



# **City & Guilds Level 3 End-point Assessment in Plumbing and Domestic Heating Technician (9289-12/13/14/15)**

**Standard: ST0303**

**EPA Plan: Version 1.2**

Version 1.1

Last modified January-2026

**Knowledge test Paper 1**  
**(9289-300) – Sample paper, multiple-choice answer  
sheet and mark scheme**

Version	Summary of changes	Section
1.0 September 2025	Document created	N/A
1.1 January 2026	Added 9289-13/15 POS	Front cover

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# 1 Introduction

Area	Description
What is in this document	<p>This document contains the sample knowledge test, answer sheet and mark scheme for the City &amp; Guilds Level 3 End-point Assessment in Plumbing and Domestic Heating Technician multiple-choice knowledge test Paper 1 (9289-300).</p>
Documents included:	<ul style="list-style-type: none"><li>• Sample questions</li><li>• Answer sheet</li><li>• Mark scheme</li></ul> <p>Apprentices should be provided with the sample questions and the answer sheets.</p> <p>The mark scheme is to be used by employers/training providers/tutors to mark the completed test.</p>

**Note:** this sample paper-based version of the multiple-choice test is to support formative assessment activities.

Live versions of the multiple-choice test will be accessed using City & Guilds E-volve online system. Please refer to the EPA Manual for details on how to book and administer live tests.

## 2 9289-300 End-point Assessment – multiple-choice knowledge test Paper 1 (sample questions)

Test duration: 120 minutes

You should have the following for this test:

- a pen with black or blue ink
- multiple-choice questions answer sheet
- calculator.

Read the following notes before you answer any questions.

- Attempt all questions.
- If you find a question difficult, leave it and return to it later.

This paper contains 60 multiple-choice questions worth 1 mark each.

This test paper is the property of City & Guilds.

### How to complete the multiple-choice answer sheet

Each multiple-choice question shows four possible answers (lettered 'a', 'b', 'c', 'd'); only one is correct.

Decide which one is correct and mark your answer on the answer sheet with your pen.

For example, if you decide 'b' is correct, mark your answer with a cross like this:

1 a  b  c  d

If you change your answer, cancel your first choice by filling in the box then put a cross in the answer which you have now decided is correct, like this:

1 a  b  c  d

<b>Q1</b>	Which health and safety legislation requires employers to ensure that safe equipment and training for their employees are in place?  (1 mark)
	<p>Answers</p> <p>a) Personal Protective Equipment at Work Regulations.</p> <p>b) Provision and Use of Work Equipment Regulations.</p> <p>c) Manual Handling Operations Regulations.</p> <p>d) Health and Safety (First-Aid) Regulations.</p>
<b>Spec reference</b>	AC1.1

<b>Q2</b>	Which hazard is associated with working on rainwater systems?  (1 mark)
	<p>Answers</p> <p>a) Falls.</p> <p>b) Trips.</p> <p>c) Slips.</p> <p>d) Burns.</p>
<b>Spec reference</b>	AC2.1

<b>Q3</b>	Which type of asbestos is blue in colour?  (1 mark)
	<p>Answers</p> <p>a) Amosite.</p> <p>b) Crocidolite.</p> <p>c) Chrysotile.</p> <p>d) Actinolite.</p>
<b>Spec reference</b>	AC2.6

<b>Q4</b>	What is the first action to take if an emergency happens?  (1 mark)
	<p>Answers</p> <p>a) Call emergency services.</p> <p>b) Ensure personal safety.</p> <p>c) Raise the alarm to evacuate.</p> <p>d) Administer first aid.</p>
<b>Spec reference</b>	AC4.2

<b>Q5</b>	What type of gas is supplied in a red bottle?  (1 mark)
	<p>Answers</p> <p>a) Butane.</p> <p>b) Oxygen.</p> <p>c) Propane.</p> <p>d) Acetylene.</p>
<b>Spec reference</b>	AC6.1

