POST GRADUATE DIPLOMA IN PLANTATION MANAGEMENT (PGDPM)

Term-End Examination December, 2018

MAM-003 : POST HARVEST MANAGEMENT AND VALUE ADDITION

Time: 3 hours

Maximum Marks: 100

- Note: (i) All questions carry equal marks.
 - (ii) Answer any 10 Questions.
 - (iii) Question No. 1 (one) is compulsory.
- 1. (a) Define the following:

1x5=5

- (i) Geitonogamy in Black Pepper.
- (ii) Rubber latex.
- (iii) Specialty Coffee (according to Coffee Board of India).
- (iv) Degree of withering in Tea manufacture.
- (v) Pleonanthy in coconut.
- (b) Name in one word, product/chemical involved in the following: 1x5=5
 - (i) A common adultarants in Cardamom.
 - (ii) World's largest producer and consumer of black tea.
 - (iii) Crinkly lace type rubber produced from latex and field coagulum.
 - (iv) Drier used for curing parchment coffee.

(v) A toxic product from fungus Aspergillus Sp. connected with coconut industry etc.

2. Comment Briefly on the following:

2x5=10

- (a) Carbon dioxide (CO₂) as a pesticide.
- (b) An ideal tapping system in Rubber
- (c) Silver tip Tea.
- (d) Decaffeinated Coffees.
- (e) 'Neera' (Sweet toddy)
- 3. What purpose/function do the following serve?
 Answer in 2 3 sentences. 2x5=10
 - (a) Blanching of fresh black pepper berries.
 - (b) Keeping honey bee colonies in cardamom plantations.
 - (c) Application of stimulant in rubber before tapping.
 - (d) Aspiration systems in coffee factories.
 - (e) Seasoning of harvested coconuts.
- **4.** (a) Distinguish between (any two): 2½x2=5
 - (i) Khoker cloves and headless cloves,
 - (ii) Parchment coffee and cherry coffee,
 - (iii) 'Pan tea' Vs 'Sancha' tea.
 - (b) What do you know about the following:
 (any two) 21/2x2=5
 - (i) Made tea,
 - (ii) Cinnamon quills,
 - (iii) Cashew feni,
- 5. Mention two important uses of:

2x5=10

- (a) Clove oil
- (b) Tea extract
- (c) Rubber seed
- (d) Nutmeg
- (e) Coconut shell

6.	Write briefly (3-4 sentences) on any four: $2\frac{1}{2}x4=10$		
	(a)	HACCP standards relevant to spices	
	(b)	Organic tea	
	(c)	Monsooned Malabar coffee.	
	(d)	Synthetic Rubber.	
	(e)	Coir Geotextiles.	
7.	Briefly discuss processing/production (any two) of the following. 5+5=1		10
	(a)	Curing of cardamom capsules.	
	(b)	Ground Pepper.	
	(c)	Virgin coconut oil.	
8.	(a)	What are the tests to verify the quality of cashew nuts, done in the processing factories?	5
	(b)	What is garbling (sorting) of cured coffee beans? Enlist the methods and briefly explain a common method that promotes manpower utilization.	5
9.	Writ	te short note on (any two) of the following: 5+	-5
	(a)	Spices as nutraceuticals.	
	(b)	Rain guarding in Rubber estates.	
	(c)	Specially Tea manufacture.	
10.	(a)	Discuss the requirements for an ideal Coffee Mill (curing works).	5
	(b)	Write briefly storage practices for raw coffee and clean coffee.	5

- 11. Discuss the present status of product diversification of spices in India. State the need for value addition for high quality end products for world market.

 5+5=10
- **12.** What do you mean by tapping in rubber ? 10 Explain the different systems of tapping.
- 13. Discuss the CTC tea manufacturing practices? 10