



# 7908-505 MARCH 2022

## Level 2 Technical Certificate in Plastering

### Level 2 Plastering – Theory exam

**Friday 25 March 2022**  
**13:30 – 15:30**

**You should have the following for this examination**

- a multiple-choice answer sheet
- a pen with black or blue ink
- a non-programmable calculator

---

**This question paper is the property of the City and Guilds of London Institute and is to be returned after the examination.**

#### **Read the following notes before you answer any questions**

- You **must** use a pen with black or blue ink to complete **all** parts of the answer sheet.
- Check that you have the correct answer sheet for the examination.
- Check that your name and candidate details are printed correctly at the top of your answer sheet.
- Inform the invigilator if your name or examination details are not correct.
- Each question shows **four** possible answers (lettered 'a', 'b', 'c' and '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 'a' is correct, mark your answer like this

101	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Cancel	Cancel	Cancel	Cancel

If you want to change your answer, cancel your first choice by filling in the 'cancel' box below the circle like this

101	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Cancel	Cancel	Cancel	

Then mark the answer which you have now decided is correct. For example if you now decide 'c' is correct, mark your answer like this

101	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Cancel	Cancel	Cancel	

Any other marks on the form may invalidate some of your answers.

- Any calculations or rough working can be done on the question paper.
- Attempt all questions. If you find a question difficult, leave it and return to it later.

**This paper contains 60 questions. Answer them using the 'boxes' numbered 1 to 60 on the answer sheet.**

- 1 Who is responsible for installing fascia boards to rafters?
  - a Roofer.
  - b Joiner.
  - c Tiler.
  - d Bricklayer.
  
- 2 Who is categorised as having a professional role in the building team?
  - a Plasterer supervisor.
  - b Service engineer.
  - c Foreman decorator.
  - d Quantity surveyor.
  
- 3 Which is responsible for issuing planning permission after the design process?
  - a Local authority.
  - b Senior architect.
  - c Building control.
  - d Structural engineer.
  
- 4 What document provides information on the standards of workmanship when planning to carry out construction work?
  - a Method statement.
  - b Schedule.
  - c Component drawing.
  - d Specification.
  
- 5 Which piece of health and safety legislation covers work equipment regulations?
  - a RIDDOR.
  - b COSHH.
  - c PUWER.
  - d CDM.
  
- 6 What information is detailed on a drawing to identify materials?
  - a Hatchings.
  - b Scales.
  - c Sections.
  - d Dimensions.
  
- 7 Why would a health and safety officer issue a prohibition notice?
  - a When method statements have been misplaced.
  - b To check the correct level of risk in a risk assessment.
  - c When a serious accident has occurred on site.
  - d To authorise a permit to work in confined spaces.
  
- 8 Why would a site agent organise a toolbox talk during the construction process?
  - a To update all site personnel of safety changes.
  - b To discuss supervisory roles within the build project.
  - c To record completed work from daily activities.
  - d To issue specialised machinery when needed.
  
- 9 Why is it necessary to read a materials schedule before carrying out the work?
  - a To determine the make and manufacture of various plasterboards.
  - b To identify the fixing location of performance plasterboards.
  - c To compare the different backgrounds that require plasterboarding.
  - d To comply with standards of workmanship when plasterboarding.
  
- 10 What colour service pipe identifies water below ground level?
  - a Brown.
  - b Grey.
  - c Blue.
  - d Yellow.
  
- 11 What type of wall is classed as load bearing?
  - a Timber stud.
  - b Clay tiled.
  - c Metal stud.
  - d Solid block.

