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**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS FOR THE DIPLOMA IN BUILDING AND CIVIL ENGINEERING**

**2ND YEAR 2ND SEMESTER 2017/2018 ACADEMIC YEAR**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: TBC 2226**

**COURSE TITLE: BUILDING TECHNOLOGY II**

**EXAM VENUE: LAB 23 STREAM: DIP IN BLD & CIV ENG**

**DATE: 21/12/2017 EXAM SESSION: 2.00 – 3.30PM**

**DURATION: 1 ½ HOURS**

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**Instructions**

1. **Answer question 1 (Compulsory) and ANY other two questions**
2. **Candidates are advised not to write on question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**
4. a) Define the following terms as applied to roofs
5. Ridge
6. Common rafters
7. Wall plate
8. Purlins (4 marks)

b) Sketch and label the details of lean – to roof (7 marks)

c) Sketch and dimension a standard plain roofing tile (7 marks)

d) Sketch the part of a cross section through a standard paneled door showing weather boards. (7 marks)

e) Sketch and label the elevation of ledged battened door. (7 marks)

f) out line any four ways of drain testing (8 marks)

2. a) Explain approved document F for ventilating a dwelling house. (10 marks)

 b) Sketch the vertical cross section through timber casement window (5 marks)

3. a) Sketch timber brackets fixed to wall. (5 marks)

 b) Describe the following terms.

 i) Skirting

 ii) Architraves

 iii) Dado rails

1. Cornices
2. Picture rails. (10 marks)

4. a) Define the following terms as used in cold water supply

 i) Main

 ii) Service

 iii) Service pipe

 iV) Communication pipe

 v) Cistern (5 marks)

 b) With the aid of sketches differentiate between direct cold water supply and indirect cold water supply. (10 marks)

5. a) Sketch and label a cold water storage cistern (7 marks)

 b) List any two faults in hot water system (4 marks)

 c) Sketch a pressed steel bracket (4 marks)