

## Utilities Engineering Technician – Mechanical Practice Knowledge Assessment

Forename (s)	
Surname (s)	
Date	

### Instructions

- Use black or blue ink or black ball-point pen
- Fill in the boxes at the top of this page
- There are 20 question in this paper
- Mark your answer with an  - if you wish to change your answer please put a line through  and re-select with another
- Only one answer per question allowed

### 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

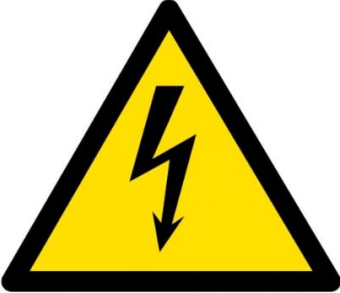
### Advice

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

You may use this page to write on, but it must not be removed.

Do not turn over the page until the invigilator instructs you to.

Question 01		
What does the <b>yellow sign</b> mean?		
Possible answers		Answer
a)	Mandatory	
b)	Warning	
c)	Prohibited	
d)	Direction	
		

Question 02		
Which of the following is <b>NOT</b> required to start a fire?		
Possible answers		Answer
a)	Co2	
b)	Fuel	
c)	Heat	
d)	Oxygen	

Question 03		
What should be your <b>first action</b> when assessing the risk of a new substance that may be hazardous:		
Possible answers		Answer
a)	Provide appropriate PPE	
b)	Check the MSDS	
c)	Check that there is space to store it safely	
d)	Conduct a Risk Assessment	

Question 04		
In accordance with the <b>Health, Safety and Environment (HSE)</b> guidelines which of these controls is the lowest:		
Possible answers		Answer
a)	Elimination	
b)	Dilution	
c)	PPE	
d)	Substitution	

Question 05		
What do you need to do when planning to enter a <b>confined space</b> ?		
Possible answers		Answer
a)	Put in place a safe system of work	
b)	Check that you have the right qualification	
c)	Ventilate the confined space	
d)	Provide access and egress routes	

Question 06		
How is a “ <b>safe working load</b> ” normally expressed?		
Possible answers		Answer
a)	The length and width of a load that lifting equipment should not attempt to lift	
b)	The maximum period of time the operator is allowed to carry out lifting operations with lifting equipment	
c)	The maximum load, usually expressed in terms of weight, that the lifting equipment can safely lift	
d)	The recommended amount of work that operators must not exceed when using lifting equipment	

Question 07		
A “ <b>check valve</b> ” is a design of:		
Possible answers		Answer
a)	Pressure reducing valve	
b)	One-way directional control valve	
c)	Pressure relief valve	
d)	Isolation valve	

Question 08		
<b>Vibration Analysis</b> concept falls under which type of maintenance:		
Possible answers		Answer
a)	Predictive maintenance	
b)	Breakdown maintenance	
c)	Shutdown maintenance	
d)	Condition-based maintenance	

Question 09		
Which <b>ONE</b> of the following is a type of <b>fault-finding</b> technique?		
Possible answers		Answer
a)	Running checks	
b)	Lubrication	
c)	Half split	
d)	Testing	


Question 10		
When multi technicians are working on the same piece of equipment that is isolated using a padlock, what <b>safe isolation practice</b> could be employed?		
Possible answers		Answer
a)	Give each technician a key to the padlock	
b)	Use a Multi Padlock Isolation Tool	
c)	Leave the key tied to the padlock	
d)	Apply a Long-Term Isolation	



### Question 11

The **function** of the tool is to:

Possible answers		Answer
a)	thread blind holes	
b)	remove headless bolts and studs from threaded applications	
c)	remove sharp edges from holes	
d)	tighten headless bolts and studs into thread applications	



### Question 12

What must **first** be put in place before undertaking any intrusive **fault-finding** activities?

Possible answers		Answer
a)	Isolations	
b)	Inhibits and Overrides	
c)	Training and Assessment	
d)	Safe System of Work	



### Question 13

For reference which **version** of the document must be used?

Possible answers		Answer
a)	First version	
b)	Last version	
c)	Latest version	
d)	The version placed in the workshop file	


### Question 14

What is this tool used to inspect?

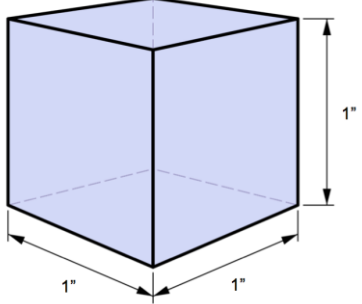


Possible answers		Answer
a)	High vibration equipment	
b)	Equipment with enclosed spaces	
c)	Low temperature equipment	
d)	Equipment with live electrical power	

Question 15		
1bar is equal to:		
Possible answers		Answer
a)	1.47 psi	
b)	14.7 psi	
c)	147 psi	
d)	17.4 psi	

Question 16		
What does this <b>symbol</b> mean?		
Possible answers		Answer
a)	Harmful substance	
b)	Corrosive substance	
c)	Toxic substance	
d)	Wear chemical resistance gloves	

Question 17		
What is the <b>surface area</b> of the cube in the image?		
Possible answers		Answer
a)	1 inch square	
b)	6 inches square	
c)	36 inches square	
d)	4 inches square	



Question 18		
What is the <b>SI</b> name for <b>Force</b> ?		
Possible answers		Answer
a)	Hertz	
b)	PSI	
c)	Watts	
d)	Newton	

Question 19		
When seen on a <b>flange</b> , what does <b>150lb</b> refer to?		
Possible answers		Answer
a)	Weight	
b)	Pressure rating	
c)	Cost code	
d)	Size	

Question 20		
Continuing to pull a torque wrench once it has reached its pre-set value will:		
Possible answers		Answer
a)	overload the connection components	
b)	not have any adverse effect on the connection	
c)	allow for expansion/contraction	
d)	increase the efficiency of the connection	

End of Practice Knowledge Assessment  
Practice Knowledge Assessment

Answer scheme

<b>Question</b>	<b>Answer</b>	<b>Question</b>	<b>Answer</b>
<b>1</b>	B	<b>11</b>	B
<b>2</b>	A	<b>12</b>	D
<b>3</b>	B	<b>13</b>	C
<b>4</b>	C	<b>14</b>	B
<b>5</b>	A	<b>15</b>	B
<b>6</b>	C	<b>16</b>	A
<b>7</b>	B	<b>17</b>	B
<b>8</b>	A	<b>18</b>	D
<b>9</b>	C	<b>19</b>	B
<b>10</b>	B	<b>20</b>	B