



**UG-7607**  
**B. Arch. IV (Sem. VIII) Examination**  
**May/June – 2012**  
**AR-806(A) Energy Efficient Architecture**

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>B. Arch. IV (Sem. VIII)</b></p> <p>Name of the Subject : <b>AR-806(A) Energy Efficient Architecture</b></p> <p>Subject Code No. : <b>7 6 0 7</b> Section No. (1, 2,.....) : <b>Nil</b></p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; width: 100%;">Student's Signature</div>
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- (2) Figures to the right indicate full marks.  
(3) Illustrating your answer through sketches, along with write-up is essential.

**1 Fill in blanks. 10**

- (1) The three Rs essential for sustainable developemnts are \_\_\_\_\_, \_\_\_\_\_ & \_\_\_\_\_.
- (2) Two types of energies available to human beings for use are \_\_\_\_\_ and \_\_\_\_\_.
- (3) A building material widely used in Pondicherry for wall construction is \_\_\_\_\_.
- (4) C.F.L. stands for \_\_\_\_\_ .
- (5) Electricity generated from sources below the Earth's crust is known as \_\_\_\_\_ power.
- (6) Carbon dioxide gas is primarily responsible for \_\_\_\_\_ effect on the Earth.
- (7) The highest consumption of electrical energy in an office building in India is for either \_\_\_\_\_ or \_\_\_\_\_.

- 2 What care would you take while designing a building in Surat to make the interiors cooler for human comfort. 10

**OR**

How can waste-water collected from a building be reused ? 10  
Name this system and briefly describe this method, with the help of sketches.

- 3 Which naturally available energy sources are you aware of? 10  
Write in brief about any one such energy, illustrating how it could be tapped, stored and used.

- 4 Explain in detail any one of the ratings : LEEDS OR GRIHA. Also give a comparison of their features. 10

**OR**

List ways in which one can harness Solar energy for use in a residential building and show how it can be linked to a house wiring circuit. 10

- 5 Name the building that your group studied this semester and briefly explain the energy efficient features of the same building along with sketches or diagrams. 10

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