# **GPI-** Exam Question Bank 2024

#### \* Indicates required question

1. What is the minimum percentage needed to pass a written test for each specialty \* 1 point license?

Mark only one oval.

- 90%
- 70%
- 85%
- 65%
- 2. What is the first tier to the specialty license? \*

Mark only one oval.

Gas Piping Installer

Service Technician

- \_\_\_\_ Equipment Installer
- Master Installation Technician
- 3. How many hours of educational training are required for the first specialty license? \* 1 point

Mark only one oval.



30 Hours

\_\_\_\_\_ 40 Hours

100 Hours

4. How many hours of on-job-training are required for the first specialty license? \*

1 point

Mark only one oval.

500 hours

750 hours

\_\_\_\_\_ 2000 hours

5. What is the second tier to the specialty license? \*

1 point

Mark only one oval.

Gas Piping Installer

Service Technician

Hearth Installer

Equipment Installation Technician

6. How many total hours of educational training are required for the second specialty \* 1 point license?

Mark only one oval.

\_\_\_\_ 140 hours

120 hours

\_\_\_\_ 100 hours

\_\_\_\_ 110 hours

7. How many additional hours of on-job-training are required for the second specialty \* 1 point license?

Mark only one oval.

1500 hours

2000 hours

\_\_\_\_\_ 1000 hours

- \_\_\_\_ 500 hours
- 8. What is the third tier to the specialty license? \*

1 point

# Mark only one oval.

- Service Technician
- Gas Piping Installer
- Equipment Installation Technician
- Hearth Installation Technician
- 9. How many total hours of educational training are required for the third specialty \* 1 point license?

- 60 hours
- \_\_\_\_ 100 hours
- 140 hours
- 200 hours

How many additional hours of on-job-training are required for the third specialty 10. \* 1 point license? Mark only one oval. 500 hours 1000 hours ) 1500 hours 2000 hours How much does the initial fuel gas trainee license cost? \* 11. 1 point Mark only one oval. \$45.00 \$90.00 \$130.00 \$190.00 12. How much does the initial fuel gas trainee renewal cost? \* 1 point Mark only one oval. Free

1 point

- \$90.00
- \$80.00
- \$120.00
- 13. How many years is a license active before expiration? \*

- 1 year2 years3 years
- \_\_\_\_\_ Lifetime

14. When does a license expire? \*
Mark only one oval.
January 31st
The last day of your birth month.
June 30th
November 1st

1 point

15. How many questions at minimum are required on each specialty license test? \* 1 point

Mark only one oval.

16. What code covers the 1st and 2nd stage regulators on a LP system? \* 1 point

Mark only one oval.

NFPA 54
NFPA 58

NFPA 85

17. A gas piping system was installed per code requirements in 2000, and now due to \* 1 point new or revised code material it no longer meets code, we shall we do?

Mark only one oval.

Total Replacement

Nothing, it's not our orginal installation

Contact the AHJ (it may fall under reciprocity)

Do not touch the system

18. Which table shall be referenced to design a gas piping system to have no more than \* 1 point a, .5" W.C. pressure drop for the following conditions; LP gas, 11" W.C. available supply pressure and black iron pipe?

Mark only one oval.



19. Which Table shall be referenced to design a gas piping system to have no more than \* 1 point a .5" W.C. pressure drop for the following conditions; LP gas, 11" W.C. available supply pressure and soft copper tubing?

Mark only one oval.

6.3.1(D)
6.2.1(A)
6.3.1(F)
6.2.1(M)

20. Which Table shall be referenced to design a gas piping system to have no more than \* 1 point a .5" W.C. pressure drop for the following conditions; natural gas, 6" W.C. available supply pressure and black iron pipe?



21. What do first stage regulators compensate for? \*

Mark only one oval.

Gas temperature

Change in Supply

Volume Requirement

- Overfilled Tanks
- 22. When adding appliances to an existing system what shall we do? \*

Mark only one oval.

Pull a permit
Do the work immedately
Shut the system off
Contact the gas supplier

23. What shall we do to black iron piping installed outdoors above ground? \*



📄 Insulate it

Install stainless steel pipe

🔵 Paint it

Nothing special

24. What do 2nd stage regulators compensate for? \*

Mark only one oval.

Boosts pressure

Changes in downstream demand

Raise the gas temperature

Manage the tank volume

1 point

1 point

25	What can	cast iron	he used for? *	
ZJ.	vilat call	castiion	De useu ioi :	

Mark only one oval.

Outdoor piping

Indoor Piping

- Nothing
- Any gas piping applications
- 26. What Can't cast iron be used for? \*

Mark only one oval.

Nothing

Indoor Piping

Outdoor Piping

Any gas piping applications

27. What is Industry best practice pressure drop we design piping systems for? \* 1 point



0.5" w.c.

) 1.0" w.c.

1.5" w.c.

5" w.c.

28. Do regulators need to be readily accessible? \*

1 point

Mark only one oval.



29. Do meters need to be readily accessible? \*

Mark only one oval.

$\square$	$\supset$	Yes

- No
- Do shutoffs need to be readily accessible? \* 30.

Mark only one oval.

Yes

No

- Only if it is a main shut off
- A gas piping installation covered by NFPA 54 includes all fixed piping from where to 31. \* 1 point where?

Mark only one oval.

) LP: 1st stage regulator, Natural: Outlet of the meter set

) LP and Natural: where it enters the building

) LP: 2nd stage regulator, Natual: Inlet of the meter set

LP: At the valve on the tank, Natural: where the piping exits the ground

What table will be used to determine approximate inputs for typical gas appliance? \* 32. 1 point

# Mark only one oval.

Annex A Table 5.4.2.1 (A.5.4.2.1)

Annex B Table 5.7.2.1 (B.5.7.2.1)

The last table in chapter 6 of NFPA54

Annex Y Table 6.4.2.7 (Y.6.4.2.7)

33. Gas meters shall be located in ventilated spaces readily accessible for what purposes?

Mark only one oval.

- 🔵 It's not necessary
- To change the meter annually
- Examination / Reading / Replacement / Necessary Maintenance
- For the AHJ to inspect when they choose
- 34. Who shall we contact to obtain the heating value of the gas used? \*

Mark only one oval.

- \_\_\_\_\_ the AHJ
- \_\_\_\_\_ the gas supplier
- \_\_\_\_\_ the regulator manufacturer
- no need to know this value
- 35. What CPN covers metallic piping joints and fittings? \*



- 5.6.7
- 13.2.4
- 36. What CPN covers plastic piping joints and fittings? \*

Mark only one oval.

1.4.3
5.6.8
9.3.1
11.3.5

1 point

1 point

\* 1 point

37. Line gas pressure regulators shall be listed in accordance with? \*

1 point

Mark only one oval.

6.3.1(A)

5.8.2 / 6.2.2

whatever the gas supplier provides

9.3.1

38. What are the two ways we accomplish venting a line gas pressure regulator. \* 1 point

Mark only one oval.	

- Piping the vent to atmosphere or use a vent limiter
- It is not required
- Install a regulator with out a vent port
- Regulators may only installed outdoors
- 39. What will be required when the available supply pressure is higher than what the \* 1 point appliance is designed for?

