

2023

TEA COFFEE AND COCOA PROCESSING

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

1.	a)	<ul style="list-style-type: none"> i. Where activity of polyphenol oxidase is most? ii. Theaflavins provide the attribute.....and to tea. iii. Plucking table is when tea is pruned and kept at a considerable height to be plucked by tea pluckers. (True/False) iv. Which of the following is NOT a step in Black tea manufacture? <ul style="list-style-type: none"> a) Drying/Firing b) Rolling c) Withering d) Lump formation v. Difference of Green tea from Black tea is that – <ul style="list-style-type: none"> a) The oxidation process is omitted b) The tea leaves are steamed in a pan before being rolled so that the enzymes don't interact with air and oxidize c) Both of the mentioned d) None of the mentioned vi. The roasting temperature of cocoa bean is _____ vii. The roasting temperature of coffee is _____ viii. Which of the following is NOT a step in Black tea manufacture? <ul style="list-style-type: none"> a) Rolling of the leaves on a horizontal roller b) Putting the leaves in a vacuum drier to remove moisture c) Roll breaking using sieves d) None of the mentioned ix. What is the optimum ph of soil required for tea cultivation? 	1x 10=10
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		x. What is the difference between Indian and Chinese tea?	
	b)	Define Tea. What are the different species of tea are used for processing? Mention the geographical condition for tea cultivation.	4
	c)	Discuss the chemistry of tea and mention the biomolecules present in tea	6
2.	a)	Explain the withering, fermentation and drying steps for CTC tea?	10
	b)	How green tea differ from oolong tea. Explain the processing of green tea	10
3.	a)	Discuss in details the different steps in coffee processing	12
	b)	Discuss how semi-fermented tea can be processed	8
4.	a)	i) When cocoa cake is obtained? ii) What is the role of thearubigins? iii) Why alkalisation is done in cocoa processing? iv) What are the biomolecules present in mucilage of coffee bean? v) What varieties of coffee are used for processing?	1*5
	b)	Write the chemical composition and nutritional value coffee	5
	c)	List out the various composition of mucilage and coffee pulp in percentage level	5
	d)	Write short notes on ecological and climatic condition required for coffee cultivation.	5
5.	a)	Explain the morphology of coffee beans	8
	b)	What are four traditional methods of fermentation for cocoa beans	12
6.	a)	Write the steps of coca processing. Discuss the roasting, milling, pilling, kibbling, dutching, and pressing steps of cocoa processing	12
	b)	Write short notes on any two cocoa products	8