

Reg.No. \_\_\_\_\_



**Karunya UNIVERSITY**

(Karunya Institute of Technology & Sciences)  
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

**Code : 14FP3015**  
**Sub. Name : Advances In Processing Of Horticulture, Spices And Plantation Products**

**Semester : 2016-17 ODD**  
**Duration : 3hrs**  
**Max. marks : 100**

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	What is canning? Discuss in detail on the process of canning of vegetables.		12
	b.	What are the factors to be considered for long term stability of minimally processed products		8
<b>(OR)</b>				
2.	a.	Discuss in detail on the technology of osmotic dehydration of Fruit materials		12
	b.	Discuss briefly on the principles of freezing and the freezing curve		8
3.	a.	Discuss in detail on the technology of High Pressure Processing of Fruits and Vegetables.		15
	b.	Discuss briefly on the principles of pulsed electric field processing		5
<b>(OR)</b>				
4.	a.	Discuss in detail on the principles and techniques of sensory evaluation of food materials		15
	b.	Discuss briefly on the techniques of CAP. How is it different from MAP		5
5.	a.	What are oleoresins?		2
	b.	Discuss in detail on the techniques involved in the preparation of essential oils.		18
<b>(OR)</b>				
6.	a.	Discuss in detail on the technology of Cryogrinding of spices		10
	b.	Discuss briefly on the following: (i) Ginger processing (ii) Cardamom processing		10
7.	a.	With a neat flow diagram, discuss in detail on the technology involved in the production of CTC Tea with the principle behind each operation		20
<b>(OR)</b>				
8.	a.	With a neat flow diagram, discuss in detail on the technology of Chocolate manufacture from cocoa beans		20
<b><u>Compulsory:</u></b>				
9.	a.	Discuss in detail on the Technology of Vanilla processing		12
	b.	Discuss in brief on the technology of decaffeination		8

ALL THE BEST