SAIA SCAFFOLD & ACCESS INDUSTRY ASSOCIATION

FRAME SCAFFOLD

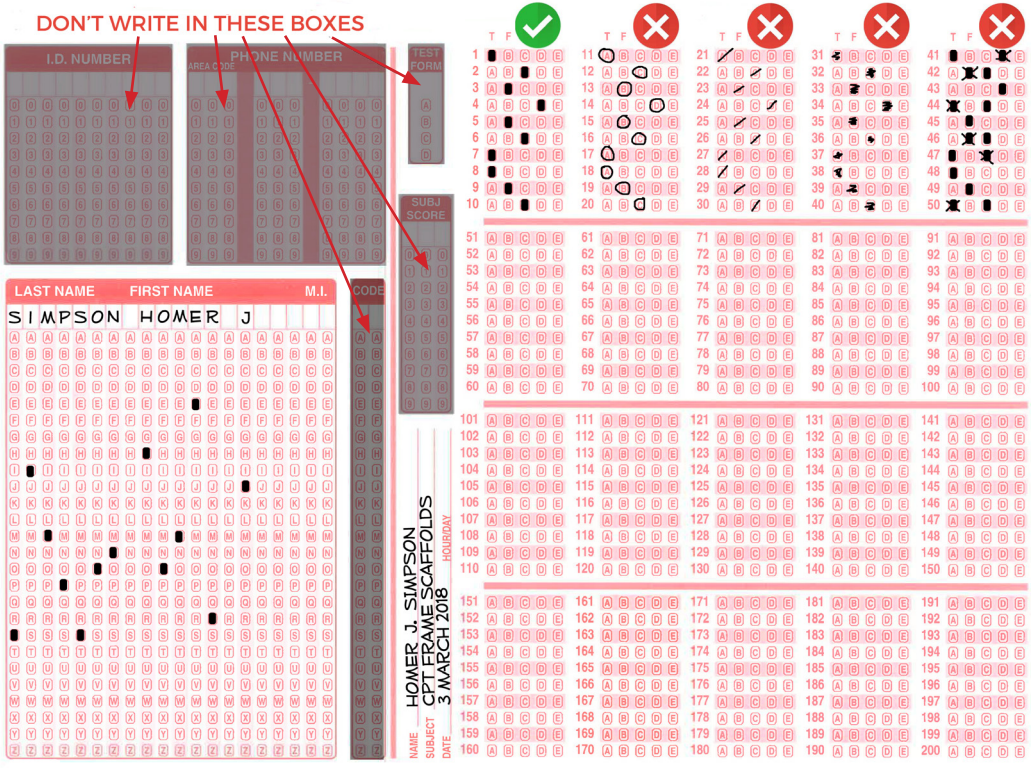
COMPETENT PERSON TRAINING

VERSION 11 • 19

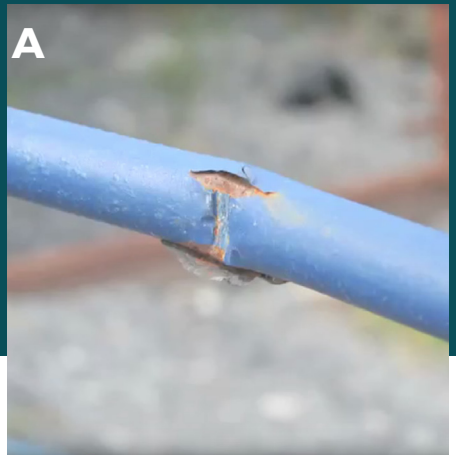
ENDORSEMENT EXAM

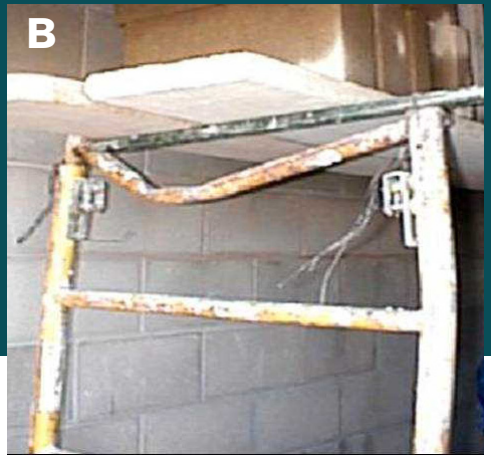
INSTRUCTIONS
IMPORTANT!

Read these instructions carefully before you start the exam.



- Use PENCIL only
- Write your name in CAPITAL letters
- Shade in the corresponding dot below each letter in your NAME.
- Make sure to shade in the whole dot as shown.
- ERASE thoroughly any mistakes
- Make sure the row number of the dot you shade matches the question you are answering
- Take time to check that you did not miss any questions.





USE IT OR LOSE IT?

Inspect the frame scaffold components in the pictures above, read the questions below and decide if they are safe to use.

