NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING

DEPARTMENT OF ARCHITECTURE

BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II FIRST SEMESTER EXAMINATIONS – DECEMBER 2005 **AAR 2103 – COMPUTER AIDED ARCHITECTURAL DESIGN II**

Instructions Time: 4 Hours

- 1) Each candidate to be provided one copy of question papers, Appendix I on A3 sheet, and empty floppy disk 3 ½".
- 2) Carefully read the description of the architectural design of a cottage represented in Appendix I.
- 3) *Answer all questions.*
- 4) *Marks for each question are indicated in brackets.*

Appendix I represents an architectural design of a two-bedroom cottage.

It consists of a floor plan, four elevations and a section A - A.

The plan shows the following components as indicated:

- two bedroom
- kitchen
- bathroom
- toilet
- lounge/dining room
- pantry

The windows and doors codes are from standard Monarch Metal Catalogue.

Questions

- 1. Indicate all dimensions on the floor plan and section A A. Set dimension style at your own choice but in agreement with general architectural standards. [20]
- 2. Draw North, South, East, and West elevations [20]
- 3. Label elevations and section correctly according to the North Point shown [10]
- 4. Label the rooms, indicate floor levels and floor finishes. [5]
- 5. Annotate in the boxes on the section A A accordingly to the construction notes provided. [5]
- 6. Use HATCH command to hatch the following:
 - a) the walls on floor plan and section A A.
 - b) roof covering in the elevations.
 - c) reinforced concrete beams, footings, the hardcore and concrete slabs on the section A A; [15]
- 7. Open the Layers Dialogue Box and assign/change the colours to the objects in the layers listed below:

Layer Name: Colour Required White Doors Dimensions Red Elevations White Drainage Green Furniture Magenta Rooms Green Sanitary fittings Cyan Text Various Walls Green Windows Cyran Room Red Text White Notes Yellow [10] 9. Fill in the details in the title block (candidate number, department etc.) [10] 10. Save the drawing file as AAR 2103/Candidate number on the floppy disk provided. [5]