

Roll No. ....

**Y – 3203**  
**M.Sc. (Second Semester)**  
**EXAMINATION, May/June 2021**  
**MICROBIOLOGY**  
**Paper–203**  
**(Microbial Physiology and Metabolism)**

*Time : Three Hours*

*Maximum Marks : 85*

*Minimum Pass Marks : 29*

**Note :** Attempt *all* questions.

**Unit-I**

1. Discuss the process of biological redox reactions with suitable examples. 17

**Unit-II**

2. What do you understand by fermentation ? Discuss Homolactic and heterolactic fermentation with examples. 17

**Unit-III**

3. Write short notes on the following : 17
- (a) Degradation of lipids
  - (b) Explain, what are add chain fatty acids
  - (c) Discuss chemolithotrops.

**Unit-IV**

4. Illustrate the process of degradation of purines and pyrimidines nucleotides in brief. 17

**Unit-V**

5. What do you understand by diazotrophs ? Discuss in brief structure of nitrogenase complex. 17