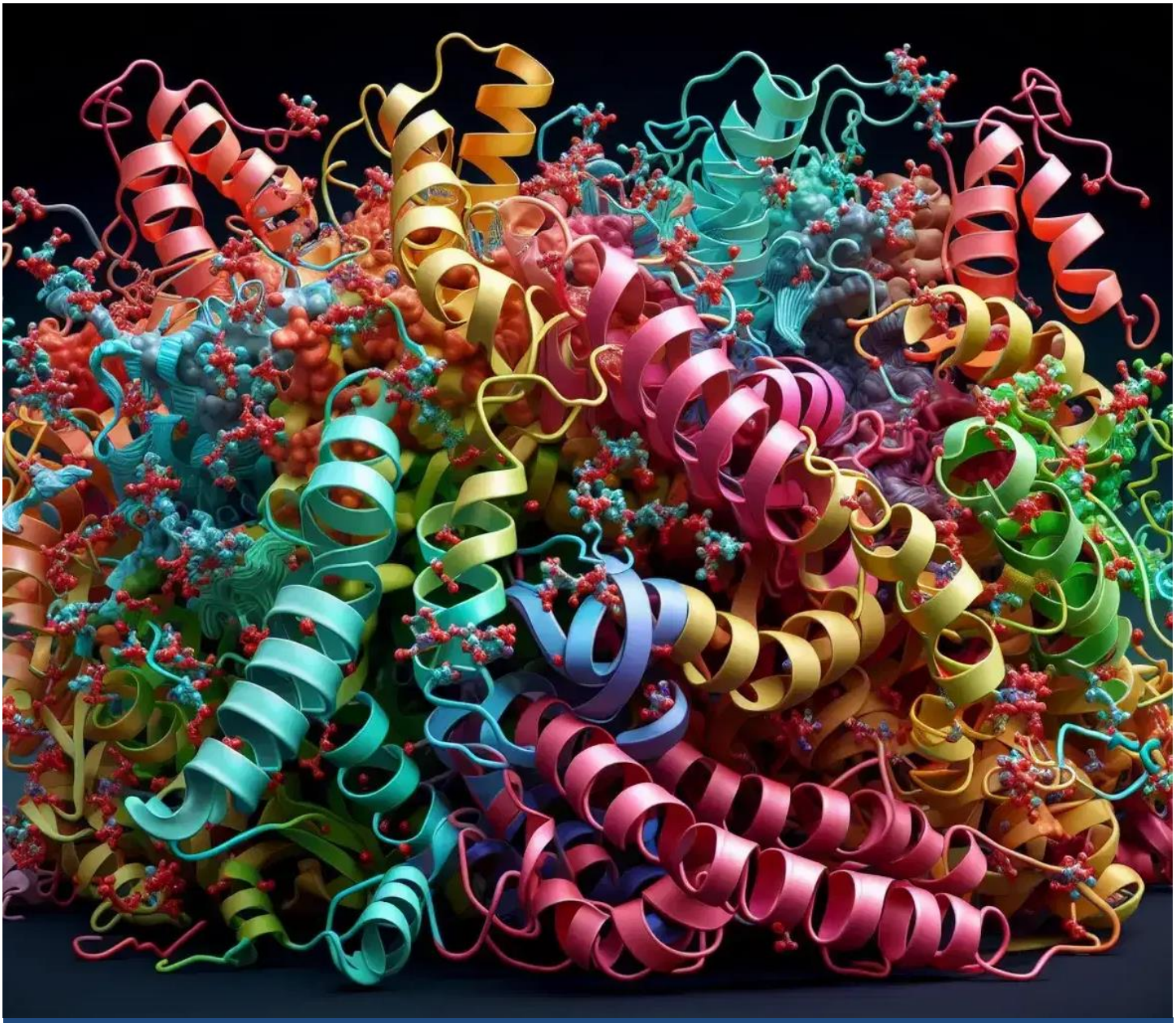

Protein and Amino Acid MCQ

800 + MCQs from different sources

Vikas Bhardwaj

Biochemistry

Introduction

Welcome to **Protein and Amino Acid MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 800+ multiple-choice questions (MCQs) covering a wide array of topics within the field of clinical enzymes.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key microbiological concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

How This Ebook Can Help You

- **For Students**: The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals**: This ebook helps professionals stay updated with the latest developments in clinical microbiology and refresh critical concepts required in day-to-day practice.
- **For Educators**: Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

Compilation and Sources

This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Biochemistry.

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Questions

1-: A 34-year-old female has a history of intermittent episodes of severe abdominal pain. She has had multiple abdominal surgeries and exploratory procedures with no abnormal findings. Her urine appears dark during an attack and gets even darker if exposed to sunlight. The attacks seem to peak after she takes erythromycin, because of her penicillin allergy. This patient most likely has difficulty in synthesizing which one of the following?

1: Heme

2: Creatine phosphate

3: Cysteine

4: Thymine

2-: DNA enzyme for aging:

1: Telosomerase

2: Topoisomerase

3: Telomerase

4: DNA polymerase

3-: Melanin is formed from which aminoacid?

1: Phenylalanine

2: Tyrosine

3: Tryptophan

4: Histidine

4-: In metabolic alkalosis, which Is true about excretion in urine

1: More of NH3

2: Less of aceto-acetic acid

3: Betahydroxy butyric acid

4: Less ammonia

5-: Aminoacyl t-RNA is not require for -

1: Proline

2: Lysine

3: Hydroxy lysine

4: Methionine

6-: Which of the following enzyme uses citrate in fatty acid synthesis?

1: Aconitase

2: Citrate synthase

3: Malic enzyme

4: ATP citrate lyase

7-: Accumulation of homogentisic acid causes?

1: Ochronosis

2: Tyrosinemia

3: Albinism

4: Tyrosinosis

8-: Glutamine synthetase is a -

1: Isomerase

2: Ligase

3: Lyase

4: Transferase

9-: Trypsinogen to trypsin is conveed by

1: Enteropeptidase

2: Acidic pH

3: Elastase

4: None

10-: The teiary structure of protein is determined by

1: X-ray Crystallography

2: Spectrophotometry

3: Electrophoresis

4: Chromatography

11-: Protein synthesis occurs in

1: Ribosome

2: Golgi apparatus

3: Lysosomes

4: Endosomes

12-: The structural proteins are involved in maintaining the shape of a cell or in the formation of matrices in the body. The shape of these protein is:

1: Globular

2: Fibrous

3: Stretch of beads

4: Planar

13-: Amino acid absorption is by:

1: Facilitated transport

2: Passive transport

3: Active transport

4: Pinocytosis

14-: In which of the following condition there is increased level of ammonia in blood?

1: Ornithine transcarbamoylase deficiency

2: Galactosaemia

3: Histidinaemia

4: Phenyl ketonuria

15-: Most important amino-acid substrate for gluconeogenesis -

1: Leucine

2: Lysine

3: Histidine

4: Alanine

16-: What changes the conformation of alpha helix in collagen

1: Methionine

2: Proline

3: Alanine

4: Tyrosine

17-: Nitric oxide is synthesized from which amino acid:

1: Arginine

2: Serine

3: Threonine

4: Lysine

18-: Tyrosine is required for the synthesis of all of the following except:

1: Melatonin

2: Epinephrine

3: Norepinephrine

4: Thyroxine

19-: A 30 year old male patient was on Isoniazid therapy for Tuberculosis.He developed rashes on exposed pas of body.He has disoriented memory. Family members gives history of diarrhea also.What is the diagnosis?

1: Isoniazid neuropathy

2: Tuberculosis skin lesions

3: Niacin deficiency

4: Some other drugs has caused this

20-: Which of the following amino acid is active at neutral pH?

