

Exam.Code:0906
Sub. Code: 6663

1108
B.E. (Bio-Technology)
Second Semester
BIO-201: Basic Biotechnology

Time allowed: 3 Hours

Max. Marks: 50

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

x-x-x

I. Attempt the following:-

- a) What is the difference between granulocytes and agranulocytes?
- b) Give example of voluntary and involuntary muscles in human body.
- c) What is Purkinje fiber?
- d) What is the relation between genes and alleles?
- e) What is parthenogenesis?
- f) Which hormone is detected during pregnancy test?
- g) What is TAIPS?
- h) What is codominance?
- i) Give example of two biopolymers.
- j) What is Watson-Crick base-pairing? (10x1)

UNIT – I

- II. a) Describe about connective tissues present in our body.
b) How nervous system differs from endocrine system? (5,5)
- III. a) What are the characteristics of skeletal muscle Fibers?
b) Briefly explain location, function of different heart valves in human with proper diagram. (5,5)
- IV. a) What was the advantage of Mendel to choose green pea plant as test organism?
b) What blood types could be observed in children born to a woman who has blood type M and a man who has blood type MN? (5,5)

P.T.O.

(2)

UNIT – II

- V. a) Explain the applications of polymers in tissue engineering.
b) What are hydrogels? Explain their applications with suitable application. (5,5)
- VI. a) What are the applications of genetic engineering in different aspects of life?
b) Describe about cosmid as a vector for cloning in genetic engineering. (5,5)
- VII. a) What are different biosafety levels in laboratories?
b) Discuss about the IPR policies of India. Mention the authorities that confer such rights. (5,5)

x-x-x