

1058

B.E. (Biotechnology), Second Semester
BIO-201: Basic Biotechnology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

x-x-x

1. a) What are different components of blood?
- b) What is sarcomere?
- c) What is the importance of superior vena cava and inferior vena cava in circulation system of human body?
- d) What is epistasis?
- e) What is Rh factor?
- f) What are the enzymes present in digestive system?
- g) Who is popularly known as Father of genetics?
- h) What is complete dominance?
- i) Give example of two biopolymers.
- j) What is base-pairing? Give example.

SECTION- A

2. A) Nervous tissue and muscular tissue work together. Justify the statement.
B) How striated and non-striated muscles are different from each other?
(6, 4)
3. A) What are the components of circulatory system in human body?
B) How nervous system is different from endocrine system?
(5, 5)
4. A) Discuss with proper examples of non Mendellian inheritance pattern.
B) Explain the importance of hormones in controlling human reproductive system.
(5, 5)

SECTION- B

5. A) What is the difference between synthetic and biodegradable polymers?
B) Explain the applications of natural, bacteriological polymers.
(5, 5)
6. A) How genetic engineering is beneficial in biomedical field?
B) Describe about plasmid as a vector for cloning in genetic engineering.
(5, 5)
7. A) Mention important facts of Indian Patent Act as applicable to a patent in biological system.
B) Explain background scope and limitations of a biotechnology patent with suitable example.
(5, 5)

x-x-x

(5, 5)