MOMETRIX
SMARTER PREP. BETTER RESULTS.

01	A	B	C	**D**	E	14	A	B	C	D	**E**	27	A	B	C	D	**E**
02	A	**B**	C	D	E	15	A	B	C	D	**E**	28	**A**	B	C	D	E
03	A	B	C	D	**E**	16	A	**B**	C	D	E	29	**A**	B	C	D	E
04	A	B	**C**	D	E	17	A	B	C	**D**	E	30	**A**	B	C	D	E
05	A	B	C	D	**E**	18	A	B	**C**	D	E	31	A	B	C	**D**	E
06	A	B	C	**D**	E	19	A	B	C	D	**E**	32	**A**	B	C	D	E
07	A	**B**	C	D	E	20	A	B	C	D	**E**	33	A	B	**C**	D	E
08	A	B	C	**D**	E	21	A	B	C	**D**	E	34	A	B	C	**D**	E
09	A	B	C	D	**E**	22	**A**	B	C	D	E	35	**A**	B	C	D	E
10	A	B	C	**D**	E	23	A	**B**	C	D	E	36	**A**	B	C	D	E
11	A	B	C	D	**E**	24	A	B	C	**D**	E	37	A	B	**C**	D	E
12	**A**	B	C	D	E	25	A	**B**	C	D	E	38	**A**	B	C	D	E
13	A	B	C	**D**	E	26	A	**B**	C	D	E	39	A	B	C	D	**E**

PRACTICE QUESTIONS

ALABAMA CONSTRUCTION

NGH9CHFU

AL Water Projects Contractor

EDITION	QUESTIONS	FORMAT
Demo	9	Limited Edition PDF

WEB www.mometrix.net

SUPPORT support@mometrix.net

Before you begin

What this is

9 practice questions for ALABAMA CONSTRUCTION `NGH9CHFU`, 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, `NGH9CHFU`
- the question number
- the email address on your order

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

mometrix.net

QUESTION 1 MULTIPLE CHOICE

Which of the following pipe materials are commonly approved for underground water main installation in Alabama public water systems? (Choose two.)

- **A** **Polyvinyl chloride (PVC) rated for potable water**
- **B** Galvanized steel
- **C** **Ductile iron with protective lining**
- **D** Aluminum irrigation tubing

ANSWER **A · C**

WHY PVC pipe AWWA C900/C905 and ductile iron with appropriate internal lining (epoxy or cement mortar) are both widely accepted for underground water main construction in Alabama. Galvanized steel is generally restricted to small service lines, and aluminum irrigation tubing is not rated for potable water main service.

mometrix.net

QUESTION 2 MULTIPLE CHOICE

Which of the following are required when an excavation for a water main exceeds 5 feet in depth on a contractor's project? (Choose two.)

- **A** **A protective system such as sloping, benching, shoring, or a trench box**
- **B** **A competent person to inspect the excavation daily and after any change in conditions**
- **C** Removal of all spoil piles to a separate staging area at least 500 feet away
- **D** Permanent dewatering of the entire trench bottom using a wellpoint system

ANSWER **A · B**

WHY OSHA excavation rules require protective systems (shoring, shields, sloping, or benching) for excavations deeper than 5 feet, and a competent person must inspect the trench before each shift and after any change in conditions. Spoil pile setback and permanent dewatering are situational, not blanket requirements for every excavation over 5 feet.

QUESTION 3 SINGLE CHOICE

A contractor is performing underground utility work that includes installation of 8-inch water mains as part of a municipal water improvement project. Which classification of Alabama contractor license is primarily required for this work?

A Highway and Heavy Construction

B **Municipal and Utility (MU) / Water and Sewer Lines**

C Building Construction

D Electrical

ANSWER **B**

WHY Installation of water mains and related utility lines for municipal projects falls under the Alabama contractor licensing classification for municipal/utility water and sewer line work, not highway/heavy, building, or electrical classifications.

mometrix.net

QUESTION 4 SINGLE CHOICE

What is the minimum recommended bedding material beneath a flexible water main pipe (such as PVC or HDPE) to provide uniform support and protect the pipe from rocks and point loads?

