

**M.E. ARCHITECTURE FIRST YEAR SECOND SEMESTER - 2025**

**URBAN INFRASTRUCTURE AND PROJECT MANAGEMENT**

**Time: 3 Hours**

**Full Marks: 100**

**Use Separate Answer scripts for each Part**

**PART I**

**Attempt any two questions**

1. With the help of an example of some activity-based set up, elucidate 'risk assessment' and 'management'. Prepare a 'risk matrix' and 'control measures' for the same set up chosen. **(10+15=25)**
  
2. Describe the various types of contract usually applied for implementation of infrastructural projects. **(25)**
  
3. Write short notes on (any five) **(5×5=25)**
  - i) Project work break down structure
  - ii) Interrelationship of infrastructure, planning and management
  - iii) Demonstrate application procedure of infrastructure planning
  - iv) Imprest cash management
  - v) Public – private joint endeavours in financing
  - vi) Social issues in infrastructure planning
  - vii) Significance of history and contemporary scenarios in infrastructure planning
  - viii) Security Deposit in tender
  - ix) Bureaucracy and politics in infrastructure planning
  - x) Management tools in project management

**PART II**

Attempt all questions

1. What are the requirements of Ideal city road? Describe the urban road classification system in India. What are the devices and methods used for control of traffic? Discuss the general principles of traffic signing. **(4+4+6+6=20)**

**Or,**

State the sources of water and average domestic water consumption of an Indian city. Briefly describe the conventional treatment methods for public water supply and different system of distribution of water. **(6+14=20)**

2. a) Why study of economics is essential for Urban Designers?  
b) Define linear aggregate demand function with respect to transportation.?  
c) Explain generalised price.  
d) Explain price elasticity.  
e) Explain consumer surplus and its utility. **(4+4+3+6+3=20)**
3. Why do we optimize processes? What are the benefits of process optimisation? State the classifications of different optimization techniques. **(2+4+4=10)**