SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR Total number of pages: 2 ROLL NO: Total number of questions: 6

B.ARCH. - 6th Sem Fundamentals of Sustainable Architecture

Subject Code : AR- 607 Paper ID: (for office use)

Batch: 2015 onwards

Time allowed: 03 Hrs Important Instructions:

A total of 5 questions are to be attempted.

 Question 1, 2 and 3 is compulsory. Question 2 & 3 are to be attempted from the options provided.

Max Marks: 60

- Attempt any two from Q.4, Q.5 and Q.6
- Answers are required to be supported with suitable sketches.
- Q.1 Briefly explain the following. How these are important in making buildings sustainable?
- a. Carbon Neutral Buildings
- b. Principles of Sustainable Design
- c. Life Cycle Assessment
- d. Carbon Credits
- e. Role of GRIHA in development of sustainable buildings.
- f. Assessment tools for sustainability of buildings
- Q.2 What do you understand by micro climate? How it is responsible for maintaining the quality of indoor environment?

Explain the causes of Global Warming? What remedial measures can be suggested to neutralize the ill effects?

Q.3 As an architect what approach is to be followed in making the design of a building sustainable? What are the objectives for designing such buildings?

Explain the concept behind the construction of green buildings. What role do the green buildings play in built environment? Give examples.

- Q.4 Explain any three interventions for a sustainable design. Also suggest ways to achieve a sustainable design with them.
- Q.5 Suggest suitable materials and their importance for different parts in designing of a site which can be recycled and brought to use again if needed.
- Q.6 Suggest Climate responsive techniques for the construction of a residence located in South India.