

[Time: 3 Hours]

[Max. Marks: 80]

III SEMESTER

PAPER - I (Fundamentals of Biochemistry I)

QP CODE: 8330

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Define and Classify lipids. Give examples for each class along with functions.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Describe the mechanism and importance of endocytosis and exocytosis.
3. Write note on chemical constituents of cell.
4. Write a neat diagram of fluid mosaic model of cell membrane.
5. Describe transport of molecules across cell membrane.
6. Define and mention the uses of electrophoresis.
7. What are the functions of cell membrane?
8. Draw a neat diagram of mitochondria and write about its functions.
9. Define carbohydrates. Write their biological functions.
10. Write a note about how quality control is used in clinical laboratory.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Which anticoagulant is added to blood samples drawn for blood sugar estimation and why?
12. Eicosanoids.
13. Proteinuria.
14. Name the tests done under the Lipid profile with their normal ranges.
15. Define epimers.
16. Mention the wavelengths used in the visible range inside the colorimeter instrument.
17. What is the application of flame photometry
18. What is the principle of colorimeter?
19. Write the Full form and normal ranges for 1.FBS. 2. PPBS. 3. RBS.
20. Define amino acids. Name the 20 amino acids.
21. Clinical importance of Cardiolipin.

July - 2022

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Medical Laboratory Technology

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III SEMESTER

PAPER - II (Fundamentals of Microbiology I)

QP CODE: 8331

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Define and classify Sterilization. Describe in detail about Hot air oven.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Robert Koch
3. Immunoglobulin A
4. Innate immunity
5. Bacterial flagella
6. Biomedical waste management
7. Agglutination reactions
8. Enriched media
9. Type I Hypersensitivity
10. IMViC test

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Name three bacterial vaccines
12. Name three enrichment media
13. Name three sources of infection
14. Autoimmunity
15. Name three chemical disinfectants
16. Name three gram negative bacilli
17. Hapten
18. Name three hospital associated infections.
19. Classical complement pathway
20. Universal safety precautions
21. Blood culture

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III SEMESTER

PAPER - III (Haematology & Clinical Pathology I)

QP CODE: 8332

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Describe in detail about the physical and chemical examination of urine.(4+6)

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Enumerate the various methods of estimating Hemoglobin. Describe any one in detail.
3. Waste disposal in pathology laboratory
4. Describe morphology of different types of WBCs with diagrams.
5. Classify Anemia. Describe peripheral smear findings in Iron deficiency anemia.
6. Write in detail about the stages of erythropoiesis with labelled diagram.
7. Describe about the laboratory safety measures.
8. Define hemostasis? Describe the different stages of hemostasis.
9. Discuss in detail about various stains used in cytology.
10. Write about anticoagulants used in hematology and their mechanism of action.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Enumerate the Red cell indices. Write the normal values for each.
12. Write 3 causes for increase in Reticulocyte count.
13. Mention the different methods of blood grouping.
14. What is absolute eosinophil count? Write its normal range.
15. List three fixatives used in cytology.
16. Write three causes for thrombocytopenia.
17. What is PAP smear, write its significance.
18. Enlist 3 different sites for bone marrow aspiration.
19. Write 3 causes for Neutrophilia.
20. What is APTT? Mention two conditions where it is elevated.
21. List the uses and advantages of FNAC.