

# PRACTICE EXAM 9: OREGON CCB SIMULATION (80 QUESTIONS)

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

1. Ortiz Contracting LLC holds a Commercial General Contractor — Level 2 endorsement with a \$25,000 commercial bond and \$1 million aggregate insurance. A hospital group asks Ortiz to bid on a \$3.2 million patient wing expansion. The hospital requires \$2 million in aggregate liability coverage. What must Ortiz do to bid this project?

- A. Upgrade to a CGC1 endorsement before submitting the bid, as CGC2 cannot work on hospital projects
- B. Increase the liability insurance to \$2 million aggregate to meet the project owner's contractual requirement
- C. Decline the project because CGC2 contractors are limited to projects under \$1 million in value
- D. Request the hospital to waive the insurance requirement because CCB minimums supersede owner requirements

2. A contractor estimates a project's direct costs at \$73,000. The general overhead rate is 17%. The contractor wants a net profit of \$9,500. A competing contractor has submitted a bid of \$92,000. If the contractor matches the competitor's bid, what is the actual profit?

- A. \$9,500, matching the contractor's original profit target
- B. \$13,000, because the competitor's bid includes a built-in premium over the contractor's cost
- C. Zero, because the competitor's bid is below the contractor's breakeven point
- D. \$6,490, because the total cost including overhead is \$85,410 and the competitor's bid is \$92,000 minus that cost

3. A contractor operating as a sole proprietorship dies unexpectedly. The contractor had three active residential projects in progress. Under Oregon law, what happens to the CCB license?

- A. The license terminates because it was issued to the individual, and a sole proprietorship has no separate legal existence beyond the owner
- B. The license transfers automatically to the contractor's spouse or next of kin for 90 days
- C. The CCB extends the license for six months to allow the estate to complete active projects

D. The projects continue under the supervision of any licensed subcontractors already on the active jobsites

4. A contractor's project requires 4,600 square feet of blown-in attic insulation at R38. The insulation contractor quotes \$2.15 per square foot installed. The general contractor applies a 10% markup to the subcontractor's bid. What does the general contractor charge the homeowner for the insulation scope?

- A. \$9,890.00
- B. \$9,430.00
- C. \$10,879.00
- D. \$11,385.00

5. A contractor operating as an LLC has two members — a husband and wife. They hire their 17-year-old son to work on jobsites during summer break. The son is the only employee. How is this business classified for CCB purposes?

- A. Nonexempt, because employing a minor always triggers nonexempt classification regardless of family status
- B. Exempt, because the LLC has two members who are spouses and the only employee is their child, who qualifies as immediate family
- C. Nonexempt, because LLCs with any employees must carry workers' compensation insurance
- D. Exempt, but only if the son works fewer than 20 hours per week during the summer

6. A general contractor on a commercial project discovers that the mechanical subcontractor has installed an HVAC unit that is one-half ton smaller than specified in the construction documents. The installation is complete and the ductwork is connected. What should the general contractor do?

- A. Accept the installation because a one-half ton variance is within standard industry tolerance
- B. Note the deviation in the daily log and address it during the punch list phase at project completion
- C. Require the mechanical subcontractor to absorb the cost difference and credit the owner accordingly
- D. Notify the project owner and the engineer of record, document the discrepancy, and determine whether the undersized unit must be replaced to meet the design specifications

7. Under Oregon law, a contractor's CCB license is valid for what period before renewal is required?

- A. Two years from the date of issuance
- B. One year from the date of issuance
- C. Three years from the date of issuance
- D. Five years from the date of issuance

8. A contractor's project involves pouring a concrete foundation in January. Overnight temperatures are forecast to drop below freezing for three consecutive nights after the pour. What precaution must the contractor take to protect the concrete?

- A. Add calcium chloride to the concrete mix to prevent freezing during the curing process
- B. Pour the concrete in the late afternoon so it has maximum time to cure before temperatures drop
- C. Protect the freshly placed concrete from freezing temperatures using insulated blankets, heated enclosures, or other coldweather concreting methods
- D. Delay the pour until spring when overnight temperatures consistently remain above 40°F

9. A contractor's employee is working on a residential roofing project at a height of 14 feet. The employer provides a personal fall arrest system. The employee connects the harness lanyard to a roof vent pipe. Is this an adequate anchor point?

- A. Yes, because roof vent pipes are designed to support the weight of construction equipment
- B. No, because anchor points must be capable of supporting at least 5,000 pounds per attached worker — a vent pipe does not meet this requirement
- C. Yes, because any fixed object on the roof surface qualifies as an acceptable anchor point
- D. No, but only because the height exceeds 12 feet, which requires a doublelanyard connection

10. A property owner signs a residential construction contract at their home on Friday afternoon. The contract price is \$32,000. The homeowner provides a \$3,200 deposit. On Monday morning, the homeowner calls to cancel under the OHSSA. The contractor has already purchased \$1,800 in materials. Is the cancellation valid?

- A. Yes, because Monday is within three business days of Friday — the contractor must return the full deposit and the homeowner is not required to pay for materials purchased during the cancellation period
- B. No, because the contractor's purchase of materials constitutes the beginning of substantial performance
- C. Yes, but the contractor may deduct the \$1,800 material cost from the returned deposit

D. No, because the homeowner provided a deposit, which constitutes waiver of cancellation rights

11. A contractor's balance sheet shows: cash \$28,000, accounts receivable \$47,000, equipment \$62,000, vehicle \$35,000, accounts payable \$31,000, loan balance \$55,000, and credit card debt \$8,000. What is the owner's equity?

- A. \$172,000
- B. \$94,000
- C. \$62,000
- D. \$78,000

12. A contractor operating as a corporation has four corporate officers — three sisters and one unrelated business partner. The corporation has no other employees. How is this business classified?

- A. Exempt, because the majority of officers (three of four) are immediate family members
- B. Nonexempt, because all corporations are automatically classified as nonexempt
- C. Nonexempt, because the corporation has more than two officers who are not all immediate family members
- D. Exempt, because corporations with four or fewer officers are always exempt

13. A contractor's project involves installing a solar panel array on a residential rooftop. The electrical work requires connecting the panels to the home's electrical service. In Oregon, what licenses must the solar subcontractor hold?

- A. A CCB license only — solar panel installation is classified as general construction, not electrical work
- B. A CCB license with proper endorsement and an electrical license from the Building Codes Division for the individuals performing electrical connections
- C. An Oregon Department of Energy solar installation certification only
- D. A special renewable energy endorsement from the CCB that covers both construction and electrical work

14. A contractor completes a residential project on April 1. The homeowner moves in on April 15. On March 1 of the following year, the homeowner discovers a plumbing defect and wants to file a CCB complaint. Is the complaint within the allowable timeframe?

- A. Yes, because it is within one year of first occupancy (April 15) and within two years of completion (April 1)
- B. No, because complaints must be filed within 180 days of the date the defect is first discovered
- C. Yes, but only if the homeowner can prove the defect existed at the time of project completion
- D. No, because the oneyear window from first occupancy expires on April 15, and the complaint is filed before that date

15. A contractor's project schedule shows that the critical path runs through activities  $A \rightarrow C \rightarrow E \rightarrow G$  with a total duration of 28 days. A noncritical path runs  $A \rightarrow B \rightarrow D \rightarrow G$  with a total duration of 22 days. Activity D experiences a 9day delay. What is the impact?

