

**FACULTY OF SCIENCE**  
**B.Sc .II Semester (Practical) Examinaton, 2018**  
**Subject : Microbiology**  
**Paper -I**  
**Question Bank**

**Time: 2 Hrs**

**Max. Marks: 25**

**Note: Each student has to perform one experiment and four spotters**

**I. Experiment Question**

**(12 Marks)**

1. Demonstrate Streak/spread plate technique for isolating pure cultures.
2. A bacteriological culture medium with colonies is provided to you. Enumerate the bacterial number and report the number in CFU/gm of soil.
3. Identify the unknown sugars present in the given mixture by qualitative analysis.
4. Identify the unknown amino acids present in the given mixture by qualitative analysis.
5. Identify the unknown amino acids in the given mixture using Paper Chromatography
6. Identify the unknown sugars in the given mixture using Paper Chromatography
7. Find out the Absorption Maxima of the given coloured solution.
8. Verify Beer-Lamberts law for coloured solution using colorimeter.
9. Define buffer. Prepare a buffer solution with specific pH and report its pH.

**II. Specimens for Spotting**

**(4x2= 8 Marks)**

1. Nutrient Agar plate
2. Nutrient agar Slant
3. Agar deep tubes
4. PDA (With labeling)
5. Autoclave
6. Hot air oven
7. Filtration apparatus
8. Streak plate
9. Spread plate
10. Mineral oil overlay tube
11. Colorimeter
12. Paper chromatogram (amino acids/sugars)
13. pH meter/strips
14. Buffer (labelled)

**III. Record and Viva**

**(5 Marks)**

*J. J.*  
29/4/18

*Bl. J.*