

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

**BDS DEGREE EXAMINATION – July 2021  
First Year**

**BIOCHEMISTRY**

**SECTION A**

**Time: Twenty Minutes**

**Maximum: 20 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 Twenty 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 20 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 20 minutes.**

**BIOCHEMISTRY**  
**SECTION-A (20X1=20 MARKS)**  
(Multiple choice questions)

Time: Twenty Minutes

Maximum: 20 marks

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

1. An increase in serum unconjugated bilirubin occurs in
  - A. Hemolytic jaundice
  - B. Obstructive Jaundice
  - C. Defect in intestinal absorption
  - D. Glomerulonephritis
  
2. The bond present in disaccharide is known as
  - A. Peptide bond
  - B. Sigma bond
  - C. Glycosidic bond
  - D. Carboxylic bond
  
3. Lysosomes are
  - A. Storehouse of genetic information
  - B. Bags of hydrolytic enzymes
  - C. Power house of the cell
  - D. Interconnected channels in the cytoplasm
  
4. Which amino acid of the following is a sulphur containing amino acid and it is an essential amino acid
  - A. Tyrosine
  - B. Tryptophan
  - C. Methionine
  - D. Proline
  
5. Digestive enzymes belong to the class of
  - A. Hydrolases
  - B. Ligases
  - C. Lyases
  - D. Oxidoreductases

(p.t.o.)

6. Coenzyme form of Thiamin is
  - A. Pyridoxal Phosphate
  - B. Thiamine chloride
  - C. Dihydrofolic acid
  - D. Thiamine pyrophosphate
  
7. Insulin activates
  - A. Lipolysis
  - B. Glycolysis
  - C. Ketogenesis
  - D. Gluconeogenesis
  
8. Blood urea level is markedly increased in
  - A. Liver diseases
  - B. Cardiac diseases
  - C. Renal diseases
  - D. Intestinal disorders
  
9. Unusual nucleotide bases are found in significant quantities in
  - A. mRNA
  - B. tRNA
  - C. rRNA
  - D. SnRNA
  
10. Serum calcium concentration is
  - A. 6-8 mg/dl
  - B. 9-11 mg/dl
  - C. 12-15 mg/dl
  - D. 4-6 mg/dl
  
11. The product of glycolysis in erythrocytes is
  - A. NADPH
  - B. Lactate
  - C. Pyruvate
  - D. Carbon dioxide
  
12. Myelin sheath contains
  - A. Gangliosides
  - B. Sphingolipids
  - C. Sulfolipids
  - D. Lauric acid

13. Iron is a
- A. Macro nutrient
  - B. Water soluble vitamin
  - C. Fat soluble vitamin
  - D. Micro nutrient
14. Total serum protein concentration is
- A. 3 – 4 g/l
  - B. 6 – 8 g/dl
  - C. 3 – 4 mg/dl
  - D. 7 - 10 g/dl
15. Sodium glycocholate and sodium taurocholate are
- A. Bile pigments
  - B. Bile acids
  - C. Bile salts
  - D. Retinoids
16. Which enzyme deficiency is seen in phenyl ketonuria
- A. Tyrosinase
  - B. Homo genititate oxidase
  - C. phenyl alanine hydroxylase
  - D. Mutase
17. Fouchets test is done for
- A. Ketone bodies
  - B. Bile pigments
  - C. Cholestrol
  - D. Sucrose
18. Which of the following vitamin has anti oxidant property?
- A. Vitamin E
  - B. Vitamin K
  - C. Vitamin D
  - D. Riboflavin
19. The de carboxilateed product of Histidine is
- A. Tyramine
  - B. Tryptamine
  - C. Histamine
  - D. Cadaverine
20. Sickle cell anemia is a result of
- A. Transversion mutation
  - B. Transition mutation
  - C. Non sense mutation
  - D. Frame shift mutation

\*\*\*\*\*

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

**BDS DEGREE EXAMINATION – July 2021  
First Year**

**BIOCHEMISTRY**

Time : Three hours

Maximum : 70 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached to it 20 marks – 20 minutes to be handed over to the invigilator immediately after 20 minutes

Answer Section B & C in the same answer book

Time : 2 hours 40 minutes

**SECTION – B & C  
SECTION – B**

Maximum : 50 marks

**I. Write an Essay on :**

**(1 x 10 = 10)**

1. Write chemistry, sources, metabolism, biochemical functions, daily requirements and deficiency manifestations of pyridoxine.

**II. Write short notes on :**

**(3 x 5 = 15)**

2. Significance of Hexosemonophosphate pathway.
3. Lipoproteins.
4. Liver function test.

**SECTION – C**

**III. Write an Essay on :**

**(1 x 10 = 10)**

5. Write sources chemistry, metabolism, biochemical functions and deficiency manifestation of calcium

**IV. Write short notes on :**

**(3 x 5 = 15)**

6. Essential Amino acids.
7. Bilirubin.
8. Mutations.

\*\*\*\*\*