

Paper: **6314-1\*\***

Paper title: **Core Items**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Underpinning Knowledge	No of items	%
01.01 Health and Safety regulations – roles and responsibilities	01.01 Identify key health and safety legislation for construction sites 01.02 Describe the key employer responsibilities under the Health and Safety at Work Act (HASWA) 1974 01.03 Describe the key employee responsibilities under HASWA 01.04 Explain the role and responsibilities of the Health & Safety Executive 01.05 Identify sources of health and safety information 01.06 Describe the legislative requirements for contacting the health and safety executive 01.07 Identify the need for enforcing stringent guidelines in health and safety 01.08 Explain the importance of controlling on site safety inductions and tool box talks 01.09 Describe the need for Construction Skills Certification Scheme (CSCS) testing 01.10 Describe the requirements involved in obtaining a skill card under the CSCS scheme	1	1.6
02.01 Fire/Accident/First Aid/Emergency procedures and reporting	02.01 Identify major types of emergencies in the work place 02.02 State the key legislation for reporting accidents 02.03 Describe the types of injuries, diseases and occurrences in the workplace relevant to Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 1985 (RIDDOR) 02.04 Identify the main types of accident and emergency records 02.05 Explain the importance of accident recording 02.06 Identify the difference between major and minor injuries	2	3.3

	02.07 Identify the meaning of a near miss 02.08 List the key accident trends within the UK building industry 02.09 Describe the cost to the employer of the most common types of accidents and injuries 02.10 List of authorised persons including first aiders 02.11 List the basic requirements of a first aid box 02.12 State the actions to be taken when discovering an accident 02.13 List the three elements essential to creating a fire 02.14 Explain how a fire can spread 02.15 Identify methods of fire prevention 02.16 Identify different types of fire extinguisher and their uses 02.17 State action to be taken on discovering a fire 02.18 State the fire evacuation procedures		
03.01 Identify hazards on Construction sites/Working with electricity	03.01 State the importance of good house keeping 03.02 Identify the purpose of risk assessments 03.03 Identify the purpose of method statements 03.04 Identify why a near miss needs to be reported 03.05 List major types of hazards in the workplace 03.06 State the importance of correct storage of combustibles and chemicals on sites 03.07 Identify precautions to be taken to avoid risk to themselves and others 03.08 State the dangers associated with electricity 03.09 State the effects of an electric shock 03.10 Identify the different voltages to be used 03.11 Explain the need for colour coding of cables and wiring	2	3.3

	03.12 Explain how safe site voltages are achieved 03.13 State the importance of correctly storing electrical equipment		
04.01 Health and hygiene/Safe handling of materials and equipment/Using basic working platforms	04.01 List the requirements of welfare facilities	2	3.3
	04.02 Identify the health effects of noise and appropriate precautions		
	04.03 Identify various substances hazardous to health under the control of substances hazardous to health (COSHH) and identify appropriate precautions		
	04.04 Identify the importance of personal hygiene		
	04.05 Explain the type of hazards linked with drugs and alcohol		
	04.06 List possible consequences of health risks in the workplace		
	04.07 Describe procedures for safe lifting		
	04.08 Explain the importance of using site safety equipment		
	04.09 Identify the key legislation governing the safe handling of materials and equipment		
	04.10 Describe the importance of waste control procedures in the work place		
	04.11 Identify safe methods of use and appropriate component part of working platforms		
	04.12 Identify good practice methods in the use of step ladders, ladders, extension ladders, trestles and proprietary tower scaffolding		
	04.13 Identify component part of ladders and extension ladders, trestles and proprietary tower scaffolding		
	04.14 Identify the dangers of working at height		
05.01 Use of appropriate Personal Protective Equipment/ Signs and notices	05.01 Identify the types of PPE used in the workplace	2	3.3
	05.02 State the importance of correct storage and maintenance of PPE		
	05.03 Describe the importance of using PPE		

	05.04 State the legislation governing PPE 05.05 Identify the purposes of PPE 05.06 Describe the possible consequences of not using PPE 05.07 List the appropriate safety signs for the work place		
06.01 Interpret building information	06.01 Explain why documentation must be looked after and stored carefully 06.02 Identify basic symbols from working drawings 06.03 Identify the appropriate scale to be used with a range of drawings 06.04 Select information from simple location drawings and specification 06.05 Select information from basic work schedules	3	5
07.01 Determine quantities of material	07.01 Identify the basic methods used to calculate quantities of material	3	5
08.01 Relay building information	08.01 List the basic requirements for recording a message 08.02 Use relevant information to ensure communication is clear 08.03 Describe positive and negative communication 08.04 Describe the benefits of effective communication	3	5
09.01 Foundations, walls and floor construction	09.01 State the purpose of a datum level used in construction 09.02 List the materials used in a concrete foundation/floor 09.03 Identify the reason for the use of Damp Proof Membrane(DPM) and Damp Proof Coarse (DPC)	3	5
10.01 Construction of internal and external masonry	10.01 Explain the need for half brick bonding 10.02 State the reason for the use of a cavity wall construction 10.03 Explain why tie wires/lintels are used in the construction of a house 10.04 Name the methods used for mixing mortar to the required strength	3	5