#### Mark only one oval.

Install an appliance designed for the higher pressure

- A line pressure regulator
- Adjust the gas valve on the appliance
- Change the design of the system
- 40. Normal ASP for LP gas is? \*

Mark only one oval.

\_\_\_\_\_\_ 5'-7" w.c.

- \_\_\_\_\_ 15"-19" w.c.
- under 1 psi

41. 1 cubic foot of LP gas approximately contains how many BTU's? \*

Mark only one oval.

2,500

5,000

29,000

42. Metallic pipe threads shall be what? \*

# Mark only one oval.

Cut to specific lengths and sized using the charts

Buried entirely when tighened into any fitting

Made in a factory only

Painted to prevent rust always

# 43. Normal manifold pressure for LP gas is? \*



6" w.c.

8" w.c.

\_\_\_\_\_ 10" w.c.

44. Normal manifold pressure for natural gas is? \*

Mark only one oval.

- 3.5" w.c.
- 8" w.c.
- \_\_\_\_ 12" w.c.
- \_\_\_\_\_ 10" w.c.

1 point

1 point

45. The maximum design operating pressure for piping located inside a building shall not \* 1 point exceed?

Mark only one oval.

2 PSIg 5 PSIg

- 15 PSIg
- 46. The maximum design operating pressure for any gas piping system shall not exceed? \* 1 point

Mark only one oval.

\_\_\_\_ 50 PSIg

\_\_\_\_ 75 PSIg

100 PSIg

🔵 125 PSIg

47. According to NFPA54 Gas piping systems shall be sized and installed to satisfy \* 1 point maximum demand of the system while ensuring what?

- To handle any future appliances added
- To satisfy 80% of the entire demand at anytime
- Each appliance receives not less than the minimum manifold pressure it requires
- Whatever the AHJ requires in their juristiction

Normal ASP for Natural gas is? \* 48.

Mark only one oval.

3.5" - 8" w.c. 7" - 14" w.c. 1 - 2 PSI

15" - 22" w.c.

49. Please convert the following appliance input into the most appropriate unit of measurement for the use with the charts pertaining to natural gas. 150,000 BTU/Hr.

Mark only one oval.

150,000 / 2500 = 60cuft 150,000 / 5000= 30cuft

150,000/1000= 150cuft

- ) 150,000/100= 1500cuft
- 50. 1 cubic foot of Natural gas approximately contains how many BTU's? \*



Mark only one oval.

2500

- 5000
- 17000
- What shall be requirement to be included on a piping plan? \* 51.

Mark only one oval.

The brands of appliances served

) The gas supplier name

- Location, Sections, Segments, Outlets, Legend, Available Supply Pressure.
- Square footage of the building

1 point

1 point

\* 1 point

52.	Who determines where the point of delivery will be? *	1 point
	Mark only one oval.	
	The homeowner	
	The AHJ	
	Me the installer	
	The serving gas supplier	
53.	What type of Plastic piping shall be used as gas pipe? *	1 point
	Mark only one oval.	
	PEX	
	O PVC	
	O Polyethylene Pipe or Polyamide	
	Only steel pipe is allowed for gas piping	
54.	Can PVC be used as plastic piping? What is PVC commonly used for? *	1 point
	Mark only one oval.	
	Not at all	
	No, but it is commonly used to pipe gas regulator vents	
	Only above ground	
	Depends on the AHJ	
55.	What is the purpose of an excess flow valve? *	1 point
	Mark only one oval.	
	To maintain constant pressure	
	To eliminate wasted gas	
	Stop the flow of gas when flow exceeds the rating of the valve (like a major pipe rupture)	
	To re-route gas back to the supply piping	

56.	A regulator vent shall be installed to prevent the entry of? *	1 point
	Mark only one oval.	
	Foreign Objects (bugs, debris, water)	
	Air	
	Sunlight	
	Nitrogen	
57.	When work interruptions occur, what shall we do to the piping system? *	1 point
	Mark only one oval.	
	Valves shut and openings capped off safely	
	Nothing, continue when you're ready	
	Tape over outlets	
	C Leave a note not to touch your piping	
58.	Steel pipe (black iron) shall have a minimum weight (wall thickness) of what? *	1 point
	Mark only one oval.	
	schedule 10	
	schedule 40	
	schedule 80	
	Schedule 100	
59.	What methods of connection are we allowed to use with steel pipe? *	1 point
	Mark only one oval.	
	Flanges	
	Welding	
	Brazing	
	Press Connect	

All of the above

Mark only one oval.

	$\bigcirc$	Yes
$\square$	$\supset$	No

- 61. When shall a permit be secured? \*



- Only when the system is initially installed
- No need for gas work
- When ever replacing the appliance or opening the system
- When the supplier comnnects to the system
- 62. What is the most common sizing method for gas pipe sizing? \*

### Mark only one oval.

- \_\_\_\_\_ the SWAG method
- Longest Length method
- Hybrid method
- Shortest Length method
- 63. Please list the general considerations for sizing of gas piping systems. \* 1 point

#### Mark only one oval.

Supply sufficient gas supply to ensure all appliance recieve more than the minimum supply pressure under maximum load



) Supply sufficient gas supply under 90% load

Provide sufficient gas supply at 200% of the maximum load

Allow for 50% load at 100% capacity.

1 point

64. The specific gravity of LP gas is approximately? \*

Mark only one oval.

1.0 specific gravity

.25 specific gravity

- .60 specific gravity
- 1.25 specific gravity

65. The specific gravity of Natural gas is approximately? \*

Mark only one oval. 1.50 specific gravity .50 specific gravity .25 specific gravity 2.75 specific gravity

66. What is the largest pipe size that threaded joints can be used for without approval \* 1 point from the AHJ?

Mark only one oval.

\_\_\_\_\_1"

<u>2</u>"

- 3"
- 67. When installing CSST we install it in accordance with what? \*

1 point

Mark only one oval.

AHJ recommendation

NFPA54

Manufactures I and O

Equipment Manufactures suggestion

69. Can you thread schedule 10 steel pipe? \*

1 point

Mark only one oval.



70. The definition of Bonding Jumper as found in NFPA 54 is; A reliable conductor to \* 1 point ensure the required electrical conductivity between metal parts required to be electrically connected.

Mark only one oval.

$\bigcirc$	True
$\bigcirc$	False

71. The definition of Drip as found in NFPA 54 is; The container placed at a high point in \* 1 point a system of piping to collect condensate and from which it may be removed.

$\bigcirc$	True
$\bigcirc$	False

72. The definition of Effective Ground-Fault Current Path as found in NFPA 54 is; An intentionally constructed, low impedance electrically conductive path designed and intended to carry current under ground-fault conditions from the point of a ground fault on a wiring system to the electrical supply source and that facilitates the operation of the overcurrent protective device or ground-fault detectors.

\* 1 point

1 point

Mark only one oval.

True False

73. The definition of Service Head Adapter as found in NFPA 54 is; A transition fitting for \* 1 point use with plastic piping (which is encased in non-pressure-carrying metal pipe) that connects the metal pipe casing and plastic pipe and tubing to the remainder of the piping system.

Mark only one oval.

$\square$	)	True
$\square$	)	False

74. The definition of Grounding Electrode as found in NFPA 54 is \*

- A conducting object through which a direct connection to earth is established.
- A non-conducting object through which a direct connection to earth is established.
- A conducting object through which an indirect connection to earth is established.
  - A wire attaching the gas pipe to the water main in the basement.

