

Madhya Pradesh Medical Science University, Jabalpur

1st MBBS Examination August 2019

Paper Code:-19AM0000100031

Subject: BIOCHEMISTRY-I

Time : 03 Hours

Maximum Marks : 50

Instructions:

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary.
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper. otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Q. 1. Long Answer Question

2X 5 = 10

- a. Absorption, Transport and Fate of Iron in body
- b. Write sources of Vitamin D & Explain the role of vitamin D in health and disease

Q.2. Short Answer Question

10 X 3 = 30

- a. Amphibolic pathways of glucose metabolism
- b. Fatty acid synthase complex
- c. Mechanisms for regulation of blood glucose
- d. Detoxification of aspirin
- e. GTT
- f. Iso-enzymes
- g. Adulteration of Lipids
- h. Homocysteinuria
- i. ATP Synthase
- j. Ketosis

Q.3. Very Short Answer Question

10 X 1 = 10

- a. Vitamin A deficiency disorders
- b. Enumerate essential amino acids
- c. Normal reference range of Cholesterol
- d. Specialized product of Amino Acid Metabolism
- e. Glycogen storage disorders
- f. Name four phospholipids
- g. Classify proteins
- h. HDL
- i. Cell membrane
- j. Epimers

Madhya Pradesh Medical Science University, Jabalpur
1st MBBS Examination December 2019

Paper Code:- 19BM0000100031

Subject: Biochemistry-I

Time : 03 Hours

Maximum Marks : 50

Instructions:

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary.
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper, otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Q. 1. Long Answer Question

2X 5 = 10

- a. Define and classify enzymes. Write brief account of clinical significance of enzymes.
- b. Describe the metabolic fates of acetyl CoA. How acetyl CoA is completely oxidized in the body?

Q.2. Short Answer Question

10 X 3 = 30

- a. Describe the role of vitamin A in vision.
- b. Hypothyroidism.
- c. Essential fatty acid and their functions.
- d. Mechanism of action of Insulin.
- e. One carbon metabolism
- f. Fluid Mosaic Model of Plasma Membrane
- g. Rapoport Leubering Cycle.
- h. Fatty acid synthase enzyme complex.
- i. Urea Cycle
- j. Megaloblastic anemia

Q.3. Very Short Answer Question

10 X 1 = 10

- a. Factors inhibiting calcium absorption.
- b. Alkaptonuria .
- c. Glucose transporters .
- d. Antioxidant.
- e. Name any 2 Biologically important peptides.
- f. Normal value of sodium and potassium.
- g. Epimers.
- h. Tumor suppressor genes.
- i. LDL.
- j. Vitamin C deficiency.

Madhya Pradesh Medical Science University, Jabalpur

Ist MBBS Examination August 2019

Paper Code:-19AM0000100032

Subject: **BIOCHEMISTRY-II**

Time : 03 Hours

Maximum Marks : 50

Instructions:

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary.
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper, otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Q. 1. Long Answer Question

2X 5 = 10

- a. Write a note on Purine metabolism. Add a note on Gout.
- b. Describe the process of protein biosynthesis. Add a note on post translational modification.

Q.2. Short Answer Question

10 X 3 = 30

- a. Tumor markers
- b. Liver Function Tests
- c. Air pollution. Enumerate its effects on health
- d. Recombinant DNA technology
- e. KFT
- f. Porphyrias
- g. Immunoglobulin
- h. Chromatography
- i. DNA repair mechanism
- j. Lac Operon model

Q.3. Very Short Answer Question

10 X 1 = 10

- a. Normal reference range of Sodium, Potassium
- b. siRNA
- c. Histone Proteins
- d. Oncogens
- e. DNA finger-printing
- f. Synthetic nucleotides
- g. Lesch-Nyhan's syndrome
- h. Ubiquitin
- i. Hbs
- j. SDA

Madhya Pradesh Medical Science University, Jabalpur

1st Prof. MBBS Examination December-2019

Paper Code:- 19BM0000100032

Subject: Biochemistry-II

Time : 03 Hours

Maximum Marks : 50

Instructions:.

- 1) All questions are compulsory
- 2) Draw diagrams wherever necessary.
- 3) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper, otherwise the question shall not be valued
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Q. 1. Long Answer Question

2X 5 = 10

- a. Describe DNA double helix structure, with a note on its characteristics/features.
- b. Write a note on haemoglobin synthesis. Add a note on Haemoglobinopathies

Q.2. Short Answer Question

10 X 3 = 30

- a. Recombinant DNA technology.
- b. Air pollution. Enumerate its effects on health.
- c. Metabolic acidosis
- d. Caloric requirement of adult
- e. LFT
- f. PEM
- g. Plasma proteins
- h. Telomerase
- i. BMR
- j. Post transcriptional modification.

Q.3. Very Short Answer Question

10 X 1 = 10

- a. PCR
- b. SDA
- c. Clinical utility of Electrophoresis
- d. Name four synthetic nucleotides
- e. Biochemical Cardiac Markers
- f. Structure of immunoglobulin
- g. hnRNA
- h. Dietary fibers
- i. Fetal haemoglobin
- j. Applications of gene therapy

M-1205

**First M. B. B. S. (Professional) Examination, 2
Feb.-March, 2015**

BIOCHEMISTRY

Paper : First

Time Allowed : Three hours

Maximum Marks : 50

Minimum Pass Marks : 25

Note : All questions are compulsory.

1. Classify Enzymes with examples and their clinical applications. 10
2. What are proteins, classified them? 10

M-1205

PTO

3. What are Mucopolysaccharides? Write down importance of Insulin in body. 10

4. Short notes :

(i) Phospholipids 5

(ii) Mutarotation 5

5. Short notes :

(i) Liver Function Test 5

(ii) Renal Function Test 5