11.01 Roof construction	11.01 Identify appropriate roof fixings	3	5
	11.02 State methods of roofing construction		
	11.03 Identify the reason for a wall plate		
	11.04 State the purpose of wall plate straps		
	11.05 Describe the purpose of roof components		
	TOTAL	27	45

Paper: **6314-101**

Paper title: **Painting and Decorating**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Underpinning Knowledge	No of items	%
12.01 Interpret guidance information for using access equipment/Erect and work from access and working platforms	12.01 Identify suitable access and working platforms for the work 12.02 Identify hazards associated with the use of access and working platforms 12.03 State the reasons for producing a risk assessment 12.04 Outline current legislation relating to Work at Height regulations 12.05 State the correct manual handling of components 12.06 Identify suitable PPE for use with access equipment 12.07 Explain the need for a secure base 12.08 Identify suitable bases 12.09 State correct loading of platforms 12.10 Describe correct manual handling techniques 12.11 Identify current legislation related to use of access equipment	2	3.3
13.01 Inspect components and identify defects/ Dismantle and store components	13.01 Identify suitable components 13.02 State the function of scaffolding components 13.03 Explain the importance of pre-erection inspections 13.04 Explain the importance of in-use inspections 13.05 State the correct inspection time periods for scaffolding 13.06 Describe the correct sequence of dismantling access and working platforms 13.07 Describe the storage requirements for components	1	1.6
14.01 Prepare a range of bare and previously painted and decorated surfaces to receive	14.01 Identify bare and previously painted substrates 14.02 Recognise different substrates 14.03 State the uses of a range of substrates used in building operations	1	6.6

coatings/coverings	<p>14.04 State the materials, tools and equipment needed to prepare surfaces</p> <p>14.05 State the preparation processes for a range of building substrates and associated defects</p> <p>14.06 State the appropriate abrasive used in the preparation processes</p> <p>14.07 State the appropriate primer and coating system for a range of surfaces</p> <p>14.08 State the health &amp; safety risks and necessary precautions associated with the preparation processes</p>	1	
15.01 Correct defects in surfaces and surface coatings	15.01 Identify types and causes of defects	2	10
	15.02 List the defects which result in unsound paint on timber		
	15.03 State the correct rectification processes, abrasives for defects	1	
	15.04 State the materials, tools & equipment needed for the rectification processes		
	15.05 State the cleaning agents and methods used for removing contamination	1	
	15.06 State the defects for which wet abrading is a suitable rectification process	1	
	15.07 State the purposes of abrading surfaces		
	15.08 State the health & safety risks and necessary precautions associated with rectification processes	1	
16.01 Repair and make good surfaces	16.01 State the materials used for repairing cracks in trowelled finishes	1	3.3
	16.02 State the relevance of each stage in the making good process for cracks in trowelled finishes		
	16.03 List commonly used primers		
	16.04 List the commonly used stoppers and fillers	1	
	16.05 List the tools required when using stoppers		
	16.06 State the methods used when applying putty		

17.01 Prepare work area and protect surrounding areas, furniture and fittings	17.01 State considerations to be taken when preparing the work area 17.02 State types of masking tape and their appropriate use 17.03 State types of protective sheeting and their appropriate uses 17.04 Describe the maintenance and storage required for dust sheets	1	1.6
18.01 Prepare materials for application and apply water-borne and solvent-borne coatings by brush and roller	18.01 State the component parts of brushes and rollers 18.02 State the appropriate type of application tool for each type of surface coating 18.03 Give examples of 'new technology' application tools	1	8.3
	18.04 List the stages of surface coating preparation	1	
	18.05 State why searching/straining primers may not be advisable		
	18.06 Explain the reason for thinning paints prior to application		
	18.07 State the main coating types	1	
	18.08 Explain why Volatile Organic Compounds (VOC) emissions are being reduced		
	18.09 Explain the causes and remedies of post-application defects in surface coatings	1	
	18.10 Name primary secondary tertiary tints and shades of a colour wheel	1	
19.01 Clean, maintain and store brushes and rollers/Store paint materials	19.01 State the different methods available for site and workshop cleaning of brushes	1	1.6
	19.02 State the difference in cleaning techniques and procedures for brushes and roller sleeves used in oil borne coatings		
	19.03 State the difference in cleaning techniques and procedures for brushes and roller sleeves used in water borne coatings		
	19.04 State the correct conditions for storage of brushes and rollers		
	19.05 State the correct storage conditions for materials		

