

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

Term-End Examination

June, 2015

MAM-002 : CROP PRODUCTION TECHNOLOGY

Time : 3 hours

Maximum Marks : 100

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

1. (a) State **True** or **False** of the following : **1x5=5**
- (i) Productivity is low for pepper in India, compared to other major countries.
 - (ii) Rubber trees are mostly propagated through seeds.
 - (iii) In general, conditions in India are favourable for organic coffee production.
 - (iv) India is the No. 1 (foremost) producer of tea in the world.
 - (v) Cashew trees can withstand even excessive shade and cold with little impact on yield.
- (b) Give two examples for each of the following : **1x5=5**
- (i) Tree spices
 - (ii) Biofertilizers
 - (iii) Micro-nutrients
 - (iv) Accredited Certifying Agents under NPOP.
 - (v) Organophosphatic pesticides.

2. Distinguish between : **2½x4=10**
- (a) Monoclonal and Polyclonal Rubber seeds
 - (b) Green budding and Brown budding
 - (c) Good Agricultural practices and Organic Agriculture
 - (d) Tall and Dwarf coconut types
3. Give short answers, what do you know about the following : **2x5=10**
- (a) Pruning Cycle in Tea
 - (b) Indian Bioorganic Tea Association
 - (c) Ortet selection in Rubber
 - (d) Yellow traps in cardamon plantations
 - (e) Backing showers for coffee
4. Briefly state how do the following procedures help for plant growth : **2½x4=10**
- (a) Seed treatment in cardamom
 - (b) Rejuvenation pruning in tea
 - (c) Removing new growths from primary branches of coffee
 - (d) Organic recycling with reference to cashew
5. (a) Justify with valid reasons : **2x3=6**
- (i) Integrated approaches for crop production is the need of the day especially for spice crops.
 - (ii) All required measures should be taken to keep pesticide residues below a specified level.
 - (iii) Organic manures also should be applied to soil particularly for plantation crops like rubber.
- (b) Explain briefly what are all the procedures taken into consideration for maintenance of a Black pepper garden cultural operations. **4**

6. How the following pests damage plantation crops ? 2½x4=10
- (a) Thrips in cardamom
 - (b) White grubs in Tea
 - (c) Mealy bugs in coffee
 - (d) Leaf eating (Black headed) caterpillar in coconut
7. (a) Explain how does coconut tree qualifies to be a 'Kalpa Vriksha' ? Briefly justify your answer. 5
- (b) Briefly discuss the role of rainfall on blossoming and fruit setting in coffee. 5
8. Write short notes on **any two** : 2x5=10
- (a) Cover crops in Rubber plantations.
 - (b) Micro-nutrients in Tea cultivation.
 - (c) Organic coffee in India.
9. Name the borer pests of coffee. Explain biology, nature of damage and control/management of coffee berry borer. 10
10. Define Integrated Pest Management (IPM). How is an IPM model suited to plantation crops with special reference to a major spice crop ? 10
11. (a) Name four major Rubber producing countries in the world. Differentiate between Traditional and Non-traditional regions for rubber in India. 5
- (b) What is mother palm selection in coconut ? Explain briefly the procedures involved in mother palm selection for seedling production. 5

12. Distinguish between training and pruning in coffee. Discuss the objectives and guidelines for pruning. Briefly state different operations associated with pruning for normal growth and rejuvenation of coffee bushes. **10**
13. (a) Briefly discuss fertilizer scheduling in cashew with emphasis on dose of nutrients, time and method of application. **5+5**
- (b) Explain shape pruning in cashew and state when and how is it done ?
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