

2013

M.Sc.

4th Semester Examination

BOTANY

PAPER—BOT-401

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer all questions.

1. (a) (i) Distinguish between fibres and flosses. Write down the botanical names of two fibre- and two floss yielding plants. 2+2
- (ii) What are natural dyes? Give scientific names of three dye yielding plants obtained from the forest with their uses. 1+3
- Or
- (i) Write down the botanical names of four grass species yielding oil mentioning their uses. 4
- (ii) Write short notes on edible products obtained from the forests of West Bengal. 4

(Turn Over)

2. Define biological invasion. What are the impacts of biological invasion? Mention the full form of CBD, AS and IAS. Give their examples. 1+4+3

Or

What are 'endangered' and 'threatened' species? Write down the full forms of CIAMP, NBPGR and TBGRI. Where are these located? 2+3+3

3. What is honey? Write the chemical constituents of honey. What is meant by aroma or flavour of honey? 2+4+2

Or

What is meant by bee pasturage? How many bees prepare honey within their stomach and store it in the honey cells of the hive? Write the names of some important bee plants of West Bengal. 2+4+2

4. Write scientific names of five(5) sacred trees of India. Mention economic importance of each of the species cited. 5+3

Or

Why are sacred groves known as traditional *in situ* conservation system? Discuss the role of sacred groves in cultural life of common people. 4+4

5. Define germplasm. Point out the reasons for germplasm conservation. Briefly discuss the *in situ* and *ex situ* conservation of germplasm. 2+2+4

Or

What is Chimera? How does chimera develop in an asexually propagating plant? Give your views on the use of clones in agriculture and forestry. 2+2+4