<b>Q6</b>	Which task involves working at heights?  (1 mark)
	<p>Answers</p> <p>a) Installing an air admittance valve.</p> <p>b) Replacing a radiator.</p> <p>c) Replacing an appliance trap.</p> <p>d) Installing an external soil stack.</p>
<b>Spec reference</b>	AC7.1

<b>Q7</b>	What danger is associated with working in a confined space? (1 mark)
	<p>Answers</p> <p>a) Electrocution.</p> <p>b) Asphyxiation.</p> <p>c) Asbestosis.</p> <p>d) Dermatitis.</p>
<b>Spec reference</b>	AC8.3

<b>Q8</b>	Which type of jointing method uses solder which is contained in the fitting? (1 mark)
	<p>Answers</p> <p>a) Integral ring.</p> <p>b) Push-fit.</p> <p>c) Compression.</p> <p>d) End feed.</p>
<b>Spec reference</b>	AC10.3

<b>Q9</b>	<p>Identify the clip shown in the image.</p>  <p><a href="http://www.toolstation.com">www.toolstation.com</a></p>
	<p>Answers</p> <p>a) School board clip.</p> <p>b) Saddle clip.</p> <p>c) Munson ring clip.</p> <p>d) Copper stand-off clip.</p>
<b>Spec reference</b>	AC12.3

<b>Q10</b>	<p>What is the internationally recognised (SI) unit for temperature?</p>
	<p>Answers</p> <p>a) Celsius.</p> <p>b) Rankine.</p> <p>c) Fahrenheit.</p> <p>d) Kelvin.</p>
<b>Spec reference</b>	AC14.1

<b>Q11</b>	Which material has a relative density of 8.9?  (1 mark)
	<p>Answers</p> <p>a) Lead.</p> <p>b) PVCu.</p> <p>c) Aluminium.</p> <p>d) Copper.</p>
<b>Spec reference</b>	AC15.1

<b>Q12</b>	What is the term for the heat required to alter the state of a substance without affecting its temperature?  (1 mark)
	<p>Answers</p> <p>a) Sensible heat.</p> <p>b) Latent heat.</p> <p>c) Useable heat.</p> <p>d) Transferable heat.</p>
<b>Spec reference</b>	AC16.3

<b>Q13</b>	What is the change of state called when a substance changes from a solid to a liquid?  (1 mark)
	<p>Answers</p> <p>a) Condensing.</p> <p>b) Freezing.</p> <p>c) Boiling.</p> <p>d) Melting.</p>
<b>Spec reference</b>	AC16.2

<b>Q14</b>	What is the unit of measurement for flow rate?  (1 mark)
	<p>Answers</p> <p>a) m/s<sup>2</sup></p> <p>b) Bar</p> <p>c) l/s</p> <p>d) N/m<sup>2</sup></p>
<b>Spec reference</b>	AC17.2

<b>Q15</b>	What is the effect on liquids and gases if there are restrictions in the pipework?  (1 mark)
	<p>Answers</p> <p>a) Stabilised velocity.</p> <p>b) Reduced pressure loss.</p> <p>c) Increased noise.</p> <p>d) Improved flow efficiency.</p>
<b>Spec reference</b>	AC17.6

<b>Q16</b>	What is a principle of basic mechanics?  (1 mark)
	<p>Answers</p> <p>a) Electromagnetism.</p> <p>b) Fluid dynamics.</p> <p>c) Electron flow.</p> <p>d) Theory of moments.</p>
<b>Spec reference</b>	AC18.2

<b>Q17</b>	Calculate the size of fuse required (in Amps) for a 600W boiler connected to a 230V supply. (1 mark)
	<p>Answers</p> <p>a) 3A</p> <p>b) 5A</p> <p>c) 13A</p> <p>d) 15A</p>
<b>Spec reference</b>	AC19.3

<b>Q18</b>	Which energy source is renewable? (1 mark)
	<p>Answers</p> <p>a) Coal.</p> <p>b) Oil.</p> <p>c) Solar.</p> <p>d) Gas.</p>
<b>Spec reference</b>	AC20.2

