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Roll No. .....

## P-238

## B. Sc. (Biotechnology) Part - II Examination – 2016

Paper: VI

## MICROBIOLOGY

Time: Three Hours]

[ Maximum Marks : 75

Note: Attempt all questions from Section - A (Objective type questions), seven questions from Section - B (Short answer type questions) and two questions from Section - C (Long/Essay type questions).

SECTION - A

[ Marks :  $1 \times 10 = 10$ 

Note: Answer in one word to maximum upto two lines.

- 1. Write two Gram-ve bacteria.
- 2. Contribution of Joseph Lister.
- Asymbiotic N<sub>2</sub> fixation.
- 4. Acetic Acid producing bacteria.
- Ethanol producing bacterium.
- 6. Tetanus is caused by which organism.
- 7. Magnification of simple microscope.
- Total ATP production by Glycolysis
- Disease caused by staphylococcus.
- 10. Action of penicillin on bacteria.

P. T. O.

Note: Answer any seven of the following:

- What are differences in Prokaryotic & Eukaryotic cells?
- (2) How do fungi differ from yeast and bacteria?
- 3.) How do Rhizobia fix N<sub>2</sub> fixation ?
  - 4. What is PPLO?
- Write about the characteristics of Mycobacterium.
- 6. What is Chemo-therapeutic agents?
- 7. What is replica plating?
- B What is TEM?
- 9. Theory of biogenesis explanation.
- 10. Role of bacteria in food fermentation.

SECTION - C

[ Marks : 15 x 2 = 30

Note: Answer any two of the following:

- 1. Write about the different methods for sterilization.
- 2. What are different nutritional classes of microorganisms? Explain with suitable examples.
  - 3. What are extremophiles? How do they sustain in such environment?
  - 4. Write the industrial production of penicillin.