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**B.Arch. Degree VIII Semester Examination April 2018****AR 1802 PROFESSIONAL PRACTICE**  
(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

**PART A**  
(Answer *ALL* questions)

(8 × 5 = 40)

- I. Write short notes on:
- Comprehensive Architectural services.
  - Council of Architecture.
  - Earnest money deposit.
  - Essential characteristics of a tender notice.
  - Clerk of work.
  - Umpire in Arbitration.
  - Double entry and single entry.
  - Duties and responsibilities of the principal Architect while running an Architect's office.

**PART B**

(4 × 15 = 60)

- II. Who is an Architect? How does Architect Act-1972 control and regulate the Architectural education and profession in the Country?
- OR**
- 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 merit and demerit of each type of tenders.
- OR**
- V. (a) What is a contract?  
(b) Write detailed note on Indemnity clause.  
(c) Write detailed note on Liquidated damages.
- VI. What are the duties and liabilities of Contractor, Architect and Employer under the contract?
- OR**
- VII. Define Arbitration? What are the main advantages of settling the disputes and differences by Arbitration?
- VIII. All profession requires planning, organization, co-ordination and control. Discuss these aspects with reference to the Architect's office.
- OR**
- IX. What are the options open to an Architect at the commencement of his career and discuss relative merits of each?

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***B.Arch. Degree VIII Semester Examination April 2018*****AR 1803 DISASTER PREPAREDNESS AND MANAGEMENT**  
(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

**PART A**  
(Answer *ALL* questions)

(8 × 5 = 40)

- I. Write short notes on the following.
- What is early warning and risk?
  - Define the following (i) vulnerability (ii) hazard (iii) mitigation.
  - Explain bio terrorism.
  - How do you protect yourself in case of a nuclear disaster?
  - Write short note on fire safety and prevention systems in residential buildings.
  - Write significance of weather forecast in preparedness for cyclone.
  - Write about community health and casualty management.
  - Write short note on GIS.

**PART B**

(4 × 15 = 60)

- II. Comment on various types of natural disasters happened in Kerala.
- OR**
- III. What is disaster? Explain various types of disasters.
- IV. Write about soil erosion, causes and various conservation measures.
- OR**
- V. What is flood? Explain harmful effects of flood. Write down the methods of controlling flood.
- VI. Discuss in detail, the role of preparedness in reducing disaster vulnerability and write brief on various preparedness measures for draught.
- OR**
- VII. Explain in detail Tsunami. Enlist various causes. What are all the damages caused by Tsunami?
- VIII. Explain disaster management. Write about the disaster management schemes offered by government of India.
- OR**
- IX. Discuss about disaster awareness. Also write about state and international level disaster management programmers.

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## B.Arch. Degree VIII Semester Examination April 2018

### AR 1804 CONSTRUCTION MANAGEMENT (2014 Scheme)

Time : 3 Hours

Maximum Marks : 100

#### PART A (Answer ALL questions)

(8 × 5 = 40)

- I. Write short notes on the following.
- Rate of return.
  - Role of a project manager in construction industry.
  - Milestone chart.
  - AoN and AoA network.
  - Resource histogram and its importance in resource leveling.
  - Network Crashing.
  - Project management triangle.
  - Project cost duration trade off.

#### PART B

(4 × 15 = 60)

- II. What are the goals of project management? Describe in detail the phases in the project life cycle.
- OR**
- III. Describe the importance of time value of money in construction industry.
- IV. Explain with examples the various types of floats in a construction project.
- OR**
- V. Draw the network diagram and mark the critical path. Calculate the Early Start (ES), Late Start (LS), Early Finish (EF), Late Finish (LF), Interfering Float (Int Float), Independent Float (Ind Float), Free Float (FF) and Total Float (TF).

Activity	Duration	Predecessor
A	6	-
B	9	A
C	3	A
D	8	B
E	1	A
F	4	C
G	1	D
H	2	E
I	1	F
J	6	G, H, I

(P.T.O.)

- VI. Construct the network diagram for the following activities. Level the resources to the optimum duration.

Activity	Predecessor	Duration	Resources
A	-	9	6
B	-	12	5
C	-	8	9
D	B	13	5
E	A, B	9	5
F	B, C	9	3

OR

- VII. Explain the following terms with examples.
- Independent activity and dependent activity.
  - Merge activity and burst activity.
  - Predecessor and Successor.
  - Dummy and Concurrent.
- VIII. How is project monitoring and control being implemented? State the relevance of risk management in construction industry.
- OR
- IX. Describe in detail the project management software packages. Explain how MS project and Primavera are useful in management process.

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Activity	Duration	Predecessor
A	9	-
B	12	-
C	8	-
D	13	B
E	9	A, B
F	9	B, C
G	1	-
H	1	-
I	1	-
J	1	-

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***B.Arch. Degree VIII Semester Examination April 2018*****AR 1805 (a) ENERGY EFFICIENT ARCHITECTURE**  
(2014 Scheme)

Time: 3 Hours

Maximum Marks: 100

**PART A**  
(Answer *ALL* questions)

(8 × 5 = 40)

- I. Write short notes on the following.
- Solar passive techniques.
  - Energy efficient lighting.
  - Smart/intelligent buildings.
  - ICT.
  - Access control.
  - Power management and video surveillance.
  - Define Biophilic architecture.
  - Nature-design-health relationship.

**PART B**

(4 × 15 = 60)

- II. Explain energy efficiency and how it helps in conserving the energy sources.
- OR**
- III. Explain the methods to reduce energy consumption in buildings.
- IV. What are the aim, need and driving factors of smart buildings?
- OR**
- V. Explain the pre-construction, construction and post-construction of smart buildings in terms of energy usage and profit.
- VI. Explain any four smart building systems.
- OR**
- VII. Write the difference between ordinary buildings and smart buildings.
- VIII. Explain the principles and benefits of biophilic design.
- OR**
- IX. Briefly describe the patterns of biophilic architecture.

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***B.Arch. Degree VIII Semester Examination April 2018*****AR 1806 (a) ARCHITECTURAL CONSERVATION  
(2014 Scheme)**

Time : 3 Hours

Maximum Marks : 100

**PART A  
(Answer ALL questions)**

(8 × 5 = 40)

- I. Write short notes on the following.
- Natural Heritage.
  - INTACH.
  - Lime mortar construction.
  - Laterite as a building material in Kerala.
  - Effect of earthquake on historic buildings.
  - Vandalism on historic buildings.
  - Values associated with historic monuments.
  - Restoration.

**PART B**

(4 × 15 = 60)

- II. Contributions of John Ruskin and William Morris in developing the philosophies behind modern conservation practice.
- OR**
- III. Elaborate on the history and formation of ASI. Discuss the role of ASI in the protection and upkeep of national monuments.
- IV. What are the regional variations seen in traditional Kerala architecture with respect to the availability of building materials? Elaborate on timber roof and wall construction seen in Kerala.
- OR**
- V. What are the various structural defects generally seen in traditional buildings?
- VI. What are the botanical, biological and micro biological aspects of decay seen in historical structures? Explain with the help of examples.
- OR**
- VII. Historic monuments often become targets for destruction in wars. Elaborate on this manmade destruction of valuable heritage with cases from recent history.
- VIII. Discuss the importance of documentation in conservation. What are the various means of documenting the essence of a built heritage?
- OR**
- IX. Elaborate on the seven degrees of intervention.