Sylhet Women’s Medical College

**2nd Term Examination**

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

Full marks -20 Time – 20 min Date- 29.10.2015

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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. Enzymes involved in gluconeogenesis are:**  …….a) Pyruvate carboxylase  …….b) Phosphoenol pyruvate carboxykinase  …….c) Lactate dehydrogenase  ……d) Glucose 6 phosphatase  …….e) Pyruvate dehydrogenase  **7. The Apoproteins in lipoproteins:**  ……..a) Apo B100 in chylomicron  ……..b) Apo B48 VLDL  ……..c) Apo C-II in nascent chylomicron  ……..d) Apo C-II in nascent VLDL  ……..e) Required for receptor recognition  **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.  **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.  **20.** . At pH 7.0  ……..a) [H+] = 10-7  ……..b) [OH-] = 10-7  ……..c) Neutral pH  ….....d) Acidic pH  …….e) Alkaline pH |