

**Q.P. Code :01339**

**[Time: Two Hours]**

**[ Marks:40]**

**Please check whether you have got the right question paper.**

- N.B:**
- 1. Question.No.1 is compulsory.**
  - 2. Attempt any four out of remaining questions.**

- Q.1)** State True or False and justify (**any eight**) **08**
- Chinese system of medicine is based on “like kill’s like’ principle.
  - Rhizomes are modified tubers.
  - Crude drugs in Indian Pharmacopoeia is arranged according to biological method of classification.
  - Secondary metabolites are important for the growth & development of plant.
  - Drugs that get degraded by heat are preferably extracted by soxhlet method.
  - Fixed oils are biosynthesized by polyketide pathway.
  - Drying is an important factor for preparation of herbal drug for market.
  - Idioblasts are a type of stone cell.
  - Leaves can be classified based on the arrangement as dorsiventral.
- Q.2)** Write a short note on (**any two**) **08**
- Cosmeceuticals
  - Starch grains
  - Collection & Cultivation of plants
- Q.3)** a) Write a note on pharmacological method of classification of drugs. **04**  
b) Enumerate shikimic acid pathway. **04**
- Q.4)** a) Write a short note on plant tissue culture. **04**  
b) Explain in brief supercritical fluid extraction. **04**
- Q.5)** a) Explain concept of authentication **04**  
b) Describe histology of bark. **04**
- Q.6)** Differentiate between: **08**
- Unorganised versus organized drug.
  - Percolation versus maceration
  - Roots versus rhizomes
  - Primary versus secondary metabolites.