

End-point Assessment

Knowledge and Skills Practice

Assessment

Please write clearly in block capitals below	
Company name	
First name (s)	
Last name (s)	
Date of birth	
Apprentice number	
Apprentice signature	
Date of knowledge and skills assessment	

Level: 3
Standard: Gas Network Craftsperson
Pathway: Emergency Response
Duration: 1 hour 15 minutes

Materials

For this paper you must have:

- Pens
- Calculators and reference documents are not required

Instructions

- Use black or blue ink or black ball-point pen
- Fill in the boxes at the top of this page
- Answer **all** questions
- There are questions, possible answers as well as a column for you to mark your answer

- Mark your answer with an against the possible answer you think is correct- if you wish to change your answer please put a line through and re-select with another
- Only one answer per question allowed. Answers which do not follow the rules of selection will be disallowed. This may impact on the grade awarded
- Do all rough work in this answer book, spare paper is provided in this answer booklet and can be used but **MUST NOT** be removed
- Additional spare paper will not be provided
- All questions are closed book

Sample:

London is the capital of....

Example Question		
London is the capital of...		
Possible answers		Answer
a)	Wales	X
b)	Scotland	
c)	Northern Ireland	
d)	England	X

Information

- The marks for questions are 1 mark each
- There are 50 questions in total
- All questions should be attempted

Advice

- You are not permitted to leave the examination room for the duration of the assessment
- Do not spend too long on one question
- Read all questions thoroughly before starting your examination
- Mobile phones and SMART watches must not be taken into the examination room. The examination must be conducted under examination conditions i.e. you may not speak to other candidates, if you have a question raise your hand and the invigilator will attend

- Cheating: you will be asked to leave the examination room and will be classified an automatic fail and referred to your employer

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**Do not turn over the page or commence the
knowledge test until the invigilator instructs you to**

You may use this page to work out on.

This page must not be removed.

Question 1		
According to the GSMR (Gas Safety (Management) Regulations 1996), where would an operative locate the emergency control valve?		
Possible answers		Answer
a)	At the end of a service pipe	
b)	At the inlet to a meter	
c)	At least 250 mm above ground level	
d)	Within 1 m of a service pipe entering a property	

Question 2		
What is the usual operating pressure of a low-pressure gas installation?		
Possible answers		Answer
a)	19 mbar \pm 2 mbar	
b)	20 mbar \pm 2 mbar	
c)	21 mbar \pm 2 mbar	
d)	23 mbar \pm 2 mbar	

Question 3		
Which ONE of the following statements is correct about health and safety?		
Possible answers		Answer
a)	An individual's behaviour is a major contributory factor to accidents	
b)	Hazardous substances are the most common causes of injury	
c)	Personal protective equipment (PPE) will protect individuals from any level of harm	
d)	The only potential harm from electricity is burns	

Question 4		
What action should be taken when coming into contact with asbestos at work?		
Possible answers		Answer
a)	Work cautiously on an identified asbestos gas main	
b)	Gently handle gaskets which may contain asbestos	
c)	Carefully drill walls with a textured coating which may contain asbestos	
d)	Take precautions when materials are found which may contain asbestos	

Question 5		
What colour and shape are the hazard markings used for the Control of Substances Hazardous to Health (COSHH)?		
Possible answers		Answer
a)	Diamond - Orange and Black	
b)	Square - Orange and Black	
c)	Diamond - Red Border	
d)	Round - Red Border	

Question 6		
The Provision and Use of Work Equipment Regulations (PUWER) includes a requirement for which ONE of the following topics?		
Possible answers		Answer
a)	The retention of inspection and maintenance records	
b)	Instructions for the regular replacement of equipment	
c)	Controls to prevent employees using equipment in an unsafe manner	
d)	Arrangements for users to carry out the annual maintenance of equipment	

Question 7		
An operative is using a piece of equipment and it leaks oil on to the ground.		
What must the operative do?		
Possible answers		Answer
a)	Wash the oil leak away	
b)	Stop the oil leak and wipe it up	
c)	Immediately report the oil leak	
d)	Contain the oil leak, clean it up and report it	

