitive workplace activities is classified as an occupational disease under Oregon workers' compensation law. Unlike acute injuries from a single event, occupational diseases develop over time from ongoing work conditions. The condition is compensable if the employee can demonstrate that their employment activities were a major contributing cause.

**20. A** — Billing for a higher percentage of completion than has actually been performed constitutes overbilling, which is a deceptive practice that may violate Oregon contractor regulations. Overbilling misrepresents the project's progress and can lead to financial harm to the homeowner who pays for work not yet completed. Contractors must ensure billing accuracy reflects actual progress verified by inspection.

**21. A** — Total float represents the amount of time an activity can be delayed without affecting the overall project completion date. Since the task has five days of float and the delay consumed only three days, the project end date is not impacted. The remaining two days of float still provide a buffer before any delay on this path would affect the critical path.

**22. D** — A performance bond guarantees that the contractor will complete the project in accordance with the contract terms and specifications, protecting the owner against default. A payment bond guarantees that the contractor will pay subcontractors, laborers, and material

suppliers. These bonds serve different protective functions and are often required together on public works and large commercial projects.

**23. B** — The area of a triangle is calculated as one-half times the base times the height. For this gable, that equals one-half times twenty-four feet times eight feet, which is ninety-six square feet. This calculation determines the actual surface area of the triangular gable wall that needs to be covered with siding material.

**24. C** — When the architect issues revised drawings that cause delays, the project owner typically bears financial responsibility because the architect acts as the owner's agent. The design change originated from the owner's design team, and the contractor and steel fabricator were proceeding based on the originally approved documents. The contractor is generally entitled to a change order for additional time and costs.

**25. A** — Oregon law requires any person performing construction work for compensation to hold a valid CCB license unless they fall under a specific statutory exemption. Exemptions include homeowners working on their own property they occupy, certain employees, and other narrowly defined categories. The licensing requirement applies regardless of project value or type of construction work performed.

**26. A** — Upon receiving a stop-work order, the contractor must immediately cease all work covered by the order and review the specific violation cited. Continuing work in defiance of a stop-work order can result in additional penalties and legal consequences. The contractor should identify the corrective action needed and address the violation before requesting reinspection.

**27. B** — A pay-if-paid clause conditions the subcontractor's right to payment on the general contractor first receiving payment from the project owner for the subcontractor's work. This clause shifts the risk of owner nonpayment from the general contractor to the subcontractor. Courts in some jurisdictions interpret these clauses strictly, and subcontractors should carefully evaluate this risk before signing agreements containing such provisions.

**28. A** — Oregon child labor laws and federal regulations prohibit minors under eighteen from performing hazardous occupations in construction, including operating power-driven woodworking machinery, hoisting equipment, roofing work, and excavation activities. These restrictions exist because developing bodies are more vulnerable to serious injury from hazardous tasks. Employers must verify that all work assignments for minors comply with applicable child labor restrictions.

**29. D** — Project overhead includes costs that support the project but cannot be directly attributed to a specific construction task. The superintendent's salary, temporary site office, and portable toilet service benefit the entire project rather than a single work item. Direct costs such as carpenter wages, concrete, and equipment rental are tied directly to specific construction activities.

**30. B** — When suspect asbestos-containing materials are encountered during demolition, work must stop in the affected area until the material is sampled and tested by a certified laboratory. Disturbing asbestos without proper precautions releases dangerous fibers that cause serious respiratory diseases. Only trained and licensed abatement professionals may remove confirmed asbestos-containing materials.

**31. D** — Oregon law governs retainage practices and the timing of release varies by project type and contract terms. Retainage on public works projects is subject to specific statutory requirements, while private projects are governed by the contract provisions. Contractors should review both the contract and applicable Oregon statutes to understand the specific retainage release conditions for each project.

**32. C** — OSHA identifies management commitment and employee involvement as the foundational elements of an effective safety program. Management must allocate resources, set expectations, and lead by example, while employees must participate in hazard identification, reporting, and prevention. Effective safety programs combine leadership support with active worker engagement in training and hazard recognition.

**33. A** — Oregon construction lien law requires a contractor to file a lien claim within seventy-five days after the date the contractor last provided labor, materials, equipment, or services to the project. Missing this deadline results in the permanent loss of the right to file a construction lien on that project. Contractors must track their last furnishing date carefully to preserve their lien rights.

**34. B** — Schedule variance is calculated by subtracting the planned value from the earned value. In this case, one hundred thirty-five thousand minus one hundred fifty thousand equals negative fifteen thousand dollars. The negative result indicates the project is behind schedule because less work has been completed than was planned at this point in the project timeline.

**35. A** — Oregon law requires employers to provide employees with an unpaid meal period of at least thirty minutes when the employee works six or more consecutive hours. The meal period must be uninterrupted, and the employee must be relieved of all duties during the break. Employers who fail to provide required meal periods may face penalties from the Bureau of Labor and Industries.

