Sylhet Women’s Medical College

**2nd Term Supplementary Examination**

Subject: **Biochemistry,** MCQ,SWMC-10 Roll no……………

Full marks -20 Time – 20 min Date- 09.11.2015

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| **1. Ketone bodies are:**  ……a) Produced in Liver  ……b) Can be utilized in Liver  ……c) Can be utilized by Brain  ……d) Energy producers  ……e) Produced in prolonged starvation   1. **Examples of Intermediary Metabolism:**   ……a) Glycolysis  ……b) Digestion  ……c) Electron Transport Chain  ……d) β-oxidation  ……e) Urea Cycle  **3. Functions of HDL-C:**  .......a) Carries cholesterol from periphery to liver  …... b) Carries cholesterol from liver to periphery.  ……c) Increased levels are harmful  …… d) Decreased levels are harmful  ……e) Atherogenic  **4. Characteristics of HMP shunt pathway:**  …….a) It generates ATP  …….b) It utilizes ATP  …….c) Key enzyme is G6PD.  …….d) Produces pentose sugar  …….e) Produces NAD.  **5. Composition of respiratory chain includes:**  …….a) Flavoprotein  …….b) NAD  …….c) Ubiquinone  …….d) Cytochromes  …….e) Carnitine  **6. Transamination is related to:**  ……a) Interconversion of a pair of amino acids and  keto acids  …….b) Occurs only in Liver  …….c) Synthesis of Essential amino acids  …….d) Synthesis of Non-Essential Amino acids  …….e) Deamination  **7. Digestion is**:  …….a) Hydrolysis of Energy Yielding Foods  …….b) Enzymes of digestion are Hydrolases  …… c) Requires Coenzymes.  .……d) May be regarded as Primary Metabolism  …….e) In both lumen of GIT and within Enterocytes.  **8. Glycolysis**  ……..a) Occurs in the cell cytosol  ……..b) Can operate under anaerobic conditions  ……..c) In red blood cells, generates 2 ATP.  ……..d) Occurs in mitochodria  ……..e) Generates net 8 ATP in aerobic state  **9. The TCA Cycle:**  …….a) Operates under anaerobic conditions  …….b) Occurs in the inner mitochondrial membrane  …….c) Absent in red blood cells  …….d) Is an amphibolic pathway  …….e) Each turn produces 12 ATP  **10.** **Substrates of gluconeogenesis are:**  ……..a) Lactate  ……..b) Glycerol  ……..c) Ketogenic amino acids  ….....d) Propionyl CoA  …….e) Pyruvate | **11.**  **ECF -**  ……a) Internal environment of body  ……b) About 60% of body weight  ……c) Affected primarily in volume disorders  ……d) Osmolailty same as ICF, at equilibrium  ……e) Ionic composition same as ICF  **12. Primary defects in ABDs;**  …….a) Reduced HCO3- in metabolic acidosis  …….b) Increased HCO3- in metabolic alkalosis  …….c) Increased pCO2 in respiratory acidosis  …….d) Decreased pCO2 in respiratory alkalosis  …….e) Change of both metabolic and respiratory components  **13 Serum potassium conc. 2.5 mmol/L:**  …….a) Leads to acidosis  …….b) Leads to alkalosis  …….c) Tall peaked ‘T’ in ECG  …….d) Prolonged ‘PR interval’ in ECG  …….e) No change in ECG  **14. Normal serum levels are:**  …….a) Na+ (140 ± 5 ) mmol/L  …….b) K+ (3.5-5.0) mmol/L  …….c) Cl- (103 ± 5) mmol/L  ……d) HCO3- (25 ± 3) mmol/L  …….e) Ca++ 2.5 mmol/L.  **15 Anion Gap;**  ……..a) Difference between measured cations & anions  ……..b) Normal value (12 ± 4) mmol/L  ……..c) Reflects unmeasured cations  ……..d) Reflects unmeasured anions  ……..e) Useful for diagnosis of metabolic acidosis  **16. Compensation results in:**  ……..a) Increased pCO2 in metabolic acidosis  ……..b) Increased pCO2 in metabolic alkalosis  ……..c) Increased HCO3- in respiratory acidosis  ……..d) Increased HCO3- in respiratory alkalosis  ……..e) Near normal pH, but abnormal HCO3-  **17. Plasma sodium conc. 130 mmol/L**  …….a) Hypernatremia  …….b) Results in cell swelling  …….c) Results in cell shrinkage  …….d) Hypotonic  …….e) Isotonic  **18. Protein can not pass through glomerular membrane due to-**  ...…a) Pores size of the membrane are smaller then protein.  .…..b) Glomerular pores are lined with a complex glycosylated protein.  …...c) Glomerular pores have very strong negative electrical charges.  …...d) The plasma proteins have very strong negative electrical  charges.  -----e) Electrostatic repulsion of protein molecules by pores walls.  **19. Which one of the following is/ are correct -**  ...…a) 2/3 of the total body water is intracellular fluid.  .…..b) 2/3 of the total body water is extracellular fluid.  …...c) Blood plasma constitutes approximately 25% of ECF  …...d) Transcellular fluid is a part of intracellular fluid.  …...e) Intracellular fluid is called internal environment of the body  **20.** . **At pH 7.0**  a. [H+] = 10-7  b. [OH-] = 10-7  c. Neutral pH  d. Acidic pH  e. Alkaline pH |