# CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC) NORTHERN ZONE JOINT EXAMINATIONS SYNDICATE (NZ-JES)



#### FORM TWO PRE - NATIONAL ASSESSMENT AUG 2025

# **BUILDING CONSTRUCTION**

#### MARKING SCHEME FORM

### 1. (0.75 marks) @ roman

i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	х.
В	A	С	В	С	A	A	A	В	С

#### 2. (0.75marks) @ roman

List A	i.	ii.	iii.	iv	v	vi	vii	viii	ix	X
List B	H	M	Q	0	F	E	K	I	P	N

## **SECTION B**

**3.** A) Is a preliminary phase of architectural process dedicated to the study of climate, geography, historical, legal and infrastructure of the site

(2.6marks)

B) Is to provide the information about the site assets and liability before the design process

OR

To allow the designer to improve the project

(2.6marks)

OR

Designer to anticipate any potential problems to the project

- C) i) Direct method
  - ii) Boring holes or semi direct method

(2.6marks)

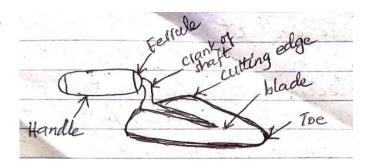
iii) Indirect method

	STUDENT ASSESSMENT NUMBER
4.	A)i)Assemble buildings ii) Domestic dwelling buildings iii) educational building iv) Service buildings v) Industrial Buildings vi) Storage buildings vii) Institutional buildings viii) Hazardous buildings
	B) i) Sub structure ii) Super structure (3.85marks)
5.	A) Is the moisture cement, sand and water
	OR Is the mixture of cement, lime, sand and water (2.6marks)
	B) i) Cement sand mortar  ii) Lime sand mortar  iii) Compo mortar= Cement, lime, sand mortar  iv) Clay or soil mortar
6.	C) i) Used in wall plastering and rendering or pointing  ii) Used as scorched on the floor surface (2.6marks)  iii) Used for joining bricks and blocks or stones on wall bonding or foundation  iv)Used as DPC and blinding  A) Is the arrangement of bricks or blocks in to particular patterns in order to avoid vertical
	straight joint (2.6marks)  B) i. To carry the above loads to the equal area without causing depression or settlement
	ii. To strengthen the wall when well fabricated to prevent overturning (2.6 mark
	C) i. Stretcher bond ii. Header bond (2.6marks) iii. Flemish bond iv. English bond
7.	A i. Architect-Is responsible for design of structure and structure is constructed with owners' specification and advices the client  ii. Quantity surveyor –Is the one who prepare bills of quantity and all cost of the project
	iii. Clark of work – Is the client's representative on site  (3.85marks)
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construction skill in particular trade
v. General foreman – Is the in change of all site construction works under technician

iv Apprentice – Is the one who attending the site work for the purpose of learning the basic

# B) (3.85marks)



- 8. A) i) Ova roll or overcoat- To protect body
  - ii) Helmet- To protect head
  - iii) Gun Boot- To protect feet

(3.85marks)

- iv)Gloves-To protect hands from sharp things and chemicals
- v) Gavages-To protect eyes
- vi) Face mask-To protect noise and mouth
- vii)Muff- To protect ear
- B. i) Personal protective equipment
  - ii) Occupational health and safety authority
  - iii) Contractors' registration Board

(3.85marks)

- iv) Engineers' registration Board
- v) Architects, engineers and quantity surveyors' registration board
- 9. A. i. improve strength and stiffness
  - ii. Reduce weight
  - iii. Enhance durability

(3.85 marks)

- iv. dimensional stability
- v. Improved workability
- vi. better finishing

B. i. Air drying

(3.85marks)

- ii. kiln drying
- iii. chemical seasoning

#### **SECTION C**

### 10 a) (i) Five properties of green concrete (5marks )

- -Workability of fresh concrete: The workability of concrete refers to how easy or difficult is to handle, transport and place concrete. The amount of water should be in the right proportion.
- -Concrete compaction: Concrete compaction entails releasing trapped air from the concrete. The air became trapped in the concrete during pouring process.
- -Consistency: The degree of plasticity or texture of cement concrete is defined as consistency. It refers to the relative flow ability of freshly mixed concrete or mortar.
- -Segregation of fresh concrete: The. separation of the constituent materials of concrete is known as segregation.
- -Stability: refers to the ability of the concrete to remain stable, homogeneous and coherent mass without segregation during handling and vibrations.

-Mobility of fresh concrete	JIVIBER
(ii) Five importance's concrete curing	
-Durability improvement	
-Minimizes shrinkage cracks	(5marks)
-Ensures proper bonding	
-Prevents dusting	
-Reduces permeability	
-Strength development	
-Improves surface hardness	
b)-To prevent weak concrete	
-To ensure proper bonding	
-To prevent long time deterioration	
-To maintain uniformity in the mix	(5marks)
-To avoid chemical reactions	
-To avoid delayed setting and hardening	