



**7908-505 MARCH 2018**  
**Level 2 Technical Certificate in Plastering**  
Level 2 Plastering – Theory exam

**Thursday 22 March 2018**  
**09:30 – 11:30**

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

- a multiple-choice answer sheet
- a pen with black or blue ink
- 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  (a)  (b)  (c)  (d)

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

101  (a)  (b)  (c)  (d)

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  (a)  (b)  (c)  (d)

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 What construction term, **best** describes general day-to-day repairs to a property?
- a New build.
  - b Alteration.
  - c Restoration.
  - d Maintenance.

- 2 What is the role of a structural engineer?
- a To produce itemised costings.
  - b To calculate building loads.
  - c To develop Gantt charts.
  - d To carry out surveys.

- 3 Which construction professional is responsible for the general day-to-day running of a building project?
- a Architect.
  - b Site agent.
  - c Building inspector.
  - d Surveyor.

- 4 What type of construction drawing provides dimensions in relation to internal ceiling heights?
- a Elevation.
  - b Section through.
  - c Component.
  - d Floor plan.

- 5 What type of building work will require full planning permission and building regulations?
- a Conservatory.
  - b Loft conversion.
  - c Basement conversion.
  - d Two-storey extension.

- 6 A customer requires a new two-storey extension to be built to the rear of their property, what is the correct procedure for undertaking the works?
- a Appoint a local builder and begin the construction works immediately, to reduce costs.
  - b Appoint an architect and have a set of plans drawn up, to submit to the local authority for approval.
  - c Appoint a quantity surveyor and produce a bill of quantities, to obtain quotes from local builders.
  - d Appoint a project manager and develop a schedule of works, to reduce any delays with the building works.

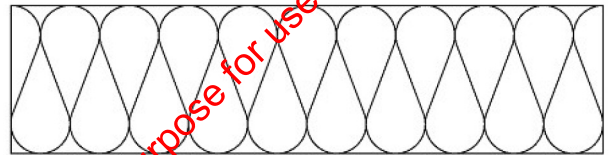


Figure 1

- 7 What hatching symbol is shown in Figure 1?
- a Brickwork.
  - b Concrete.
  - c Blockwork.
  - d Insulation.
- 8 What **must** be supplied by the principal building contractor, to comply with Construction Design Management (CDM) Regulations 2015?
- a Welfare facilities.
  - b Storage containers.
  - c Car parking spaces.
  - d Managers office.
- 9 Why are tiles specified in a downstairs wet room?
- a To produce a water tight seal.
  - b To produce a hygienic surface.
  - c To produce a maintenance free finish.
  - d To produce an ornate decorative finish.

10 What is used to protect building sites in highly populated areas?

- a Guard rails.
- b Plastic sheeting.
- c Timber hoarding.
- d Toe board.

11 An RSJ needs installing during some renovation works to a property. What fault would occur if the RSJ was installed **without** a pad stone?

- a The masonry blockwork below the opening would crack.
- b The mortar beds in between the bricks would shrink.
- c The width of the cavity would be greatly reduced.
- d The transferable load above would be reduced.

12 Why are construction specifications produced?

- a To provide a written description of the works.
- b To estimate costs on a building project.
- c To ensure the works are completed on time.
- d To identify any potential site hazards.

13 What type of foundation is driven deep into the ground when constructing high rise commercial buildings?

- a Pile.
- b Raft.
- c Strip.
- d Pad.

14 What colour is a plastic foul water drainage pipe, which is installed beneath the ground?

- a White.
- b Black.
- c Grey.
- d Brown.



Figure 2

15 What is the component in Figure 2 used for?

- a Fixing door liners in position.
- b Securing wall plates in position.
- c Fixing uPVC windows in position.
- d Securing stud partitions in position.

16 A plasterer is required to build a party wall between two properties using a metal stud partitioning and plasterboard system to comply with building regulations. What is the consequence of using standard plasterboard compared to performance plasterboard?

- a Increased levels of condensation, due to moisture transfer.
- b Reduced thermal properties, due to the movement of air.
- c Increased noise levels, due to the transfer of sound.
- d Reduced fire rating, due to the leakage of air.

17 What term identifies an upright timber in a partition wall?

- a Herringbone.
- b Noggin.
- c Header.
- d Stud.



**Figure 3**

18 What type of roof is shown in Figure 3?

- a Lean to.
- b Mono.
- c Hipped.
- d Gable.

19 Why are membranes installed beneath concrete floors?

- a To reduce exposure to toxic gas.
- b To prevent the rising of moisture.
- c To reduce heat loss in the structure.
- d To prevent the transmission of sound.

20 A home owner has asked for a rendering survey on a new extension, as they have noticed that rain water has been penetrating through the external render above all the window and door openings. What is the **main** cause of this?

