

**ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM**  
**VIII SEMESTER HOME SCIENCE      TIME:4Hrs/Week**  
**HS-E2-8105      MARKS:100**  
**HOUSING FOR SUSTAINABLE LIVINGTHORY**

**COURSE OBJECTIVE:**

- focuses on energy conservation, environmental protection, and many other supporting factors.
- Sustainable housing aims to provide affordable, sustainable housing for all city inhabitants.

**COURSE OUTCOMES:**To enable the students to:

1. Understand the concept and importance of sustainability in housing
2. Be aware of Green building technology concepts
3. Understand about various research institutes/organisations for sustainable house construction
4. Gain knowledge about the relevance of sustainable planning approach
5. Comprehend the importance of various research organisations for sustainable house construction.
6. Understand importance of life-cycle approach to sustainability

**THEORY**

**UNIT-1**

- Sustainability in housing – concept, importance, Sustainable Development Goals (SDGs) in Habitat

**UNIT-2**

- Life – cycle approach to sustainability – importance, concepts.

**UNIT-3**

- Green Buildings – concept, importance, components and elements of green building technology, rating criteria, advantages and disadvantages of green building technology, LEED Certification.

**UNIT-4**

- Research Institutes/Organisations for sustainable house construction – NEERI, World Green Building Council.

**UNIT-5**

- Case studies on sustainable housing/living practices
  - a) Sustainable housing – From cities in India
  - b) Sustainable energy management – From cities, villages in India

**REFERENCES:**

1. David T Allen (2015) Sustainable Engineering, Pearson Education
2. G. Harihara Iyer (2022) Green Building Fundamentals, Notion Press
3. Dr.Adv.Harshul Savla (2021), Green Building Principles &Practise, Notion Press

