

BIOLOGY

1. Among the mature tissues of the mammals- Which one of the following cells contains no nucleus?
 - a. erythrocyte
 - b. monocyte
 - c. osteocyte
 - d. chondroblast
2. Sister chromatids are tightly joined in places named:
 - a. karyokinetic spindle
 - b. bivalent
 - c. kinetochore
 - d. centromere
3. When DNA replicates semiconservatively, which of the following is true of each daughter DNA molecule?
 - a. both strands are newly synthesized
 - b. one strand is newly synthesized, whereas the other is a strand from the parent DNA molecule
 - c. both strands are the original strands of the parent molecule
 - d. one strand has more GC-rich regions than the other strand has
4. Which of the following plant hormones hastens apple ripening?
 - a. auxin
 - b. ethylene
 - c. gibberellin
 - d. cytokinin
5. Normal site of implantation of early embryo (blastocyst) in humans is:
 - a. uterine tube
 - b. ovary
 - c. uterus
 - d. vagina
6. Blood fibrinogen is converted into fibrin during:
 - a. CO₂ transport
 - b. an immune response
 - c. clot formation
 - d. glucose regulation

7. If the alleles A and a conform to Hardy-Weinberg expectation, and if the frequency of a is 0.3, which of the following is the most common genotype in the population?
- A
 - a
 - AA
 - Aa
8. Vitamin deficiency causes various health problems
- C- scurvy, A- rickets, D- night blindness, E- pernicious anemia
 - C- night blindness, A- scurvy, B12- rickets, E- pernicious anemia
 - C- scurvy, A- night blindness, B12- pernicious anemia, D- rickets
 - D- night blindness, B12- scurvy, B6- rickets, A- pernicious anemia
9. The vector that transmits the malaria pathogen (*Plasmodium*) from one host to another is:
- mosquitoes
 - ticks
 - lice
 - houseflies
10. Which of the following is part of a heme prosthetic group:
- boron
 - magnesium
 - zinc
 - iron