

## Worksheet: Molecular Basis of Inheritance

Andhra Pradesh 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]*

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

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

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

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

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