	19.06 State the hazards associated with storage of materials 19.07 Describe the deterioration of dry powder materials caused by incorrect storage 19.08 Identify storage defects		
20.01 Identify, maintain and store tools and equipment required for applying papers/Store Materials	20.01 Identify tools and equipment 20.02 State the appropriate uses of tools and equipment 20.03 State the care and maintenance required for tools and equipment 20.04 State the conditions required for the storage of decorator's tools 20.05 State the types of deterioration that can occur to tools due to incorrect storage  20.06 State physical considerations for the correct storage of materials and the reason for each  20.07 State the atmospheric considerations for the storage of papers and the deterioration that may occur if these do not exist	1	1.6
21.01 Select and prepare adhesives	21.01 Identify adhesives and state the papers for which they are suitable 21.02 Describe the advantages and disadvantages of the range of adhesives  21.03 Outline the factors that may affect the consistency of adhesives 21.04 State the defects that can occur due to incorrect consistency of adhesives 21.05 State the health hazard associated with adhesives	1	3.3
22.01 Apply lining, wood grain and non-matching papers to walls	22.01 State the factors to be considered when planning the positioning of papers 22.02 State methods of calculating the quantity of paper 22.03 Describe methods of marking a horizontal line 22.04 State the purpose of a plumb bob, and spirit level and when they should be marked on a wall 22.05 Describe the sequence of pasting paper	1	5

	22.06 Outline the method of checking if the paste is of the correct consistency for the paper 22.07 State faults resulting from careless pasting and describe their prevention and repair 22.08 Outline the importance of ensuring pasted edges are always aligned after folding	1	
	22.09 Explain the causes of defects after hanging and how they can be prevented 22.10 List the implications of not maintaining the cleanliness and/or sharpness of paperhanging tools		
23.01 Produce quality finish ground coats for painted decorative work	23.01 Describe preparation processes to be used prior to the application of ground coats for decorative work	1	1.6
	23.02 Describe defects that may occur in the range of decorative work if the ground coat finish is not of a high quality		
	23.03 Describe how the application method may affect the quality of the finished work		
	23.04 Explain the benefits of using a stipple brush or roller to provide the finish for some ground coats		
	23.05 State the appropriate coating types for use as ground coats for painted decorative work		
24.01 Produce broken colour effects using acrylic and oil based scumbles	24.01 List materials that may be used for producing broken colour effects	1	3.3
	24.02 State the difference between a glaze and a scumble		
	24.03 State methods of extending and reducing the drying time of oil-based and acrylic scumbles		
	24.04 State factors for the selection of materials for broken colour work		
	24.05 Explain why it may be advantageous to prepare more than the calculated quantity of scumble for a piece of work		
	24.06 State how a uniform effect is produced when broad areas of broken colour are to be	1	

	produced		
	24.07 Describe the effect incorrect viscosity of the scumble has on the appearance of the finished work		
	24.08 State application faults which may result in uneven pattern effect and how these faults may be prevented		
	24.09 State the difference between opaque and translucent in relation to surface coatings		
	24.10 State problems which may result from the careless removal of masking material		
	24.11 Describe the cleaning and storage of tools and equipment following use in oil-based scumble		
25.01 Single colour stencils	25.01 List stencil types	1	3.3
	25.02 Describe the difference between stencil types		
	25.03 State planning considerations when setting out stencils for wall areas		
	25.04 Describe the method used to mark out an area to be stencilled		
	25.05 State methods of securing a stencil to the surface prior to application	1	
	25.06 Describe how to prevent application faults.		
	TOTAL	33	55

Paper: **6314-102**

Paper title: **Carpentry and Joinery**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Underpinning Knowledge	No of items	%
12.01a Setting Out	12.01 Describe the importance of working drawings	1	3.3
	12.02 Identify the tools used to set out timber		
12.01b Setting Out	12.03 Describe the checks that can be used to ensure the accuracy of setting out tools	1	
13.01a Select hand tools	13.01 Describe the uses of woodworking hand tools	1	3.3
13.01b Select hand tools	13.03 Identify faulty hand tools	1	
14.01a Form woodworking joints	14.01 List woodworking joints	1	3.3
14.01b Form woodworking joints	14.02 Describe the uses of woodworking joints	1	
15.01a Select materials	15.01 Identify common defects found in timber	1	6.6
	15.02 Identify the properties of timber		
15.01b Select materials	15.03 Describe the methods of timber conversion	1	
	15.04 Describe the methods of seasoning		
15.01c Select materials	15.05 Describe the importance of storing materials correctly and securely	1	
15.01d Select materials	15.06 Describe the necessity of using the correct materials according to specification	1	
16.01a Maintain power tools	16.01 Describe different types of power sources used to operate portable power tools	1	6.6
	16.02 Explain the importance of having valid test date certificates		
16.01b Maintain power tools	16.03 Identify types of tooling and their uses	1	
	16.04 Describe the safety equipment required for each type of portable power tool		
16.01c Maintain power	16.05 Store portable power tools correctly	1	