**36. A** — Freshly placed concrete must be protected from freezing during the initial curing period because ice crystal formation disrupts the hydration process and permanently reduces concrete strength. Insulated blankets, heated enclosures, or other approved cold weather protection methods maintain adequate curing temperatures. Adding extra water or pouring on frozen ground are improper practices that further compromise concrete quality.

**37. B** — When the contract does not include an acceleration clause, the general contractor should negotiate a change order that addresses the additional costs of accelerating the schedule. Acceleration requires overtime labor, additional crews, or compressed task durations, all of which increase costs. A written change order protects the contractor by documenting the owner's authorization and the agreed-upon compensation for the schedule compression.

**38. D** — On prevailing wage projects, the contractor must pay the full prevailing wage rate, which includes both the base hourly wage and the fringe benefit rate. The total minimum compensation is forty-two dollars plus eighteen dollars and fifty cents, equaling sixty dollars and fifty cents per hour. Fringe benefits may be paid as cash wages or through bona fide benefit plans, but the total compensation must meet or exceed the published prevailing rate.

**39. B** — When a proposed structure encroaches on a required setback, the contractor must obtain a zoning variance or other appropriate approval from the local planning or zoning authority before construction. Setbacks are established by local ordinances to maintain spacing

between structures and property lines. Building without an approved variance violates the zoning code and may require removal of the non-conforming construction.

**40. A** — Under the Fourth Amendment and OSHA regulations, an employer has the right to refuse entry to an OSHA compliance officer and require them to obtain an administrative warrant before conducting the inspection. While most employers allow inspections voluntarily, the legal right to require a warrant exists. This right does not eliminate the obligation to comply with OSHA standards or correct known hazards.

**41. B** — Contingency funds are reserved for unforeseen conditions and risks that could not be specifically identified during the estimating phase. Examples include unexpected soil conditions, concealed damage in renovation work, or weather impacts that exceed normal planning assumptions. Contingency is not intended to cover scope upgrades, forgotten line items, or profit margin increases.

**42. B** — Buildings constructed before nineteen eighty commonly contain asbestos in insulation, vinyl floor tiles, pipe wrapping, roofing materials, and other products. Asbestos was widely used for its fire resistance and insulating properties until health risks were identified. Contractors demolishing structures from this era must assume asbestos may be present and comply with testing and abatement requirements.

**43. C** — Construction contracts are generally not assignable without the written consent of the project owner because construction agreements involve personal skill, trust, and qualifications. The owner selected the contractor based on their specific capabilities and reputation. Assigning the contract to another party without consent could deprive the owner of the benefit of their bargain.

**44. A** — Non-exempt employees must receive overtime pay at one and one-half times their regular rate for hours worked over forty in a workweek. The calculation is forty hours at thirty-two dollars equaling one thousand two hundred eighty dollars, plus six overtime hours at forty-eight dollars equaling two hundred eighty-eight dollars. The total gross pay is one thousand five hundred sixty-eight dollars.

**45. D** — Encountering rock not indicated in the geotechnical report or contract documents constitutes a differing site condition under standard contract provisions. This entitles the contractor to submit a claim for additional compensation to cover the increased excavation costs and a time extension for the resulting delay. The contractor must promptly notify the owner and document the condition before proceeding.

**46. A** — Workers performing trenching operations must understand soil classification systems, required protective systems such as sloping and shoring, means of egress requirements, and how to recognize hazardous atmospheres in excavations. These topics directly address the most common causes of trenching fatalities including cave-ins and atmospheric hazards. OSHA requires competent person training for all excavation work.

**47. C** — An indemnification or hold-harmless clause transfers the risk of third-party claims arising from the contractor's operations to the contractor. This typically covers bodily injury and property damage claims brought by persons not party to the contract. The scope of the indemnification depends on the specific language of the clause and applicable state law limitations.

**48. A** — Oregon CCB regulations require contractors to include their CCB license number in all forms of advertising, including online advertisements, print materials, and vehicle signage. This requirement helps consumers verify that they are hiring a licensed contractor. Failure to include the license number in advertising is a violation that can result in CCB enforcement action.

**49. B** — When a subcontractor fails to maintain required workers' compensation coverage, the general contractor may become the statutory employer responsible for workers' compensation claims filed by the subcontractor's uninsured employees. Oregon law imposes this liability to ensure injured workers receive benefits regardless of their direct employer's compliance. General contractors should verify subcontractor insurance status before allowing work to begin.

**50. D** — Straight-line depreciation is calculated by dividing the asset's purchase price by its useful life. For Machine A, sixty thousand dollars divided by ten years equals six thousand dollars per year. This method spreads the cost of the asset evenly over its useful life and is the most commonly used depreciation method for construction equipment.