- 12 What should be installed in a substructure to form a solid floor?
- Block and beam.
  - Plywood sheet.
  - Timber joist.
  - Insulation sheet.
- 13 What is installed during the first fix of an electrical installation?
- Down light.
  - Pull switch.
  - Kitchen fan.
  - Power cable.
- 14 Why would a pile foundation need to be used when constructing a house on soft ground?
- To reduce sound resistance from below.
  - To ensure the structure does not subside.
  - To limit the amount of blocks used.
  - To eliminate potential flooding.
- 15 Why are weep holes incorporated within a masonry wall of a building?
- To prevent render shrinkage.
  - To remove water within a cavity.
  - To reduce structural movement.
  - To minimize air flow within the property.
- 16 Why is it necessary to use wall straps when installing a roof structure?
- To provide a fixing between the rafters and ridge board.
  - To allow for movement when the timber shrinks.
  - To maintain correct lap when laying the tiles.
  - To ensure the wall plate is fixed to the masonry.
- 17 A survey has been carried out on a recently built extension and the report shows that large cracks have appeared between the adjoining extension walls and the house.
- What is the cause of this defect?
- The foundation trench has been excavated too deep, causing impact from traffic vibration.
  - The brickwork wall that was built did not contain any insulation, causing the wall to become structurally weak.
  - The windows used in the extension do not contain the correct lintels, causing the structure to fail.
  - The masonry walls of the extension have not been tied to the house, causing movement between both walls.
- 18 A newly laid concrete floor is showing signs of rising damp in some areas on the surface. What could be the cause of this problem?
- The damp proof membrane was punctured during installation, allowing moisture to rise up through the floor.
  - The insulation laid beneath the concrete was too thick, causing the floor to sweat and penetrate the surface.
  - The hard core was too fine and was laid on wet soil, which is causing moisture to appear onto the surface.
  - There was no reinforcement used in the floor, causing movement and dampness to rise from below the floor.
- 19 A builder is currently undertaking major alteration work on a property and the schedule is constantly being changed by the client.
- What is the **correct** process for managing amendments to the previously agreed schedule?
- Provide an estimate, invoice for additional work, sign the contract and agree the changes.
  - Agree the changes, sign the contract, invoice for additional work and provide an estimate.
  - Provide an estimate, sign the contract, invoice for additional work and agree the changes.
  - Agree the changes, provide an estimate, sign the contract and invoice for the additional work.

- 20 A 15 m x 12 m concrete oversite slab has been laid, finished and dried. However, long cracks have now appeared.  
What could be causing this defect?
- a The floor had not completely set, which was a result of insufficient moisture being sprayed onto the surface during the curing process.
  - b The expansion joints were not incorporated when preparing the slab to compensate for movement.
  - c The galvanised sheets of Expanded Metal Lath were used instead of stainless steel, which affected the overall strength.
  - d The oversite concrete slab was not tamped to remove the trapped air, which has affected the finished surface.

- 21 Which document provides information for mixing pre-blended plaster?
- a Manufacturer's instructions.
  - b Job card.
  - c Material schedule.
  - d Data sheet.

- 22 Which drawing shows the pedestrian access routes in a building?
- a Reflective.
  - b Elevation.
  - c Layout.
  - d Section.

- 23 What percentage of waste is added when estimating and pricing materials for plastering contracts?
- a 5%.
  - b 15%.
  - c 25%.
  - d 30%.

- 24 What calculation formula is used when working out quantities of finishing plaster?
- a Linear.
  - b Area.
  - c Cube.
  - d Volume.

- 25 What background is categorised as being the **weakest** in terms of strength?
- a Aerated blocks.
  - b Granite stone.
  - c Solid blocks.
  - d Engineering bricks.

- 26 What type of background is **most** likely to have an irregular surface?
- a New blockwork.
  - b Concrete face.
  - c Mixed stone.
  - d Painted brickwork.



Source: [www.nlt.com](http://www.nlt.com)

**Figure 1**

- 27 What piece of equipment is shown in Figure 1?
- a Scissor lift.
  - b Podium access.
  - c Tower scaffold.
  - d Youngman platform.
- 28 What type of brush is used to clean internal angles when applying finishing plaster?
- a Six inch brush.
  - b Splash brush.
  - c One inch brush.
  - d Floor brush.
- 29 What background is **most** likely prepared with Expanded Metal Lath (EML) coil?
- a Plywood sheet.
  - b Timber wall plate.
  - c Steel lintel.
  - d Concrete pad stone.

30 What material should be applied to textured ceilings to ensure adequate key when preparing to over skim with finishing plaster?

- a Grit adhesive.
- b Slurry sealer.
- c Liquid primer.
- d Solvent glue.



