

1. The DNA sequence CAT will be transcribed into which sequence in mRNA ?
A. TAC B. GUA
C. CAT D. GTA
2. The start codon in eukaryotes specifies which amino acid ?
A. Valine B. Alanine
C. Methionine D. Isoleucine
3. Which of the following cells do not have phagocytic activity ?
A. Neutrophil B. Monocytes
C. Macrophages D. Erythrocytes
4. Major form of nitrogenous waste excreted by man is?
A. Urea B. Ammonia
C. Uric Acid D. Creatinine
5. In eukaryotes, the number of codons that specify amino acids is
A. 64 B. 60
C. 24 D. 61
6. Gout is caused due to accumulation of which crystals in Joints ?
A. Uric acid B. Allantoin
C. Xanthine D. Urea
7. Glycosuria is
A. High sugar in blood
B. Low sugar in blood
C. High sugar in urine
D. Low sugar in urine
8. Which of the following enzymes are correctly paired with their function
A. Peptidyl transferase- translation
B. DNA ligase – joining of Okazaki fragments
C. RNA polymerase- transcription
D. All of the above
9. Which of the following hormones is an amino acid derivative?
A. Insulin B. Thyroxine
C. Cortisol D. Glucagon
10. Which of the following is a C₄ epimer of Glucose ?
A. Galactose B. Mannose
C. Fructose D. All of these
11. Which of the following coenzymes is required for carboxylation reaction.
A. Biotin B. Niacin
C. Thiamine D. Cobalamine
12. Which of the following fat soluble vitamins is an important anti oxidants?
A. Vitamin E B. Vitamin C
C. Vitamin A D. Both a and b
13. Which hormone is the fight and flight hormone ?
A. Adrenaline B. Insulin
C. Glucagon D. Thyroxine
14. Which of the following is an essential fatty acid for humans?
A. Stearic Acid B. Linoleic Acid
C. Oleic Acid D. Palmitic Acid
15. Prostaglandins are derived from?
A. Cholesterol
B. Fatty Acid
C. Amino Acid
D. Carbohydrates
16. Which of the following conditions is not due to deficiency of Thyroid Hormones?
A. Graves disease
B. Cretinism
C. Myxoedema
D. Iodine deficiency Giotre
17. Which of the following antibiotics are inhibitors of proteins synthesis?
A. Streptomycin B. Puromycin
C. Chloramphenicol D. All of these
18. How many molecules of acetyl CoA are produced from 16 carbon palmitic acid during β -oxidation ?
A. 4 B. 6
C. 8 D. 10