75. NFPA 54, Chapter 7 includes what? \*

1 point

Mark only one oval.

- Gas Pipe Sizing
- Gas Piping Installation
- Definitions
- \_\_\_\_ Fuel Gas Venting

76. When gas piping is installed underground, we must provide clearance from what? \* 1 point

Mark only one oval.

The surface

Sewer Pipe

Telecom Wiring

- Any other underground structure.
- 77. Plastic piping shall be installed with sufficient clearance or shall be insulated from any \* 1 point source of heat so as to prevent the heat from impairing the serviceability of the pipe.

Mark only one oval.

$\square$	)	True
$\square$	)	False

78. Piping shall be buried or covered for protect against what? \*

1 point

Mark only one oval.

Rainy weather

Excavation / Damage

🔵 Gas theft

Direct Sunlight

79. What is the minimum cover depth required for underground pipe? \*

Mark only one oval.

6" 12" 18" 24"

80. If external damage from external forces is likely to occur what does the minimum \* 1 point depth increase to?

Mark only one oval.

12"
18"
24"
36"

81. If a minimum depth cannot be achieved how can we protect the piping from external \* 1 point damage from external forces?

Mark only one oval.

Find another route

bury the pipe in concrete

Place it under a bridge or run it inside conduit

Use a thicker schedule piping

82. If we install our gas pipe inside a larger pipe to protect the piping from physical \* 1 point damage, what must we prevent?

Mark only one oval.

- Water intrusion
- Trapping Gas
- static electricity
- Sharp changes in direction
- 83. Terra tape is a brand of marker tape, it is buried atop the pipe so that a digger will hit \* 1 point the tape first, and it will warn them of the pipe below.

Mark only one oval.

True False

84. Who should be notified before any digging takes place? How far in advance of work \* 1 point commencing in the State of NH?

#### Mark only one oval.

Dig Safe, 72 hours before excavation

Dig Safe, 24 hours before excavation

- DOL, 72 hours before excavation
- OSHA, 48 hours before excavation
- 85. A trench will be dug at least 36" down (better to over excavate), or to 48" if there is a \* 1 point risk of excavation, then the trench is graded, the pipe and tracer wire are run, the inspector approves, backfilling is then done in 6" increments either being tamped, or flooded. (7.4.2)

$\square$	$\Big)$	True
$\square$	$\supset$	False

86. Protection against corrosion. Instead of steel pipe, what type of piping should we use \* 1 point underground?

Mark only one oval.



Stainless Steel

🔵 Brass

Galvanized Steel

87. Underground piping, where installed through the outer foundation or basement wall of \* 1 point a building, shall be encased in a protective sleeve or protected by an approved device or method. The space between the gas piping and the sleeve and between the sleeve and the wall shall be sealed to prevent entry of gas and water. (7.1.5)

Mark only one oval.

$\square$	$\Big)$	True
$\square$	$\supset$	False

88. Where gas piping is installed underground beneath buildings, the piping shall be \* 1 point either be encased in an approved conduit designed to withstand the imposed loads and installed in accordance with 7.1.6.1 or 7.1.6.2 or a piping/encasement system listed for installation beneath buildings. (7.1.6)

Mark only one oval.

$\square$	)	True
$\square$	)	False

89. If a piece of larger pipe is used as a conduit for protection against physical damage \* 1 point inside a building, what two installation practices must be followed?

#### Mark only one oval.

The pipe must be able to withstand the gas pressure

The pipe must be vented such that gas will not accumulate and explode.

) Both statements are correct

90. Can PVC be used for gas piping underground? \*

Mark only one oval.

$\subset$	$\supset$	Yes
_	_	

- O No
- 91. Where shall plastic gas piping be used? \*

Mark only one oval.	
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- Underground only
- Above ground only
- Anywhere gas piping can be installed
- no where
- 92. What type of fitting assembly will be used in conjunction with plastic piping for the \* 1 point following two conditions?

# Mark only one oval.

Aboveground outdoors: Service head adapter (3.3.87)

Below Grade indoors: Wall head adapter (3.3.104)

Both statements are correct

- Both statements are incorrect
- 93. Since a metal detector cannot locate plastic pipe underground, what must be buried \* 1 point with the plastic pipe to facilitate locating it?

#### Mark only one oval.

\_\_\_\_\_ Metal Conduit

Nothing is required

Tracer Wire

None of the above

94. When gas piping is passing through an exterior wall above grade why do we have to \* 1 point seal the annular space around the pipe?

Mark only one oval.

In order to prevent entry of water/insects/rodents (7.2.1)

Piping may not pass through the exterior wall above grade

Both statements are incorrect

95. Select the prohibited location(s) for gas piping inside a building? \* 1 point

Mark only one oval.

$\bigcirc$	Clothes chutes
$\bigcirc$	Air ducts
$\bigcirc$	Gas Vents
$\bigcirc$	Chimneys
$\bigcirc$	Dumbwaiters

All of the above

96. Shutoffs are required to be readily accessible, is above a drop ceiling considered \* 1 point readily accessible?

# Mark only one oval.

Readily accessible requires that the valve be able to be accessed without moving anything to get to it. (3.3.1.1 / Annex A 7.2.5 / 9.3)

Ceiling Tiles are exempt from this regulation (3.3.1.1 / Annex A 7.2.5 / 9.3)

Both statements are correct

97. According to NFPA 54, piping shall be supported by what? \*

1 point

# Mark only one oval.

 $\square$ 

Metal hangers/hooks/bands/brackets

Plastic Strap/ Metal hangers/plastic J hooks/milford hangers

Any style hanging material is acceptable

98.	Can piping support piping? *	1 point
	Mark only one oval.	
	Yes	
	No	
99.	What table should be referenced for spacing of supports? *	1 point
	Mark only one oval.	
	Table 7.3.7.2	
	Table 7.2.6.4	
	Table 7.2.6.2	
	Table 6.2.7.2	
100.	Where do we find support spacing information for CSST? *	1 point
	Mark only one oval.	
	Manufacturers I&O (7.2.6.2 / 7.2.7)	
	NFPA54 6.2.3.1	

NFPA58 5.6.7.2

Consult the AHJ

101. When gas pipe is installed on a roof how high above the roof does the pipe need to \* 1 point be elevated?

Mark only one oval.

12"

\_\_\_\_ no specified height

In accordance with table 7.2.6.2

100	~~~ <b>T</b>					
102.	CSST	shall	be	Installed	per	what? *

Mark only one oval.

AHJ recommendation

- NFPA54 7.2.6.2
- Manufacturers I&O
- Installers best judgement

103. Why does concealed piping pose a greater risk than exposed piping? \*

# Mark only one oval.

Pipe is more prone drilling or cutting

Pipe is harder to hang

Pipe will not be used as a hanger

- All statements are correct
- 104. Any connections not listed in 7.3.2 (notable unions) is prohibited in concealed \* 1 point locations.

Mark	only	one	oval.
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🔵 True

🕖 False

105.	Why can't gas piping be installed in a solid partition? *	
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### Mark only one oval.

