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GIET UNIVERSITY, GUNUPUR – 765022
M. Tech (Second Semester Examinations) – October' 2021
MPECT2042 – ADVANCED CONSTRUCTION MATERIALS
(Construction Technology and Management)

Time: 2 hrs

Maximum: 50 Marks

(The figures in the right hand margin indicate marks)

PART – AQ.1. Answer **ALL** questions

(2 x 10 = 20)

- List the factors that affect the choice of selection of building materials.
- Define the terms : Specific weight and Specific gravity
- Differentiate between elasticity and plasticity.
- Define Quick lime.
- What do you mean by hydration of cement?
- Give classification of mortars on the basis of binding material.
- How phosphorous effect the property of steel?
- Write short notes on Thermo-mechanically treated bars.
- State the advantages of fiber reinforced concrete.
- What do you understand by Geosynthetics?

PART – B**(6 x 5 = 30 Marks)**Answer **ANY FIVE** questions

Marks

- Explain about fire resistance and chemical resistance of materials. (6)
- Explain briefly about the mechanical properties of building materials. (6)
- Explain briefly about the varieties of lime and state the uses of lime in the field of construction industry (6)
- Write short notes on: (6)
 - effect of mixing water from different sources.
 - Alkali-Aggregate Reaction
- Describe about the constituents of plastics and discuss about various moulding methods of plastics. (6)
- Give an account of Alloy steel and explain its properties. (6)
- Explain briefly about composite materials. Also state the uses and applications of composite materials. (6)

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