Source: [www.plasterers1stopshop.co.uk](http://www.plasterers1stopshop.co.uk)

**Figure 2**

31 What piece of equipment is shown in Figure 2?

- a Scraper.
- b Knife.
- c Rule.
- d Spatula.

32 What type of bead is used to form splayed angles on plasterboard when applying finishing plaster?

- a Movement bead.
- b Architrave bead.
- c Thin coat stop bead.
- d Standard angle bead.

33 What is the **correct** spacing of screws when mechanically fixing plasterboard to ceilings?

- a 150 mm.
- b 190 mm.
- c 230 mm.
- d 300 mm.

34 What can cause gypsum plaster to flash set?

- a Gauging plaster too stiff.
- b Mixing in worn buckets.
- c Gauging in damp conditions.
- d Mixing using dirty water.

35 What is added to a sand and cement mix to control efflorescence?

- a Retarder.
- b Waterproofer.
- c Accelerator.
- d Salt inhibitor.

36 What type of plasterboard is **recommended** for installation in a busy pedestrian area?

- a Thermal laminate.
- b Vapour check.
- c Moisture resistant.
- d High impact.

37 What is the purpose of planning a plastering contract?

- a To issue safety guidance.
- b To ensure resources are available.
- c To allow for staff holidays.
- d To produce a defect survey.

38 Why are drawings used for plastering work?

- a To assess hazards in the work place.
- b To identify the manufacturer of plasterboard.
- c To work out the correct quantities of materials.
- d To list the correct ratios of loose materials.

39 How many standard plasterboards measuring 2400 mm x 1200 mm are required for plasterboarding a ceiling measuring 8.7 m x 11.4 m?

- a 33
- b 34
- c 35
- d 36

40 If **one** bag of plaster covers 3.5 m<sup>2</sup>, how many bags of backing plaster are required when plastering a room 2.4 m in height with a perimeter of 45 m?

- a 32
- b 31
- c 30
- d 29

41 Why is cement used when mixing loose materials for a scratch coat?

- a Provides strength.
- b Increases the workability.
- c Reduces setting time.
- d Limits the adhesion.

- 42 Why is it necessary to keep sand covered after use when carrying out plastering?
- To prevent moisture penetration.
  - To protect from the public.
  - To avoid animal contamination.
  - To minimise exposure from the sun.
- 43 Why are expansion beads used prior to applying plaster?
- To allow for movement in the background.
  - To enable hard angles to be formed.
  - To ensure returns are square.
  - To form splayed corners.
- 44 What is the **correct** procedure for cutting plasterboard around an electric service box?
- Measure the dimensions and cut with a pad saw.
  - Use a gauge to mark the hole and cut out with a rasp.
  - Mark out the dimensions with a level and cut with a panel saw.
  - Puncture the back of the board and cut by coring out.
- 45 Why are plasterboard joints reinforced before applying the finishing plaster?
- To minimise shrinkage.
  - To reduce inline cracks.
  - To strengthen external angles.
  - To increase fire rating.
- 46 How is sand and cement gauged accurately for mixing?
- By dividing loose materials equally.
  - By ensuring equal amounts using a shovel.
  - By measuring the correct amount of materials in buckets.
  - By adding the correct amount of liquid additive.
- 47 When would a rasp be used when preparing to install plasterboard?
- When cutting out services for electrical sockets.
  - When removing jagged edges from a cut board.
  - When cutting high impact plasterboard.
  - When lining up to machine cut edges.
- 48 Why does sand and lime need to be gauged when mixing for internal plastering work?
- To ensure consistent strength.
  - To maintain correct moisture content.
  - To minimise shrinkage cracking.
  - To allow for vapour passage.
- 49 Why are performance plasterboards used during installation?
- To follow the Codes of Practice.
  - To adhere to British Standards.
  - To conform to building regulations.
  - To meet the quality kite mark.
- 50 How is a backing coat prepared for skimming after ruling with a straight edge?
- Devil floated and cut back with a trowel.
  - Keyed with a scarifier and sanded down.
  - Scratched vertically and scraped back.
  - Ruled flat and left smooth faced.
- 51 Why is SBR applied on a background before plastering?
- To stabilise the surface and ensure adequate bonding.
  - To remove high dust levels and to avoid priming.
  - To increase suction and reduce surface crazing.
  - To avoid loss of moisture and ensure consistency.
- 52 How is a timber wall plate prepared before plastering?
- Apply with a bonding grit adhesive.
  - Dust down and applied with clean water.
  - Dub out with a sand and cement scratch coat.
  - Mechanically fix with Expanded Metal Lath (EML).

