


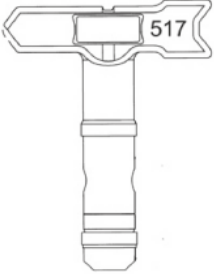
Qualification: 7907-30 Level 3 Advanced Technical Diploma in Painting and Decorating (450)

Assessment: 7907-001/501 Level 3 Painting and Decorating – Theory Exam

June 2018

1	<p>What regulation does the sign shown in Figure 1 relate to?</p> <div style="text-align: center;">  <p>Figure 1</p> </div> <p>a) CDM b) PPE c) COSHH d) RIDDOR</p>						
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C	N/A	1					
2	<p>Why would oral communication be used by a foreman to convey a change in specification to the decorating team?</p> <p>a) Information can be passed on quickly. b) Information can be easily understood. c) Important information can be recorded. d) Large information can be passed on efficiently</p>						
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A	N/A	1					

3	Why should customers be provided with an estimate? a) It provides a legally binding price for the work. b) It ensures the price given is the final total cost. c) It ensures a verbal agreement for the final total cost. d) It provides a variable price for the work.		
	Acceptable answer(s)	Guidance	mks
	D	N/A	1
4	What insulation material has the highest thermal resistance? a) Expanded polystyrene. b) Polyisocyanurate. c) Mineral wool. d) Hemp rolls.		
	Acceptable answer(s)	Guidance	mks
	B	N/A	1
5	What type of access equipment should be used when painting a window on a gable end of a two storey house over an adjoined gabled garage roof? a) Roof ladder. b) Tower scaffold. c) Triple extension ladder. d) Mobile elevated working platform.		
	Acceptable answer(s)	Guidance	mks
	D		1
6	Why are registration marks used on multi-plate stencils? a) To align layers. b) To prevent creep. c) To prevent movement. d) To keep the stencil flat.		
	Acceptable answer(s)	Guidance	mks
	A	N/A	1

7	What BS 4800 ground colour is used for creating a mid-oak graining effect?		
	a) 00E55 b) 04D44 c) 08C35 d) 12B15		
	Acceptable answer(s)	Guidance	mks
	C	N/A	1
8	What is the name of the tool used to apply loose gold leaf?		
	a) Gilders tip. b) Gilders mop. c) Gilders fitch. d) Gilders burnisher.		
	Acceptable answer(s)	Guidance	mks
	A	N/A	1
9	What is the spray fan width of the airless spray tip shown in Figure 2, when sprayed at 12 inches from the surface?		
	 <p>Figure 2</p>		
	a) 5 inches. b) 10 inches. c) 17 inches. d) 20 inches.		
	Acceptable answer(s)	Guidance	mks
	B	N/A	1

10	What is the purpose of a tip guard on an airless spray set-up?		
	a) Protect tip from blockage. b) Prevent paint overspray. c) Protect from paint injection. d) Maintain even spray pattern.		
	Acceptable answer(s)	Guidance	mks
	C	N/A	1
11	State two benefits of using a Gantt chart for planning delivery of materials.		
	Acceptable answer(s)	Guidance	mks
	Financial benefits – cash flow. Phased delivery Reduce storage space required Reduced risk theft Reduced chance of materials wearing/ damaging Stock control	Any other suitable.	2
12	Identify two advantages of a closed tender for a client.		
	Acceptable answer(s)	Guidance	mks
	Any two ; Selected contractors with financial track record Good quality workmanship Less evaluation time Less aggregate cost for tender	N/A	2

- 13 A domestic lounge requires repainting with vinyl matt emulsion.
Two coats will be required on all surfaces.

Decorators notes of costs and dimensions	
Area of walls	62 m ²
Area of ceiling	31 m ²
Paint coverage	12 m ² /l
Labour cost	£2.50/m ²
VAT	20%
Paint cost/ltr tin	£7

Table 1

Using Table 1, calculate all costs for labour and materials to produce a total cost.

Acceptable answer(s)	Guidance	mks
<p>Total area to be painted $(62 + 31) \times 2$ coats = 186m² Paint cost 186m² divided by 12 = 15.5 litres, therefore 16 litres required @ £7 per ltr = £112 Understanding 1 mark</p> <p>Labour cost 186m² x £2.50 = £465.00</p> <p>Total labour and material cost £465.00 + £112 = £577 Understanding 1 mark</p> <p>VAT @ 20% of £577 = £ 115.40 Total inc. VAT £577.00 + £115.40 = £692.40 Understanding 1 mark</p>	N/A	3

14

A decorator is using a steam stripper within an entrance foyer.
Complete the risk assessment for this activity.

RISK ASSESSMENT FORM	
1. Identify hazard	_____
2. Identify risk	_____
3. Who is at risk?	_____
4. Safety measures	_____
5. Review process	_____

Acceptable answer(s)

Guidance

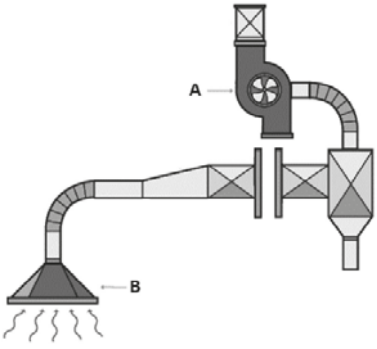
mks

	Answer 1	Answer 2	Answer 3
Identify hazard (1 mark)	Trailing leads	electrical shock	scolding
Identify risk (1 mark)	Slips and trips	Burns, fatal	burns
Who is at risk (1 mark)	Public and operative	Operative	Operative
Safety measures (1 mark)	Place mat over the leads, re-routing leads	Use PAT tested equipment, only use 110 V power tool, Partial isolation of electrical circuit	Wear PPE, Keep paddle close to the wall at all times Keep away from the heat/ steam plate Avoid treading on the hose
Review process (1 mark)	On-going at regular intervals	Before use of each equipment	On-going, review at every opportunity

Other answers can be accepted provided they are valid.

