JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -1 EXAMINATION - September 2016
B.Tech III Semester

COURSE CODE: 14B11BI311 — MAX. MARKS: 15

COURSE NAME: Microbiology and Immune System

COURSE CREDITS: 04 — MAX. TIME: 1Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. Draw labeled diagrams of Gram-negative and Gram-positive and cell walls. Give important differences between Gram Positive and Gram Negative bacteria. **[3]**

Q2. A disinfectant liquid soap kills 90% of bacteria in 15 seconds. If 5.9×10^8 bacterial cells are present on a person's hand, how many bacterial cells would still be present after a hand wash for 45 seconds by the soap? On the basis of viable cells still remaining on the person's hand, would it be safe for him to eat with his hands. **[3]**

Q3. Differentiate between the following methods of microbial control: **[1.5 X 2 =3]**
   i. Non-ionizing Radiation and ionizing Radiations
   ii. Autoclaving and Pasteurization

Q4. Describe Germ Theory of Diseases with suitable diagrams. **[3]**

Q5. Write Short Notes on: **[1.5 X 2 = 3]**
   i. Food Spoilage
   ii. Culture Media and its types