

DIPLOMA EXAMINATION IN ENGINEERING / TECHNOLOGY/MANAGEMENT /
COMMERCIAL PRACTICE – APRIL 2019

COST EFFECTIVE CONSTRUCTION AND GREEN BUILDING

(Maximum Marks : 100)

[Time : 3.hours]

PART - A
(Maximum marks: 10)

I Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Mention any two uses of mud as a green material.
2. Write two advantages of pre engineered and ready to use building elements
3. Name the process that breakdown used materials into raw materials to make new products.
4. Define embodied energy.
5. Clarify the concept of passive solar design in buildings with one or two sentences.

(5x2=10)

PART - B
[Maximum marks: 30]

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

1. Write about the application of plastic in building construction.
2. List out any 3 methods involved in reduction of the building carbon foot print.
3. Justify the economic benefits of green building construction and development.
4. Write a short note on costford.
5. Expand GRIHA. Write a short note on it.
6. Discuss the benefits of Reducing and Reusing.
7. Brief about the environmental effects of quarrying.

(5x6=30)

PART - C
[Maximum marks: 60]

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

MODULE-I

- III. a. State the role of stone and laterite block as cost effective materials. (8)
- b. Brief about the reuses of brick, concrete and steel in construction. (7)

OR

- IV. a. Write about the applications of gypsum board in construction. (8)
b. List out the advantages and disadvantages of gypsum board. (7)

MODULE II

- V . a. Illustrate any two types of cost effective wall construction methods. (8)
b. Describe the role of Nirmithi Kendra in promoting cost effective building construction. (7)

OR

- VI. a. Discuss about the precast members using ferro cement and ferroconcrete. (8)
b. Write about any two alternate roofing systems. (7)

MODULE III

- VII.a. Describe global warming and Carbon foot print (8)
b. Explain the global efforts to reduce carbon emissions. (7)

OR

- VIII. a. Explain life cycle analysis of buildings and its scope (8)
b. Write about the concept of green materials. Point out any four criteria for green building material selection. (7)

MODULE – IV

- IX. a. Write about any four major Green Building Rating Systems (8)
b. Explain the LEED certification procedure with the help of a flow chart. (7)

OR

- X. a. Describe any four energy efficient practices that are adopted in our traditional buildings. (8)
b. Discuss about the ways to increase energy efficiency of new buildings (7)