7.3.3 states it is prohibited

7.3.3 states it is not prohibited

NFPA54 does not have any such statement in it

This is determined by the AHJ

1 point

106.	When installing tubing (not pipe) in a wall should we support the tubing in locations	* 1 point
	not protected by a striker plate?	

Mark only one oval.

) It should not be secured. 7.3.4(2)

) It should be secured every  $36^{"}$ . 7.3.4(2)

Stiker plates should be ran horizontally to protect the entire bay

- Tubing is prohibited in wall cavities
- 107

107.	How should piping be installed in solid floors such as concrete? *	1 point
	Mark only one oval.	
	Direct bury	
	In conduit	
	No piping in solid floors	
	Below the soild floor only	
108.	What is the difference between a drip leg and a sediment trap? *	1 point
	Mark only one oval.	
	They are the same thing	
	Drip legs are meant to catch condensate, sediment traps are meant for sediment.	
	Neither statement is correct	
109.	Where does the majority of debris collected by sediment traps originate? *	1 point

# Mark only one oval.

Dirty gas

From the original installation

) Dirt in the main gas lines

Piping improperly installed

110. Are drips required on LP? \*

Mark only one oval.

- Only If the AHJ requires it
- If there is high moisture levels
- Both statements are correct
- Both statements are incorrect
- 111. What is the minimum length of unthreaded portion of piping protruding from walls or \* 1 point ceilings?

Mark only one oval.



112. What is the approximate length of threaded portion of 3/4" black iron pipe? \* 1 point

#### Mark only one oval.

3/4" or 10 threads

1.25" or 15 threads

no minimum length

113. What is the minimum length of a sediment trap between the bottom of the tee and \* 1 point the cap?

Mark only one oval.

2" 3" 4" 5"

114. What is the minimum length of unthreaded portion of piping protruding from floors? \* 1 point *Mark only one oval.* 



115. Each outlet, including a valve, shall be closed gastight with a threaded plug or cap \* 1 point immediately after installation and shall be left closed until the appliance or equipment is connected thereto. When an appliance or equipment is disconnected from an outlet and the outlet is not to be used again immediately, it shall be capped or plugged gastight.



116. Each laboratory space containing two or more gas outlets installed on tables, benches, or in hoods in educational, research, commercial, and industrial occupancies shall have a single shutoff valve through which all such gas outlets are supplied. The shutoff valve shall be accessible, located within the laboratory or adjacent to the laboratory's egress door, and identified.

Mark only one oval.

$\square$	$\supset$	True
	)	False

117.	Where can the definition of Pressure Test as found in NFPA 54. $\star$	1 point
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$\subset$	Section 8.1
	Section 6.1

Mark only one oval.

- Section 2.1
- Section 1.1
- 118. To free a gas conduit of air or gas, or a mixture of gas and air. \*

Mark only one oval.		
Purge		
Pressure Test		

- Prohibited by code
- 119. Please give the definition of Leak Check as found in NFPA 54. \*

# Mark only one oval.

- An operation performed in a gas piping system to verify that the system does not leak.
- $\bigcirc$  To free a gas conduit of air or gas, or a mixture of gas and air.
- Both statements are correct

\* 1 point

1 point

- Wich is NOT a listed the 3 requirements chapter 8 contains. \* 120. 1 point Mark only one oval. Inspection Testing Draining Purging Are appliances or appliance connectors part of a fixed piping system? \* 121. 1 point Mark only one oval. Yes No 122. A pressure test usually only occurs under two circumstances \* 1 point Mark only one oval. New branches, or new installation is done Removing old appliances Annually When the AHJ recommends it Any inert gas may be used for pressure testing. \* 123. 1 point Mark only one oval. True
  - 🕖 False

124. Can oxygen be used as a test medium? \*

Mark only one oval.

- 🔵 No
- 125. Which is NOT an inert gas. \*

Mark only one oval.

$\subset$	Oxygen
	Nitrogen

- Air
- Argon
- Option 5
- 126. How do we isolate appliances and equipment not intended to be included in the \* 1 point pressure test?

#### Mark only one oval.

- Shut off the gas valve
- Disconnect and cap them
- Leave them connected
- Crack the union
- 127. If a mechanical gauge is used with the pressure test scale is allowed to be? \* 1 point

# Mark only one oval.

- $\bigcirc$  up to 5 times the test pressure
- \_\_\_\_\_ up to 10 times the test pressure
- 🔵 100# gauge
- The exact amount of pressure required for the test

128. What is the required test pressure? \*

Mark only one oval.

- 🔵 a minimum of 3 PSIg
- a minimum of 5 PSIg
- 🔵 a maximum of 3 PSIg
- 🗌 25 PSlg
- 129. How long should a pressure test last for piping with a volume greater than 10 cu ft.? \* 1 point

# Mark only one oval.

- 1/2 hour per 500 cubic feet up to a maximum 24 hours.
- The same as a smaller system
- 2 hours
- 24 hours minimum
- 130. How long should a pressure test last for piping with a volume less than 10 cu ft.? \* 1 point

# Mark only one oval.

- 10 minutes minimum, 24 hours maximum
- The same as a larger system
- 24 hours minimum
- \_\_\_\_\_ 5 hours
- 131. All residential installations have a minimum of 10 minutes, and a maximum of 24 \* 1 point hours

$\square$	)	True
$\square$	)	False

132. How much is the pressure allowed to drop on a gas piping system when the pressure drop cannot be attributed to a change in temperature?

\* 1 point

Mark only one oval.



133. What is the maximum test duration regardless of volume? \*

1 point

- 72 hours
- 🔵 12 hours
- 2 hours
- 24 hours
- 134. Leak tests are pressurized with the fuel gas, the pressure test is pressurized with an \* 1 point inert gas.

Mark	only	one	oval.
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True

🔵 False

135. What is the test medium and pressure used in a leak check? \*

1 point

Mark only one oval.



🔵 Inert gas

🕖 Vacuum

All of the above
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## Google Forms

# GPI- Exam Question Bank 2024\_w/ short answer

 What is the minimum percentage needed to pass a written test for each specialty \* 1 point license?

- 2. What is the first tier to the specialty license? \*
  Mark only one oval.
  Gas Piping Installer
  Service Technician
  Equipment Installer
  Master Installation Technician
- 3. How many hours of educational training are required for the first specialty license? \* 1 point
- 4. How many hours of on-job-training are required for the first specialty license? \* 1 point

5. What is the second tier to the specialty license? \*

Mark only one oval.

Gas Piping Installer

Service Technician

- Hearth Installer
- Equipment Installation Technician
- 6. How many total hours of educational training are required for the second specialty \* 1 point license?

Mark only one oval.

- \_\_\_\_ 140 hours
- \_\_\_\_ 120 hours
- \_\_\_\_ 100 hours
- \_\_\_\_ 110 hours
- 7. How many additional hours of on-job-training are required for the second specialty \* 1 point license?

Mark only one oval.

