

FEDERAL UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY

ARCHITECTURE DEPARTMENT

2016 HARMATTAN SEMESTER EXAMINATION

COURSE TITLE: BUILDING COMPONENTS AND METHODS IV

COURSE CODE: ARCH. 407

TIME ALLOWED: 2 HOURS

Mark: 70%

Instruction: Answer all questions.

1. a. Discuss the use of doors in institutional building types.
- (b) Write short notes on the following door types
 - (a) Pocket doors,
 - (b) revolving doors
 - (c) swing doors,
 - (d) flush doors
 - (e) automatic opening doors
2. Discuss the application of sun control and shading devices in the design of
 - (a) Residential buildings
 - (b) Institutional buildingsButtress your write-ups with sketches
- 3(a). Write short notes on:
 - (i) Steel floors
 - (ii) Concrete floors
 - (iii) Composite floors
 - (iv) Wood floors
- (b) What determines the choice of a floor system in constructing a building
- 4(a) What are infill walls? When are they used.
- (b) Write short notes on light steel framed in-fill walls, masonry in-fill walls, concrete and timber in-fill walls
- 5(a) What is a curtain wall? When are they used.
- (b). Write short notes on the following in relation to curtain walls
 - (a) Dead Load
 - (b) Wind Load
 - (c) Seismic Load.
6. Discuss the application of clerestory, skylighting, Jalousie windows (i.e. louvered windows), bay windows, stained glass windows, casement windows in the design of residential and institutional buildings.