

LIBRARY
MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION



B.Sc. (Agri.)

Semester : IV (New)	Term : II	Academic Year : 2011-12
Course No. : HORT 243	Title : Production Technology of Spices, Aromatics, Medicinal and Plantation Crops	
Credits : 2 (1+1)	Time : 14.00 to 16.00	Total Marks : 40
Day & Date : Monday, 23.04.2012		

- 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 diagrams wherever necessary.

SECTION "A"

Q.1 Discuss on importance and scope for commercial cultivation of spices and plantation crops in India.

Q.2 Write in detail cultivation of black pepper on the following points.

- 1) Soil and climate
- 2) Common method of propagation
- 3) Planting (Distance & Season)
- 4) Harvesting and yield

Q.3 Write in detail cultivation of coconut on the following points.

- 1) Soil and climate
- 2) Selection of seedling for planting
- 3) Improved varieties (Four)
- 4) Harvesting and yield

Q.4 Describe in short citronella cultivation on the following points.

- 1) Soil and climate
- 2) Propagation
- 3) After cares
- 4) Harvesting and yield

Q.5 Write short notes on following.

- 1) Harvesting and processing of turmeric.
- 2) Harvesting and processing of cinnamon.

Q.6 Complete the following table with correct information.

Sr. No.	Crop	Botanical name	Common method of propagation	Planting distance	Yield / ha
1.	Arecanut				
2.	Ginger				

Q.7 Comment on following.

- 1) Varieties of black pepper
- 2) Rejuvenation of cashew

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talasande, Tal : Hatakangle, Dist : Kolhapur

Pin Code : 416 112

(P.T.O.)

SECTION "B"

Q.8 Fill in the blanks:

- 1) The botanical name of Adulsa is _____.
- 2) Senna is propagated by _____.
- 3) In Safed Musli, the plant part used for medicine is _____.
- 4) Mohitnagar is a variety of _____.
- 5) The bright yellow colour of turmeric occurs due to _____.

Q.9 Write true or false:

- 1) Stevia is a short day plant.
- 2) The main alkaloid present in *Opium poppy* is morphine.
- 3) The National Research Centre for seed spices is located at Ajmer.
- 4) The spacing of oil palm is 2.7 m x 2.7 m.
- 5) Vetiver belongs to family liliaceae.

Q.10 Match the pairs:



"A"

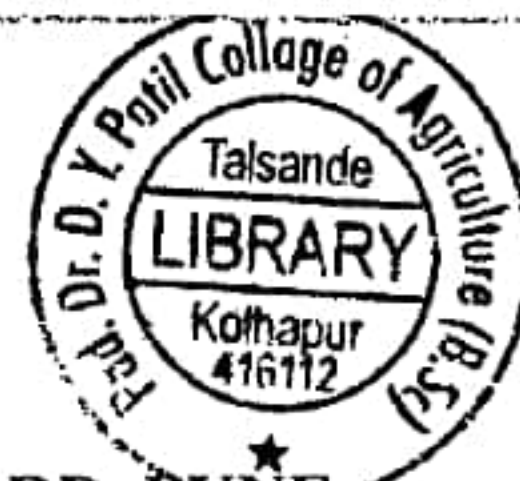
- 1) Fenugreek
- 2) Stevia
- 3) Tea
- 4) Nuxvomica
- 5) Nutmeg

"B"

- a) *Camellia sinensis*
- b) Strychnine
- c) Leguminosae
- d) Konkan Sugandha
- e) A sugar substitute for diabetic patients

◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

LIBRARY



MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester	: IV (New)	Term	: II	Academic Year	: 2010-11
Course No.	: HORT 243	Title	: Production Technology of Spices, Aromatics, Medicinal and Plantation Crops		
Credits	: 2 (1+1)				
Day & Date	: Thursday, 28.04.2011	Time	: 14.00 to 16.00	Total Marks	: 40

- 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 diagrams wherever necessary.