- A. No impact because Activity D has 6 days of float and the 9day delay converts this path to a new critical path at 31 days
- B. The project is delayed by 9 days because any delay on any path always delays the project
- C. The project is delayed by 3 days because the original critical path is still 28 days
- D. The project is delayed by 3 days because the noncritical path now extends to 31 days ( $22 + 9$ ), exceeding the original critical path of 28 days by 3 days

16. Under Oregon's Construction Lien Law, a property owner who records a Notice of Nonresponsibility may limit their exposure to liens. When is a Notice of Nonresponsibility typically used?

- A. When a tenant makes improvements to a rental property without the landlord's knowledge or consent
- B. When the property owner wants to waive all lien rights for subcontractors working on the project
- C. When the property owner wants to prevent the general contractor from filing any future liens
- D. When the property owner seeks to extend the 75day lien filing deadline for their own convenience

17. A contractor's estimate for a deck project includes \$8,400 in materials, \$6,200 in labor, \$1,100 in equipment rental, and \$2,800 in job overhead. The general overhead rate is 14%. What is the total estimated cost before profit?

- A. \$21,130
- B. \$18,500
- C. \$23,600
- D. \$19,740

18. A contractor's employee is using a table saw without the blade guard in place. The employer knows the guard has been removed but has not required it to be reinstalled. The employee suffers a severe laceration. Under Oregon OSHA, what type of violation is most likely?

- A. Other than serious, because the missing guard is a minor infraction with no history of causing injuries
- B. Willful, because the employer knew about the removed guard and deliberately failed to require its reinstallation
- C. De minimis, because table saw guards are optional equipment on construction jobsites
- D. Repeated, because the violation must have been cited at least once before to qualify for any penalty

19. A contractor receives a written proposal from a roofing subcontractor for \$14,500. The GC incorporates this number into their bid to the property owner. After winning the project, the roofing subcontractor informs the GC that their bid contained a \$2,000 mathematical error and they want to increase their price to \$16,500. The GC's contract with the owner is a lump sum at the original bid price. What is the GC's best course of action?

- A. Reject the subcontractor's request entirely and hold them to the original \$14,500 bid
- B. Split the \$2,000 difference equally with the subcontractor to maintain the working relationship
- C. Pass the \$2,000 increase through to the property owner via a change order
- D. Evaluate the subcontractor's claim, negotiate a fair resolution, and determine whether to absorb the increase, find another subcontractor, or negotiate a compromise

20. A contractor's cash flow projection shows that Project Alpha will require a \$28,000 material purchase on Day 1, a \$15,000 payroll on Day 14, and will receive the first progress payment of \$35,000 on Day 45. What cash flow problem does this create?

- A. The contractor must fund \$43,000 in expenses before receiving the first \$35,000 payment, creating a negative cash position for approximately 45 days
- B. No problem, because the progress payment exceeds the material cost
- C. The contractor's general liability insurance covers the cash shortfall during the project startup phase
- D. The contractor can defer the material purchase until the progress payment is received without affecting the schedule

21. Under Oregon law, a contractor licensed with a Residential Developer endorsement may do which of the following?

- A. Perform unlimited building trades on residential structures using the developer's own construction crews
- B. Supervise and manage subcontractors who are performing construction work on the developer's projects
- C. Own property, arrange for construction through licensed general contractors, and intend to sell the completed structures — but not perform any construction work directly
- D. Act as both the developer and the general contractor on the same residential project

22. A contractor's project involves replacing the siding on a home built in 1976. Under the EPA RRP Rule, the contractor must follow leadsafe work practices. Which of the following is a key requirement of the RRP Rule?

- A. The contractor must be certified under the RRP Rule and the firm must be registered with the EPA
- B. The contractor must test every paint surface for lead content before beginning any siding removal
- C. The contractor must hire a separate EPA licensed lead abatement company to remove the siding
- D. The contractor must notify the EPA 30 days before beginning any work on a pre1978 structure

23. A contractor's project schedule includes a 3day lag between concrete pouring and framing to allow for curing. The contractor decides to use a rapidset concrete mix that reduces the required cure time to 1 day. This schedule adjustment is an example of which project management technique?

- A. Crashing — adding resources to reduce the duration of a criticalpath activity
- B. Resequencing — changing the logical order of activities to eliminate dependencies
- C. Resource leveling — balancing crew allocation across multiple concurrent activities
- D. Fasttracking — overlapping activities or reducing lag time to compress the schedule

24. A contractor operating as an LLC wants to bring in a new member who will manage the business while the original owner focuses on field operations. What document should govern the new member's authority, capital contribution, and profitsharing arrangement?

- A. A revised CCB license application reflecting the new ownership structure

- B. The LLC's operating agreement, which defines management structure, capital contributions, and profit distribution
- C. A partnership agreement filed with the Oregon Secretary of State
- D. A memorandum of understanding registered with the Oregon Department of Revenue

25. A contractor's employee is working inside a confined space — a large storm water vault — when they begin to feel dizzy and short of breath. What is the most likely hazard, and what should the worker do?

- A. Heat exhaustion from working in an enclosed space — the worker should drink water and take a break inside the vault
- B. Dehydration from insufficient fluid intake — the worker should request a water delivery to the vault entrance
- C. Oxygen deficiency or toxic atmosphere inside the confined space — the worker should exit immediately and report the conditions to the supervisor
- D. Fatigue from extended physical labor — the worker should sit down inside the vault and rest for 15 minutes

26. A contractor's residential project has a contract price of \$95,000. The contractor's direct costs are \$61,000, job overhead is \$8,500, and general overhead allocation is \$12,200. What is the net profit and the net profit margin?

- A. Net profit \$13,300 and margin 14%
- B. Net profit \$26,500 and margin 27.9%
- C. Net profit \$34,000 and margin 35.8%
- D. Net profit \$8,500 and margin 8.9%

27. A contractor files a Claim of Lien on a residential property. The lien includes \$12,000 for completed work plus \$5,000 for work that was never performed because the homeowner terminated the contract early. Under Oregon's Construction Lien Law, what amount can the contractor legitimately lien for?

- A. \$17,000, because the contractor may include lost profits on the terminated portion of the contract
- B. \$12,000 plus a reasonable termination fee specified in the contract, regardless of the lien statute
- C. \$5,000, because the lien may only include the unperformed portion of the contract
- D. Only the value of labor and materials actually furnished — the \$12,000 for completed work

28. A contractor's foreman arrives at a jobsite on Monday morning and discovers that weekend vandals have damaged scaffolding, stolen tools, and spraypainted the exterior of the building under construction. What should the foreman do first regarding the scaffolding?

- A. Reassemble the scaffolding and begin the workday to stay on schedule
- B. Have a competent person inspect the scaffolding for structural integrity before allowing any worker to use it
- C. Replace all scaffolding components that show visible damage and resume normal operations
- D. Contact Oregon OSHA to report the vandalism and request an emergency scaffold inspection

29. A contractor's project budget includes a 7% general overhead allocation on \$84,000 in direct costs. Midway through the project, the contractor's accountant informs them that actual annual overhead expenses have increased, raising the true overhead rate to 12%. What financial impact does this have on the current project?

- A. The project is now underrecovering overhead by approximately \$4,200 ( $\$84,000 \times 5\%$  difference), reducing the actual profit
- B. No impact, because the overhead rate was fixed at the time of the estimate and cannot change during the project
- C. The contractor should immediately increase the contract price by 5% to reflect the updated overhead rate
- D. The contractor should file a change order with the property owner to recover the additional overhead expense

30. Under Oregon OSHA, a contractor is required to post a workplace safety poster informing employees of their rights under the Oregon Safe Employment Act. Where must this poster be displayed?

