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**University Examinations 2015/2016**

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

THE DEGREE OF

BACHELO OF SCIENCE IN PUBLIC HEALTH

**HPP 3403: TECHNICAL DRAWING**

**DATE: AUGUST 2016 TIME: 3 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two***questions.

**QUESTION ONE (30 MARKS)**

The floor plan of a one bed roomed house is shown in Figure 1

Using a scale of 1:50 draw a section Y-Y of the house using the instructions below:

1. Substructure

* Foundation depth below ground floor – 1000mm
* Strip foundation – 600x200mm
* Foundation wall – 200mm thick
* Hardcore bed – 300mm
* Blinding layer – 50mm thick
* Floor slab concrete – 100mm thick (18 marks)

1. Superstructure

* Floor to wall plate – 2700mm
* External/internal walls- 150mm thick
* Ring beam (lintel) height – 300mm
* Wall plate – 100x50mm
* Roof pitch - 300 (12 marks)

**QUESTION TWO (20 MARKS)**

1. State the meaning of the following symbols and abbreviations
2. CONC.
3. MH
4. Φ
5. SVP (5 marks)
6. Illustrate the following types of lines as used in Technical Drawing
7. Centre – line
8. Hidden detail line
9. Bold outline
10. Projection line
11. Dimension line (10 marks)
12. Discuss why it is important for a public health practitioner to have some working knowledge of technical drawing (5 marks)

**QUESTION THREE (20 MARKS)**

Figure 2 shows the Isometric and Orthographic views of 6 blocks.

Study the isometric views of the blocks and the orthographic views shown alongside and having the table provided, place the number of the views in the appropriate position in the table. Eg view number 10 is the front view of block A in the direction F. (20 marks)

**QUESTION FOUR (20 MARKS)**

Draw at a scale of 1:1 the first angle orthographic of the block shown in figure 3. No dimensions are required. (20 marks)