21916017 (1604MCB20)

THREE YEAR B.Voc. (CBCS) DEGREE EXAMINATIONS, MARCH/APRIL 2022.

(Regular/Supplementary)

FIRST SEMESTER

Medical Laboratory Technology

Paper IV — MICROSCOPY AND CELL BIOLOGY

Time : 3 Hours *Max. Marks : 75*

Draw neat labelled diagrams wherever necessary.

I. Answer any FIVE questions. (5 × 5 = 25)

1. Explain Lysosomes.
2. Explain Exocytosis.
3. Explain Carcinogens.
4. Explain Centrosomes.
5. Explain the types of cells.
6. Explain Nucleus.
7. Explain Ribosomes.
8. Explain the principle of microscopy.
9. Explain the symptoms and causes of cancer.
10. Explain Golgi complex.

II. Answer any FIVE questions. (5 × 10 = 50)

11. Explain about the types and applications of microscope.
12. Describe about specimen preparation, staining and fixation.
13. Write about the structure of prokaryotic cell.
14. Define *osmosis* and explain about active and passive transport.
15. Explain the structure, types and functions of Endoplasmic reticulum.

[P.T.O]

209161023

(2606BML20)

THREE YEAR (CBCS) B.Voc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2021

SECOND SEMESTER

Part II – Medical Lab Technology

MICROBIAL PHYSIOLOGY METABOLISM

(Regular)

Time : 3 Hours *Max. Marks : 75*

SECTION – A

Answer any FIVE of the following.

(Marks : 5 × 5 marks = 25 marks)

1. Nutritional uptake of cell
2. Synchronous curve
3. Growth curve
4. Diauxic curve
5. Fermentation
6. Glycolysis
7. Respiration
8. Glyoxylate cycle
9. Beta Oxidation
10. Uncouplers and inhibitors.

SECTION – B

Answer any FIVE of the following questions.

(Marks : 5 × 10 marks = 50 marks)

11. Explain about nutritional requirements of microbes.
12. Describe about nutritional classification of microorganisms.
13. Write about the factors effecting bacterial growth.
14. Discuss about batch and continuous culture.

(2005BML20)

THREE YEAR B.Voc. (CBCS) DEGREE EXAMINATION, NOVEMBER/DECEMBER 2021

(Regular)

SECOND SEMESTER

Part II – Medical Lab Technology

ENZYMOLOGY AND BIOENERGETICS

Time : 3 Hours *Max. Marks : 75*

SECTION – A

Answer any FIVE of the following questions.

(Marks : 5 × 5 = 25 marks)

1. Holo Enzymes.
2. Prosthetic group.
3. Activesite of Enzymes.
4. Preliminary fractionation.
5. Gel filtration.
6. Enzyme purification.
7. Determination of Km Value.
8. Enzyme regulation.
9. Free Energy.
10. Biological oxidations.

SECTION – B

Answer any FIVE of the following questions.

(Marks : 5 × 10 = 50 marks)

11. Write about the general characteristics of Enzymes.
12. Explain about Coenzymes and their biochemical functions.
13. Describe about theories of enzyme catalysis.
14. Write about Ion Exchange Chromatography.

[P.T.O]

(3604MET20)

THREE YEAR B.Voc. (CBCS) DEGREE EXAMINATION, MARCH/APRIL 2022

(Regular)

THIRD SEMESTER

Medical Laboratory Technology

Course IV – BIOCHEMICAL METABOLISMS

(2020 regulations)

Time : 3 Hours *Max. Marks : 75*

SECTION – A

Answer any FIVE of the following.

(Marks : 5 × 5 marks = 25 marks)

1. Glycogenolysis
2. Cerebrosides
3. Prostaglandins
4. Thromboxanes
5. Glycogenesis
6. Cholestrol
7. Oxidative deamination
8. Catabolism of aminoacids
9. Conjugation of bilirubin
10. Degradation of purines

SECTION – B

Answer any FIVE of the following

(Marks : 5 × 10 marks = 50 marks)

11. Describe the biosynthesis of Ascorbic acid.
12. Write about Gluconeogenesis.
13. Explain the biosynthesis of phospholipids.
14. Discuss about the aerobic metabolism of human muscles.

20916 1015

(3601HBB20)

THREE YEAR B Voc. (CBCS) DEGREE EXAMINATION, MARCH/APRIL 2022

(Regular)

THIRD SEMESTER

Medical Laboratory Technology

Course I – HEMATOLOGY AND BLOOD BANKING – I

(2020 Regulation)

Time : 3 Hours *Max. Marks : 75*

SECTION – A

Answer any FIVE questions.

(Marks : 5× 5 marks = 25marks)

1. Osmotic fragility test.
2. Bone marrow smear for microscopic examination.
3. Heinz body preparation.
4. Haemostatis.
5. Fibrinolysis.
6. Immunohaematology.
7. Preparation for blood collection.
8. Antihuman globulin.
9. Specimen collection for blood bank.
10. Reporting of haemagglutination reaction.