53 A ready mix mortar has been delivered to site and emptied into tubs. During the transportation of the materials, it was noticed that there was a difference in texture and variation of shade.

What is the **most** likely outcome of using this mortar mix?

- a The mix will dry quicker than normal and become weak.
- b The mortar will vary in strength and become defective.
- c The mix will crumble and become dusty when fully set.
- d The mortar will set hard and create bond failure.

54 The plasterboards that have been fixed to a timber background ceiling are beginning to sag between the joists.

What is causing this defect?

- a The joists are 150 mm thick and there are too many fixings affecting the strength of the plasterboard core.
- b The fixings are spaced 100 mm apart, causing the plasterboard surface to become weak.
- c The joists centres are 800 mm apart and not evenly supporting the load.
- d The fixings are 5 mm longer than the required length, causing the joists to twist out of shape.

55 A bathroom partition wall has been installed with plasterboard and is showing signs of damage with some of the plasterboard perishing and crumbling in places.

What has caused this defect?

- a Thermal plasterboards were used and are sweating due to warm moisture in the bathroom.
- b Moisture resistant plasterboards were fixed horizontally causing moisture to penetrate the joint.
- c Standard plasterboards were used and the gypsum core has absorbed moisture from the air.
- d Vapour check plasterboards were reflecting the penetrating moisture circulating from the bathroom.

56 Expanded Metal Lath has been used to reinforce a background and has been secured using mechanical fixings.

Why would this method need to be carried out?

- a The substrate was lightweight block and it needed strengthening.
- b The brick in the background was made of clay and deemed weak.
- c The surface was solid with adequate key and low suction.
- d The background was composite and required reinforcing.

57 An inclined ceiling needs to be installed with plasterboard and then prepared and finished to form a curved surface.

What is the **correct** process to carry out this work?

- a Apply scrim, bond out, fix the plasterboard and apply skim.
- b Fix the plasterboard, apply scrim, bond out and apply skim.
- c Fix the plasterboard, bond out, apply scrim and apply the skim.
- d Apply scrim, fix plasterboard, bond out and apply the skim.



Source: <https://www.swanbarnfarm.wordpress.com>

**Figure 3**

- 58 A background has been floated and keyed using a light weight backing plaster and had been left for several weeks before the finishing plaster was applied. During the application of the finishing coat, the defect shown in Figure 3 has occurred.

What has caused this defect?

- a The plaster surface has cracked due to structural movement.
- b The plaster applied was out of date causing the surface to shrink.
- c The consistency of finishing plaster was too wet causing it to blister.
- d The finishing plaster has crazed due to a high amount of suction.



Source: [www.toolstoday.co.uk](http://www.toolstoday.co.uk)

**Figure 4**

- 59 You are awarded a plastering contract to renovate a stoned built terraced house using traditional sand and cement materials.

How would the resource shown in Figure 4 benefit and support the workload?

- a The loose material mixed in the resource will not require a plasticiser for consistency.
  - b The resource will allow for continuous amounts of loose material to be mixed.
  - c The mixed plastering material will set equally after being mixed in the resource.
  - d The resource used will eliminate the need to add clean water to the mix.
- 60 A plasterer is renovating an isolated house during the winter. Whilst mixing the sand and cement material, the temperature in the house has decreased to 2 degrees.

What action should be taken by the plasterer if the temperature continues to decrease?

- a A retarder will need to be added to slow down the setting time.
- b Gypsum will need to be added to the plaster to increase the setting time.
- c An accelerator will need to be added to the mix to speed up the setting time.
- d Sulphur resistant cement will need to be added to slow down the setting time.

### **NOW GO BACK AND CHECK YOUR WORK**

- **IMPORTANT -**

Are the details at the top of the answer sheet correct?

Have you filled in your answers in INK in the appropriate boxes on the answer sheet?