

Important Questions Sem - II

Short Questions: (4M.)

- 1) B-DNA
- 2) C-Value / C-Value paradox.
- 3) Cot - Curve
- 4) Denaturation / Renaturation.
- 5) T_m Curve.
- 6) Satellite DNA (Mini / Micro)
- 7) SINEs / LINEs
- 8) frameshift mutation.
- 9) Excision Repair / SOS
- 10) NHEJ
- 11) Gen Bank / EMBL / DDBJ
- 12) BLAST
- 13) PDB / swiss-PROT / UNIPROT / PIR
- 14) pairwise alignment (global / Local)
- 15) pharmacogenomics
- 16) Enzymes involved in DNA Replication.

Long Questions (15M.)

- 1) Describe the Experiments of DNA as the genetic material?
- 2) Write in detail about Watson and Crick Structure of DNA?
- 3) Write about genome organization in prokaryotes (15)

Eukaryotes

- 4) ^{write} kinetic classes of DNA in detail?
- 5) Write the Messelson and Stahl's Experiment?
- 6) Write in detail about induced and spontaneous mutation?
- 7) Describe about the DNA Repair mechanisms?

- 8) Write about Nucleotide DNA databases?
- 9) Write about protein data bases?
- 10) Describe about basics of Sequence alignment - pairwise alignment?
- 11) Write in detail about phylogenetic analysis?
- 12) Describe about homology modeling?
- 13) Write the Cairn's (Theta) and D-loop replication?
- 14) Explain about Rolling Circular DNA replication?