# Worksheet: Molecular Basis of Inheritance

Rajasthan State Board · Class 12 · Biology · 5 questions · 13 marks

| Name: _____ | Date: _____ | Score: _____ / 13 |
|---|---|---|

**Q1.** How many amino acids would a polypeptide encoded by 150 codons have? *[2 marks]*

**Q2.** What is the significance of VNTRs in DNA fingerprinting? *[2 marks]*

**Q3.** Why was the Hershey-Chase experiment decisive in proving DNA is the genetic material? *[3 marks]*

**Q4.** What is semiconservative replication and how did Meselson-Stahl prove it? *[3 marks]*

**Q5.** What is the function of the lac operon repressor? *[3 marks]*