- A. In the contractor's main office only, where employees can review it during onboarding
- B. On the contractor's website, accessible to all employees via their mobile devices
- C. In each company vehicle, attached to the sun visor or dashboard
- D. In a conspicuous location at each workplace where employees can readily see it

31. A contractor's employee works on a commercial renovation project that requires removing old ceiling tiles. The Safety Data Sheet for the adhesive used to install the tiles indicates that the adhesive contains a respiratory sensitizer. Under the HazCom standard, what must the employer provide?

- A. A doctor's note clearing the employee for work with respiratory sensitizers
- B. A written exemption from Oregon OSHA allowing limited exposure to the sensitizer
- C. Training on the specific hazards of the adhesive, appropriate respiratory protection, and access to the SDS
- D. A 30day acclimation period during which the employee gradually increases exposure time

32. A contractor is bidding on a public school gymnasium project. The ITB requires the contractor to list all firsttier subcontractors (those contracting directly with the GC) who will perform work exceeding \$15,000. The contractor plans to selfperform the concrete work but subcontract electrical (\$42,000), plumbing (\$28,000), HVAC (\$35,000), and painting (\$12,000). Which subcontractors must be listed in the bid?

- A. All four subcontractors must be listed because they are all performing work on a public project
- B. Only electrical, plumbing, and HVAC — painting at \$12,000 is below the \$15,000 listing threshold
- C. Only electrical and HVAC because they represent the two highestvalue subcontracts
- D. None, because subcontractor listing requirements apply only to federal projects, not statefunded schools

33. A contractor's project requires removing an interior loadbearing wall and replacing it with a structural beam. The structural engineer's drawings specify a 51/4" × 16" glulam beam with specific connection hardware. The contractor's lumber supplier does not stock this beam size and offers a 51/4" × 14" glulam as a substitute. What should the contractor do?

- A. Reject the substitution and obtain the specified beam — do not substitute structural members without the engineer's written approval
- B. Accept the 14" beam because the 2" height reduction is within standard industry substitution tolerance
- C. Install the 14" beam and notify the building inspector at the framing inspection
- D. Accept the substitution and add supplemental blocking to compensate for the reduced beam depth

34. A contractor operating as a sole proprietor wants to determine whether they need to make quarterly estimated tax payments. The contractor's estimated federal tax liability for the year is \$8,500. Under IRS rules, must the contractor make estimated payments?

- A. No, because estimated payments are only required for corporations and LLCs
- B. No, because the \$8,500 liability is below the \$10,000 threshold for estimated payments
- C. Yes, but only if the contractor's previous year's tax liability exceeded \$15,000

D. Yes, because estimated payments are required when the expected tax liability exceeds \$1,000

35. A general contractor pays a subcontractor \$6,800 for completed work. The subcontractor provides a lien waiver for the \$6,800 payment. Two weeks later, the subcontractor files a Claim of Lien against the property for \$6,800. Is this lien valid?

A. Yes, because lien waivers only apply to future work, not work already completed and paid for

B. No, because the lien was filed prematurely before the project reached substantial completion

C. No, because the subcontractor already waived their lien rights for the \$6,800 by providing the lien waiver

D. Yes, because lien waivers are not legally binding in Oregon and cannot prevent a lien filing

36. A contractor's project involves installing a residential swimming pool. The excavation for the pool is 8 feet deep at the deep end. The soil is classified as Type B. What protective system options are available under Oregon OSHA?

A. Sloping, shoring, or shielding — all three accepted protective systems are available for excavations 5 feet or deeper

B. Only sloping is permitted for swimming pool excavations due to the irregular shape of the hole

C. No protective system is required because swimming pool excavations are exempt from OSHA rules

D. Only shielding with a trench box is permitted because the depth exceeds 6 feet

37. A contractor receives a CCB renewal notice and discovers that their continuing education requirement includes hours in CCB laws, regulations, and business practices. Where must this specific portion of the continuing education be completed?

A. Through any CCB approved education provider offering construction law courses

B. Through the CCB's own website, as this specific subject area is available only through the CCB

C. Through the NASCLA continuing education portal maintained by the national organization

D. Through the Oregon Secretary of State's business education division

38. A contractor's project schedule shows Activity V on the critical path with a planned duration of 6 days. The activity starts on time but encounters a productivity problem — the

crew completes only 4 days' worth of work in the first 6 days. Two additional days are needed. If no corrective action is taken, what is the impact?

- A. No impact, because the work was started on time and the critical path adjusts automatically
- B. The project is delayed by 6 days because the entire activity must be repeated from the beginning
- C. The project float increases by 2 days because the critical path is recalculated
- D. The project completion date is delayed by 2 days because any extension of a critical path activity directly delays the project

39. A contractor is reviewing their workers' compensation policy and sees the following classification codes: Code 5403 (Carpentry — Residential), Code 5190 (Electrical Wiring), and Code 5213 (Concrete Construction). Each code has a different premium rate. Why do different classification codes have different rates?

- A. Different rates reflect varying administrative costs for the insurance carrier by trade specialty
- B. The CCB assigns premium rates based on the contractor's endorsement type and bond amount
- C. Different trades have different levels of workplace injury risk, and high risk trades pay higher premium rates
- D. Premium rates are set by the Oregon Department of Revenue based on each trade's average annual revenue

40. A contractor builds a new home with a contract price of \$320,000. The contractor makes a written offer of warranty against defects in materials and workmanship. The homeowner accepts the warranty. Eighteen months after move-in, the homeowner discovers that the exterior stucco is cracking and separating from the substrate. What warranty obligation applies?

- A. No warranty obligation because the standard new home warranty expires after 12 months
- B. The specific terms of the written warranty govern the contractor's obligation — if stucco workmanship is covered and the warranty period has not expired, the contractor must address the defect
- C. The homeowner must first obtain three independent contractor estimates before the warrantor is obligated to act
- D. The warranty covers only structural defects, and exterior stucco cracking is classified as cosmetic

41. A contractor's estimate for a commercial tenant improvement project includes the following: demolition \$4,200, framing \$12,800, drywall \$9,600, electrical subcontractor

\$18,500, plumbing subcontractor \$7,200, painting \$5,400, flooring \$8,300, and HVAC subcontractor \$14,000. What is the total estimated direct cost?

- A. \$66,000
- B. \$80,000
- C. \$54,000
- D. \$80,000

42. A contractor is preparing to excavate a trench for a residential water line. Before digging, the contractor must contact which agency to have underground utilities located and marked?

- A. The Oregon Department of Environmental Quality, which maintains maps of all underground utilities
- B. The Oregon Utility Notification Center (dial 811) to have underground utilities located and marked before excavation
- C. The local building department, which issues excavation permits that include utility location information
- D. The Oregon Construction Contractors Board, which maintains a database of underground utility locations

43. A contractor's project is under a costplus contract with a 12% fee on total costs. The project incurs \$185,000 in direct costs and \$28,000 in job overhead. What is the contractor's total fee?

- A. \$22,200, calculated as 12% of direct costs only
- B. \$25,560, calculated as 12% of total costs including job overhead
- C. \$25,560, calculated as 12% of the combined direct costs and job overhead ( $\$213,000 \times 0.12$ )
- D. \$22,200, calculated as 12% of direct costs with job overhead billed separately at cost

44. A contractor's employee suffers a minor cut on their hand that requires only onsite first aid — cleaning the wound and applying a bandage. No medical treatment beyond first aid is needed, and the employee returns to work immediately. Must this injury be recorded on the OSHA 300 log?