<b>Q19</b>	What is a benefit of using energy efficient equipment? (1 mark)
	<p>Answers</p> <p>a) Increased water consumption.</p> <p>b) Higher greenhouse gas emissions.</p> <p>c) Improved carbon footprint.</p> <p>d) Greater availability.</p>
<b>Spec reference</b>	AC21.1

<b>Q20</b>	Which member of the site management team is responsible for designing load-bearing beams?  (1 mark)
	<p>Answers</p> <p>a) Architect.</p> <p>b) Surveyor.</p> <p>c) Site manager.</p> <p>d) Structural engineer.</p>
<b>Spec reference</b>	AC22.1

<b>Q21</b>	Which communication method would be <b>most</b> suitable when agreeing with a customer the position of a radiator in a domestic property?  (1 mark)
	<p>Answers</p> <p>a) E-mail.</p> <p>b) In person.</p> <p>c) Letter.</p> <p>d) Text message.</p>
<b>Spec reference</b>	AC24.2

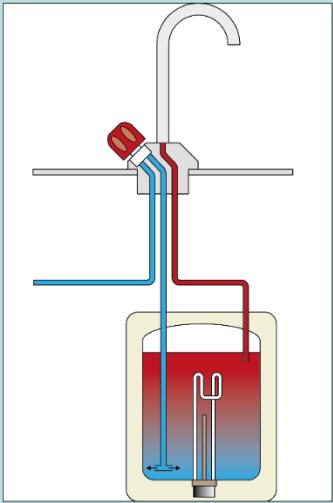
<b>Q22</b>	What type of client hires a plumber to install a new bathroom in a domestic property?  (1 mark)
	<p>Answers</p> <p>a) Internal customer.</p> <p>b) Sub-contractor.</p> <p>c) Private customer.</p> <p>d) Main contractor.</p>
<b>Spec reference</b>	AC25.1

<b>Q23</b>	What factor affects working time allocation to work activities during the installation phase? (1 mark)
	<p>Answers</p> <p>a) Material deliveries.</p> <p>b) Type of building.</p> <p>c) Location of building.</p> <p>d) Type of consumables.</p>
<b>Spec reference</b>	AC26.4

<b>Q24</b>	What type of water source is <b>always</b> found underground? (1 mark)
	<p>Answers</p> <p>a) Reservoir.</p> <p>b) Lake.</p> <p>c) River.</p> <p>d) Well.</p>
<b>Spec reference</b>	AC28.2

<b>Q25</b>	What can unwholesome water be used for?  (1 mark)
	<p>Answers</p> <p>a) Flushing toilets.</p> <p>b) General use.</p> <p>c) Drinking purposes.</p> <p>d) Food preparation.</p>
<b>Spec reference</b>	AC28.4

<b>Q26</b>	Which cold water system incorporates a break cistern and pumps?  (1 mark)
	<p>Answers</p> <p>a) Direct boosted.</p> <p>b) Indirect boosted.</p> <p>c) Indirect.</p> <p>d) Direct.</p>
<b>Spec reference</b>	AC29.1

Q27	<p>Identify the hot water system shown in the image.</p>  <p>City and Guilds of London Institute</p> <p>(1 mark)</p>
	<p>Answers</p> <p>a) Indirect cylinder.</p> <p>b) Thermal store.</p> <p>c) Combination boiler.</p> <p>d) Single point heater.</p>
<b>Spec reference</b>	AC29.2

Q28	<p>What type of domestic central heating system contains <math>3 \times</math> two port valves?</p> <p>(1 mark)</p>
	<p>Answers</p> <p>a) S plan.</p> <p>b) S Plan +.</p> <p>c) W Plan.</p> <p>d) Y Plan.</p>
<b>Spec reference</b>	AC29.3

<b>Q29</b>	Which sanitary pipework system contains one vertical pipe which terminates to the atmosphere?  (1 mark)
	<p>Answers</p> <p>a) Ventilated branch stack system.</p> <p>b) Stub stack system.</p> <p>c) Primary ventilated stack system.</p> <p>d) Secondary ventilated stack system.</p>
<b>Spec reference</b>	AC29.4

