# THE 47 COUNTIES C1 SCHOOLS' JOINT NATIONAL SBA ASSESSEMENT

## SENIOR SCHOOL ASSESSMENT

## TERM 2: MIDTERM ASSESSMENT 2026

### GRADE 10 – BUILDING CONTRUCTION 006 JUNE

**Time:** 2 Hours

### LEARNER'S DETAILS

**Name:** _____. **School:** _____.

**Assessment Number:** _____. **Date:** _____.

**School Code:** _____. **Signature:** _____.

### INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your stream in the spaces provided.
3. Write your admission number and the date of the assessment in the spaces provided.
4. This paper consists of two sections: A and B.
5. Answer all questions in section A and section B.
6. Answer the questions in English.
7. All answers MUST be written in the spaces provided in the paper.
8. Do NOT remove any page from this question paper.

### FOR OFFICIAL USE ONLY (EXAMINER'S USE)

| SECTION | SECTION A | SECTION B | % SCORE | EE1 | EE2 | ME1 | ME2 | AE1 | AE2 | BE1 | BE2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SCORE RANGE | 30 MARKS | 50 MARKS | | 90-100 | 75-89 | 58-74 | 41-57 | 31-40 | 21-30 | 11-20 | 1-10 |
| POINTS | | | | 8 POINTS | 7 POINTS | 6 POINTS | 5 POINTS | 4 POINTS | 3 POINTS | 2 POINTS | 1 POINT |
| LEARNER'S TOTAL SCORE | | | | | | | | | | | |

## SECTION A (30 MARKS)

Answer ALL questions in this section.

**1.** At Nairobi School, Grade 10 learners are introduced to basic concepts in building construction.

a) Define a building. (1 mark)

_____

_____

b) State TWO functions of buildings in everyday life. (2 marks)

i. _____.

ii. _____.

**2.** Learners at Mama Ngina Senior School are studying different categories of buildings and their uses.

Match the type of building with its description:

| Type of Building | Description |
|---|---|
| (i) Residential | Used for trade activities |
| (ii) Commercial | Used for human shelter |
| (iii) Industrial | Used for manufacturing |

**3.** At Kisumu Boys Senior School, students explore how buildings have changed over time.

State ONE characteristic of:

a) Pre-colonial buildings (1 mark)

_____

_____.

b) Modern buildings (1 mark)

_____

_____.

**4.** Learners at Moi Girls Eldoret are learning about the structure of buildings.

Name TWO [illegible]

**5.** At Kenya Institute of Construction, trainees study factors influencing safe and suitable building sites.

State THREE factors to consider when selecting a building site in Kenya.

i. _____.

ii. _____.

iii. _____.

**6.** Learners at Nanyuki Senior School are introduced to tools used before construction begins.

Name TWO tools used during site preparation.

i. _____.

ii. _____.

7. At Machakos Senior School, students are taught how to prepare level ground for construction.

State TWO methods used to level a building site.

i. _____.

ii. _____.

8. Students at Nakuru School learn about safety and environmental practices at construction sites.

State TWO safe ways of disposing waste at a construction site.

i. _____.

ii. _____.

9. Grade 10 learners from Nyanturago Senior School, practiced the use of technical drawing instruments.

Identify the use of the following:

a) T-square (1 mark)

_____

_____

b) Compass (1 mark)

_____

_____

c) Set square (1 mark)

_____

_____

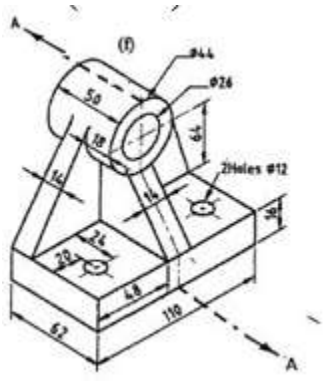
10. Students at Murang'a Senior school are introduced to 3D drawing techniques.

(a) State TWO characteristics of isometric drawings.

i. _____

ii. _____

(b) Figure 7 shows an isometric drawing of a block.




