

2010

(New Syllabus)

MICROBIOLOGY — HONOURS — PRACTICAL

SECOND PAPER

GROUP — B

Full Marks – 50

The figures in the margin indicate full marks

For the following experiments, write down only the procedure and observed results.

1. Demonstrate the procedure of streak plate technique. 5

Or

✓ Demonstrate 10-fold serial dilution of supplied culture in three test tubes with decreasing cell number.

2. Identify the supplied biomolecule by using qualitative methods. 10

Or

✓ Identify the supplied amino acid by Thin Layer Chromatography against the supplied standards.

3. (a) Carry out the Gram-staining of the microorganism in supplied culture. Note the sample number in your answer script and report on its

(i) Gram character 4

(ii) General cell morphology and cellular arrangements (slides are to be submitted) 6

Or

✓ (b) Stain the endospores and report on its position in the cell (slides are to be submitted). 10

Or

(c) Carry out the capsule staining of the supplied microorganism. 10

4. (a) Determine the size of the supplied bacteria by a micrometer. 10

Or

✓ (b) Determine the number of yeast cells present per ml of the supplied culture by a hemocytometer and calculate the standard deviation of your observations. 7+3

5. Laboratory Note Book. 5

6. Viva-voce. 10