NEW

Part II 3-Tier

2015

BIOTECHNOLOGY

(Honours)

PAPER—V

(PRACTICAL)

Full Marks : 100

Time : 10 Hours

The figures in the right-hand margin indicate full marks.

Answer *all* questions.

1. Calculate molecular weight of the supplied protein sample (A) using SDS-PAGE. 20

[*Principle—4, Work—8, Result—5, Comment—3*]

2. Identify supplied amino acid sample (B) through thin layer chromatography using standard (p, q, r). 15

[*Principle—3, Procedure—3, Work—3, Result—3, Comment—3*]

3. A sample of waste-water has an ultimate BOD of 280 mg/L and a 5-day BOD of 240 mg/L. Calculate 15-day BOD of this sample. 5

4. Find out the Gram nature and shape of the supplied bacterial sample (C). 10

[*Principle—2, Work—3, Drawing—3, Comment—2*]

5. Find out the concentration of the supplied antibiotic (D) through bioassay using standard. 20

[*Principle—3, Procedure—4, Work—5, Result—5, Comment—3*]

6. Determine the O.D. of a supplied *E. Coli* sample (E) by Spectrophotometer using sterile media as blank and calculate the number of bacterial cells per *ml* of culture. 10

[*Principle—3, Work—3, Result—2, Comment—2*]

6. Laboratory Note Book. 10

7. Viva-voce. 10