**51. A** — The CCB surety bond requirement provides a source of funds to compensate property owners, subcontractors, and material suppliers who suffer financial loss due to a contractor's failure to perform work or make required payments. The bond acts as a financial safety net when the contractor defaults or engages in improper conduct. Bond amounts are set by statute and vary by license category.

**52. C** — OSHA requires ground-fault circuit interrupter protection on all one hundred twenty-volt, single-phase, fifteen- and twenty-ampere receptacle outlets used on construction sites. GFCIs detect imbalances in electrical current that indicate a ground fault and shut off power within milliseconds to prevent electrocution. This requirement applies to all temporary wiring installations on construction sites.

**53. C** — Under a cost-plus contract with a fifteen percent fee, the contractor's fee is calculated by multiplying the fee percentage by the total documented direct costs. Fifteen percent of two hundred eighty thousand dollars equals forty-two thousand dollars. The fee compensates the contractor for overhead and profit, while direct costs are reimbursed at actual documented amounts.

**54. D** — A differing site condition entitles the contractor to additional compensation through a change order when subsurface or physical conditions differ materially from those indicated in the contract documents. The contractor must provide timely written notice to the owner, document the condition, and demonstrate the additional costs incurred. Failure to notify promptly may waive the contractor's right to additional compensation.

**55. A** — Parallel activities are tasks that can be performed concurrently because they share the same predecessor but do not depend on each other. Electrical, plumbing, and HVAC rough-in work all require completed framing as a predecessor but can proceed simultaneously in different areas of the building. Scheduling parallel activities reduces the overall project duration compared to performing them sequentially.

**56. B** — Oregon law requires that when an employer terminates an employee without cause, all earned and unpaid wages must be paid no later than the end of the first business day after

the termination date. This includes regular wages, overtime, and any other earned compensation. Failure to pay final wages within the required timeframe can result in penalty wages assessed against the employer.

**57. A** — An exterior membrane waterproofing system applied to the outside face of the foundation wall below grade provides a continuous barrier against hydrostatic pressure from groundwater. Combined with proper drainage board and footer drains, this system prevents water from reaching the foundation wall. Interior methods such as French drains manage water that has already penetrated the wall rather than preventing entry.

**58. B** — When a long lead time is discovered, the contractor must first evaluate the impact on the project schedule and immediately notify the owner of the potential delay. Providing proposed mitigation options such as alternative materials or schedule resequencing demonstrates proactive management. Substituting materials without authorization or delaying notification can result in contract disputes and loss of the contractor's right to a time extension.

**59. C** — Oregon does not impose a general sales tax on the purchase of goods, including construction materials. Materials purchased within Oregon are not subject to a state sales tax at the point of purchase. However, contractors purchasing materials from states that do impose sales tax may be subject to that state's tax laws depending on the transaction and delivery circumstances.

**60. A** — Substituting smaller rebar at wider spacing significantly reduces the structural capacity of the concrete slab below the engineered design requirements. Number three rebar has a smaller cross-sectional area than number four, and eighteen-inch spacing provides less reinforcement per linear foot than twelve-inch spacing. This unauthorized substitution creates a structural deficiency that could lead to slab failure under design loads.

**61. D** — Payroll taxes withheld from employee wages, such as state and federal income tax withholdings, are classified as trust fund taxes because the employer holds them in a fiduciary capacity on behalf of the employees and the government. The employer has a legal obligation to remit these funds to the appropriate taxing authority. Failure to remit trust fund taxes can result in personal liability for the business owner.

**62. B** — OSHA requires guardrail systems to be at least thirty-nine inches high, measured from the walking surface to the top edge. A forty-two-inch masonry parapet wall meets this height requirement and functions as a guardrail by providing a physical barrier that prevents workers from falling off the roof edge. The solid construction of the parapet eliminates the need for a separate manufactured guardrail system.

**63. D** — A binding arbitration clause requires the parties to resolve disputes through arbitration rather than litigation, and the arbitrator's decision is generally final and enforceable in court. Arbitration is typically faster and less expensive than litigation but limits the parties' ability to appeal the outcome. Contractors and subcontractors should understand the implications of binding arbitration before signing agreements containing such clauses.

**64. C** — The volume is calculated as sixty feet times twelve feet times zero-point-three-three feet (four inches converted to feet), which equals approximately two hundred thirty-seven-point-six cubic feet. Dividing by twenty-seven cubic feet per cubic yard yields approximately

eight-point-eight cubic yards. At one hundred forty-five dollars per yard, the material cost is approximately one thousand two hundred ninety-three dollars.

**65. D** — OSHA's permit-required confined space standard mandates that a written entry permit be completed before workers enter the space and that a trained attendant be stationed outside the space during all entry operations. The permit documents the hazards, atmospheric test results, rescue procedures, and authorized entrants. The attendant monitors conditions and maintains communication with workers inside the space.

