



قائمة الاسئلة

الكيمياء الحيوية الغذائية - المستوى الثاني - قسم تغذية علاجية - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة الثانية - درجة الامن

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- 1) The general mechanism is that an enzyme acts by
 - 1) A. Reducing the activation energy
 - 2) B. Increasing activation energy
 - 3) C. Decreasing pH value
 - 4) D. Increasing the pH value
- 2) An example of a transamination process is
 - 1) A. Glutamate = hexanoic acid + NH₃
 - 2) B. Aspartate + hexanoic acid = glutamate + oxaloacetate
 - 3) C. Aspartate + α ketoglutarate = glutamate + oxaloacetate
 - 4) D. Glutamate = α -ketoglutarate + NH₃
- 3) The main site of urea synthesis in mammals is
 - 1) A. Liver
 - 2) B. Skin
 - 3) C. Intestine
 - 4) D. Kidney
- 4) The coenzyme is
 - 1) A. Often a metal
 - 2) B. Always a protein
 - 3) C. Often a vitamin
 - 4) D. Always an inorganic compound
- 5) Blocking of enzyme action by blocking its active site is called as:
 - 1) A. Allosteric inhibition
 - 2) B. Feedback inhibition
 - 3) C. Competitive inhibition
 - 4) D. Non-competitive inhibition
- 6) Oxidative deamination is the conversion of an amino
 - 1) A. Group from an amino acid to a keto acid
 - 2) B. Acid to a carboxylic acid plus ammonia
 - 3) C. Acid to a keto acid plus ammonia
 - 4) D. Group from an amino acid to a carboxylic acid
- 7) This causes decreased rate of glycolysis and leads to deficiency of ATP produced in RBCs.
 - 1) A. Pyruvate kinase (PK) deficiency
 - 2) B. Lactase deficiency
 - 3) C. LPL deficiency
 - 4) D. HDL deficiency
- 8) The main sites for oxidative deamination are
 - 1) A. Liver and kidney
 - 2) B. Skin and pancreas
 - 3) C. Intestine and mammary gland
 - 4) D. Lung and spleen
- 9) Which of the following is regarding with enzyme
 - 1) A. Enzymes are proteins
 - 2) B. Enzyme can be denaturated
 - 3) C. All of the above
 - 4) D. None of the above





- 10) Oxidation of which substance in the body yields the most calories
- 1) - A. Glucose
 - 2) - B. Glycogen
 - 3) - C. Protein
 - 4) + D. Lipids
- 11) Increase in blood of this class of lipoproteins is beneficial to ward off coronary heart disease:
- 1) - A. HDL
 - 2) + B. LDL
 - 3) - C. IDL
 - 4) - D. VLDL
- 12) In the human body optimum temperature for enzymatic activities is:
- 1) + A. 37-degree celsius
 - 2) - B. 25-degree celsius
 - 3) - C. 20-degree celsius
 - 4) - D. 15-degree Celsius
- 13) The cholesterol serves as the precursor for the following biosynthetic pathways, EXCEPT
- 1) - A. Bile acid synthesis
 - 2) - B. Steroid hormone synthesis
 - 3) - C. Aldosterone synthesis
 - 4) + D. Thyroid hormone synthesis
- 14) The enzyme involved in the conversion of glutamate to α -ketoglutarate and Ammonia is
- 1) + A. Glutamase dehydrogenase
 - 2) - B. Glutamase
 - 3) - C. Glumase decarboxylase
 - 4) - D. Glutamic oxidase
- 15) In competitive inhibition
- 1) + A. Inhibitor has similar structure to substrate
 - 2) - B. V max is decreased
 - 3) - C. Km is decreased
 - 4) - D. (d)reaction rate is independent of substrate concentration
- 16) The enzymes of urea synthesis are found in
- 1) - A. Mitochondria only
 - 2) - B. Cytosol only
 - 3) + C. Both mitochondria and cytosol
 - 4) - D. Nucleus
- 17) Lactase deficiency
- 1) - A. It is a deficiency of lactase enzyme
 - 2) - B. Congenital
 - 3) - C. Acquired
 - 4) + D. All of the above
- 18) β -Oxidation of fatty acids occurs mainly in
- 1) - A. Liver
 - 2) - B. Brain
 - 3) + C. Muscles
 - 4) - D. Adipose tissue
- 19) Bile is produced by
- 1) + A. Liver
 - 2) - B. Gall-bladder
 - 3) - C. Pancreas





