

# Water Process Technician

## Sample Practice Knowledge Assessment

Note: this sample test has 40 questions and duration of 70 minutes; the live test has 50 questions and duration of 90 minutes

Please write clearly in block capitals below	
Employer Name	
First Name (s)	
Last Name (s)	
Date of Birth	
Candidate Number	
Apprentice signature	
Date of Knowledge Test	

Level: 3

Standard: Water Process

Pathway: Waste Water Sewerage Network Technician

Duration: 70 minutes

## Materials

For this paper you must have:

- Pens
- Scientific calculator (non-programmable)

## Instructions

- Use black 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

Below is a Sample:

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 **40** sample questions
- There will be 50 questions in the live knowledge assessment
- All questions should be attempted

## 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
- 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 for rough work.

This page must not be removed.

<b>Question 1</b>		
RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences) requires the reporting of dangerous occurrences at work.		
Which ONE of the following is not reportable as a dangerous occurrence?		
<b>Possible answers</b>		<b>Answer</b>
a)	The collapse or over turning of a crane	
b)	Contact with an overhead power line	
c)	Escape of a biological agent likely to cause severe illness	
d)	Accidental damage to a drain or sewer	

<b>Question 2</b>		
An employee has to carry out a work activity which involves a substance that can be hazardous to health. What should they do?		
<b>Possible answers</b>		<b>Answer</b>
a)	Carry on with the work once they have identified the hazardous contents of the container	
b)	Carry out the work, providing they have been suitably trained and have the necessary COSHH assessment information	
c)	Carry out the work using their own initiative to change working procedures and reduce exposure	
d)	Carry out the work once the workplace has been sealed to allow disinfection	

<b>Question 3</b>		
Which ONE of the following is the most common cause of workplace injury?		
<b>Possible answers</b>		<b>Answer</b>
a)	Falling from height	
b)	Attacks by animals	
c)	Manual handling injuries	
d)	Electric shocks	

<b>Question 4</b>		
Which of the following scenarios would be classed as on a Transferred Sewer?		
<b>Possible answers</b>		<b>Answer</b>
a)	<ul style="list-style-type: none"> <li>If the pipework takes roof drainage from one property and was built before October 1937</li> <li>The problem is with the above ground roof drainage pipe and communicates with an existing public sewer</li> </ul>	
b)	<ul style="list-style-type: none"> <li>If the pipework takes roof drainage from two or more properties and was built before October 1937</li> <li>The problem is with the underground pipe and communicates with an existing public sewer</li> </ul>	
c)	<ul style="list-style-type: none"> <li>If the pipework takes roof drainage from two or more properties and was built after October 1937</li> <li>The problem is with the underground pipe and communicates with an existing public sewer</li> </ul>	
d)	<ul style="list-style-type: none"> <li>If the property takes roof drainage from two or more properties and was built after October 1937</li> <li>The problem is with the above ground roof drainage pipe and communicates with an existing public sewer</li> </ul>	

<b>Question 5</b>		
When would a Guaranteed Standards Scheme (GSS) payment be made to a customer for external flooding from a public sewer?		
<b>Possible answers</b>		<b>Answer</b>
a)	Every time a water company attends external flooding	
b)	Every time the external flooding is the water company's responsibility	
c)	If the flooding has not been cleaned up to the satisfaction of the customer	
d)	If the customer has been materially affected by the incident	

[Please turn over for question 6]

<b>Question 6</b>		
Following investigations, the source of a Fats, Oils and Greases (FOG) discharge cannot be traced.		
What action should be taken?		
<b>Possible answers</b>		<b>Answer</b>
a)	Wait for the next blockage to try to trace the source	
b)	CCTV all sewers within a mile radius to try and locate source	
c)	Consider a FOG letter drop within catchment area	
d)	Check all private manholes on business land within catchment area	

<b>Question 7</b>		
There is a blockage on a single connection beyond the property boundary into an alleyway.		
What should it be recorded as?		
<b>Possible answers</b>		<b>Answer</b>
a)	A transferred lateral	
b)	A private sewer	
c)	A private drain	
d)	A transferred sewer	

[Please turn over for question 8]

<b>Question 8</b>		
A commercial property has suffered from internal flooding from a public sewer.		
What Guaranteed Standards Scheme (GSS) payment would be received?		
<b>Possible answers</b>		<b>Answer</b>
a)	Up to 50% sewerage charge rebate (for every incident)	
b)	Up to 100% sewerage charge rebate (for every incident)	
c)	Up to 100% water and sewerage charge rebate (for every incident)	
d)	Up to 50% water and sewerage charge rebate (for every incident)	

<b>Question 9</b>		
How many litres of water is in a 50m length of 150mm pipe?		
<b>Possible answers</b>		<b>Answer</b>
a)	567 litres	
b)	884 litres	
c)	989 litres	
d)	1,245 litres	

<b>Question 10</b>		
What is a cess pit?		
<b>Possible answers</b>		<b>Answer</b>
a)	A tank which a sewer can overflow into during periods of heavy rain	
b)	A holding tank for wastewater storage which is emptied on a regular basis	
c)	A trap that prevents odours venting back into domestic systems, and for rodent control	
d)	A small scale sewage treatment system	

