

October - 2024

## **BLDE (DEEMED TO BE UNIVERSITY)**

**Duration: 1 ½ Hrs.**

**Max Marks: 50**

### **Pre – Ph.D. Course Work Examination**

#### **Paper II: BACKGROUND PAPER (Biochemistry)**

**QP CODE - 6016**

**I. Answer ANY TWO of the following** **2 x 10 = 20 Marks**

1. Explain the chronic complications of diabetes mellitus, focusing on its impact on the cardiovascular system, eyes, and nervous system.
2. Describe the pathophysiology of diabetic ketoacidosis (DKA) and the clinical presentation of a patient in DKA.
3. Describe the pathophysiology of diabetic nephropathy, detailing the role of hyperglycemia, advanced glycation end products (AGEs), and other contributing factors in renal damage.

**II. Answer ANY FOUR of the following** **4 x 5 = 20 Marks**

4. What is the significance of micro albuminuria in diabetic patients? How does it progress to overt nephropathy?
5. Discuss the ADA diagnostic criteria for prediabetes and diabetes mellitus, explaining the values for fasting plasma glucose and oral glucose tolerance tests.
6. What are the roles of oxidative stress and inflammation in the progression of diabetic complications?
7. Describe the utility of the HbA1c test in managing diabetes, including its limitations.
8. What is the principle of HPLC, and how is it applied in clinical laboratories for measuring HbA1c?

**III. Answer the following** **5 x 2 = 10 Marks**

9. What is the normal range for HbA1c, and what level indicates diabetes?
10. Define NGAL and explain its role as a renal injury marker.
11. What are the stages of diabetic nephropathy?
12. What is the albumin-creatinine ratio, and what does an elevated ratio indicate?
13. What is ELISA used for in medical diagnostics?

Oct - 2024

**BLDE (DEEMED TO BE UNIVERSITY)**

**Pre – Ph.D. Course Work Examination**

[Time: 1 ½ Hours]

[Max Marks: 50]

**Paper II: BACKGROUND PAPER (PSYCHIATRY)**

**QP CODE - 6013**

**I Answer the following**

**5 x 2 = 10 Marks**

1. AUDIT
2. CAGE
3. ACAMPROSATE
4. Types of cannabis receptors
5. Enumerate substances of abuse

**II Answer ANY FOUR of the following**

**4 x 5 = 20 Marks**

6. Mild Cognitive Impairment
7. Classification of Bipolar illness and explain about it
8. Signs and symptoms of Alcohol intoxication
9. ERP
10. Motivation enhancing treatment (MET)

**III Answer ANY TWO of the following**

**2 x 10 = 20 Marks**

11. Delirium tremens management
12. Discuss Drug treatment of relapse prevention in Alcohol use disorders
13. Enumerate Neurological complications of Alcohol use disorders. Discuss Wernicke – Korsakoff syndrome.

OCT-2024

## **BLDE (DEEMED TO BE UNIVERSITY)**

**Duration: 1 ½ Hrs.**

**Max Marks: 50**

### **Pre – Ph.D. Course Work Examination**

#### **Paper II: BACKGROUND PAPER (Biotechnology)**

**QP CODE – 6022 (AHS)**

**I. Answer ANY TWO of the following** **2 x 10 = 20 Marks**

1. Explain pathophysiology and pathway in development in Hepatocarcinoma.
2. Explain microRNA as biomarker
3. Write in detail about molecular docking & its types

**II. Answer ANY FOUR of the following** **4 x 5 = 20 Marks**

4. Limitation of current treatment for HCC.
5. Write about biogenesis of microRNA synthesis
6. Explain about Molecular dynamic simulation
7. Explain network pharmacology
8. Principle of MTT assay

**III. Answer the following** **5 x 2 = 10 Marks**

9. Pharmacophore generation
10. Limitation of herbal drugs
11. Write a note on microRNA as biomarker
12. Cellular localization of microRNA
13. Terminalia Arjuna