

Q2- ANSWER IN BRIEF (Attempt any 10) (each carry 2 marks)

[20]

- i. Differentiate average linkage and complete-linkage.
- ii. Differentiate High throughput screening and virtual screening .
- iii. How Macroarray differ from Microarray?
- iv. How mutation plays an important role in evolution?
- v. Differentiate between Rooted and Unrooted tree.
- vi. Enlist any two softwares for both phylogenetics analysis and CADD.
- vii. What is a basic structure of phylogenetic tree?
- viii. Explain preclinical and clinical trial in CADD.
- ix. Define Combinatorial Chemistry and docking.
- x. Elaborate different route of drug delivery system.
- xi. Differentiate between DNA and RNA structure.
- xii. Give the applications and limitations of Mfold method.

Q3 What is microarray? Discuss its methods and applications in detail.

[10]

OR

Q3 Discuss the clustering method and its types.

[10]

Q4 What is a phylogenetic tree? Discuss its important methods and applications.

[10]

OR

Q4-Construct the tree using UPGMA method with following matrix table

[10]

	A	B	C	D
A	0			
B	8	0		
C	7	9	0	
D	12	14	11	0

OR

Q5 Define drug and its basic features. Explain the steps for CADD.

[10]

OR

Q5 Write a short note on following:

i) High Throughput Screening ii) knockout Gene iii) Lipinski's rule.

[04+03+03]

Q6 i) Explain M-fold method and its utility.

[05]

Q6 ii) Elaborate tertiary structure of RNA.

[05]

OR

Q6- Write a short note on following:

i) A, B and Z type of DNA ii) tRNA structure

[10]

X=X=X

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