

**MBBS I (First) Professional Examination 2017-18**

Course Code: MBS103                      Paper ID: 0322242

**Biochemistry -II**

Time: 2 Hours 40 Minutes                      Max Marks: 40

**Note:** Attempt all questions. Draw proper diagrams to support your answer.

**Part ‘B’**

- Describe chemistry, sources, daily requirement, biochemical functions and deficiency manifestations of vitamin-D. (10)
- Discuss the following: (5x2=10)
  - Liver Function Tests
  - Lac- Operon
- Write short notes on the following: (2.5x4=10)
  - Tumour markers
  - Cytochrome P450
  - Absorption of iron
  - Balanced Diet
- Differentiate between: (2x5=10)
  - Acidosis and Alkalosis
  - Fat soluble and water soluble vitamins
  - PCR and Recombinant DNA technology
  - Active and Passive immunity
  - ELISA and RIA

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|                     |                         |
|---------------------|-------------------------|
| Roll No.            | Student's Name          |
| <div></div>         | <div></div>             |
| Student's Signature | Invigilator's Signature |
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**Biochemistry - II**

**Part ‘A’**

Time: 20 Minutes                      Max Marks: 10

- Note:** 1. Attempt all questions and return this part of the question paper to the invigilator after 20 Minutes.  
 2. Please tick (✓) correct one only. Cutting, overwriting or any other marking are not allowed.  
 3. For answering please use Ball- pen only.

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|--|--|
| Q.1 SDA is highest for:<br>a) Lipids<br>b) Proteins<br>c) Carbohydrates<br>d) Glucose  | d) Fluorine  |
| Q.2 Oedema occurs in:<br>a. Marasmus<br>b. Kwashiorkor<br>c. Both<br>d. None   | Q.7 Anion Gap in healthy adults is :<br>a) 20-25 mEq/L<br>b) 5-10 mEq/L<br>c) 12-18 mEq/L<br>d) 2.5-5.0 mEq/L  |
| Q.3 Element present in salivary protein.GuSten:<br>a) Zinc<br>b) Iodine<br>c) Chromium<br>d) Selenium  | Q.8 In metabolic acidosis:<br>a) Decrease in plasma HCO <sub>3</sub><br>b) Increase in plasma HCO <sub>3</sub><br>c) Increased pCO <sub>2</sub><br>d) Decreased pCO <sub>2</sub> |
| Q.4 Dietary fibres helps in :<br>a) Motility of GIT<br>b) Reduce incidence of colon cancer<br>c) Decrease absorption of cholesterol<br>d) All of the above | Q.9 The normal range of creatinine clearance is:<br>a) 120-135 ml/min<br>b) 80-90 ml/min<br>c) 180 ml/min<br>d) 75 ml/min.   |
| Q.5 Ferroxidase activity is exhibited by:<br>a) Ceruloplasmin<br>b) Hemosiderin<br>c) Ferritin<br>d) Siderophilin -C                                       | Q.10 Proteins are identified by:<br>a) Western blotting<br>b) Eastern blotting<br>c) Southern blotting<br>d) Northern blotting   |
| Q.6 Keshan disease is due to deficiency of:<br>a) Selenium<br>b) Manganese<br>c) Zinc  | Q.11 Production of monoclonal antibodies in vitro is by:<br>a) PCR<br>b) Recombinant DNA technology<br>c) Hybridoma Technology<br>d) Blotting Technology                         |

Q.12 Cancer causing factors includes:

- a) Life Style
- b) Occupation
- c) Iatrogenic
- d) All of the above

Q.13 In duodenal ulcer:

- a) Basal acid output is elevated
- b) Maximal acid output is elevated
- c) Both are elevated
- d) BAO and MAO are normal

Q.14 Tumour marker specific for ovarian cancer is:

- a) Beta HCG
- b) CEA
- c) CA-125
- d) AFP

Q.15 Phase –II reactions in metabolism of Xenobiotics involves:

- a) Oxidation
- b) Reduction
- c) Hydroxylation
- d) Conjugation

Q.16 Light chains in Immunoglobulins are of types:

- a) kappa and lambda
- b) alpha and beta
- c) gamma and lambda
- d) alpha and delta

Q.17 Methyl donor in detoxification by conjugation is:

- a) S-adenosyl methionine
- b) Glutathione
- c) Phosphoadenosyl phosphosulfate
- d) Acetyl Co A

Q.18 Natural antibodies are:

- a) IgA
- b) IgM
- c) IgG
- d) IgE

Q.19 Carpal tunnel syndrome is seen in deficiency of:

- a) Pyridoxine
- b) Thiamine
- c) Niacin
- d) Cyanocobalamin

Q.20 Burning feet Syndrome is manifestation of:

- a) Folic acid deficiency
- b) Pantothenic acid deficiency
- c) Biotin Deficiency
- d) Vitamin E deficiency