19. Which of the following statements regarding Insulin are correct ?
 - A. In muscles, insulin increases glucose uptake
 - B. In liver, insulin decreases production of glucose by inhibiting gluconeogenesis
 - C. Epinephrine and glucagon have opposite effect to insulin, they increase glucose concentration in blood
 - D. All of the above
20. Detoxification of drugs and other metabolic wastes takes place in ?
 - A. Smooth Endoplasmic Reticulum
 - B. Rough Endoplasmic Reticulum
 - C. Golgi Apparatus
 - D. Mitochondria
21. Which is of the following is a glucose homopolysaccharide ?
 - A. Starch
 - B. Chitin
 - C. Cellulose
 - D. Both a) and c)
22. Adenosine triphosphate (ATP) is a?
 - A. Purine
 - B. Nucleoside
 - C. Nucleotide
 - D. Pyrimidine
23. Which of the following carbohydrates is not a disaccharide?
 - A. Mannose
 - B. Sucrose
 - C. Maltose
 - D. Lactose
24. The backbone of DNA and RNA, formed of alternating sugar-phosphate-sugar-residues is held by which bonds?
 - A. Glycosidic bond
 - B. Hydrogen bond
 - C. Phosphodiester bond
 - D. Peptide bond
25. Cholesterol is a precursor of which of the following hormones ?
 - A. Progesterone
 - B. Testosterone
 - C. Estradiol
 - D. All of these
26. Which of the following nitrogenous bases is not present in DNA ?
 - A. Adenine
 - B. Guanine
 - C. Uracil
 - D. Thymine
27. Which of the following amino acids is not optically active ?
 - A. Leucine
 - B. Glycine
 - C. Tryptophan
 - D. Methionine
28. Pellagra is caused due to deficiency of ?
 - A. Biotin
 - B. Cobalamine
 - C. Niacin
 - D. Pyridoxine
29. Which of the following cell organelles lacks membrane ?
 - A. Lysosome
 - B. Ribosome
 - C. Nucleus
 - D. Vacuole
30. The 2 Carbon compounds that enters the Krebs's Cycle to condense with 4 Carbon oxaloacetate is ?
 - A. Pyruvate
 - B. Acetyl CoA
 - C. Lactate
 - D. Acetaldehyde
31. β -oxidation of fatty acids takes place in ?
 - A. Cytosol
 - B. Mitochondria
 - C. E.R
 - D. Lysosome
32. Ketone bodies are formed during ?
 - A. Fasting
 - B. High carbohydrate meal
 - C. High protein meal
 - D. High insulin
33. Which is the most abundant protein in animals?
 - A. Keratin
 - B. Collagen
 - C. Haemoglobin
 - D. Insulin
34. The metabolic disorder "phenylketonuria" results in the build up of ?
 - A. Ketone bodies
 - B. Phenylalanine
 - C. Alanine
 - D. All of these
35. Post transcriptional modification of mRNA includes ?
 - A. 5' capping of mRNA
 - B. 3' capping of mRNA
 - C. 5' poly A tail addition
 - D. All of the above

26. In eukaryotes mRNA is transcribed by ?
A. RNA pol I B. RNA pol II
C. RNA pol III D. All of the above
37. The enzyme Lipase that breaks down triacylglycerols belongs to which class of enzymes?
A. Ligases B. Lyases
C. Hydrolases D. Transferases
38. Which of the following forms of DNA is a Left-handed helix ?
A. A form
B. B form
C. Z form
D. None of above
39. Phospholipid "Lecithin" is which of the following ?
A. Phosphatidyl choline
B. Phosphatidyl serine
C. Phosphatidyl ethanolamine
D. Phosphatidyl inositol
40. According to Michealis Menten approach a graph between initial velocity (V) and substrate concentration (S) of an enzyme catalyzed reaction is ?
A. Straight Line
B. Bell shaped curve
C. Hyperbolic curve
D. None of the above
41. The net gain of ATP during glycolysis is
A. Two B. Four
C. Six D. Eight
42. Which of the following is an aromatic amino acid ?
A. Serine B. Alanine
C. Tryptophan D. None of these
43. Electron Transport Chain (ETC) is located in mitochondrial ?
A. Matrix
B. Outer Membrane
C. Inner Membrane
D. Inter Membrane Space
44. The conversion of pyruvate to acetyl CoA is by the process of
A. Oxidative decarboxylation
B. Dehydrogenation
C. Phosphorylation
D. Decarboxylation
45. The site for Tricarboxylic Acid Cycle in eukaryotes is ?
A. Cytoplasm
B. Mitochondrial matrix
C. Inner Mitochondrial Membrane
D. Outer Mitochondrial Membrane
46. The Fluid Mosaic Model for Plasma Membrane was given by ?
A. Schleiden and Schwann
B. Gorter and Grendel
C. Danielli and Davson
D. Singer and Nicolson
47. Which of the following is a sulphur containing amino acid ?
A. Methionine B. Glycine
C. Cysteine D. Both a and c
48. Which enzyme of the TCA cycle is located on the inner mitochondrial membrane?
A. Malate dehydrogenase
B. Isocitrate dehydrogenase
C. α -ketoglutarate dehydrogenase
D. Succinate dehydrogenase
49. Which of the following is an unsaturated fatty acid ?
A. Palmitic Acid
B. Oleic acid
C. Stearic acid
D. Arachidic Acid
50. The Na^+ Glucose transporter of the intestinal epithelium is an example of?
A. Antiport
B. Uniport
C. Symport
D. Facilitated Diffusion