Question 8		
Prior to using electrical equipment, what are users required to do?		
Possible answers		Answer
a)	Review test certificates for the equipment	
b)	Visually check the condition of the equipment	
c)	Carry out an electrical safety test on the equipment	
d)	Refer to manufacturer's instructions for the equipment	

Question 9		
An operative is working double the distance from a noisy plant or equipment.		
What is the effect of the noise exposure on the operative?		
Possible answers		Answer
a)	The noise exposure halves	
b)	The noise exposure doubles	
c)	The noise exposure minimises	
d)	There is no difference in the noise exposure	

Question 10		
Which ONE of the following regulations places a responsibility on an organisation for the notification of safety-related incidents?		
Possible answers		Answer
a)	Gas Safety (Management) Regulations 1996	
b)	Gas Safety (Installations and Use) Regulations 1998	
c)	Provision and Use of Work Equipment Regulations 1998	
d)	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013	

Question 11		
What colour band is the dry powder fire extinguisher?		
Possible answers		Answer
a)	Blue	
b)	Red	
c)	Black	
d)	Cream	

Question 12		
A common unit of electric current is the:		
Possible answers		Answer
a)	Ampere	
b)	Ohm	
c)	Volt	
d)	Bar	

Question 13		
The burner on a gas cooker has a yellow burner flame, which indicates:		
Possible answers		Answer
a)	Stoichiometric combustion	
b)	Incomplete combustion	
c)	Zero combustion	
d)	Complete combustion	

Question 14		
The required accuracy of a water-filled manometer is:		
Possible answers		Answer
a)	0.1 mbar	
b)	0.2 mbar	
c)	0.25 mbar	
d)	0.5 mbar	

Question 15		
The purpose of a main equipotential bonding is:		
Possible answers		Answer
a)	it improves the efficiency of electrical installations within the property	
b)	it reduces household costs through minimising wasted energy	
c)	it improves the safety of installations	
d)	it prevents pipework from corroding	

Question 16		
A regulator is preventing the flow of gas downstream.		
What is this condition known as?		
Possible answers		Answer
a)	Lock up	
b)	Lock in	
c)	Lock stop	
d)	Lock down	

Question 17		
What is achieved by undertaking a risk assessment on-site?		
Possible answers		Answer
a)	Danger is eliminated on-site	
b)	Hazards are removed on-site	
c)	A site is made safe	
d)	Site safety is improved	

Question 18		
Which ONE of the following actions is lowest in the hierarchy of risk control?		
Possible answers		Answer
a)	Control	
b)	Eliminate	
c)	Isolate	
d)	Reduce	

Question 19		
A risk assessment should consider the:		
Possible answers		Answer
a)	Outcome and frequency	
b)	Severity and likelihood	
c)	Difficulty and effect	
d)	Cost and efficiency	

Question 20		
When undertaking a risk assessment, how is a risk score calculated?		
Possible answers		Answer
a)	Hazard × risk	
b)	Severity × likelihood	
c)	Outcome × likelihood	
d)	Hazard × severity	

Question 21		
An example of a control measure is:		
Possible answers		Answer
a)	Undertaking a risk assessment	
b)	Getting someone else to do the job	
c)	Deferring the job to a later date	
d)	Re-designing the job	

Question 22		
When should plant-avoidance equipment be used?		
Possible answers		Answer
a)	After barholing the area	
b)	Before breaking the surface of the ground	
c)	Only when there are visible signs off plant in the ground	
d)	Upon completion of works on site	

Question 23		
Plant detection equipment should only be used when:		
Possible answers		Answer
a)	it is less than 5 years old	
b)	it is within its 'calibration due' date	
c)	It is known that there is buried plant in the vicinity	
d)	working in the public highway	

Question 24		
When can CAT (Cable Avoidance Tool) and Genny (Signal Generator) equipment be used in an environment with gas readings above 20% of the lower explosive limit (LEL)?		
Possible answers		Answer
a)	They can never be used	
b)	With the permission of a manager	
c)	When there is movement of air	
d)	When gas readings are falling	

Question 25		
Select the correct telephone number for Emergency Services?		
Possible answers		Answer
a)	111	
b)	999	
c)	Either 111 or 999	
d)	0800 111999	

