B.Arch-VIII(S)-05-25-4192	Reg. No.	B

AR 1802 PROFESSIONAL PRACTICE

(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A (Answer ALL questions)

 $(8 \times 5 = 40)$

I. Write short notes of the following.

- (a) Comprehensive Architectural Services.
- (b) Council of Architecture.
- (c) Essential characteristics of a tender notice.
- (d) EMD and its purpose.
- (e) Liquidated damages.
- (f) Umpire in Arbitration.
- (g) Tax planning for architects.
- (h) Double entry and single entry.

PART B

 $(4\times15=60)$

II. Explain the salient features of CoA act 1972.

OF

- III. (a) What is 'professional negligence' of an Architect?
 - (b) What are the professional liabilities of an Architect?
- IV. Mention different types of tenders. Explain the merits and demerits of each type of tenders.

OR

- V. (a) What is a contract?
 - (b) Write detailed note on Indemnity clause and Liquidated damages.
- VI. Define arbitration. What are the main advantages of settling the disputes and differences by Arbitration?

OR

- VII. Explain the duties and liabilities of an architect, employer and contractor.
- VIII. What is management? What are the important principles of management?

IX. Discuss the aspects of planning, organization, coordination and control with reference to the architect's office.

AR 1803 DISASTER PREPAREDNESS AND MANAGEMENT

(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A

(Answer ALL questions)

 $(8 \times 5 = 40)$

I. Write short notes of the following.

- (a) Vulnerability, hazard and mitigation.
- (b) Strategies for risk management.
- (c) Drought.
- (d) Bio-terrorism.
- (e) Disaster forecasting.
- (f) Fire safety and prevention systems in residential building.
- (g) Application of remote sensing in disaster monitoring.
- (h) Role of various agencies in disaster management.

PART B

 $(4 \times 15 = 60)$

 Explain the vulnerability of India to disasters based on its geography and geology.

OR

- III. Explain the characteristics, causes and effect of any two types of disasters.
- IV. Briefly explain the effects of earthquake on built environment and the socio-economic consequences observed from case studies.

OR

- V. What is flood? Explain harmful effects of flood and also the methods of controlling flood.
- VI. Explain the community-based disaster preparedness in India.

OR

- VII. What are the different techniques adopted for forecasting and warning the occurrence of flood.
- VIII. Explain in detail the various components of disaster management cycle.

OR

IX. Discuss disaster awareness. Write about national and international level disaster management programs.

B.Arch-VIII(S)-05.25-4194	Reg. No.
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AR 1804 CONSTRUCTION MANAGEMENT

(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A (Answer ALL questions)

 $(8 \times 5 = 40)$

Write short notes on the following.

- I. (a) Types of construction projects.
 - (b) Objectives of construction management.
 - Bar chart and gantt chart. (c)
 - (d) WBS.
 - (e) Cash flow and time value of money.
 - AON and AOA network. **(f)**
 - Types of delay in construction management. (g)
 - (h) Resource management.

PART B

 $(4 \times 15 = 60)$

Π. Explain in detail Cost - Benefit Analysis and its uses.

- Ш. What do you mean by depreciation? What are the methods to estimate depreciation?
- IV. Draw the network diagram and mark the critical path. Calculate the EST, LST, EFT, LFT and the floats Total float, Free float, Interfering float, Independent float

Activity	Predecessor	Duration
Α	-	8
В	· A	9
C	Α	4
D	В	8
Е	A	3
F	С	6
G	D	3
H	E	5
I	F	1
J	G, H, I	9

V.

OR Explain project scheduling. What are the steps to be taken for a successful project schedule?

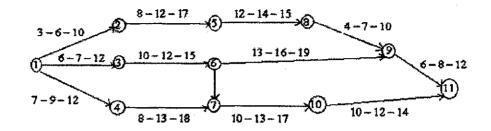
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VI. Describe in detail the steps involved in resource smoothening and levelling. What is the purpose of resource leveling?

ΩR

VII. Calculate the variance and the expected time for each activity



VIII. What is project monitoring? Explain linear scheduling method and earned value analysis.

OR

IX. List and explain any two construction management softwares.

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AR 1805 (a) ENERGY EFFICIENT ARCHITECTURE (ELECTIVE III) (2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A (Answer ALL questions)

 $(8\times5=40)$

I. Write short notes on the following:

- (a) Energy efficiency in architecture.
- (b) Embodied energy.
- (c) Intelligent buildings.
- (d) ICT in smart buildings.
- (e) Lighting control and video surveillance.
- (f) Access control and fire alarms.
- (g) Biophilic architecture.
- (h) Biophelia and need for Biophilic design.

PART B

 $(4 \times 15 = 60)$

II. Explain how solar passive techniques in building design can be utilized to bring in energy efficiency.

OR

- III. Explain any three methods in detail to conserve energy during the construction and working of a building.
- IV. What are the merits of smart buildings over ordinary buildings? Discuss.

OR

- V. Explain the pre-construction, construction and post-construction of smart buildings in terms of energy usage and profit.
- VI. Explain how smart building systems help in providing services like fire safety, water supply and their role for catering differently abled and aged.

OF

- VII. How do the different building system such as voice network, power management, video surveillance and fire alarms work in a smart building?
- VIII. What are the different Biophilic Design Strategies to be adopted when designing along with its landscape and master plan?

OR

IX. Explain in detail Nature-Design-Health relationship with two suitable examples.

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В.Arch-VIII(S)-05-25-4196	Reg. No.	

AR 1806 (a) ARCHITECTURAL CONSERVATION (ELECTIVE IV) (2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A

(Answer ALL questions)

 $(8 \times 5 = 40)$

- I. (a) Venice Charter (1964).
 - (b) Authenticity and Integrity in Conservation.
 - (c) Lime Mortar in Kerala's Traditional Architecture.
 - (d) Wooden Roof Structures in Kerala.
 - (e) Effect of Neglect on Historic Buildings.
 - (f) Biological Causes of Deterioration.
 - (g) Seven Degrees of Intervention.
 - (h) Restoration vs. Reconstruction.

PART B

 $(4 \times 15 = 60)$

II. Explain the objectives and scope of architectural conservation.

OR

- III. Analyze the importance of agencies like ICCROM, ICOMOS and ASI in heritage conservation.
- IV. Analyze the structural defects in traditional Kerala buildings with respect to foundations, walls and wooden roofs.

OR

- V. Discuss the role of wooden construction in Kerala's traditional architecture, focusing on walls and roofs.
- VI. Describe the climatic and biological causes of decay in historic structures, with special reference to Kerala's traditional buildings.

OR

- VII. Analyze the impact of natural disasters (earthquakes, floods, fire) on built heritage. How can disaster preparedness be integrated into conservation planning?
- VIII. Discuss the importance of documentation (research, analysis and recording) in conservation projects. How does it ensure authenticity and integrity in heritage preservation?

OR

IX. Describe the preparatory procedures for conservation, focusing on the identification of values (emotional, cultural, use) and initial inspections.