

Exam.Code:0906
Sub. Code: 6663

1059

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

Max. Marks: 50

Allowed: 3 Hours

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

x-x-x

I. Attempt the following:-

- How blood cells are classified depending on staining properties?
- What is chitin?
- What is coronary sinus?
- What is action potential?
- What is sarcoplasm?
- How phenotype is different from genotype?
- WIPO is _____.
- Pattern baldness is _____ type of inheritance pattern.
- Give example of two non toxic biopolymer used in drug delivery.
- Which type of bonding is important for complementary base pairing in DNA? (10x1)

UNIT - I

- What are the characteristic patterns of different connective tissue cells? (5,5)
 - Brain controls endocrine glands in body. Justify the statement. (5,5)
- Briefly explain neuronal structure along with diagram. Define synaptic junctions.
 - What are the digestive enzymes available in our body? What is zymogen molecule? (5,5)
- Derive the phenotypic and genotypic ratio of Mendellian inheritance pattern of dihybrid cross. (6,4)
 - Differentiate between codominance and incomplete dominance. (6,4)

P.T.O.

(2)

UNIT - II

- V. a) Differentiate between synthetic polymers and biopolymers.
b) How biopolymers are used in tissue engineering? Explain with example. (5,5)
- VI. a) What are the methods available for transformation in genetic engineering?
b) What is gene therapy? Briefly describe the methodology with proper example.(5,5)
- VII. a) What are different biosafety levels in laboratories dealing with highly infectious organisms?
b) Briefly explain the importance of patents in technology world. What is trade mark? (5,5)

x-x-x

(b)
(b)
(c)
(a)
(b)
(c)
(a)
(b)
(c)
(6)(a)