SECTION – B

Answer any FIVE of the following.

(Marks : 5 × 10 marks = 50 marks)

11. Explain the estimation of foetal haemoglobin.
12. Describe the laboratory diagnosis of protozoan blood parasites.
13. Discuss about anaemias and leukaemias.
14. Write about the mechanism of blood coagulation.

[P.T.O]

20916015

(1603PAS20)

THREE YEAR B.Voc. (CBCS) DEGREE EXAMINATION, JULY/AUGUST 2022

FOURTH SEMESTER

Medical Laboratory Technology

Course III – PARASITOLOGY

(Regular)

Time : 3 Hours *Max. Marks : 75*

PART - A

Answer any FIVE questions of the following

(Marks : 5 × 5 marks = 25 marks)

1. Host — Parasite relationships
2. Criteria far Parasites diagnosis
3. Measles
4. Balantidium coli
5. Leishmania donovani
6. Fungal Infections
7. Sleeping Sickness
8. Trematodes
9. Urogenital Swabs
10. Diagnosis of Sputum

PART - B

Answer any FIVE of the following questions.

(Marks : 5 × 10 marks = 50 marks)

11. Write about transmission infections and causing diseases.
12. Explain the diagnosis and identification of parasites.
13. Describe the clinically important parasites and their classification.
14. Discuss about intestinal protozoan parasites.
15. Explain about Malarial Parasites.
16. Give a detailed account on Trypanosones.

[P.T.O]

20916 1015

(3604MET20)

THREE YEAR B.Voc. (CBCS) DEGREE EXAMINATION. MARCH/APRIL 2022

(Regular)

THIRD SEMESTER

Medical Laboratory Technology

Course IV – BIOCHEMICAL METABOLISMS

(2020 regulations)

Time : 3 Hours *Max. Marks : 75*

SECTION – A

Answer any FIVE of the following.

(Marks : 5 × 5 marks = 25 marks)

1. Glycogenolysis
2. Cerebrosides
3. Prostaglandins
4. Thromboxanes
5. Glycogenesis
6. Cholestrol
7. Oxidative deamination
8. Catabolism of aminoacids
9. Conjugation of bilirubin
10. Degradation of purines

SECTION – B

Answer any FIVE of the following

(Marks : 5 × 10 marks = 50 marks)

11. Describe the biosynthesis of Ascorbic acid.
12. Write about Gluconeogenesis.
13. Explain the biosynthesis of phospholipids.
14. Discuss about the aerobic metabolism of human muscles.

[P.T.O.]

197696

(1604MCB20)

THREE YEAR B Voc DEGREE (CBCS) EXAMINATION, AUGUST 2021

(Regular and Supplementary)

FIRST YEAR - FIRST SEMESTER

Medical Laboratory Technology

MICROSCOPY AND CELL BIOLOGY (Course - IV)

Time : 3 Hours *Max. Marks : 75*

(Draw neat labelled diagrams wherever necessary)

PART – A

Answer any FIVE questions.

(Marks : 5 × 5 marks = 25 marks)

1. Explain Nucleolus and Nuclear membrane.
2. Explain Golgi complex.
3. Explain Plasma membrane.
4. Explain Endocytosis.
5. Explain Ribosomes.
6. Explain the components of microscope.
7. Explain cysosomes.
8. Explain carcinogens.
9. Explain the types of cells.
10. Explain imetastasis.

PART – B

Answer any FIVE of the following.

(Marks : 5 × 10 marks = 50 marks)

11. Give a detailed account on microscope.
12. Explain the structure of Eukaryotic cell.
13. Describe about mitochondria.
14. Write about specimen preparation, staining and fixation.
15. What is osmosis and explain about active and passive transport.
16. Explain briefly about chromosomes.

[P.T.O]

2916015

(1605FOM20)

THREE YEAR B.Voc. DEGREE (CBCS) EXAMINATION, AUGUST 2021

(Regular and Supplementary)

FIRST YEAR - FIRST SEMESTER

Fundamentals of Microbiology

MEDICAL LAB TECHNOLOGY (Course - V)

Time : 3 Hours *Max. Marks : 75*

(Draw neat labelled diagrams wherever necessary)

PART - A

Answer any FIVE questions.

(Marks : 5 × 5 marks = 25 marks)

1. History of Microbiology.
2. Microscopic examination of micro-organisms.
3. Carlwoes classification of microorganisms.
4. Structure of actinomycetes.
5. Viral disease cycle.
6. Classification of fungi.
7. Formation of spores.
8. Natural media.
9. Nature of microbial world.
10. Flagella and capsules in bacteria.

PART - B

Answer any FIVE of the following.

(Marks : 5 × 10 marks = 50 marks)

11. Explain about staining microbes.
12. Describe the growth pattern in microbes.
13. Write about five kingdom classification.
14. Explain the structure of bacteria.
15. Discuss about the classification of viruses.
16. Describe the morphology and multiplication of Bacteriophages.

[P.T.O]