

## MULTIPLE CHOICE QUESTIONS ON DNA STRUCTURE AND REPLICATION

1. **Accepted theory of replication is**
  - a) conservative theory
  - b) dispersive theory
  - c) semi-conservative theory
  - d) evolutionary theory
2. **Telomeres are usually rich in which nucleotide**
  - a) Adenine
  - b) Guanine
  - c) Thymine
  - d) Cytosine
3. **In DNA double helix, the two DNA chains are held together by**
  - a) covalent bonds between the pair of bases
  - b) hydrogen bonds between the pair of bases
  - c) ionic bonds between the pair of bases
  - d) none of the above
4. **Messelsen and Stahl model of replication was called**
  - a) conservative replication
  - b) semi-conservative replication
  - c) dispersive replication
  - d) Cri du Chat
5. **DNA gyrase in *E. coli***
  - a) adds positive supercoils to chromosomal DNA
  - b) can be inhibited with antibiotics
  - c) is required only at the *oriC* site
  - d) performs the same function as helicase in eukaryotes
6. **In DNA, guanine pairs with**
  - a) Adenine
  - b) Guanine
  - c) Thymine
  - d) Cytosine
7. **Enzymes, responsible for unraveling short segments of DNA is**
  - a) DNA polymerase
  - b) Helicase
  - c) DNA ligase
  - d) Primase
8. **Enzyme, responsible for proofreading base pairing is**
  - a) DNA polymerase
  - b) Telomerase
  - c) Primase
  - d) DNA ligase
9. **Proteins involved in opening a replication bubble are**
  - a) DNA helicases
  - b) single stranded binding proteins
  - c) ligase
  - d) DNA topoisomerase
10. **DNA helicase is used to**
  - a) unwind the double helix
  - b) interact the double helix closely
  - c) break a phosphodiester bond in DNA strand
  - d) none of the above