

QP Code : 76328

For Paper Students

3 Hours

[Total Marks : 75

For Research Students

3 Hours

[Total Marks : 100

- N.B.** (1) All Questions are **compulsory**.
(2) For **Paper students** each question carries **15** marks.
(3) For **Research students**, each question carries **20** marks.

- Q.1 (a) Discuss the following (any One)** **7 /10**
i) The overall activity of validation.
ii) Importance of GLP in Pharmaceutical industry.
- (b) Comment on the following (any One)** **8/10**
i) Basic principles of Quality assurance in food processing industry.
ii) Importance of documentation in GMP.
- Q.2 (a) Answer the following (any one)** **7/10**
i) Give an account of the types of microbes found in meat. Add a note on the changes in meat quality due to microbial activity.
ii) Elaborate upon the sterilization processes used in pharmaceutical industry.
- (b) Answer the following (any one)** **8/10**
i) How would you enumerate indicator organisms from a water sample?
ii) Describe the methods used in microbiological analysis of milk powder.
- Q.3 (a) Answer the following (any one)** **7/10**
i) Discuss the newer food borne pathogens.
ii) What are the types of microorganisms found in fruit juices? How would you perform microbiological analysis of a fresh juice sample?
- (b) Discuss the following (any one)** **8/10**
i) The role of pigments and surfactants in increasing the survival capacity of microbes in processed food.
ii) The applications of organic acids and their salts as food preservatives.
- Q. 4.(a) Attempt the following (any one)** **7/10**
i) Give an account of the role of Pharmacopeia in Pharmaceutical industry.
ii) Describe in details the CCPs in Cheese making.
- (b) Attempt the following (any one)** **8/10**
i) Discuss the importance of Quality Audits.
ii) What are ISO series of standards? Where and why are they used?

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Q. 5 (a) Write short notes on the following (any three)

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- i) SOP for culture maintenance in a laboratory.
- ii) Sterility testing of antifungal preparation.
- iii) Enumeration of *S aureus* from dairy product.
- iv) Automated methods for bacterial identification.

(b) Answer (any one)

3/5

- i) Describe detection methods for presence of *Listeria monocytogenes* in food.
 - ii) Give role of Biocontrol agents in food preservation.
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