Question 26		
Which organisation has a duty to coordinate the undertaking of street works?		
Possible answers		Answer
a)	The police	
b)	Local authorities	
c)	The Department of Transport	
d)	Utility companies amongst themselves	

Question 27		
What is the typical low alarm level for methane on a personal atmosphere monitor?		
Possible answers		Answer
a)	20 parts per million (ppm)	
b)	2% LEL of the lower explosive limit (LEL)	
c)	20% LEL of the lower explosive limit (LEL)	
d)	50% LEL of the lower explosive limit (LEL)	

Question 28		
The correct order of priority actions when dealing with a reported gas escape is:		
Possible answers		Answer
a)	Safeguard life Safeguard property Locate and secure the escape Carry out final site investigation Report status of work	
b)	Locate and secure the escape Safeguard life Safeguard property Report status of work Carry out final site investigation	
c)	Safeguard life Safeguard property Locate and secure the escape Report status of work Carry out final site investigation	
d)	Report status of work Locate and secure the escape Safeguard life Safeguard property Carry out final site investigation	

Question 29		
An operative is responding to a public reported escape.		
Where should the external survey be undertaken?		
Possible answers		Answer
a)	Either side of the reported location	
b)	Either side and opposite of the reported location	
c)	In front of the property where the escape was reported	
d)	At both ends of the street	

Question 30		
It is permissible to turn on the gas supply following a gas escape on an internal installation when:		
Possible answers		Answer
a)	the operative is instructed to do so by a manager	
b)	gas readings have fallen to below 2% of the (LEL) lower explosive limit	
c)	requested to do so by the customer	
d)	the cause of the escape has been repaired	

Question 31		
A gas escape has been brought under control by turning off the emergency control valve (ECV).		
What other action should be taken to remove any build-up of gas?		
Possible answers		Answer
a)	Open doors and windows	
b)	Turn on extractor fans	
c)	Open the taps on gas alliance	
d)	Close all doors and windows	

Question 32		
A gas escape is reported outside of a property.		
Upon arrival on site, what should the first action be?		
Possible answers		Answer
a)	Carry out a full external site investigation	
b)	Find and secure the gas escape	
c)	Turn off all visible gas supplies	
d)	Attempt to access the property where the escape was reported	

Question 33		
The GSMR (Gas Safety (Management) Regulations 1996) permits a gas conveyor to defer the repair of a gas escape based upon a risk-based prioritisation system, provided that:		
Possible answers		Answer
a)	the training of the individuals who deferred the gas escape was sufficient to ensure that they were aware of the prioritisation system	
b)	the governance of the individuals who deferred the gas escape was sufficient to ensure that they applied the prioritisation system correctly	
c)	the competence assurance of the individuals who deferred the gas escape was sufficient to ensure that they were aware of the prioritisation system	
d)	the training, competence assurance and governance of the individuals who deferred the gas escape was sufficient to ensure that they applied the prioritisation system correctly	

Question 34		
A gas conveyor can decide not to prevent a gas escape within the required timescale under the Gas Safety (Management) Regulations.		
What is this known as?		
Possible answers		Answer
a)	A delayed repair to gas escape	
b)	A deferred repair to a gas escape	
c)	A postponed repair to a gas escape	
d)	A deviation to the repair of a gas escape	

Question 35		
According to gas pipework installations, which ONE of the following statements applies to union joints and connections?		
Possible answers		Answer
a)	They must be steel-faced	
b)	They must be made using a washer	
c)	They must be ground-faced or compression	
d)	They must be brass-faced or compression	

Question 36		
What colour is the 'O' ring, inside the copper pressed joints, that indicate the joint is suitable for gas?		
Possible answers		Answer
a)	Black or blue	
b)	Blue or green	
c)	Red or blue	
d)	Yellow or tan	

Question 37		
What should be confirmed when visually inspecting a gas appliance?		
Possible answers		Answer
a)	The appliance is clean, and dirt is not visible	
b)	The flame picture is blue, vibrant, and stable	
c)	The customer has a record of the appliance being maintained	
d)	The customer has a carbon monoxide alarm installed close to the appliance	