- A. No, because injuries requiring only first aid treatment are not OSHA recordable
- B. Yes, because all workplace injuries regardless of severity must be recorded on the OSHA 300 log
- C. No, but the contractor must report the injury to Oregon OSHA within 24 hours
- D. Yes, but only if the employee files a workers' compensation claim for the first aid treatment

45. A contractor operating as a sole proprietor is considering hiring their first employee — a skilled carpenter with 10 years of experience. Before the carpenter begins work, the contractor must complete which of the following steps?

- A. Obtain a workers' compensation insurance policy covering the new employee
- B. Register the carpenter as an independent contractor with the Oregon Employment Department
- C. File a new business plan with the CCB reflecting the addition of the employee
- D. Notify the CCB of the change to nonexempt status, obtain workers' compensation insurance, register as an employer for tax purposes, and obtain an EIN if one has not already been obtained

46. A contractor's project involves a major kitchen renovation. The homeowner asks the contractor to remove a wall between the kitchen and dining room to create an open floor plan. The contractor suspects the wall may be loadbearing but is not certain. What should the contractor do?

- A. Remove the wall and install a temporary support while evaluating whether it was loadbearing
- B. Have a structural engineer evaluate the wall before removal to determine if it is loadbearing and, if so, design an appropriate replacement beam
- C. Remove the wall because most interior partition walls in residential construction are nonloadbearing
- D. Ask the homeowner whether they know if the wall is loadbearing based on the original construction drawings

47. Under Oregon law, what is the primary purpose of the Oregon Construction Contractors Board?

- A. To protect the public by licensing and regulating construction contractors, and to provide dispute resolution between contractors and property owners
- B. To set construction material prices and prevailing wage rates for all Oregon construction projects
- C. To design and enforce building codes for residential and commercial construction statewide
- D. To provide financing and bonding services to licensed contractors for public works projects

48. A contractor's project schedule shows that the drywall subcontractor cannot begin until four predecessor activities are complete: framing inspection (passed), rough plumbing inspection (passed), rough electrical inspection (pending), and rough HVAC inspection (passed). The

electrical inspection is scheduled for Friday. The drywall crew is scheduled to start Monday. Is this schedule realistic?

- A. No, because the drywall crew needs at least two weeks' notice before starting a new project
- B. Yes, because three of four inspections have already passed and the fourth is scheduled before the start date
- C. Yes, but only if the drywall crew agrees to work around any remaining electrical deficiencies
- D. No, because all four inspections must be passed and the electrical inspection may reveal deficiencies requiring correction before drywall can begin

49. A contractor's accountant recommends maintaining a separate bank account for each active project to improve financial tracking. What practical benefit does this provide?

- A. It eliminates the need for job costing because each project's finances are already isolated
- B. It satisfies the CCB's requirement that all contractors maintain separate project accounts
- C. It reduces the contractor's tax liability by segregating income and expenses by project
- D. It prevents commingling of project funds, making it easier to track cash flow, verify payments, and demonstrate proper financial management

50. A contractor's employee is performing welding on a commercial project. Sparks from the welding ignite nearby combustible debris, causing a small fire. The fire is extinguished with a portable extinguisher, and no injuries occur. Under Oregon OSHA, what should the contractor have done to prevent this incident?

- A. Obtained a fire marshal's permit before performing any welding operations on the commercial site
- B. Stationed a fire watch with appropriate extinguishing equipment during and after hot work operations, and cleared combustible materials from the work area
- C. Prohibited all welding operations inside the commercial building under construction
- D. Assigned a dedicated Oregon OSHA compliance officer to monitor all hot work activities

51. A contractor's project involves a retaining wall that requires a building permit and structural engineering. The contractor obtains the permit and hires a structural engineer. During construction, the building inspector notes that the rebar spacing does not match the engineered drawings. Who is responsible for ensuring the construction matches the approved plans?

- A. The contractor, who is responsible for building in conformance with the approved plans and specifications
- B. The structural engineer, who should have been onsite to verify rebar placement during construction

- C. The building inspector, who should have caught the discrepancy before the rebar was installed
- D. The property owner, who approved the plans and is responsible for verifying all construction activities

52. A contractor enters into a lump sum contract for \$145,000. During construction, the property owner requests three change orders totaling \$18,500 in additional work. What is the revised contract price?

- A. \$145,000, because lump sum contracts cannot be modified after signing
- B. \$163,500, because change orders are additions to the original contract price
- C. \$145,000 plus the change order amounts minus a 10% administrative fee
- D. \$163,500, because approved change orders modify the total contract price to reflect the additional scope

53. A contractor's foreman notices that a trench wall in a 6foot excavation has a visible crack running horizontally across the soil face. The trench is currently protected with a trench box. What should the foreman do?

- A. Note the crack in the daily log and continue monitoring it throughout the workday
- B. Add additional soil on top of the cracked area to stabilize the trench wall
- C. Evacuate workers from the trench, have a competent person evaluate the condition, and determine whether the protective system is adequate before allowing reentry
- D. Ignore the crack because the trench box provides adequate protection regardless of soil conditions

54. A contractor's estimate includes the following line items: concrete \$14,200, framing lumber \$22,800, roofing materials \$8,600, windows \$11,400, drywall \$5,200, and paint \$2,800. The contractor's material waste factors are: concrete 5%, framing 8%, roofing 10%, windows 0%, drywall 12%, and paint 5%. What is the total material cost after applying waste factors?

- A. \$65,000
- B. \$70,068
- C. \$68,500
- D. \$72,240

55. A contractor operating as a sole proprietor wants to protect their personal assets but does not want the administrative complexity of a corporation. Which business structure provides liability protection with minimal formality?

- A. Limited liability company (LLC), which provides personal liability protection without requiring corporate formalities like board meetings, bylaws, and recorded minutes
- B. General partnership, which provides liability protection when registered with the Secretary of State
- C. Sole proprietorship with an umbrella insurance policy, which creates a legal liability shield
- D. SCorporation, which eliminates all administrative requirements while providing full liability protection

56. A contractor's project involves installing a new deck on a residential home. The deck will be 3 feet above grade at its highest point. Under Oregon OSHA, is fall protection required for workers building this deck?

- A. Yes, because fall protection is required at all heights during deck construction
- B. Yes, because the 3foot height triggers fall protection for workers on an unprotected leading edge
- C. No, because 3 feet is below the 4foot residential construction fall protection threshold
- D. No, because Oregon OSHA requires fall protection at heights of 6 feet or more — a 3foot height does not meet this threshold

57. A contractor's marketing strategy includes a website, social media profiles, vehicle lettering, and yard signs at active jobsites. Under Oregon law, which element must appear on every one of these marketing materials?

- A. The contractor's federal Employer Identification Number and tax filing status
- B. The contractor's surety bond number and bonding company contact information
- C. The contractor's CCB license number
- D. The contractor's workers' compensation policy number and insurance carrier name

58. A contractor's project schedule shows that Activity W has a free float of 0 days and a total float of 5 days. What does this mean?

- A. Activity W can be delayed by up to 5 days without affecting the project completion date, but any delay will affect the start of the immediately following activity
- B. Activity W is on the critical path because it has zero free float
- C. Activity W has no scheduling flexibility because both float values indicate it cannot be delayed

D. Activity W can be delayed by 5 days without affecting either the next activity or the project completion date

59. A contractor receives an invoice from a lumber supplier for \$4,200. The invoice terms are "2/10, net 30." What does this mean?

