



7908-505 JUNE 2018

Level 2 Technical Certificate in Plastering

Level 2 Plastering – Theory exam

Thursday 21 June 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
- 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"/> b	<input type="radio"/> c	<input type="radio"/> d
	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"/> b	<input type="radio"/> c	<input type="radio"/> d
	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"/> b	<input checked="" type="radio"/>	<input type="radio"/> d
	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 Which construction professional is responsible for pricing construction projects?

- a Quantity surveyor.
- b Senior architect.
- c Structural engineer.
- d Building inspector.



Figure 1

2 Why **must** off cuts of plasterboard be segregated from other waste building materials?

- a So it can be recycled.
- b To reduce any accidents on site.
- c To avoid exposure to hazardous materials.
- d So it can be returned to the builders merchants.

3 A surveyor has carried out a survey on an empty property and noticed that the external walls have been built using two leaves of solid brick, no cavity and the windows and doors are single glazed. What issue will arise in the future?

- a Rising damp will affect the internal walls and result in surface efflorescence.
- b Rain water will penetrate the wall and enter the inside and decay the plaster.
- c The internal rooms will have increased levels of condensation due to cold spots.
- d The walls will need to be hacked and re-plastered due to poor air circulation.

4 What type of construction drawing provides information to determine the costing of a concrete oversite?

- a Elevation.
- b Site.
- c Component.
- d Layout.

5 What hatching symbol is shown in Figure 1?

- a Hardcore.
- b Brickwork.
- c Plywood.
- d Plasterboard.

6 Why is it **important** for construction specifications to be written?

- a To provide a report on the safe systems of work.
- b To provide a description of the standards of workmanship.
- c To provide details of any hazardous materials.
- d To provide technical information on machinery.

7 Why are loading bays installed on independent scaffoldings?

- a To minimise manual handling of materials that are stacked on a scaffold.
- b To provide a larger area for craftspeople to work.
- c To comply with manual handling health and safety regulations.
- d To prevent any building materials from being knocked off the scaffolding.

8 A client has requested for a survey to be carried out on a recently built extension. Both the exterior and the interior walls of the extension are displaying large movement cracks. What has caused this defect?

- a The concrete oversite was poured unevenly.
- b Reinforcing bar was not used in the footings.
- c A suspended block and beam floor was laid out of level.
- d The footings were not excavated to the correct depth.

- 9 What **must** be installed to the bottom part of the chimney, above the roof tiles, to prevent water penetrating the brickwork?
- a Damp proof membrane.
 - b Lead flashing.
 - c Damp proof course.
 - d Vented ridge tile.



Figure 2

- 10 What metal component is shown in Figure 2?
- a Wall tie.
 - b Fir fix.
 - c Fish tail fixing.
 - d Wall strap.

- 11 A customer requires a masonry load bearing wall to be removed within their property. What order **must** the work be carried out?
- a Appoint an architect, remove the wall, support existing structure.
 - b Appoint a structural engineer, support existing structure, remove the wall.
 - c Support existing structure, appoint a structural engineer, remove the wall.
 - d Remove the wall, appoint an architect, support existing structure.

- 12 When installing metal stud partitions, what is the **maximum** distance permitted between upright studs?
- a 300 mm
 - b 400 mm
 - c 500 mm
 - d 600 mm

- 13 Why are timber furring's used on flat roofs?
- a To provide a fall to the roof.
 - b To provide a fixing point for joists.
 - c To allow for the thickness of insulation.
 - d To ensure the guttering has the correct fall.

- 14 Why is a raft foundation different from any other type of foundation?
- a The footing and the oversite is concreted with one continuous pour.
 - b No reinforcement bars are required for the oversite or footing.
 - c The footings and oversite will require a weaker concrete mix.
 - d No earth has to be removed for the footings or oversite.

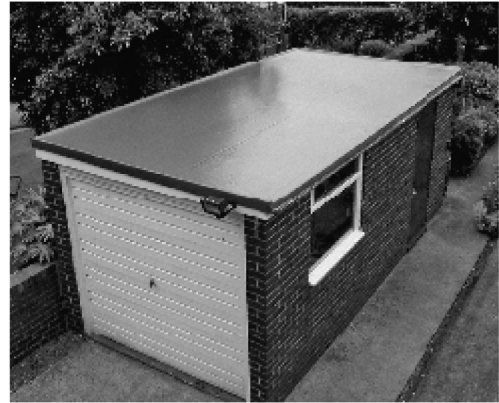


Figure 3

- 15 What type of roof is shown in Figure 3?
- a Lean-to.
 - b Hipped.
 - c Flat.
 - d Truss.
- 16 Why is external wall insulation installed?
- a To reduce external maintenance costs.
 - b To improve the U values of a property.
 - c To improve the appearance of a building.
 - d To reduce external airborne noise.
- 17 Which organisation has the legislative powers to shut down a construction site?
- a Health and Safety Executive.
 - b Local Authority Building Control.
 - c National House Building Council.
 - d Local Authority Planning Committee.

