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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

 $3 \times 10 = 30$

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 $10 \times 5 = 50$ **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 5 (b) Explain the need for National Housing Policy. **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

residential building

(b) One brick thick (23 cm) load-bearing walls to 5 stories'

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.	Exp	plain the following: 5+5=	10
	(a)	Deflouridation of water by Nalgonda technique	
	(b)	Sanitation of drinking water wells	
18.	-	plain the functions and working principle of KVIC model gas plant.	10

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