

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5299

J

Unique Paper Code : 2164001001

Name of the Paper : Plant Diversity and Human Welfare

Name of the Course : B.Sc. (Hons.) Botany (GE-I)

Semester : II / IV

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **four** questions in all. Attempt **all** parts of question together.
3. Question number **1**, is compulsory.
4. **All** questions carry equal marks.

1. (a) Define the following terms (**any five**) : (1×5=5)

- (i) Sustainable Development Goals (SDGs)
- (ii) Cash crop
- (iii) Genetic diversity
- (iv) Waste minimization
- (v) Vegetation Stands
- (vi) Endemism

- (b) Fill in the blanks : (1×5=5)

- (i) The _____ aims to protect the rights of tribal communities over forest resources and promote biodiversity conservation.
- (ii) Forests help in maintaining the _____ cycle by facilitating transpiration and precipitation.
- (iii) The _____ is an international agreement aimed at conserving biological diversity and ensuring fair sharing of benefits.
- (iv) The pulses belong to _____ family of plants.
- (v) The sustainable use of plant resources helps conserve _____ for future generations.

P.T.O.

- (c) Match the following : (1×5=5)
- | | |
|---------------------|--|
| (i) Forests | a. Morels |
| (ii) Commercial use | b. Biodiversity and ecological balance |
| (iii) Tobacco | c. Space algae |
| (iv) Chlorella | e. Timber, medicine, and fuel |
| (v) Morchella | f. Cash crop used for smoking products |
2. Write the botanical name, family, important plant part and traditional uses of the following (**any three**) (5×3=15)
- (i) Ashwagandha
 - (ii) Cotton
 - (iii) Tea
 - (iv) Saffron
3. Write short note on **any three** : (5×3=15).
- (i) Ecological Importance of Forests
 - (ii) Community-driven strategies for biodiversity conservation.
 - (iii) Biodiversity hotspots of India
 - (iv) Sustainable developmental
4. Answer the following : (7.5×2=15)
- (i) Highlight the role of international organizations such as the IUCN in the conservation of plant diversity. What are some of their key initiatives?
 - (ii) Describe how green spaces and vegetation influence human health, aesthetics, and well-being.
5. Answer **any two** of the following : (7.5×2=15)
- (i) Discuss the objectives and impact of the Protection of Plant Varieties and Farmers' Rights Authority (PPVFR) in safeguarding the interests of farmers and promoting plant diversity.
 - (ii) What are phytogeographical regions? Discuss Phytogeographical regions of India with a special mention of their constituent food crop diversity.
 - (iii) Explain the social dimensions of plant diversity in tribal and rural communities.