

**VTM NSS COLLEGE, DHANUVACHAPURAM**  
**DEPARTMENT OF ZOOLOGY**  
**QUESTION BANK**

Semester 3

Bioinformatics

1 mark questions

1. **Green computing**
2. **linux**
3. PDB
4. Rasmol
5. **DOS**
6. Phylip
7. Expand OMIM
8. what is DDJB
9. **Name a free open source operating system**
10. **what is IPR**
11. what is ORF finding
12. **Define licence**
13. **what is phishing**
14. Comment on bioinformatics
15. mention an example for a specialized databases
16. what are repositories. give an example
17. FASTA
18. Database

2 mark questions

1. **Internet protocol**
2. **modem of a computer**
3. **E-Journals**
4. **open source initiative**
5. **potential hazards of social networking**
6. Entrez
7. Database on mendelian inheritance in man
8. **ROM**
9. **Hypertext transfer protocol**
10. **free software**

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11. Swissprot
12. what is virtual reality
13. Explain computational biology
14. Define BLAST
15. Explain basic features of Rasmol
16. Explain GENSNIP
17. Define NCBI
18. Explain genefinding
19. what is computeraided drug discovery
20. Explain scoring Matrics, giving examples
21. what is databases. Name three types of databases

4 mark questions

- 1. wireless network**
- 2. search engines**
- 3. Health problems associated with the use of computers and guidelines for proper usage**
4. Describe the primary databases
5. proteomics
- 6. CPU**
- 7. Malicious software and types**
- 8. Internet access methods**
- 9. what is the difference between guarantee and warranty Explain**
10. Describe the tools for similarity search and sequence alignment
11. Explain single nucleotide polymorphism
12. Explain the concept of homology
13. What is hydrophobicity prediction
- 14. Internet as a knowledge repository, Explain**
15. Explain FASTA sequence file format
- 16. Briefly describe the various input and output devices**
17. Describe virtual reality
18. Give an account on molecular phylogenetics
19. mention the use of GENSNIP as atool in gene prediction
20. Distinguish bioinformatics from computational biology
21. describe a FASTA sequence file format citing an example
22. Explain the Drug discovery pipeline in bioinformatics
23. Give a short note on a protein structure visualization tool
24. Briefly write on ORF finding
25. what is sequence similarity search?.Mention the different types of similarities among organisms
26. Differentiate genomics from proteiomics

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27. what is bioinformatics?what are its 3 major areas
28. what is docking.name tools for docking
29. What is BLAST.what are its applications
30. write an account on bioinformatics in relation to biomolecular structures
31. Differentiate between local and global alignments.Mention two commonly used tools for data search
32. what is proteomics.name the major tools required for proteomics.mention the application of proteomics
33. what are the different types of dataused in bio-informatics.how it is classified.mention any one example for each database

Essay questions

1. Give an account on popular databases in bioinformatics
2. **Give an account on cyber ethics, cybercrime, cyber security cyber laws and cyber addictions**
3. **Give an account on input device, output device and storage devices of computer**
4. Give a detailed account on bioinformatic tools.
5. **Describe the various operating systems and the major application software**
6. Explain the various tools used in bioinformatics
7. Explain the meaning of a database, its application and various models
8. Define Bio-informatics. Explain the applications of bioinformatics and its advantages.
9. Explain the different biological databases and their uses.
10. Explain molecular phylogenetics and molecular evolution in the light of bioinformatics
11. what is pharmacogenomics. Explain its applications in the modern medicine and therapeutics.