tools	16.06 Explain the importance of maintaining tools in relation to the manufacturers' instructions		
16.01d Maintain power tools	16.07 Describe the current legislation associated with operating portable power tools	1	
17.01a Use power tools	17.01 Describe the damage caused to tooling when cutting, moulding, shaping and sanding different materials	1	5
17.01b Use power tools	17.02 Describe the hazards associated with debris projected from portable power tools	1	
	17.03 Explain the precautions which should be undertaken in ensuring the surrounding work area is kept free from debris		
17.01c Use power tools	17.04 Describe the current legislation associated with operating portable power tools	1	
18.01a Drill and insert fastenings	18.02 Identify suitable fixings for different materials to a range of surfaces	1	3.3
	18.03 Describe how to use a portable power drill safely		
18.01b Drill and insert fastenings	18.05 Describe how to use a powered nail gun safely	1	
	18.06 Explain methods of locating services		
19.01a Maintain and store hand tools	19.01 Describe the correct procedure to sharpen tools using a grinder and oilstone	1	6.6
	19.02 Identify different types of sharpening stones		
19.01b Maintain and store hand tools	19.03 State the legislation which governs the use of grinding wheels	1	
19.01c Maintain and store hand tools	19.04 Store hand tools correctly	1	
19.01d Maintain and store hand tools	19.05 Describe the types of handsaw	1	
	19.06 Describe the method for sharpening hand held drills		
20.01a Use handsaws	20.01 Identify different types of handsaw	1	5
	20.02 Explain the purposes of the different types of handsaw		
20.01b Use handsaws	20.03 Explain why the shape and size of a saws' teeth have different uses	1	
20.01c Use handsaws	20.04 Describe the correct method of using a handsaw	1	

	20.05 Identify the hazards associated with using a handsaw incorrectly		
21.01a Use planes	21.01 Identify the different types of plane and describe what they are used for	1	5
	21.02 Describe how to plane timber to form a face side and face edge		
21.01b Use planes	21.04 Describe how to form a rebate using a hand plane	1	
	21.05 Describe how to form grooves using a hand plane		
21.01c Use planes	21.06 Describe how to plane a curved surface using a hand plane	1	
22.01a Use handheld drill	22.01 Describe how to use hand held drills	1	3.3
	22.02 Identify the types of bits used to drill holes into timber and manmade products		
22.01b Use handheld drill	22.04 Describe the most appropriate method for drilling through timber and manmade products	1	
	22.05 Identify suitable holding devices		
23.01a Use woodworking chisel	23.01 Identify the different types of chisel	1	3.3
	23.02 Describe how to form a mortice using a hand held chisel		
23.01b Use woodworking chisel	23.03 Describe the safest method for carrying a chisel	1	
	23.04 Identify the common uses of a chisel		
	TOTAL	33	55

Paper: **6314-103**

Paper title: **Plastering**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Underpinning Knowledge	No of items	%
12.01 Select tools and equipment-	12.01 Identify background surfaces 12.02 State methods of removing existing plaster by hand and machine 12.03 State methods of cleaning and disposal of debris including cleaning equipment	2	3.3
13.01 Prepare background surfaces to receive solid plasterwork	13.01 State the reason for controlling suction 13.02 Identify backgrounds of different porosities 13.03 State the reason for forming a mechanical key 13.04 State the reason for applying bonding agents 13.05 State the reason for applying spatterdash / stipple coats 13.06 Identify common faults caused from backgrounds that are badly prepared 13.07 State the method of cleaning down backgrounds 13.08 Identify backgrounds that require special treatments 13.09 Select suitable treatments for backgrounds 13.10 State reasons for and methods of ensuring a clean workstation	1 1 1 1 1 1 1 1 1 1	6.6
14.01 Select resources for mixing	14.01 State the procedure for setting up a mixing area 14.02 State the purpose of manufacturers operating instructions for materials and equipment 14.03 State the method of protecting materials 14.04 State the regulation relating to power mixing tools and explain its importance 14.05 Demonstrate knowledge of relevant power tools and power supplies	1 1 1	3.3 3.3
15.01	15.01 State methods of mixing materials	1	5

