

Total number of printed pages-4

**3 (Sem-5/CBCS) BOT HE1**

**2024**

**BOTANY**

(Honours Elective)

Paper : BOT-HE-5016

**( Natural Resource Management )**

Full Marks : 60

Time : Three hours

***The figures in the margin indicate full marks for the questions.***

1. Fill in the blanks: Answer the following :  $1 \times 7 = 7$

- (a) United Nations identified \_\_\_\_\_ sustainable development goals to be achieved by 2030.
- (b) To maintain ecological stability \_\_\_\_\_ of total geographical area should be under forest cover.
- (c) One can get an idea about the extent of consumption of resources and waste generation by a country or by individual in a country by calculating the \_\_\_\_\_.

Contd.

(d) What are exhaustible sources of energy?

(e) What is an aquifer?

(f) What is land use change?

(g) What are 'hot spots' of biodiversity?

2. Answer the following :  $2 \times 4 = 8$

(a) What are the 4 R's of waste management?

(b) What is ecological sustainability?

(c) What is Nagoya Protocol?

(d) What is GIS?

3. Answer the following (**any three**) :  $5 \times 3 = 15$

(a) What are the merits and demerits of bioprospecting?

(b) Write on natural resource accounting and its significance.

(c) "Energy consumption of a nation is usually considered as an index of its development." Justify.

(d) Write a note on participatory resource appraisal.

(e) Write on the evolution of National Biodiversity Action Plan (NBAP) in India.

4. Answer the following (**any three**) :  $10 \times 3 = 30$

(a) What is sustainable development? Discuss some important measures of sustainable development.  $3 + 7 = 10$

(b) Why is water considered as one of the most important natural resources? Write the uses of water in different sectors. Mention some of the major international and national water disputes.  $2 + 5 + 3 = 10$

(c) What are the major and minor forest products? Write a note on the NTFPs of Northeast India and their significance in the upliftment of the economic condition of the region.  $4 + 6 = 10$

(d) What are different types and sources of solid waste? Explain the importance of solid waste management.  $4 + 6 = 10$

- (e) What is IPR? Discuss the role of IPR in curbing biopiracy and conservation of biodiversity. 3+7=10
- (f) Discuss different national and international efforts in resource management and conservation.
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