



Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary. Answer all questions

**LONG ESSAY (Answer any TWO)****2 X 20 = 40 Marks**

1. Describe the principle and applications of rDNA technology
2. Discuss the pharmacokinetics of Peptides
3. Discuss in detail the cracking of Genetic code

**SHORT ESSAY (Answer any FIVE)****5 X 10 = 50 Marks**

4. Write the factors leading to cellular aging and death
5. Discuss briefly the signal transduction pathways
6. Describe the principle of PCR. Mention any two applications
7. Write a note on the methods of gene transfer in rDNA technology
8. Give a note on the rDNA products used in Medicine
9. Describe the experiments that prove DNA is the primary genetic material

**SHORT NOTES****2 X 5 = 10 Marks**

10. Totipotency
11. Degeneracy of the code

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