NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II - SUPPLEMENTARY EXAMINATIONS – SEPTEMBER 2007
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 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 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	White	
Walls	Red	
Doors	Green	
Dimensions	Yellow	
Windows	Blue	
Sanitary fittings	Cyan	
Text	White	
Glazing	Green	
Furniture	White	
Hatch	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]