



**QUIZ TIME**

# Bio- chemistry

**Lec25**

Done by:

Lemar mustafa

1-which out of the following is required as a coenzyme for the transamination reaction?

- a-coenzyme A
- b-pyridoxal phosphate
- c-Folic acid
- d-cobalamine

Ans: B

2-which of the following is a common nitrogen acceptor for all reactions involving transaminases?

- a-alpha-keto glutarate
- b-pyruvate
- c-oxaloacetate
- d-Acetoacetate

Ans:A

3-Which of the following is a major structural protein found in connective tissues, providing strength and support?

- A. Hemoglobin
- B. Collagen
- C. Albumin
- D. Insulin

Ans: B

4-Which of the following is considered a functional protein rather than a structural protein?

- A. Collagen
- B. Elastin
- C. Hemoglobin
- D. Keratin

Ans: C

5-Which of the following small peptides functions as an antioxidant, protecting cells from oxidative damage?

- A. Enkephalin
- B. Endorphin
- C. Glutathione
- D. Insulin

Ans:C

6-Catabolism of amino acids mainly produces:

- A. Ammonia and  $\alpha$ -keto acids
- B. Glucose and fatty acids
- C. Nucleotides and glycerol
- D. Lactate and pyruvate

Ans:A

7-Which of the following amino acids is correctly matched with its corresponding  $\alpha$ -keto acid?

- A. Alanine  $\rightarrow$  Pyruvic acid
- B. Aspartic acid  $\rightarrow$  Oxaloacetic acid
- C. Glutamic acid  $\rightarrow$   $\alpha$ -Ketoglutaric acid
- D. All of the above

Ans:D

8-Aspartate aminotransferase (AST, also called GOT) is an important diagnostic enzyme. Its level in serum increases significantly in:

- A. Myocardial infarction and chronic liver disease
- B. Diabetes mellitus and hypothyroidism
- C. Chronic kidney disease and anemia
- D. Osteoporosis and rickets

Ans:A

9- L-amino acid oxidase catalyzes deamination of all L-amino acids except:

- A. Alanine
- B. Aspartic acid
- C. Glutamic acid
- D. Valine

Ans:C

10-In the reaction catalyzed by L-amino acid oxidase, the coenzyme FMN functions primarily as:

- A. A hydrogen carrier
- B. A phosphate donor
- C. A methyl group donor
- D. A metal ion cofactor

Ans:A

11-Which of the following statements about L-glutamate dehydrogenase is correct?

- A. It primarily deaminates all L-amino acids except glutamic acid
- B. Its main substrate is L-glutamic acid and it requires  $\text{NAD}^+$  or  $\text{NADP}^+$  as a coenzyme
- C. It synthesizes L-glutamic acid from alpha-ketoglutarate
- D. It acts only in the cytoplasm and does not require any coenzyme

Ans:B

12-Which of the following describes the main catabolic pathway of amino acids?

- A. It is limited to the liver and minimally active
- B. It is widely distributed and highly active
- C. It only occurs in muscle tissue during starvation
- D. It does not involve deamination of amino acids

Ans:B