<b>Question 11</b>		
What is a land and field drain?		
<b>Possible answers</b>		<b>Answer</b>
a)	A pipeline which conveys foul sewage and/or surface water runoff from more than one property	
b)	A pipeline that allows water to flow under a road or railway	
c)	A pipeline that is used for subsoil drainage	
d)	A pipeline that takes surface water from the highway only	

<b>Question 12</b>		
Which ONE of the following would be grade 3, when grading the structural condition of pipework?		
<b>Possible answers</b>		<b>Answer</b>
a)	No structural defects, cracks, or surface damage	
b)	Circumferential crack, multiple open or displaced joints, slight surface damage	
c)	Fractures, longitudinal or multiple cracks, severe joint defects, medium surface damage	
d)	Serious joint defects with visible voids, serious loss of level, deformations up to 10%	

<b>Question 13</b>		
Which of the following situations is NOT considered in the Environment Agency Common Incident Classification Scheme (CICS) pollution impact assessment?		
<b>Possible answers</b>		<b>Answer</b>
a)	Impact on wildlife	
b)	If the pollution is a repeat incident	
c)	If water abstraction points have been affected	
d)	Extent of pollution and visual effects	



<b>Question 14</b>		
It is NOT possible to identify the source of a Contaminated Surface Water sewer following investigations on site.		
Who should be notified?		
<b>Possible answers</b>		<b>Answer</b>
a)	The company project team	
b)	The Environmental Health	
c)	The Environment Agency	
d)	The Local Authority	

<b>Question 15</b>		
A developer is proposing to divert an existing public sewer on their land.		
Under what section of the water industry act would they apply?		
<b>Possible answers</b>		<b>Answer</b>
a)	Section 106	
b)	Section 185	
c)	Section 104	
d)	Section 159	


<b>Question 16</b>		
How many litres of water is in a 50m length of 150mm pipe?		
<b>Possible answers</b>		<b>Answer</b>
a)	567 litres	
b)	884 litres	
c)	989 litres	
d)	1,245 litres	

<b>Question 17</b>		
In the context of water company performance, what does 'Serviceability' measure?		
<b>Possible answers</b>		<b>Answer</b>
a)	The capability of a company's assets to deliver performance at an agreed level	
b)	The level of investment a company spends on its asset at an agreed level	
c)	The level of customer service a company provides to its customers	
d)	The number of maintenance services carried out in the company within 1 year	

<b>Question 18</b>		
What is the maximum pressure at pump, recommended by the water jetting association code of practice, which can be used for jetting an asbestos pipe which is in good structural condition?		
<b>Possible answers</b>		<b>Answer</b>
a)	100 bar / 1500 psi	
b)	180 bar / 2600 psi	
c)	250 bar / 3625 psi	
d)	340 bar / 5000 psi	

<b>Question 19</b>		
What is a Category A sewer?		
<b>Possible answers</b>		<b>Answer</b>
a)	An Asbestos sewer	
b)	A Sewer that has minimal impact on the surrounding environment and costs to repair	
c)	A Sewer where the costs of failure would be high and the effect on human health and surrounding environment would be great	
d)	A sewer that runs through agricultural land	

<b>Question 20</b>		
When conducting a CCTV survey what would the code LD identify?		
<b>Possible answers</b>		<b>Answer</b>
a)	Lateral defect	
b)	Line of drain/sewer deviates down	
c)	Lining defect	
d)	Lateral damage	

<b>Question 21</b>		
What does this blue sign indicate?		
<b>Possible answers</b>		<b>Answer</b>
a)	A warning	
b)	Prohibited behaviour	
c)	Information	
d)	Mandatory behaviour	

<b>Question 22</b>		
A technician needs to deviate from the NJUG guidelines when installing new water services.		
Whose authorisation is required?		
<b>Possible answers</b>		<b>Answer</b>
a)	The other utility provider	
b)	DWI	
c)	The site agent	
d)	The water undertaker	

<b>Question 23</b>		
An empty tank with a volume of 185m <sup>3</sup> is being filled at a rate of 12 l/sec. How long will it take to fill, to the nearest minute.		
<b>Possible answers</b>		<b>Answer</b>
a)	134 minutes	
b)	185 minutes	
c)	257 minutes	
d)	304 minutes	

<b>Question 24</b>		
What should a blockage occurring in above ground rainwater or soil vent pipe that causes flooding be recorded as?		
<b>Possible answers</b>		<b>Answer</b>
a)	Transferred sewer	
b)	Transferred lateral	
c)	Private	
d)	Public sewer	

<b>Question 25</b>		
A technician attends a job in dry weather however they suspect that the foul flooding of a public sewer is caused by hydraulic overload due to recent weather conditions.		
What action should they take?		
<b>Possible answers</b>		<b>Answer</b>
a)	Reattend when the weather conditions have changed	
b)	Take no action and record as hydraulic overload	
c)	Investigate and find the root cause	
d)	Pass the job to the local authority	