1: Histidine

2: Glycine

3: Leucine

4: Arginine

21-: Neutral amino acid is -

1: Aspartate

2: Arginine

3: Glycine

4: Histidine

22-: a-helix of protein is

1: Primary structure

2: Secondary structure

3: Teiary structure

4: Quaery structure

23-: Sulphur of cysteine are not used/utilised in the body for the following process/product:

1: Help in the conversion of cyanide to thiocyanate

2: Thiosulphate formation

3: Introduction of sulphur in methionine

4: Disulphide bond formation between two adjacent peptide

24-: Which of the following is a suicidal enzyme

1: Cyclooxygenase

2: Lipooxygenase

3: 5-nucleotidase

4: Thrombaxane synthase

25-: Amino acid required for formation of thyroxine-

1: Tryptophan

2: Tyrosine

3: Glutamine

4: Cysteine

26-: Defect in collagen formation is seen in

1: Scurvy

2: Hunter's syndrome

3: Marfan's syndrome

4: Osteogenesis imperfecta

27-: Xantheurenic acid is produced in -

1: Tyrosine metabolism

2: Tryptophan metabolism

3: Cysteine metabolism

4: Valine metabolism

28-: Which of the following amino acid can produce oxaloacetate directly in a single reaction?

1: Alanine

2: Cysteine

3: Threonine

4: Aspaate

29-: H4-biopterin (tetrahydrobiopterin) is required for metabolism of

1: Arginine

2: Lysine

3: Phenylalanine

4: Tryptophane

30-: The main catabolic product/products of purine nuleotides in humans is which one of the following:

1: Ammonia + CO2

2: Ammonia

3: Uric Acid

4: CO2 and Water

31-: Number of amino acids in A chain and B chain of insulin is:

1: 30, 21

2: 28, 32

3: 32, 28

4: 21, 30

32-: Increased levels of alanine in serum after fasting is primarily due to:

1: Net loss of muscle protein due to increased breakdown

2: Leakage from cells due to membrane damage

3: Renal dysfunction

4: Decreased rate of gluconeogenesis

33-: Which of the following TCA cycle intermediate is a part of heme metabolism?

1: Alpha ketoglutarate

2: Fumarate

3: Succinyl CoA

4: Malate

34-: Which of the following amino acids can be phosphorylated?

1: Cysteine

2: Leucine

3: Methionine

4: Serine

35-: 1st product of tryptophan Catabolism

1: Kynurenine

2: Xantheurenic acid

3: Bradykinin

4: Melatonin

36-: Glutamic acid is formed from which of the following amino acid?

1: Threonine

2: Proline

3: Alanine

4: Lysine

37-: Which of the following contains sulphur?

1: Creatine

2: Insulin

3: Inulin

4: Creatinine

38-: Tomcat urine odor is seen in:

1: Multiple carboxylase deficiency

2: Phenylketonuria

3: Hawkinuria

4: Maple syrup disease

39-: Keratin in the nail is exceptionally stronger than others because of

1: Disulphide

2: Van der Wall's forces

3: Ionic bonds

4: Calcification

40-: Among the given hormones which are stored the longest in a cell

1: Insulin

2: T3

3: PTH

4: Testosterone

41-: Smooth muscle relaxant nitric oxide is synthesized from:

1: Methionine

2: Cyseine

3: Arginine

4: Ornithine

42-: Glucogenic amino acid transported to the liver most commonly -

1: Alanine

2: Glycine

3: Lysine

4: Leucine

43-: Positive Acute phase reactants are all except :

1: Serum Amyloid A protein

2: Transthyretin

3: Fibrinogen

4: Hepcidin

44-: Selenocysteine is derivative of which aminoacid -

1: Serine

2: Alanine

3: Arginine

4: Glycine

45-: Initial amino acid in prokaryotic protein synthesis -

1: Arginine

2: Methionine

3: Formyl-methionine

4: Alanine

46-: Urea cycle is linked to TCA cycle by -

1: Arginine

2: Ornithine

3: Oxaloacetate

4: Fumarate

47-: Which of the following amino acids is involved in one carbon pool?

1: Glycine

2: Proline

3: Threonine

4: Hydroxyproline

48-: Maple syrup urine disease is due to -

1: a-ketoacid decarboxylase

2: Transaminase

3: Isomerase

4: Mutase

49-: Proteins are linear polymers of amino acids. They fold into compact structures. Sometimes, these folded structures associate to form homo or hetero-dimers. Which of the following refers to this associated form?

1: Denatured state

2: Molecular aggregation

3: Precipitation

4: Quaternary structure

50-: All are in cystinuria except

1: Cystine

2: Ornithine

3: Alanine

4: Arginine

51-: Function of Topoisomerases

1: Deoxynucleotide polymerization

2: Relieve torsional strain

3: Initiates synthesis of RNA primers

4: Prevent premature reannealing of dsDNA

52-: Essential amino acids include all EXCEPT:

1: Methionine

2: Tryptophan

3: Leucine

4: Alanine

53-: Aminoacyl t-RNA is not required for

1: Proline

2: Lysine

3: Hydroxylysine

4: Methionine

54-: Which of the following amino acid is required for synthesis of hemoglobin?

1: Alanine

2: Glycine

3: Arginine

4: Histidine

55-: Which amino acid spares the use of methionine -

1: Cysteine

2: Glycine

3: Histidine

4: Arginine

56-: Tryptophan is:

1: Non polar, essential and pure glucogenic

2: Polar, essential and both glucogenic & ketogenic

3: Polar, non-essential, both glucogenic & ketogenic

4: Non polar, essential, both glucogenic & ketogenic

57-: Glucogenic aminoacids give rise to all of the following intermediates of citric acid cycle except-

1: Isocitrate

2: a ketoglutarate

3: Succinyl CoA

4: Fumarates

58-: True about collagen is all Except

1: Triple helix

2: Beta pleated sheet

3: Vit C is necessary for post translational modification

4: Glycine residue at every third position

59-: Enzyme deficiency responsible for gout are all except:

1: PRPP synthase

2: Pseudogout enzyme

3: 5 - phosphoribosyl amido transferase

4: Glucose 6 phosphatase

60-: In one carbon metabolism Serine loses which carbon atom?

1: Alpha

2: Beta

3: Gamma

4: Delta

61-: Which of the following is true about glycine?

1: Glycine is an essential amino acid

2: Sulphur containing at 4th position

3: Has a guanidine group

4: Optically inactive

62-: Both glucogenic and ketogenic amino-acids are all except -

1: Phenylalanine

2: Tyrosine

3: Tryptophan

4: Leucine

63-: Fish odour syndrome can be prevented by intake of:

1: Choline

2: Niacin

3: Pantothenic acid

4: Riboflavin

64-: NADPH actions in RBC are all except

1: Produce ATP

2: Stabilizes the membrane

3: Reductive biosynthesis

4: GP6D deficiency causes decreased synthesis of NADPH

65-: A 40-year-old woman presents with progressive palmoplantar pigmentation. X-ray spine shows calcification of IV disc. On adding benedicts reagent to urine, it gives greenish brown precipitate and blue-black supernatant fluid. What is the diagnosis?

1: Phenyl ketonuria

2: Alkaptonuria

3: Tyrosinemia type 2

4: Argininosuccinic aciduria

66-: "Indican" is a metabolite of

1: Histidine

2: Tryptophan

3: Tyrosine

4: Valine

67-: Enzyme involved in binding of & for conjugated bilirubin formation is

1: Kinases

2: Ligases

3: Syntheses

4: Transferases

68-: Ion exchange chromatography is based on -

1: Size

2: Charge

3: Solubility

4: Polarity

69-: All are cndopeptidases except -

1: Trypsin

2: Chymotripsin

3: Carboxypeptidase

4: None

70-: All are essential amino acid except

1: Phenylalanine

2: Lysine

3: Leucine

4: Glycine

71-: 5 HIAA in urine is due to:

1: Pheochromocytoma

2: Carcinoid syndrome

3: Phenyl ketonuria

4: Alkaptonuria

72-: The two nitrogen atoms that are incorporated into the urea cycle. The source of the nitrogen is

1: Glutamate & Aspaate

2: Aspaate & Arginine

3: Aspaate & NH3

4: Glutamate & NH3

73-: Type of collagen found in basement membrane is -

1: Type I

2: Type II

3: Type III

4: Type IV

74-: In Gaucher&;s disease, there is a deficiency of

1: Glucocerebrosides

2: glucokinase

3: Sphingomyelinase

4: G-6PD

75-: One gram of hemoglobin contains how much iron -

1: 2 mg

2: 3.4 mg

3: 5 mg

4: 6 mg

76-: In which form of aminoacid is ammonia transported from skeletal muscle to liver?

