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Question Paper Code: U5613

M.E. DEGREE EXAMINATION, NOV 2025

Professional Elective

Structural Engineering

21PSE513– GREEN BUILDING MANAGEMENT

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) Apply the principles of sustainable development to design a typical green building layout. CO1-App (20)
Or
(b) Demonstrate an integrated design approach for sustainable site planning. CO2-App (20)

2. (a) Apply LEED guidelines to propose sustainability strategies for an office building. CO1- App (20)
Or
(b) Apply the steps of a rating process to overcome challenges faced in India during certification. CO2- App (20)

3. (a) Analyze the role of salvaged and reusable materials in reducing construction costs. CO5- Ana (20)
Or
(b) Compare the life-cycle impacts of alternative construction methods on sustainability. CO5- Ana (20)

4. (a) Evaluate the effectiveness of cost-performance benchmarking in green-certified buildings. CO6- E (20)
Or
(b) Critically evaluate green retrofits in extending the life of existing buildings. CO6- E (20)

5. (a) Analyze the role of green building consultants in achieving certification success. CO4- Ana (20)

Or

(b) Analyze the challenges in registration and implementation of rating systems in developing countries. CO4- Ana (20)