**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 constrcution of COGs.
9. What are cluster of orthologous genes?
10. Explain COGs Database and give its applications.