# MCQs on Amino Acids

Amino acids are the building blocks of proteins. There are 20 amino acids present in proteins. Amino acids are organic compounds, which can be referred to as substituted methanes. The  $\alpha$  carbon has an amino group, carboxylic group, hydrogen and variable R group. There are 9 essential amino acids and 11 non-essential amino acids.

## 1. Which among the following is not polymeric?

- (a) Carbohydrates
- (b) Nucleic acids
- (c) Proteins
- (d) Lipids

### 2. The simplest amino acid is

- (a) Glycine
- (b) Alanine
- (c) Asparagine
- (d) Tyrosine

### 3. Amino acids are mostly synthesised from

- (a) fatty acids
- (b) mineral salts
- (c)  $\alpha$ -ketoglutaric acid
- (d) volatile acids

#### 4. 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

#### 5. Which of the following amino acids is not necessary to be taken in the diet?

- (a) histidine
- (b) threonine
- (c) serine
- (d) lysine

## 6. An amino acid yielding acetyl CoA during catabolism is

- (a) ketogenic
- (b) glucogenic

- (c) essential
- (d) both glucogenic and ketogenic

# 7. The first amino acid of any polypeptide chain in eukaryotes is

- (a) valine
- (b) methionine
- (c) glycine
- (d) alanine

#### 8. Amino acids with aromatic side chain are

- (a) tryptophan, asparagine, tyrosine
- (b) tryptophan, threonine, tyrosine
- (c) phenylalanine, tryptophan, serine
- (d) phenylalanine, tryptophan, tyrosine

# 9. 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