THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

FORM TWO NATIONAL ASSESSMENT

071 BUILDING AND CONSTRUCTIONS

Time: 2:30 Hours **Year: 2021**

Instructions

1. This paper consists of sections **A, B** and **C** with a total of **ten (10)** questions**.**
2. Answer **all** questions.
3. Section **A** and **C** carry **fifteen (15)** marks each, section **B** carries **seventy (70)** marks.
4. Cellular phones and any unathorized materials are **not** allowed in the assessmenmt room.
5. Write your **Assessment Number** at the top right hand corner of every page.

FOR ASSESSOR'S USE ONLY		
QUESTION NUMBER	**SCORE**	**ASSESSOR'S INITIALS**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		



SECTION A (15 MARKS)

Answer **all** questions in this section

1. Choose the correct answer from the given alternatives and write its letter in the box provided.

   i) How would you categorize the construction works involving water supply, drainage systems, sanitation, electric supply and installation of lifts?

   A. Building finishes

   B. Building services

   C. Building specification

   D. Building components.

   ii) The portion of a building structure between the ground surface and the floor level immediately just above the ground is known as

   A. Foundation

   B. superstructure

   C. floor

   D. plinth

   iii) What is the function of fillers in the moulding composition of plastics?

   A. To improve mechanical properties.

   B. To make plastic soft, flexible, flexible and improve toughness.

   C. To give the required colour to the plastic.

   D. To facilitate moulding operations by increasing the flow of plastic mix.

   iv) Why lead pipe is not recommended for the domestic water supply system?

   A. It has corrosive effect.

   B. It is highly flexible.

   C. It has poisoning effect.

   D. It is light in weight.

v) Suppose you are supervising a site preparation for construction of a class room; what will be the first task to be performed on a site?

A. Excavation of trenches.

B. Timbering to trenches.

C. Back filling.

D. Site clearence.

vi) Which group of buildings include a Parliament house?

A. Sanitaria

B. Institutional

C. Assembly

D. Mercantile.

vii) The weight of all walls, partitions, floors, roofs and other permanent structures in the building are termed as

A. Live load

B. Dead load

C. Point load

D. Effective load.

viii) What is the disadvantage of tubular scaffold as used in building construction?

A. Have higher fire resisting qualities.

B. Are easy dismantling.

C. Have high initial cost.

D. Have greater durability.

ix) When some one suddenly falls ill or injured in the workshop, what kind of assistance needed before treatment process?

A. First aid

B. Clinical

C. Medical

D. Administration

x) Excavation of foundation trenches in ground having high water table or water logged area needs to be dewatered. What is the method used for shallow excavation ?

A. Well point dewatering system.

B. Ditches and sumps dewatering system.

C. Vacuum method dewatering system.

D. Electro-osmosis method dewatering system

2. Match items (i - v) in **List A** with the corresponding responses in **List B** by writing the letter of the correct response in the table provided.

LIST A	**LIST B**
i) A wall built with two different materials.	A. Parapet
ii) A wall built with two leaves.	B. Composite wall
iii) A wall projecting above the roof level.	C. Cavity wall
iv) A wall built to support a timber floor.	D. Honey combing wall
v) A wall designed to curves in and out along its length.	E. Serpentine wall
	F. Boundary wall
	G. Fender wall
	H. Fence wall

ANSWERS

List A	(i)	(ii)	(iii)	(iv)	(v)
List B					

SECTION B (70 MARKS)

Answer **all** questions from this section

3. Walls of different types made up of different materials are adopted in the constructions of buildings to save various functions:

   a) What are the four functional rquirements of the partition walls?

      (i) .....

      (ii) .....

      (iii) .....

      (iv) .....

   b) Briefy describe four types of partition walls based on the materials of constructions

      (i) .....

      (ii) .....

      (iii) .....

      (iv) .....

4. (a) Stones are building materials used since ancient times.what are the four reasons that make stones useful materials in constructions?

      (i) .....

      (ii) .....

      (iii) .....

      (iv) .....

   (b) Briefly describe three types of stones used in the constrcutions of building

      (i) .....

      (ii) .....

      (iii) .....

(c) Identify three conditions that deteriorates stones and show how it deteriorate stones

(i) .....

(ii) .....

(iii) .....

5. You visited a site where a building of two floors requires temporaray support for the constructions to be continued

a) With aid of awell labeled sketch, briefly explain three types of shoring to be used:

(i) .....

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(ii) .....

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(iii) .....

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(b) Why scaffold is used to accomplish a work?

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6. A constructor asked you to purchase timber for constructions works

(a) what factors will you consider in making a choice of a quality timber?

(i) .....

(ii) .....

(iii) .....

(iv) .....

(b) What factors that will oberve in deciding the quality of a timber to choose?

(i) .....

(ii) .....

(iii) .....

(iv) .....

7. Glasses are used as a part of building components

(a) why someone should opt for glasses in building?

(i) .....

(ii) .....

(iii) .....

(iv) .....

(b) Give six types of glasses that can be used and show how they differe from one another

(i) .....

(ii) .....

(iii) .....

(iv) .....

8. You are at the construction site where there is an argument concerning the appropriate procedures of making concrete. Identify fivestages of making concrete

(i) .....

(ii) .....

(iii) .....

(iv) .....

(v) .....

9. Suppose you are appointed as a team member for analyzing the constructions of school toilet:

(a) What four functions of foundatins will you consider?

(i) .....

(ii) .....

(iii) .....

(iv) .....

(b) Outline six factors which will make foaundation to fail.

(i) .....

(ii) .....

(iii) .....

(iv) .....

SECTION C (15 Marks)

Answer **all** questions

10. Mtakuja Village plan to make a new police station with single room measured $2mx4m.$

(a) Describe two main activities to be done on site before the comencement of the setting out

i) .....

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ii) .....

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(b) With the aid of well labeled sketches, describe the procedures which should be followed in setting out the building

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(c) If a site plan measured $15mx10m$ prepare a well labeled sketch plan wich shows six neccessary site accomodation services.

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