**Term 1 - 2025**

**DRAWING AND DESIGN (449)**

**FORM TWO**

**Time: 1½ Hours**

**Name**: …………………………………………………………. **Adm** **No**: ……………….

**School**: ……………………………………………………….. **Class**: …………………..

**Signature**: …………………………………………………….. **Date**: …………………...

**INSTRUCTIONS TO CANDIDATES:**

**Answer all the questions in the spaces provided.**

|  |  |  |
| --- | --- | --- |
| **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATE SCORE** |
| **1-16** | **100** |  |
|  |  |  |

1. State five reasons studying drawing and design as a subject (5 marks)
2. ………………………………………………………………………………………………………………………………………………………………………………
3. ………………………………………………………………………………………………………………………………………………………………………………
4. ………………………………………………………………………………………………………………………………………………………………………………
5. ………………………………………………………………………………………………………………………………………………………………………………
6. ………………………………………………………………………………………………………………………………………………………………………………
7. Briefly define the following terms. (2mks)
8. Technical drawing……………………………………………............................................................................................................................................................................................................................................................................................................................................................
9. Design. …………………………………………………………………………………………………………………………………………………………………………………….………………………………………………………………………………

1. List four type of drawing templates found in drawing office. (4mks)
2. ………………………………………………………………………
3. ………………………………………………………………………
4. ………………………………………………………………………
5. ………………………………………………………………………
6. a). State the sizes of the following drawing papers. (4mks)
7. A4
8. A3
9. A2
10. A1

 b). state where each of the following types of lines are used (5mks)

 *Type of line* *uses.*

1. Bold and continuous line ………………………………………………
2. Thin and continuous line ………………………………………………
3. Bold and continuous irregular line ………………………………………………
4. Thin short dashes ………………………………………………
5. Thin chain lines ………………………………………………
6. (a)Give one reason why the following are used in drawings (2marks)
7. lettering
8. Symbols and abbreviations

 (b)State the two main classes of drawings (2mks)

1. ……………………………………………………………………………………………
2. .…………………………………………………………………………………………….
3. Fill in the blank spaces with the correct type of drawing associated with the following fields in technical drawing. (5mks)

|  |  |  |
| --- | --- | --- |
|  |  FIELD | TYPE OF DRAWING |
| 1 | Construction industry |  |
| 2 | Mechanical industry |  |
| 3 | Building industry |  |
| 4 | Ship industry |  |
| 5 | Aircraft industry |  |

1. List four aims of technical drawings. (4mks)
2. ………………………………………………
3. ……………………………………………….
4. ………………………………………………
5. ………………………………………………..
6. State five general maintenance on drawing instruments (5 marks)
7. …………………………………………………………………………………………
8. ………………………………………………………………………………………….
9. ………………………………………………………………………………………….
10. ………………………………………………………………………………………….
11. ………………………………………………………………………………………….
12. (a) What is dimensioning? (1mks)
13. Use sketches to illustrate the difference between datum and chain dimensioning (4 marks)
14. Sketch how the following pencils are sharpened. (2mks)
15. HB pencil H pencil

1. Construct the following angles using a pair of compass, a pencil and a ruler only (10 marks)
2. 600
3. 300
4. 900
5. 37.50
6. 750
7. Construct a square whose diagonal is 65mm (6mks)

1. From the given line AB, illustrate how a line can be proportionally sub- divided into 10 equal portions. (6mks).

A B

1. Construct a kite when given the lengths of the diagonals as 71 mm and 53mm and the point of intersection is 53mm from one end of the longer diagonal. (6mks)
2. Construct a triangle with a base measuring 62mm, an altitude of 50mm (6mks)
3. Construct a triangle when given the base as 60mm and two base angles as 1200 and 300. (6mks)
4. Draw the following views of the block given below. (15 marks)
5. Front Elevation
6. End elevation
7. The plan