1. **PICTURE A: This scaffold frame has a dented rung. Should it be used?**
   a) YES
   b) NO

2. **PICTURE B: Workers have attached a metal tube to substitute the bent frame. Is this scaffold safe to use?**
   a) YES
   b) NO

3. **PICTURE C: The adjustment handle on this screwjack moves freely but has some rust - is it ok to use it?**
   a) YES
   b) NO

SCENARIO:

ONE

The owner of this warehouse wants to replace all the lightbulbs with high-efficiency (longer-lasting) LED bulbs. The work has to be done within two weeks but there are constantly trucks moving in and out and forklifts. Only one worker is needed to replace the bulbs but another is needed to safeguard the scaffold while it is being used.

SCENARIO SUMMARY:

WORK/ACTIVITY:	*Change lightbulbs*
TYPE & SHAPE OF STRUCTURE:	*Warehouse,*
CONDITIONS:	*Indoor use - smooth flat concrete floor, forklifts and trucks moving in and out*
DURATION:	*2 weeks*
LOADS:	*One worker and box of lightbulbs*

SCENARIO QUESTIONS

CHOOSE THE BEST ANSWER:

4. **What is the best scaffold configuration for the situation in this scenario?**
   a) Area Scaffold
   b) Rolling Tower Scaffold
   c) Scaffold Run

5. **What components are needed for the base of the scaffold?**
   a) Baseplates
   b) Screwjacks and sills
   c) Casters

6. **What component(s) will keep the scaffold square and prevent it from racking (folding up) while it is being moved?**
   a) Crossbraces
   b) Plan Brace (Horizontal Diagonal Brace)
   c) Outriggers

7. **If the minimum base dimension of your scaffold is 5ft and the scaffold is 22ft high what must you do to make it stable?**
   a) Attach outriggers to widen the base
   b) Use sills to distribute the load
   c) Ensure the casters are lockable

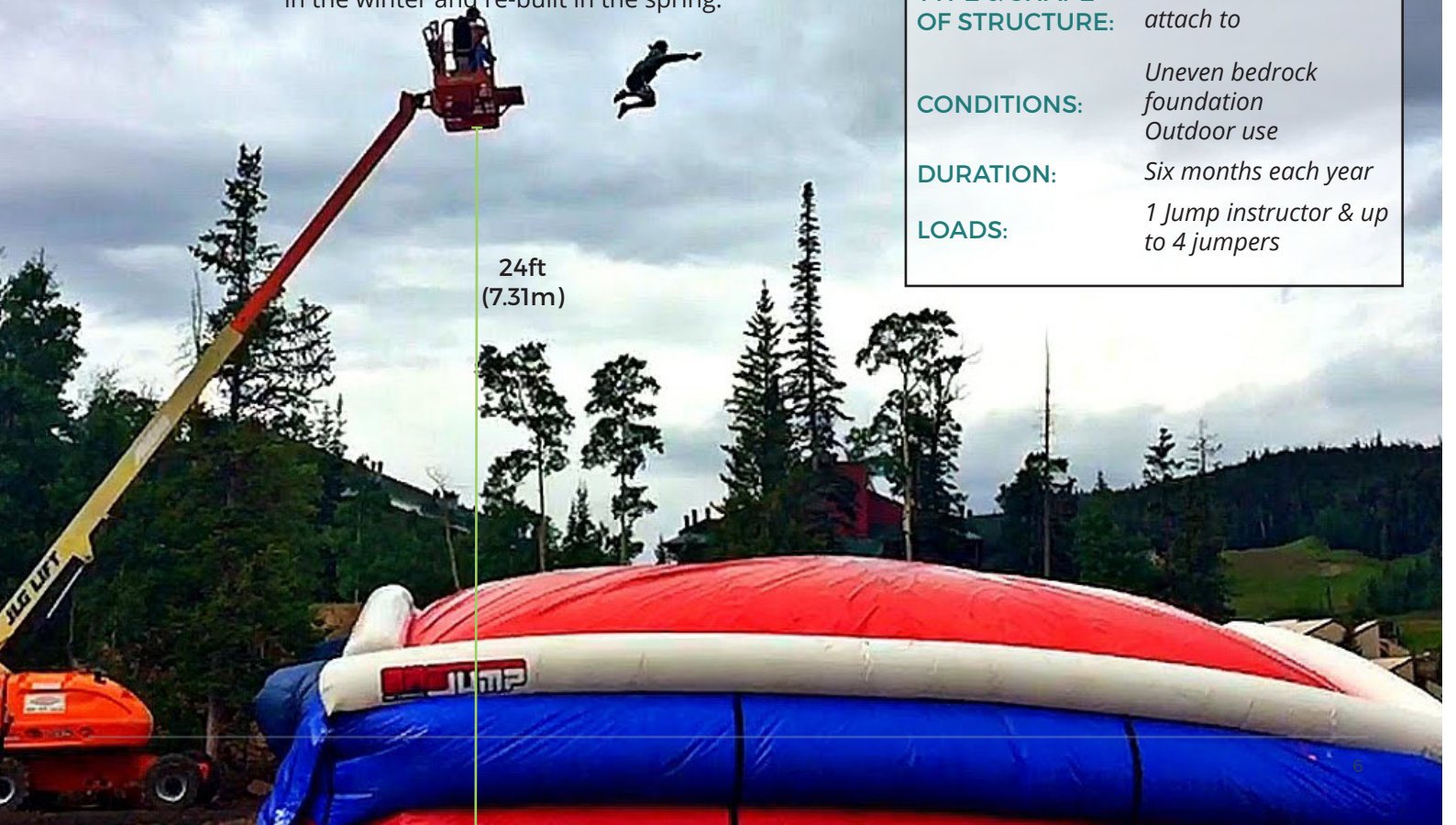
8. **What is the maximum a screwjack should be extended if used with casters?**
   a) 12in (305mm)
   b) 14in (355.6mm)
   c) 10in (254mm)

