

7907-30 Level 3 Technical Diploma in Painting and Decorating
 7907-001/501 Level 3 Painting and Decorating - Theory Exam

March 2022 Mark Scheme

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
1.	Key: B		1	301 1.2
2	Key: C		1	301 3.2
3.	Key: B		1	301 3.2
4.	Key: C		1	301 6.3
5.	Key: C		1	302 1.1
6.	Key: D		1	304 1.2
7.	Key: B		1	304 2.2
8.	Key: A		1	304 3.3
9.	Key: D		1	306 1.1
10.	Key: B		1	306 2.2

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
11.	<ul style="list-style-type: none"> • Open. • Closed/selective. <p>1 mark for each correct answer up to 2 marks.</p>	There are potentially a couple more specialised processes but learners are unlikely to have been taught but could include negotiated, serial, framework and public procurement.	2	301 3.1 AO1
12.	<p>Any two from:</p> <ul style="list-style-type: none"> • Labour. • Materials. • Overheads. • Travel. • Plant and equipment • Profits or VAT <p>1 mark for each correct answer up to 2 marks.</p>	Give one mark only if candidate provided subcategories of the acceptable answers, e.g. paint, brickwork, filler, timber (materials).	2	301 3.3 AO1
13.	<p>Any two from:</p> <ul style="list-style-type: none"> • Solar/solar panel. • Photovoltaic. • Ground or air source heat pumps. • Wind turbine/power. • Geothermal. • Hydroelectric. • Biomass. <p>1 mark for each correct answer up to 2 marks.</p>		2	301 2.4 AO1
14.	<p>Any two from:</p> <ul style="list-style-type: none"> • Ground conditions. • Height. • Type and duration of work. • Weight. • Number of operatives. • Weather conditions. • Internal/external locations. • Access and egress. <p>1 mark for each correct answer up to 2 marks.</p>		2	302 1.1 AO1

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
15.	Any two from: <ul style="list-style-type: none"> • Badger • Hog hair/pure bristle • Synthetic 1 mark for each correct answer up to 2 marks.		2	304 2.2 AO1
16.	Any two from: <ul style="list-style-type: none"> • Feather. • Sable pencil. • Charcoal. • Fitch. • Card. • Lint free rag. • Sponge. • Bone. 1 mark for each correct answer up to 2 marks.		2	304 3.3 AO1
17.	Any two from: An airless spray tip: <ul style="list-style-type: none"> • Determines the fluid flow rate / the amount of coating applied. • Determines the spray pattern (fan width). • Reversible tip blows back paint clogs. 1 mark for each correct answer up to 2 marks.	If reversible tip is answered, then must indicate its function for 1 mark.	2	306 2.1 AO1
18.	Any one from: <ul style="list-style-type: none"> • A component rupture, such as the fluid hose leading to leakage of paint. • Pump breakdown such as stuck piston or inlet ball causing no paint to be drawn through. • Poor paint application due to thick or thin paint. 		2	306 3.1 AO1

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
19.	<p>Outline planning permission</p> <p>As the name suggests, an outline permission tends to require fewer details (1 mark) being submitted and the application may suggest a simple or more modest house type (1 mark) to obtain the initial outline planning permission.</p> <p>Detailed planning permission</p> <p>(DPP) is the next stage in the planning process. A detailed consent means that you have permission to build the exact house shown in the plans (1 mark) subject to any planning conditions agreed. A detailed planning application is a lot more thorough and defines materials of the new dwelling proposing exactly how it will look once built. (1 mark).</p>	<p>Consider looking for emboldened words to be included in candidate descriptions.</p>	4	301 1.2 AO2
20.	<p>Rainwater Harvesting</p> <p>Rainwater harvesting involves collecting rainwater from a building's roof or from any other surface, including nowadays permeable pavements and garden lawns. The rainwater then passes through a filter, which eliminates debris, and is stored in a holding tank placed either underground or the side of a building or in the loft.</p> <p>Greywater Recycling</p> <p>Grey water recycling is reusing the water from your sinks, baths and showers for other purposes. You can use it to flush your toilet or water your garden. The greywater then passes through a filter, which eliminates debris, and is stored in a holding tank placed either underground or the side of a building or in the loft.</p> <p>Both can be retrofitted to buildings but are more easily incorporated in ton new build.</p>	<p>Names only carry 1 mark each.</p> <p>To gain full marks answer must include brief descriptions.</p>	4	301 2.4 AO2

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
21 a.	Heights are determined generally by manufacturer's instructions (1 mark) with due consideration to the safe working loads (1 mark) and base dimensions including outriggers (1 mark). Normal maximum platform height for indoor use is 12m for double width, and 8m for single width. For outdoor use, the maximum height is 8m for single and double widths (1 mark indoor/outdoor use height difference).	1 mark for the correct answer and 1 mark for the correct explanation up to 2 marks.	2	302 1.2 AO2
21 b.	The increase can be achieved by: The use of outriggers therefore widening the base measurement and the size of outrigger is determined by the different manufacturer's instructions. Securing the tower at different heights to the building structure can increase maximum height of tower. Increased stability is achieved by tying in.	1 mark for the correct answer and 1 mark for the correct explanation up to 2 marks.	2	302 1.2 AO2
22.	<ul style="list-style-type: none"> • Creep. • Smudging. • Paint liftin. • Uneven colour. • Bittiness. • Undue texture. • Uneven weight of colour over repeats. • Buckled/curled stencil plate misalignment. • Stencil sticking to background and causing damage to substrate. 	Candidate has to consider the application to the vinyl matt emulsion surface on which stencil is applied and also pattern repeats, registration, correct alignment as well as simple paint application defects. A vinyl matt surface is more absorbent than a silk finish leading to a potential for stencil sticking and causing surface damage. The question may appear simple but requires candidate to be competent in application methods as well as understanding methods of adhering stencil to the background without causing damage.	4	304 1.3 AO2