Prepare and mix materials	15.02 State the effects of either under or over mixing materials		
	15.03 State the properties of additives	1	
	15.04 List current regulations	1	
	15.05 Identify hazards during the mixing operations		
16.01 Interpret information relating to the positioning of board materials and thickness of plaster coats	16.01 State the types of drawings used in construction	1	3.3
	16.02 State the purpose of assembly drawings		
	16.03 State the purpose of a specification	1	
	16.04 State the importance of the compatibility in materials		
	16.05 State the purpose of a schedule		
17.01 Select materials and components	17.01 State the types and size of sheet materials	1	3.3
	17.02 State materials used for jointing	1	
18.01 Prepare and apply sheet materials and plasters to internal backgrounds	18.01 State the effect of using out of date plasters	1	5
	18.02 Describe the correct storage of plasters		
	18.03 State the reasons for storing plasters in date order		
	18.04 State the importance of ensuring the compatibility of backgrounds and finish plaster to be applied	1	
	18.05 State the limitations and use of materials		
	18.06 State the purpose and use of Expanded metal lath (EML) strips	1	
	18.07 State the purpose and use of beads and trims		
19.01 Apply one and two coat plaster to internal brick or block backgrounds	19.01 State the purpose of Expanded metal lath (EML) in relation to two coat work	1	6.6
	19.02 State the correct hand tools for two coat work	1	
	19.03 State the correct equipment for two coat work		
	19.04 State methods of application for one and two coat work.	2	
	19.05 State the reason for dubbing out coats		

20.01 Select materials and components	20.01 State the purpose of tools	1	20	
	20.02 State the purpose of technical literature	1		
	20.03 State the reason for the use of a flood mould	1		
	20.04 State the purpose of reinforcement	2		
	20.05 State where reinforcement is applied			
	20.06 State the purpose of release agents	1		
	20.07 List the uses of additives			
	20.08 List the uses of release agents			
	20.09 State the type of casting plaster used	1		
21.01 Produce plasterwork components	21.01 State methods of casting from flood moulds	2	6.6	
	21.02 State the types of flexible moulds	1		
	21.03 State the methods used for storing and drying casts	1		
	TOTAL	33	55	

Paper: **6314-104**

Paper title: **Bricklaying**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Underpinning Knowledge	No of items	%
12.01 Select the required quantity and quality of resources to construct cavity walling and form joint finishes	12.01 Identify the resources required for erecting cavity walling and forming joint finish 12.02 Identify the working characteristics of the resources required for constructing cavity walling 12.03 Identify ways of carrying out checks on resources, required for constructing cavity walling 12.04 Identify type, size, and position of walling materials, components, tools and equipment.	4	6.6
13.01 Construct cavity walling straight lengths and, form joint finishes to working instructions	13.01 Set out cavity walls, position bricks, blocks, mortar and components, ready for use 13.02 Identify tools and equipment used to transfer datum heights 13.03 Identify methods used to transfer datum heights 13.04 State methods of erecting basic cavity walling to given datum heights 13.05 Describe methods for the provision of damp proof barriers (in materials)	1	6.6
	13.06 Describe method of establishing face bonds for walling 13.07 Describe reasons for the use of broken bond 13.08 Identify appropriate methods of keeping cavity's clean	1	
14.01 Construct cavity walling return corners and form joint finishes to working instructions	14.01 Identify tools and equipment and methods used to transfer datum heights 14.02 Identify methods of cutting components by hand 14.03 Describe methods for the provision of damp proof barriers (in turning corners)	1	6.6

	14.04 State the types, uses, methods and limitations of produce joint finishes to brick and block walling		
	14.05 Describe broken bond (turning corners)	1	
	14.06 Describe the methods used to maintain industrial standards when erecting basic cavity walling (turning corners)		
	14.07 Describe the function of wall ties	1	
15.01 Interpret given instructions to establish setting out work to be carried out	15.01 Describe the type of drawings and conventions commonly used	1	1.6
	15.02 Describe the purpose of different types of drawing		
	15.03 State scales commonly applied to drawing		
	15.04 Describe methods of reading and taking measurements from drawings		
	15.05 List a range of information sources		
	15.06 Describe methods of reporting inaccuracies in information sources		
16.01 Select required quantity and quality of resources when assisting in the setting out and building of basic masonry structures	16.01 Identify the resources required for carrying out setting out and building activities	1	1.6
	16.02 Identify the resources required for transferring levels		
	16.03 Identify ways of carrying out checks on resources used for levelling		
	16.04 State the reasons for site clearance, before setting out activities commence		
	16.05 State the reasons for locating existing services, before setting out activities commence.		
17.01 Assist in the setting out and building of basic masonry structures to	17.01 State the importance of setting out building in correct location	1	3.3
	17.02 State the purpose and importance of the building line		