**66. B** — When specifications reference proprietary products by brand name, the contractor may typically submit a substitution request to the architect or engineer for review and approval of an equivalent alternative product. The proposed substitute must meet or exceed the specified product's performance requirements. The architect evaluates the substitution for compliance with design intent before granting or denying approval.

**67. A** — When a sole proprietor dies, the CCB license terminates because the license was issued to that specific individual and is not transferable. The contractor's estate may need to make arrangements for completing or transferring active projects, but the license itself cannot be inherited or assigned. A new entity or individual would need to apply for their own CCB license.

**68. D** — A work breakdown structure decomposes the total project scope into progressively smaller, manageable work packages that can be individually estimated, scheduled, assigned, and controlled. This hierarchical decomposition ensures that every element of the project scope is identified and accounted for. The WBS serves as the foundation for accurate estimating, scheduling, and cost control throughout the project.

**69. D** — Oregon law limits the initial down payment a contractor may collect on residential projects to one thousand dollars or ten percent of the contract price, whichever is less, unless a different amount is agreed upon in the written contract. Ten percent of twenty-eight thousand dollars is two thousand eight hundred dollars, which exceeds one thousand dollars. Since the contract terms regarding the down payment amount determine compliance, the answer depends on whether the written contract specified the five-thousand-dollar amount.

**70. C** — An OSHA "serious" violation means a hazard exists in the workplace that could cause death or serious physical harm and the employer knew or should have known about the condition. Serious violations carry mandatory monetary penalties and require corrective action within a specified abatement period. This classification is more severe than an "other-than-serious" violation but less immediate than an "imminent danger" finding.

**71. B** — The property owner is typically responsible for providing the boundary survey because the survey establishes the legal property boundaries where construction will take place. The contractor relies on survey information to position the foundation and structure within the required setbacks and easements. While the contractor may recommend a survey, the property owner bears the responsibility and cost of establishing boundary locations.

**72. A** — Requiring lien waivers from subcontractors and material suppliers with each progress payment confirms that those parties have been paid for work and materials furnished to date. This protects the property owner against construction liens filed by unpaid subcontractors or

suppliers after the owner has already paid the general contractor. Lien waivers create a documented chain of payment verification throughout the project.

**73. A** — Builder's risk insurance covers work in progress and materials stored on site against specified perils including water damage, wind, fire, theft, and vandalism. The policy protects the contractor's and owner's financial interest in the partially completed structure. In this scenario, moisture damage to installed drywall from a roof leak during construction would typically fall within the builder's risk coverage.

**74. C** — Labor productivity per person per hour is calculated by dividing the total daily output by the number of crew members and then by the hours worked. One hundred sixty linear feet divided by four workers equals forty linear feet per person per day. Dividing forty feet by eight hours equals five linear feet per person per hour, which is the unit productivity rate used for estimating.

**75. D** — The National Electrical Code requires minimum number two-ought AWG copper or number four-ought AWG aluminum conductors for a two-hundred-ampere residential service entrance. These conductor sizes have adequate ampacity to safely carry the full service load without exceeding temperature ratings. Undersized conductors create fire hazards due to overheating under load conditions.

**76. C** — The general contractor has contractual authority and responsibility to coordinate the work of all subcontractors on the project and direct the construction sequence to maintain the project schedule. This coordination role is a fundamental obligation of the general contractor under most construction contracts. Allowing trade disputes to persist without intervention can result in costly delays and potential liquidated damages.

**77. A** — Installing insulation that does not meet the code-required R-value violates the Oregon energy code, and the building inspector may require the contractor to remove and replace the non-compliant insulation. Energy code compliance is mandatory and enforced through the building inspection process. The contractor bears the cost of corrective work to bring the installation into compliance with the specified requirements.

**78. C** — Delegating authority with defined limits allows field personnel to make time-sensitive decisions within established dollar thresholds without requiring approval from the contractor for every minor field change. This management practice improves project efficiency by reducing decision-making delays. Clear documentation of the superintendent's authority limits protects both the contractor and the project from unauthorized scope changes.

**79. D** — LEED-certified projects require additional costs not present on conventional projects, including LEED documentation and registration fees, building commissioning, enhanced energy modeling, sustainable material premiums, and construction waste diversion and recycling. These costs can significantly increase the project budget and must be accounted for in the estimate. Contractors bidding LEED projects should have experience with the certification requirements and associated cost impacts.

**80. C** — A punch list is a document created during the final walkthrough that identifies specific minor deficiencies, incomplete items, or corrections needed before the project is considered fully complete. Both the contractor and homeowner collaborate to identify these items, and the

contractor is responsible for addressing each one. Completion of punch list work typically triggers the release of final payment and the start of warranty periods.