SECTION "A"

- Q.1 Define spices and write importance of spices and plantation crops in India.
- Q.2 Write in brief on **Coconut** on following points:
- 1) Uses
 - 2) Propagation
 - 3) Varieties
 - 4) Harvesting and yield
- Q.3 Explain in brief on **Turmeric** in respect of followings:
- 1) Soil and climate
 - 2) Propagation and seed rate
 - 3) Harvesting
 - 4) Processing
- Q.4 Describe the package of practices of **Cashew nut** on following points:
- 1) Soil and climate
 - 2) Propagation
 - 3) Harvesting
 - 4) Varieties
- Q.5 Describe in brief cultivation of **Black pepper** on following aspects:
- 1) Soil and climate
 - 2) Propagation
 - 3) Harvesting and yield
 - 4) Processing
- Q.6 Explain in brief on **Cardamom** on following points:
- 1) Soil and climate
 - 2) Intercultural operations
 - 3) Harvesting
 - 4) Processing
- Q.7 Describe the cultivation of **Medicinal Solanum** in respect of:
- 1) Propagation
 - 2) Varieties
 - 3) Harvesting
 - 4) Processing
- Q.8 Write in detail the cultivation of **Senna** on the following points:
- 1) Soil and climate
 - 2) Planting
 - 3) Irrigation and interculture
 - 4) Harvesting and yield

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talsande, Tal: Halakangle, Dist: Kolhapur

Pin Code: 416 112

(P.T.O.)

Q.9 Write in brief on **Lemon grass** on following points:

- 1) Uses
- 2) Raising of nursery
- 3) Planting
- 4) Harvesting and yield

Q.10 Write short notes on (Any two):

- 1) Training and pruning in cocoa.
- 2) Processing of cashewnut.
- 3) Uses of Aloe and periwinkle.

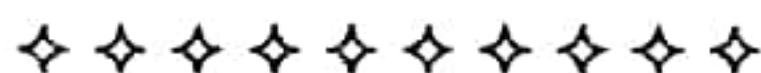
SECTION "B"

Q.11 Fill in the blanks:

- 1) For coconutwater, the nuts should be harvested at _____ month of age.
- 2) _____ is said to be the queen of spices.
- 3) Panniyur No.1 is a variety of _____ spice crop.
- 4) In clove the _____ part is used as spice in commerce.

Q.12 Give any two uses of following crops.

- 1) Vetiver
- 2) Aonla
- 3) Adulsa
- 4) Dawna



MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)



Semester	: IV(New)	Term	: II	Academic Year	: 2009-10
Course No.	: HORT 243	Title	: Production Technology of Spices, Aromatics, Medicinal and Plantation Crops		
Credits	: 2(1+1)				
Day & Date	: Wednesday, 21.4.2010	Time	: 14.00 to 16.00	Total Marks	: 40

- Note :
1. Solve ANY FIVE questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Define spices and write importance of spices production in India.
- Q.2 Write the production technology of **Cashewnut** on following points.
- 1) Soil and climate
 - 2) Propagation and spacing
 - 3) Varieties
 - 4) Manures and fertilizers
 - 5) Harvesting and yield
- Q.3 Explain in brief the package of practices for **Citronella** with reference to the following points.
- 1) Soil and climate
 - 2) Propagation
 - 3) Improved varieties
 - 4) Fertilizer requirement
 - 5) Harvesting and yield
- Q.4 Write short notes on (any two).
- 1) Uses of Aloe and Periwinkle
 - 2) Propagation and planting of Arecanut
 - 3) Harvesting and yield of Black pepper
- Q.5 Describe the cultivation of **Turmeric** on following points.
- 1) Climate
 - 2) Propagation and seed rate
 - 3) Varieties
 - 4) Manuring and fertilizers
 - 5) Harvesting and yield
- Q.6 Write the production technology of **Coconut** on following points.
- 1) Soil and climate
 - 2) Propagation and spacing
 - 3) Varieties
 - 4) Manuring and fertilization
 - 5) Harvesting and yield
- Q.7 Describe the cultivation of **Isabgol** or **Medicinal Solanum** on following points.
- 1) Soil and climate
 - 2) Seed rate and sowing time
 - 3) Improved varieties
 - 4) Fertilizer requirement
 - 5) Harvesting and yield

(P.T.O.)

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talsande, Tal : Hatakangle, Dist. : Kolhapur

Pin Code : 416 112

Q.8 Write in short propagation and planting of following crops.

- 1) Periwinkle
- 2) Aloe

Q.9 Write in short cultivation of arecanut on the following points.

- 1) Soil and climate
- 2) Varieties
- 3) Harvesting
- 4) Processing and uses

Q.10 Write in short medicinal uses of following crops.

