1. Small amounts of hazardous chemicals used on several shifts are to be transferred from one container to another. How should the new container be labeled?
   - A. Mark new container with product name only.
   - B. Transfer all required information from original container.
   - C. Have new container marked to refer back to original container.
   - D. Remove the label from original container and place on new container.

2. How many 5-ft. end frames are required to build a single scaffold tower to reach the middle of the second floor of a building with a floor-to-floor height of 12 ft. 6 in.?
   - A. 6
   - B. 8
   - C. 10
   - D. 12

3. Why is water used when doing edge work on a belt edger?
   - A. To reduce the risk of fire.
   - B. To prolong the life of the belt.
   - C. To prevent the glass from shelling.
   - D. To prevent glass dust from damaging edger.

4. A door is binding on the header of a frame. What is done to lower the door?
   - A. Shim the top pivot.
   - B. Shim the bottom pivot.
   - C. Turn the adjusting screw of the top pivot clockwise.
   - D. Turn the adjusting screw of the bottom pivot counterclockwise.
5 What is the procedure to install the bottom track on a glass sliding door?
A. Plumb from top, level bottom track and secure.
B. Plumb from bottom, level top track and secure.
C. Install top track, plumb down, install locking jamb and secure.
D. Install jambs first, then install top track, bottom track and secure.

6 An automatic door frame is out-of-square and the door is rubbing on the threshold on the lock side. What is the easiest way to correct the problem?
A. Adjust the door on the lock side.
B. Adjust the door on the pivot side.
C. Adjust the frame on the lock side.
D. Adjust the frame on the pivot side.

7 Which type of tape is most commonly used for the interior of a residential wood sash?
A. Fiber.
B. Shim.
C. High density.
D. Two-sided foam.

8 Glass in slope glazing has broken during a snow storm and a rafter appears to have sagged. What is the first step before reglazing?
A. Remove the broken glass.
B. Remove the snow from the sky lite.
C. Secure the sky lite from underneath.
D. Take measurements for the replacement glass.
9. How is an aluminium channel installed onto a residential sliding sash?
   A. By caulking the channel onto the glass edges.
   B. By taping the channel onto the glass with a rubber mallet.
   C. By pressing the channel onto the glass using a vinyl roller.
   D. By using a steel framing hammer to secure the channel onto the glass edges.

10. Where should the putty line be when glazing a residential wood sash?
    A. Even with the rabbet.
    B. 1/8 in. below the rabbet.
    C. 1/8 in. above the rabbet.
    D. 1/16 in. below the rabbet.

11. What must be done when installing mirrors using concealed clips?
    A. Use mastic on the clips.
    B. Countersink the screw holes.
    C. Use three or more clips per mirror.
    D. Cover the screws with masking tape.

12. To the nearest dollar, what is the cost of the sheet metal required to form a cylindrical column 2.5 m high and 1.5 m in diameter if the material costs $4.56 per square meter?
    A. $49.00
    B. $54.00
    C. $62.00
    D. $70.00
13. Where is the primer applied when installing a windshield using a kit?
A. On the pinch weld flange.
B. On the pinch weld flange and kit.
C. On the windshield and rubber gasket.
D. On the rubber gasket and pinch weld flange.

14. What is done if there is excess lock strip after replacing glass?
A. Cut off excess.
B. Overlap the excess.
C. Fold under the excess.
D. Reinstall lock strip to remove excess.

15. On a noisy job site, what is the preferred method to communicate with the crane operator or rigger?
A. Radio.
B. Air horn.
C. Cell phone.
D. Hand signals.

16. Where should the lifeline be secured when erecting a power-operated hoist?
A. To the outrigger.
B. To the swing stage.
C. To a plumbing vent.
D. To a solid section of the structure.
17. The thrust-out beams are 16 ft. in length, the overhang is 2 ft. and the swing stage has a line load of 750 lb. The safety factor is 4. How many pounds per thrust-out beam are needed?

A. 375 lb.  
B. 429 lb.  
C. 750 lb.  
D. 858 lb.

18. How is the crate positioned when crating glass before shipping?

A. Flat on the floor.  
B. Perpendicular to the floor.  
C. Slipped over stacked glass.  
D. Leaning at 15° against a solid support.

19. Where should slings be placed when lifting glass cases overhead?

A. On the sides of the case.  
B. On the sides, under cleats.  
C. Underneath at 1/3 points.  
D. Underneath at 1/4 points.

20. What is done before handling hazardous materials required for glass installation?

A. Check the WHMIS label.  
B. Check the packing slip.  
C. Check with the foreman.  
D. Wear protective clothing.

21. At what minimum height is safety glass required?

A. 175 mm  
B. 220 mm  
C. 305 mm  
D. 350 mm
22. How many pieces of glass 584 mm × 762 mm can be cut from a sheet of glass 2438 mm × 3048 mm?
   A. 14
   B. 15
   C. 16
   D. 17

23. Which type of edging is required when the edges of glass are to be siliconed together?
   A. Arrissed.
   B. Ground.
   C. Polished
   D. Chipped.

24. Which type of acid is used to etch glass?
   A. Oxalic.
   B. Sulfuric.
   C. Hydrochloric.
   D. Hydrofluoric.

25. What is used to fasten a horizontal and vertical solid mullion?
   A. Shear block.
   B. Sleeve anchor.
   C. Machine screws.
   D. Wedge anchor.

26. Where are drain holes located on curtain wall cover caps?
   A. Top.
   B. Bottom.
   C. Upper front face.
   D. Lower front face.
27. What is the procedure to layout offset pivot door frame members?
   A. Layout bottom pivot allowing 1/8 in. clearance at jamb and layout top pivot measuring from the bottom pivot layout.
   B. Layout top pivot allowing 1/4 in. clearance at jamb and layout bottom pivot measuring from the top pivot layout.
   C. Layout top pivot allowing 1/8 in. clearance at jamb and layout bottom pivot measuring from the top pivot layout.
   D. Layout bottom pivot allowing 1/4 in. clearance at jamb and layout top pivot measuring from the bottom pivot layout.

28. What is the first step before changing a unit on a curtain wall system?
   A. Remove cover caps.
   B. Cut away the caulking.
   C. Remove the vinyl gasket.
   D. Remove the fastening screws.

29. Where is information about the fastening method of an expansion sleeve found?
   A. In the shop drawings.
   B. In the structural drawings.
   C. In the specifications manual.
   D. In the architectural drawings.

30. Which type of caulking is used when installing EPDM membranes?
   A. Butyl.
   B. Silicone.
   C. Urethane.
   D. Polysulfide.
31 How many locks are required on an exterior four-wing revolving door?
A. 1
B. 2
C. 3
D. 4

32 What is done to repair a revolving door leaf that has collapsed?
A. Replace the door leaf.
B. Force it back into place.
C. Replace the collapsing mechanism.
D. Remove the door leaf and adjust the spring.

33 A 1/2-in. caulking bead between a window frame and the opening is found to be brittle and has a 1/4-in. open crack. What should be used to replace the old caulking so this situation does not reoccur?
A. Butyl.
B. Acrylic.
C. Bitumastic.
D. Polyurethane.

34 How is the glass size determined on a flush glazed sealed unit system?
A. Frame size less 2 in.
B. Frame size less 4 in.
C. Daylight opening plus 1/2 in.
D. Daylight opening plus 3/4 in.
A door is dragging on the threshold on the locking side. The stops are removed and setting blocks are found to be in the appropriate locations. What should be done first?

A. Raise the bottom pivot.
B. File the bottom of the door.
C. Tighten door lite adjustment screw.
D. Back off door lite adjustment screw.