

**SECOND YEAR B.Sc. DEGREE (PARAMEDICAL COURSES)
[SUPPLEMENTARY] EXAMINATION, NOVEMBER 2019**

Medical Laboratory Technology

Paper VIII—HAEMATOLOGY—II AND CLINICAL PATHOLOGY

(2012 Admissions)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Draw diagrams wherever necessary.

Essays :

1. Classify Acute Leukemia. Describe the blood and bone marrow findings in Acute Myeloid Leukemia.
(4 + 3 + 3 = 10 marks)
2. Describe the collection and examination of CSF. Mention the CSF findings in various diseases.
(3 + 4 + 3 = 10 marks)
[2 × 10 = 20 marks]

Short Notes :

3. Urine sugar estimation.
4. Cytochemical stains in Acute Leukemia.
5. Sputum examination.
6. Urinary sediments.
7. Pregnancy test.
8. Laboratory diagnosis of iron deficiency anemia.
9. Haemophilia.
10. Semen analysis.
11. Leukemoid reaction.
12. Ham's test.

(10 × 5 = 50 marks)

Turn over

Answer briefly :

13. INR.
14. Serum Electrophoresis of Myeloma proteins.
15. Perl stain.
16. Heat and acetic acid test.
17. Fecal Occult Blood examination.
18. Differentiate between Transudate and Exudate.
19. Sickling test.
20. Eosinophilia.
21. Synovial fluid analysis.
22. Stool Ova and Parasite test.

(10 × 3 = 30 marks)

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Medical Laboratory Technology

Paper VII—PARASITOLOGY AND ENTOMOLOGY

(2012 Admissions)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Draw diagrams wherever necessary.

I. Essays :

- 1 Describe the lifecycle and morphology of the parasite causing visceral leishmaniasis. Discuss in detail about its laboratory diagnosis. (10 marks)
- 2 Explain in detail the morphology, lifecycle and public health importance of Aedes mosquito. (10 marks)

II. Short notes :

- 3 Lab diagnosis of falciparum malaria.
- 4 Mosquito control measures.
- 5 Clonorchis sinensis.
- 6 Lab diagnosis of Echinococcosis.
- 7 Cysticercus cellulosae.
- 8 Lab Diagnosis of Enterobiasis.
- 9 Compare the microfilariae of Wuchereria bancrofti and Brugia malayi.
- 10 Classify arthropods of public health importance.
- 11 Ascariasis-Lifecycle of causative agent and Lab diagnosis.
- 12 Pathogenic free living amoebae.

(10 × 5 = 50 marks)

Turn over

III. Answer briefly :

- 13 Culture methods in Parasitology.
- 14 Giardia lamblia.
- 15 Enumerate the parasites seen in peripheral blood films.
- 16 Housefly.
- 17 Sarcoptes scabiei.
- 18 Xenodiagnosis.
- 19 Paragonimus westermani.
- 20 Lab diagnosis of hookworm infection.
- 21 Trypanosoma cruzi.
- 22 Cryptosporidium parvum.

(10 × 3 = 30 marks)

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**SECOND YEAR B.Sc. DEGREE (PARAMEDICAL COURSES)
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Medical Laboratory Technology
Paper VI—GENERAL MICROBIOLOGY
(2012 Admissions)

Time : Three Hours

Maximum : 100 Marks

*Answer all questions.
Draw diagrams wherever necessary.*

I. Essay :

- 1 Briefly describe anaerobic respiration in bacteria and write in detail about anaerobic culture methods. (10 marks)
- 2 What are extrachromosomal genetic elements? Write a note on plasmids and its significance. (10 marks)

II. Short Notes on :

- 3 Enriched media.
- 4 Mutagens.
- 5 Bacterial growth curve.
- 6 Conjugation.
- 7 Mc Farland standard.
- 8 Incubator used in bacteriology.
- 9 Bacteriocin typing.
- 10 Streak culture method.
- 11 Cooked meat medium.
- 12 IMViC Test.

(10 × 5 = 50 marks)

Turn over

III. Answer briefly :

- 13 Inspissation.
- 14 Classification of bacteria based on O_2 requirement.
- 15 Mac Conkey agar.
- 16 Liquid culture media.
- 17 Different pH testing methods in culture media preparation.
- 18 Batch culture.
- 19 Bacteriophage.
- 20 Oxidative fermentative test.
- 21 Sterilization methods for culture media.
- 22 Specific pathogen free animals.

(10 × 3 = 30 marks)

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Medical Laboratory Technology

Paper V—BIOCHEMISTRY—II

(2012 Admissions)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Draw diagrams wherever necessary.

Essay :

1. Define Gluconeogenesis. What are the substrates of gluconeogenesis ? Write the pathway from any one of the substrate.

(2 + 2 + 6 = 10 marks)

2. Name the plasma lipoproteins. Describe the metabolism of LDL and HDL.

(2 + 8 = 10 marks)

[2 × 10 = 20 marks]

Short notes :

3. Glycated hemoglobin.
4. Deficiency and assay of Vitamin A.
5. Fatty liver.
6. Aminoacidurias.
7. Gout.
8. Protein-Energy malnutrition.
9. Diagrammatic representation of Electron Transport Chain.
10. Pleural fluid analysis.
11. TCA Cycle.
12. Abnormal constituents of urine.

(10 × 5 = 50 marks)

Turn over

Answer briefly :

13. A/G ratio.
14. Clinical significance of serum Transaminases.
15. Hypoglycemia.
16. Biologically important compounds synthesized from Tryptophan.
17. Functions of prostaglandins.
18. Maple Syrup Urine Disease.
19. Role of bile acids in our body.
20. Biological role of Niacin.
21. Lactose intolerance.
22. Diabetic ketoacidosis.

(10 × 3 = 30 marks)