BIOCHISTRY MCQ'S

1. Which of following is common compound shared by TCA cycle and Urea Cycle.

   a. α – Ketoglutarate b. Succinyl COA

   c. Oxaloacetate **d. Fumarate**

2. There are about _____ types of specialized cells in Human body.

   a. 250 b. 350 c. 450 d. 550

3. A eukaryotic cell is generally 10 to _____ um in diameter.

   a. 400 b. 300 c. 200 ***d. 100***

4. Sub-cellular organelles are _____ in prokaryotic cell.

   a. present ***b. absent*** c. both a & b d. none

5. _____ is the largest cellular organelle in cell.

   a. Golgi apparatus b. Lysosomes

   c. Nucleus d. Mitochondria

6. _____ is the major site for purine nucleotide synthesis.

   a. Brain **b. Liver** C. adipose Tissue d. Kidney

7. Nucleus contains _____ the repository of genetic information.

   a. Ribosome ***b. DNA*** c. Cytosol d. Vacuole

8. The cellular matrix is collectively referred to as _____.

   a. Ribosome b. DNA ***c. Cytosol*** d. Vacuole

9. _____ is the programmed cell death or cell suicide.

   a. Apoptosis b. Autotosis c. Destrosis d. None

10. Carbohydrates are precursors for many ____ compound

a. Organic b. Inorganic c. both a & b d. none

11. Monosaccharides is based on which of the following functional group

a. Phenol b. Alcohol ***c. Ketoses*** d. None

12. The carbohydratet hat is taken as a reference for writing the configuration of others

a. Dihydroxyacetone ***b.Glyceraldehyde***

c. D-Erythrose d. D-Xylose

13. If two monosaccharide differ in configuration around a single carbon atom, they are known as

a. Diclomers b. Bimers ***c. Epimers*** d. None

14. The non-carbohydrate moiety found in glycosides is known as

a. Aglycone b. Agnine c. both a & b d. None

15. Citrate Synthase is inhibited by _____.

a. ATP b. Acetyl CoA c. ADH ***d. Both a & b***

16. Kreb Cycle is _____ in nature.

a. Anabolic b. Catabolic ***c. Amphibolic*** d. None

17. TCA cycle is actively involved in_____.

a. Gluconeogenesis b. Phosphorylation

c. Both a & b d. None

18. One of the following enzymes in glycolysis catalyzes an irreversible action.

a. Hexokinase b. Phosphofructokinase

c. Pyruvate kinase d. All of them

19. Synthesis of 2, 3-bisphosphoglycerate occurs in the tissue namely.

a. Liver b. Kidney

c. Erythrocytes d. Brain

20. End product of glycolysis is _____.

a. Glucose **b. Pyruvic Acid**

c. Citric Acid d. Glycogen

21. The hormone that lowers cAMP concentration in liver cells is

a. Glucagon ***b. Insulin***

c. Epinephrine d. Thyroxine

22. The number of ATP produced when a molecule of acetyl CoA is oxidized through citric acid cycle

a. 12 b. 24 ***c. 38*** d. 15

23. The connecting link between HMP shunt and lipid synthesisis

a. Ribose ***b. NADPH*** c. Sedoheptulose7 –phosphate d. NADH.

