JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T3 EXAMINATION- JUNE-2023

COURSE CODE (CREDITS): 14M1WBT334 (3)   MAX. MARKS: 35
COURSE NAME: **QC ANALYSIS AND MANAGEMENT**   MAX. TIME: **2 Hour**

COURSE INSTRUCTORS: Gopal Singh Bisht/ Jata Shankar/ Jitendraa/ Udayabanu M

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Define sigma factor with equation and give its metrics? What are the measure of sigma concept to improve the quality, give example   **[5 Marks] COII**

Q2. Write on concept 'One Health' How to manage toxin exposure in One Health Concept?   **[5 Marks] COI, COII**

Q3. Regulation aflatoxin exposure is serious issue in food crops in USA, Europe and India? Give the guild line for permissible limits in different countries in crops, processed food products, and milk products for their consumption to human and Animals?   **[5 Marks] COII**

Q4. You are working in a laboratory which produces biochemical for diagnostics purpose. Design a standard operating procedure to ensure the quality of the produced molecules. What are the different parameters while preparing the SOPs for the laboratory methods?

          [5 Marks] COV

Q5. Define the following with relation to quality control of biological laboratory.
    a) High Performance Liquid Chromatography (HPLC) Calibration
    b) CFU counts and microbiological assays   **[5 Marks] COII**

Q6. How true values and measured values of an experimental method show the clear representation of accuracy and precision in a defined quality assurance process? What are the requirements for creating the quality standards?   **[5 Marks] COV**

Q7. What do you understand by 'the dimensions of quality?'What is the significance of following: a) quality of design, b) quality of conformance, and c) quality of performance in establishment of successful product?   **[5 Marks] COII**