9. **Why is it important to square your scaffold?**
   a) So you can properly install toeboards on all sides and ends of the platform
   b) So the scaffold will be level and plumb
   c) So the platform can be fully-planked and crossbraces can be properly installed

SCENARIO:

TWO:

Stan's Stunt School wants to replace their "cherry picker" with a scaffold tower to jump from. Stan wants to take up to 4 jumpers (not all jumping at the same time). He would like his jump platform to be 24ft (7.31m) high. The school operates 6 months of the year so the tower must be dismantled by his staff in the winter and re-built in the spring.



SCENARIO SUMMARY:

WORK/ACTIVITY:	*Practice stunt jumping from 24ft (7.31m)*
TYPE & SHAPE OF STRUCTURE:	*No stable structure to attach to*
CONDITIONS:	*Uneven bedrock foundation* *Outdoor use*
DURATION:	*Six months each year*
LOADS:	*1 Jump instructor & up to 4 jumpers*

SCENARIO

CHOOSE THE BEST ANSWER:

10. Stan's workers don't have much experience/ expertise building scaffolds. Which is the best type of scaffold for them to use for this tower?

a) Tube & Clamp Scaffold

b) System Scaffold

c) Frame Scaffold

11. Before you can build the scaffold tower what needs to be done?

a) Evaluate the foundation to determine if it can support the scaffold and intended loads.

b) Put up a barricade around the area where the scaffold will be built.

c) Ensure there is a stable structure the tower can be tied to.

12. The bedrock foundation is uneven. What will you need to make the scaffold level?

a) Screwjacks to adjust the height

b) Wood or bricks for blocking or packing

c) Excavate then fill with gravel or crushed stone

13. If Stan wanted to extend the jump platform beyond the uprights what component(s) could be used?

a) Stringers and joists

b) Side or end brackets

c) A putlog

14. The scaffold tower exceeds the allowable height-to-base ratio, what is the best option for Stan's crew to stabilize this scaffold?

a) Install a tie from the scaffold to the closest largest tree.

b) Use two guy wires to anchor it to the ground.

c) Install outriggers to widen the base of the tower.

15. When you compare the height-to-base ratio what base dimension must you use?

a) The smaller base dimension

b) The larger base dimension

c) A combination of both

SCENARIO:

THREE:

The vaulted ceiling of this old church must be reinforced with steel beams. The work will be carried out from the main floor (there is a basement below). The work platform must be large enough to assemble the steel beam reinforcments which, when assembled, are as wide as the church. The work will take place over 2 weeks and there will be up to 5 workers using the scaffold at one time.

SCENARIO SUMMARY:

Work/activity:	*Reinforce ceiling*
Structure:	*Church w/high ceiling*
Conditions:	*Interior use, wood floor*
Duration:	*2 weeks*
Loads:	*Steel beams + 5 workers*

SCENARIO QUESTIONS:

TRUE OR FALSE?

16. An area scaffold would be best suited for this job.

a) True

b) False

17. A Frame Scaffold unit will be stable as long as one side of the bay is braced.

a) True

b) False

18. It is possible to build a scaffold with a platform that spans the entire width of the church

a) True

b) False

19. Tube & Clamp Scaffolds are best suited for the required scaffold configuration.

a) True

b) False

SCENARIO QUESTIONS:

CHOOSE BEST ANSWER

20. What must you do before building a scaffold on a wood floor?

a) Find out how much load the floor can support

b) Make sure the floor is completely level

c) Make sure there are no large gaps between the floor boards

21. If you wanted to build a putlog scaffold what must you find out?

a) Whether there is a stable anchor point accessible

b) Allowable loading on putlogs and bracing requirements

c) Whether scaffold grade planks or plywood will be used for the platform

22. How will you determine if the scaffold platform can support the weight of the steel beams?

a) Have a qualified person design the scaffold to support the anticipated load.

b) Multiply the width of the platform unit by the length and divide by 75psf.

c) Use platform units that are rated as “Heavy Duty”

HAZARDS

CHOOSE THE BEST ANSWER:

23. PICTURE A: What scaffold component could have prevented this falling object hazard?

a) Midrail

b) Crossbrace

c) Toeboard

24. PICTURE B: Why is this considered unsafe access?

a) Crossbraces are not made to be climbed

b) The worker is not climbing with three points of contact

c) The worker isn't wearing personal fall protection equipment

25. PICTURE C: The correct way to handle this situation is...?

a) Nail all the boards together

b) Set the baseplate centrally on the top board

c) Consult a Qualified Person for advice on how to remedy unstable earth conditions