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BTE 512

**Third Semester M.Sc. Degree Examination, December 2018
(Choice Based Credit System)**

BIOTECHNOLOGY

Medical Biotechnology (Open Elective)

Time : 3 Hours

Max. Marks : 70

Write short notes on **any ten** of the following (**not exceeding 1 page each**). **(10×2=20)**

1. a) Allergy.
- b) Evolution of immune system.
- c) Passive immunization.
- d) Edible vaccines.
- e) HLA typing.
- f) Heterochromatinization and its significance.
- g) Apoptosis.
- h) Down's syndrome.
- i) CDK.
- j) Cell cycle.
- k) Telomeres and genomic stability.
- l) Physical carcinogenic agents.

Answer **any five** of the following (**not exceeding 3 pages each**). **(5×6=30)**

2. MHC and antigen processing.
3. Describe the types and significance of immunization.
4. Hypersensitive reactions.
5. Meiosis.
6. *In vitro* fertilization.
7. Prenatal diagnosis.
8. Elaborate on the role of Tumor suppressor genes, proto-oncogenes and oncogenes in cancer.

P.T.O.



Answer **any two** of the following (**not** exceeding **7** pages **each**). **(2×10=20)**

9. Give a detailed account of gene therapy. Add a note on its significance.
 10. Discuss the pathophysiology of AIDS.
 11. With appropriate illustrations, describe the molecular organization of chromosomes.
 12. Discuss the importance of stem cells in medicine.
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