

**RDL 740**

**MAJOR TEST**

**Dated: 2/12/2006**

**Max. Marks: 50**

**Time: 2 Hours**

**Technology for Utilization of Wastelands and Weeds**

Q. 1 (a) What do you understand by biomass ? Discuss how biomass can provide renewable raw materials for Industry. (4)

(b) Write short notes on any two (3 × 2)

(i) Terpenoids and their plant sources

(ii) Cellulose and Hemicellulose

(iii) Plant acids

Q. 2. (a) What is vegetable fibre ? Classify based on their location in the plants and major sources of vegetable fibres in India. (5)

(b) How fibre plants can be utilized for employment generation in the rural areas? (5)

Q. 3. (a) Distinguish between traditional and non traditional oilseeds. (4)

(b) How non-traditional oilseeds can be utilized for the production of Biofuel in India? (6)

Q. 4. How Gums differ from Resins? Discuss various Biomass sources of Gums & Resins. (5)

**OR**

Discuss the importance of wastelands in the context of Rural Development.

(5)

Q. 5. Describe the Auroville wasteland reclamation case study (for red latirite soil or Saline-alkaline black cotton soil) discussed in the class. What lessons should be learnt from the success and failure achieved in then case study.

(5)

Q. 6. (a) Based on the article circulated, describe the common features of Wasteland and Fly ash. Mention the amount of fly ash generated/ used in India and also list potential utilization of fly ash

(2.5)

(b) How can fly ash be utilized for reclamation of degraded soils. Mention 2-3 examples. What precautions need to be taken for land application of fly ash.

(2.5)

Q. 7. Write short notes on any **Two**:

- (a) Weeds and their potential in Wasteland reclamation.
- (b) Xerophyte adaptations in plant
- (c) Role of bio-technology in Wasteland reclamation.

(5)