

# Practice Assessment Paper

Please write clearly in block capitals below	
Company Name	
Forename (s)	
Surname (s)	
Date of Birth	
Candidate Number	
Apprentice Signature	
Date of Knowledge Test	

**Level:** 3  
**Standard:** Gas Network Craftsperson  
**Pathway:** Pipeline Maintenance  
**Duration:** 1 hour 15 minutes (75 minutes)

## Materials

For this paper you must have:

- Pens and calculators
- 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 at the back of this answer book 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	<del>X</del>
b)	Scotland	
c)	Northern Ireland	
d)	England	X

### Information

- There are 50 questions in total
- All questions should be attempted

### Grading

- $\leq 34$  marks will result in a fail
- 35 - 44 marks will result in a pass
- 45 – 50 marks will result in a distinction

### Advice

- You are not permitted to leave the examination room for the first 45 minutes and the last 15 minutes of the examination

- Do not spend too long on one question
- Read all questions thoroughly before starting your examination
- Mobile phones and 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 problem 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

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

**THIS PAPER MUST NOT BE COPIED OR CIRCULATED WITHOUT THE WRITTEN PERMISSION OF THE EUIAS**


## **DO NOT DETACH**


Spare paper for to use for calculations or working out

Question 01		
What is defined by the term <b>hazard</b> ?		
Possible answers		Answer
a)	Anything that could cause offence	
b)	The likelihood to cause harm	
c)	The outcome of an accident	
d)	Anything that has the potential to cause harm	


Question 02		
When could <b>asbestos</b> be considered as safe?		
Possible answers		Answer
a)	When it is damaged	
b)	When undamaged and in good condition	
c)	When being removed	
d)	When fitted to an appliance	

Question 03		
You are using a piece of equipment and it leaks oil on to the ground. What must you do?		
Possible answers		Answer
a)	Contain the leak, clean it up and report it	
b)	Ignore it	
c)	Wash it away with water	
d)	Just wipe it up	

Question 04		
What does this <b>symbol</b> mean?		
		
Possible answers		Answer
a)	Hearing protection should be worn	
b)	Hearing protection must be worn	
c)	Hearing protection is required	
d)	Hearing protection is not required	

Question 05		
What does this <b>Control of Substances Hazardous to health Regulations (COSHH)</b> symbol mean?		
		
Possible answers		Answer
a)	Harmful	
b)	Oxidising	
c)	Toxic	
d)	Flammable	

Question 06		
Prior to using any tool or equipment, the operator of the tool must check and confirm that it:		
Possible answers		Answer
a)	is intrinsically safe and suitable for the task	
b)	is safe to use and suitable for the task	
c)	has all appropriate certification labels	
d)	is supplied by the employee or a hire company	

Question 07		
A piece of equipment has the following markings on the case:		
		
What does this mean?		
Possible answers		Answer
a)	It is approved under the PPE regulations	
b)	It meets the requirements of RIDDOR	
c)	It is ATEX certified	
d)	It meets the requirements of the PUWER regulations	

Question 08		
The purpose of <b>risk assessment</b> is to:		
Possible answers		Answer
a)	ensure work can be carried out in reasonable safety	
b)	fully meet the requirements of the CDM regulations	
c)	ensure tasks are done in the correct order	
d)	protect employer and employee from prosecution	

Question 09		
When operating any equipment that creates dust, what must be used to prevent damage to the lungs?		
Possible answers		Answer
a)	A dust mask	
b)	A full-face mask	
c)	Suitable respiratory protective equipment	
d)	Dust suppression system	

Question 10		
When <b>moving and lifting items</b> , what is the <b>first option</b> required by the Manual Handling Operations Regulations 1992?		
Possible answers		Answer
a)	To use more than one person	
b)	To test the load to see if one person can move it	
c)	To test the load to see if two people can move it	
d)	To use mechanical lifting equipment where ever possible	

Question 11		
You are planning to carry out work at height, when would the use of leaning ladders be considered a suitable option?		
Possible answers		Answer
a)	Where the work area cannot be reached from a fixed scaffold	
b)	Where the work activity is low risk and short duration	
c)	Where it is the most cost effective solution	
d)	Where work will take between 30 minutes to an hour to complete	



