

01	☐ A	☐ B	☐ C	☐ D	☐ E
02	☐ A	☐ B	☐ C	☐ D	☐ E
03	☐ A	☐ B	☒ C	☐ D	☐ E
04	☐ A	☐ B	☐ C	☒ D	☐ E
05	☐ A	☐ B	☐ C	☒ D	☐ E
06	☐ A	☐ B	☐ C	☒ D	☐ E
07	☐ A	☐ B	☐ C	☐ D	☒ E
08	☐ A	☐ B	☐ C	☒ D	☐ E
09	☐ A	☐ B	☐ C	☐ D	☒ E
10	☐ A	☒ B	☐ C	☐ D	☐ E
11	☐ A	☐ B	☐ C	☒ D	☐ E
12	☐ A	☐ B	☒ C	☐ D	☐ E
13	☐ A	☐ B	☐ C	☒ D	☐ E

14	☐ A	☒ B	☐ C	☐ D	☐ E
15	☒ A	☐ B	☐ C	☐ D	☐ E
16	☐ A	☐ B	☐ C	☒ D	☐ E
17	☐ A	☐ B	☐ C	☒ D	☐ E
18	☐ A	☐ B	☐ C	☒ D	☐ E
19	☐ A	☐ B	☒ C	☐ D	☐ E
20	☐ A	☐ B	☐ C	☒ D	☐ E
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22	☐ A	☒ B	☐ C	☐ D	☐ E
23	☐ A	☒ B	☐ C	☐ D	☐ E
24	☒ A	☐ B	☐ C	☐ D	☐ E
25	☐ A	☐ B	☒ C	☐ D	☐ E
26	☐ A	☒ B	☐ C	☐ D	☐ E

27	☐ A	☐ B	☐ C	☐ D	☒ E
28	☐ A	☐ B	☒ C	☐ D	☐ E
29	☐ A	☒ B	☐ C	☐ D	☐ E
30	☐ A	☐ B	☒ C	☐ D	☐ E
31	☐ A	☒ B	☐ C	☐ D	☐ E
32	☐ A	☐ B	☐ C	☒ D	☐ E
33	☐ A	☒ B	☐ C	☐ D	☐ E
34	☐ A	☐ B	☒ C	☐ D	☐ E
35	☐ A	☐ B	☐ C	☐ D	☒ E
36	☐ A	☐ B	☐ C	☐ D	☒ E
37	☐ A	☐ B	☒ C	☐ D	☐ E
38	☐ A	☐ B	☐ C	☒ D	☐ E
39	☐ A	☒ B	☐ C	☐ D	☐ E

PRACTICE QUESTIONS

ARIZONA REGISTRAR OF CONTRACTORS

QXGUBZEU

AZ R-53 Water Well Drilling

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

Before you begin

What this is

9 practice questions for ARIZONA REGISTRAR OF CONTRACTORS QXGUBZEU , each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, QXGUBZEU
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1

SINGLE CHOICE

Under Arizona Revised Statutes, what is the minimum casing depth requirement for a new water well drilled in a normal consolidated formation?

- ☐ A At least 5 feet into the producing formation
- ☐ B At least 10 feet into the producing formation
- ☒ C At least 20 feet into the producing formation
- ☐ D At least 50 feet into the producing formation

ANSWER C

WHY A.R.S. § 45-596 and the associated rules require that well casing extend at least 20 feet into the producing formation in consolidated (rock) formations to ensure adequate seal and structural integrity. Options A, B, and D misrepresent the statutory minimum.

QUESTION 2

SINGLE CHOICE

Which type of casing material is most commonly required by the Arizona Department of Water Resources for domestic water wells because of its corrosion resistance and strength?

- ☐ A Black steel pipe
- ☒ B PVC plastic pipe
- ☐ C Galvanized steel pipe
- ☐ D Wrought iron pipe

ANSWER B

WHY PVC casing is the most commonly specified material for domestic water wells in Arizona because of its corrosion resistance, ease of installation, and compliance with AWWA and ADWR standards. Black steel, galvanized steel, and wrought iron are either discouraged or not standard for modern domestic well construction.

