

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

Paper Code : CE(HS)401 Civil Engineering-Societal & Global Impact

UPID : 004449

Time Allotted : 3 Hours

Full Marks : 70

*The Figures in the margin indicate full marks.**Candidate are required to give their answers in their own words as far as practicable***Group-A (Very Short Answer Type Question)**

1. Answer any ten of the following :

[1 x 10 = 10]

- (i) Higher resins dosage is recommended when using _____ aggregates.
- (ii) Rainbow revolution is related to _____.
- (iii) Petra is also called _____.
- (iv) What is called for the collection of rainwater for uses?
- (v) The process of burning of municipal solid waste at high-temperature is called _____.
- (vi) Which type of inspection is more intensive involving the examination of structural elements?
- (vii) What is Global Warming?
- (viii) The technique of growing crops without soil is _____.
- (ix) Which technology that converts sunlight into current electricity by using semiconductors?
- (x) What is the crushing and grinding of municipal solid waste?
- (xi) A Hyperloop is a proposal mode of _____.
- (xii) What body of water does the Panama Canal connect to the Pacific ocean?

Group-B (Short Answer Type Question)

Answer any three of the following :

[5 x 3 = 15]

- 2. Illustrate with example few modern marvels and wonders in the field of civil engineering? [5]
- 3. Describe if the brief infrastructure in context to civil engineering. what are types of infrastructure? [5]
- 4. Agricultural Revolution in India ? [5]
- 5. What are the main consequences of global warming? [5]
- 6. What is the architectural acoustics? why acoustics matter in homes and building? [5]

Group-C (Long Answer Type Question)

Answer any three of the following :

[15 x 3 = 45]

- 7. What are the Merits & Demerits of Multi purpose water projects? [15]
- 8. What is climate control & how it works? [15]
- 9. Illustrate the innovations and methodologies for ensuring sustainability. [15]
- 10. Describe the innovative technology & materials used in modern civil engineering? [15]
- 11. Describe in brief the key ways to reduce Green House Gas emissions in building construction? [15]

*** END OF PAPER ***