

M.E Construction Engineering 2nd YR 1st Semester Exam-2025**Retrofitting of Historical & Heritage Structures****Time : Three hours****Full Marks : 100****Group / Part : PART I (40 Marks)****Instructions: Use Separate Answer Scripts For Each Group/Part Etc.
Answer All Questions**

No. of Questions	Part -I	Marks
Q1.	Write a descriptive note on Flat Jack Test with neat sketch Why Flat Jack in very important test for restoration process of brick masonry structure.	20
Q2.	Explain different process for repair technique of brick masonry structure	10
Q3.	Draw a sketch of Brick Arch strengthening technique	10

PART II (60 Marks)

REPLY ANY 6 QUESTIONS (Each Mark 10)

1. a. What do you understand about the “HERITAGE”, explain with the examples?
b. Explain types of Heritages with the examples.
c. Why is the built heritage stated as the “Cultural Heritage” and who coined it?

Or

Throw the light on “SANTINIKETAN” recognized as a heritage having Outstanding Universal Value by UNESCO this year.

- d. What is “Built Heritage”, explain with examples?
e. Why the Heritage should be conserved?
 2. Involvement of which professionals are compulsorily required for any restoration works for the Built Heritages, explain their roles.
 3. Explain in brief (with references) about the Indian Conservation system in ancient periods.
 4. a. What were the protective measures before the Renaissance in other parts of the world, state with examples.
b. Write a short note on **The Society for the Protection of Ancient Buildings (SPAB)**.
 5. a. When was Reinforced Concrete first adopted internationally for heritage conservation work and why? What was the impact of it afterward?
b. What do you understand by the “CHARTER”? Provide a brief note about “Athens Charter and “Venice Charter”
c. Explain the “Ethics of Conservation” with the examples.
 6. Explain the “Degrees of Intervention” with the examples.
 7. a. What is the Implementational framework for the restoration and preservation in India, explain briefly.
b. How is the State Govt. liable to the agencies of Govt. Of India.
- Or
- a. Name two of India's leading organizations that take care of the heritage structures, and state how they work under which legal framework.
 - b. Short Notes: **Protected Area, Prohibited Area & Regulated Area**