

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.ARCH
BRANCH: ARCHITECTURE

SEMESTER : VII/IX
SESSION : MO/2022

SUBJECT: AR703 SUSTAINABLE CITY PLANNING

TIME: 3:00 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) What are the basic features of a sustainable city? [2]
Q.1(b) Does green building more expensive than traditional building? Why? [3]
Q.1(c) Justify, giving one reason why sustainability is an essential component of any developmental programs and projects. [5]
- Q.2(a) What is the meaning of carrying capacity? [2]
Q.2(b) Write your opinions and thoughts on Urban Sprawl versus Compact City concerning sustainability in planning briefly. [3]
Q.2(c) Write in detail regarding the Three Magnet Theory of Ebenezer Howard. Illustrate with sketches and write your opinion on how this theory is evident in Indian cities and towns. [5]
- Q.3(a) What is the meaning of sustainability in transportation? [2]
Q.3(b) Write a short note on how appropriate material selection can contribute to sustainability in building construction. [3]
Q.3(c) What are the causes of rural-urban migration? How will it affect the urban area? [5]
- Q.4(a) What is a built environment? [2]
Q.4(b) Write a short note on any local environmental issue (can be based on your study). [3]
Q.4(c) How a green building differs from a conventional building? Compare any five aspects. [5]
- Q.5(a) Slum dwellers strive hard for self-sustenance. How? [2]
Q.5(b) Enumerate the characteristics of the slum. [3]
Q.5(c) Write a detailed note on the garden city concept by Ebenezer Howard. Explain the same with examples. [5]

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