<b>Question 12</b>		
Where peoples' safety is put at risk from fire, explosion and corrosion of metal. Which <b>regulation</b> puts duties on employers and the self-employed to protect people from these risks?		
<b>Possible answers</b>		<b>Answer</b>
a)	Gas Safety (Management) Regulations	
b)	Pipeline Safety Regulations	
c)	Dangerous Substances and Explosive Atmospheres Regulations	
d)	Pressure Systems Safety Regulations	

<b>Question 13</b>		
Under the <b>gas safety management regulations</b> , which of the following duties are placed on gas transporters?		
<b>Possible answers</b>		<b>Answer</b>
a)	To minimise the risk of a gas supply emergency	
b)	To protect people from fire and explosion	
c)	To design and safely operate pipelines	
d)	To prevent major accidents involving dangerous substances	

<b>Question 14</b>		
You are involved in a flow stopping operation and you have an accidental equipment failure that results in the loss of more than 500Kg of natural gas leakage. Under which <b>regulation</b> must this be reported?		
<b>Possible answers</b>		<b>Answer</b>
a)	DSEAR	
b)	RIDDOR	
c)	COMAH	
d)	PUWER	

<b>Question 15</b>		
As part of your work you are required to enter a deep excavation which due to leakage on a gas pipeline, the risk of an explosive atmosphere exists. In order to enter this excavation, the requirements of which regulation must be met?		
<b>Possible answers</b>		<b>Answer</b>
a)	Confined Spaces Regulations	
b)	Construction Design and Management Regulations	
c)	Dangerous Substances and Explosive Atmospheres Regulations	
d)	Gas Safety (Management) Regulations	

<b>Question 16</b>		
According to the health and safety at work act, who is responsible for maintaining health and safety?		
<b>Possible answers</b>		<b>Answer</b>
a)	Employees	
b)	Employers	
c)	Everyone	
d)	The HSE	

<b>Question 17</b>		
For person working on gas pipelines, when do the <b>Construction (Design and Management) regulations</b> apply?		
<b>Possible answers</b>		<b>Answer</b>
a)	At all times	
b)	When notification is required to the HSE	
c)	On projects of more that 50 days in length	
d)	Where projects exceed 300 person days	

<b>Question 18</b>		
The rights of access to carry out maintenance and refurbishment work are contained within which agreement with the landowner?		
<b>Possible answers</b>		<b>Answer</b>
a)	Rights of access agreements	
b)	Wayleaves or easements	
c)	Pipeline safety regulations	
d)	Gas safety management regulations	

<b>Question 19</b>		
Prior to any excavation work commencing, what activity must be completed on site?		
<b>Possible answers</b>		<b>Answer</b>
a)	A hazard assessment	
b)	Location and identification of any below ground apparatus	
c)	Site protection through the use of HERAS fencing	
d)	A visual inspection	

<b>Question 20</b>		
Where your work encroaches on to a road or footway, what must be installed on the site to protect both the workers and members of the public?		
<b>Possible answers</b>		<b>Answer</b>
a)	Signs, cones and barriers	
b)	Traffic control systems	
c)	Suitable safety measures in line with codes of practice	
d)	A suitable signing, lighting and guarding system	

Question 21		
What diameter bag off tube should be used on a mains diameter measuring between 14"-18"?		
Possible answers		Answer
a)	3"	
b)	4"	
c)	5"	
d)	6"	

Question 22		
What specific <b>safety training</b> would be required for any technician to be able to carry out cold cutting?		
Possible answers		Answer
a)	PUWER	
b)	Permits to work	
c)	Abrasive Wheels	
d)	Hot works	

Question 23		
What is the <b>pre-test pressure</b> for both primary and secondary bags of diameter 18" (450mm)?		
Possible answers		Answer
a)	75mbar	
b)	125mbar	
c)	150mbar	
d)	175mbar	

Question 24		
When preparing to squeeze off a PE pipe with a peelable sleeve, how much of the peelable sleeve be removed from either side of the squeeze-off bar?		
Possible answers		Answer
a)	0.25 x Pipe diameter	
b)	0.5 x Pipe diameter	
c)	0.75 x Pipe diameter	
d)	1.0 x Pipe diameter	

Question 25		
When using a cold cutting tool, which <b>corrosion prevention</b> method could lead to sparking if a temporary continuity bond was not used?		
Possible answers		Answer
a)	Wrapping	
b)	Painting	
c)	Cathodic protection	
d)	Insulation joints	

