

**Indian Institute of Technology
Kharagpur**

Date..... FN/AN Time 3 Hrs. Full Marks 100 No. of Students 22
End Semester Exam Dept. Architecture & Regional Planning Sub. No. AR 32004
III Yr.B.Arch (H) Sub. Name: Housing and Community Planning

(Answer any five questions)

- Q.1. What was the design concept of the 'Torri' neighbourhood in Italy? 05
 Explain how the concept of mixed land use was successfully implemented in
 the 'Maringhe' housing area of Italy. 05
 Illustrate some of the techniques of site planning that have been tried out in the
 "Aranya" project in Indore and in Melbourne and Sydney in Australia. 10
- Q.2. Explain the 'Garden City' concept of Ebenezer Howard with the help of neat
 sketches. Give any two examples of where this concept was translated. 10
 What was the contribution of Lewis Mumford and Sir Raymond Unwin in
 the context of Garden City? 10
- Q. 3. Who are the main propounders of the neighbourhood concept? 02
 Explain the principles of the neighbourhood concept with neat sketches. 15
 Give your critical comments on its suitability in the Indian context. 03
- Q.4. What is climate balanced housing? 02
 What is energy rating in buildings? 05
 What are the essential characteristics of 'zero waste' buildings? 08
 What are the design principles for housing in a warm-humid climate? 05
- Q.5. In a housing scheme, the built form, the social issues and the technical issues are
 the three most important aspects to be considered- explain with examples. 10
 What are the principles and features of 'Flex Housing'? 10
- Q.6. Through a time-line, explain the major housing efforts in the global and the
 Indian context. 10
 Explain the order of development in a built house form, site and services
 approach and slums. What could be a suitable model for social housing? 10
- Q. 7. Write short notes on the following: (any two) 10x2
 • Earthquake resistant building design.
 • Future Dwelling Units
 • Alternative Building Materials