

ASSIGNMENT-1
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Microbiology and Immunology
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe the Ultra-structure of Fungal cell with labelled diagram.
- Q2)* Write an account on the general characters of Photosynthetic bacteria.
- Q3)* Describe the nutritional requirements of Bacteria.
- Q4)* Explain the methods of sterilization of bacterial cultures.
- Q5)* Describe Photosynthetic bacteria and their metabolism.

ASSIGNMENT-2
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020

BIO-TECHNOLOGY

Microbiology and Immunology

Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe role of microorganisms in nitrogen cycle.
- Q2)* Describe the antigen and antibody reactions.
- Q3)* Write an account on types of immunity.
- Q4)* Describe the production of Vaccines.
- Q5)* Write an account on autoimmunity.



ASSIGNMENT-1
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Biochemistry and Molecular Biology
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe the structure and functions of amino-acids.
- Q2)* Write an account on the structure and functions of Nucleic acids.
- Q3)* Describe the glycogen metabolism.
- Q4)* Explain the electron transport system.
- Q5)* Describe the Nucleotide metabolism.



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ASSIGNMENT-2
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Biochemistry and Molecular Biology
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe the biosynthesis of pyrimidines.
- Q2)* Describe DNA as genetic material.
- Q3)* Write an account on the Watson and Crick model of DNA.
- Q4)* Describe the regulation of gene expression.
- Q5)* Write an account on post translational modifications.



ASSIGNMENT-1
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Plant and Animal Tissue Culture and Genetic Engg.
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe Bergman's plating technique and its significance.
- Q2)* Write an account on media preparation and sterilization.
- Q3)* Write an account on meristem culture and clonal propagation.
- Q4)* Describe the protoplast isolation, culture and fusion.
- Q5)* Describe the methods of maintenance of cell culture.

ASSIGNMENT-2
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Plant and Animal Tissue Culture and Genetic Engg.
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe the basic techniques and types of mammalian cell culture.
- Q2)* Describe the in vitro fertilization and embryo transfer.
- Q3)* Describe cell growth and cell transformation.
- Q4)* Describe the vectors used in genetic engineering.
- Q5)* Write an account on gene therapy and its importance.

ASSIGNMENT-1
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Applications of Biotechnology
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe methods of isolation and improvement of industrially important microbes.
- Q2)* Write an account on methods of maintenance of important microbes.
- Q3)* Write an account on fermentative production of Citric acid.
- Q4)* Describe the fermentative production of Acetone.
- Q5)* Write an account on immobilization of enzymes.

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ASSIGNMENT-2
P.G. DIPLOMA DEGREE EXAMINATION,
JUNE/JULY - 2020
BIO-TECHNOLOGY
Applications of Biotechnology
Maximum : 30 MARKS
Answer ALL Questions

- Q1)* Describe biosensors and their applications in biotechnology.
- Q2)* Describe the production of antibiotic, Tetracyclin and its importance.
- Q3)* Write an account on the production of antibiotic, Cephalosporin and its applications.
- Q4)* Describe the production of Hepatitis - B vaccine, through genetically engineered microbes and its importance.
- Q5)* Write an account on the production of transgenic animals and their importance in medicine.