

7907-001 and 501 L3 March 2018 Mark Scheme

7907-30 Level 3 Advanced Technical Diploma in Painting and Decorating (450)

Q	Acceptable answer(s)	Guidance	Max mks
1	C	N/A	1
2	D	N/A	1
3	C	N/A	1
4	D	N/A	1
5	B	N/A	1
6	B	N/A	1
7	A	N/A	1
8	B	N/A	1
9	C	N/A	1
10	C	N/A	1
11	<p>Description of two factors:</p> <p>Environmental</p> <ul style="list-style-type: none"> - Protect the Eco system - Reduce emissions - Improve air and water quality - Conserve water - Reduce waste - Conserve and restore natural resources <p>Economic;</p> <ul style="list-style-type: none"> - Reduces energy consumption - Reduces operating costs - Increases property value <p>Social;</p> <ul style="list-style-type: none"> - Improve health - Creates aesthetically pleasing environment 	N/A	2

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	<ul style="list-style-type: none"> - Minimises strain on local infrastructure - Improves worker productivity 		
12	<p>H of walls 2.400m x L of walls 20.800 = 49.920m 1 mark</p> <p>L of walls 3.900m + 6.500m + 3.900m + 6.500m = 20.800m 1mark</p> <p>- Non emulsion areas 5.33 = area to emulsion 44.590m x two coats = 89.18 1 mark</p> <p>Door area 1.76m + Fire surround 1.65m + window 1.92= 5.33m 1mark</p> <p>Divided by coverage 12sq metres = 7.432 litres required 1 mark</p> <p>5ltr tin x £35 + 2.5ltr tin £20= £55 1 mark</p>	N/A	6
13	<p>1 mark for each document named (max 2 marks) 1 mark for each description of document named (max 2 marks).</p> <ul style="list-style-type: none"> ● location plan ● site plan ● application form ● ownership certificate ● design & access statement ● application fee 	N/A	4
14	<p>There is flexibility to amend the prices (1 mark)</p> <p>if there are unforeseen developments such as; And any 1 mark from below; Variation in Suppliers costs (1 mark) Materials cost required (1 mark) Labour costs can change (1 mark).</p>	N/A	2
15a)	<ul style="list-style-type: none"> ● Mobile tower ● Trestle platform/ lightweight staging 	N/A	2
15b)	<ul style="list-style-type: none"> ● Mobile tower – Due its manoeuvrability, stability and adjustable height functions ● Trestle platform/ lightweight staging – enables user to span full length of area to be painted with minimal movement of the equipment. 	N/A	2
16	<p>Answers may include (max 2 marks);</p> <ul style="list-style-type: none"> - A sole board is usually constructed from wood, while base plate is made out of steel (1 mark) 	Any other suitable differences.	2

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	<ul style="list-style-type: none"> - A sole board is laid on the ground, while base plate is placed under a standard (1 mark) - A sole board distributes the weight of the scaffold over a large area, while a base plates weight is centrally positioned (1 mark) 		
17	Treated paper, treated card, proprietary stencil card, acetate sheet, non-ferrous or galvanised metal.	N/A	2
18	Oil-in and rubbing in, veining, softening, cissing/ opening out, wiping out, distressing ground colour	N/A	2
19	<p>Answers may include;</p> <p>Goose feather (1mark) 1 mark for any of the below; as they can be re-used after cleaning and has a long life span (1 mark). The feathers can absorb the marbling mediums without distorting (holds their shape) (1mark) and end product results in a realistic veining configuration/ pattern (1 mark)</p>	N/A	2
20	<p>Apply gold size to surface and allow to tac off. Drying time must be monitored to ensure the gold size does not fully dry and is still sticky to ensure adhesion to the gold leaf (1 mark)</p> <p>Put gold leaf onto cushion and cut gold to size to minimise wastage of gold leaf. (1 mark)</p> <p>Gold leaf will stick to fingers if handled so use gilders tip to transfer leaf from cushion to surface. (1 mark)</p> <p>The surface must be completed by burnishing or polishing to improve the gloss of the material. (1 Mark)</p>	N/A	4
21	<p>Create vertical and horizontal chalk lines with the use of a spirit level/ plumb bob/ laser level to ensure stencil runs true. (1 mark)</p> <p>Registration marks cut into the stencil on all sides to help align stencil correctly in position. (1 mark)</p>	N/A	4

