



**QUIZ TIME**

# **Bio- chemistry**

**Lec 17**

**Gluconeogenesis mainly takes place in:**

- a) Stomach
- b) Liver
- c) Heart
- d) Intestine
- e) spleen

**Ans:B**

**Which one of the following is a rate-limiting enzyme of gluconeogenesis?**

- a) Hexokinase
- b) Phosphofruktokinase 1
- c) Pyruvate carboxylase
- d) Pyruvate kinase
- e) Enolase

**Ans:c**

**The hormone responsible for stimulating gluconeogenesis is:**

- a) Glucagon
- b) Insulin
- c) Melatonin
- d) TSH
- e) Prolactin

**Ans:a**

**Which of the following is the main function of gluconeogenesis?**

- A) To store glycogen in the liver
- B) To supply blood glucose during carbohydrate deficiency
- C) To increase fatty acid synthesis
- D) To promote protein breakdown

**Ans:B**

How many glycolytic reactions are irreversible and therefore bypassed in gluconeogenesis?

- A) 7
- B) 3
- C) 10
- D) 5

Answer: B) 3

Which of the following amino acids are not glucogenic?

- A) Alanine and Glycine
- B) Aspartate and Glutamate
- C) Lysine and Leucine
- D) Serine and Threonine

Answer: C) Lysine and Leucine

What happens when the energy status of the cell is high (high ATP)?

- A) Glycolysis is turned on to produce more ATP
- B) Gluconeogenesis is inhibited and glycolysis is accelerated
- C) Glycolysis is turned off and pyruvate is used for gluconeogenesis
- D) Glucose is degraded rapidly in glycolysis and TCA cycle

Answer: C) Glycolysis is turned off and pyruvate is used for gluconeogenesis