- a No damp proof membrane has been installed.
- b No sealer has been applied to the external render finish.
- c No drip/bell cast beads have been installed.
- d No additive has been used in the sand and cement mix.

21 Where would a list of repetitive materials for a new housing estate be found?

- a Specification sheet.
- b Manufactures guide.
- c Architect drawing.
- d Schedule document.

22 What document will provide the mix ratio for traditional sand and lime mortar for a plastering restoration contract?

- a Detailed drawing.
- b Detailed schedule.
- c Detailed worksheet.
- d Detailed specification.

23 A plasterer has arrived on a new construction site. What drawing should be referred to in order to identify the plot number that needs to be worked on?

- a Reflective.
- b Section through.
- c Location.
- d Floor plan.

24 What unit of measurement is used when a liquid additive is included in a sand and cement mix for plastering?

- a Kilograms.
- b Millilitres.
- c Ounces.
- d Pounds.

25 What symbol of measurement is used for calculating areas?

- a m<sup>2</sup>
- b LM
- c kg
- d m<sup>3</sup>

26 What method of installation **must** be used when fixing two layers of fire line plasterboard?

- a Single lapped.
- b Double staggered.
- c Double lapped.
- d Single staggered.

27 A surveyors report, carried out on the internal plastering of a house, has identified that the beads used for forming the external corners have corroded at the bottom of the walls. What is the **main** cause of this?

- a Condensation from the occupants.
- b No damp proof membrane in the wall.
- c No circulation of clean air in the rooms.
- d Steam circulating from the kitchen and bathroom.

- 28 What document **must** be used when installing components and ensuring the warranty of a product?
- Material manual.
  - Material data sheet.
  - Manufacture guidelines.
  - Manufactures COSHH sheet.
- 29 Angle beads need to be fitted around the window opening measuring 3.96 m x 2.76 m. 1 angle bead measures 2.4 m in length. How many lengths of angle beads would be required?
- 3
  - 4
  - 5
  - 6
- 30 What type of background is considered to be high suction?
- Aerated block.
  - Slate surface.
  - Engineering brick.
  - Expanded Metal Lath.
- 31 Gypsum backing plaster has blown away from an uneven plasterboard surface that requires filling out to ensure straightness before applying the finish. What is the **most likely** cause of this?
- The setting coat has been applied too early.
  - The plasterboard joints have not been scrimmed.
  - The performance plasterboard surface has no key.
  - The gypsum based plaster does not contain vermiculite.
- 32 If one bag covers 10 m<sup>2</sup>, how many bags of plaster are required to plaster a room, with a perimeter of 14 m and height of 2 m, including a ceiling measuring 3 m x 4 m?
- 3 bags.
  - 4 bags.
  - 5 bags.
  - 6 bags.
- 33 What type of background is considered the **least likely** to have a key for plaster adhesion?
- Engineering bricks.
  - Solid blockwork.
  - Expanded Metal Lath.
  - Oak riven laths.
- 34 What type of tool should be used to apply a bonding grit to a background that requires re-plastering?
- Trowel.
  - Roller.
  - Spatula.
  - Scraper.
- 35 What will occur if gypsum floating coats are left for several days without finishing with a setting coat?
- The backing coat will lose its key.
  - The backing coat will lose strength.
  - The backing coat will have low suction rate.
  - The backing coat will have increased absorption.
- 36 What is a cause of efflorescence showing on plaster surfaces?
- Not enough additive in the mix.
  - Plaster not compatible with the background.
  - Using the incorrect backing plaster.
  - Moisture retained in the background.
- 37 The site agent has carried out a check on the plastering work and has noticed that the plasterer has not used the correct performance plasterboard on the bathroom partitions. What is the **most likely** outcome of this error?
- The plaster applied to the board will warp over time.
  - The plasterboard dabs will become loose.
  - The plaster may blow off the board surface over time.
  - The plasterboard will deteriorate and crumble.

38 What type of plastering system would be applied to a timber lath background?

- a Dubbing, scratch, float and set.
- b Pricking-up, scratch, float and set.
- c Prick-out, float, scratch and set.
- d Scratch, float and set.



Figure 4

39 What reinforcement is used on timber wall plates to ensure sand and cement floating coats bond adequately?

- a Cement board.
- b EML coil.
- c Fibre mesh.
- d Hessian cloth.

40 What is a consequence of using a plastering trowel that is out of shape when applying a setting coat?

- a The finished surface will contain hollows.
- b The finished surface will be over-polished.
- c The finished surface will be defect free.
- d The finished surface will craze crack.

