[ Marks:60]

## [Time: Two and a half Hours]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory

- 2. Figures to the right indicate full marks
- 3. Mixing of sub questions is not allowed
- 4. Draw diagrams wherever necessary

Q1			12 M
	Α	Explain the principle of supercritical fluid extraction (SFE). Discuss with sketch the equipment used for the SFE.	6
	В	Discuss various dehydration techniques used for natural material dehydration.  OR	6
	С	Write a note on "Applications of Pressurized low polarity water in extraction of bioactive compounds".	6
Q2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	12M
	Α	Describe how nutraceuticals help in prevention of allergy.	6
	В	Write a brief note on what is chemoprevention.	6
	С	Describe the concept of cellular signaling as targets.	6
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Q3			12M
	Α	Explain in brief the initial and critical moisture content.	6
	В	Explain the Package Design requirements in packaging  OR	6
	С	A biscuit has an initial moisture content of 2.5% and a critical moisture content of 6%. A pack has to be developed for 50g biscuit in flexible laminate for a shelf life of 180 days (6 months). The laminated pouch for the biscuit has an area of 200sqcm. What should be the WVTR of the laminate to offer a life of 6 months. Explain reason at every stage. (Note WVTR is express as g/sqM / day)	6
Q4			12M
-	Α	Explain the consumer buying behavior and food purchase habits of the people.	6
	В	Explain the basics of communication processes used to convey oral message.  OR	6
	C	How to communicate health claims for functional foods	6
Q5		Short notes: (Any 3)	12M
80	A	MAP & CAP	
\$ 50 F	В	Stages of cancer	
	C	Impact of legislation on advertising	
7 45 60	D	Distillation and its application	
NA A	E	Canning Technology	
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