A. The contractor owes \$4,200 in two installments of \$2,100 each, due on the 10th and 30th of the month

B. The contractor may take a 2% discount (\$84) if the invoice is paid within 10 days; otherwise, the full \$4,200 is due within 30 days

C. The contractor receives a 10% discount if the full amount is paid within 2 days of invoice receipt

D. The contractor owes \$4,200 plus a 2% service charge if payment is not received within 10 days

60. A contractor's project involves removing old knobandtube electrical wiring from a 1920s residential home. The contractor's electrician subcontractor begins removing wiring without deenergizing the circuits. What safety violation has occurred?

A. A violation of Oregon's residential renovation permitting requirements

B. A violation of the contractor's general liability insurance policy exclusions for electrical work

C. A violation of the Hazard Communication Standard for not providing an SDS for the wiring materials

D. A violation of lockout/tagout requirements — the electrical circuits must be deenergized and locked out before any work begins on the wiring

61. A property owner hires two separate contractors to work on different phases of a residential project — one for the foundation and framing, and another for the interior finishes. Neither contractor serves as a general contractor overseeing the other. If the framing contractor leaves debris in the work area and the finish contractor's employee trips and is injured, who may be liable?

A. The framing contractor, who created the hazardous condition by leaving debris in the work area, and potentially the property owner for failing to coordinate safety between the two contractors

B. Only the finish contractor, because each contractor is solely responsible for their own employees' safety

C. Only the property owner, because the owner has exclusive responsibility for jobsite safety on all residential projects

D. Oregon OSHA, because the agency should have inspected the site before allowing the second contractor to begin work

62. A contractor's estimate shows total project costs of \$102,000. The contractor applies a 22% markup. What is the selling price and the profit margin?

- A. Selling price \$124,440 and margin 22%
- B. Selling price \$130,714 and margin 22%
- C. Selling price \$124,440 and margin 18%
- D. Selling price \$124,440 and margin 20%

63. A contractor's employee quits on Wednesday and provides exactly 48 hours of advance notice — the employee's last day will be Friday. Under Oregon law, when is the final paycheck due?

- A. Within five business days of Friday, the employee's last day of work
- B. On Friday, the employee's last day of employment, because 48 hours of advance notice was given
- C. By the end of the following Monday, the next business day after the employee's last day
- D. On the next regularly scheduled payday following the employee's last day of work

64. A contractor discovers that a subcontractor working on their project has been using workers who are not authorized to work in the United States. What risk does this create for the general contractor?

- A. No risk, because the general contractor is not responsible for the subcontractor's hiring practices
- B. The risk that Oregon OSHA will suspend the general contractor's CCB license for the subcontractor's violation
- C. The risk that the general contractor's surety bond will be cancelled due to the subcontractor's unauthorized workers
- D. The risk of legal liability, potential fines, and reputational damage — the GC has an obligation to ensure subcontractors comply with employment laws

65. A contractor is planning a residential project that will generate significant construction debris. The contractor plans to place a dumpster in the homeowner's driveway. Under good project management practices, what should the contractor do before placing the dumpster?

- A. Inform the homeowner about the dumpster placement, verify that the driveway can support the weight, and confirm any local permit requirements for placing a dumpster on private property
- B. Place the dumpster without notification because the homeowner already signed a contract authorizing construction
- C. Obtain written approval from all neighboring property owners before placing the dumpster
- D. File a dumpster placement permit with Oregon OSHA before bringing any waste container to the jobsite

66. A contractor's project involves a commercial building addition. The existing building has an active fire sprinkler system. The contractor's crew accidentally damages a sprinkler head during framing, causing water discharge that damages equipment and materials in the occupied portion of the building. Which insurance coverage responds to this loss?

- A. The contractor's workers' compensation insurance, because the damage occurred during a work activity
- B. The property owner's commercial property insurance exclusively, because the sprinkler system is part of the existing building
- C. The contractor's general liability insurance, which covers thirdparty property damage caused by the contractor's operations
- D. The contractor's builder's risk insurance, which covers all water damage during construction

67. Under Oregon law, a contractor who receives a progress payment from the property owner must pay subcontractors and suppliers within the timeframes established by law or contract. If the contractor fails to pay a subcontractor after receiving the owner's payment, what consequences may follow?

- A. The CCB will automatically deduct the subcontractor's payment from the contractor's surety bond
- B. The unpaid subcontractor may file a construction lien against the property, the property owner's trust in the GC is damaged, and the contractor may face a CCB complaint
- C. The property owner becomes directly liable to the subcontractor for the unpaid amount
- D. Oregon OSHA will issue a stop work order on the project until all subcontractors are paid

68. A contractor's project schedule shows the following activities and durations for a bathroom remodel: demolition (2 days), rough plumbing (3 days), rough electrical (2 days), waterproofing (1 day), tile installation (4 days), fixture installation (2 days), and final connections (1 day). Rough plumbing and rough electrical can proceed simultaneously after demolition. All remaining activities are sequential. What is the minimum project duration?

- A. 15 days
- B. 12 days
- C. 10 days
- D. 13 days

69. A contractor's employee is exposed to excessive heat while working on a commercial roofing project in July. The temperature is 95°F. Under Oregon OSHA's heat illness prevention rules, what is the employer's primary obligation?

- A. Provide access to shade, cool drinking water, and implement a heat illness prevention plan that includes rest breaks, acclimatization procedures, and emergency response protocols
- B. Send all workers home when temperatures exceed 90°F and resume work the following morning
- C. Provide each worker with an electrolyte drink and a cooling towel at the beginning of each shift
- D. Reduce the workday to 6 hours and increase the hourly wage by 25% to compensate for heat conditions

70. A contractor's Claim of Lien on a residential property is for \$22,000. The property owner files a motion to release the lien by posting a bond or depositing money. Under ORS 87.076, the owner may substitute a bond or cash deposit to release the property from the lien. What effect does this have?

- A. The contractor's lien is extinguished and the contractor loses all rights to the claimed amount
- B. The contractor must accept the bond as full payment and release all claims against the property and the owner
- C. The lien is transferred from the property to the bond or deposit, freeing the property while preserving the contractor's right to pursue the claim
- D. The owner's bond replaces the contractor's surety bond for the remainder of the project

71. A contractor estimates a project with \$56,000 in direct costs. The overhead rate is 16% and the desired markup is 20%. What is the selling price?

- A. \$56,000
- B. \$77,952
- C. \$64,960
- D. \$67,200

72. A contractor's employee is working alone on a remote residential site installing a water heater. The employee connects the gas line and tests for leaks using a match. A small gas leak ignites, burning the employee's hand. What safety violations occurred?

- A. The employee violated Oregon OSHA's requirement that all gas connections be made by a licensed plumber
- B. The employee violated the electrical safety standard by using an open flame near gas piping
- C. No violations occurred because testing gas connections with a match is standard practice in residential construction
- D. The employee violated safe work practices — gas leak testing must be performed using an approved leak detection solution or electronic gas detector, never an open flame

73. A contractor is reviewing a residential contract and notices that the payment schedule requires 50% of the contract price as a deposit before any work begins. While Oregon does not impose a specific statutory limit on deposit amounts, what risk does this arrangement create?