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
23.	<ul style="list-style-type: none"> • Preparation of surface. • Barrier coat material. • Apply gold size. • Test tack time. • Apply gold leaf. • Skew off loose gold. • Faulting. • Burnish. • Clean off barrier coat. 	<p>1 mark for each process up to 3 marks.</p> <p>1 mark for each description up to 3 marks.</p>	6	304 4.3 AO2
24.	<p>Furniture polythene sheeting, cotton dust sheets, tarpaulin.</p> <p>Ceiling and wall Light fittings Polythene bag taped.</p> <p>Computer work stations polythene sheeting, cotton dust sheets, tarpaulin.</p> <p>Floors Hardboard, dust sheets, tarpaulin.</p> <p>1 mark for each up to 4 marks maximum.</p>		4	306 1.1 AO2
25.	<ol style="list-style-type: none"> 1. Turn ON/OFF switch to the OFF position. 2. Engage the trigger lock. Always engage the trigger lock when sprayer is stopped to prevent the gun from being triggered accidentally. 3. Turn pressure control to lowest setting. 4. Put drain tube into a pail and place prime/Spray valve in PRIME position (drain) to relieve pressure. 5. Hold the gun firmly to a pail, point gun into pail. Disengage the trigger lock and trigger the gun to relieve pressure. 6. Engage the trigger lock. 	<p>1 mark for each stage and 1 mark for description, up to 6 marks.</p>	6	306 2.3 AO2

Q No.	Acceptable answer(s)	Guidance	Max marks	Ref.
26.	<p>Band 1 (1 – 4 marks)</p> <p>Response is basic and shows limited understanding of the tasks needed to be carried out.</p> <p>Lists stages of decoration, tools, materials and finishes without details. No description of safety implications or consideration of busy road implications, pedestrian traffic.</p> <p>Possibly misinterprets task, therefore lists incorrect stages, tools, materials and finishes.</p> <p>In order to access higher marks, the response will include:</p> <p>Brief description of safety implications and items of PPE. Answers suggest limited knowledge of the processes.</p> <p>Band 2 (5 – 8 marks)</p> <p>Response shows some understanding of the tasks needed to be carried out. Provides some details of stages of decoration, tools, materials, but does not make links between them.</p> <p>Limited description of appropriate access equipment, basic safety implications of working from fixed scaffolding and provision of area protection and sheeting. Basic description of decoration process, for lower marks roller application may have been selected.</p> <p>In order to access higher marks, the response will include:</p> <p>Details of stages of decoration, tools, and materials with some links between them. General description of safety implications, PPE, consideration of public, water stains, application method by airless spray, area protection items listed including walls and floors, waste material and access equipment, storage tools and site security. Consideration of drying times.</p> <p>Band 3 (9 – 12 marks)</p> <p>Response shows good understanding of the tasks needed to be carried out.</p> <p>Evaluates and analyses stages of decoration, tools, materials and applications by discussing advantages and disadvantages. Adequately discusses links</p>	<p>Indicative content - candidate's responses may include, but not be limited to:</p> <p>Health and Safety</p> <ul style="list-style-type: none"> • Risk assessment and method statement. • Storage and security of tools and equipment. • Selection of appropriate access equipment, erected by others. • PPE. • Protective barriers/sheeting to protect pedestrians etc. • Permit to work busy street. <p>List of tools and equipment</p> <ul style="list-style-type: none"> • Preparation tools. • Airless spray equipment or large deep pile roller etc. • Access equipment. • Masking & sheeting. <p>Wall preparation</p> <ul style="list-style-type: none"> • Brush down/scrape to remove loose material. • Apply alkali resistant primer to stained areas. • Make good minor defects with powder filler. • Make good larger holes and cracks with sand & cement mix. • Apply thinned first coat 1:5 water to paint to help with 	12	AO4

	<p>between them. An in-depth detailed description of decoration method that describes fully the use of airless spray equipment. Links these to the stages of decoration, tools, and materials.</p> <p>In order to access higher marks:</p> <p>Correct process described along with all other aspects included. Understanding of protection of public, water staining.</p>	<p>porosity of surface and adhesion of paint.</p> <p>Access Equipment</p> <p>Independent scaffold to allow for height to be reached.</p> <p>Sequence of work</p> <ul style="list-style-type: none"> • Health and safety. • Erection of access equipment. • Sheeting/protection of area inc. masking windows and doors. • Preparation of wall area inc. scraping, filling and application of any primers. • Airless Spray set up or roller equipment. • Application of first thinned coat. • Application of 2 x coats. • Cleaning of paint application equipment. • Removal of masking. • Disposal of waste and clearing site. • Dismantling of Access equipment by others. 		
--	--	---	--	--