1: Glutamate

2: Glutamine

3: Alanine

4: Glycine

77-: In pyridoxine deficiency, tryptophan is converted to -

1: Nicotine

2: Acetoacetate

3: Xantheurenic acid

4: Acetyl CoA

78-: Disulfide bonds are formed in which amino acid:

1: Glycine

2: Cysteine

3: Proline

4: Isoleucine

79-: "Classical phenyl ketonuria" is caused by deficiency of

1: Phenylalanine transaminase

2: Phenylalanine hydroxylase

3: Tyrosine transaminase

4: Tyrosine hydroxylase

80-: Which structure of Hb can do function?

1: Primary, secondary , teiary

2: Primary & secondary

3: Primary, secondary , teiary, quaernary

4: Teiary & quaernary

81-: All of the following are branched chain amino acids EXCEPT:

1: Leucine

2: Lysine

3: Isoleucine

4: Valine

82-: Protein synthesis occurs in:

1: Golgi bodies

2: Endoplasmic reticulum

3: Mitochondria

4: Peroxisomes

83-: Ammonia in brain is trapped by -

1: Alanine

2: Glutamine

3: Ornithine

4: Aspartate

84-: All of the following are true about the stationary phase used in high-pressure liquid chromatography, EXCEPT

1: Made up of fine paicles

2: Provides high resistance

3: Provides more surface area

4: Provides low resolution

85-: Conversion of phenylalanine to tyrosine is hampered in -

1: Phenylketonuria

2: Alkaptonuria

3: Maple syrup disease

4: Tyrosinemia

86-: Familial hypercholesterolemia is associated with

1: Liver cirrhosis

2: Premature atherosclerosis

3: Nephrotic syndrome

4: Pancreatitis

87-: Which of the following is an example of conjugated protein?

1: Albumin

2: Glutelin

3: Myoglobin

4: Globulin

88-: Which of the following chemical reaction is involved in the conversion of noradrenaline to adrenaline?

1: Hydroxylation

2: Carboxylation

3: Methylation

4: Dehydrogenation

89-: Which amino acid has maximum tendency to bind phosphate ?

1: Serine

2: Alanine

3: Phenylalanine

4: Tryptophan

90-: In monoclonal antibody production, monoclonal cells are differentiated from?

1: Sensitized B cells

2: Sensitized T cells

3: Myeloma cell lines

4: None of these

91-: Biuret test is used for detection of:

1: Protein

2: Cholesterol

3: Steroid

4: Sugar

92-: Protein efficiency ratio is

1: Gain in weight / protein consumed

2: Product of digestibility coefficient and biological value divided by 100

3: Percentage of nitrogen retained out of nitrogen absorbed

4: Percentage of protein absorbed after digestion

93-: Quaternary structure of protein is:

1: The arrangement sequence of amino acids in the polypeptide chain

2: Inter relation between amino acids in a single polypeptide chain

3: Inter relation of amino acid in 2 polypeptide chains

4: The inter relation and arrangement of polypeptides in a protein with more than 2 polypeptides chains

94-: Polyamine like putrescine is derived from:

1: Arginine

2: Ornithine

3: Yohimibine

4: Arginosuccine

95-: Collagen most commonly contains which of the following amino acid:

1: Proline and hydroxyproline

2: Cysteine and cysteine

3: Glycine and cysteine

4: Methionine and proline

96-: Which technique is used to study structure of molecules -

1: X-ray crystallography

2: Ion exchange chromatography

3: Electron microscopy

4: Agarose gel electrophoresis

97-: Which enzyme is not seen in urea cycle?

1: Carbamoyl Phosphate Synthetase II

2: Carbamoyl Phosphate Synthetase I

3: Argininosuccinate Synthetase

4: Arginase

98-: Vitamin C is necessary in the formation of collagen. It is required for the conversion of:

1: Proline to hydroxyproline

2: Beta-carotene to vitamin A

3: Glutamate to gamma-carboxyglutamate

4: Pyridoxine to pyridoxal phosphate

99-: Guthrie's bacterial inhibition test detects:

1: Phenyl pyruvate

2: Phenyl alanine

3: Phenyl lactate

4: All of the above

100-: An amino acid that does not form an a-helix is:

1: Asparagine

2: Tyrosine

3: Tryptophan

4: Proline

101-: First product of tryptophan catabolism is:

1: Kynerunine

2: Bradykinin

3: PAF

4: Xantheurenate

102-: PKU is due to deficiency of which enzyme:

1: Phenylalanine reductase

2: Phenylalanine hydroxylase

3: Tyrosine hydroxylase

4: Tyrosine reductase

103-: N Acetyl Cysteine replenishes:

1: Glutathione

2: Glycine

3: Glutamate

4: GABA

104-: The first gene therapy (somatic enzyme) was successfully done in

1: SCID

2: Phenylketonuria

3: Thalassemia

4: Cystic fibrosis

105-: Homocysteine is

1: Amino-acid in Protein- D form

2: Amino-acid in Protein- L form

3: Non-protein alpha amino-acid

4: Seen in Collagen

106-: 5-hydroxyindoleacetate is a catabolic product of

1: Histidine

2: Tyrosine

3: Phenylalanine

4: Tryptophan

107-: At isoelectric pH protein

1: Have Net charge 'O'

2: Are positively charged

3: Are negatively charge

4: Don't migrate

108-: Transamination reaction requires -

1: Biotin

2: Folic acid

3: Pyridoxin

4: Niacin

109-: Removal of amino group from amino acid is called

1: Transamination

2: Deamination

3: Glucoronidation

4: Methylation

110-: Most abundant in bone

1: Alanine

2: Hydroxyproline

3: Lysine

4: Arginine

111-: Vanillylmandelic acid (VMA) is excreted in urine in which of the following condition?

1: Alkaptonuria

2: Phenylketonuria

3: Pheochromocytoma

4: Diabetic ketoacidosis

112-: The structural proteins are involved in maintaining the shape of a cell or in the formation of matrices in the body. The shape of these proteins is

1: Globular

2: Fibrous

3: Stretch of beads

4: Planar

113-: In Phenylketonuria the main aim of first line therapy is:

1: Replacement of the defective enzyme

2: Replacement of the deficient product

3: Limiting the substrate for deficient enzyme

4: Giving the missing amino acid by diet

114-: Mental retardation is a clinical feature of:

1: Alkaptonuria

2: Albinism

3: Hawkinsinuria

4: Phenylketonuria

115-: All of the following amino acids forms Acetyl CoA via pyruvate dehydrogenase except:

1: Glycine

2: Tyrosine

3: Hydroxyproline

4: Alanine

116-: Tryptophan is glucogenic & ketogenic by producing -

1: Acetyl Co A & alanine

2: Acetoacetate & fumarate

3: Acetoacetate & arginine

4: Arginine & alanine

117-: Hydrophobic amino acid is

1: Alanine

2: Tyrosine

3: Glycine

4: Histidine

118-: Acidic property to a-carbon of amino acid is due to-

1: Carboxyl group

2: Amino group

3: Hydrogenatom

4: None

119-: Which of the following amino acids have side chains that are negatively charged under physiological conditions?