41 Why **must** weak backgrounds be prepared by mechanically fixing Expanded Metal Laths (EML)?

- a To reduce the thickness of plaster.
- b To avoid the plaster crazing.
- c To reduce the suction.
- d To reinforce the surface.

42 A row of piers have been plastered and the face of one pier is not lining through as it should, what would be the **most likely** reason for this?

- a The plasterboard applied was not levelled.
- b The undercoat was not cut back at the beads.
- c The beads were not levelled through from one end.
- d The beads were not set out and plumbed from the chalk lines.

43 Why would a vapour check plasterboard be specified by a building contractor?

- a To provide a moisture barrier.
- b To prevent penetrating damp.
- c To increase the thermal values.
- d To reduce sound transmission.

44 What is the purpose of the tool shown in Figure 4?

- a To mark the position of plasterboards for a ceiling.
- b To level angle beads for window reveals.
- c To position stop beads for forming a stop end.
- d To plumb timber rules for plastering a beam.

45 What power tool is used to ensure consistency of plastering materials?

- a Drill and whisk.
- b Drill and gauge.
- c Drill and cutting bit.
- d Drill and core bit.

46 What are the **maximum** centres when setting out a stud partition to receive 12.5 mm plasterboards?

- a 700 mm
- b 600 mm
- c 500 mm
- d 400 mm

47 A composite background containing a mixture of weak materials in its construction requires preparing for three-coat plastering. What action should be taken to prepare the surface?

- a Apply a slurry of SBR before plastering.
- b Install fibre mesh in the first coat.
- c Fix EML mechanically to the background.
- d Mechanically key the background first.

48 When floating walls with door linings, what preparation should be carried out after forming the key?

- a Trowel the wall surface flat.
- b Cut back to allow for finishing plaster.
- c Remove high spots to prevent defects.
- d Rule it again to check straightness.

- 49 What are the **recommended** fixing centres when installing wallboards to stud partitions using screws?
- 300 mm
  - 325 mm
  - 350 mm
  - 375 mm
- 50 What tools are needed for cutting and fixing standard angle beads to a window wall?
- Pliers, level and tape measure.
  - Tape measure, snips and gauge.
  - Snips, tape measure and level.
  - Level, pliers and gauge.
- 51 A plasterboard partition has been plastered and finished, ready for decoration. However the painter has informed the supervisor that there is self-adhesive scrim showing through to the face of the plastered surface in certain places. What is the **most likely** cause of this defect?
- The scrim applied was too thick.
  - The plaster applied was over trowelled.
  - The plaster was applied using one pass.
  - The scrim applied was doubled up for strength.
- 52 When contaminated water is used for mixing gypsum plaster, what will **most likely** occur?
- Plaster will sag.
  - Plaster will craze.
  - Plaster will show grinning.
  - Plaster will insufficiently set.
- 53 What type of backing plaster can be applied with a spray machine to large internal walls in order to reduce labour?
- Pre-blended gypsum.
  - Ready mix mortar.
  - Traditional lime and sand.
  - Sand and cement.
- 54 What type of plaster is applied on a background that has been keyed with a devil float?
- Casting.
  - Backing.
  - Setting.
  - Fine.
- 55 When ordering ready mix sand and cement mortar, what additive is used to increase the working time of the mix?
- Hardener.
  - Retarder.
  - Polymer.
  - Plasticiser.
- 56 Finishing plaster applied and finished on to a plasterboard ceiling is showing signs of popping at the fixing points. What is the **most likely** cause of this problem?
- The noggins were not installed between the joists.
  - The screws used have missed the timber joists.
  - The screws used were too long and coated with zinc.
  - The joist centres are too close together.
- 57 What is the reason for sealing a high suction lightweight floated background **prior** to applying the finishing coat?
- To prevent structural cracks.
  - To prevent crazing of the surface.
  - To prevent sagging of plaster.
  - To prevent the flash setting of plaster.
- 58 Why **must** uneven backgrounds require subsequent backing coats to build up the thickness?
- To prevent sagging.
  - To prevent shrinkage.
  - To reduce setting times.
  - To increase setting times.
- 59 What is a consequence of adding too much plasticiser to a mix of sand and cement for plastering?
- The mix will set quicker.
  - The mix will be too strong.
  - The mix will be weak.
  - The mix will shrink.

- 60 A solid concrete wall in a basement needs making good to prevent the passage of moisture. What is the **best** solution for re-plastering the surface?
- a Apply PVA to the background then plaster with a gypsum backing coat.
  - b Apply SBR slurry then plaster with a mix of sand and cement.
  - c Apply SBR slurry then plaster with a mix of traditional lime mortar.
  - d Apply PVA to the background then plaster with bonding grade plaster.

Please note that this theory test has been amended to ensure it is fit for purpose for use as a sample assessment.

**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?