\_\_\_\_\_ 1500 hours

\_\_\_\_\_ 2000 hours

- \_\_\_\_\_ 1000 hours
- \_\_\_\_ 500 hours

- What is the third tier to the specialty license? \* 8. 1 point Mark only one oval. Service Technician **Gas Piping Installer Equipment Installation Technician** Hearth Installation Technician How many total hours of educational training are required for the third specialty 9. \* 1 point license? How many additional hours of on-job-training are required for the third specialty 10. \* 1 point license? Mark only one oval. 500 hours 1000 hours 1500 hours 2000 hours How much does the initial fuel gas trainee license cost? \* 11. 1 point 12. How much does the fuel gas trainee RENEWAL cost? \* 1 point Mark only one oval. Free
  - \$80.00

\$90.00

\$120.00

How many years is a license active before expiration? \* 13.

Mark only one oval.

1 year

2 years

) 3 years

Lifetime

14.

When does a license expire? \* 1 point Mark only one oval. ) January 31st The last day of your birth month. June 30th November 1st

- How many questions at minimum are required on each specialty license test? \* 15. 1 point
- 16. What code covers the 1st and 2nd stage regulators on a LP system? \* 1 point

- NFPA 54
- NFPA 58
- NFPA 85
- IPC

17. A gas piping system was installed per code requirements in 2000, and now due to \* 1 point new or revised code material it no longer meets code, we shall we do?

Mark only one oval.

- Total Replacement
- Nothing, it's not our orginal installation
- Contact the AHJ (it may fall under reciprocity)
- Do not touch the system
- 18. Which table shall be referenced to design a gas piping system to have no more than \* 1 point a, .5" W.C. pressure drop for the following conditions; LP gas, 11" W.C. available supply pressure and black iron pipe?

Mark only one oval.

- 6.3.1(D) 6.3.1(A) 6.2.1(N) 6.2.1(B)
- 19. Which Table shall be referenced to design a gas piping system to have no more than \* 1 point a .5" W.C. pressure drop for the following conditions; LP gas, 11" W.C. available supply pressure and soft copper tubing?

Mark only one oval.

6.3.1(D)
6.2.1(A)
6.3.1(F)
6.2.1(M)

20. Which Table shall be referenced to design a gas piping system to have no more than \* 1 point a .5" W.C. pressure drop for the following conditions; natural gas, 6" W.C. available supply pressure and black iron pipe?

Mark only one oval.

- 6.2.1(A)
  6.2.1(N)
  6.2.1(B)
  6.2.1(M)
- 21. What do first stage regulators compensate for? \*

Mark only one oval.

Gas temperature

Change in Supply

Volume Requirement

Overfilled Tanks

22. When adding appliances to an existing system what shall we do? \*

#### Mark only one oval.

\_\_\_\_ Pull a permit

Do the work immedately

Shut the system off

Contact the gas supplier

1 point

What shall we do to black iron piping installed outdoors above ground? \* 23. 1 point Mark only one oval. Insulate it Install stainless steel pipe Paint it Nothing special What do 2nd stage regulators compensate for? \* 24. 1 point Mark only one oval. Boosts pressure Changes in downstream demand Raise the gas temperature Manage the tank volume

1 point

1 point

- 25. What can cast iron be used for in gas piping? \*
- 26. Cast iron CANNOT be used for? \*

Mark only one oval.

Nothing

Indoor Piping

- Outdoor Piping
- Any gas piping applications

27. What is Industry best practice pressure drop we design piping systems for? \*

Mark only one oval.

\_\_\_\_\_ 0.5" w.c.

\_\_\_\_\_\_ 1.0" w.c.

\_\_\_\_\_ 1.5" w.c.

\_\_\_\_\_ 5" w.c.

28. Do regulators need to be readily accessible? \*

Yes

Mark only one oval.

29. Do meters need to be readily accessible? \*

30. Do shutoffs need to be readily accessible? \*

Mark only one oval.

\_\_\_\_ Yes

No

Only if it is a main shut off

1 point

1 point

1 point

31. A gas piping installation covered by NFPA 54 includes all fixed piping from where to \* 1 point where?

Mark only one oval.

- LP: 1st stage regulator, Natural: Outlet of the meter set
- LP and Natural: where it enters the building
- DLP: 2nd stage regulator, Natual: Inlet of the meter set
- DLP: At the valve on the tank, Natural: where the piping exits the ground
- 32. What table will be used to determine approximate inputs for typical gas appliance? \* 1 point

#### Mark only one oval.

- Annex A Table 5.4.2.1 (A.5.4.2.1)
- Annex B Table 5.7.2.1 (B.5.7.2.1)
- The last table in chapter 6 of NFPA54
- Annex Y Table 6.4.2.7 (Y.6.4.2.7)
- 33. Gas meters shall be located in ventilated spaces readily accessible for what \* 1 point purposes?

- It's not necessary
- To change the meter annually
- Examination / Reading / Replacement / Necessary Maintenance
- For the AHJ to inspect when they choose

Who shall we contact to obtain the heating value of the gas used? \* 34. 1 point Mark only one oval. the AHJ the gas supplier the regulator manufacturer no need to know this value What CPN covers metallic piping joints and fittings? \* 35. 1 point Mark only one oval. ) 1.4.3 6.3.1 5.6.7 13.2.4

1 point

1 point

36. What CPN covers plastic piping joints and fittings? \*

Mark only one oval.

- 1.4.35.6.8
- 9.3.1
- 11.3.5
- 37. Line gas pressure regulators shall be listed in accordance with? \*

Mark only one oval.

6.3.1(A)
 5.8.2 / 6.2.2
 whatever the gas supplier provides
 9.3.1

38. What are the two ways we accomplish venting a line gas pressure regulator. \*

1 point

Mark only one oval.

Piping the vent to atmosphere or use a vent limiter

It is not required

- Install a regulator with out a vent port
- Regulators may only installed outdoors
- 39. What will be required when the available supply pressure is higher than what the \* 1 point appliance is designed for?

Mark only one oval.

Install an appliance designed for the higher pressure

A line pressure regulator

Adjust the gas valve on the appliance

- Change the design of the system
- 40. Normal ASP for LP gas is? \*

Mark only one oval.

\_\_\_\_\_ 5'-7" w.c.

\_\_\_\_\_ 15"-19" w.c.

\_\_\_\_\_ under 1 psi

41. 1 cubic foot of LP gas approximately contains how many BTU's? \* 1 point

Metallic pipe threads shall be what? \* 42.

Mark only one oval.

Cut to specific lengths and sized using the charts

Buried entirely when tighened into any fitting

Made in a factory only

- Painted to prevent rust always
- Normal manifold pressure for LP gas is? \* 43.

Mark only one oval.

6" w.c.

8" w.c.

10" w.c.

- 15.9" w.c.
- Normal manifold pressure for natural gas is? \* 44.



3.5" w.c.

8" w.c. 12" w.c.

10" w.c.

45. The maximum design operating pressure for piping located inside a building shall not \* 1 point exceed?

Mark only one oval.

2 PSIg ) 5 PSIg

10 PSIg

15 PSIg

1 point

46. The maximum design operating pressure for any gas piping system shall not exceed? \* 1 point Mark only one oval.

50 PSIg

75 PSIg

100 PSIg

- 🔵 125 PSIg
- 47. According to NFPA54 Gas piping systems shall be sized and installed to satisfy \* 1 point maximum demand of the system while ensuring what?

Mark only one oval.

To handle any future appliances added

To satisfy 80% of the entire demand at anytime

Each appliance receives not less than the minimum manifold pressure it requires

Whatever the AHJ requires in their juristiction

48. Normal ASP for Natural gas is? \*

Mark only one oval.

