

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

DEPARTMENT OF ARCHITECTURE  
BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

PART II END OF SECOND SEMESTER EXAMINATIONS – JUNE 2004  
AAR 2202 – BUILDING CONSTRUCTION II

**Instructions**

**Time : 3 Hours**

*Answer All Questions.*

*Use clearly annotated drawings to illustrate your answers.*

*All Questions carry equal marks (25)*

**QUESTION 1**

Draw a stair connecting ground floor with first floor of a residential building. Provide one landing in between.

- Take the level of ground floor as 0.0m and that of the first floor as 3.0m.
- Assume your own dimensions for treads and risers.
- Any other dimension required may also be assumed.
- Illustrate your answer with appropriate sketches, and indicate names of various parts and components of your stair. [25]

**QUESTION 2**

- a) Name different types of wooden trusses commonly used for sloping (steep) roofs.
- b) Illustrate your answer with the aid of sketch drawings.
- c) State the maximum span up to which a particular type can be used. [25]

**QUESTION 3**

- a) Drainage and falls are of a major concern when designing flat roofs. Provide a clearly labelled sketch drawing of a typical straight fall rainwater outlet where the roof is drained by internal outlets. [15]
- b) Briefly state the essential requirements of a good roof and compare the advantages and disadvantages of flat and pitched (steep) roofs. [10]

**QUESTION 4**

- a) Draw elevations and sections of the following:
  - i) glazed door                      ii) flush doorShow the constructional details and name each part and their fittings. [15]
- b) What type of doors would you recommend for the following situations?
  - i) Bathroom                      ii) Showroom                      iii) Restaurant
  - iv) Cinema Hall                      v) Bank entranceGive reasons in support of your answers. [10]