- 18 A building company would like to lay a floor screed on a block and beam floor. What is the **correct** order this work should be undertaken?
- Install rigid insulation, lay floor screed, install DPM membrane.
 - Install rigid insulation, install DPM membrane, lay floor screed.
 - Install DPM membrane, lay floor screed, install rigid insulation.
 - Install DPM membrane, install rigid insulation, lay floor screed.
- 19 What **must** be supplied as a welfare facility when setting up a new construction site?
- First aid hut.
 - Parking spaces.
 - Canteen area.
 - Site storage.
- 20 What construction term describes work undertaken on a historic building?
- Domestic.
 - Industrial.
 - Commercial.
 - Restoration.
- 21 What are the benefits of using a chalk line when installing plasterboard to ceiling joists?
- Produces a clear and visible straight line.
 - Produces a level and visible line.
 - Ensures plasterboard is fixed square and even.
 - Identifies fixing points and low spots.
- 22 An uneven plasterboard ceiling with a two coat lightweight pre-blended plaster system has been plastered. After a few days the backing coat is shelling from the plasterboard background. What is causing this problem?
- The lightweight backing coat did not contain the aggregate vermiculite.
 - The setting coat was out-of-date when it was applied to the backing coat.
 - The plasterboard joints weren't reinforced before the backing coat was applied.
 - The setting coat was applied before the backing coat had sufficiently set.
- 23 What type of drawing shows the position of plasterboard fixed to ceiling joists?
- Elevation.
 - Component.
 - Reflective.
 - Detail.
- 24 What construction document is referred to when calculating materials for a plastering contract?
- Detailed specification.
 - Method statement.
 - COSHH sheet.
 - Data sheet.
- 25 Why should manufacture instructions be followed?
- To ensure the work is completed on time without delay.
 - To ensure the product is installed correctly.
 - To ensure materials can be pre-ordered beforehand.
 - To reduce costs when ordering specific materials.
- 26 What unit of measurement is used when calculating the required amount of a liquid additive to a standard bucket of water?
- Ounces.
 - Millilitres.
 - Gallons.
 - Kilograms.
- 27 A plasterer is carrying out a survey on a property and has noticed that a section of the ceiling is deteriorating beneath the bathroom. What has caused this defect?
- The plasterboard on the ceiling is too thick.
 - The plasterboard has been affected by moisture.
 - The incorrect plasterboard has been used.
 - The setting plaster applied to the board is too thick.

28 What measurement is used for measuring window openings for the installation of standard angle beads?

- a Linear.
- b Cylinder.
- c Volume.
- d Area.



Figure 4

29 What access equipment should be used for plastering a large ceiling measuring 6 m x 8 m and 3 m in height?

- a Trestles and fully boarded.
- b Mobile tower and youngman board.
- c Moveable lightweight podium.
- d Independent putlog scaffolding.

30 What defect will occur after fixing plasterboard to joist centres that are too far apart?

- a The plasterboard will become loose.
- b The board surface will sag over time.
- c The applied setting plaster will crack.
- d The setting plaster will become loose.

31 Standard angle beads have been installed on three identical row of returns and are not lining through. Why has this occurred?

- a The beads have not been levelled along their length.
- b The beads have been nailed instead of bedded with plaster.
- c The beads are different types and are not plumb.
- d The beads have not been set out and plumbed from chalk lines.

32 What term is given to a masonry wall that consists of **two** different materials?

- a Dense.
- b Composite.
- c Unstable.
- d Irregular.

33 How many 2.4 m x 1.2 m plasterboards are required for a ceiling measuring 8 m x 9 m?

- a 1.5
- b 15
- c 2.5
- d 25

34 What tool is shown in Figure 4?

- a Scutching chisel.
- b Mixing whisk.
- c Floor scraper.
- d Mechanical bolster.

35 A plasterer has noticed that the first coat of setting plaster applied to the lightweight floating coat has fine cracks appearing on the surface. What is causing this problem?

- a The background has a high suction surface.
- b The setting plaster has been applied too thick.
- c The backing coat has a low suction surface.
- d The plaster has been mixed with dirty tools.

36 What background requires preparing with Expanded Metal Lath (EML) before plaster is applied?

- a Timber wall plate.
- b Aerated brick.
- c Timber lath.
- d Solid block.

37 Why are floating coats scraped with a trowel before applying the setting plaster?

- a To prevent sagging.
- b To remove snots.
- c To provide a key.
- d To control suction.



