

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Winter 2018-19 Examination

Semester: 1
Subject Code: 11201102
Subject Name: Microbiology

Date: 05/12/2018
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 (08)**
How can microorganisms be classified on the basis of morphological, physiological, metabolic and ecological characteristics?
- Q.1. B) Answer the following questions (Any two) (04)**
(a) Brief note (04)
1. Botulism
2. Salmonellosis
(b) Differentiate between gram positive and gram negative bacteria (04)
(c) Enlist the general characteristics of molds (04)
- Q.2. A) Answer the following questions. (04)**
(a) Brief note (04)
1. Commensalism
2. Predation
(b) Write the Economical and industrial uses of algae (04)
- Q.2. B) Answer the following questions (Any two) (03)**
(a) Name the causative agent of:- (Each of 01 marks) (03)
1. Plague
2. Tuberculosis
3. Anthrax
(b) Write in short about Food Preservation (03)
(c) What is the role of microbes in Sewage treatment (03)
- Q.3. A) Essay type (08)**
Describe the physico-chemical methods of Sterilization?
- Q.3. B) Answer the following questions (Any two) (04)**
(a) Define: (04)
1. Pasteurization
2. Food Spoilage
(b) Describe the pathogenesis of the disease: Diphtheria (04)
(c) Describe the pathogenesis of the disease: Syphilis (04)
- Q.4. A) Answer the following questions. (04)**
(a) Brief note (2x2) (04)
1. Tumor Viruses
2. Polio
(b) Short note on Growth curve of bacteria. (04)
- Q.4. B) Answer the following questions (Any two) (03)**
(a) What is the mode of transmission of: (03)
1. Dengue
2. Rabies
3. HIV
(b) Explain Isolation of bacteria. (03)
(c) Short note on Capsule Staining (03)