



Maximise

**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Bachelor's Degree Examination – June / July 2020**  
**II Semester**

**Class : I UG**  
**Major : Physician Assistant**

**Time : 3 Hours**  
**Max. Marks : 100**

**18BPAI02 Clinical Biochemistry**

**Part A**

**10 x 1 = 10**

**Choose the Correct Answer**

- is the liquid portion of blood in which blood cells are suspended.  
a. Plasma                      b. Serum                      c. Platelets                      d. None of the above
- The liquid obtained from blood that has been allowed to clot is  
a. serum                      b. plasma                      c. platelets                      d. none of the above
- Keratan sulphate is found abundance in  
a. heart muscle                      b. liver                      c. adrenal cortex                      d. cornea
- Specific gravity of urine increases in  
a. diabetes mellitus                      b. chronic glomerulonephritis  
c. compulsive polydypsia                      d. hypercalcemia
- Proteins are soluble in  
a. anhydrous acetone                      b. aqueous alcohol  
c. anhydrous alcohol                      d. benzene
- A lipoprotein inversely related to the incidence of coronary arteriosclerosis is  
a. VLDL                      b. IDL                      c. LDL                      d. HDL
- Impaired glucose tolerance test suggests  
a. defect in glucose utilisation                      b. liver cell injury  
c. renal defect                      d. muscle injury
- The major storage form of lipid is  
a. esterified cholesterol                      b. glycerophospholipids  
c. triglycerides                      d. sphingolipids
- The enzyme involved in essential pentosuria is  
a. reductase                      b. hydroxylase                      c. isomerase                      d. racemase
- Fatty liver is caused due to accumulation of  
a. fatty acid                      b. cholesterol                      c. phospholipids                      d. triacylglycerol

**Part B**

**5 x 6 = 30**

**Answer ALL questions  
Answer should not exceed 400 words or two pages**

- 11.a. Give a short note on anticoagulants.  
(or)
- 11.b. Give the normal values of any six biochemical parameters.
- 12.a. What are ketone bodies? Discuss its level under diseased conditions.  
(or)
- 12.b. What do you mean by lactose intolerance? Explain.
- 13.a. Explain the classes of lipoproteins.  
(or)
- 13.b. Analyse how obesity is related to food habits.
- 14.a. Give a short note on maple syrup urine disease.  
(or)
- 14.b. Write briefly on gout.
- 15.a. Distinguish among bleeding time, clotting time and prothrombin time.  
(or)
- 15.b. Write about haemophilia.

**Part C**

**5 x 12 = 60**

**Answer ALL questions  
Answer should not exceed 800 words or four pages**

- 16.a. Explain how to preserve the biochemical specimens.  
(or)
- 16.b. How will you collect the different types of urine samples and preserve the same?
- 17.a. Explain glycogen storage disease.  
(or)
- 17.b. Interpret – Glucose Tolerance Test.
- 18.a. Differentiate hyper and hypo lipoproteinemia.  
(or)
- 18.b. Explain the condition of atherosclerosis.
- 19.a. Enumerate the plasma proteins and its variations in diseases.  
(or)
- 19.b. Assess the metabolic changes and clinical features of albinism and alkaptonuria.
- 20.a. Explain the mechanism of blood clotting.  
(or)
- 20.b. Discuss the variations of the following electrolytes in disease conditions:  
i. Sodium      ii. Potassium      iii. Calcium      iv. Chloride

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