working drawings	17.03 State reasons for allowing working space between profiles and excavation	1	6.6
	17.04 State the purpose of datum heights		
	17.05 Explain the importance of protecting setting out work		
	17.06 Explain how setting out information is transferred onto foundation concrete		
	17.07 Identify methods used for setting out right angled corners		
	17.08 Describe the importance of dimensional accuracy		
	17.09 Identify methods used to transfer levels from datum		
	17.10 State reasons for, and uses of, single wall and corner type profiles		
	17.11 Describe methods of locating walling and trench positions onto single wall and corner type profiles		
	17.12 State reasons for carrying out regular checks to confirm that setting out and building work conforms to instructions		
	17.13 Describe the importance of following correct procedures when reporting errors or other circumstances, which may affect programme of work		
	18.01 Interpret working drawings related to Blocklaying workshop activities		
18.01 Set out blockwork to comply with workshop drawings	18.02 Describe scales commonly applied to drawings used in Blocklaying workshop		
	18.03 List a range of information sources		
	18.04 Describe methods of reporting inaccuracies in information sources.		
	18.05 Identify hazards associated with laying blocks and forming joint finishes	2	
	18.06 Identify the resources required for erecting block walling and forming joint	1	

	finish		
19.01 Set out and build block walling using dense concrete blocks	<p>19.01 Identify location of position blocks, mortar and components, ready for use</p> <p>19.02 Identify methods of cutting and preparing components by hand</p> <p>19.03 Describe method of establishing bonds for block walling</p> <p>19.04 Identify correct use of hand tools and equipment, when constructing block walling</p> <p>19.05 Describe methods used to maintain industrial standards when erecting blockwork</p> <p>19.06 Identify safe working practices when erecting walling at height</p> <p>19.07 State sequence of work and recommended heights of walling constructed at any one time.</p> <p>19.08 State reasons for carrying out checks to confirm that work conforms to given instructions</p>	1	3.3
20.01 Set out and build block walling using lightweight insulation blocks	<p>20.01 Identify methods of cutting and preparing components by hand</p> <p>20.02 Identify correct use of hand tools and equipment, when constructing block walling</p> <p>20.03 Describe methods used to maintain industrial standards when erecting blockwork</p> <p>20.04 Identify safe working practices when erecting walling at height</p> <p>20.05 State sequence of work and recommended heights of walling constructed at any one time.</p> <p>20.06 State reasons for carrying out checks to confirm that work undertaken conforms to given instructions</p>	1	3.3
21.01 Set out brickwork to	21.01 Interpret working drawings related to Bricklaying workshop activities	2	3.3

comply with workshop drawings	21.02 Describe scales commonly applied to drawings used in Bricklaying workshop		
	21.03 List a range of information sources		
	21.04 Identify hazards associated with laying bricks and forming joint finishes		
	21.05 Describe methods of reporting inaccuracies in information sources.		
	21.06 Identify the resources required for erecting brick walling and forming joint finish		
22.01 Build straight walls in half brick stretcher bond	22.01 Identify methods of cutting and preparing components by hand	1	3.3
	22.02 Describe method of establishing bonds for straight brick walling		
	22.03 Identify correct use of hand tools and equipment, when constructing half brick walling		
	22.04 Describe methods used to maintain industrial standards when erecting brickwork		
	22.05 State reasons for carrying out checks to confirm that work undertaken conforms to given instructions		
23.01 Build return corners in half brick stretcher bond	23.01 Identify methods of cutting and preparing components by hand	1	1.6
	23.02 Describe method of establishing bonds for return corners		
	23.03 Identify correct use of hand tools and equipment, when constructing half brick walling		
24.01 Build straight walls in one brick walling	24.01 Identify methods of cutting and preparing components by hand	1	1.6
	24.02 Describe method of establishing bonds for one brick walling		
	24.03 Identify correct use of hand tools and equipment, when constructing one brick walling		
25.01 Build return corners in	25.01 Identify methods of cutting and preparing components by hand	1	1.6

one brick walling	25.02 Describe method of establishing bonds for return corners		
	25.03 Identify correct use of hand tools and equipment, when constructing one brick walling		
26.01 Form junctions in brick and block walling	26.01 Identify methods of cutting and preparing components by hand	1	3.3
	26.02 Identify correct use of hand tools and equipment, when constructing junctions		
	26.03 Describe method of establishing bonds for junctions	1	
	<b>TOTAL</b>	33	55