QUESTION 3 SINGLE CHOICE

What is the minimum annular space, in inches, that must be filled with grout between the well casing and the borehole wall in the upper portion of a water well in Arizona?

- ☐ A 1 inch
- ☐ B 1.5 inches
- ☒ C 2 inches
- ☐ D 3 inches

ANSWER C

WHY Arizona well construction rules require a minimum annular space of 2 inches between the casing and borehole wall for proper cement or bentonite grout placement, ensuring a sanitary surface seal. Smaller annular spaces do not allow adequate grout coverage.

QUESTION 4 SINGLE CHOICE

Before drilling a new water well in Arizona, who must be notified and what document must be obtained from the Arizona Department of Water Resources?

- ☐ A A building permit from the local municipality
- ☒ B An approved Notice of Intent to Drill
- ☐ C A federal EPA groundwater discharge permit
- ☐ D A county health department septic permit

ANSWER B

WHY Arizona law requires that a Notice of Intent to Drill be filed with and approved by the Arizona Department of Water Resources before any new well construction begins. Building, EPA, and septic permits are unrelated to the well drilling notification requirement.

QUESTION 5 SINGLE CHOICE

After construction of a new water well, which procedure is required to remove drilling fluids, cuttings, and fine sediments from the borehole and adjacent aquifer formation?

- ☐ A Static water level measurement
- ☒ B Well development
- ☐ C Casing perforation
- ☐ D Air-lift pumping

ANSWER B

WHY Well development is the standard procedure used after drilling to remove drilling mud, cuttings, and fine sand from the well screen and surrounding formation, restoring the aquifer's hydraulic connection to the well. Static water level measurement, casing perforation, and air-lift pumping alone do not accomplish this sediment removal function.

QUESTION 6 SINGLE CHOICE

During a well yield test, the specific capacity of a well is calculated as the yield (gpm) divided by what measurement?

- ☐ A Total well depth in feet
- ☐ B Static water level in feet
- ☒ C Drawdown in feet
- ☐ D Casing diameter in inches

ANSWER C

WHY Specific capacity is defined as the pumping rate (gallons per minute) divided by the drawdown (in feet), and it is a key indicator of well efficiency. Total depth, static water level, and casing diameter are not part of the specific capacity calculation.

QUESTION 7

SINGLE CHOICE

Which of the following is a primary sanitary protection requirement for a completed water well in Arizona?

- ☐ A Painting the casing bright red above grade
- ☒ B Installing a sanitary well cap or cover at the top of the casing
- ☐ C Connecting the well directly to a sewer cleanout
- ☐ D Locating the well within 10 feet of a septic tank

ANSWER B

WHY ADWR rules require a sanitary well cap or cover to prevent surface contaminants, insects, vermin, and debris from entering the well. Painting the casing red, connecting to a sewer, or siting near a septic tank are all prohibited or unsafe practices.

QUESTION 8

SINGLE CHOICE

When abandoning a water well in Arizona, what is the required method for sealing the well?

- ☐ A Backfill with native soil and cap with a wooden plug
- ☐ B Fill with concrete only to the surface
- ☒ C Seal with approved cement or bentonite grout from bottom to top
- ☐ D Remove the casing and leave the borehole open

ANSWER C

WHY Arizona abandonment rules (A.R.S. § 45-593 and ADWR rules) require sealing with cement or bentonite grout placed from the bottom of the well upward to prevent migration of poor-quality water between aquifers and to protect groundwater. Native soil backfill, surface-only concrete, or leaving the borehole open are not acceptable methods.

QUESTION 9

MULTIPLE CHOICE

Which of the following drilling methods are commonly used for water well construction in Arizona? (Choose two.)

- ☒ **A** Mud rotary drilling
- ☒ **B** Air rotary drilling
- ☐ **C** Tunnel boring machine (TBM) operation
- ☐ **D** Cable tool drilling

ANSWER **A** • **B**

WHY Mud rotary and air rotary are the two most common drilling methods used for water wells in Arizona, suitable for both unconsolidated and consolidated formations. Tunnel boring machines (TBM) are used for tunnels, not water wells. While cable tool drilling is a legitimate historical method, it is not one of the two primary methods commonly used today in Arizona and is not paired with the correct answers.