Question 38		
An existing 35 mm diameter downstream installation has appliances connected, has an E6 ultrasonic meter installed and there is no reported smell of gas.		
What is the maximum permissible drop in pressure over a 2 minute period?		
Possible answers		Answer
a)	0 mbar	
b)	1 mbar	
c)	4 mbar	
d)	8 mbar	

Question 39		
What type of gas appliance may be fitted in a bathroom?		
Possible answers		Answer
a)	Enclosed	
b)	Flueless	
c)	Open flued	
d)	Room sealed	

Question 40		
How would an operative determine that a relief valve on a medium-pressure (MP) regulator has opened?		
Possible answers		Answer
a)	By using a manometer	
b)	By listening to the relief tube	
c)	By immersing the relief tube in water	
d)	By checking for a pressure drop on the gauge	

Question 41		
Cooking appliances, hotplates, grills, and ovens should not be fitted in bedrooms, but can be fitted in bed-sitting rooms.		
What must the volume of the bed-sitting room be?		
Possible answers		Answer
a)	Minimum 11 m ³	
b)	More than 11 m ³	
c)	Minimum 20 m ³	
d)	At least 20 m ³	

Question 42		
Select the option that accurately reflects the common symptoms of carbon monoxide poisoning.		
Possible answers		Answer
a)	Headache, nausea, shivering	
b)	Headache, dizziness, nausea	
c)	Dizziness, unsteady, aching	
d)	Nausea, sweating, tiredness	

Question 43		
Exposure to carbon monoxide may be particularly dangerous for:		
Possible answers		Answer
a)	children and older adults	
b)	children and teenagers	
c)	people who are unfit	
d)	people who have open wounds	

Question 44		
Vehicles stopping on the public highway for works purposes should have:		
Possible answers		Answer
a)	flashing amber lights	
b)	roof-mounted flashing amber lights	
c)	chevron markings covering the entire rear of the vehicle	
d)	rear chevron markings and roof-mounted flashing amber lights	

Question 45		
What is an acceptable method to prevent signing, lighting, and guarding equipment from being blown over or out of position by wind or passing vehicles?		
Possible answers		Answer
a)	Road pins	
b)	Barrels filled with concrete	
c)	Excavated material and spoil	
d)	Sacks containing granular material	

Question 46		
What is the stated aim of the New Road and Street Works Act?		
Possible answers		Answer
a)	To give local authorities the power to ensure that road works are properly protected and reinstated upon completion	
b)	To balance the need for street works with the right of road users to expect minimum disruption	
c)	To protect the public and workforce from danger when street works are undertaken	
d)	To ensure that utility companies liaise to minimise disruption to road users and to minimise damage to utility apparatus	

Question 47		
The “Red Book” (Safety at Street Works and Road Works) states that the basic safety zone is made up of:		
Possible answers		Answer
a)	the longways clearance and the sideways clearance	
b)	the area covered by the lead-in taper through to the exit taper	
c)	the work area and the space given for safe passage of pedestrians	
d)	the lead-in taper, the longways clearance, the sideways clearance, the exit taper	

Question 48		
Greater controls are necessary when barholing in the vicinity of:		
Possible answers		Answer
a)	Exposed cables	
b)	High voltage cables	
c)	Low voltage cables	
d)	Streetlamp cables	

Question 49		
Which form of injury is most likely if a cable is pierced by a sharp object such as a barhole tool?		
Possible answers		Answer
a)	Burns	
b)	Paralysis	
c)	Electric shock	
d)	Hearing damage	

Question 50		
Plant detection equipment has limitations. It will:		
Possible answers		Answer
a)	not detect plastic pipes	
b)	always give accurate indications	
c)	only work if the batteries are new	
d)	not work beyond the 'calibration due' date	

End of Knowledge and Skills Practice Assessment



Answers

Question	Answer	Question	Answer
1	A	26	B
2	C	27	C
3	A	28	A
4	D	29	B
5	C	30	D
6	A	31	A
7	D	32	D
8	B	33	D
9	A	34	B
10	D	35	C
11	A	36	D
12	A	37	B
13	B	38	C
14	D	39	D
15	C	40	C
16	A	41	D
17	D	42	B
18	A	43	A
19	B	44	D
20	B	45	D
21	D	46	B
22	B	47	D
23	B	48	B
24	C	49	A
25	B	50	A