

MCM Practice Questions: Lecture Day 1

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Lecture 2: Protein Structure & Function

1) A woman late in pregnancy presents to the ED with a serious undifferentiated medical condition that could put fetal viability at risk. The Emergency Physician consults OBGYN to assess whether the fetus is viable for premature delivery. What lab value will the OBGYN look at to make their final decision?

- (A) Phosphatidylethanolamine levels
- (B) Lecithin : sphingomyelin ratio
- (C) Phosphatidylglycerol levels
- (D) Phosphatidylserine levels

2) What macromolecule travels in the bloodstream conjugated to Human Serum Albumin?

- (A) Fatty Acids
- (B) Proteins
- (C) Polysaccharides
- (D) Nucleic Acids

3) Ceramide is conjugated with what other macromolecule to form sphingomyelin?

- (A) Sphingosine
- (B) Inositol
- (C) Glycerol
- (D) phosphatidylcholine

4) A patient with anemia has their blood drawn for inspection under light microscopy. The Pathologist identifies that the patient is afflicted with Spherocytosis. What type of membrane protein is the most likely reason for this diagnosis?

- (A) Lipid Anchored Proteins
- (B) Peripheral Proteins
- (C) Heat Shock Proteins
- (D) Integral Proteins

5) Which one of the following is true of phospholipids in the plasma membrane?

- (A) Saturated Phospholipids make up more than 50% of phospholipids in the membrane
- (B) Unsaturated Phospholipids leads to a more rigid membrane structure
- (C) The fatty acids in phospholipids usually contain 16-18 carbons
- (D) The phospholipids are completely hydrophilic