<b>Q30</b>	Identify the gutter profile shown in the image.    (1 mark)
	<p>Answers</p> <p>a) Square.</p> <p>b) Ogee.</p> <p>c) Half round.</p> <p>d) High capacity.</p>
<b>Spec reference</b>	AC29.5

<b>Q31</b>	What is fluid category 5?  (1 mark)
	<p>Answers</p> <p>a) Fluids posing a serious health hazard.</p> <p>b) Fluids posing a significant health hazard.</p> <p>c) Fluids that have slight impairment.</p> <p>d) Wholesome water with no health risk.</p>
<b>Spec reference</b>	AC30.1

<b>Q32</b>	What is an advantage of an indirect cold water system?  (1 mark)
	<p>Answers</p> <p>a) Low operating pressure.</p> <p>b) No stagnant water.</p> <p>c) Low installation cost.</p> <p>d) Low maintenance.</p>
<b>Spec reference</b>	AC30.2

<b>Q33</b>	Which component regulates water entry into a storage cistern?  (1 mark)
	<p>Answers</p> <p>a) Gate valve.</p> <p>b) Stop valve.</p> <p>c) Float valve.</p> <p>d) Check valve.</p>
<b>Spec reference</b>	AC30.4

<b>Q34</b>	What is the minimum pipe size for a distribution pipe on an instantaneous hot water system? (1 mark)
	<p>Answers</p> <p>a) 10 mm</p> <p>b) 15 mm</p> <p>c) 22 mm</p> <p>d) 28 mm</p>
<b>Spec reference</b>	AC31.2

<b>Q35</b>	Which Building Regulations Approved Document provides information relating to the insulation of hot water system pipework? (1 mark)
	<p>Answers</p> <p>a) Part A.</p> <p>b) Part H.</p> <p>c) Part L.</p> <p>d) Part P.</p>
<b>Spec reference</b>	AC31.4

<b>Q36</b>	What is an advantage of a low temperature central heating system? (1 mark)
	<p>Answers</p> <p>a) Reduced carbon emissions.</p> <p>b) Higher flow rates.</p> <p>c) Larger radiators installed.</p> <p>d) Reduced installation cost.</p>
<b>Spec reference</b>	AC32.1

<b>Q37</b>	What is the working principle of a combination boiler?  (1 mark)
	<p>Answers</p> <p>a) Heats hot water in a storage cylinder and supplies one outlet.</p> <p>b) Heats hot water in a storage cylinder and provides space heating.</p> <p>c) Heats hot water on demand and supplies it through a head.</p> <p>d) Heats hot water on demand and provides space heating from one unit.</p>
<b>Spec reference</b>	AC32.3

<b>Q38</b>	What is the maximum floor area that can be served by one heating zone?  (1 mark)
	<p>Answers</p> <p>a) 150 m<sup>2</sup></p> <p>b) 175 m<sup>2</sup></p> <p>c) 200 m<sup>2</sup></p> <p>d) 225 m<sup>2</sup></p>
<b>Spec reference</b>	AC32.6

<b>Q39</b>	What is an advantage of a stub stack system?  (1 mark)
	<p>Answers</p> <p>a) Good airflow.</p> <p>b) Saves space.</p> <p>c) Ideal for complex layouts.</p> <p>d) Suitable for high-rise buildings.</p>
<b>Spec reference</b>	AC33.1

<b>Q40</b>	What is the minimum size waste pipe required for a wash hand basin? (1 mark)
	<p>Answers</p> <p>a) 22 mm</p> <p>b) 32 mm</p> <p>c) 40 mm</p> <p>d) 50 mm</p>
<b>Spec reference</b>	AC33.3

<b>Q41</b>	Which material is <b>commonly</b> used for rainwater pipes (RWP)? (1 mark)
	<p>Answers</p> <p>a) Mild steel.</p> <p>b) PVCu.</p> <p>c) Stainless steel.</p> <p>d) Polypropylene.</p>
<b>Spec reference</b>	AC34.2

