

7/24

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. Medical Laboratory Technology

[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. Explain in detail aerobic glycolytic pathway. Add a note on its importance & energetics. (5+3+2)

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Colour coded bags for segregation of biomedical waste
3. Write a note on Jaundice & blood Investigation for diagnosis of Jaundice
4. Errors in Laboratory testing
5. pH meter
6. Laboratory Safety Measures & Safety Regulations
7. Digestion & absorption of carbohydrates
8. Role of technologists in healthcare
9. Glycogenolysis
10. Structure and Functions of Hemoglobin

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Preparation of molar solution with example.
12. Collection of sample for ABG analysis
13. Water Deionisers
14. Lactose intolerance
15. Collection & Preservation of Urine sample
16. SI unit
17. Mol. Wt.
18. Anticoagulants
19. Hyperglycemia
20. Types of Centrifuge
21. Significance of HMP pathway

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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 sterilization. Classify various agents of sterilization. Write in detail about Hot air oven.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Contribution of Robert Koch
3. Bacterial Spores
4. Bacterial cell division
5. Moist heat sterilization
6. Universal precautions
7. Hospital Acquired Infection
8. Agglutination tests
9. IgG Antibody
10. Acquired Immunity

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Types of Microscopes
12. Enumerate three Gram positive bacilli
13. Enumerate three spore bearing bacteria
14. Types of antibodies
15. Enumerate bacterial filters
16. Enumerate three antiseptics
17. Enumerate three transport media
18. Uses of ELISA test
19. Enumerate three live attenuated vaccines
20. Enumerate three Gram negative bacilli
21. Uses of Hanging drop preparation

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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. Name Romanowsky stains. What is the principle of Leishman Stain? How is it prepared? (3+2+5)

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Write in detail about the stages of erythropoiesis with labelled diagram.
3. Quality control in hematology
4. Microscopic examination of urine
5. Thick smear and thin smear- preparation and uses
6. What is Phlebotomy? Describe procedure and safety precautions
7. Name various stains used in cytology. Describe Giemsa stain.
8. Laboratory safety measures.
9. Examination of peripheral blood smear
10. Benedict's test- principle, procedure and interpretation

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Write morphological classification of anemia with one example for each.
12. Enlist RBC indices with their normal values.
13. Define thrombocytopenia. Write four causes.
14. Draw a neat, labelled diagram of improved Neubauer's chamber
15. What is eosinophilia? Write four causes
16. Name three anticoagulants used in hematology with one use of each.
17. What is hematocrit? Mention the methods to determine it.
18. Enumerate various cytological fixatives.
19. List the stains used for bone marrow smears.
20. Write six properties of ideal blood smear.
21. Name preservatives for urine.