

**EIGHTH SEMESTER B. ARCH DEGREE EXAMINATION
(2013 Scheme)**

13AR1805.4 SERVICES IN HIGH-RISE BUILDINGS

Time: 3 Hrs

Max. Marks: 100

Part A

(Answer all questions 8x5=40)

- 1) Building Automation system
- 2) Integrated building services
- 3) Wet risers and dry risers
- 4) Three stages of waste water treatment
- 5) Evaporative coolers
- 6) Cooling load calculation
- 7) Rated load and rated speed
- 8) Biometrics

(8x5=40 Marks)

Part B

(Answer any ONE QUESTION from each module 4x15=60)

Module 1

9) Describe the components of building services. What is the impact of the services in building design?

OR

10) Differentiate between conventional and intelligent building. State the major aspects which describe a building as intelligent. Give an example.

(15 Marks)

Module 2

11) What are the various systems of water supply in high rise buildings? In a high rise building explain with sketches the ways of water supply in-

- a) Pressure sufficient and supply continuous
- b) Pressure insufficient and supply continuous
- c) Pressure insufficient and supply intermittent
- d) Pressure sufficient and supply intermittent

OR

12) Describe the classification of fire and the fire detection systems used in high rise buildings.

(15 Marks)

Module 3

13) Differentiate central air conditioning systems with non central air conditioning systems.

OR

14) List the important points to be considered for industrial ventilation.

(15 Marks)

Module 4

15) Describe in detail the classification of elevators. What are the design principles to be considered.

OR

16) What are the design elements in CCTV system? State the need for providing such a system in the present day context.

(15 Marks)

(Pages : 2)

Reg. No. :

Name :

**Eighth Semester B.Arch. Degree Examination, April/May 2017
(2013 Scheme)**

13AR1806.1 ELECTIVE IV :ARCHITECTURAL CONSERVATION

Time : 3 hours

Max. Marks:

100

Instruction : Answer **all** questions. Include **illustrations** wherever necessary.

I. Write short notes on **all** the following.

- a) ICCROM and its services
- b) INTACH
- c) Climatic causes of decay and their impacts on Historic structures
- d) Man-made causes of decay in materials and structures
- e) Values in Cultural Heritage Sites
- f) Differentiate between Restoration and Reconstruction
- g) Aspects to be considered for Adaptive Re-use of any Historic Residence
- h) Integrated Conservation Approaches **(8X5= 40 marks)**

II. A) Elaborate on the beginning of the Conservation Movement and the Contributions of John Ruskin and William Morris **15**

OR

B) Elaborate on the Venice Charter, and its relevance to the field of Conservation **15**

III. A) Explain with illustrations the Traditional Building Construction Techniques of Kerala **15**

OR

B) Discuss in detail, the various Causes of Decay in materials and structures **15**

P.T.O.

IV. A) Discuss the Preparatory Procedures for Conservation. Elaborate on the need for Inventories in Conservation **15**

OR

B) Elaborate on the Seven Degrees of Intervention in a Heritage Site **15**

V. A) Discuss the various approaches to Adaptive Re-use **15**

OR

B) Discuss on how Adaptive Re-use has been dealt with by various ICOMOS Charters **15**

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Eighth Semester B.Arch.Degree Examination, 2017
(2013 Scheme)

13AR1804 DISASTER PREPAREDNESS & MANAGEMENT

Time:3Hours

Max.Marks:100

- I. Write short notes on:
- a) Disaster Management Cycle
 - b) Vulnerability
 - c) Lightning Arrestors
 - d) Seismic Dampers
 - e) Drought Management measures
 - f) Cyclone shelters
 - g) Blast resistant design
 - h) Fire rating in Buildings
- (8 x 5 = 40 marks)
- II. a) Explain the Structural and Non-Structural measures taken for Flood Mitigation .
OR
b) Describe the conventional seismic retrofitting measures that are adopted in framed structures.
15
- III. a) Briefly describe the standards for Fire Protection as specified in the N.B.C.
OR
b) What are the reasons for disastrous effects of Tsunami? Explain the precautions to be taken during Tsunami.
15
- IV. a) Elaborate the method of preparation of Hazard Zonation Map with special emphasis on LHZ (Landslide Hazard Zonation) Map
OR
b) Explain the application of Remote sensing and GIS in real time disaster monitoring.
15
- V. a) Enumerate the role of NDMA, SDMA and DDMA during a Disaster
OR
b) Discuss the challenges of Disaster Management that are faced by our nation, citing suitable examples
15