Question 26		
When you have completed a flow stop operation on a plastic-coated steel pipeline, the pipeline is now fully recommissioned, what must be applied before the pipeline can be back filled?		
Possible answers		Answer
a)	Sacrificial anodes	
b)	A wind and water line wrap	
c)	Painting to the required standard	
d)	Suitable corrosion protection	


Question 27		
<p><b>Under pressure drilling</b> requires a leakage test to be applied prior to the drilling commencing. What are the <b>test times</b> and <b>permitted leakage</b> when undertaking this test?</p>		
Possible answers		Answer
a)	20 minutes stabilisation, 20 minutes test – no pressure drop	
b)	15 minutes stabilisation, 15 minutes test – no pressure drop	
c)	10 minutes stabilisation, 10 minutes test – no pressure drop	
d)	5 minutes stabilisation, 15 minutes test – no pressure drop	

Question 28		
<p>When completing a <b>hydrostatic test</b>, what effect would any pockets of trapped air or gas have on the test?</p>		
Possible answers		Answer
a)	An unpredictable build-up of pressure	
b)	An increase in pressure if the pipe was suddenly heated	
c)	A risk of high pressure air being released	
d)	An unstable pressure build up and inaccurate test	

Question 29		
<p>Nitrogen gas can be used for pressure and leak testing but due to its asphyxiating nature this must be carried out <b>only</b> under which circumstance?</p>		
Possible answers		Answer
a)	In confined spaces	
b)	Low volume tests	
c)	Large volume tests	
d)	Where a permit to work is in place	

Question 30		
You are working on a gas distribution operational site <b>Above Ground Installations (AGI)</b> , who on this site will control any permit to work requirements?		
Possible answers		Answer
a)	The local manager	
b)	The site technician	
c)	The competent person	
d)	The authorising engineer	

Question 31		
You are working on a gas operational site, what <b>must</b> you ensure you do every day?		
Possible answers		Answer
a)	Log on and off site	
b)	Contact the Authorising Engineer	
c)	Contact your line manager	
d)	Request a permit to work	

Question 32		
You arrive at an operational site and the following sign is displayed at the entrance to the site		
		
What does this mean?		
Possible answers		Answer
a)	Warning - Explosive atmosphere	
b)	ATEX certified equipment only	
c)	Warning - Explosive gas	
d)	DSEAR regulations apply	

<b>Question 33</b>		
Following a successful hydrostatic test on an existing exposed pipeline, what should you also check for?		
<b>Possible answers</b>		<b>Answer</b>
a)	Condition of corrosion protection measures	
b)	Any minor defects that could grow in time	
c)	The safe operation of any protective devices	
d)	Damage sustained to tools and equipment	

<b>Question 34</b>		
Ariel, vantage point and line walk are all what <b>type</b> of pipeline protection technique:		
<b>Possible answers</b>		<b>Answer</b>
a)	PSSR inspection	
b)	Risk prioritisation survey	
c)	Pipeline safety inspection	
d)	Route Survey	

<b>Question 35</b>		
What could be the consequence of selecting and applying a squeeze-off SDR stop that is too small for the diameter of pipe being squeezed off?		
<b>Possible answers</b>		<b>Answer</b>
a)	The squeeze off would not seal properly	
b)	Excessive stress on the pipeline that could lead to failure	
c)	A longer re-rounding period would be required	
d)	There will be minimal effect unless SDR 17.6 was selected	



<b>Question 36</b>		
Where a pipeline is damaged, who must this be reported to?		
<b>Possible answers</b>		<b>Answer</b>
a)	The pipeline owner	
b)	The pipeline operator	
c)	The local gas distribution network	
d)	0800 111999	

<b>Question 37</b>		
Where a pipeline has been damaged, without any gas loss what action must be undertaken?		
<b>Possible answers</b>		<b>Answer</b>
a)	The section must be replaced	
b)	The integrity of the pipe must be confirmed	
c)	The extent of the damage must be assessed	
d)	The pressure of the pipeline must be reduced	

<b>Question 38</b>		
You have started an under-pressure drilling operation and gas has started to leak from the drill being used. What should your action be?		
<b>Possible answers</b>		<b>Answer</b>
a)	Close the valve	
b)	Effect a repair on the drill	
c)	Retract the drill and close the valve	
d)	Continue with the operation	

<b>Question 39</b>		
Why is it important to <b>brace the cap and gland assembly</b> during CCTV Surveys?		
<b>Possible answers</b>		<b>Answer</b>
a)	To prevent the cap moving	
b)	To prevent the cap coming off and releasing gas	
c)	The prevent the cap from staying on	
d)	To prevent the survey being delayed	