3.5" - 8" w.c.
7" - 14" w.c.
1 - 2 PSI
15" - 22" w.c.

Please convert the following appliance input into the most appropriate unit of \* 1 point
 measurement for the use with the charts pertaining to natural gas. 150,000 BTU/Hr.

Mark only one oval.

- \_\_\_\_\_ 150,000 / 2500 = 60cuft
- (\_\_\_\_\_ 150,000 / 5000= 30cuft
- \_\_\_\_ 150,000/100= 1500cuft
- 50. 1 cubic foot of Natural gas approximately contains how many BTU's? \* 1 point

Mark only one oval.
---------------------

\_\_\_\_\_ 1000

2500

- 5000
- \_\_\_\_\_ 17000
- 51. What shall be requirement to be included on a piping plan? \*

#### Mark only one oval.



- The gas supplier name
- DLocation , Sections , Segments, Outlets, Legend, Available Supply Pressure.
- Square footage of the building

#### 52. Who determines where the point of delivery will be? \*

Mark only one oval.



The AHJ

Me the installer

The serving gas supplier

1 point

- What type of Plastic piping shall be used as gas pipe? \* 53. 1 point Mark only one oval. PEX PVC Polyethylene Pipe or Polyamide Only steel pipe is allowed for gas piping Can PVC be used as plastic piping? What is PVC commonly used for? \* 54. 1 point Mark only one oval. Not at all No, but it is commonly used to pipe gas regulator vents Only above ground Depends on the AHJ 55. What is the purpose of an excess flow valve? \* 1 point Mark only one oval. To maintain constant pressure ) To eliminate wasted gas Stop the flow of gas when flow exceeds the rating of the valve (like a major pipe rupture) To re-route gas back to the supply piping 56. A regulator vent shall be installed to prevent the entry of? \* 1 point Mark only one oval. Foreign Objects (bugs, debris, water)
  - Air
  - Sunlight
  - \_\_\_\_ Nitrogen

- 57. When work interruptions occur, what shall we do to the piping system? \* 1 point
  Mark only one oval.
  Valves shut and openings capped off safely
  Nothing, continue when you're ready
  Tape over outlets
  Leave a note not to touch your piping

  58. Steel pipe (black iron) shall have a minimum weight (wall thickness) of what? \* 1 point
  - schedule 10
  - \_\_\_\_\_ schedule 40
  - schedule 80
  - \_\_\_\_\_ schedule 100
- 59. What methods of connection are we allowed to use with steel pipe? \* 1 point



60. Can press connect fittings be used with copper tubing? \*

1 point

Mark only one oval.

Yes

When shall a permit be secured? \* 61.

1 point

Mark only one oval.

- Only when the system is initially installed
- No need for gas work
- When ever replacing the appliance or opening the system
- When the supplier comnnects to the system
- 62. What is the most common sizing method for gas pipe sizing? \*

1 point

1 point

#### Mark only one oval.

the SWAG method

- Longest Length method
- Hybrid method
- Shortest Length method
- 63. Please list the general considerations for sizing of gas piping systems. \* 1 point

#### Mark only one oval.

Supply sufficient gas supply to ensure all appliance recieve more than the minimum supply pressure under maximum load



Supply sufficient gas supply under 90% load

Provide sufficient gas supply at 200% of the maximum load

Allow for 50% load at 100% capacity.

#### 64. The specific gravity of LP gas is approximately? \*

#### Mark only one oval.

1.0 specific gravity

.25 specific gravity

.60 specific gravity

1.25 specific gravity

65. The specific gravity of Natural gas is approximately? \*

Mark only one oval.

- 1.50 specific gravity
- .50 specific gravity
- .25 specific gravity
- 2.75 specific gravity
- 66. What is the largest pipe size that threaded joints can be used for without approval \* 1 point from the AHJ?

Mark only one oval.

1" 2" 3" 4"

67. When installing CSST we install it in accordance with what? \*





NFPA54

Manufactures I and O

Equipment Manufactures suggestion

- 68. Instead of black steel pipe, what type of piping could we use for gas piping \* 1 point underground?
  Mark only one oval.
  Soft copper , Plastic, Polyethylene (PE), Polyamide Pipe
  Plastic
  Polyethylene(PE)
  Polyamide Pipe
  All of the above
- 69. Can you thread schedule 10 steel pipe? \*
- 70. The definition of Bonding Jumper as found in NFPA 54 is; A reliable conductor to \* 1 point ensure the required electrical conductivity between metal parts required to be electrically connected.

1 point

Mark only one oval.

True

71. The definition of Drip as found in NFPA 54 is; The container placed at a high point in \* 1 point a system of piping to collect condensate and from which it may be removed.

Mark only one oval.

TrueFalse

72. The definition of Effective Ground-Fault Current Path as found in NFPA 54 is; An intentionally constructed, low impedance electrically conductive path designed and intended to carry current under ground-fault conditions from the point of a ground fault on a wiring system to the electrical supply source and that facilitates the operation of the overcurrent protective device or ground-fault detectors.

\* 1 point

1 point

Mark only one oval.

True False

73. The definition of Service Head Adapter as found in NFPA 54 is; A transition fitting for \* 1 point use with plastic piping (which is encased in non-pressure-carrying metal pipe) that connects the metal pipe casing and plastic pipe and tubing to the remainder of the piping system.

Mark only one oval.

$\square$	)	True
$\square$	)	False

74. The definition of Grounding Electrode as found in NFPA 54 is \*

- A conducting object through which a direct connection to earth is established.
- A non-conducting object through which a direct connection to earth is established.
- A conducting object through which an indirect connection to earth is established.
  - A wire attaching the gas pipe to the water main in the basement.

75. NFPA 54, Chapter 7 includes what? \*

1 point

Mark only one oval.

- Gas Pipe Sizing
- Gas Piping Installation
- Definitions
- \_\_\_\_ Fuel Gas Venting

76. When gas piping is installed underground, we must provide clearance from what? \* 1 point

Mark only one oval.

The surface

Sewer Pipe

Telecom Wiring

- Any other underground structure.
- 77. Plastic piping shall be installed with sufficient clearance or shall be insulated from any \* 1 point source of heat so as to prevent the heat from impairing the serviceability of the pipe.

Mark only one oval.

$\square$	)	True
$\square$	)	False

78. Piping shall be buried or covered for protect against what? \*

1 point

Mark only one oval.

Rainy weather

Excavation / Damage

🔵 Gas theft

Direct Sunlight

- 79. What is the minimum cover depth required for underground pipe? \*
- 80. If external damage from external forces is likely to occur what does the minimum \* 1 point depth increase to?

Mark only one oval.

12"
18"
24"

- 36"
- 81. If a minimum depth cannot be achieved how can we protect the piping from external \* 1 point damage from external forces?

Mark only one oval.

Find another route

bury the pipe in concrete

Place it under a bridge or run it inside conduit

- Use a thicker schedule piping
- 82. If we install our gas pipe inside a larger pipe to protect the piping from physical \* 1 point damage, what must we prevent?

Mark only one oval.

Water intrusion

Trapping Gas

static electricity

Sharp changes in direction

83. Terra tape is a brand of marker tape, it is buried atop the pipe so that a digger will hit \* 1 point the tape first, and it will warn them of the pipe below.

