

00108

**POST GRADUATE DIPLOMA IN
PLANTATION MANAGEMENT**

Term-End Examination

June, 2010

MAM-002 : CROP PRODUCTION TECHNOLOGY

Time : 3 hours

Maximum Marks : 100

Note : Answer any ten questions. Question No. 2 is compulsory. All questions carry equal marks.

1. (a) Define the following : 5x1=5
- (i) Integrated Pest Management
 - (ii) Pre-potent Palms
 - (iii) Organic Agriculture
 - (iv) Sustainable Coffees
 - (v) Non-traditional Belt
- (b) Mention the fertilizer recommendation for mature vines/trees of : 5x1=5
- (i) Pepper
 - (ii) Coffee
 - (iii) Coconut
 - (iv) Cashew
 - (v) Cardamom-small

2. Distinguish between the following : 5x2=10
- (a) Primary and secondary nurseries.
 - (b) Pollarding and lopping in Tea.
 - (c) Orthotropic and plagiotropic shoots.
 - (d) Tall and Dwarf types of coconut.
 - (e) Green manure and Green leaf manure.
3. (a) Mention two examples each of : 5x1=5
- (i) Pepper standards.
 - (ii) Shade trees for cardamom.
 - (iii) Green manure crops for coconut.
 - (iv) Legume cover crops for rubber.
 - (v) Biofertilizers for spices.
- (b) Explain in brief various limiting factors for rubber growing, production of latex and its extraction, specific to the North-east Indian region. 5
4. What do you know about the following ? 5x2=10
- (a) Backing showers and coffee yield.
 - (b) Obligate parasites.
 - (c) Ortet selection.
 - (d) Foliar feeding of nutrients in coffee.
 - (e) Banji shoots.

5. (a) Briefly discuss the relevance of organic tea cultivation and justify how tea adapts better to organic inputs and earn higher remuneration. 5
- (b) Briefly state an integrated approach for pest management in coffee. How does this help to minimise chemical residue problem in coffee beans. 5
6. (a) Indicate the different methods of weed control in tea plantations and give two examples each of dicot and grassy weeds. Name a common herbicide. 5
- (b) State the function of cover crops in new and established rubber estates, with suitable examples for both. 5
7. (a) Coconut is 'Kalpavriksha' or Tree of Heaven' for millions of people. Substantiate this statement highlighting the many uses of coconut tree. 5
- (b) State the general guidelines for pruning of coffee. 5
8. (a) Mention the insect/pests of Rubber. State the scientific name, nature of damage and control measure of white grubs. 5
- (b) Briefly write about the organic certification. 5

9. Discuss briefly the steps involved in the construction of an Integrated Pest Management model for plantation crops with special reference to small cardamom. 10
10. State the fertilizer recommendations for young and mature rubber crop and explain briefly : time and method of fertilizer application. 10
11. List out three major insect/pests of coffee. Give scientific name of coffee berry borer and explain nature of damage and control measure of the pest. 10
12. Briefly discuss about :
- (a) Two major tree species 5
 - (b) Organic coffee in India 5
13. (a) Briefly explain about the high density planting of cashew. 5
- (b) Briefly explain about National Programme for Organic Production. (NPOP) 5
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