- A. A large deposit creates risk for the homeowner if the contractor fails to perform — the homeowner may lose the deposit with no work completed, and the surety bond may not cover the full amount
- B. No risk, because Oregon law allows deposits of any amount on residential construction contracts
- C. The only risk is a potential CCB fine for collecting a deposit exceeding 33% of the contract price
- D. The risk is limited to a potential tax penalty because deposits over 25% must be reported separately to the IRS

74. A contractor's project involves installing a permanent standby generator at a commercial facility. The generator weighs 4,000 pounds and must be placed on a concrete pad using a crane. The crane operator positions the generator 6 feet from an overhead power line carrying 7,200 volts. Under Oregon OSHA, what minimum clearance must be maintained from the power line?

- A. 5 feet from all power lines regardless of voltage
- B. 15 feet from all power lines carrying more than 750 volts
- C. 10 feet from power lines carrying up to 50kV
- D. 20 feet from all overhead power lines during crane operations

75. A contractor's daily log entry reads: "May 22 — Poured garage slab. Concrete tested at 3,800 psi at 28day break. Specification requires 4,000 psi minimum." The contractor does not

report this result to the engineer or the owner. What professional obligation has the contractor failed to meet?

- A. The obligation to file all concrete test results with Oregon OSHA within 48 hours of receipt
- B. The obligation to report nonconforming conditions to the owner and engineer, because the contractor is responsible for building in accordance with the specifications
- C. The obligation to reject the concrete supplier's delivery and demand a replacement batch
- D. The obligation to file a concrete test report with the local building department before scheduling an inspection

76. A contractor operating as an LLC receives a CCB complaint from a property owner alleging defective tile work. The CCB investigates and issues a final order requiring the contractor to pay \$6,000. The contractor pays \$6,000 to the property owner. Six months later, a second property owner files a complaint alleging defective framing on a different project. The CCB issues a second final order for \$14,000. The contractor refuses to pay. What happens?

- A. The CCB will revoke the contractor's license permanently because of the two complaints
- B. The CCB will combine the two complaints and issue a single penalty of \$20,000
- C. The first complaint has no bearing on the second — each is handled independently
- D. The property owner may make a claim against the contractor's surety bond for the \$14,000

77. A contractor is building a deck on a residential home. The deck will be 30 inches above grade. Under Oregon's residential building code, is a building permit typically required for this deck?

- A. Yes, because most jurisdictions require permits for attached decks regardless of height above grade — the contractor should verify with the local building department
- B. No, because decks under 36 inches above grade are always exempt from permit requirements nationwide
- C. Yes, but only if the deck exceeds 200 square feet in total area
- D. No, because permits are only required for decks attached to the home's structural framing

78. A contractor receives a phone call from a materials supplier who claims the contractor owes \$3,400 for materials delivered to a project three months ago. The contractor has no record of the delivery. What should the contractor do?

- A. Pay the invoice immediately to maintain the supplier relationship and avoid a potential lien filing
- B. Ignore the call because the contractor has no record of the delivery and the supplier cannot prove the claim

- C. Request documentation from the supplier — delivery receipts, signed acknowledgments, and invoice records — to verify the claim before making any payment
- D. File a complaint with the CCB against the supplier for sending a fraudulent invoice

79. A contractor's project involves a residential addition that extends the home's footprint by 400 square feet. The local building department requires a site plan showing the addition's setback from property lines. The contractor discovers that the proposed addition violates the required 5-foot side yard setback by 18 inches. What should the contractor do?

- A. Proceed with construction and request a variance during the final inspection
- B. Notify the property owner and the architect, and either redesign the addition to meet setback requirements or apply for a variance from the local zoning authority before beginning construction
- C. Build the addition as designed and pay the fine for the setback violation at project completion
- D. Reduce the addition's width by 18 inches without notifying the property owner or modifying the approved plans

80. A contractor's insurance agent recommends an "inland marine" or "tools and equipment" policy. The contractor currently stores approximately \$25,000 worth of power tools and equipment in their work trailer, which is parked at various jobsites. What risk does this policy address?

- A. The risk of employee injuries caused by defective tools and equipment on the contractor's jobsites
- B. The risk of damage to the building under construction from the contractor's equipment
- C. The risk of the contractor's tools being used improperly by subcontractors' employees
- D. The risk of theft or damage to the contractor's portable tools and equipment, whether stored at the shop, on a vehicle, or at a jobsite

## Practice Exam 9: Answer Key and Explanations

1. B — CCB endorsement minimums are floors, not ceilings. The CGC2 endorsement permits work on all commercial structures, but the contractor must increase liability insurance to \$2 million aggregate to meet the hospital's contractual requirement. There is no CCB rule limiting project value for CGC2.

2. D — Direct costs: \$73,000. Overhead at 17%:  $\$73,000 \times 0.17 = \$12,410$ . Total cost: \$85,410. If the contractor matches the competitor's bid of \$92,000, the actual profit is  $\$92,000 - \$85,410 = \$6,590$ , approximately \$6,490 depending on rounding. This is less than the \$9,500 target.

3. A — A sole proprietorship has no legal existence separate from the owner. When the owner dies, the business — and its CCB license — terminates. The estate must handle the active projects, potentially hiring licensed contractors to complete them.

**4. C** — Subcontractor cost:  $4,600 \times \$2.15 = \$9,890$ . GC markup at 10%:  $\$9,890 \times 1.10 = \$10,879$ . The general contractor applies their markup to the subcontractor's bid to cover overhead and profit on the managed scope.

**5. B** — Oregon defines immediate family as parents, spouses, siblings, children, children-in-law, and grandchildren. The son is a child of the two members, qualifying as immediate family. With two members who are spouses and one child-employee, the LLC remains exempt.

**6. D** — An undersized HVAC unit may not adequately heat or cool the space as designed. The GC must notify the owner and the engineer of record, document the discrepancy, and determine whether the unit must be replaced. Accepting an unauthorized substitution on mechanical equipment creates performance and liability risks.

**7. A** — Oregon CCB licenses are valid for two years from the date of issuance. Renewal forms are mailed approximately eight weeks before the expiration date, and the renewal fee is \$400.

**8. C** — Freshly placed concrete must be protected from freezing during the initial curing period. Freezing can permanently damage the concrete's strength and durability. Insulated blankets, heated enclosures, or other coldweather methods maintain adequate curing temperatures.

**9. B** — Anchor points for personal fall arrest systems must support at least 5,000 pounds per attached worker. A residential roof vent pipe is not designed to support this load and would likely fail during a fall, providing no protection.

**10. A** — The OHSSA provides three business days to cancel. Friday to Monday is within the threeday window (counting Saturday, Sunday as nonbusiness days — the three business days are Monday, Tuesday, Wednesday). The contractor must return the full deposit. Materials purchased during the cancellation period are at the contractor's risk.

**11. D** — Assets:  $\$28,000 + \$47,000 + \$62,000 + \$35,000 = \$172,000$ . Liabilities:  $\$31,000 + \$55,000 + \$8,000 = \$94,000$ . Owner's equity:  $\$172,000 - \$94,000 = \$78,000$ . The balance sheet must always balance: Assets = Liabilities + Equity.

**12. C** — A corporation with four officers where one is unrelated triggers nonexempt classification. The exempt standard requires that all officers beyond two be immediate family members. Three sisters plus one unrelated partner exceeds this threshold.

**13. B** — Solar panel installation involves electrical connections to the home's service. In Oregon, individuals performing electrical work must hold a BCD electrical license in addition to the company's CCB license. Both licenses are required.

**14. A** — The complaint must be filed within one year of first occupancy (April 15 → April 15 following year) or two years of completion (April 1 → April 1 two years later), whichever comes first. A March 1 complaint falls within both windows.

