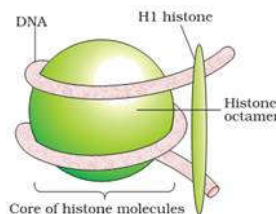


1. Name the three non-sense codons? (1)
2. Name the enzyme which helps in formation of peptide bond? (1)
3. Name the factors for RNA polymerase enzyme which recognises the start and termination signals on DNA for transcription process in Bacteria. (1)
4. Name the process in which unwanted mRNA regions are removed & wanted regions are joined. (1)
5. In which direction, the new strand of DNA synthesised during DNA replication. (1)
6. Complete the blanks a, b, c and d on the basis of Frederick Griffith Experiment.  
S Strain → inject into mice → (a)  
R strain → inject into mice → (b)  
S strain (heat killed) → inject into mice → (c)  
S strain (heat killed) + R strain (live) → inject into mice → (d) (2)
7. Give two reasons why both the strands of DNA are not copied during transcription. (2)
8. Give two reasons why both the strands of DNA are not copied during DNA transcription? (2)
9. What is peptide bond? How is it formed? (2)
10. Why is DNA & not RNA is the genetic material in majority of organisms? (2)
11. Give six points of difference between DNA and RNA in their structure/chemistry and function. (3)
12. What is transformation? Describe Griffith's experiment to show transformation? What did he prove from his experiment? (3)
13. The length of DNA in an eukaryotic cell is N 2.2 m How can such a huge DNA be packaged in a nucleus of micrometer in diameter. (3)



14. What are the three types of RNA & Mention their role in protein Synthesis? (3)
15. Define bacterial transformation? Who proved it experimentally & how? (3)
16. What does the lac operon consist of? How is the operator switch turned on and off in the expression of genes in this operon? Explain. (5)
17. Where do transcription & translation takes place in a prokaryotic cell? Describe the three stepsinvolved in translation? (5)