

**Exam: 186083RR - Print Reading Applications**

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**1. The drawing scale of an architectural print**

- A. can be as small as  $1/8" = 1'$ .
- B. shouldn't be linked to the actual size of the material being drawn.
- C. is usually  $1/4" = 1'$  unless the sheet is for a site plan.
- D. is determined by the size of the material and the detail to be shown.

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**2. Title block information on a drawing includes information such as**

- A. material specifications, drawing scale, and drawing number.
- B. company name, assembly notes, welding notes, and finishing instructions.
- C. applicable specifications, finishing notes, and file names.
- D. drawing specifications, machining notes, welding notes, and material information.

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- 3.** The growing use of the metric system for drawing dimensions is
- A.** now on the decline because U.S. companies are reluctant to adopt a foreign system.
  - B.** a result of the metric (SI) system's ease of use and simplicity.
  - C.** because of the modern software being used to produce drawings.
  - D.** due to the increasing requirements for global marketing of products.

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- 4.** How many waterproof GFI receptacles are installed in the building shown in Figure 2?
- A.** 34
  - B.** 7
  - C.** 3
  - D.** 6

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- 5.** The distance from the top (as shown Figure 3) of the frame to the top of the center rib is
- A.** 108 mm.
  - B.** 120 mm.

C. impossible to determine from these drawings since a view is missing from this print.

D. 72 mm.

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**6. In Figure 4, the feature with a nominal diameter of 22.50**

A. is a through-hole.

B. appears four places on the print.

C. is a countersink that's 7.8 mm deep.

D. is for reference only.

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**7. The lack of HVAC system information on the print in Figure 5 indicates**

A. that the building is too simple to include an HVAC system.

B. HVAC information is always contained on the sheet designated A1.

C. that the building's designer has left the layout of HVAC components to the skilled contractor.

D. that it's probably found on a sheet with an "M" designation.

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**8.** Referring to Figure 5, what is the width of the building in the north-south direction?

- A. 38'-0"
- B. 71'-9"
- C. 43'-0"
- D. 50'-0"

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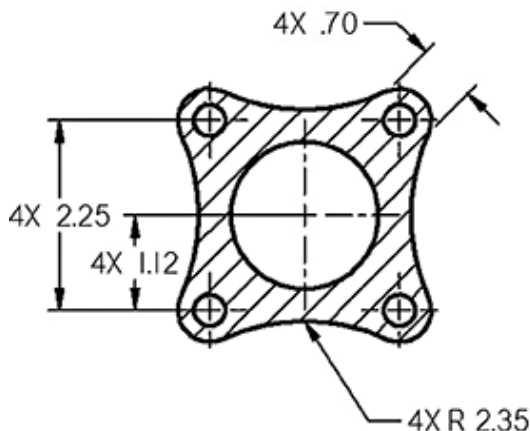
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**9.** Referring to the figure, how many florescent lights are located on the first floor?

- A. 0
- B. 16
- C. 4
- D. 18



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**10.** In the figure above, the capital “R” refers to

- A. the specified material type.
- B. this as a revolved section.
- C. the sheet from which this detail view was projected.
- D. the radius of the indicated surface.

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**11.** In Figure 5, the staircase leading to the second floor is

- A. 1'-0" wide with a landing of 8'-8" at the top.
- B. only partially constructed.
- C. 3'-8" wide with a 6'-0" landing at the top.
- D. next to the restroom on the east side of the building.

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**12.** Architectural prints for houses don't need to specify all details of a construction because

- A. installation instructions are often shipped with the material.
- B. skilled contractors rely on their knowledge of construction methods and are responsible for the correct installation of materials according to the design intent of the print.

C. it's impossible to predict how site conditions will affect construction requirements.

D. final details aren't drawn until the building is completed and as-built drawings are produced by the construction manager.

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**13.** Cross-hatching on the drawing in the figure indicates concrete masonry units (CMUs) are used in the external walls of the two-story part of the building. What is the thickness of the CMU wall on the north side of the second floor in Figure 5?

- A. 12"
- B. 6"
- C. 10"
- D. 8"

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**14.** The equipment represented by the schematic in Figure 1 uses \_\_\_\_\_ hydraulic cylinders.

- A. four single-acting
- B. four double-acting
- C. two double-acting and one single-acting
- D. three double-acting and one single-acting

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**15.** In the right-hand view shown in Figure 3, notice the dimension that contains  $2 \times 70.1/70.0$ . In this case, the 2x means the

- A. dimension is actually 140/140.2 mm.
- B. dimension applies only between the two circular bosses at the top of the frame.
- C. dimension also applies to another location, in this case at the bottom of the part.
- D. detail is drawn at a 2:1 scale for clarity.

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**16.** An isometric view of a mechanical part is often included to

- A. show the difference between a first-angle and third-angle projection.
- B. give inspectors the most important view of the part.
- C. give a full-scale representation of the part to the machinist.
- D. give a general view of the part for information only.

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**17.** In Figure 1, the power unit most likely includes

- A. an electrical motor driving a unidirectional pump.

- B. only double-acting pumps.
- C. a reservoir and check valve.
- D. a directional control valve and an actuator.

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**18.** In Figure 4, how thick is the collar in the least material condition (LMC)?

- A. 3.8 mm
- B. 7.8 mm
- C. 7.6 mm
- D. 4.2 mm

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**19.** An architectural print sheet labeled E2 is likely to be

- A. an electrical print showing plans for installation of electrical equipment.
- B. the second floor plan print in a series of working-drawing sheets.
- C. some sort of schedule since all schedules are designated with an "E".
- D. an estimate of electrical work required for complete installation of the equipment.

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**20.** Section B-B from the drawing in Figure 5 is found

- A.** on Sheet A4.
  - B.** on this sheet by looking in the direction of the arrow.
  - C.** on Sheet 4 over the title “detail A”.
  - D.** on Sheet B.
- 

End of exam