1: Aspaic acid

2: Histidine

3: Tyrosine

4: Serine

120-: In DNA transfer the vectors used to inse smallest to largest DNA is

1: Cosmids, Plasmids, Bacteriophage

2: Plasmids, Bacteriophage, Cosmids

3: Bacteriophage, Cosmids, Plasmids

4: Cosmids, Bacteriophage, Plasmids

121-: Sickle cell disease is present with which mutation:

1: Cross-linked defect

2: Base pair defect

3: Mismatch defect

4: Base pair substitution

122-: The enzyme deficient in Phenyl Ketonuria is:

1: Phenylalanine dehydrogenase

2: Phenylalanine hydroxylase

3: Tyrosine hydroxylase

4: Dihydrobiopted n

123-: Alpha helix is which structure

1: Primary

2: Secondary

3: Tertiary

4: Quaternary

124-: Transamination is the first step in the catabolism of many amino acids. All of the following amino acids undergo transamination, EXCEPT

1: Alanine

2: Threonine

3: Glutamate

4: Aspaate

125-: The optically inactive amino acid is:

1: Glycine

2: Serine

3: Threonine

4: Valine

126-: Shoest peptide is:

1: Angiotensin-I

2: Vasopressin

3: Angiotensin-II

4: Angiotensin-III

127-: Which of the following is a weak bond -

1: Covalent bond

2: Peptide bond

3: Disulphide bond

4: Hydrophobic interactions

128-: A 30-year-old male has had multiple episodes of sudden, severe pain, redness, and swelling of metatarsophalangeal joint of his great toes. These problems seem to occur after

the man has had a night out on the town with his friends, when they go barhopping, and the night usually ends with a cab ride home for the group. This problem would also be exacerbated if the man eats which one of the following during his night out?

1: Hamburger

2: Chicago hot dog

3: Chopped liver

4: Nachos and salsa

129-: All of the following are excreted in cystinuria, except:

1: Cystine

2: Leucine

3: Arginine

4: Ornithine

130-: Amino acid with double chiral carbon-

1: Tyrosine

2: Threonine

3: Tryptophan

4: Phenylalanine

131-: A lady developed severe hyperglycemia in pregnancy and returned to normal after pregnancy with similar history in her mother and sister. What is the Enzyme defect?

1: PFK

2: Glucokinase

3: Enolase

4: Aldolase

132-: Transamination reaction reaquires which vitamin-

1: Thiamine

2: Pyridoxin

3: Riboflavin

4: Pentothenic acid

133-: Enzyme deficient in Alkaptonuria?

1: Phenylalanine hydroxylase

2: Cystathionine synthase

3: Homogentisic acid oxidase

4: Tyrosinase

134-: Plasma ceruloplasmin is a

1: a-1 globulin

2: a-2 globulin

3: b-1 globulin

4: b-2 globulin

135-: In Kreb's cycle and Urea cycle the linking component is

1: Arginine

2: Aspaate

3: Ammonia

4: Fumarate

136-: Movement of protein from nucleus to cytoplasm can be seen by:

1: FISH

2: FRAP

3: Confocal microscopy

4: DNA microscopy

137-: Melatonin is synthesized from which of the following amino acid?

1: Tryptophan

2: Histidine

3: Arginine

4: Glycine

138-: The greatest buffering capacity at physiologic pH would be provided by a protein rich in which of the following amino acids?

1: Lysine

2: Histidine

3: Aspartic acid

4: Valine

139-: The amino acid residue having an imino side chain is

1: Lysine

2: Histidine

3: Tyrosine

4: Proline

140-: Protein structure not lost in denaturation is?

1: Primary structure

2: Secondary structure

3: Tertiary structure

4: Quaternary structure

141-: Vitamin which formed from amino acid -

1: Thiamine

2: Riboflavin

3: Niacin

4: Biotin

142-: Increased copper excretion in urine is seen in all except

1: Primary sclerosing cholangitis

2: Wilson's disease

3: Primary biliary cirrhosis

4: Hepatocellular carcinoma

143-: Glutathione is a:

1: Monopeptide

2: Dipeptide

3: Tripeptide

4: Tetrapeptide

144-: Unfolded proteins are handled by

1: Chaperones

2: Histones

3: Proteases

4: Proteosomes

145-: Metabolic water is -

1: Ingested water

2: Water infused iv

3: Water produced by metabolism

4: None

146-: Xanthurenic acid is the metabolite in the metabolism of

1: Uric acid

2: Xanthine

3: Tryptophan

4: Uronic acid

147-: Which of the following transpos nitrogen from muscle to liver?

1: Lactate

2: Alanine

3: Glutamine

4: Aspeate

148-: The protein synthesis is sorted out at / by

1: Ribosomes

2: Mitochondria

3: Golgi - apparatus

4: Endoplasmic reticulum

149-: A 3-month-old girl was referred for recurrent fever, pneumonia, diarrhea, chronic dermatitis, failure to thrive, and motor retardation. The patient was the daughter of consanguineous parents and had a female sibling who had died due to recurrent infections. She suffered from oral thrush and a diffuse brownish colored macular rash on the trunk. Chest auscultation revealed bilateral crackles at the lower zones. Chest X-ray, indicated the absence of thymus shadow; a para-cardiac infiltration and an inferolateral squaring scapulae were demonstrated.Laboratory tests revealed mild anemia with profound lymphocytopenia, and hypogammaglobulinemia. adenosine deaminase (ADA) enzyme activities were low.What is the diagnosis?

1: Gout

2: Dwarfism

3: Mental retardation

4: Immunodeficiency

150-: Parkinson disease can be caused by a problem with the metabolism of which particular compound.

1: Glycogen

2: Collagen

3: Dopamine

4: Valine

151-: In urea cycle, hydrolysis of arginine forms -

1: Citrulline

2: Ornithine

3: Carbomoyl phosphate

4: Arginosuccinase

152-: Role of Ubiquitin in cell -

1: Energy dependent protein folding

2: Energy independent protein folding

3: Energy dependent protein degradation

4: Energy independent protein degradation

153-: Structure of proteins is best studied by:

1: X -ray crystallography

2: Ultra centrifugation

3: Using Sangers reagent

4: Sucrose density gradient centrifugation

154-: Protein degradation occurs in

1: Golgi apparatus

2: Peroxisomes

3: ER

4: Mitochondria

155-: In blood bilirubin is with -

1: Protein

2: Steroid

3: Vitamin

4: Carbohydrates

156-: Protein folding is done by -

1: Chaperones

2: Preosomes

3: Ubiquitin

4: None

157-: Maple syrup urine disease is due to

1: a-ketoacid decarboxylase

2: Transaminase

3: Isomerase

4: Mutase

158-: Carbamoyl phosphate is used in-

1: Urea

2: Uric acid

3: Pyruvic acid

4: Stearic acid

159-: In liver ammonia is formed from which amino acid?

1: Glycine

2: Glutamine

3: Isoleucine

4: Proline

160-: Which of the following does not contain b-alanine?

1: Carnosine

2: Anserine

3: Homocarnosine

4: Pantothenic acid

161-: Nitric Oxide synthesised from:

1: Arginine

2: Citrulline

3: Alanine

4: Cysteine

162-: True about ribozyme

1: Peptidayl transferase activity

2: Cuts DNA at specific sites

3: Paicipate in DNA synthesis

4: GTPase activity

163-: Each of the following is a physiological uncoupler EXCEPT:

1: 2,4 dinitrophenol

2: Thyroid hormone

3: Unconjugated bilirubin

4: Long chain fatty acid

164-: Oxaloacetate is formed from:

1: Proline

2: Histidine and arginine

3: Glutamate and glutamine

4: Aspartate and asparagine

165-: Most abundant in bone -

1: Arginine

2: Hydroxyproline

3: Proline

4: Alanine

166-: In SDS-PAGE (Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis) proteins are separated on basis of: (PGI June 2009)

1: Mass

2: Charge

3: Density

4: Molecular weight

167-: Defect in phenylketonuria

1: Phenylanine hydroxylase

2: Homogentisate oxidase

3: Pyruvate hydroxylase

4: Fumarylacetoacetate hydroxylase

168-: Which of the following is not an aromatic amino acid?

1: Phenylalanine

2: Tyrosine

3: TVyptophan

4: Valine

169-: Selenocysteine is derivative of which amino acid?

1: Cysteine

2: Alanine

3: Arginine

4: Glycine

170-: Which of the following is the rate-limiting enzyme in pyrimidine synthesis?