Question 26		
During a service of a Pressure reducing valve (PRV), what could happen at a Critical Monitoring Point (CMP) if flows changed dramatically?		
Possible answers		Answer
a)	Pressures could increase or decrease	
b)	Pressure would increase	
c)	Pressure would decrease	
d)	Flows would increase	

Question 27		
What is a flap valve?		
Possible answers		Answer
a)	A device which stops rag from entering the sewer	
b)	A device which restricts the amount of flow passing through a sewer or Combined Sewer Overflow (CSO)	
c)	A device which is a temporary watertight barrier that can be placed across doorways	
d)	A device which allows liquid to flow in one direction, whilst preventing flow in the opposite direction	

Question 28		
What is a transferred lateral drain?		
Possible answers		Answer
a)	A pipeline which drains more than one property	
b)	A pipeline which drains a single property, which is inside the boundary of the property	
c)	A pipeline which drains a single property, which is outside the boundary of the property it serves	
d)	A pipeline that takes surface water from the highway only	

<b>Question 29</b>		
A technician needs to clear a blockage to prove ownership. Once the blockage was cleared it was found to be on a private section of pipework.		
What should the customer be advised?		
<b>Possible answers</b>		<b>Answer</b>
a)	It was a private blockage. The customer will be retrospectively re-charged	
b)	It was private blockage that is not the water and waste undertakers responsibility	
c)	To contact the water company again if the blockage re-occurs	
d)	To report the current blockage and future blockages to the local authority	

<b>Question 30</b>		
Which of the following could make a drain a transferred lateral?		
<b>Possible answers</b>		<b>Answer</b>
a)	Drain that serves one property within the boundary and was built before October 1937 and communicates with an existing public sewer	
b)	Drain serving one property, but has gone beyond the boundary into third party land and communicates with an existing public sewer	
c)	Drain that serves one property and does not go beyond the boundary of that property and communicates with an existing public sewer	
d)	Drain that serves more than one property and was built after October 1937 and communicates with an existing public sewer	

[Please turn over for question 31]

<b>Question 31</b>		
What is a private drain?		
<b>Possible answers</b>		<b>Answer</b>
a)	Drain serving one property but has gone into third party land	
b)	Drain serving one property but has gone beyond the property into the footpath or road	
c)	Drain that serves one property and does not go beyond the boundary of that property	
d)	Drain that serves more than one property and was built after October 1937	

<b>Question 32</b>		
Which of the following are examples of a non-powered screen on a Combined Sewer Overflow (CSO)?		
<b>Possible answers</b>		<b>Answer</b>
a)	Auger (Rotamat)	
b)	Band (Longwood	
c)	Haigh Screen	
d)	Static	

<b>Question 33</b>		
What is a septic tank?		
<b>Possible answers</b>		<b>Answer</b>
a)	A tank which a sewer can overflow into during periods of heavy rain	
b)	A trap that prevents odours venting back into domestic systems, and for rodent control	
c)	A small scale sewage treatment system	
d)	A holding tank for wastewater storage which is emptied on a regular basis	

<b>Question 34</b>		
Within what timescale would a customer visit not be recorded as a GSS appointment?		
<b>Possible answers</b>		<b>Answer</b>
a)	12 hours	
b)	24 hours	
c)	48 hours	
d)	72 hours	

<b>Question 35</b>		
What jetter pressures are most suitable for clearing a fat blockage?		
<b>Possible answers</b>		<b>Answer</b>
a)	High pressure, high flow	
b)	High pressure, low flow	
c)	Low pressure, low flow	
d)	Low pressure, high flow	

<b>Question 36</b>		
What should flooding to a garage forming an integral part of an house with an adjoining door to the occupied building be classed as?		
<b>Possible answers</b>		<b>Answer</b>
a)	Internal flooding	
b)	External flooding	
c)	Internal and external flooding	
d)	Highway flooding	



<b>Question 37</b>		
What notice period is required to work near a railway crossing or track?		
<b>Possible answers</b>		<b>Answer</b>
a)	1 day	
b)	1 week	
c)	1 month	
d)	1 year	

<b>Question 38</b>		
What is the minimum distance which must be maintained when working next to a railway line?		
<b>Possible answers</b>		<b>Answer</b>
a)	50 metres	
b)	100 metres	
c)	200 metres	
d)	300 metres	

<b>Question 39</b>		
Which of the following parameters does this formula calculate?		
$whl$		
where $w$ = width, $h$ =height, $l$ =length		
<b>Possible answers</b>		<b>Answer</b>
a)	Surface area of a storage tank	
b)	Volume of water in a storage tank	
c)	Flow of water through a storage tank	
d)	The pressure of water in a storage Tank	

<b>Question 40</b>		
Under section 159 of the Water Industry Act 1991 what period of notice is required to lay new apparatus in private land?		
<b>Possible answers</b>		<b>Answer</b>
a)	30 days	
b)	42 days	
c)	3 months	
d)	6 months	

End of Sample Practice Assessment

## Sample Practice Knowledge Assessment

### Answer scheme

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