	<p>Select a fixing method relevant to the stencil plate material to hold the stencil in place and prevent paint/ material creep. (1 mark)</p> <p>Position the stencil to the vertical and horizontal chalk lines on the wall, aligned with registration marks previously cut into the stencil – thereby ensuring the precise position of stencil. (1 mark)</p>		
22	<p>Answers may include;</p> <p>1 mark for each part named (max 2 marks) 1 mark for each correct description of part named (2 marks)</p> <p>Air cap or air nozzle - Directs air into the flow of paint, causing the paint to atomise and form a spray pattern.</p> <p>Fluid tip or Fluid Nozzle - Acts as a seating for the needle and controls the paint flow</p> <p>Fluid needle - A spring loaded needle controlled by the trigger which fits into the fluid-tip and stops and starts the flow of paint.</p> <p>Spreader adjustment valve - Regulates the amount of air flowing into the air cap, adjusting the fan pattern from round to wide fan.</p> <p>Air valve - Shuts or opens the air inlet</p> <p>Trigger - Controls the air inlet valve and fluid needle</p>	N/A	4
23	<p>Answers may include;</p> <p>1 mark for defect (max 2 marks) 1 mark for description (max 2 marks) 1 mark for affect (max 2 marks)</p> <p>Sags and runs (1 mark) will be develop due to excessive build-up of coating (1 mark) caused by high concentration of the spray fan pattern focusing on one area (1 mark).</p> <p>Orange peel effect (1 mark) will develop due to insufficient atomisation of the paint (1 mark) therefore it cannot flow out after application, leaving undulating texture in a concentrated area (1 mark).</p>	N/A	6
24	<p>Answers may include;</p> <p>1 mark for each cause (max 2 marks) 1 mark for each effect (max 2 marks)</p>	N/A	4

	<p>Failing to strain paint (1 mark) will result in oversized particles becoming lodged in the fluid tip. (1 mark)</p> <p>Paint thinned insufficiently (1 mark) will not allow material to flow through the orifice at the correct/ desired rate (1 mark)</p> <p>Incorrect cleaning and maintenance after each use (1 mark) will result in debris build-up around the fluid tip (1 mark)</p> <p>Using the incorrect fluid tip size for the type of material (1 mark) will result in the material being too viscous and will flow inconsistently (1 mark)</p>		
<p>25</p>	<p>Intention: The aim of this question is to allow candidates an opportunity to demonstrate knowledge and understanding of the work required and suitable methods used for redecorating the existing foyer, ensuring good health and safety and best practices have been considered.</p> <p>Indicative content: Candidate's responses may include, but not be limited to:</p> <p>H&S Complete risk assessment and method statement Storage and security of tools and materials Selection of appropriate access equipment PPE</p> <p>List of tools Preparation tools Application of specialist wallcovering tools</p> <p>Wall preparation Treatment of mould growth Materials Size</p> <p>Application of specialist wallcoverings Adhesives Preparation of wallcoverings</p> <p>Sequence of work H&S Preparing work area Stripping of walls</p>	<p>N/A</p>	<p>12</p>

<p>Disposal of waste Preparation of walls Treatment of mould growth Preparation of wallcoverings Hanging of wallcoverings</p> <p>Band 1 (1 – 4 marks) Response is basic and shows limited understanding of the tasks needed to be carried out. Lists stages of decoration, tools, materials and finishes without details. No description of safety implications or removal of waste material. Possibly misinterprets task, therefore lists incorrect stages, tools, materials and finishes. No acknowledgement of mould.</p> <p>In order to access higher marks, the response will include Brief description of safety implications and items of PPE. Answers suggest limited knowledge of the processes.</p> <p>Band 2 (5 – 8 marks) Response shows some understanding of the tasks needed to be carried out. Provides some details of stages of decoration, tools, materials and finishes, but does not make links between them. Limited description of basic safety implications and removal of waste material. Basic recognition of mould formation and its removal.</p> <p>In order to access higher marks, the response will include details of stages of decoration, tools, materials and finishes with some links between them. Limited description of basic safety implications, waste material and access equipment, storage tools and site security</p> <p>Band 3 (9 – 12 marks) Response shows good understanding of the tasks needed to be carried out. Evaluates and analyses stages of decoration, tools, materials and finishes by discussing advantages and disadvantages. Adequately discusses links between them. Makes a recommendation but without justification. An in-depth detailed description of safety implications and methods for removal of waste material. Links these to stages of decoration, tools, materials</p>		
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	<p>and finishes. Use of correct PPE and fungicidal washes to remove the mould, and suitable disposal of contaminated waste.</p> <p>In order to access higher marks, the response will include strong attention to detail through a cohesive and thorough discussion. Response shows clear understanding of the integration of decorating components. Incorporates and justifies recommendation.</p>		
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