Paper: **6314-105**

Paper title: **Construction & Civil Engineering**

Duration: **90 minutes**

Assessment type: **Multiple Choice**

No of items: **60**

Outcome/ Section	Knowledge group	No of items	%
12.01 Know how to select materials and components for cutting	12.01 describe how to select materials and components to be cut, including: bricks, blocks, brick pavers, concrete paving slabs/flags, concrete edging stones, timber sheet materials (ie external plywood, lengths of rough sawn timber), steel reinforcement matting, steel reinforcement rods, clay and plastic drainage pipes and channels	1	1.6
13.01 Know how to measure, mark out, position and secure materials and components for cutting	13.01 describe methods of accurately measuring and marking out the quantity of materials and components to be cut	1	1.6
	13.02 describe methods of setting up suitable cutting aids to safely secure materials and components		
	13.03 explain the importance of safely positioning and securing materials and components in readiness for cutting		
14.01a Know how to cut materials and components using hand tools	14.01 describe types and purposes of hand tools and equipment used for cutting materials including: club hammers, bolster chisels, masonry hand saw, timber hand saw, hacksaw, clay pipe cutters, masonry block cutters, steel cutters, craft knives	1	3.3
	14.02 explain the importance of ensuring the types of materials and components to be cut are compatible with the hand tools		
14.01b Know how to cut	14.03 describe how to check hand tools for defects prior to	1	

	<p>materials and components using hand tools</p> <p>use, including: mushrooming on chisel heads, loose heads on hammers, split or damaged hammer shafts, loose handles on saws, blunt or broken cutting blades</p>		
	<p>14.04 describe methods for cutting materials and components using hand tools</p>	1	3.3
	<p>15.01a Know how to cut materials and components using portable power tools</p> <p>15.01 describe types and purposes of portable power tools and equipment used for cutting materials, including: angle grinders, petrol cutters, voltage transformers, steel cutting blades, masonry cutting blades</p>		
	<p>15.02 explain the importance of ensuring the types of materials and components to be cut are compatible with the power tools</p>		
	<p>15.03 describe the pre-start checks to be carried out on portable power tools and equipment, including: leads free from cuts and frayed areas, transformer positioned and connected correctly, correct type of disc fitted, cutting disc checked for defects, guards correctly secured, starting pull cords on petrol cutters not frayed, fuel leaks</p>		
	<p>15.04 describe the methods of cutting materials and components using portable power tools</p>	1	
	<p>15.05 explain the importance of protecting resources and the surrounding area from damage during cutting activities.</p>		
<p>16.01a Know how to lay and compact over-site/sub-base materials</p>	<p>16.01 describe how to select the quantity and quality of materials to be used, including: types of hardcore (ie crushed stone), blinding, DPC membranes, dry, lean concrete mixes</p>	1	8.3

16.01b Know how to lay and compact over-site/sub-base materials	16.02 identify types and purposes of hand tools, power tools and ancillary equipment for laying and compacting sub-base materials, including: shovels, rakes, wheelbarrows, hammers, compacting/vibrating plates, tamper blocks, straight edges/screed battens, levels, string lines	1	
16.01c Know how to lay and compact over-site/sub-base materials	16.03 describe methods of laying over-site/sub-base materials, including: placing of sub-base materials to levels and alignment	1	
16.01d Know how to lay and compact over-site/sub-base materials	16.04 explain the importance of protecting the work, resources and surrounding areas from damage arising from work activities	1	
16.01e Know how to lay and compact over-site/sub-base materials	16.05 identify methods of protecting work and surrounding areas from damage, including: protection of kerbs, access covers and manhole covers	1	
17.01a Know how to lay, compact and finish concrete	17.01 describe how to select the quantity and quality of concrete to be placed	1	8.3
	17.02 identify types and purposes of hand tools, power tools and ancillary equipment for laying, compacting and finishing concrete, including: shovels, rakes, barrows, floating trowels tampers-including powered tampers, brushes		
17.01b Know how to lay, compact and finish concrete	17.03 describe methods of erecting basic formwork / shuttering, including: establishing correct levels and alignment to receive concrete, securing of formwork/shuttering and any treatment of formwork / shuttering for ease of removal upon completion of the work	1	
17.01c Know how to lay, compact and finish	17.04 describe methods of laying and compacting concrete, including: placing of concrete	1	

