July - 2022

BLDE (DEEMED TO BE UNIVERSITY)

M.Sc. Allied Health Sciences (Medical Biochemistry)

[Time:3 Hours] **[Max.Marks:80]**

III SEMESTER

PAPER – I (Basic Metabolism & Homeostasis)

QP CODE: 9051

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

Long Questions **10 X 3 = 30 Marks**

1. Discuss the metabolic changes during fast and fed cycle. Explain the role of hormones. [5+5]
2. Explain glycolysis with regulation and energetics. [5+2+3]
3. Define ketone bodies. How are ketone bodies synthesized and regulated? Add a note on clinical significance [1+6+3].

Short Essays: **5 X 10 = 50 Marks**

4. Lipid profile: mention the tests included with normal reference ranges. Name the method used for estimation of cholesterol.
5. Atherosclerosis.
6. Define TCA cycle. Add a note on its regulation and energetics.
7. Glucose tolerance test.
8. Urea cycle
9. Cori's cycle
10. Formation and fate of ammonia
11. Mention the hormones involved in blood glucose homeostasis. Write the normal ranges of FBS, PPBS and RBS.
12. What is carnitine and carnitine shuttle?
13. Write the regulatory enzymes involved in gluconeogenesis with the reactions.

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III SEMESTER

PAPER – II (Physiological Biochemistry)

QP CODE: 9052

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

Long Questions **10X3 = 30 Marks**

1. Discuss the biochemical basis, types, clinical features and lab findings in Thalassemia.
2. Explain the Chemi-osmotic theory of ATP generation.
3. Define jaundice. Explain in detail the causes and the laboratory investigations of different types of jaundice.

Short Essays: **5 X 10 = 50 Marks**

4. Write a note on acute phase proteins.
5. High energy compounds.
6. What is xenobiotic and explain the phases of detoxification.
7. Uncouplers of Oxidative phosphorylation.
8. Acute intermittent porphyria.
9. ATP synthase complex.
10. List the plasma proteins and functions of Albumin
11. Normal serum Electrophoretogram.
12. Modes of transmission of HIV.
13. Oxygen dissociation curve.