

## BIF501-Bioinformatics-II MCQs FINAL TERM (PAST PAPERS)

1. Lcs scoring mechanism is for \_\_\_\_\_ **sequence similarity analysis**
2. Physiological base approach \_\_\_\_\_ **disease centric**
3. An association rule has two parts \_\_\_\_\_ **if and then**
4. Transfer of gene among organism is called \_\_\_\_\_ **horizontal gene transfer**
5. Eco R1 break down DNA at \_\_\_\_\_ **GAATTC**
6. Programming language used for modeler \_\_\_\_\_ **Python**
7. It is to compute the prefix function \_\_\_\_\_ **O(m)**
8. Prob used by sequencing in hybridization have size \_\_\_\_\_ **8-32**
9. Which is correct \_\_\_\_\_ **homology vs paralogy + orthology**
10. \_\_\_\_\_ helps in finding global alignment \_\_\_\_\_ **Needleman Wunsch**
11. Brute force algorithm use every possible ..... to find the solution \_\_\_\_\_ **1 mer**
12. LCS scoring award 1 for \_\_\_\_\_ **match**
13. .... programming approach does not require prior sequence alignment \_\_\_\_\_ **dynamic programming**
14. Brute force is a \_\_\_\_\_ **motif finding problem**
15. DNA array is also known as \_\_\_\_\_ **DNA chip**
16. GCG stand for \_\_\_\_\_ **Genetics Computer Group**
17. Gene mapping is determining the ..... on chromosome \_\_\_\_\_ **location**
18. MS2 genom has \_\_\_\_\_ amino acid \_\_\_\_\_ **129**
19. Method use fr lesd validation \_\_\_\_\_ **virtual screening**
20. Use for embryonic development \_\_\_\_\_ **Homeobox genes**
21. concerned with the effect of genetic factors on reactions to drugs \_\_\_\_\_ **Pharmacogenetics**
22. Sequence in EMBL formate start with \_\_\_\_\_ **SQ**
23. an ordered sequence of symbols \_\_\_\_\_ **pattern**
24. deletion in alignment in Edit graph shows \_\_\_\_\_ **east ( horizontal arrow)**
25. how many methods for lead validation? \_\_\_\_\_ **5**
26. Chou fasman algorithm helps to find \_\_\_\_\_ **2ndary structure of protein**
27. Plant mitochondria contain genes \_\_\_\_\_ **150 – 200kb**
28. Brut force is an ..... Pattern finding algorithm \_\_\_\_\_ **Approximation algorithm**
29. Which identify the structure with minimum free energy \_\_\_\_\_ **Ab initio**
30. Length of each line for FASTA algorithm should be \_\_\_\_\_ **shorter than 80 or ( 60)**
31. Genome rearrangement results in a change of \_\_\_\_\_ **gene ordering**
32. Human genome consist of repeats \_\_\_\_\_ **20 %**
33. Responsible for protein function \_\_\_\_\_ **protein structure**
34. .... pattern matches with  $k$  mismatches or differences \_\_\_\_\_ **approximate**
35. We look for molecule which need to be selected as target and those molecule that cause disease  
\_\_\_\_\_ **target discovery**
36. GEO for \_\_\_\_\_ **gene expression omnibus**

37. Intron start from 5' end is ..... and 3' end is ..... **GT, AG**
38. SINE are ..... bp long **80 – 300**
39. Needleman published in ..... **1970**
40. Chou-Fasman algorithm was 1<sup>st</sup> used in ..... **1974 – 1978**
41. The notion of spectral similarity with shared peaks count ..... **P1, P2-S1 and S2**
42. Human genome project ..... **1988**
43. TCGGGATTCC is in Drosophila for activate ..... **immunity**
44. BLOSUM 6 is good for ..... **un gaped alignment**
45. Disease that are hereditary ..... **3000 – 4000**
46. Computational technique use for protein not present in database ..... **Denovo**
47. Motif are found in ..... **promoter**

# BIF501 NOTES FOR FINAL TERM

## **Objective:**

1. Waardenburg syndrome is a genetic disorder found in Human
2. Fourth step of homology modeling is Loop modeling
3. The notion of spectral similarity with shared peaks counts is P1,P2-S1, S2
4. Number of methods for target validation are 5
5. 3D 1D algorithm was proposed by bowie et al in 1991
6. AG and GT are Exon flanking dinucleotide
7. Paralogs genes originated from Rare gene duplication
8. ORF stands for Open reading frame
9. PAM stands for Point accepted mutation
10. GEO stands for Gene Expression Omnibus
11. 0.01% % of sequence is unique enough to differentiate people. 0.01%
12. In Chou Fasman algorithm, Alpha helix is formed from 4 contiguous amino acids having propensity over 1.
13. methods for lead validation Genome sequencing and screening
14. MS2 has 49 codons?
15. TIGR stand for what The institute of genome research
16. Bypass is a type of Branch and Bound algorithm.
17. Simple motif search algorithm based on Next vertex
18. Cystic fibrosis gene is found on the chromosome No. 7
19. Genome rearrangement results in change of gene Order
20. Consensus score is define as Score(s DNA)
21. Next vertex algorithm provides an output Next subtree
22. Median string problem is one of the way to find Motif
23. Restriction enzyme breaks DNA molecules at specific location
24. Motifs facilitates for binding Transcription factor
25. Regulatory motif are generally found Promoter region of DNA.
26. Gel electrophoresis is used to measure Size of restriction fragments.