Draw: (6 marks)

**i.** Sectional front elevation along plane A – A.

**ii.** End elevation.

11. At Jomo Kenyatta Senior School, learners explore modern digital drawing methods.

a) State the meaning of CAD. (1 mark)

_____

_____

b) Name ONE type of CAD system. (1 mark)

_____

_____

12. Students at Bungoma Technical College study materials used in construction.

Name TWO materials used to make concrete.

i. _____

ii. _____

13. At Kericho Tea Senior School, learners are taught about structural support in buildings.

Name TWO types of building foundations.

**i.** _____

**ii.** _____

## SECTION B (50 MARKS)

*Answer ALL questions.*

**14.** A county government in Kenya plans to construct different types of buildings: a hospital, a factory, and residential houses.

a) Classify each building type. (3 marks)

| | Building type | Category |
|---|---|---|
| i. | | |
| ii. | | |
| iii. | | |

b) Explain TWO differences between pre-colonial and modern buildings. (4 marks)

**i.** _____

**ii.** _____

c) Describe THREE functions of buildings in the community. (3 marks)

**i.** _____

**ii.** _____

**iii.** _____

**15.** A contractor is preparing land for construction in Kiambu County.



(A)



(B)



(C)

a) Identify the use of each tool. (3 marks)

**A.** _____

**B**

b) Outline THREE steps involved in site preparation. (3 marks)

i. _____

ii. _____

iii. _____

c) State TWO dangers associated with poor site preparation. (2 marks)

i. _____

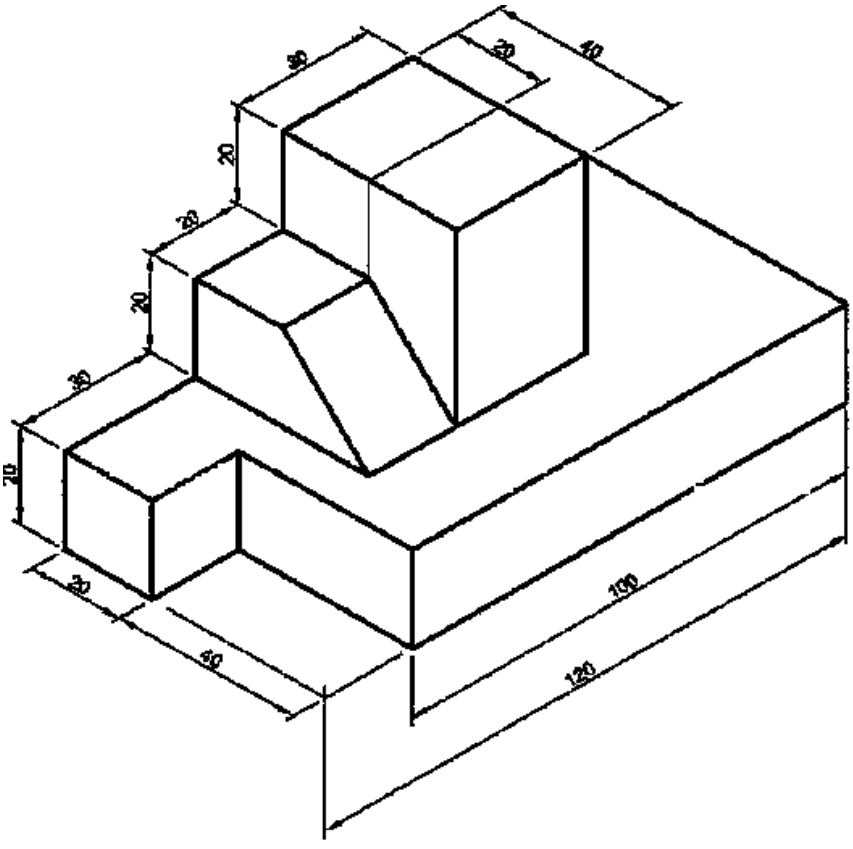
ii. _____

d) Explain TWO methods of levelling a site. (2 marks)

