

6720-21-002 Level 2 Constructing and Maintaining the Built Environment

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Candidate	Name	Date	DD/MM/YY
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- 1 Explain how Gantt charts and precedence diagrams are used as production planning tools. (4 marks)

- 2 A new housing development is being built.

- (a) State one suitable foundation that could be used when the ground has a high bearing capacity. (1 mark)

- (b) Explain how a foundation for use on a building with **weak sub-soil** is fit for purpose. (3 marks)

c) Describe the setting-up procedure for the new building site. (6 marks)

3 Explain **four** properties that make timber a useful material for fixtures and fittings off-site. (8 marks)

- 4 Properties need to be serviced and maintained regularly. State **three** reasons why properties deteriorate. (3 marks)

- 5 a) Using the image below, identify the defect and explain its cause. (4 marks)



b) Explain actions to be taken to remediate this defect.

(4 marks)

6 Calculate the cost of the bricks required to construct a wall if the wall is 3 m high, 6 m wide and 225 mm thick. Assume the standard number of bricks per m² and allow 15% extra for wastage, breakage and cutting. The bricks required cost £420 per 1000 bricks. Assume the work to be zero-rated for VAT purposes. (3 marks)

7 Using examples, explain the impact to operatives of **three** hazardous materials on construction sites. (6 marks)

8 The table below shows a partially completed risk assessment for a project to underpin a brick wall.

Hazard	Risk level			Possible Outcomes	Who could be affected	Control Methods
	L	M	H			
Manual Handling		M		Splinters in hands/fingers, bruised or trapped fingers wrong lifting technique causing back injury	Young people Inexperienced, immature and lacking in awareness of relevant risks	i) (2 marks)
Tools			H	i) (2 marks)	Operatives, in-experienced workers not trained in use of tools and equipment.	ii) (2 marks)
Possible Trench collapse			H	Injury to oneself or others (grazes, severe cut, severed limb, loss of finger, foreign objects in eye) entrapment	Workers in and around the trench, members of the public	iii) (2 mark)

Provide responses that would complete the following in the table:

a) Tools: Possible outcomes of hazard

i) _____

(2 marks)

b) Control methods used to mitigate hazards occurring

i) _____

(2 marks)

ii) _____

(2 marks)

iii) _____

(2 marks)

