*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 : 1×7=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 : 2×4=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)*** : 5×3=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)*** : 10×3=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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