

B. Tech Degree III Semester Examination, November 2008

CE 305 HABITAT ENGINEERING

(Common for 1999 & 2002 Schemes)

Time : 3 Hours

Maximum Marks : 100

- I. (a) How many kinds of climate are there and what are they? List the climatic regions of the world. (10)
(b) Discuss briefly human body's heat production, heat loss and thermal balance of body. (5)
(c) What are thermal comfort devices? (5)
- OR**
- II. (a) Explain the various factors that affect the microclimate of a region. (10)
(b) Write short notes on :
(i) Bioclimatic chart (5)
(ii) Temperate climate (5)
- III. (a) Write down the general rules for natural ventilation as applicable to non-industrial type of buildings. (5)
(b) What is "cross ventilation"? explain in detail with sketches. (5)
(c) What do you mean by relative humidity? How do you measure humidity? (10)
- OR**
- IV. (a) Define ventilation. State the functions of ventilation. (5)
(b) What are the factors affecting human comfort in a building? Explain. (15)
- V. (a) Explain Sol-avi temperature and solar gain factor. (6)
(b) Define thermal insulation. Explain the methods of thermal insulation. (9)
(c) Explain thermo physical properties of building materials. (5)
- OR**
- VI. (a) Explain how do you achieve thermal insulation of exposed walls. (8)
(b) Explain the general principles to be observed in the construction of earthquake resistant buildings. (12)
- VII. (a) Comment on the National Housing Policy of Government of India. (5)
(b) Make a critical study on the roles played by housing cooperative public and private agencies in solving the housing problems of the country. State whether their efforts are successful, if yes, how far and if not why? (15)
- OR**
- VIII. Explain the social, economic and political aspects of housing in developing countries. (20)
- IX. (a) Explain the general principles of cost effective construction, briefly. (6)
(b) Briefly mention the building bye-laws for residential area of a typical-town planning scheme. (14)
- OR**
- X. (a) Explain the advantages of using appropriate technology in the construction of houses in rural areas. (14)
(b) Explain the various features of the Land Acquisition Act. (6)