1: Aspoate transcarbamylase

2: Dihydro-orotase

3: Redvctase

4: UMP kinase

171-: The ability of amino acids/proteins to behave like zwitterions forms the basis for separating them using the following technique

1: Gel filtration chromatography

2: Ion exchange chromatography

3: Isoelectric focusing

4: Mass spectrometry

172-: Amino acid responsible for Thioredoxin reductase activation:

1: Serine

2: Selenocysteine

3: Cysteine

4: Alanine

173-: Decarboxylation of which of the following amino acids yields a potent vasodilator?

1: Glutamate

2: Arginine

3: Histidine

4: Serine

174-: Transamination reaction requires

1: Biotin

2: Folic acid

3: Pyridoxin

4: Niacin

175-: Proteins can be separated by the following except

1: Electrophoresis

2: Ultra - centrifugation

3: Gas chromatography

4: None

176-: All the following are Serine proteases, Except

1: Chymotrypsin

2: Trypsin

3: Thrombin

4: Carboxy peptidase

177-: Limiting amino acid in maize:

1: Niacin

2: Tyrosine

3: Tryptophan

4: Methionine

178-: Which of the following enzymes does not contain Zn

1: Alcohol Dehydrogenase

2: Arginase

3: Alkaline Phosphatase

4: Carbonic Anhydrase

179-: Which process involves the formation of non-essential amino acid from keto acid?

1: Deamination

2: Transamination

3: Dehydrogenation

4: Oxidation

180-: An individual who has been treated for type 2 diabetes for the past 24 years had, as part of his annual physical, a 24-hour urine collection. Reduced levels of creatinine were found, which is most likely because of which one of the following?

1: A decreased dietary intake of creatine

2: A higher-than-normal muscle mass resulting from weightlifting

3: A genetic defect in the enzyme that converts creatine phosphate to creatinine

4: Kidney failure

181-: Transamination of Aspaate forms

1: Pyruvate

2: Acetly CoA

3: Oxaloacetate

4: Alanine

182-: True about Nitric Oxide are all except:

1: Produced from arginine

2: Nitric oxide synthase has three isoforms

3: Otherwise called endothelium derived relaxing factor

4: Acts through c AMP

183-: Sulphur containing amino acid is/are -

1: Aspartic acid

2: Glutamine

3: Methionine

4: Glycine

184-: Maple syrup urine disease can be caused by a problem with the metabolism of which particular compound.

1: Glycogen

2: Collagen

3: Dopamine

4: Valine

185-: Catecholamines are synthesized from

1: Tryptophan

2: Tyrosine

3: Methionine

4: Histidine

186-: A 2-year-old intellectually disabled child is having blue eyes, blonde hair and fair skin. He also has a peculiar body odour. What is the diagnosis?

1: MSUD

2: Isovaleric Aciduria

3: Phenylketonuria

4: Canavan's disease

187-: Amino acid carrying ammonia from muscle to liver

1: Alanine

2: Glutamine

3: Arginine

4: Lysine

188-: Protein that precipitates on heating to 45 C and redissolves on boiling is

1: Bence Jones Protein

2: Gamma globulin

3: Albumin

4: Myosin

189-: The amino acid that can be converted into a vitamin:

1: Glycine

2: Tryptophan

3: Phenylalanine

4: Lysine

190-: Ehlers-Danlos syndrome can be caused by a problem with the metabolism of which particular compound.

1: Glycogen

2: Collagen

3: Dopamine

4: Valine

191-: In what form do proteins cross the mitochondrial membranes?

1: Bound to an impoin protein a signal sequence

2: In fully folded form

3: In unfolded extended form attached to Hsp 70 chaperones

4: In unfolded extended form without chaperones

192-: Which does not play a role in protein synthesis?

1: Exon

2: Intron

3: m-RNA

4: ATP

193-: Albumin binds with all except

1: Steroid

2: Calcium

3: FFA

4: Thyroxine

194-: The semi essential amino acids is:

1: Arginine

2: Phenylalanine

3: Lysine

4: Tryptophan

195-: Non-essential amino acid group is?

1: Acidic Amino Acid

2: Branched chain amino Acid

3: Basic Amino Acid

4: Aromatic Amino Acid

196-: A patient reports a change in colour of urine on air exposure. All are true about the condition shown below except:

1: Blackening of urine is accelerated on exposure to sunlight

2: Alkapton bodies are deposited in intervertebral disc

3: Urine Benedict's test is negative

4: Nitisinone is an inhibitor of the enzyme 4- hydroxy phenyl pyruvate dioxygenase

197-: Selenium is a co-factor for

1: Glutathione peroxidase

2: Glutathione reductase

3: Glutathione synthetase

4: Glutathione dehydrogenase

198-: Gangliosides consist of

1: Nitrogenous base

2: Glycerol

3: Phosphate

4: Sialic acid

199-: Phospholamban is a protein leads to

1: That increase interaction of calcium with myofilaments

2: That leads to sequestration of calcium in endoplasmic reticulum

3: That leads to sequestration of calcium by mitochondria

4: That activates Ca/Na pump

200-: Ferric chloride test in PKU gives

1: Green

2: Red

3: Yellow

4: Blue

201-: Transferofan amino group from an amino acid to an alpha ketoacid is done by:

1: Transaminases

2: Aminases

3: Transketolases

4: Deaminases

202-: Biological value of protein is related to

1: Amino Acid content

2: Essential amino acid content

3: N2 content

4: Protein quality

203-: Amino acid abundant in collagen:

1: Glycine

2: Lysine

3: Leucine

4: Isoleucine

204-: Which collagen produces sheets -

1: I

2: II

3: IV

4: VI

205-: Which is a niacin sparing amino acid:

1: Tryptophan

2: Methionine

3: Cysteine

4: Tyrosine

206-: In the synthesis of collagen which enzyme requires copper ?

1: Lysyl hydroxylase

2: Lysyl Oxidase

3: Prolyl hydroxylase

4: Prolyl oxidase

207-: How do proteins enter peroxisomes?

1: Folded, using a C-terminal or internal signal sequence

2: Folded, using an N-terminal or internal signal sequence

3: Unfolded, using a C-terminal or internal signal sequence

4: Unfolded, using an N-terminal or internal signal sequence

208-: Non-essential amino acid :

1: Tryptophan

2: Tyrosine

3: Arginine

4: Histidine

209-: Hepatic encephalopathy is caused by an increase of -

1: Urea

2: Glutamate

3: Ammonia

4: Fattyacid

210-: The semi-essential amino acids are

1: Phenylalanine

2: Lysine

3: Tryptophan

4: Arginine

211-: HHH syndrome is due to defect in -

1: Tryptophan metabolism

2: Histidine transporter

3: Branched chain AA metabolism

4: Ornithine transporter

212-: Which one of the following can be a homologous substitution for isoleucine in a protein sequence?

1: Methionine

2: Aspartic acid

3: Valine

4: Arginine

213-: Source of ammonia in urine -

1: Glutaminase

2: Urease

3: Glutamate dehydrogenase

4: Arginase

214-: Increased serum alanine during fasting is due to:

1: Breakdown of muscle proteins

2: Decreased utilization of non-essential amino acids

3: Leakage of amino acids to plasma

4: Impaired renal function

215-: Creutzfeldt-Jakob disease is due to a mutation causing the misfolding of

1: b-amlyloid protein

2: Prion protein

3: Muscle proteins

4: Structural proteins

216-: Zwitterions have

1: +ve ions>- ions

2: + ve ions < - ions

3: + ve ions = -ve ions

4: None of these

217-: Which of the following gives a positive reaction with Ferrous chloride?

1: Phenylketonuria

2: Alkaptonuria

3: Maple syrup urine disease

4: Non

218-: For untreated Myocardial infarction condition, select the blood or urine value that best distinguishes Myocardial infarction condition from the others. All values are measured after an overnight fast and are compared with those of a normal individual.