24. The six most common atoms in organic molecules

a. C,H,O,He,Ca & S ***b. C,H,O,N,P & S***

b. C,H,O,Mg,Mn & S d. C,H,O,N,P & K

25. The structure of proteins can be denatured by its particular

a. Heat b. The presence of oxygen

c. The polar bonds of water molecules d. The presence of CO2 gas

26. Which is a linear Polysaccharide?

a. Glycogen ***b. Cellulose*** c. Starch d.Amylose

27. Ribose is a pentose sugar found in

a. NAD b. FAD c. RNA ***d. All of these***

28. The most abundant monosaccharide in nature is

a. Lactose ***b. Glucose*** c. Maltose d. Sucrose

29. Which of the following is a polysaccharide

a. Glucose ***b. Glycogen*** c. Amylose d. Lactose

30. The highest concentration of cystine can be found in

a. Melanin ***b. Keratin*** c. Myosin d. Collagen

31. The formation of cysteine occurs at

a. ER b. Golgi apparatus

c. Cytosol d. Mitochondria

32. Natural Lipids are readily soluble in

a. Oil b. Mercury c. Water ***d. None of these***

33. The synthesis of glucose from fat is called

a. Glycolysis b. Krebs cycle
c. Saponification ***d. Gluconeogenesis***

34. High content of triglyceride is seen in

a. HDL b. LDL c. VLDL ***d. Chylomicrons***

35. The no. of double bond in Arachidonic acid

a. 1 b. 2 c. 3 ***d. 4***

36. Two Monosaccharide's are joined by

a. Peptide bond b. Phosphodiester bond
c. Glycosidic bond d. Hydrogen bond

37. Monosaccharides are

a. Aldoses b. Ketoses ***c. Both a & b*** d. none of these

38. The most common monomer of carbohydrate is

a. Nucleotide ***b. Glucose*** c. Amino acids d. Maltose

39. The element found in all amino acids that is not found in carbohydrates is

a. Sulphur b. Carbon c. Oxygen ***d. Nitrogen***

40. The following substance is ketogenic

a. Fatty Acids b. Leucine
c. Lysine ***d. all of them***

41. Hormone sensitive lipase activity is inhibited by the hormone

a. Epinephrine b. Insulin
c. Thyroxine d. Glucocorticoids

42. Hypercholesterolemia is observed in the disorder

a. Hypothyroidism ***c. Diabetes mellitus***
c. Nephrotic Sydrome d. All of them

43. Cellular respiration is an example of

a. Endergonic Reaction b. Oxidation Reaction
c. Exergonic Reaction d. None of these

44. Nucleoside is a pyrimidine or purine base which _____.

a. covalently bonded to sugar b. Ionically bonded to sugar
c. Hydrogen bonded to sugar d. None of these

45. A compound which found in all living cells and play key role in energy transformation is

a. ADP **b. ATP** c. Chlorophyll d. Granum

46. Type III glycogen storage disease is known as _____.

a. Cori disease b. Gierke's disease

c. Pompe's disease d. Anderson's disease

47. DNA replication states with

a. Small fragments of DNA b. DNA ligase

c. OKAZAKI fragments **d. Small fragments of RNA**

48. Each enzyme have its _____ structure.

a. Primary b. Secondary

c. Tertiary d. Quaternary

49. Bile acid is synthesized in _____.

a. Kidney **b. Liver** c. Inine d. Stomach

50. _____ is a end product of gluconeogenesis pathway.

a. Pyruvate **b. Glucose**

c. Bile acid d. Oxaloacetate

51. Anabolic glycolysis occur in _____.

a. Liver b. Kidney c. Muscles d. Brain

52. Glucose 6 phosphate enzyme is present in _____.

a. Liver b. Brain c. Lungs d. Muscles

53. Which of the following is general formula for monosaccharide

a. $C_nH_{2n+2}O_n$ b. $C_nH_{2n+1}O_n$ **c. $C_nH_{2n}O_n$** d. $C_nH_{2n}O$

54. Proteins are polymers of

a. L – α Amino Acid b. L – β Amino Acid

c. D – α Amino Acid d. D - β Amino Acid

55. The SI unit of potential energy is _____.

a. Pascal b. Dyne **c. Joule** d. pound

56. Which pyrimidine base contains an amino group at fourth carbon?

a. Cytosine b. Thymine c. Uracil d. Adenine

57. The normal concentration of uric acid in the serum of adults is within the range of

a. 3 – 7 mg/dL b. 2 – mg/dL

c. 7 – 8 mg /dL d. 5 – 9 mg/dL

58. In photosynthesis Co_2, light, water act as

a. Reactant b. Product c. By product d. Catalyst

59. Cytochrome oxidases are example of

a. Oxygenase b. Dehydrogenase

c. Oxidases d. Oxidoreductase

60. Blood urea decreases in all of the following conditions except than

a. Liver cirrhosis b. Pregnancy

c. Renal Failure d. Angina Pectoris

61. Following is onset mist toxic compound

a. Tyrosine **b. Phenyl pyruvate**

c. Lysine d. Phenylalanine

62. Helicase are dependent on _____ for energy.

a. ATP b. Glucose c. GTP d. FADH

63. _____ used to dissolve blood clots in circulation.

a. Penicillin **b. Streptokinase**
c. Phosphokinase d. None

64. During RNA Replication hydrogen bond is breaked by

a. DNA ligase **b. DNA helicase**
c. DNA gyrase d. DNA polymerase

65. Which one is the largest particulate of the cytoplasm?

a. Lysosomes b. Golgi apparatus
c. Mitochondria d. Endoplasmic reticulum