

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II SUPPLEMENTARY EXAMINATIONS – JULY 2006
AAR 2103 – COMPUTER AIDED ARCHITECTURAL DESIGN I

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 1/2".*
- 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 one-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
- study

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

Questions

1. Draw North, South, East, and West elevations. [25]
2. 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. [25]
3. Label elevations and section correctly according to the North Point shown [5]
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. Arrange the furniture/fittings in appropriate places. [5]
7. 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; [10]
8. Open the Layers Dialogue Box and assign/change the colours to the objects in the layers listed below:

Layer Name:

Colour Required

Elevations
Walls

White
Red

Doors
Dimensions

Green
Yellow

Windows
Sanitary fittings

Blue
Cyan

Text
Glazing

White
Green

Furniture
Hatch

White
Yellow

[10]

9. Fill in the details in the little block (candidate number, department etc.)

[10]

10. Save the drawing file as AAR 2103/Candidate number on the floppy disk provided.

[5]