BASUDEV GODABARI DEGREE COLLEGE KESAIBAHAL,

BLENDED LEARNING STUDY MATERIALS

UNIT-II

DEPARTMENT: ZOOLOGY

SUBJECT : QUESTION BANK

AMINO ACID

SEMESTER : III

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Lect in zoology

1. Multiple choice question.
2. **Which among the following is not polymeric?**
    a. Carbohydrates
    b. Nucleic acids
    c. Proteins
    d. Lipids
3. **The simplest amino acid is**
    a. Glycine
    b. Alanine
    c. Asparagine
    d. Tyrosine
4. **Amino acids are mostly synthesised from**
    a. fatty acids
    b. mineral salts
    c. α-ketoglutaric acid
    d. volatile acids
5. **Amino acids with the aliphatic 'R' group are**
    a. Glycine, alanine, leucine
    b. Serine, threonine, cysteine
    c. Lysine, arginine, histidine
    d. Phenylalanine, tyrosine and tryptophan
6. **Which of the following amino acids is not necessary to be taken in the diet?**
    a. histidine
    b. threonine
    c. serine
    d. lysine

7. **An amino acid yielding acetyl CoA during catabolism is**
    a. ketogenic
    b. glucogenic
    c. essential
    d. both glucogenic and ketogenic
8. **The first amino acid of any polypeptide chain in eukaryotes is**
    a. valine
    b. methionine
    c. glycine
    d. alanine
9. **Amino acids with aromatic side chain are**
    a. tryptophan, asparagine, tyrosine
    b. tryptophan, threonine, tyrosine
    c. phenylalanine, tryptophan, serine
    d. phenylalanine, tryptophan, tyrosine
10. **The naturally occurring proteins consist of**
    a. D-amino acids
    b. L-amino acids
    c. both (a) and (b)
    d. none of these

10.Which of the following amino acids has to be supplemented in the diet?

a. phenylalanine

b.cysteine

c.glutamine

d.asparagine

11. Which among the following is a non-essential amino acid?

a.Serine
b.Threonine
c.Lysine
d.Histidine

12. Which of the following is an essential amino acid?

a.Cysteine
b.Asparagine
c.Glutamine
d.Phenylalanine

13. Which of the following is an amino acid?

a.Alanine
b.Glycine
c.Proline
d. Serine

14.Which among the following is both glucogenic and ketogenic?

a.Isoleucine
b.Leucine
c.Lysine
d.Histidine

15. An amino acid that yields acetoacetyl CoA during the catabolism of its carbon skeleton will be considered as _____

a.Glycogenic
b.Ketogenic
c.Both glycogenic and ketogenic
d. Essential

16. Which one of the following amino acids may be considered a hydrophobic amino acid at physiological p H of 7.4?

a.Isoleucine

b.Arginine

c.Aspartic acid

d. Threonine

17. Which of the characteristics below apply to amino acid Glycine?

a. Optically inactive

b.Hydrophilic, basic and charged

c.Hydrophobic

d. Hydrophilic, acidic and charged

18. Which of the following amino acids in myoglobin, a globular protein, is highly likely to be localized within the interior of the molecule?

a. Arginine

b. Valine

c.Aspartic acid

d.Lysine

19. Which of the amino acids below is the uncharged derivative of an acidic amino acid?

a.Cystine

b. Tyrosine

c. Glutamine

d.Serine 2

SUBJECTIVE QUESTIONS

1. What are essential amino acids?
2. What are nonessential amino acids?
3. What happens if you are deficient in an amino acid?

4.Draw the functional groups present in all amino acids.

5.Complete the following for threonine, lysine, and tyrosine.

6.Draw the amino acid.
b. Circle the side chain.

c. Identify whether it is polar, nonpolar, acidic, or basic.
d. At what pH will it exist as a zwitterion?
e. What is the range of pH values when it will be positively charged?
f. What is the range of pH values when it will be negatively charged?

7.Describe the four levels of protein structure.

8.What levels of structure involve hydrogen bonding?

9.What types of structure is the result of interactions between amino acids that are far apart in the primary structure?

10.What levels of structure are affected by denaturation?