**Prof Questions G-A**

1. Define colloid. What are the properties of colloid? Write the differences

between colloidal and crystalloidal solutions. (1+2+2)

2. Define buffer. Name the common buffer systems of the body with their components.

How buffers act? (1+2+2)

3. Give daily water intake –output chart of an adult. How water balance is maintained in our body? (2+3)

4. Define Enzymes and co-enzymes. Name the factors affecting enzyme activity.What is Km value? (2+2+1)

5. Define and classify Polysacchrides with example. Differentiate between Glycogen &

Starch. (1+2+2)

6.. Name the essential fatty acids. Why Lenolenic acid is called ω-3 fatty acid? What are the importance of PUFA ? (1+1+3)

7. Mention the different structures of protein . What is denaturation of protein?

(4+1)

8. What are the acid –base disorders? Mention causes and compensation of metabolic acidosis and respiratory acidosis (1+4)

**G-B**

9.What are the enzymes of carbohydrate digestion? How end products of CHO digestion are absorbed ?What is lactose intolarance. ( 2+2+1)

10. Define bioenergetics. Mention the location & components of ETC. Name the inhibitors of respiratory chain? (1+2+2)

11. Define glycolysis. What are the phases of glycolysis. . Calculate how many

ATP are produced from one glucose molecule in Glycolysis? (1+2+2)

12. Define gluconeogenesis. What are the substrates for gluconeogenesis.Give its significance .

1+2+2

13. Write the major steps of cholesterol biosynthesis. How cholesterol synthesis can be inhibited? Give functions of cholesterol. 2+1+2

14. Define transamination & deamination with example.What are the fate of amino acids?

2.5+2.5

15. Name the ketone bodies. How they are synthesized & utilized? 1+4

16. How fats are digested and absorbed in our body? 5

**MCQ**