<b>Q42</b>	What is a negative effect of temperature variation on a rainwater system? (1 mark)
	<p>Answers</p> <p>a) Surface pitting.</p> <p>b) Erosion corrosion.</p> <p>c) Fitting failure.</p> <p>d) Dezincification.</p>
<b>Spec reference</b>	AC34.4

<b>Q43</b>	Which source of information provides details on the commissioning of a cold water system component?  (1 mark)
	<p>Answers</p> <p>a) Building plans.</p> <p>b) Job specification.</p> <p>c) Service schedule.</p> <p>d) Manufacturer's instructions.</p>
<b>Spec reference</b>	AC36.1

<b>Q44</b>	What is hot distribution pipework flushed with during commissioning?  (1 mark)
	<p>Answers</p> <p>a) Wholesome water.</p> <p>b) Chlorine.</p> <p>c) Inhibitor.</p> <p>d) System cleanser.</p>
<b>Spec reference</b>	AC37.5

<b>Q45</b>	Which document provides information relating to testing central heating systems?  (1 mark)
	<p>Answers</p> <p>a) Job specification.</p> <p>b) Industry standards.</p> <p>c) User instructions.</p> <p>d) Maintenance plan.</p>
<b>Spec reference</b>	AC38.1

<b>Q46</b>	Which document provides information relating to testing rainwater systems? (1 mark)
	<p>Answers</p> <p>a) Job specification.</p> <p>b) Maintenance record.</p> <p>c) British Standards.</p> <p>d) Supplier catalogue.</p>
<b>Spec reference</b>	AC40.1

<b>Q47</b>	What is the main reason for checking manufacturer's instructions and maintenance schedules? (1 mark)
	<p>Answers</p> <p>a) To estimate installation time.</p> <p>b) To choose product colours.</p> <p>c) To determine service intervals.</p> <p>d) To compare brands.</p>
<b>Spec reference</b>	AC46.1

<b>Q48</b>	Which Approved Code of Practice (ACoP) provides guidance on temperature control of hot water systems? (1 mark)
	<p>Answers</p> <p>a) L8.</p> <p>b) L23.</p> <p>c) L131.</p> <p>d) L142.</p>
<b>Spec reference</b>	AC47.4

<b>Q49</b>	What check is carried out during the periodic servicing of a sealed central heating system? (1 mark)
	<p>Answers</p> <p>a) Condition of waste pipeworks.</p> <p>b) Operation of traps.</p> <p>c) Condition of cylinders.</p> <p>d) Operation of heat emitters.</p>
<b>Spec reference</b>	AC48.1

<b>Q50</b>	Which document should be consulted to identify replacement components during periodic maintenance of a sanitary appliance? (1 mark)
	<p>Answers</p> <p>a) Manufacturer's instructions.</p> <p>b) British Standards.</p> <p>c) User guides.</p> <p>d) Building regulations.</p>
<b>Spec reference</b>	AC49.1

<b>Q51</b>	Which renewable system uses a loop to extract energy?  (1 mark)
	<p>Answers</p> <p>a) Biomass.</p> <p>b) Solar thermal.</p> <p>c) Combined heat and power.</p> <p>d) Ground source heat pump.</p>
<b>Spec reference</b>	AC56.1

<b>Q52</b>	What is the optimum orientation for a solar thermal panel?  (1 mark)
	<p>Answers</p> <p>a) West facing.</p> <p>b) North facing.</p> <p>c) East facing.</p> <p>d) South facing.</p>
<b>Spec reference</b>	AC57.1

<b>Q53</b>	What type of fuel is used in a biomass boiler?  (1 mark)
	<p>Answers</p> <p>a) Timber logs.</p> <p>b) Coal.</p> <p>c) Wood chips.</p> <p>d) Peat.</p>
<b>Spec reference</b>	AC58.1