Mark only one oval.

$\square$	)	True
$\square$	)	False

84. Who should be notified before any digging takes place? How far in advance of work \* 1 point commencing in the State of NH?

Mark only one oval.

Dig Safe, 72 hours before excavation

Dig Safe, 24 hours before excavation

DOL, 72 hours before excavation

- OSHA, 48 hours before excavation
- 85. A trench will be dug at least 36" down (better to over excavate), or to 48" if there is a \* 1 point risk of excavation, then the trench is graded, the pipe and tracer wire are run, the inspector approves, backfilling is then done in 6" increments either being tamped, or flooded. (7.4.2)

Mark only one oval.

|--|



86. Protection against corrosion. Instead of steel pipe, what type of piping should we use \* 1 point underground?

Mark only one oval.

Copper or plastic

Stainless Steel

Brass

Galvanized Steel

87. Underground piping, where installed through the outer foundation or basement wall of \* 1 point a building, shall be encased in a protective sleeve or protected by an approved device or method. The space between the gas piping and the sleeve and between the sleeve and the wall shall be sealed to prevent entry of gas and water. (7.1.5)

Mark only one oval.

$\square$	$\mathcal{D}$	True
$\square$	$\Big)$	False

88. Where gas piping is installed underground beneath buildings, the piping shall be \* 1 point either be encased in an approved conduit designed to withstand the imposed loads and installed in accordance with 7.1.6.1 or 7.1.6.2 or a piping/encasement system listed for installation beneath buildings. (7.1.6)

Mark only one oval.

$\square$	)	True
$\square$	)	False

89. If a piece of larger pipe is used as a conduit for protection against physical damage \* 1 point inside a building, what two installation practices must be followed?

#### Mark only one oval.

The pipe must be able to withstand the gas pressure

The pipe must be vented such that gas will not accumulate and explode.

- Both statements are correct
- 90. Can PVC be used for gas piping underground? \*

1 point

Yes No

- 91. Where shall plastic gas piping be used? \*
- 92. What type of fitting assembly will be used in conjunction with plastic piping for the \* 1 point following two conditions?

Mark only one oval.

- Aboveground outdoors: Service head adapter (3.3.87)
- Below Grade indoors: Wall head adapter (3.3.104)
- Both statements are correct
- Both statements are incorrect
- 93. Since a metal detector cannot locate plastic pipe underground, what must be buried \* 1 point with the plastic pipe to facilitate locating it?

Mark only one oval.



Nothing is required

Tracer Wire

None of the above

94. When gas piping is passing through an exterior wall above grade why do we have to \* 1 point seal the annular space around the pipe?

#### Mark only one oval.

 $\bigcirc$  In order to prevent entry of water/insects/rodents (7.2.1)

Piping may not pass through the exterior wall above grade



95. Select the prohibited location(s) for gas piping inside a building? \*

Mark only one oval.

Clothes chutes

Air ducts

Gas Vents

Chimneys

Dumbwaiters

All of the above

96. Shutoffs are required to be readily accessible, is above a drop ceiling considered \* 1 point readily accessible?

Mark only one oval.

Readily accessible requires that the valve be able to be accessed without moving anything to get to it. (3.3.1.1 / Annex A 7.2.5 / 9.3)

Ceiling Tiles are exempt from this regulation (3.3.1.1 / Annex A 7.2.5 / 9.3)

Both statements are correct

97. According to NFPA 54, piping shall be supported by what? \*

1 point

Mark only one oval.

 $\bigcirc$ 

) Metal hangers/hooks/bands/brackets

Plastic Strap/ Metal hangers/plastic J hooks/milford hangers

Any style hanging material is acceptable

98. Can piping support piping? \*

Mark only one oval.

Table 7.3.7.2 Table 7.2.6.4

Table 6.2.7.2

100. Where do we find support spacing information for CSST? \*

Mark only one oval.

Manufacturers I&O (7.2.6.2 / 7.2.7)

**NFPA54** 6.2.3.1

NFPA58 5.6.7.2

Consult the AHJ

101. When gas pipe is installed on a roof how high above the roof does the pipe need to \* 1 point be elevated?

Mark only one oval.

\_\_\_\_\_12"

6"

\_\_\_\_ no specified height

 $\bigcirc$  In accordance with table 7.2.6.2

102. CSST shall be installed per what? \*

Mark only one oval.

AHJ recommendation

NFPA54 7.2.6.2

Manufacturers I&O

📄 Installers best judgement

1 point

Why does concealed piping pose a greater risk than exposed piping? \* 103.

1 point

Mark only one oval.

- Pipe is more prone drilling or cutting
- ) Pipe is harder to hang
- Pipe will not be used as a hanger
- All statements are correct
- 104. Any connections not listed in 7.3.2 (notable unions) is prohibited in concealed \* 1 point locations.

Mark only one oval	•
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False

105. Why can't gas piping be installed in a solid partition? \*

#### Mark only one oval.

- 7.3.3 states it is prohibited
- 7.3.3 states it is not prohibited
- ) NFPA54 does not have any such statement in it
- This is determined by the AHJ
- 106. When installing tubing (not pipe) in a wall should we support the tubing in locations \* 1 point not protected by a striker plate?

#### Mark only one oval.



- It should not be secured. 7.3.4(2)
- It should be secured every 36". 7.3.4(2)
- Stiker plates should be ran horizontally to protect the entire bay
- Tubing is prohibited in wall cavities

107.	How should piping be installed in solid floors such as concrete? *	1 point
	Mark only one oval.	
	Direct bury	
	In conduit	
	No piping in solid floors	
	Below the soild floor only	
108.	What is the difference between a drip leg and a sediment trap? *	1 point
	Mark only one oval.	
	They are the same thing	
	Drip legs are meant to catch condensate, sediment traps are meant for sediment.	
	Neither statement is correct	
109.	Where does the majority of debris collected by sediment traps originate? *	1 point
	Mark only one oval.	
	Dirty gas	
	From the original installation	
	Dirt in the main gas lines	
	Piping improperly installed	
110.	Are drips required on LP? *	1 point
	Mark only one oval.	
	Only If the AHJ requires it	
	If there is high moisture levels	
	Both statements are correct	
	Both statements are incorrect	

111. What is the minimum length of unthreaded portion of piping protruding from walls or \* 1 point ceilings?

Mark only one oval.



- 112. What is the approximate length of threaded portion of 3/4" black iron pipe? \* 1 point

Mark only one oval.

- 3/4" or 10 threads
- 1.25" or 15 threads
- 1.75" or 20 threads
- no minimum length
- 113. What is the minimum length of a sediment trap between the bottom of the tee and \* 1 point the cap?

Mark only one oval.



5"

114. What is the minimum length of unthreaded portion of piping protruding from floors? \* 1 point Mark only one oval.

2" 4" 6" 8"

115. Each outlet, including a valve, shall be closed gastight with a threaded plug or cap \* 1 point immediately after installation and shall be left closed until the appliance or equipment is connected thereto. When an appliance or equipment is disconnected from an outlet and the outlet is not to be used again immediately, it shall be capped or plugged gastight.

Mark only one oval.

