

1. Joining of Okazaki's fragments is carried out by

Select one:

- a. DNA polymerase I
- b. DNA polymerase II
- c. Helicase
- d. DNA ligase

2. Metabolic alkalosis may result from

Select one:

- a. Severe vomiting
- b. Methanol poisoning
- c. Uncontrolled diabetes
- d. Diarrhoea

3. cAMP activates the enzyme

Select one:

- a. Tyrosine Kinase
- b. Phosphodiesterase
- c. Adenyl cyclase
- d. Protein Kinase

4. In muscles glucose 6 phosphate cannot be converted to glucose due to the absence of

Select one:

- a. Glucokinase
- b. Hexokinase
- c. Glucose 6 phosphate dehydrogenase

d. Glucose 6 phosphatase

5. Tetracycline, erythrocycin and streptomycin are effective antibiotics because these inhibit

Select one:

- a. DNA synthesis in prokaryotes
- b. RNA synthesis in prokaryotes
- c. Protein synthesis in prokaryotes
- d. RNA synthesis in eukaryotes

6. Tumor of chromaffin cells of adrenal medulla may lead to

Select one:

- a. Diabetes mellitus
- b. Diabetes insipidus
- c. Pheochromocytoma
- d. Cushing's syndrome

7. The enzyme of TCA cycle involved in oxidative decarboxylation of the substrate is

Select one:

- a. Alpha ketoglutarate dehydrogenase complex
- b. Fumarase
- c. Citrate synthase
- d. Malate dehydrogenase

8. The metabolic function of LDL includes

Select one:

- a. To synthesize apo-protein B-48
- b. To catabolize cholesterol
- c. To transport cholesterol from liver to peripheral tissues
- d. To transport cholesterol from peripheral tissues to liver

9. Niemann-Pick's disease is associated with the deficiency of

Select one:

- a. Hexoaminidase-A
- b. Sphingomyelinase
- c. Glucose 6 phosphatase
- d. Beta galactosidase

10. A molecule of DNA to which the fragment of other DNA to be cloned, is joined is called

Select one:

- a. DNA probe
- b. Oncogene
- c. Cloning vector
- d. Retrovirus

11. For the synthesis of leukotrienes which of the following enzymes is needed

Select one:

- a. Fatty acyl synthase
- b. Lipoxygenase
- c. Oxidoreductase
- d. Cyclo-oxygenase

12. Respiratory acidosis can result due to excessive accumulation of

Select one:

- a. Carbonic acid
- b. Fumaric acid
- c. Aspartic acid
- d. Lactic acid

13. The most significant source of stored energy in human body is

Select one:

- a. Liver protein
- b. Adipose tissue
- c. Liver glycogen
- d. Muscle glycogen

14. Neurotransmitter 5-hydroxytryptamine is derived from the amino acid

Select one:

- a. Cysteine
- b. Cystine
- c. Methionine
- d. Tryptophan

15. Dietary fats after absorption from intestine appear in circulation as

Select one:

- a. HDL
- b. VLDL
- c. Chylomicrons

d. LDL

16. Nitric oxide is synthesized by nitric oxide synthase and is derived from which of the amino acids?

Select one:

- a. Proline
- b. Tryptophan
- c. Arginine
- d. Histidine

17. Rotenone a fish poison, which is

Select one:

- a. AN activator of electron transport chain
- b. An activator of oxidative phosphorylation
- c. An inhibitor of electron transport chain
- d. An inhibitor of oxidative phosphorylation

18. DNA topoisomerases are mainly responsible for

Select one:

- a. Proofreading
- b. Unwinding of supercoils
- c. Removing RNA primer
- d. Joining of Okazaki's fragments

19. Glycogen synthase and phosphorylase are reversibly regulated by

Select one:

- a. GMP
- b. UDP
- c. cAMP
- d. CTP

20. CO_2 , NH_3 and beta alanine are the catabolic products of

Select one:

- a. Cytosine
- b. Bile pigments
- c. Guanine
- d. Bile acids

21. Which of the following statements about insulin is incorrect?

Select one:

- a. It stimulates gluconeogenesis
- b. It stimulates glycogenesis
- c. It stimulates glycolysis
- d. It inhibits glycogenolysis

22. The conjugation of physiological active bile acids is carried out in liver with

Select one:

- a. Glycine and taurine
- b. Proline and Histidine
- c. Lysine and leucine
- d. Cysteine and serine

23. The committed step in cholesterol biosynthesis is

Select one:

- a. Formation of lanosterol from squalene
- b. Formation of Acetoacetyl SCoA from Acetyl SCoA
- c. Formation of HMG SCoA from Acetyl SCoA
- d. Formation of mevalonate from HMG SCoA

24. Low pulse rate, low body temperature and bradycardia are the symptoms of

Select one:

- a. Grave's disease
- b. Cushing syndrome
- c. Acromegaly
- d. Cretinism

25. Glucose-6-phosphate dehydrogenase is needed for the synthesis of

Select one:

- a. Xylulose-5-phosphate
- b. 6 phosphogluconate
- c. Ribose-5-phosphate
- d. Glucose-6-phosphate

26. Triacylglycerol present in chylomicrons is hydrolyzed by enzyme

Select one:

- a. Hormone-sensitive lipase
- b. Phospholipase A2
- c. Lipoprotein lipase
- d. Phospholipase A1

27. One of the enzymes of the glycolysis is

Select one:

- a. Phosphoglycerate kinase
- b. Pyruvate carboxylase
- c. Pyruvate dehydrogenase complex
- d. Glucose-6-phosphatase

28. In dehydrated person the body water is maintained by the infusion of

Select one:

- a. 5% glucose
- b. Distilled water
- c. 10% glucose
- d. 0.9% sodium chloride

29. All of the statements about growth hormone are correct except

Select one:

- a. It decreases liver glycogen store
- b. It increases uptake of amino acid by tissues

- c. It increases plasma glucose concentration
- d. It increases protein synthesis

30. By the oxidation of odd chain fatty acids Propionyl SCoA is formed which is finally converted into

Select one:

- a. Succinyl SCoA
- b. Fatty acyl SCoA
- c. Acetoacetyl SCoA
- d. Malonyl SCoA