FACULTY OF SCIENCE
B.Sc. IV Semester (Practical) Examination-2018
Subject: MICROBIOLOGY

QUESTION BANK

Time: 2 hours **Max. Marks:25**

I. Experiment Questions (12 Marks)

1. Find out the quantity of Protein present in the given sample by Biuret/Lowry's method and plot a standard graph of protein by calorimetry (The examiner will provide unknown sample and necessary reagents).
2. Find out the amount of DNA present in the given sample by Diphenyl amine method and plot a standard graph of DNA by calorimetry (The examiner will provide unknown sample and necessary reagents).
3. Plot a standard graph of RNA by calorimetry using Orcinol method and find out the quantity of RNA present in the given sample (The examiner will provide unknown sample and necessary reagents).
4. Isolate genomic DNA from the given sample. Observe and report the result.
5. A sample is provided to you. Demonstrate electrophoretic separation by using Agarose gel electrophoresis and interpret your result.
6. Problems related to DNA, RNA characteristics, Transcription and Translation (The examiners can prepare problems to be solved by the students).

II. Spottings (4x2=8 Marks)

7. Calorimeter
8. Cuvette
9. Micropipette
10. Centrifuge
11. PCR kit
12. Gel electrophoresis unit
13. DPA ~~(DNS)~~ reagent with label
14. TE buffer
15. Diagrammatical representation of Lac operon
16. Biuret reagent with label
17. Orcinol reagent with label
18. Graph showing the estimation of DNA with label
19. Graph showing the estimation of RNA with label
20. Graph showing the estimation of Protein with label

III. Record & viva (5 Marks)