1: Increased troponin I

2: Increased blood ketone bodies

3: Decreased creatinine in the urine

4: Decreased blood lactate

219-: DNA repair defect is seen in:

1: Xeroderma pigmentosum

2: Li-fraumani syndrome

3: Retinoblastoma

4: None

220-: Branched chain amino acids

1: Are normally completely catabolised by muscle to CO2 and H2O

2: Can be catabolised by liver but not muscle

3: Are the main dietary amino acids metabolized by intestine

4: Are a major source of nitrogen for alanine and glutamine produced in muscle

221-: Which of the following is not a test for amino acids?

1: Biuret test

2: Xanthoproteic reaction

3: Ninhydrin test

4: Molisch's test

222-: Which one of the following enzymes is not a protein, but an RNA molecule

1: Peptidyl transferase

2: RNA polymerse

3: Restriction endonuclease

4: Reverse transcriptase

223-: Amide-containing amino acid

1: Alanine

2: Leucine

3: Asparagine

4: Serine

224-: Increased alanine during prolonged fasting represents:

1: Increased breakdown of muscle proteins

2: Impaired renal function

3: Decreased utilization of amino acid from Gluconeogenesis

4: Leakage of amino acids from cells due to plasma membrane damage

225-: NO is secreted by-

1: Endothelium

2: Ectoderm

3: Endoderm

4: Bones

226-: Basic amino acids are

1: Lysine and Arginine

2: Serine and cystein

3: Phenylalanine and Tyrosine

4: Aspartic acid and Glutamic acid

227-: &;D&;-form of amino acid is derived from

1: Synthesis in muscle

2: Break down from muscle

3: From external source

4: Produced in liver

228-: Creatinine is synthesized from

1: Glycine, Arginine and Methionine

2: Glycine and Methionine

3: Ornithine and Glycine

4: Thymine and Ornithine

229-: Transfer of an amino group from an amino acid to an alpha-keto acid is done by

1: Transaminases

2: Oxidases

3: Transketolases

4: Deaminases

230-: Endoplasmic reticulum do not paicipate in

1: Protein synthesis

2: Muscle contraction

3: Protein soing

4: Glycoproteins

231-: During vigorous strenuous exercise, which of the following amino acid is liberated from the skeletal muscles in maximum amount into circulation

1: Glutamate

2: Glutamine

3: Branched chain amino acids

4: Alanine

232-: Which of the following conversion is irreversible

1: Formyl THFA to Methenyl-THFA

2: Methenyl THFA to Methylene-THFA

3: Methylene THFA to Methyl-THFA

4: All of the above

233-: Which is a purely glucogenic aminoacid?

1: Leucine

2: Lysine

3: Phenylalanine

4: Alanines

234-: In Phenylketonuria, the first line therapy is:

1: Replacement of the defective enzyme

2: Replacement of the deficient product

3: Limiting the substrate for deficient enzyme

4: Giving the missing amino acid by diet

235-: Defect in folding of the protein result in which of the following clinical disease:-

1: Kuru

2: Migraine

3: Hypothyroidism

4: Myopia

236-: Precursor of tyrosine is:

1: Cysteine

2: Histidine

3: Tryptophan

4: Phenylalanine

237-: Enzyme dificient in alkaptonuria -

1: Kynureninase

2: Tyrosine hydroxylase

3: Homogentisate oxidase

4: Tyrosinase

238-: Which collagen produces sheets?

1: I

2: II

3: IV

4: VI

239-: Cysteine is formed from

1: Methionine and serine

2: Methionine and glycine

3: Alanine and glycine

4: Serine and glycine

240-: Glucuronyl conjugation of which amino acid leads to maximum excretion through urine?

1: Glycine

2: Alanine

3: Proline

4: Serine

241-: FIGLU is intermediate product of metabolism of

1: Histidine

2: Glutamine

3: Alanine

4: Tryptophan

242-: Bilirubin glucuronide in the urine in the absence of Urobilinogen suggests

1: Hemolytic jaundice

2: Hepatocellular jaundice

3: Obstructive jaundice

4: None of the above

243-: Anti-codon arm is seen in

1: m-RNA

2: r-RNA

3: t-RNA

4: sn- RNA

244-: "Type I phenylketonuria" is caused by a deficiency of

1: Phenylalanine transminase

2: Phenylalanine hydrolaxase

3: Tyrosine transaminase

4: Tyrosine hydroxylase

245-: In SDS-PAGE (Sodium Dobecyl Sulfate-polyacrelamide Gel Electrophoresis) proteins are separated on basis of

1: Mass

2: Charge

3: Density

4: Molecular weight

246-: Initial amino acid in prokaryotic protein synthesis

1: Arginine

2: Methionine

3: Formyl-methionine

4: Alanine

247-: Most abundant collagen in body is

1: Type I

2: Type II

3: Type V

4: Type VI

248-: A 42-year-old male has fatigue, pale skin, and shortness of breath with exercise. Blood test shows a macrocytic, hyperchromic anemia with hyper-segmented neutrophils and normal folate levels. The patient has been taking omeprazole for over 3 years to treat gastric reflux disease. One method to treat this patient is to do which one of the following?

1: Give injections of vitamin B6

2: Give injections of intrinsic factor

3: Give injections of vitamin B12

4: Give oral folic acid

249-: In porphyra cutanea tarda the type of porphyrin excreted in urine is

1: Coproporphyrin - I

2: Uroporphyrin - I

3: Uroporphyrins - II

4: Type I & III uroporphyrins

250-: Symptoms of Hanup's disease mimic:-

1: Beri-Beri

2: Pellagra

3: Kwashiorkor

4: Korsakoff psychosis

251-: Niacin is synthesized from-

1: Arginine

2: Histidine

3: Tryptophan

4: Tyrosine

252-: Which vitamin can be synthesized from tryptophan:

1: Niacin

2: Riboflavin

3: Cobalamin

4: Folic acid

253-: Which structure is not affected by protein denaturation?

1: Primary

2: Secondary

3: Tertiary

4: Quartenary

254-: All of the following are features of Lesch-Nyhan syndrome EXCEPT:

1: Hyperuricaemia

2: Self-mutilation

3: Mental retardation

4: Immunodeficiency

255-: Amino acid responsible for formation of histone- nucleic acid complex -

1: Alanine

2: Threonine

3: Leucine

4: Lysine

256-: A 2-year-old intellectutually disabled child is having blue eyes, blonde hair and fair skin. He also have a peculiar body odour. What is the diagnosis?

1: MSUD

2: Isovaleric aciduria

3: Phenyl ketonuria

4: Canavan's disease

257-: Amino acid w hich is optically inert -

1: Valine

2: Alanine

3: Glycine

4: Threonine

258-: Restriction enzymes have been found in

1: Bacteriophages

2: Bacteria

3: Fishes

4: Humans

259-: Substitution of which one of the following amino acids in place of alanine would increase the absorbance of protein at 280 nm

1: Leucine

2: Arginine

3: Tryptophan

4: Proline

260-: Carbamoyl phosphate is used in

1: Urea

2: Uric acid

3: Pyruvic acid

4: Stearic acid

261-: The aminoacid excreted in Hartnup's disease is -

1: Arginine

2: Hydroxyproline

3: Tryptophan

4: Proline

262-: The primary role of chaperones is to help in

1: Protein synthesis

2: Protein degradation

3: Protein denaturation

4: Protein folding

263-: 'D'- form of amino acid is derived from?

1: Produced in liver

2: Break down from muscle

3: From external source

4: Synthesis in muscle

264-: Amino acid used in the synthesis of purines

1: Glycine

2: Ornithine

3: Alanine

4: Threonine

265-: Urea is formed in:

1: Brain

2: Kidney

3: Liver

4: Intestine

266-: Smell of sweaty feet is seen in:

1: MSUD

2: Phenyl ketonuria

3: Homocystinuria

4: Glutaric acidemia

267-: Conversion of norepinephrine to epinephrine occurs by

1: Methylation

2: Decarboxylation

3: Oxidation

4: Sulphation

268-: The two nitrogen atoms, that are incorporated into the urea cycle. The source of the nitrogen are

1: Glutamate & Aspartate

2: Aspartate & Arginine

3: Aspartate & NH3

4: Glutamate & NH3

269-: Substitution of which one of the following amino acids in place of alanine would increase the absorbance of protein at 280 nm -

1: Leucine

2: Arginine

3: Tryptophan

4: Prolein

270-: Vitamin synthesized from amino acid is?

