

[Time: 2 Hours]

[Marks:40]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

- Q.1** Answer the following: **12**
- i) What are functional foods? Give examples.
 - ii) Give limitations of nutraceuticals (any 2)
 - iii) Give the source & structure of Resveratrol.
 - iv) Name one marketed preparation and the therapeutic uses of Curcumin.
 - v) State the role of tocopherol as nutraceuticals.
 - vi) Write the occurrence and use of Glutathione.
 - vii) Give the structure and recommended does of Astaxanthin.
 - viii) Name any 2 processing challenges for liquid oral dosage forms.
 - ix) Give one examples of food-nutraceutical interaction.
 - x) Give any one adverse effect of nutraceutical with suitable examples.
 - xi) What does FPO stand for?
 - xii) Write a pharmacoepial specification for nutraceuticals.
- Q.2** i) Write a note on nutrition and aging. **04**
- ii) Write a note on labeling of nutraceuticals. **03**
- Q.3** i) Discuss adulteration of nutraceuticals. **04**
- ii) Discuss marine nutraceuticals. **03**
- Q.4** i) Comment on AGMARK regulatory aspects for nutraceuticals. **04**
- ii) Write a note on flax Lignans. **03**
- Q.5** i) Discuss the challenges involved in extraction and concentration of nutraceutical constituents. **04**
- ii) Write a note on the occurrence and role of prebiotics and probiotics. **03**