- 1) Stevia
- 2) Aonla
- 3) Medicinal solanum
- 4) Aloe

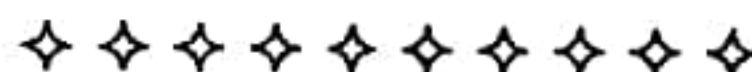
SECTION "B"

Q.11 Define following terms.

- 1) Spices
- 2) Plantation crops
- 3) Medicinal plants
- 4) Aromatic crops

Q.12 State True or False.

- 1) Botanical name of cardamom is *Elettaria cardamomum*.
- 2) Acorus (Sweet flag) is propagated through rhizomes.
- 3) On the basis of sex form, nutmeg is dioecious in nature.
- 4) The steroid diosgenin is extracted from medicinal dioscorea.



MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : IV (New)	Term : II	Academic Year : 2012-13
Course No. : HORT 243	Title : Production Technology of Spices, Aromatics, Medicinal and Plantation Crops	
Credits : 2 (1+1)		
Day & Date : Monday, 15.04.2013	Time : 14.00 to 16.00	Total Marks : 40

- 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 diagrams wherever necessary.

SECTION "A"

- Q.1 Discuss the importance of medicinal and plantation crops in India.
- Q.2 Describe the cultivation of **Black pepper** on following points:
- a) Propagation
 - b) Training and pruning
 - c) Harvesting
 - d) Processing
- Q.3 Describe the cultivation practices of **Citronella grass**.
- Q.4 Write short notes on (Any Two)
- 1) Propagation of Coconut
 - 2) Processing of Cardamom
 - 3) Uses of Aloe and Periwinkle
- Q.5 Give the symptoms and control measures of important diseases of Coconut and Coffee.
- Q.6 Write the package of practices of **Ginger** on following points:
- a) Soil and climate
 - b) Propagation and planting
 - c) Harvesting
 - d) Curing
- Q.7 Describe the cultivation practices of **Isabgol**.
- Q.8 Comments on following (Any Two)
- 1) Importance of Aromatic Plants
 - 2) Propagation of Arecanut
 - 3) Pest and diseases of Cashewnut
- Q.9 Write the botanical name and uses of following plants.
- 1) Lemon grass
 - 2) Davana
 - 3) Seena
 - 4) Belladonna
- Q.10 Give the production technology of **Medicinal Solanum** considering soil and climate, propagation, varieties and processing.

(P.T.O.)

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talsande, Tal: Hatakangle, Dist: Kolhapur

Pin Code : 416 112

SECTION "B"

Q.11 Fill in the blanks.

- 1) CIMAP is located at _____.
- 2) _____ is said to be the King of spices.
- 3) _____ is a dollar earning crop.
- 4) _____ part of Vettiver grass is used for extraction of essential oil.

Q.12 Match the pairs.

"A"

- (1) Cinnamom
- (2) Nutmeg
- (3) Turmeric
- (4) Aonla

"B"

- (a) Myrstickaceae
- (b) Kanchan
- (c) Zingiberaceae
- (d) Bark spice
- (e) Piperaceae

◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : IV (New)	Term : II	Academic Year : 2013-14
Course No. : HORT 243	Title : Production Technology of Spices, Aromatics, Medicinal and Plantation Crops	
Credits : 2 (1+1)		
Day & Date : Saturday, 26.04.2014	Time : 14.00 to 16.00	Total Marks : 40

- 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 diagrams wherever necessary.

SECTION "A"

- Q.1 Describe in brief the importance and scope for spices cultivation in India.
- Q.2 Describe in brief the cultivation of Coconut on following points.
- 1) Climate and soil requirements
 - 2) Propagation and planting
 - 3) Varieties
 - 4) Harvesting and yield
- Q.3 Describe the cultivation of Turmeric on the following points.
- 1) Propagation and planting
 - 2) Varieties
 - 3) Harvesting and yield
 - 4) Curing and polishing
- Q.4 Write cultivation practices of Citronella grass on following points.
- 1) Soil and climate
 - 2) Propagation and planting
 - 3) Varieties
 - 4) Harvesting and yield
- Q.5 Describe the cultivation of Cashew nut on following points.
- 1) Soil and climate
 - 2) Propagation and planting
 - 3) Varieties
 - 4) Harvesting and yield
- Q.6 Discuss about cultivation of Dioscorea on following points.
- 1) Propagation
 - 2) Planting
 - 3) Harvesting
 - 4) Medicinal use
- Q.7 Give information on following points pertaining to Coriander and Fenugreek.
- 1) Varieties
 - 2) Harvesting and yield
- Q.8 Discuss the cultivation of Black pepper on following aspects.
- 1) Soil and climate
 - 2) Propagation planting
 - 3) Varieties
 - 4) Harvesting and yield
- Q.9 Explain in detail cultivation of Nutmeg on following points.
- 1) Soil and climate
 - 2) Propagation and planting method
 - 3) Varieties
 - 4) Plant parts used
- Q.10 Write Short notes on (Any Two)
- 1) Cultivation of lemongrass
 - 2) Harvesting and processing of cardamom
 - 3) Medicinal uses of Senna