i. _____

ii. _____

**16. Amelia made the drawing shown below**



b) State THREE characteristics of this drawing. (3 marks)

i. _____

ii. _____

iii. _____

c) Name THREE drawing instruments used to produce it. (3 marks)

i. _____

ii. _____

iii. _____

d) Explain TWO advantages of using CAD in construction. (3 marks)

i. _____

ii. _____

**17.** A builder is constructing a house foundation using concrete.

a) List the FOUR main materials used in concrete. (2 marks)

i. _____

ii. _____

iii. _____

iv. _____

b) Arrange the following processes in the correct order: (4 marks)

| | | | | |
|---|---|---|---|---|
| ✓ Mixing | ✓ Placing | ✓ Batching | ✓ Curing | ✓ Compacting |

i. _____

ii. _____

iii. _____

iv. _____

v. _____

vi. _____

ii) Transporting_____

iii) Compacting_____

d) Explain ONE importance of curing concrete. (1 mark)

_____

_____

**18. Tondo visited various construction sites and identified the following types of construction foundations.**



(A)



(B)



(C)

a) Match each type of foundation with its description: (3 marks)

i. Supports load along a continuous strip : _____.

ii. Supports individual columns : _____.

iii. Covers the entire building area : _____.

b) Describe TWO uses of strip foundation. (2 marks)

**i.** _____

**ii.** _____

c) State THREE materials used in timbering. (3 marks)

**i.** _____

**ii.** _____

**iii.** _____

d) State whether the following statements are TRUE or FALSE: (2 marks)

i) Timbering is used to support trenches

# GRADE 10 INTER C1 SENIOR SCHOOLS END OF YEAR EXAMINATIONS

## KENYA CERTIFICATE OF BASIC EDUCATION

## SENIOR SCHOOL ASSESSMENT

## TERM 3: ENDTERM ASSESSMENT 2026

### GRADE 10 – BUILDING CONTRUCTION

**Time:** 2 Hours

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### SECTION A (30 MARKS)

Answer ALL questions in this section.

**1.** A group of Grade 10 learners at Itiero Senior visited a construction site in their locality. They observed residential houses, shops, offices and a school building under construction.

.....

**b)** State **two reasons why buildings are important in society**. (2 marks)

i. .....

ii. .....

**c)** Name **one type of building** used for each of the following purposes: (3 marks)

i. Residential .....

ii. Commercial .....

iii. Social .....

**2.** Buildings have developed from simple shelters such as caves and temporary huts to complex modern structures.

**a)** State **two early forms of shelter** used by human beings. (2 marks)

i. .....

ii. .....

**b)** Name **three basic components of a building**. (3 marks)

i. .....

ii. .....

iii. .....

**3.** A contractor intends to construct a classroom block on a piece of land that contains bushes, stones, loose soil and an old structure.

**a)** State **two activities carried out during site clearance**. (2 marks)

i. .....

ii. .....

**b)** Give **two reasons for setting out a building before excavation**. (2 marks)

i. .....

ii. .....

**c)** Name **one tool used in setting out a building**. (1 mark)

.....

.....

**b)** State **two types of lines commonly used in building drawings**. (2 marks)



S



T

S. .....

T. .....

**c)** State **one advantage of using a scale when preparing a building drawing**. (1 mark)

.....

**5.** A learner was given samples of cement, sand, ballast, timber and bricks for identification.

**a)** State **one use of cement in building construction**. (1 mark)

.....

**b)** State **one use of timber in building construction**. (1 mark)

.....

**c)** Give **two properties of good building sand**. (2 marks)

i. .....

ii. .....

**d)** State **one factor considered when selecting building materials**. (1 mark)

.....

**6.** During the construction of a foundation, a concrete mixture is prepared using cement, sand, coarse aggregate and water.

**a)** Name the **four main ingredients of concrete**. (4 marks)

i. .....

ii. .....

iii. .....

iv

**7.** A contractor is preparing trenches for the foundation of a single-storey building.

**a)** State **two factors that determine the depth of a foundation**. (2 marks)

i. .....

ii. .....