1: Thiamine

2: Riboflavin

3: Biotin

4: Niacin

271-: An L isomer of monosaccharide formed in the human body is

1: L-Fructose

2: L-Erythrose

3: L-xylose

4: L-Xylulose

272-: Bilirubin is absent in urine because it is:

1: Distributed in the body fat

2: Conjugated with glucuronide

3: Not filterable

4: Lipophilic.

273-: Transversion seen in

1: Guanine - cytosine

2: Guanine - adenine

3: Guanine - thymine

4: Adenine - thymine

274-: A 16 Yr old presented to the clinic with recurrent joint pains,dark spots in sclera,blackening of urine on standing.What is the most probable diagnosis?

1: Alkaptonuria

2: Tyrosinemia

3: Phenylketonuria

4: All of the above

275-: FIGLU is an intermediate in

1: Valine

2: Histidine

3: Methionine

4: Argenine

276-: The amino acid that lacks chirality

1: Lysine

2: Leucine

3: Histidine

4: Glycine

277-: Purely glucogenic amino acid -

1: Isoleucine

2: Tyrosine

3: Lysine

4: Proline

278-: Order of increasing polarity: A. Alanine B. Valine C. Glycine D. Isoleucine

1: D- B- A-C

2: B- C- A-D

3: A- D- C-B

4: D-A- B-C

279-: All are aromatic amino acids except

1: Lysine

2: Phenylalanine

3: Tyrosine

4: Tryptophan

280-: Phenylketonuria is due to the deficiency of:

1: Phenylalanine

2: Phenylalanine hydroxylase (PAH)

3: Phenylene

4: All of these

281-: Nitric oxide is synthesized from which Amino acid

1: Lysine

2: Arginine

3: Serine

4: Threonine

282-: Flow cytometry analysis is done for:

1: Blood Glucose estimation

2: Separation of Proteins

3: CD4/CD8 estimation in AIDS

4: Estimation of LDL

283-: Keratin contains -

1: Arginine

2: Histidine

3: Lysine

4: All

284-: Out of the following, which is substrate for the rate limiting enzyme of polyamine biosynthesis?

1: Anandamide

2: Cadaverine

3: Ornithine

4: Histidine

285-: Selenocysteine is synthesized from

1: Alamine

2: Cysteine

3: Arginine

4: Histidine

286-: Michaelis-Menten hypothesis states that

1: Rate of enzymatic reaction is independent of substrate concentration

2: Rate of non enzymatic reaction is propoional to substrate concentration

3: Km is the enzyme-substrate complex association constant

4: Enzyme -substrate complex formation is essential in enzymatic reaction

287-: Folding of protein chain is due to

1: Amide bond

2: Hydrogen bond

3: Phosphodiester bond

4: Disulphide bond

288-: Which of the following is derived from tyrosine -

1: Melatonin

2: Serotonin

3: Melanin

4: Niacin

289-: Urea cycle takes place in -

1: Liver

2: Kidney

3: Muscle

4: Brain

290-: Ochronosis is caused by

1: Tyrosinemia Type I

2: Maple syrup urine disease

3: Alkaptonuria

4: Phenylketonuria

291-: Major source of ammonia in kidney -

1: Glutamate

2: Glutamine

3: a-ketoglutarate

4: Alanine

292-: The primary role of chaperones is to help in?

1: Protein synthesis

2: Protein degradation

3: Protein de-naturation

4: Protein folding

293-: In Phenylketonuria the main aim of first-line therapy is

1: Replacement of the defective enzymes

2: Replacement of the deficient product

3: Limiting the substrate for deficient enzyme

4: Giving the missing amino acid by diet

294-: Dietary essential amino acid-

1: Cysteine

2: Arginine

3: Methionine

4: Selenocysteine

295-: True regarding collagen synthesis is all except

1: Synthesized in ribisomes as preprocollagen

2: Hydroxylation of proline occurs in Golgi apparatus

3: Hydroxylation of lysine occurs in ER

4: Triple helix assembly occurs in ER

296-: Reaction occuring in conversion of norepinephrine to epinephrine-

1: Hydroxylation

2: Oxidation

3: Glucuronidation

4: Methylation

297-: Taurine is biosynthesized from-

1: Arginine

2: Leucine

3: Valine

4: Cysteine

298-: Collagen in basement membrane

1: Type I

2: Type II

3: Type III

4: Type IV

299-: End product of catecholamine metabolism is -

1: Metanephrine

2: Vanillyl Mandelic Acid

3: Normetanephrine

4: Dihydroxyphenyl glycol

300-: Molecular size of proteins is assessed by

1: Sedimentation

2: Absorption mass spectroscopy

3: Lyophilization

4: Salting out

301-: Succinyl CoA is formed by

1: Valine

2: Isoleucin

3: Methionine

4: All of the above

302-: Coenzyme for phenylalanine hydroxylase is -

1: Tetrahydrofolate

2: Pyridoxal phosphate

3: S-adenosyl methionine

4: Tetrahydrobiopterin

303-: Isoelectric point is when

1: Net charge of protein is zero

2: Mass of protein is zero

3: Protein

4: Denaturation of protein occurs

304-: Which amino acid&;s deamination takes place in liver?

1: Alanine

2: Aspaic acid

3: Glycine

4: Glutamine

305-: Glycine is used in the synthesis of

1: Nitric oxide

2: Catecholamines

3: Melanin

4: Purines

306-: Over the past 2 months, a patient was on a nonscientific fad diet for weight loss which excluded all meats, eggs, legumes, nuts, and seeds. She takes a protein powder supplement, but not a vitamin supplement. Which one of the following will be greatly impaired in this patient?

1: Absorption of amino acids by the intestine

2: Membrane-transport systems for amino acids

3: Transamination reactions

4: Ammonia production by bacteria

307-: All are involved in stabilizing teiary structure of protein

1: Hydrogen bond

2: Hydrophobic interaction

3: Peptide bond

4: Van der Waals

308-: Alpha helix and Beta pleated sheet are examples of

1: Primary structure

2: Secondary structure

3: Teiary structure

4: Quaternary structure

309-: True-regarding DNA-replication are all except

1: Occurs in the M-phase of the cell cycle

2: Sister Chromatids are formed

3: Follow base pair rule

4: Semi conservative

310-: The immunoglobulin having highest molecular weight is:

1: IgG

2: IgM

3: IgE

4: IgA

311-: Heme in hemoglobin is in the

1: Hydrophobic pocket

2: Positive region

3: Negative region

4: Polar region

312-: Albumin and globulin are classified as:

1: Conjugate proteins

2: Secondary proteins

3: Simple globular proteins

4: Derived proteins

313-: All the following amino acids contain a hydroxyl group, Except ?

1: Serine

2: Lysine

3: Threonine

4: Tyrosine

314-: Movement of protein from nucleus to cytoplasm can he seen by:

1: FISH

2: FRAP

3: Confocal microscopy

4: Electron microscopy

315-: Krebs cycle and Urea cycle are linked at

1: Ornithine

2: Fumarate

3: Oxaloacetate

4: Arginine

316-: Protein separation based on moleular size -

1: HPLC

2: Gel filtration chromatography

3: Salting out

4: Affinity chromatography

317-: 39 years old, male Chronic knee pain,Headache, nausea, epigastric pain, blurred vision,Progressed over next 48 h to confusion, slowed speech,Progressive decline in GCS, requiring intubation,Seizure activity.CT brain showed cerebral oedema.Ammonia level: 652 mmol/L (RR, < 50 mmol/L). profound elevation of urine orotic acid, plasma glutamine level high, arginine level low.What is the pattern of inheritance of the disease?