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talsande, Tal : Halakangle, Dist : Kolhapur

Pin Code : 416 112

SECTION "B"

Q.11 Fill in the blanks.

- 1) Periwinkle belongs to family_____.
- 2) Commercial variety of oil palm is_____.
- 3) Cumin is classified as _____ spice.
- 4) Senna is propagated by _____.

Q.12 Match the pairs.

"A"

"B"

- | | |
|-----------------------------|-----------------------------|
| 1) Cocoa | a) <i>Camellia sinensis</i> |
| 2) Betel vine | b) Fruit |
| 3) Tea | c) Chocolate |
| 4) <i>Solanum khasianum</i> | d) Creeper |

◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talsande, Tal : Hatakangle, Dist. : Kolhapur

Pin Code : 416 112

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : IV (New)	Term : II	Academic Year : 2014-15
Course No. : HORT 243	Title : Production Technology of Spices, Aromatics, Medicinal and Plantation Crops	
Credits : 2 (1+1)		
Day & Date : Thursday, 14.05.2015	Time : 14.00 to 16.00	Total Marks : 40

- 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 diagrams wherever necessary.



SECTION "A"

- Q.1 Discuss the importance of plantation and medicinal crops.
- Q.2 Describe cultivation of oil plant on following parameters.
1. Soil and Climate
 2. Ablation
 3. Pruning
 4. Harvesting and Yield
- Q.3 Furnish information on cultivation of ginger on the following points.
1. Soil and Climate
 2. Propagation and Planting
 3. Manures and Fertilizers
 4. Harvesting and Yield
- Q.4 Write cultivation of coconut on following aspects.
1. Soil and Climate
 2. Varieties
 3. Manures and Fertilizers
 4. Harvesting and Yield
- Q.5 Describe cultivation of lemon grass on following points.
1. Soil and Climate
 2. Propagation and Planting
 3. Varieties
 4. Harvesting and Yield
- Q.6 Write short notes on (Any two).
1. Processing of coffee
 2. Protection from sun and Training in black pepper
 3. Latex collection of opium poppy
- Q.7 Discuss cultivation of *plantago ovate* on the following points.
1. Soil and Climate
 2. Manuring and Irrigation
 3. Harvesting and Yield
 4. Major pest and disease with their control measures
- Q.8 Furnish information on cultivation of cinnamon on the following aspects.
1. Uses
 2. Ecophysiological requirement
 3. Varieties
 4. Harvesting and Processing
- Q.9 Write short notes on.
1. Gum tapping in guggul
 2. Lowering down in betel vine

(P.T.O.)

LIBRARY

Padmashree Dr. D. Y. Patil College of Agriculture

A/P: Talasandra, Tal : Hatakangle, Dist : Kolhapur

Pin Code : 416 112

Q.10 Describe the cultivation of Aloe on following points.

- 1) Soil and Climate
2. Propagation and Planting
- 3) Manures and Fertilizers
4. Harvesting and Yield

SECTION "B"

Q.11 Match the following pairs.

"A"

- 1) Hemanti
- 2) Vincristine
- 3) VTLAH
- 4) Triphala

"B"

- a) *Areca catechu*
- b) *Terminalia chebulla*
- c) *Curcuma longa*
- d) *Catharanthus roseus*
- e) *Pelargonium graveolens*

Q.12 Do as directed.

1. State the name of sweetener extracted from *Stevia rebaudiana*.
2. Which parts of nutmeg fruits are commercially used.
3. State names of different parts of cashew nut fruit.
4. Where Directorate of Medicinal and Aromatic Plants Research is located?