5

18	Acceptable answer(s) Answers may include (max 4 marks); <ul style="list-style-type: none"> - A Guardrail is usually steel construction (1), whereas a Toe board is wood construction (1 mark) - A Guardrail is fixed at a minimum height of 950 mm above the working platform, (1) while a Toe board is placed on top of a working platform at a minimum of 100 mm height (1 mark) - A guardrail helps to prevent operatives from falling off scaffold, (1) while Toe board helps prevent tools and materials from falling off scaffold. (1 mark) 	Guidance N/A	mks 4
19	Describe the different visual effects of three application methods used to apply prominent veining to a marble effect.		
	Acceptable answer(s) Answer; <ol style="list-style-type: none"> 1. Use of goose/swan feather (1 mark) leads to a random 'accidental' effect producing large main prominent veining (1 mark). 2. Fine sable brush (1 mark) leads to twisting/rolling the shaft which produces slight variations. (1 mark) 3. Coloured pastels and crayons. (1 mark) leads to a fine and opaque detail to a dried coating. (1mark) 4. Veining horn/coin/thumb and rag/ cotton buds/rubber, eraser.(1 mark) will lead to wiping away or displacing colour to reveal ground coat as veining) (1 mark) 	Guidance Any other suitable.	mks 6

20	<p>Explain four actions that should be carried out after cleaning airless equipment, before it can be placed in long term storage.</p>		
	<p>Acceptable answer(s)</p>	<p>Guidance</p>	<p>mks</p>
	<p>Answer; Before storing airless sprayer</p> <ol style="list-style-type: none"> 1. Drain all water and material from hoses and guns (1 mark) to prevent sediment settlement and corrosion (1 mark). 2. Hoses to be connected, coiled and hung off the floor (1 mark), reducing air exposure and preventing punctures, grazes and kinks (1 mark). 3. Release pressure before storage (1 mark) to prevent accidental paint injection (1 mark). 4. Flush through with a pump protectant (1 mark) to protect and oil pump parts (1 mark). 5. Ensure pump rod is down when switched off (1 mark) as less exposure to air will reduce corrosion (1 mark). 6. Store indoors (1 mark) to prevent weather or frost damage (1 mark). 	<p>Max 4 marks for listing actions.</p>	<p>8</p>
21	<p>Identify component A and B in the LEV system shown in Figure 3.</p>  <p style="text-align: center;">Figure 3</p>		
	<p>Acceptable answer(s)</p>	<p>Guidance</p>	<p>mks</p>
	<p>A – Hood / Intake B – Fan / Extractor fan A – Fan / Extractor B –fan Hood / Intake</p>	<p>N/A</p>	<p>2</p>

22	State two pieces of equipment that help ensure the viscosity consistency through various paint batches.		
	Acceptable answer(s)	Guidance	mks
	1 mark each, max 2 marks <ul style="list-style-type: none"> ● Ratio stick ● Flow “Ford” cup ● Viscometer 	N/A	2
23	Explain how the application fault ‘triggering’ can occur at the beginning and end of each pass on an airless spray gun.		
	Acceptable answer(s)	Guidance	mks
	Max 2 marks. <ul style="list-style-type: none"> ● Failure to release the trigger at the end of a pass (1 mark) has caused a double coating (1 mark) ● Failure to have the spray gun moving before pressing the trigger (1 mark) has caused a build-up of coating (1 mark) ● Failure to continue moving the spray gun after releasing the trigger (1 mark) has led to a build-up of coating (1 mark) 	N/A	2
24	Identify two methods of storing scaffold boards.		
	Acceptable answer(s)	Guidance	mks
	<ul style="list-style-type: none"> ● Off the ground ● Under cover ● Flat and horizontal ● Supported throughout length 	N/A	2

25	<p>The frontage of a new warehouse building requires decoration. The area is of a new blockwork construction and is approximately 25 m long and 4 m high. The area is to be finished with 3 coats of a smooth water based masonry paint. The warehouse is off road and has a hard-tarmac ground construction around the building. Spreading rate of masonry paint is 8 m²/litre.</p> <p>Propose a plan of works including quantities of materials required to carry out the redecoration of the warehouse.</p>							
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Limited description of appropriate access equipment, basic safety implications of using mobile tower and area protection and sheeting. Some accurate points on the application of airless spray. Attempted calculations with some correct processes/ methods used.</p> <p>Access to higher marks Correctly details of stages of decoration, tools, and materials with some links between them with very few inaccuracies. Some description of safety implications, PPE, spray application, area protection items listed, waste material and access equipment, storage tools and site security.</p> <p>Band 3 (9 – 12 marks) Detailed response shows good understanding of the tasks needed to be carried out. Accurate evaluations and analysis of all stages of decoration, tools, materials and applications by discussing advantages and disadvantages. Some discussions to link all points made. Makes a recommendation but without justification. 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	<p>Correct process and calculations for material required.</p> <p>Access higher marks Response shows clear understanding of the integration of decorating components. Incorporates and justifies recommendations. All points relevant and correctly linked with justifications provided.</p>	<p>Dismantling of Access equipment</p> <p>Calculation. $25\text{m} \times 4\text{m} = 100\text{m}^2$ $100\text{m}^2 \times 3 \text{ coats} = 300\text{m}^2$ $300\text{m}^2 \div 8\text{m}^2 = 37.5 \text{ litres of masonry paint}$</p>	
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