- 4) - D. Intestine
- 20) Trypsinogen is converted to active trypsin by
- 1) A. Enterokinase
 - 2) - B. Bile salts
 - 3) - C. HCl
 - 4) - D. Mg⁺⁺
- 21) The process of breakdown of amino acids to α keto acids is called
- 1) - A. Ketogenesis
 - 2) - B. Amination
 - 3) C. Transamination
 - 4) - D. Racemization
- 22) Cholesterol can be synthesized de novo in
- 1) - A. Pancreas
 - 2) - B. Intestine
 - 3) C. Liver
 - 4) - D. Cell Membrane
- 23) A kinase is an enzyme that
- 1) - A. Removes phosphate groups of substrates
 - 2) B. Uses ATP to add a phosphate group to the substrate
 - 3) - C. Uses NADH to change the oxidation state of the substrate
 - 4) - D. Removes water from a double bond
- 24) ATP is from which general category of molecules?
- 1) - A. Polysaccharides
 - 2) - B. Proteins
 - 3) C. Nucleotides
 - 4) - D. Amino acids
- 25) Enzymes are made Up of:
- 1) - A. Fats
 - 2) B. Proteins
 - 3) - C. Nucleic acids
 - 4) - D. Vitamins
- 26) Carnitine Transport system Disorder is associated with which metabolism?
- 1) - A. phospholipid metabolism
 - 2) - B. ketone body metabolism
 - 3) - C. cholesterol metabolism
 - 4) D. fatty acid metabolism
- 27) This statement about enzymes is true:
- 1) - A. Enzymes accelerate reactions by lowering the activation energy
 - 2) - B. Enzymes are proteins whose three-dimensional form is key to their function
 - 3) - C. Enzymes do not alter the overall change in free energy for a reaction
 - 4) D. All of these
- 28) During cellular respiration, most of the ATP made, is generated by
- 1) A. Oxidative Phosphorylation
 - 2) - B. Photophosphorylation
 - 3) - C. Glycolysis
 - 4) - D. Substrate-Level Phosphorylation
- 29) Which of the following factor is responsible for atherosclerosis?
- 1) - A. age
 - 2) - B. genetic factor





- 3) - C. smocking
4) D. all of the above
- 30) Obesity is accumulation of _____ in the body.
1) - A. Water
2) - B. NaCl
3) C. Fat
4) - D. Protein
- 31) Obesity increases the risk of
1) - A. Hypertension
2) - B. Diabetes mellitus
3) - C. Cardiovascular disease
4) D. All of these
- 32) . It decreases blood glucose and increases uptake of glucose by various tissues?
1) - A Glucagon.
2) - B Epinephrine.
3) - C Cortisol.
4) D Insulin.
- 33) . Pancreatic juice contains all of the following except
1) - A Trypsinogen .
2) - B Lipase.
3) C Cholecystokinin .
4) - D Chymotrypsinogen.
- 34) In β -Oxidation of fatty acids, which of the following are utilized as coenzymes?
1) - A. NAD⁺ and NADP⁺
2) B. FADH₂ and NADH + H⁺
3) - .C FAD and FMN
4) - D. FAD and NAD⁺Z
- 35) Pepsinogen is converted to active pepsinby
1) A. HCl
2) - B. Bile salts
3) - C. Ca⁺⁺
4) - D. Enterokinase
- 36) The end product of protein digestion inG.I.T. is
1) - A. Dipeptide
2) - B. Tripeptide
3) - C. Polypeptide
4) D. Amino acid
- 37) anti beriberi vitamin is:
1) A. Thiamin
2) - B. Ascorbic acid
3) - C. Riboflavin
4) - D. None of the above
- 38) The major lipid in chylomicrons is
1) A. Triglycerides
2) - B. Phospholipids
3) - C. Cholesterol
4) - D. Free fatty acids
- 39) Vitamin K is essential for
1) A. synthesis of prothrombin





- 2) - B. synthesis of serotonin
3) - C. synthesis of calcitonin
4) - D. None of the above
- 40) Ketosis reflects
1) - A. Increased hepatic glucose liberation
2) B. Increased fatty acid oxidation
3) - C. Increased carbohydrate utilization
4) - D. Increased gluconeogenesis
- 41) Vitamin E acts as:
1) A. Antioxidant
2) - B. Anti-Scurvy
3) - C. Anti-Rickets
4) - D. None of the above
- 42) Dietary fats after absorption appear in the circulation as
1) - A. HDL
2) - B. VLDL
3) - C. LDL
4) D. Chylomicron
- 43) Vitamin D is required for the prevention of:
1) - A. Scurvy
2) B. Rickets
3) - C. Beriberi
4) - D. None of the above
- 44) The power house of the cell is
1) - A. Nucleus
2) - B. Cell membrane
3) C. Mitochondria
4) - D. Lysosomes
- 45) The amino acids involved in the synthesis of creatin are
1) A. Arginine, glycine, active methionine
2) - B. Arginine, alanine, glycine
3) - C. Glycine, lysine, methionine
4) - D. Arginine, lysine, methionine
- 46) Brain gets energy from ketone bodies if availability of glucose is
1) - A. Constant
2) B. Less
3) - C. High
4) - D. All of the above
- 47) The enzymes of the TCA cycle in cell are located in the
1) - A. Nucleus
2) B. Mitochondria
3) - C. Plasma Membrane
4) - D. Lysosomal Bodies
- 48) In How many ATPs are formed during complete oxidation of palmitate (16:0)?
1) - A. 35
2) - B. 96
3) C. 129
4) - D. 131
- 49) Synthesis of fatty acid takes place when





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- 1) - A. fatty acid are plentiful
2) - B. carbohydrate is plentiful
3) + C. carbohydrate and energy are plentiful
4) - D. none of these
- 50) In Deamination, the amino acid is converted into
- 1) - A. Aldol Acid
2) + B. Keto Acid
3) - C. Hydrochloric Acid
4) - D. Carboxylic Acid

