

Sl.No. M23005

Course Code : 161021T05

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

MBBS DEGREE EXAMINATION – October 2020

First Year

BIOCHEMISTRY - PAPER I

SECTION A

Time: Fifteen Minutes

Maximum: 15 marks

Register Number :

--	--	--	--	--	--	--	--	--	--

Signature of the candidate

Signature of the Invigilator

Instructions to the candidates

- 1. Write your Register Number and sign at the place specified on the first page of this Question Booklet.**
- 2. Do not open this question booklet until Invigilator announces the commencement of the examination.**
- 3. Answer ALL the Fifteen questions. They carry equal marks. No negative marking for wrong answers.**
- 4. Answers should be marked legibly in the SHEET provided in capital letters.**
- 5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.**
- 6. Questions should not be copied and taken out of the Examination Hall. Any one found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.**
- 7. At the end of 15 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.**
- 8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 15 minutes.**

BIOCHEMISTRY - PAPER I

SECTION-A (15X1-15 MARKS)

(Multiple choice questions)

Time: Fifteen Minutes

Maximum: 15 marks

Select the most appropriate answer and answer in the answer sheet attached:

1. Key Enzyme of Gluconeogenesis is

- A) Hexokinase
- B) Phosphofructokinase
- C) Pyruvate kinase
- D) Pyruvate Carboxylase

2. Glucuronic Acid is Present in

- A) Reducing Disaccharides
- B) Non Reducing Disaccharides
- C) Homopolysaccharides
- D) Heteropolysaccharides

3. Hereditary fructose intolerance is due to defect in

- A) Aldolase A
- B) Aldolase B
- C) Fructokinase
- D) Phosphofructokinase

4. Co Lipase is secreted from

- A) Pancreas
- B) Liver
- C) Intestinal Cells
- D) Gall Bladder

5. Number of Acetyl COA molecules produced by complete oxidation of Palmitic acid is

- A) 6
- B) 8
- C) 10
- D) 12

6. Ethanolamine the Nitrogen base is Present in the following phospholipid

- A) Lecithin
- B) Cephalin
- C) Phosphatidyl Inositol
- D) Plasmalogens

7. One of the following cannot utilize Ketone bodies for energy Purpose

- A) Renal Cortex
- B) Brain
- C) RBC
- D) Heart Muscle

8. Number of ATP generated from one FADH_2 is

- A) 1.5
- B) 2.5
- C) 3.5
- D) 4.5

9. HexoKinase Enzyme is an Example of

- A) Oxidoreductases
- B) Transferases
- C) Hydrolases
- D) Lyases

10. Inhibition of ALA Synthase Enzyme by Heme is an Example of

- A) Competitive inhibition
- B) Non Competitive inhibition
- C) Feedback inhibition
- D) Suicidal inhibition

11. The Following Vitamin is Required for TransKetolase Acivity

- A) Thiamine
- B) Riboflavin
- C) Niacin
- D) Pyridoxine

12. Pellagra can be seen due to deficiency of

- A) Folic Acid
- B) Vitamin B12
- C) Thiamine
- D) Pyridoxine

13. Photosensitivity is not seen in the following type of Porphyria

- A) Acute intermittent Porphyria
- B) Congenital Erythropoietic Porphyria
- C) Porphyria Cutanea tarda
- D) Hereditary Coproporphyria

14. Ferrous Iron has the following Valencies

- A) 4
- B) 5
- C) 6
- D) 7

15. Calorific value of 1gram of Carbohydrate is

- A) 3 Kcal
- B) 4 Kcal
- C) 5 Kcal
- D) 6 Kcal

(Sl.No. M23005)

Sl.No. M23005

Course Code :161021T05

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM.
(Deemed to be University)**

MBBS DEGREE EXAMINATION – October 2020

First Year

BIOCHEMISTRY PAPER - I

Time : Three hours

Maximum : 80 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached to it 15 marks – 15 minutes to be handed over to the invigilator immediately after 15 minutes

Answer Section B in the same answer book

Time : 2 hours 45 minutes

SECTION – B

Maximum : 65 marks

I. Write essays on :

(2 x 15 = 30)

1. Describe citric acid cycle. Add a note on its energetics. Write about the Amphibolic nature of the pathway.
2. Write the sources, daily requirement, Biochemical functions and deficiency manifestations of Vitamin A.

II. Short notes on :

(5 x 5= 25)

3. Abnormal haemoglobins
4. What are lipoproteins? Name them and write their functions.
5. Name five enzymes of diagnostic importance. Write their normal value and significance.
6. Protein energy malnutrition.
7. Chemiosmotic theory of oxidative phosphorylation.

III. Answer briefly on :

(5 x 2 = 10)

8. Golgi complex.
9. Inhibitors of electron transport chain.
10. Name any two phospholipid and write their function
11. Renal glycosuria
12. Pellagra.
