

00350

**POST GRADUATE DIPLOMA IN
PLANTATION MANAGEMENT (PGDPM)**

Term-End Examination

December, 2011

MAM-002 : CROP PRODUCTION TECHNOLOGY

Time : 3 hours

Maximum Marks : 100

Note : Answer any ten questions. All questions carry equal marks.

1. (a) Define the following : 1x5=5
- (i) Pruning cycle of tea
 - (ii) Integrated Nutrient Management spices
 - (iii) Rubber clone
 - (iv) Certification of organic coffee
 - (v) Prepotent palm
- (b) What do the following abbreviations stand for ? 1x5=5
- (i) FOAM
 - (ii) INDOCERT
 - (iii) NPK
 - (iv) APEDA
 - (v) NSOP

2. (a) Give *two* examples each for the following : $1 \times 5 = 5$
- (i) Cover crops for pepper
 - (ii) Shade trees for Tea
 - (iii) Manually operated sprayers for Rubber
 - (iv) Hybrid varieties of coconut
 - (v) Leguminous cover crops for cashew
- (b) Differentiate between in 1-2 sentences : $1 \times 5 = 5$
- (i) Good Agri. Practices (GAP) and Organic Agriculture
 - (ii) Green Budding and Brown budding
 - (iii) Blossom showers and Backing showers
 - (iv) Climate needs of large and small cardamom
 - (v) Ratio manuring and Expansion ratio manuring in Tea
3. State briefly how are the following operations carried out in plantation crops : $2\frac{1}{2} \times 4 = 10$
- (a) Seedling production in clove
 - (b) Bush pepper production
 - (c) Method of fertilizer application in coffee
 - (d) Hybridization and clonal selection in Rubber
4. Briefly state what you know about the following :
- (a) Agro climatic requirements of coconut $2\frac{1}{2} \times 4 = 10$
 - (b) Soil organic matter with reference to rubber cultivation
 - (c) Inestimable coffee
 - (d) High density planting of cashew

5. (a) Justify the following observations/phenomena with valid facts : 2x3=6
- (i) Productivity of rubber in the NE Non-traditional areas as lower than traditional areas.
 - (ii) Organically produced spices are superior in quality and offer better market potential.
 - (iii) Coffee plantations and industry play crucial role in the economy of the countries where it is grown.
- (b) Comment briefly on the following : 2x2=4
- (i) High shade on coffee growth and yield
 - (ii) Shade tolerance of cashew
6. (a) State briefly the Integrated Disease Management (IDM) for viral diseases of cardamom. 5
- (b) Explain how green budding is carried out in rubber and mention its advantages. 5
7. (a) Briefly explain the different post pruning care operations for Tea. 5+5=10
- (b) State briefly the causal organism, symptoms and control/Management of Coconut Bud rot.

8. (a) List out the different methods of weed control in tea plantations and explain weed control using herbicides.
(b) Critically compare the shade requirements for Arabian and Robusta coffees. 5+5=10
9. Explain briefly various operations involved in the establishment of a new pepper garden. Also list out the cultural operations required for maintenance of the crop. 10
10. Discuss the relevance of organic tea cultivation. Outline the harvest and manufacturing practices/facilities for producing organic tea. 10
11. Name the major insect pests of rubber. Describe the nature of damage caused by each and suggest control measures. 10
12. What are the major diseases of coffee in South India ? Name the causal organism and extent of damage by Coffee Leaf. Suggest control management practices for this disease. 10
13. Give a short account of the following : 2x5=10
(a) Plant Growth Regulators in Tea production
(b) Organic nutrition and INM for cashew (INM-Integrated Nutrient Management)