[This question paper contains 6 printed pages.]

Your Roll No ...

Sr. No. of Question Paper: 1469

Unique Paper Code : 32163404

Name of the Paper : Medicinal Botany

Name of the Course : B.Sc. (Honours) Botany

(SEC)

Semester : IV

Duration: 2½ Hours Maximum Marks: 38

## 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.
- 3. All questions carry equal marks.
- 4. Support your answers wherever necessary with suitable diagrams.
- 1. (a) Write suitable answers for the following (any six):  $(0.5 \times 6 3)$

 $(0.5 \times 6 = 3)$ 

(i) A plant source of Piperine.



- (ii) A plant used in cancer prevention.
- (iii) A plant used in key ingredients in nonpesticidal management (NPM).
- (iv) A plant belonging to Lamiaceae.
- (v) A plant known as Shatavari.
- (vi) A plant known in Ayurveda as the queen of herbs.
- (vii) An Indian system of medicine which has its origin in Greece.
- (b) Match of the following:

 $(0.5 \times 5 = 2.5)$ 

- (i) Azadirachta indica (a) Skin burns
- (ii) Aloe vera

1469

- (b) Biopesticide
- (iii) Withania somnifera (c) Memory enhancement
- (iv) Ocimum sanctum
- (d) Strength & vitality
- (v) Bacopa moneri
- (e) cold cough

Meliaceae (i) Curcuma longa

Combretaceae (ii) Tinospora cordifolia

Lamiaceae (iii) Azadirachta indica

Menispermaceae (iv) Terminalia chebula

(v) Ocimum sanctum Zingiberaceae

- (c) Define the following: (any four)  $(1 \times 4 = 4)$ 
  - (i) Cryopreservation
  - (ii) Sacred grooves
  - (iii) Red data list criteria
  - (iv) Endemic
  - (v) Organoleptic
  - (vi) Traditional medicine
- (a) Write short notes on the following: (any four)  $(2 \times 4 = 8)$ 
  - (i) Medicinal uses of turmeric
  - (ii) National gene bank

- (iii) Nutraceuticals
- (iv) Endangered plants
- (v) Concept of Umoor-e-Tabiya
- ·(vi) Greenhouse technology
- (b) Expand the following: (any three)  $(0.5\times3=1.5)$ 
  - (i) NBPGR
  - (ii) CIMAP
  - (iii) JNTBGRI
  - (iv) RRL
  - (v) NMPB
  - (vi) AIIA
  - (vii) AYUSH
- 3. (a) Discuss the historical aspects, concepts and principles of Ayurvedic system of medicine.

  (5)

- (b) Write the therapeutic and pharmaceutical uses of important plants used in the Ayurveda system of medicine. (4.5)
- 4. (a) Differentiate between the following (any two):  $(2.5 \times 2=5)$ 
  - (i) Siddha system and Unani system
  - (ii) National Parks and Botanic Garden
  - (iii) Saptadhatus and Tridoshas
  - (b) Discuss the various asexual methods of propagation in medicinal plants. (4.5)
- 5. Mention two medicinal plants and explain their importance in treatment of hepatic disorders, cardiac diseases, infertility, diabetes, blood pressure, cancer and skin diseases. (9.5)
- 6. (a) What are the objectives of nursery? Write the lists of important components of nursery. (5)
  - (b) Discuss methods of cuttings, layering, grafting and budding. (4.5)



7. What are the threats to biodiversity? Discuss the various strategies used for conservation of endangered and endemic medicinal plants of India. (9.5)