**b)** State **one function of a foundation**. (1 mark)

.....

**c)** Name **one material commonly used in foundation construction**. (1 mark)

.....

**8.** During excavation, the sides of a deep trench become unstable and begin to collapse.

**a)** What is **timbering**? (2 marks)

.....

.....

**b)** State **two reasons for timbering excavation sides**. (2 marks)

i. .....

ii. .....

**c)** State **one danger associated with unsupported excavations**. (1 mark)

.....

**9.** After the foundation concrete has gained sufficient strength, the mason begins constructing the foundation wall.

**a)** State **two functions of foundation walling**. (2 marks)

i. .....

ii. .....

**b)** Name **one material that can be used to construct foundation walls**. (1 mark)

.....

**c)** State **two functions of a ground floor**. (2 marks)

i. .....

**10.** A plumber is installing a water supply system in a newly constructed house.

**a)** Name **two tools below used in plumbing work**. (2 marks)



**M**



**N**

M. .....

N. .....

**b)** State **two safety precautions that should be observed when carrying out plumbing work**. (2 marks)

i. .....

ii. .....

**c)** Name **one material used for making water pipes**. (1 mark)

.....

**SECTION B: 50 MARKS**

**Answer ALL questions in this section.**

**11.** A community has acquired a piece of land on which a two-classroom block is to be constructed. The site is covered with vegetation and contains several stones. The contractor first prepares the site before setting out the building.

**a)** Explain **four activities that should be carried out during site preparation** before construction begins. (4 marks)

i. .....

ii. .....

**b)** Describe the procedure for **setting out a simple rectangular building**. (4 marks)

.....

.....

.....

.....

.....

.....

**c)** State **two precautions to observe during setting out**. (2 marks)

i. .....

ii. .....

**12.** A building technician has been asked to prepare a simple working drawing for a small house.

**a)** Differentiate between a **plan** and an **elevation** of a building. (4 marks)

**Plan:**

.....

.....

**Elevation:**

.....

.....

**b)** State **three types of information that may be shown on a building plan**. (3 marks)

i. .....

ii. .....

iii. .....

**c)** A wall measuring **6 metres** in actual length is represented by a line measuring **12 centimetres** on a drawing.

Determine the scale used. Show your working. (3 marks)

.....

.....

**13.** A contractor is constructing the foundation of a proposed classroom block. The concrete used for the foundation must be properly proportioned, mixed, placed and compacted.

**a)** Explain **four steps involved in preparing concrete for foundation work**. (4 marks)

i. .....

ii. .....

iii. .....

iv. .....

**b)** Explain **three reasons why concrete should be properly compacted** after placing. (3 marks)

i. .....

ii. .....

iii. .....

**c)** State **three factors that should be considered when determining the suitability of a foundation for a building**. (3 marks)

i. .....

ii. .....

iii. .....

**14.** During the construction of a residential house, the contractor excavates deep foundation trenches. The soil is loose and the sides of the trenches are likely to collapse.

**a)** Explain **three reasons why timbering may be necessary in excavation work**. (3 marks)

i. .....

ii. .....

iii. .....

**b)** Describe **three stages involved in constructing foundation walling** after the foundation has been prepared. (3 marks)

i. .....

ii. .....

iii. .....

**c)** Explain **four considerations when constructing a ground floor**. (4 marks)

i. .....

ii. .....

iii. .....

iv. .....

**15.** A newly constructed house requires a water supply and waste-water disposal system. A plumber is instructed to install the system using appropriate tools, materials and pipe fittings.

**a)** Name **four plumbing tools** that may be required for the installation. (4 marks)

i. .....

ii. .....

iii. .....

iv. .....

**b)** Identify and explain the function of **the pipe fittings** used in plumbing. (3 marks)



**Q**



**R**



**S**

| Pipe fitting | Function |
|---|---|
| Q | |
| R | |
| S | |

**c)** State **three factors that should be considered when selecting pipes for a building water-supply system**. (3 marks)

i. .....

ii. .....