

FIFTH/SIXTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—MARCH, 2015

COST EFFECTIVE CONSTRUCTION AND GREEN BUILDING

(For V Semester Civil and for VI Semester AR)

[Time : 3 hours

(Maximum marks : 100)

Marks

PART—A

(Maximum marks : 10)

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. What are the advantages of laterite as a building materials ?
2. Mention the uses of burned bricks.
3. What are the uses of arches ?
4. Define green building.
5. What is meant by Griha ?

(5x2=10)

PART—B

(Maximum marks : 30)

II Answer *any five* of the following questions. Each question carries 6 marks.

1. Explain concrete block.
2. Describe fiber reinforced concrete componants.
3. List the types of panels.
4. Explain filler slab constructions.
5. What are the causes and effect of global warming ?
6. Explain embodied energy in global in materials.
7. What do you understand by Green star ?

(5x6=30)

PART—C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT – I

III List different types of building materials and its uses. 15

OR

IV (a) Explain cost effective construction. 8

(b) Explain environmental issues related to quarrying of stones. 7

UNIT – II

V Explain the different substitutes for wall construction. 15

OR

VI (a) Mention the different pre-cast members using ferro cement and ferro concrete constructions. 8

(b) What are the contributions of Nirmithi Kendras ? 7

UNIT – III

VII (a) Explain carbon foot print. 8

(b) What defines a green building ? 7

OR

VIII (a) Explain green materials. 8

(b) What are the major energy efficient areas of a building ? 7

UNIT – IV

IX (a) Explain BREEAM. 8

(b) What are the sustainably managed materials ? 7

OR

X Explain integrated life cycle design of materials and structures. 15