<b>Question 40</b>		
When working on a stopple operation on a high pressure main, which procedure is applicable?		
<b>Possible answers</b>		<b>Answer</b>
a)	Form of authority	
b)	Hot works permit	
c)	Routine Operation	
d)	Non- Routine Operation	

<b>Question 41</b>		
What checks must be undertaken when selecting the plugging head for a tapping operation?		
<b>Possible answers</b>		<b>Answer</b>
a)	The head must be larger than the internal pipeline dimension	
b)	Nose piece must correspond to the pipeline external dimensions	
c)	The head must be larger than the jackscrew diameter	
d)	Nose piece must correspond to the pipeline internal dimensions	

<b>Question 42</b>		
Any equipment to be used on a high pressure system should comply with the requirements of which <b>regulation</b> ?		
<b>Possible answers</b>		<b>Answer</b>
a)	Gas Safety (Management) Regulations	
b)	Pipeline Safety Regulations	
c)	Dangerous Substances and Explosive Atmospheres Regulations	
d)	Pressure Systems Safety Regulations	

<b>Question 43</b>		
When attending a confirmed gas emergency, what are the priority actions on site?		
<b>Possible answers</b>		<b>Answer</b>
a)	Risk assessment	
b)	Safeguard Life and Property	
c)	Secure the escape and property	
d)	Set up an exclusion zone	

<b>Question 44</b>		
What is the minimum distance that a 2 inch TOR equalisation point fitting can be installed from the Stopple Tee?		
<b>Possible answers</b>		<b>Answer</b>
a)	1 x the nominal diameter	
b)	2 x the nominal diameter	
c)	3 x the nominal diameter	
d)	4 x the nominal diameter	

<b>Question 45</b>		
What are the implications of the <b>torque setting</b> for a guide chain being exceeded?		
<b>Possible answers</b>		<b>Answer</b>
a)	Steel pipe could be distorted	
b)	Cast iron pipe could crack	
c)	The chain will snap	
d)	The chain will stretch	

<b>Question 46</b>		
During flange completion, how many threads as a minimum should be protruding from the nut face after final tightening?		
<b>Possible answers</b>		<b>Answer</b>
a)	1	
b)	1.5	
c)	2	
d)	2.5	

<b>Question 47</b>		
What would indicate that the sealant packings on a small bore drill are not sealing?		
<b>Possible answers</b>		<b>Answer</b>
a)	An increase in gas pressure in the drill housing	
b)	Gas would leak out from the body of the drill	
c)	There would be no noticeable effect	
d)	There would be a greater resistance encountered due to the pressure	

Question 48		
When must the threads of a <b>TOR plug</b> be checked?		
Possible answers		Answer
a)	On completion of the drilling as the TOR is fitted	
b)	Before the drilling operation commences	
c)	Before the blank flange is fitted	
d)	Before the drilling valve is fitted	

Question 49		
What is the difference between a <b>standard cutter</b> and a <b>stopple cutter</b> ?		
Possible answers		Answer
a)	The standard cutter is larger than a Stopple cutter for the same nominal size	
b)	The standard cutter is smaller than a Stopple cutter for the same nominal size	
c)	The standard cutter is the same as the Stopple cutter for the same nominal size	
d)	The standard cutter is the same as the Stopple cutter for different nominal sizes	

Question 50		
In terms of isolation, which <b>one</b> of the following would provide a double block and bleed?		
Possible answers		Answer
a)	Plug Valve	
b)	Ball Valve	
c)	Butterfly valve	
d)	Gate valve	

## Gas Network Craftsperson Network Pipeline Maintenance Craftsperson

### Practice Knowledge Assessment

#### Answer scheme

<b>Question</b>	<b>Answer</b>	<b>Question</b>	<b>Answer</b>
1	D	26	D
2	B	27	B
3	A	28	D
4	B	29	B
5	C	30	C
6	B	31	A
7	C	32	A
8	A	33	B
9	C	34	D
10	D	35	B
11	B	36	B
12	C	37	C
13	A	38	C
14	B	39	B
15	A	40	D
16	C	41	D

17	A	42	D
18	B	43	B
19	B	44	B
20	D	45	B
21	B	46	C
22	C	47	B
23	D	48	D
24	B	49	B
25	C	50	B