

# **Question Bank**

## **Paper 3- SEM II**

### **Subjective Questions: (Unit 3)**

- 1) Write a short note on protein microarray
- 2) Write a short note on types of protein microarrays
- 3) Write short notes on proteomics and its types.
- 4) Gives applications of proteomics and explain.
- 5) Explain the steps involved to perform proteomics study.
- 6) Explain techniques used to perform proteomics study.
- 7) Explain working of Mass Spectrometry.
- 8) What are the components of Mass Spectrometry? Explain each component.
- 9) What are the steps involved in computational methods for identification of polypeptides from Mass Spectrometry?
- 10) Explain any one computational method for protein identification using mass spectrometry.

### **Subjective Questions: (Unit 4)**

- 1) Write a short note on comparative genomics.
- 2) Explain methods for comparative genomics.
- 3) Write short note on Genome alignment?
- 4) Explain working of genome alignment tool (PipMaker/MUMmer).
- 5) Write a short note on Synteny.
- 6) Write short note on SNPs, its characteristics and types.
- 7) Explain in detail about database dbSNP .
- 8) Explain COGs database and construction of COGs.
- 9) What are cluster of orthologous genes?
- 10) Explain COGs Database and give its applications.

