

VI SEMESTER B. ARCH DEGREE EXAMINATION
(2013 Scheme)

13AR1602 BUILDING MATERIALS AND CONSTRUCTION –V

MODEL QUESTION PAPER

Time: 4Hours

Max Marks: 100

*Instruction: Use Illustrations wherever required. Illustrations carry due marks
Drawing sheets shall be supplied.*

PART –A

Answer all questions. Each question carries 5 Marks.

1. Write short notes on the following.

- a) Fiber Reinforced Concrete
- b) Water Proofing Admixtures
- c) Flat Slabs
- d) Pneumatic Structures
- e) Basic Module and Multi modules
- f) Prefabrication
- g) Colored Cement Flooring
- h) Terrazzo Flooring

(8 x5 Marks = 40 Marks)

2. a) What are the different types of light weight concrete? Elaborate the application of light weight concrete in architecture.

(10 Mark)

OR

b) Explain with examples the different types of pre stressed concrete structures. Discuss their use in architecture.

(10 Mark)

3. a) Elaborate with relevant examples the concept of prefabrication . What are the advantages and disadvantages of using prefabrication in construction?

(10 Mark)

OR

b) Explain the classification and properties of tiles used in flooring.

(10 Mark)

PART - B

4. a) Draw the details of a Folded Plate roof of dimensions 7 m X 40 m. Drawings should include key plan showing the grid. Important details should be shown in 1: 10 Scale
(20 Mark)

OR

b) Draw the details of a Coffered Slab of dimensions 50 m X 50 m. Drawings should include key plan showing the grid. Important details should be shown in 1: 10 Scale
(20 Mark)

5 a) Design and draw the details for a prefabricated structure for an exhibition kiosk for a 2.4m X 2.4 m grid. The construction should be of prefabricated members to be assembled on site. All the services and details have to be shown in the plan not less than 1: 50 Scale. Specify materials, and joineries of various geometries in details drawn to scale not less than 1: 10
(20 Mark)

OR

b) Design and draw the details for a pay and use public toilet facility to be used in multiple locations in an urban area in a space of 10 m X 5 m. Separate space for ladies and gents has to be provided in the same unit. Use modular, prefabricated members to be assembled on site. All the services and details have to be shown in the plan not less than 1: 50 Scale. Specify materials, and joineries of various geometries in details drawn to scale not less than 1: 10
(20 Mark)