Figure 5

- 38 What is the output voltage of the equipment shown in Figure 5?
- 90 V.
 - 110 V.
 - 240 V.
 - 415 V.
- 39 Why would grinning occur when applying setting plaster onto a floated background?
- The background contains a low suction.
 - The floating coat has been keyed too deep.
 - The floating coat has been over consolidated.
 - The background contains a high suction.
- 40 What type of plasterboard is installed for taping and jointing?
- Bevelled edge.
 - Square edge.
 - Tapered edge.
 - Rounded edge.
- 41 Why are construction layout drawings used by a plasterer when calculating quantities of plasterboard?
- To show window openings.
 - To identify how the components are fixed.
 - To obtain ceiling heights.
 - To show the dimensions of the internal walls.
- 42 What term is given when mixing different ingredients of loose material to make traditional backing plaster?
- Batching.
 - Gauging.
 - Rationing.
 - Slaking.
- 43 What additive is used in a sand and cement mix to increase the working time of the mixed material?
- Retarder.
 - Accelerator.
 - Plasticiser.
 - Waterproofer.
- 44 What type of material is classed as lightweight aggregate?
- Perlite.
 - Sand.
 - Cement.
 - Lime.
- 45 Why is diluted PVA applied to an aged gypsum floating coat before applying a setting coat?
- To reduce setting times.
 - To prevent shrinkage.
 - To prevent blistering.
 - To control suction.
- 46 What colour plasterboard is used to reduce sound on partition walls?
- Blue.
 - Pink.
 - Grey.
 - Green.
- 47 How many bags of lightweight plaster with a coverage of 3.5 m² are required for floating the walls of a room measuring 2.4 m in height with a perimeter of 34 m?
- 22 bags.
 - 23 bags.
 - 24 bags.
 - 25 bags.
- 48 A plasterer has been asked to survey a scratch coat that has been applied for 7 days and the mix appears to be weak and has crumbled. What has caused this problem?
- The mixed materials contained too much cement.
 - The mix had been standing in a wheel barrow before applying.
 - The incorrect amount of plasticiser was added when mixing.
 - The incorrect tools and equipment were used for mixing the materials.

- 49 Why does Expanded Metal Lath (EML) require a pricking up coat?
- To form the base for a floating coat.
 - To form the base for the setting coat.
 - To strengthen the background surface.
 - To fill out the background hollows.
- 50 A plasterer has applied a setting coat on a plasterboard surface and noticed that the plaster has blown. What has caused this defect?
- The diluted PVA applied to the plasterboard is too thick and has poor adhesion.
 - The aluminium foil on the back of the plasterboard has de-laminated.
 - The incorrect fixings have been used causing the plasterboard to become loose.
 - The core of the board has cracked causing the surface paper and plaster to separate.
- 51 Why does a stone background require dubbing out before applying a scratch coat?
- To produce an even suction.
 - To fill out any deep crevices.
 - To produce a keyed surface.
 - To ensure the wall is plumb.
- 52 What would a portable scabbler be used for?
- Screeding floor surfaces.
 - Sanding jointed surfaces.
 - Applying a wet slurry coat.
 - Producing a mechanical key.
- 53 What is the purpose of using a rasp/surform before installing plasterboard?
- To produce a tapered edge when jointing.
 - To provide a key to the plasterboard surface.
 - To remove the rough edges of a cut plasterboard.
 - To form an arch shaped plasterboard.
- 54 How can a fire rating of two hours be achieved on a ceiling surface that requires plasterboarding?
- Fixing fire line length staggered.
 - Fixing fire line single staggered.
 - Fixing fire line end staggered.
 - Fixing fire line double staggered.
- 55 What is the purpose of batching traditional lime mortar prior to being used for restoration work?
- To improve the materials workability.
 - To increase the materials adhesion.
 - To ensure the material remains waterproof.
 - To ensure the material sets within the timescale.
- 56 A batch of pre-mixed sand and cement has been delivered to the site. The mix is beginning to set before it can all be used. What is causing this problem?
- The company mixed the materials to the incorrect ratio.
 - Too much retarder may have been added in the plant.
 - The sand was too coarse and did not bind with the cement.
 - Too much accelerator may have been added in the plant.
- 57 What is the cause of efflorescence appearing on a newly plastered wall surface?
- A lack of air circulation in the room.
 - The incorrect plaster has been used.
 - Too much cement has been added in the mix.
 - There is moisture trapped within the masonry background.
- 58 A long masonry wall in a steel framed building containing vertical expansion joints has been plastered and is showing vertical cracks after the plaster work has been completed. What has caused this defect?
- The blockwork wall was uneven and contains some bricks in its design.
 - Movement beads have not been installed prior to applying plaster.
 - The plaster applied is too strong and caused cracks under stress.
 - Fibre mesh was not incorporated during the application of the base coat.

59 What type of backing plaster is suitable for applying on to timber laths?

- a Hardwall.
- b Browning.
- c Lime mortar.
- d Sand and cement.

60 What background is classed as low suction?

- a Plasterboard.
- b Aerated block.
- c Clay brick.
- d Hollow blocks.

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?