

**[Time: 2½ hours]**

**[ Marks:60]**

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.

- Q.1 a) Short note the need for standardization. 06  
 b) What are the factors that determine the method of manufacture of drugs? 06  
 OR  
 c) What do you mean by Doshā? Mention the three doshas and elaborate on it. 06
- Q.2 a) Explain the Method for Detection, Determination and Confirmation of Coliforms and Escherichia coli in Foods and Beverages. 06  
 b) Give an overview of ISO 22000 – Food Safety Management and explain the coverage of ISO/TS 22002-1:2009 and ISO/TS 22002-2:2013. 06  
 OR  
 c) Give an overview of ISO 9000 – Quality Management? Draw a schematic representation of the elements of a single process under ISO 9001:2015 and explain the requirements for internal audits under this standard. 06
- Q.3. a) Give an overview of “**Kellogs**” with special focus on their nutraceutical products, technologies and R & D. 06  
 b) Write a note on “**Omniaactive**” and “**Dabur**” with special focus on their nutraceutical products. 06  
 OR  
 c) Give an overview of “**Patanjali**” with special focus on their nutraceutical products, technologies and R & D. 06
- Q.4 a) Explain procurement, collection and storage of herbal raw material. 06  
 b) Enlist the advantages of using Nutraceutical for different stages. 06  
 OR  
 c) Which factors are to be considered while using herbal raw material. 06
- Q.5 Write short note : (ANY THREE) 12  
 a Tests for completion of Bhasma/Parpam  
 b Explain the terminology under FSSAI: Food or Health Supplements & Nutraceuticals  
 c Requirements for Foods for Special Medical Purposes under FSSAI?  
 d Determination of water and volatile matter.  
 e State function of CDL.