**P720/3**

**BUILDING DRAWING THEORY**

**Paper 3**

**Jul/Aug 2019**

**2 Hours**

****

**MUKONO EXAMINATION COUNCIL**

**Uganda Advanced Certificate of Education**

**BUILDING DRAWING THEORY**

Paper 3

**2 Hours**

**INSTRUCTIONS TO CANDIDATES**

* *The question paper consists of* ***six*** *questions.*
* *Attempt any* ***four*** *questions.*
* *All questions carry equal marks.*
* *Use of sketches will earn you more marks.*
* *Any additional question(s) answered will not be marked.*

1. a) Define the term iron monger as applied to building construction. ***(01 mark)***

b) Describe the following iron monger ***(04 marks)***

(i) Nails

(ii) Screws

(iii) Bolts

(iv) Hinges

c) With sketches, show the following types of hinges and mention where each one is suitably

used.

(i) Tee hing ***(03 marks)***

(ii) But hing ***(03 marks)***

d) (i) Mention any three means of vertical transportation apart from stairs. ***(03 marks)***

(ii) With the aid of sketches illustrate the construction of a timber stair for one compete

flight. ***(11 marks)***

1. a) State;

(i) three functions of foundation ***(03 marks)***

(ii) three functional requirements of a foundation. ***(03 marks)***

b) (i) Explain three ways of improving the bearing capacity of a subsoil. ***(06 marks)***

(ii) Explain what the term Bearing capacity means in building construction. ***(01 mark)***

c) (i) Give three reasons why concrete is used in the construction of foundations. ***(03 marks)***

(ii) In sequence describe five steps of forming a concrete strip foundation. ***(05 marks)***

d) With sketches show a formwork which is suitable for casting the concrete in c(i) above.

***(04 marks)***

1. a) Define the term building finish as applied to building construction. ***(01 mark)***

b) Give;

(i) three functions a wall finish. ***(03 marks)***

(ii) three functional requirements of a floor finish. ***(03 marks)***

c) (i) mention two tools each used in the following process.

- plastering ***(02 marks)***

- painting ***(02 marks)***

(ii) Explain how an old dirty timber piece can be painted. ***(03 marks)***

d) describe the following types of floor finishes and explain where each is suitably applied.

(i) Terazo floor finish ***(05 marks)***

(ii) Timber strip floor finish ***(03 marks)***

(iii) Ceramic clay floor tiles. ***(03 marks)***

1. a) (i) Explain the term bonding. ***(02 marks)***

(ii) Give one purpose of bonding. ***(01 mark)***

b) (i) Name and draw four tools commonly used in the construction of walls. ***(08 marks)***

(ii) Give one reason why bricks are soaked in water they are used in construction.

***(01 mark)***

c) With the aid of sketches, describe the following types of bonds and state where each is

suitably used.

(i) Stretcher bond ***(03 marks)***

(ii) Header bond ***(04 marks)***

(iii) English bond ***(03 marks)***

(iv) Flemish bond ***(03 marks)***

1. a) (i) What is a roof covering as applied to roofs. ***(01 mark)***

(ii) State two functions of a roof covering. ***(02 marks)***

b) (i) Apart from iron sheets, mention any other three types of roofing materials. ***(03 marks)***

(ii) Describe how any two of the roofing material in b(i) above is manufactured. ***(06 marks)***

c) Describe with the aid of sketched how corrugated galvanized iron sheets are fixed on a

couple close single roof. ***(07 marks)***

d) (i) Give three advantages of using galvanized iron sheets over other types of roof covering.

***(03 marks)***

(ii) Explain three disadvantages of using galvanized iron sheets. ***(03 marks)***

1. a) Define the term wall. ***(01 mark)***

b) (i) State any four functional requirements of a wall. ***(04 marks)***

(ii) Give any five function of a wall. ***(05 marks)***

c) (i) Differentiation between load bearing walls and non-load bearing. ***(02 marks)***

(ii) Give one example of each of the walls mentioned in c(i) above. ***(02 marks)***

d) With sketches, show the following types of walls and state where each is used.

(i) short parapet wall ***(03 marks)***

(ii) Timber stud partition wall ***(04 marks)***

(iii) Party wall ***(03 marks)***

e) What is a cavity wall. ***(01 mark)***

***End -***