



c09-c-606 A

3725

BOARD DIPLOMA EXAMINATION, (C-09)

APRIL/MAY—2015

DCE—SIXTH SEMESTER EXAMINATION

**LOW-COST HOUSING, RURAL WATER SUPPLY
AND SANITATION**

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. How is environmental pollution related to housing?

2. What are the various economic and social aspects responsible for emerging housing needs?

3. Define slums and write any two measures for improving slums.

1+2=3

4. What is energy conservation related to low-cost housing?

5. How innovative technologies cause cost reduction in housing?

6. List any three natural disasters which cause effect on housing.

- * 7. Write a brief note on garbage disposal.
8. Write any three factors to be considered in adoption of innovative technologies.
9. Give any three factors which influence the need for protected water supply.
10. List out the different types of rural household latrines.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.
 (2) Each question carries **ten** marks.
 (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (a) Explain the financial assistance for housing development by government organizations. 5
 (b) Explain the need for National Housing Policy. 5
12. Explain shelter upgradation technology relating to improvements in housing of poor families. 10
13. Compare the following alternative building materials with conventional mud bricks : 3+3+4=10
 (a) Fly ash bricks
 (b) Sand lime bricks
 (c) Hollow concrete bricks
- * 14. Explain the following innovative housing technologies : 5+5=10
 (a) Improved mud-thatch houses
 (b) One brick thick (23 cm) load-bearing walls to 5 stories' residential building

- * 15. (a) What are the various measures to be taken in providing shelter for homeless? 5
- (b) What are the various measures to be taken in construction of fire resistant houses? 5
16. (a) Explain the role played by the trees and greenery in providing low-cost infrastructure services. 5
- (b) Explain the concept of recycling of industrial and agricultural wastes. 5
17. Explain the following : 5+5=10
- (a) Defluoridation of water by Nalgonda technique
- (b) Sanitation of drinking water wells
18. Explain the functions and working principle of KVIC model biogas plant. 10
