



- Notes :
1. All questions carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Use of slide rule, Logarithmic tables is permitted.
 5. Illustrate your answers wherever necessary with the help of neat sketches.
 6. Non programmable calculator is permitted.

1. a) State indirect methods of utilizing solar energy and discuss any two method in detail. **8**
b) What are the conclusions of alternate energy strategy? **8**

OR

2. a) State applications of solar energy and discuss any one application in detail. **8**
b) Write short notes on **any two** of the following. **8**
i) Wind energy. ii) Tidal energy
iii) Biomass iv) Ocean thermal Energy Conversion.

3. a) Discuss International Energy Policies in detail. **8**
b) State principle pollutants and describe any three of them in detail. **8**

OR

4. a) Discuss current evidences of climate change. And state effects of acid rain. **8**
b) Describe energy consumption and its impact on environmental climatic change. **8**

5. a) Describe in detail conventional energy sources in India. **8**
b) Discuss energy and environmental policies in detail. **8**

OR

6. a) Describe in detail commercial and non-commercial form of energy sources. **8**
b) Discuss bio-fuels utilization pattern in past, present and future. **8**

7. a) State role of BEE and Central and State governments in ECA-2001. **8**
b) State features of Energy Conservation Act 2001. **8**

OR

8. a) State features of Electricity Act-2003 and role of Bureau of Energy efficiency. **8**
b) Discuss powers and functions of Central and State government under Energy Conservation Act 2001. **8**

9. a) Discuss global energy issues in detail. **8**
b) Discuss National and State level energy issues in detail. **8**

OR

10. a) Discuss Energy Vision with respect to India. **8**
b) Discuss Industrial energy policy in detail. **8**
