

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

Semester	: V (New)	Term	: First	Academic Year	: 2022-23
Course No.	: H/MAP 351	Title	: Medicinal and Aromatic Crops		
Credits	: 3(2+1)				
Day & Date	Thursday, 09.02.2023	Time	: 14:00 to 17:00 hrs.	Total Marks	: 80

- Note :**
1. Solve ANY EIGHT questions from SECTION 'A'.
 2. All questions from SECTION 'B' are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Define Medicinal and Aromatic plants and describe in brief about opportunities and constraints in cultivation of medicinal and aromatic plants.
- Q.2 Write down the cultivation of Safed Musli on the following points:
- a) Soil and climate
 - b) Propagation and planting
 - c) Manures and fertilizers
 - d) Harvesting and yield
- Q.3 Write down the cultivation of Dioscorea on the following points:
- a) Importance and chemical composition
 - b) Propagation techniques
 - c) Planting and aftercare
 - d) Harvesting and processing
- Q.4 Give the information in tabular form.

Sr.No.	Crop	Botanical Name	Family	Spacing	Varieties
a)	Periwinkle				
b)	Pyrethrum				
c)	Citronella				
d)	Lavender				

- Q.5 Discuss the cultivation of Mentha on the following aspects:
- a) Origin and distribution
 - b) Varieties
 - c) Pest and diseases
 - d) Distillation and storage of oil
- Q.6 Describe the cultivation of Geranium on the following points:
- a) Soil and climate
 - b) Types and varieties
 - c) Nutritional and water requirement
 - d) Harvesting and yield
- Q.7 Write down the cultivation of Khus grass on the following points:
- a) Soil and climate
 - b) Propagation and planting
 - c) Manures and fertilizers
 - d) Distillation and storage of oil

(P.T.O.)

- Q.8 Write in brief about the package of practices of Cinchona.
- Q.9 Write down the therapeutic and pharmaceutical uses of the following crops (Any Four):
- | | | |
|----------------------|----------------|---------------|
| a) Isabgol | b) Lemon grass | c) Belladonna |
| d) <i>Ammi majus</i> | e) Panpimpali | f) Patchouli |
- Q.10 Write short notes on (Any Two):
- Harvesting, processing and grading of Withania
 - The lancing and latex collection of Opium
 - Cosmetic and medicinal uses of *Aloe vera*

SECTION 'B'

Q.11 Do as directed:

- Name two varieties of Wild Brinjal developed by IIHR, Bangalore.
- Give the full form of CIMAP, Lucknow.
- Write botanical names of Hirda and Behada.
- Acorus calamus* is a annual long-day plant with life cycle of one year in general.
(State True or False)
- Which two parts of Senna plant contains sennoside?
- Write one important use of Muskdana.
- Write two species of Cinchona grown commercially for Cinchona bark.
- What is the seed rate of Occimum per hectare?

Q.12 Fill in the blanks:

- _____ is a steroidal sapogenin obtained from the rhizomes of various species of Dioscorea.
- Cymbopogon martini* belongs to the family _____.
- Safed Musli is cultivated during the _____ season.
- Ashwagandha is also known as _____.
- _____ and _____ are two alkaloids found in periwinkle which are important in cancer therapy.
- Oil of mint is rich in _____.
- _____ is a mutant variety of Isabgol, released by the CIMAP, Lucknow.
- _____ is a variety of Lemon grass, developed by clonal selection from OD-19.