$\square$	$\supset$	True
_	_	

🔵 False

116. Each laboratory space containing two or more gas outlets installed on tables, \* 1 point benches, or in hoods in educational, research, commercial, and industrial occupancies shall have a single shutoff valve through which all such gas outlets are supplied. The shutoff valve shall be accessible, located within the laboratory or adjacent to the laboratory's egress door, and identified.

#### Mark only one oval.



🔵 False

- Where can the definition of Pressure Test as found in NFPA 54. \* 117. 1 point Mark only one oval. Section 8.1 Section 6.1 Section 2.1 Section 1.1 To free a gas conduit of air or gas, or a mixture of gas and air. \* 118. 1 point Mark only one oval. Purge Pressure Test Leak Prohibited by code
- 119. Please give the definition of Leak Check as found in NFPA 54. \* 1 point

#### Mark only one oval.

An operation performed in a gas piping system to verify that the system does not leak.

To free a gas conduit of air or gas, or a mixture of gas and air.

Both statements are correct

120. Which is NOT a listed the 3 requirements chapter 8 contains. \* 1 point

#### Mark only one oval.

Inspection

\_\_\_\_) Testing

Draining

Purging

121.	Are appliances or appliance connectors part of a fixed piping system? *	1 point
	Mark only one oval.	
	Yes	
	No	
122.	A pressure test usually only occurs under two circumstances *	1 point
	Mark only one oval.	
	New branches, or new installation is done	
	Removing old appliances	
	Annually	
	When the AHJ recommends it	
123.	Any inert gas may be used for pressure testing. *	1 point
	Mark only one oval.	
	True	
	False	

1 point

124. Can oxygen be used as a test medium? \*

- Yes
- 🔵 No

125. Which is NOT an inert gas. \*

Mark only one oval.

🗌 Oxygen

Nitrogen

Air

Argon

- Option 5
- 126. How do we isolate appliances and equipment not intended to be included in the \* 1 point pressure test?

Mark only one oval.

- Shut off the gas valve
- Disconnect and cap them
- Leave them connected
- Crack the union
- 127. If a mechanical gauge is used with the pressure test scale is allowed to be? \* 1 point

- \_\_\_\_ up to 5 times the test pressure
- \_\_\_\_\_ up to 10 times the test pressure
- 🔵 100# gauge
- The exact amount of pressure required for the test

128. What is the required test pressure? \*

Mark only one oval.

- 🔵 a minimum of 3 PSIg
- a minimum of 5 PSIg
- 🔵 a maximum of 3 PSIg
- 🗌 25 PSlg
- 129. How long should a pressure test last for piping with a volume greater than 10 cu ft.? \* 1 point

#### Mark only one oval.

- 1/2 hour per 500 cubic feet up to a maximum 24 hours.
- The same as a smaller system
- 2 hours
- 24 hours minimum
- 130. How long should a pressure test last for piping with a volume less than 10 cu ft.? \* 1 point

#### Mark only one oval.

- 10 minutes minimum, 24 hours maximum
- The same as a larger system
- 24 hours minimum
- \_\_\_\_\_ 5 hours
- 131. All residential installations have a minimum of 10 minutes, and a maximum of 24 \* 1 point hours

$\square$	)	True
$\square$	)	False
132. How much is the pressure allowed to drop on a gas piping system when the pressure drop cannot be attributed to a change in temperature?

\* 1 point

Mark only one oval.



133. What is the maximum test duration regardless of volume? \*

1 point

- 72 hours
- 🔵 12 hours
- 2 hours
- 24 hours
- 134. Leak tests are pressurized with the fuel gas, the pressure test is pressurized with an \* 1 point inert gas.

Mark on	ly o	ne o	val.
---------	------	------	------

True

🔵 False

135. What is the test medium and pressure used in a leak check? \*

1 point

Mark only one oval.



🔵 Inert gas

🕖 Vacuum

All of the above

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## Google Forms

Mec 308.02 Testing Organization Approval.

(a) Applicants seeking approval of their testing program shall submit to the mechanical licensing board the following:

(1) A short statement of the specialty license for which the applicant wants its testing program to be evaluated;

We are applying to administer our exam for the Gas Piping Installers specialty license, to students upon successful completion of the GPI course at our technical center.

(2) Copies of the exams that demonstrate the validity of the exam questions as they relate to the adopted codes, standards, and these rules specifically related to licensing endorsement, or trade applied for;

A copy of our exam question bank is included in the submitted information, the bank consists of 135 questions. Students will be given a random mix of 100 questions from the bank, and will need to attain a minimum score of 70% to pass the exam.

(3) The testing administration procedure, as follows:

a. Exams shall consist of a mixture of multiple choice, true or false, fill in the blank, and worksheet calculations;

b. Each exam for licensure shall be no less than 100 questions; and

c. For the purposes of licensing administration, a passing score shall be no less than 70% unless otherwise specified in these rules; and

A copy of our exam question bank is included in the submitted information, the bank consists of 135 questions. Students will be given a random mix of 100 questions from the bank, and will need to attain a minimum score of 70% to pass the exam.

(4) Evidence of the following standards of exam integrity:

a. Tests shall be validated by the testing entity and audited by the board, biannually, to insure reliability to current industry standards, accepted practices and concurrence with applicable codes and standards;

b. Tests shall be maintained in a manner that demonstrates the highest regard for test security, including secured in a locked cabinet when not in use; and

c. The testing entity shall notify the board of its biannual validation of tests pursuant to a. above at which time the board shall conduct an audit of the exam and procedures; and

A copy of the current exam questions bank has been provided with this document.

(5) Evidence of the following standards for the proctoring of exams:

a. Tests shall be administered only to those candidates that have met all of the prerequisites for the specific test being administered;

Only students who complete the GPI course successfully will be eligible to sit for the exam.

b. Test proctors and examiners shall not have been the candidate's instructor for the specialty license they are administering;

The exam will be administered by our Career Coordinator, Sharon De La Vergne, in our Career Lab located in the lower HTC building.

c. Proctors shall monitor the registration process for all examinations;

d. Candidates shall be required to show proof of positive identification by means of government issued photo identification;

Ms. De La Vergne will sign in and register the eligible students, checking their identification and verifying their identity. Sharon is also familiar with the HTC students.

e. Testing environment shall be as comfortable as possible with regard to temperature, light and seating arrangements;

The Career Lab is comfortable and supplies ample space for students to test in.

f. Candidates shall not be permitted to bring any electronic devices into an exam, except that a non-programmable calculator shall be permitted during exams requiring mathematical calculations;

Sharon De La Vergne will confirm the testers do not have any electronics with them, if they do have their cell phones they will be collected until testing is completed. A non-programmable simple calculator will be provided for their use.

g. Candidates shall be adequately spaced so that they cannot readily view the exam documents of other candidates; and

Students will be spaced out adequately to prevent viewing other students' exams, exams will be random so students will have a unique set of questions. The exam will be taken on the Career Center laptops which can be screen monitored by the proctors master station.

h. Alternative proctoring methods, such as oral examination shall be permitted, as approved by the board, provided that adequate justification is submitted. Such

alternative methods shall be as closely similar to the written test method with regard to exam integrity.

If needed students will be eligible to take the exam orally in a separate location.

(b) Upon receipt of a request for approval of an applicant's examination program, the board shall schedule a time for the applicant to provide a presentation to the board.