A Native excavated clay compacted in place

B Open-graded angular rock larger than the pipe diameter / 4

C **Granular embedment such as crushed stone or sand conforming to AWWA pipe bedding requirements**

D Concrete encasement for the full pipe length

ANSWER **C**

WHY Flexible water main pipes require a granular embedment (typically sand or crushed stone meeting AWWA/ANSI standards) to provide uniform support and prevent damage from rocks or point loads. Native clay is unstable for flexible pipe bedding, large angular rock creates point loads, and full concrete encasement is used only in special circumstances such as poor soil or crossing conflicts.

QUESTION 5 SINGLE CHOICE

At a horizontal bend in a newly installed ductile iron water main, which method is commonly used to resist the unbalanced thrust forces and prevent joint separation?

A Welded lap joints at every pipe section

B **Thrust blocks of concrete bearing against undisturbed soil, and/or restrained joint pipe**

C Threaded brass fittings with Teflon tape

D Wrapping the bend area with polyethylene encasement only

ANSWER **B**

WHY Unbalanced thrust at bends, tees, plugs, and hydrants must be resisted by concrete thrust blocks bearing against undisturbed soil, and/or by restrained (mechanical) joint pipe. Welded joints are not used on ductile iron, threaded fittings are not rated for main sizes, and polyethylene wrap is for corrosion protection only.

mometrix.net

QUESTION 6 SINGLE CHOICE

When installing a dry-barrel fire hydrant on a new water main, what is the required relationship between the hydrant's bury depth, the connecting shoe, and the finished grade?

A The hydrant barrel must terminate above grade with a flanged connection exposed for inspection

B **The hydrant must be installed so the valve (at the shoe) is at the proper depth and the breakaway flange is at the correct height above finished grade**

C The hydrant's operating nut must be installed at grade and the barrel buried completely

D The hydrant shoe must be plugged and the hydrant pressurized only through the pumper nozzle

ANSWER **B**

WHY Dry-barrel hydrants are installed with the main control valve at the shoe (at the connection to the main), a predetermined bury depth, and the breakaway traffic flange and operating nuts set to the manufacturer's specified height above finished grade. The operating nut is not at grade, and the barrel is not fully buried.

QUESTION 7 SINGLE CHOICE

A newly installed water main must be hydrostatically pressure tested before being placed in service. According to AWWA standards, what is the typical minimum test pressure applied, and what is the typical allowable leakage?

A Test at 50% of the working pressure for 30 minutes with no visible leaks allowed anywhere

B **Test at 1.5 times the working pressure at the lowest point (or 150 psi, whichever is greater) for a duration of 2 hours, with leakage not exceeding a calculated allowable**

C Test at the static pressure of the system for 24 hours with zero pressure drop

D Test by filling and observing for 10 minutes without pressure gauge verification

ANSWER **B**

WHY AWWA C600/C605 (and equivalents) require hydrostatic testing of water mains at typically 1.5 times the working pressure (at the lowest elevation of the test section) or 150 psi, whichever is greater, held for 2 hours, with allowable leakage calculated based on pipe diameter, length, and test pressure. The other options describe incorrect or nonstandard procedures.

QUESTION 8 SINGLE CHOICE

When a contractor makes a new service tap on an existing pressurized water main, which of the following procedures is standard?

A Drain the main and weld the tap under dry conditions

B **Use a tapping sleeve and tapping valve installed under pressure to avoid shutting down the main**

C Insert a saddle and tighten until the pipe wall deforms to seal

D Drill the main, leave the coupon inside the pipe, and connect the service line directly

ANSWER **B**

WHY Standard practice for live taps on existing mains is to install a tapping sleeve and tapping valve under pressure, then make the cut with the tapping machine, which retains and retrieves the coupon. Draining the main would disrupt service, deforming the pipe is not a sealing method, and leaving the coupon inside would obstruct flow.

mometrix.net

QUESTION 9 SINGLE CHOICE

On a water main project that disturbs more than one acre of land in Alabama, what is the contractor typically required to obtain before construction begins to control stormwater runoff?

A **A National Pollutant Discharge Elimination System (NPDES) Construction General Permit, including a site-specific SWPPP**

B An EPA Section 404 permit only

C A state fire marshal certificate

D An OSHA hazard communication form

ANSWER **A**

WHY Alabama's ADEM administers the NPDES Construction General Permit for construction activities disturbing one or more acres. Coverage requires preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) with appropriate BMPs (silt fence, sediment basins, stabilized entrances, etc.). The other permits listed address wetlands, fire safety, and worker right-to-know respectively, not stormwater runoff.

mometrix.net