

BACHELOR OF SCIENCE (RADIOLOGY & IMAGING TECHNOLOGY)(CBCS-2019 COURSE)  
B.Sc. (R&IM) Sem-I : WINTER- 2022  
SUBJECT : BIOCHEMISTRY

Day : Monday

Time : 10:00 AM-12:00 PM

Date : 23-01-2023

W-21582-2022

Max. Marks : 10

**N.B.**

- 1) There are **THREE** section as  
Section A :- Objective Type questions : 10 marks  
Section B :- Long Answer Questions : 20 marks  
Section C :- Short Answer Questions : 10 marks
- 2) Section A is given on **SEPARATE** sheet and has to be answered on **SAME** sheet. This sheet should be completed within **first 20 minutes** of starting of the examination. The sheet with **section A** will be collected by Supervisor at the end of 20 minutes.
- 3) You have to make  $\surd$  such kind of mark in the box of the appropriate answers.
- 4) There is no negative marking.

Seat No. : \_\_\_\_\_

**SECTION – A**

**Q.1** The homopolysaccharide used for the measurement of GFR is \_\_\_\_\_

- Cellulose
- Glycogen
- Chitin
- Inulin

**Q.2** Which of the following enzyme is used as a marker of myocardial infarction ?

- Alkaline phosphatase
- Amylase
- Lipase
- Creatine phosphokinase

**Q.3** The phospholipid possessing antigenic properties is \_\_\_\_\_

- Lecithin
- Cardiolipin
- Cephalin
- Phosphatidyl inositol

**Q.4** All of the following are normal variants of Hemoglobin, Except

- HbA<sub>1c</sub>
- HbF
- HbS
- HbA<sub>1</sub>

PTO

**Q.5** Mineral which helps in the prevention of dental caries is \_\_\_\_\_

- Iodine
- Fluorine
- Calcium
- Zinc

**Q.6** Which of the following is a storage form of Lipid?

- Glycolipid
- Phospholipid
- Sulfolipid
- Triacylglycerol

**Q.7** The plasma protein involved in blood clotting is \_\_\_\_\_

- Albumin
- $\alpha$  -globulin
- Fibrinogen
- $\gamma$  - globulin

**Q.8** Identify the essential amino acid

- Tyrosine
- Alanine
- Phenylalanine
- Lysine

**Q.9** The heteropolysaccharide having a role as an anticoagulant is \_\_\_\_\_

- Hyaluronic acid
- Heparin
- Chondroitin
- Chondroitin sulphate

**Q.10** Which of the following is involved in allergic response?

- IgM
- IgE
- IgA
- IgD

Total Marks obtained : \_\_\_\_\_

Signature of Invigilator

Signature of Examiner

COMMON FOR B.S. & B.PH.D. COURSE  
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Max. Marks : 30

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**N.B.**

- 1) There are **THREE** section as  
Section A :- Objective Type questions : 10 marks  
Section B :- Long Answer Questions : 20 marks  
Section C :- Short Answer Questions : 10 marks
  - 2) Section B has four long answer questions and **ANY TWO** questions have to be answered.
  - 3) Section C has Six short answer questions and **ANY FIVE** questions have to be answered.
  - 4) Section B and C should be written in **SAME** answer sheet.
  - 5) Draw neat diagram wherever necessary.
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**SECTION – B**

**Long answer questions (attempt ANY TWO) (20)**

- 1) Define proteins. Classify proteins by different ways giving suitable examples.
- 2) Describe the structure and functions of cholesterol.
- 3) Define enzymes. Describe the factors affecting enzyme activity.
- 4) Discuss the sources, RDA, functions and deficiency manifestations of calcium.

**SECTION – C**

**Short answer questions (attempt ANY FIVE) (10)**

- 1) Give any four functions of plasma proteins.
- 2) Mention the coenzyme forms of Niacin with any two functions.
- 3) Biologically important free nucleotides.
- 4) Draw and label structure of t-RNA.
- 5) Enumerate four applications of Radioisotopes.
- 6) Define and enumerate essential fatty acids.

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