

**INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR**

**Date:-**

**Time: 2 hrs**

**Total Marks: 60**

**No. of Students:41**

**Mid- Autumn Semester Examination 2012**

**Sub: Environmental Studies**

**Sub No. (AR22007)**

**Course: 2<sup>nd</sup> Yr. B.Arch**

**Instruction:** i) Answer **ANY FOUR** questions having equal marks.  
ii) Answer all parts of a given question at one place only.  
iii) Answer briefly and to the point to get extra credit.

**Q.1(a)** Explain with sketches and diagrams various types of ecosystem in the earth.

(b) What are the various physical factors that affect the distribution of organisms in different habitats.

**Q.2.(a)** List **five differences** in microclimatic conditions of dense urban areas from that of surrounding rural areas, with reasons.

b) "Big dams not only control floods but also provide large scale impact on river basins."  
**Explain the phenomena with suitable examples.**

c) How do **Human activities** cause ground subsidence and alter the process of erosion?

**Q.3.(a)** What are the major functions of forests, and why are they such important ecosystem?

(b) What are renewable, non-renewable and alternate energy sources in India?

(c) What are the mega bio-diversity centres in the world and hot-spots in India?

**Q.4.(a)** How is **population size affected** by birth, death, fertility and migration rates?

(b) What does **age-sex distribution** of population mean?

(c) **List 5 changes** you might anticipate if world population were to be doubled in the next 40 years.

**Q.5. Write short notes** on the followings:-

i) Agenda 21 of RIO-SUMMIT, 1992

ii) Kyoto Protocol

iii) Montreal Protocol

iv) Vermi - composting

v) Advantages of rainwater harvesting in urban catchment

**Q.6. (a)** Distinguish between Classical smog and Photochemical smog.

(b) How fresh water resources get polluted by excessive use of water in urban areas.

(c) "Modern Building seems to be much noisier than many old homes". State five reasons.