concrete	whilst working to levels and alignments and compacting using tampers and vibrators		
17.01d Know how to lay, compact and finish concrete	17.05 describe how to correct surface finish , including: tamper, trowel and sealing the concrete	1	
17.01e Know how to lay, compact and finish concrete	17.06 explain the importance of protecting the work, resources and surrounding areas from damage arising from work activities	1	
	17.07 identify methods of protecting concrete from contamination, use curing methods appropriate to climate conditions including: polythene sheeting, Hessian and curing compounds.		
18.01a Know how to lay, compact and finish screeds	18.01 describe how to select the quantity and quality of screed to be placed	1	5
	18.02 identify types and purposes of hand tools, power tools and ancillary equipment for laying, compacting and finishing screeds, including: shovels, wheelbarrows, tampers, floating trowels		
18.01b Know how to lay, compact and finish screeds	18.03 describe methods of laying screeds whilst working to levels and alignments and compacting	1	
	18.04 describe how to correct surface finish, including: tamper, trowel and sealing the screed		
	18.05 explain the importance of protecting the work, resources and surrounding areas from damage arising from work activities		
18.01c Know how to lay, compact and finish screeds	18.06 identify methods of protecting work and surrounding areas from damage	1	
	18.07 identify methods of protecting screed from contamination, including curing methods to be used		
19.01a Know how to mix concrete and mortar by hand	19.01 describe how to select the quantity and quality of materials to be used, including: cement, aggregates, water, additives as specified	1	5

	19.02 identify types and purposes of hand tools and equipment for mixing concrete and mortar, including: shovels, buckets, gauging equipment		
19.01b Know how to mix concrete and mortar by hand	19.03 describe the methods used gauging materials to be mixed, including: aggregates, cement, water and additives	1	
	19.04 describe the methods of mixing concrete and mortar by hand		
19.01c Know how to mix concrete and mortar by hand	19.05 explain the importance of protecting resources and surrounding areas from damage arising from mixing activities	1	
20.01a Know how to mix concrete and mortar by mechanical methods	20.01 describe how to select the quantity and quality of materials to be used, including: cement, aggregates, water, additives	1	5
	20.02 identify types and purposes of hand tools and mechanical mixing equipment used for mixing concrete and mortar, including: shovels, buckets, gauging equipment, tilting drum mixer, voltage transformer, extension leads		
	20.03 describe how to carry out pre-start checks on mechanical mixing equipment and ancillary equipment including; leads free from cuts and frayed areas, transformer positioned and connected correctly, stop and start buttons in good order, mixer safely positioned and secured, fuel leaks		
20.01b Know how to mix concrete and mortar by mechanical methods	20.04 explain the importance of reporting faults to authorised person	1	
	20.05 describe the methods used for gauging materials to be mixed including aggregates, cement, water and additives		
	20.06 describe methods of mixing concrete and mortar by mechanical mixer		
20.01c Know how to mix concrete and mortar by mechanical methods	20.07 explain the purpose of protecting resources and surrounding areas from damage arising from mixing activities	1	

21.01a Know how to mix plasters by hand and mechanical methods	<p>21.01 describe how to select the required quantity and quality of materials to be used, including: lightweight plasters including backing and finishing types, water</p> <p>21.02 identify types and purposes of hand tools, mechanical mixing equipment and ancillary equipment for mixing lightweight plasters, including: Shovels, buckets, gauging equipment, mixing trough, whisk drills, voltage transformer, extension leads</p> <p>21.03 describe how to carry out pre-start checks on mechanical mixing equipment , including: leads free from cuts and frayed areas, transformer positioned and connected correctly, stop and start buttons in good order, whisk attachments adequately secured</p>	1	5
21.01b Know how to mix plasters by hand and mechanical methods	<p>21.04 explain the importance of reporting faults to authorised person</p> <p>21.05 describe the methods used for gauging materials to be mixed</p>	1	
21.01c Know how to mix plasters by hand and mechanical methods	<p>21.06 describe the methods used to mix lightweight plasters by hand and mechanical methods to specification, including: the use of shovels, mixing troughs, buckets and mechanical whisks</p> <p>21.07 explain the purpose of protecting resources and surrounding areas from damage arising from mixing activities</p>	1	
22.01a Know how to prepare powder based and liquid based construction related materials	22.01 describe how to select the quantity and quality of materials to be used, including: resins, bonding agents, colourings, water-proof coatings	1	8.3
22.01b Know how to prepare powder based and liquid based construction related materials	22.02 identify types and purposes of mixing tools and equipment used for preparation of powder based and liquid based materials, including: mixing receptacles, stirring tools,	1	

	agitators, blending tools, gauging/measuring equipment		
22.01c  Know how to prepare powder based and liquid based construction related materials	22.03 describe the methods used for gauging materials to be prepared	1	
22.01d  Know how to prepare powder based and liquid based construction related materials	22.04 describe the methods used to prepare powder based and liquid based materials to specification, including: resins, bonding agents, colouring and water-proof coatings	1	
22.01e  Know how to prepare powder based and liquid based construction related materials	22.05 explain the purpose of protecting resources and surrounding areas from damage arising from preparation activities	1	
<b>TOTAL</b>		33	55