

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
B.Sc., Summer 2017-18 Examination

Semester: 3
Subject Code: 11101203
Subject Name: Applied Microbiology

Date: 29/05/2018
Time: 10:30 am to 1:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 (a) Discuss the compositions of air
 (b) Discuss the process of BOD estimation.
- Q.1. B) Answer the following questions (Any two) (04)**
 (a) Brief note (2x2) (Each of 02 marks)
 1. Name the sources of microorganisms present in air.
 2. What is droplet and droplet nuclei?
 (b) Short note on Microbiology of sewage. (04)
 (c) Short note on Microbial examination of water. (04)
- Q.2. A) Answer the following questions. (04)**
 (a) Brief note (2x2) (Each of 02 marks)
 1. Name any two air borne diseases.
 2. What are coliform bacteria?
 (b) Name any two water borne disease and their symptoms and causal organisms. (04)
- Q.2. B) Answer the following questions (Any two) (03)**
 (a) Short note. (Each of 01 marks)
 1. Define air.
 2. Define sewage
 3. Write down the full form of COD.
 (b) Name different indicator microorganism to detect water pollution. (03)
 (c) Discuss the process of pasteurization of milk. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 (a) Name Different types of water.
 (b) Discuss microbial index of water pollution.
- Q.3. B) Answer the following questions (Any two) (04)**
 (a) Brief note (2x2) (Each of 02 marks)
 1. Name any two Milk borne diseases.
 2. What are the undesirable changes in milk?
 (b) Discuss briefly Domestic sewage treatment (04)
 (c) Short note on Water purification and Water reclamation. (04)
- Q.4. A) Answer the following questions. (04)**
 (a) Short note. (Each of 02 marks)
 1. Name different sources of contamination of milk
 2. Write any two applications of microorganisms in dairy industry
 (b) Short note on Reductase test. (04)
- Q.4. B) Answer the following questions (Any two) (03)**
 (a) Answer the following questions (Each of 01 marks)
 1. What is droplet infection?
 2. Write down the desirable characteristics of milk.
 3. What do we get from estimating COD?
 (b) Discuss compositions of sewage. (03)
 (c) Short note on composition of milk. (03)