

B.E. Seventh Semester (Civil Engineering) (C.B.S.)  
**Elective - I : Sustainable Resource Management in Civil Engineering**

P. Pages : 1

Time : Three Hours



**NKT/KS/17/7438**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Solve Question 11 OR Questions No. 12.

1. What are sustainable goals? Who has prescribed these goals. 13  

**OR**
2. What are the techniques adopted in managing resources in construction Industries. 13
3. Explain in detail the concept of zero waste production in construction engineering. 14  

**OR**
4. How the industrial waste can be utilized in construction industries? Explain with examples. 14
5. Enumerate 3R of water conservation and explain them in detail. 13  

**OR**
6. What is grey water? Why and how it is treated. 13
7. What are the disadvantages of Non-renewable energy sources? Explain the effects on the human health. 13  

**OR**
8. Enumerate various renewable energy sources. Explain their potential with reference to Indian conditions. 13
9. Discuss any seven human health issues related with construction activity. 14  

**OR**
10. Discuss effect of light, heat and humidity on human health. 14
11. Enumerate and discuss the provisions of National Building codes for Life Cycle Costing. 13  

**OR**
12. What are the different techniques adopted for Life cycle costing? 13

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