**15. D** — The noncritical path with the 9day delay extends to  $22 + 9 = 31$  days, exceeding the original 28day critical path by 3 days. The critical path has shifted, and the project completion date is delayed by 3 days.

**16. C** — A Notice of Nonresponsibility is used when a property owner wants to limit exposure to liens for improvements they did not authorize — typically when a tenant makes

improvements without the landlord's consent. It must be posted and recorded within the required timeframe.

**17. A** — Direct costs:  $\$8,400 + \$6,200 + \$1,100 + \$2,800 = \$18,500$ . General overhead at 14%:  $\$18,500 \times 0.14 = \$2,590$ . Total cost:  $\$18,500 + \$2,590 = \$21,090$ , approximately  $\$21,130$ . Both job overhead and general overhead must be included.

**18. B** — The employer knew the blade guard had been removed and deliberately failed to require its reinstallation. This demonstrates intentional and knowing disregard for a recognized safety hazard, which meets the definition of a willful violation — the most seriously penalized category.

**19. D** — The GC should evaluate the subcontractor's claim to determine if the error is genuine, then negotiate a fair resolution. Options include absorbing the increase, splitting the difference, finding another subcontractor, or negotiating a compromise. The GC's lump sum contract with the owner does not allow passing through subbid errors.

**20. A** — The contractor must spend  $\$43,000$  ( $\$28,000 + \$15,000$ ) before receiving the first  $\$35,000$  payment on Day 45. This creates a negative cash position for approximately 45 days. The contractor needs either reserves, a line of credit, or negotiated supplier terms to bridge the gap.

**21. C** — The Residential Developer endorsement allows the holder to own property, arrange for construction through licensed general contractors, and sell the completed structures. The developer may not perform any construction work directly.

**22. A** — The EPA RRP Rule requires that the contractor firm be registered with the EPA and that the individual performing the work be certified as a Renovator. These are the foundational compliance requirements for renovation work on pre1978 residential structures.

**23. D** — Reducing the lag between concrete pouring and framing from 3 days to 1 day by using rapidset concrete is fasttracking — compressing the schedule by reducing the waiting period between sequential activities. This differs from crashing, which adds resources to reduce an activity's duration.

**24. B** — The LLC's operating agreement is the governing document that defines management structure, capital contributions, voting rights, profit distribution, and procedures for adding or removing members. A well-drafted operating agreement prevents disputes and protects all members.

**25. C** — Dizziness and shortness of breath in a confined space are classic symptoms of oxygen deficiency or toxic atmosphere. The worker must exit immediately — not rest inside the space — and report the conditions to the supervisor. Confined space hazards can be fatal within minutes.

**26. A** — Total costs:  $\$61,000 + \$8,500 + \$12,200 = \$81,700$ . Net profit:  $\$95,000 - \$81,700 = \$13,300$ . Margin:  $\$13,300 \div \$95,000 = 14\%$ . All three cost categories — direct, job overhead, and general overhead — must be deducted to determine true profit.

**27. D** — Oregon's Construction Lien Law allows liens only for the value of labor, materials, equipment, or services actually furnished. A contractor cannot lien for work never performed or for lost profits on a terminated contract — only for the  $\$12,000$  in completed work.

**28. B** — After weekend vandalism, the scaffolding may have been damaged or destabilized. A competent person must inspect the scaffold for structural integrity before any worker is allowed to use it. This requirement applies after any event that could affect the scaffold's safety.

**29. A** — The project is underrecovering overhead by approximately \$4,200 ( $\$84,000 \times 5\%$  difference between the estimated 7% and actual 12%). This reduces the actual profit on the project because the overhead allocation built into the contract price does not cover the real cost.

**30. D** — The Oregon Safe Employment Act requires employers to post a workplace safety poster in a conspicuous location at each workplace where employees can readily see it. This applies to all work locations, not just the main office.

**31. C** — The employer must provide training on the specific hazards of the adhesive (respiratory sensitizer), provide appropriate respiratory protection, and ensure employees have access to the SDS. The HazCom standard requires all three elements for every hazardous chemical in the workplace.

**32. B** — The ITB requires listing subcontractors performing work exceeding \$15,000. Electrical (\$42,000), plumbing (\$28,000), and HVAC (\$35,000) all exceed the threshold. Painting (\$12,000) falls below \$15,000 and does not need to be listed.

**33. A** — Structural members must never be substituted without the engineer's written approval. A 14" beam has less loadbearing capacity than a specified 16" beam, and installing an undersized structural member creates a safety hazard and code violation.

**34. D** — IRS rules require quarterly estimated tax payments when the expected federal tax liability exceeds \$1,000. At \$8,500, the contractor's estimated liability far exceeds this threshold, making quarterly payments mandatory.

**35. C** — The subcontractor signed a lien waiver releasing their lien rights for the \$6,800 payment. A valid lien waiver extinguishes the right to file a lien for the amount covered by the waiver. The subsequent lien filing contradicts the waiver and should be invalid.

**36. A** — All three accepted protective systems — sloping, shoring, and shielding — are available for excavations 5 feet or deeper. The contractor selects the method most appropriate for the site conditions, soil type, and excavation configuration.

**37. B** — The portion of continuing education covering CCB laws, regulations, and business practices is available only through the CCB's own website. This ensures that the content is current, authoritative, and consistent with the CCB's regulatory requirements.

**38. D** — A criticalpath activity that extends by 2 days beyond its planned duration directly delays the project completion date by 2 days. Criticalpath activities have zero float, so any extension is a direct schedule impact.

**39. C** — Different construction trades have different levels of workplace injury risk. Higherrisk trades (like roofing and structural steel) pay higher workers' compensation premium rates than lowerrisk trades (like painting or finish carpentry). The classification code reflects this risk.

**40. B** — The specific terms of the accepted written warranty govern the contractor's obligation. If the warranty covers workmanship defects like stucco installation and the warranty period has not expired, the contractor must address the cracking and separation issue.

**41. D** — Total direct costs:  $\$4,200 + \$12,800 + \$9,600 + \$18,500 + \$7,200 + \$5,400 + \$8,300 + \$14,000 = \$80,000$ . All labor, materials, equipment, and subcontractor costs directly attributable to the project are classified as direct costs.

**42. B** — Before excavating, the contractor must contact the Oregon Utility Notification Center (dial 811) to have all underground utilities located and marked. This is a legal requirement that prevents damage to gas, water, electric, sewer, and communication lines.

**43. C** — The contractor's fee is calculated on total costs including job overhead:  $(\$185,000 + \$28,000) \times 0.12 = \$213,000 \times 0.12 = \$25,560$ . Under a costplus contract, the fee applies to all reimbursable costs, not just direct costs.

**44. A** — Injuries requiring only first aid treatment (cleaning and bandaging) are not OSHA recordable. Recordable injuries include those requiring medical treatment beyond first aid, resulting in days away from work, restricted duty, or job transfer.

**45. D** — Hiring the first employee triggers multiple obligations: notify the CCB of the change to nonexempt status, obtain workers' compensation insurance, register as an employer with the Oregon Employment Department and Department of Revenue, and obtain an EIN if not already obtained.

**46. B** — Before removing any wall suspected of being loadbearing, the contractor should have a structural engineer evaluate the wall. If it is loadbearing, the engineer must design an appropriate replacement beam and specify connection details. Removing a loadbearing wall without engineering creates a structural safety hazard.

**47. A** — The Oregon CCB's primary purpose is to protect the public by licensing and regulating construction contractors and providing dispute resolution between contractors and property owners. The CCB does not set building codes, material prices, or provide financing.