<b>Q54</b>	Which regulatory body governs the installation of solid fuel?  (1 mark)
	<p>Answers</p> <p>a) CIPHE.</p> <p>b) OFTEC.</p> <p>c) HETAS.</p> <p>d) MCS.</p>
<b>Spec reference</b>	AC58.4

<b>Q55</b>	What is the equation for complete combustion of natural gas?  (1 mark)
	<p>Answers</p> <p>a) <math>\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}</math></p> <p>b) <math>2\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 4\text{H}_2\text{O}</math></p> <p>c) <math>\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 4\text{H}_2\text{O}</math></p> <p>d) <math>2\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}</math></p>
<b>Spec reference</b>	AC59.1

<b>Q56</b>	What is a symptom of CO poisoning?  (1 mark)
	<p>Answers</p> <p>a) Dizziness.</p> <p>b) Insomnia.</p> <p>c) Leptospirosis.</p> <p>d) Hepatitis.</p>
<b>Spec reference</b>	AC59.5

<b>Q57</b>	Which component allows products of combustion to be diluted with air? (1 mark)
	<p>Answers</p> <p>a) Primary flue.</p> <p>b) Draught diverter.</p> <p>c) Secondary flue.</p> <p>d) Terminal.</p>
<b>Spec reference</b>	AC60.3

<b>Q58</b>	What testing procedure is used to check the integrity of a chimney? (1 mark)
	<p>Answers</p> <p>a) Flue gas analysis.</p> <p>b) Spillage.</p> <p>c) Flue flow.</p> <p>d) Visual inspection.</p>
<b>Spec reference</b>	AC60.7

<b>Q59</b>	Which electrical task is a plumbing and heating engineer permitted to carry out? (1 mark)
	<p>Answers</p> <p>a) Replacing a miniature circuit breaker.</p> <p>b) Installing a new circuit to a shower.</p> <p>c) Removing a circuit to a boiler.</p> <p>d) Connecting a water heater to a fused spur.</p>
<b>Spec reference</b>	AC61.1

<b>Q60</b>	What equipment is used during the safe isolation of an electrical circuit? (1 mark)
	<p>Answers</p> <p>a) Multimeter.</p> <p>b) Ohmmeter.</p> <p>c) Voltage indicator.</p> <p>d) Voltage pen.</p>
<b>Spec reference</b>	AC62.1

### 3 9289-300 End-point Assessment – multiple-choice knowledge test (answer sheet)

Apprentice name:

Date of test: Click or tap to enter a date.

1	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
2	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
3	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
4	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
5	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
6	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
7	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
8	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
9	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
10	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
11	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
12	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
13	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
14	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
15	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
16	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
17	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
18	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
19	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
20	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
21	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
22	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
23	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>

24	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
25	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
26	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
27	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
28	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
29	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
30	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
31	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
32	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
33	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
34	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
35	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
36	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
37	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
38	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
39	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
40	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
41	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
42	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
43	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
44	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
45	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
46	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
47	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
48	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
49	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
50	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
51	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
52	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
53	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>

54	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
55	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
56	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
57	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
58	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
59	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>
60	a <input type="checkbox"/>	b <input type="checkbox"/>	c <input type="checkbox"/>	d <input type="checkbox"/>

**Number of correct answers:** / 60

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## 4 9289-300 End-point Assessment – multiple-choice knowledge test (mark scheme)

### Grading

Fail – 35 marks

Pass – 36 marks (60%)

Distinction – 50 marks (83.33%)

Question Number	Key
1	B
2	A
3	B
4	B
5	C
6	D
7	B
8	A
9	A
10	D
11	D
12	B
13	D
14	C
15	C
16	D
17	A
18	C
19	C
20	D
21	B
22	C
23	A

Question Number	Key
24	D
25	A
26	B
27	D
28	B
29	C
30	B
31	A
32	A
33	C
34	B
35	C
36	A
37	D
38	A
39	B
40	B
41	B
42	C
43	D
44	A
45	B
46	C
47	C
48	A
49	D
50	A
51	D
52	D
53	C
54	C
55	A

Question Number	Key
56	A
57	B
58	C
59	D
60	C