# BLDE (DEEMED TO BE UNIVERSITY)

## **B.Sc.** Medical Laboratory Technology

[Time: 3 Hours]

[Max. Marks: 80]

#### **V SEMESTER**

# PAPER - I (Clinical Biochemistry I)

**QP CODE: 8530** 

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. List clinically important serum enzymes in diagnosis of diseases. Add a note on enzyme profile in liver diseases, Myocardial Infarction. [2+4+4]

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Explain Ketogenesis & ketoacidosis.
- 3. Glycogen storage disorder
- 4. Explain Principle, steps, advantages & disadvantages of Point of care testing for blood glucose estimation
- 5. Describe functions of thyroid hormones. Thyroid function tests.
- 6. β- Oxidation of fatty acid
- 7. Non protein nitrogenous (NPN) substances
- 8. Digestion & absorption of lipids
- 9. Blood Sample collection for biochemical investigations & reasons for rejection of the sample
- 10. Name Laboratory accreditation bodies. Note on preparation of lab to get NABL accreditation.

# Short Answers: (Any – 10)

 $3 \times 10 = 30 \text{ Marks}$ 

- 11. List the hormones acting through intracellular receptors
- 12. Internal audit of lab
- 13. Maintenance of autoanalyzer.
- 14. Role of carnitine in  $\beta$  oxidation
- 15. Phenylketonuria
- 16. Internal Quality control
- 17. Interpretation of flags
- 18. Maple syrup urine disease
- 19. Galactosemia
- 20. Describe the safety measures to prevent laboratory hazards.
- 21. List the lipid storage disorders.

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#### V SEMESTER

### PAPER - II (Medical Microbiology - I) OP CODE: 8531

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. List the malaria parasites. Describe life cycle and lab diagnosis of Plasmodium falciparum

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Stool concentration methods
- 3. Describe Life cycle, Pathogenesis and Laboratory diagnosis of hook worm infection
- 4. Hydatid cyst
- 5. Laboratory diagnosis of candida infection
- 6. Free living amoebae
- 7. Slide culture method
- 8. Cryptococcosis
- 9. Dermatophytosis
- 10. Mycetoma

#### Short Answers: (Any - 10)

 $3 \times 10 = 30 \text{ Marks}$ 

- 11. Enumerate three fungal media
- 12. Name the dimorphic fungi
- 13. Draw a neat labeled diagram of E. histolytica trophozoite
- 14. Name three Non-Bile-stained Eggs
- 15. Enumerate three vector borne parasitic infection
- 16. NIH swab
- 17. Name the Aspergillus species
- 18. Enumerate three fungi causing eye infection
- 19. Enumerate the opportunistic infections
- 20. Classification of fungi
- 21. Enumerate Antifungal agents

5/07/202A

# BLDE (DEEMED TO BE UNIVERSITY)

## **B.Sc. Medical Laboratory Technology**

[Time: 3 Hours]

[Max. Marks: 80]

#### V SEMESTER

# PAPER - III (Blood Bank & General Pathology I) OP CODE: 8532

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

#### **Long Questions**

10X1 = 10 Marks

1. What are transfusion transmitted infections? Discuss in detail about the screening tests done on donated blood.

#### Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Write in detail about coombs test and its clinical significance.
- 3. Mention the various blood group systems and methods of blood grouping.
- 4. Write in detail about staining of cytological specimens
- 5. What is FNAC? Describe the advantages of FNAC.
- 6. Describe the tests for detection of ketone bodies in urine
- 7. Describe the techniques of collection of specimens for cervical cytology study and the normal cellular components.
- 8. Describe the various methods of cell block preparation.
- 9. Name the various blood components and their preparation & storage.
- 10. Mention the criteria of donor selection for blood donation

# Short Answers: (Any – 10)

 $3 \times 10 = 30 \text{ Marks}$ 

- 11. Name various anticoagulant- preservatives solutions used in blood bag with their shelf life
  - 12. Name the fixatives used in cytology
  - 13. Major cross matching
  - 14. Mention List three reasons of donor deferral
  - 15. Mention the normal cellular components of breast FNAC
  - 16. Write few disadvantages of FNAC
  - 17. Name the methods of estimation of ESR with the normal values.
  - 18. Describe the procedure of urine sediment preparation for cytological examination.
  - 19. What is the normal volume of urine & what is oliguria.
  - 20. What is Proteinuria? Name the tests used to detect it
  - 21. Describe the process of processing sputum sample for cytological examination.