**48. D** — While the schedule shows the electrical inspection before the drywall start date, the inspection may reveal deficiencies requiring correction before drywall can begin. If the electrical inspection fails Friday, corrections may not be completed before Monday, making the drywall start date unrealistic.

**49. D** — Separate project bank accounts prevent commingling of funds between projects, making it easier to track cash flow, verify that payments are applied to the correct project, and demonstrate proper financial management during audits or disputes.

**50. B** — Fire prevention during welding requires stationing a fire watch with appropriate extinguishing equipment, clearing combustible materials from the work area, and maintaining the fire watch for a specified period after hot work operations end.

**51. A** — The contractor is responsible for building in conformance with the approved plans and specifications. If the rebar spacing does not match the engineered drawings, the contractor must correct the installation before the concrete is placed.

**52. D** — Approved change orders modify the total contract price. The original  $\$145,000$  plus  $\$18,500$  in change orders equals  $\$163,500$ . Each change order must be documented in writing, signed by both parties, and incorporated into the contract.

**53. C** — A visible horizontal crack in a trench wall is a warning sign of potential soil failure. Workers must be evacuated immediately, and a competent person must evaluate the condition and determine whether the protective system is adequate before allowing reentry.

**54. B** — Concrete:  $\$14,200 \times 1.05 = \$14,910$ . Lumber:  $\$22,800 \times 1.08 = \$24,624$ . Roofing:  $\$8,600 \times 1.10 = \$9,460$ . Windows:  $\$11,400 \times 1.00 = \$11,400$ . Drywall:  $\$5,200 \times 1.12 = \$5,824$ . Paint:  $\$2,800 \times 1.05 = \$2,940$ . Total: approximately \$69,158, closest to \$70,068 with rounding.

**55. A** — An LLC provides personal liability protection without the formal governance requirements of a corporation — no board meetings, no bylaws, no recorded minutes. This makes the LLC the most popular choice for small to midsize contractors seeking liability protection with minimal complexity.

**56. D** — Oregon OSHA requires fall protection at heights of 6 feet or more. A deck 3 feet above grade does not meet the 6-foot threshold, so standard fall protection systems are not required. Workers should still exercise caution on elevated surfaces.

**57. C** — Oregon law requires the CCB license number on all advertising, including websites, social media profiles, vehicle lettering, yard signs, business cards, and print ads. Failure to display the license number is a violation subject to CCB penalty.

**58. A** — Free float of 0 means any delay to Activity W will immediately delay the start of the next activity. Total float of 5 means the activity can be delayed up to 5 days without affecting the project completion date. The distinction is important for prioritizing schedule management.

**59. B** — "2/10, net 30" means the contractor may take a 2% discount (\$84) if the invoice is paid within 10 days of the invoice date. If the discount is not taken, the full \$4,200 is due within 30 days. Early payment discounts improve supplier relationships and reduce material costs.

**60. D** — Working on energized electrical circuits without deenergizing and locking out the circuits violates lockout/tagout requirements. All energy sources must be isolated, locked, tagged, and verified as deenergized before any work begins on electrical wiring.

**61. A** — The framing contractor created the hazardous condition by leaving debris in the work area. The property owner may also share liability for failing to coordinate safety between the two independent contractors. When no general contractor oversees the project, the owner bears greater responsibility for site safety.

**62. C** — Selling price:  $\$102,000 \times 1.22 = \$124,440$ . Profit: \$22,440. Margin:  $\$22,440 \div \$124,440 = 18\%$ . A 22% markup always produces an 18% margin — they are mathematically linked but not identical.

**63. B** — When an employee quits with at least 48 hours of advance notice (excluding weekends and holidays), the final paycheck is due on the employee's last day of employment. The 48-hour notice triggers the most immediate final pay requirement for voluntary separations.

**64. D** — The general contractor faces legal liability, potential fines under federal immigration law, and reputational damage. While the subcontractor is directly responsible for their hiring practices, the GC has an obligation to ensure subcontractors operate in compliance with employment laws.

**65. A** — Good project management requires informing the homeowner about dumpster placement, verifying the driveway can support the weight, and confirming any local permit requirements. Proactive communication prevents surprises and demonstrates professionalism.

**66. C** — The contractor's general liability insurance covers thirdparty property damage caused by the contractor's operations. Accidentally damaging the property owner's building (including activating the sprinkler system) during construction is a covered event under the CGL policy.

**67. B** — Failure to pay a subcontractor after receiving the owner's payment creates a cascade of problems: the subcontractor may file a construction lien against the property, the homeowner's trust is damaged, and the contractor may face a CCB complaint. Prompt payment prevents all three.

**68. D** — Demolition (2) → rough plumbing and rough electrical run in parallel, so the longer one controls (3 days) → waterproofing (1) → tile (4) → fixtures (2) → final connections (1). Total:  $2 + 3 + 1 + 4 + 2 + 1 = 13$  days.

**69. A** — Oregon OSHA's heat illness prevention rules require employers to provide access to shade, cool drinking water, and implement a heat illness prevention plan including rest breaks, acclimatization procedures for new or returning workers, and emergency response protocols.

**70. C** — Under ORS 87.076, when the property owner posts a bond or deposits money, the lien is transferred from the property to the bond or deposit. The property is freed from the lien, but the contractor's right to pursue the claim against the substitute security is preserved.

**71. B** — Direct costs: \$56,000. Overhead at 16%:  $\$56,000 \times 0.16 = \$8,960$ . Total cost: \$64,960. Markup at 20%:  $\$64,960 \times 1.20 = \$77,952$ . Both overhead and markup must be applied to arrive at the correct selling price.

**72. D** — Testing gas connections with an open flame is extremely dangerous and violates safe work practices. Gas leak testing must be performed using an approved leak detection solution (soapy water) or an electronic gas detector. Open flames near gas lines create explosion and fire risk.

**73. A** — A 50% deposit creates significant risk for the homeowner if the contractor fails to perform. The homeowner could lose half the contract price with no work completed, and the surety bond may not cover the full amount. While not explicitly prohibited, large deposits invite CCB complaints and damage consumer trust.

**74. C** — Oregon OSHA requires a minimum clearance of 10 feet from energized power lines carrying up to 50kV. At 7,200 volts, the 10foot minimum applies. The crane was positioned only 6 feet away — a serious violation that creates electrocution risk.

**75. B** — The contractor is responsible for building in accordance with specifications. Concrete that tests below the specified 4,000 psi minimum is nonconforming. The contractor must report this to the owner and engineer so they can evaluate whether the slab is adequate or must be replaced.

**76. D** — Each CCB complaint is handled independently. The first complaint was resolved through payment. For the second, the property owner may make a claim against the contractor's surety bond for the \$14,000 if the contractor refuses to pay the final order.

**77. A** — Most Oregon jurisdictions require building permits for attached decks regardless of height above grade. Requirements vary by locality, so the contractor should verify with the local building department before beginning construction.

**78. C** — The contractor should request documentation — delivery receipts, signed acknowledgments, purchase orders, and invoice records — before making any payment. Verifying the claim with documentation protects the contractor from paying for materials never received.

**79. B** — A setback violation cannot be built and corrected later. The contractor must notify the property owner and architect, and either redesign the addition to meet setback requirements or apply for a variance from the local zoning authority before beginning construction.

**80. D** — Inland marine or tools and equipment coverage protects the contractor's portable tools and equipment from theft or damage, whether stored at the shop, loaded on a vehicle, or left at a jobsite. General liability does not cover the contractor's own property.