1: Autosomal dominant

2: Autosomal recessive

3: X-linked disorder

4: None of the above

318-: All are aromatic amino acid except

1: Phenyl alanine

2: Tyrosine

3: Leucine

4: Histidine

319-: Serotonin is synthesized from

1: Tryrosine

2: Alanine

3: Tryptophan

4: Glycine

320-: Essential amino acid is

1: Alanine

2: Serine

3: Arginine

4: Proline

321-: Enzyme deficient in maple syrup urine disease -

1: a-ketoacid decarboxylase

2: Transaminase

3: Isomerase

4: Mutase

322-: Glutathione is a

1: Dipeptide

2: Polypeptide

3: Tripeptide

4: Oligopeptide

323-: Protein purification and separation is done by all Except

1: Chromatography

2: Precipitation

3: Electrophoresis

4: Densitometry

324-: Which of the following protein molecule is responsible for cell-to-cell adhesion?

1: Enactin

2: Lignin

3: Laminin

4: Fibronectin

325-: Hyperammonemia type I is due to deficiency of

1: CPS-I

2: CPS-II

3: Arginase

4: Arginosuccinase

326-: The sorting out of molecules according to size and shape may be adapted to protein purification in this technique:

1: Adsorption chromatography

2: Gel filtration chromatography

3: Paper chromatography

4: None of these

327-: Urea cycle take place in:

1: Liver

2: GIT

3: Spleen

4: Kidney

328-: Serotonin is derived from

1: Tyrosine

2: Tryptophan

3: Phenylalanine

4: Methionine

329-: Stability of the toxoid in snake's venom is due to:

1: Disulfide bonds

2: Hydrogen bonds

3: Ionic bonds

4: VanDer Wall's bond.

330-: Initiator codon in prokaryotes:

1: UAA

2: UGA

3: AUG

4: UAG

331-: Disulphide bond is seen between-

1: Lysine and cysteine

2: Cysteine and cystine

3: Cysteine and cysteine

4: Arginine and histidine

332-: Type I Collagen is not present in:

1: Bone

2: Hyaline Cartilage

3: Ligament

4: Aponeurosis

333-: Which of the following is a Semi-essential aminoacid-

1: Tyrosine

2: Histidine

3: Alanine

4: Isoleucine

334-: The peptide bond has all the following characteristics, EXCEPT:-

1: Covalent in nature

2: Planar in nature

3: Paial double bond character

4: Free to rotate

335-: Aromatic amino acid is -

1: Serine

2: Histidine

3: Leucine

4: Tryptophan

336-: All are essential amino acids except

1: Glycine

2: Valine

3: Isoleucine

4: Tryptophan

337-: Secretory proteins are synthesized in

1: Cytoplasm

2: Endoplasmic Reticulum

3: First in cytoplasm and then in Endoplasmic Reticulum

4: First in Endoplasmic Reticulum and then in cytoplasm

338-: How many amino acids are present in a single turn of a-helix?

1: 3.3

2: 3.6

3: 10.5

4: 11.5

339-: What is role of insulin in lipid metabolism?

1: Activate lipoprotein lipase

2: Increase lipolysis

3: Activate hormone sensitive lipase

4: Activate acetyl CoA carboxylase

340-: Which conves Succinyl CoA to succinic acid?

1: Succinate thiokinase

2: Succinate dehydrogenase

3: Succinate

4: All of the above

341-: Polar amino acids are all except

1: Glutamic acid

2: Histidine

3: Glutamine

4: Methionine

342-: Defective proteins are degraded after attaching covalently to -

1: Clathrin

2: Pepsin

3: Laminin

4: Ubiquitin

343-: Brain damage in phenylketonuria is due to accumulation of-

1: Tyrosine

2: Phenylalanine

3: Tryptophan

4: None

344-: A medical student has been exposed to a patient with tuberculosis and developed a positive tuberculin test (PPD) but exhibited a normal chest X-ray. Fie is placed on a 6-month course of prophylactic treatment, but subsequently develops peripheral neuropathies. Which one of the following vitamins would be considered a treatment for the neurotoxicity?

1: B1

2: B2

3: B3

4: B6

345-: Melatonin is derived from -

1: Tyrosine

2: Tryptophan

3: Glutathione

4: None

346-: Protein synthesized in rough Endoplasmic reticulum will first go to:

1: Mitochondria

2: Cytosol

3: Golgi body

4: Lysosome

347-: The elongation of fatty acids occurs in which of the diagrammatic structures shown in the Illustration?

1: Structure A

2: Structure B

3: Structure C

4: Structure D

348-: Defect in alkaptonuria is:

1: Defect in phytanic acid oxidase

2: Absence of homogentisic acid oxidase

3: Deficiency of homogentisic acid oxidase

4: Deficiency of phenylalanine hydroxylase

349-: Which Amino acid has a double sulfide bond is?

1: Alanine

2: Glycine

3: Proline

4: Cystine

350-: The amino acid producing ammonia in kidney is

1: Glutamine

2: Alanine

3: Methionine

4: Glycine

351-: Cofactor involve in sulphur containing amino acid metabolism is?

1: Folic acid

2: Biotin

3: Vitamin B 1

4: Vitamin B 12

352-: Sorting of protein molecules is performed in?

1: Mitochondria

2: Golgi apparatus

3: Nucleosome

4: Endosome

353-: Detection of proteins by the following methods does not affect its function

1: Detecting with Coomassie blue dye after electrophoresis by SDS-PAGE

2: Detecting with heat coagulation

3: Detecting with 2-D electrophoresis

4: Detecting with UV light at 280 nm

354-: Two same charged proteins can be separated by

1: Agarose

2: DEAE Cellulose

3: Sephadex

4: None of these

355-: Type of collagen in Basement membrane

1: Type I

2: Type II

3: Type III

4: Type IV

356-: Dihydrobiopterin is used in management of which amino acid defect?

1: Alanine

2: Tyrosine

3: Phenylalanine

4: Tryptophan

357-: The best method to differentiate proteins is by

1: Gel chromatography

2: Affinity chromatography

3: Ion exchange electrophoresis

4: None of the above

358-: Cytochrome oxidase in oxidative phosphorylation is inhibited by

1: CO

2: H2S

3: Rotenone

4: Amobarbital

359-: Fructose from the intestine to enterocytes is transpoed through glucose transpoer?

1: GLUT 1

2: GLUT 4

3: GLUT 5

4: GLUT 7

360-: Melatonin is synthesized from

1: Histidine

2: Methionine

3: Tryptophan

4: Phenylalanine

361-: Optical transmission through a solution depends on

1: Time

2: Concentration

3: Scale

4: Path length

362-: In which of the following polysaccharides, monomers are linked by a beta-glycosidic bond

1: Amylose

2: Amylopectin

3: Glycogen

4: Cellulose

363-: VMA is a metabolite of:

1: Adrenaline

2: Thyroxine

3: Serotonin

4: Growth hormone

364-: Strongest interactions among the following -

1: Covalent

2: Hydrogen

3: Electrostatic

4: Van der Waals

365-: A 2-year-old boy is brought to clinic because of poor development as well as vomiting, irritability, and a skin rash. The boy's mother also notes that his urine has a strange "mousy" odor. Physical examination reveals the child has an eczema-like rash, is hyperreflexive, and has increased muscle tone. He has a surprisingly fair-skinned complexion compared to the rest of his family. What is the most likely diagnosis?

1: Tay-Sachs disease

2: Mcardle disease

3: Phenylketonuria

4: Pyruvate dehydrogenase deficiency

366-: Equal number of nucleotide bases are seen between which pair of nucleotides:

1: A=G

2: G=T

3: G=C

4: A=C

367-: Which of the following is not the source of cytosolic NADPH

1: Malic enzyme

2: Isocitrate dehydrogenase

3: ATP citrate lyase

4: 6-phospho gluconate dehydrogenase

368-: Signal pathways activate transcription factors for their transpo into the nucleus by all except

1: Detachment of the transcription factor from a complexing protein can unmask a nuclear localisation signal

2: Phosphorylation of impoin protein increases its binding affinity for transcription factors

3: Phosphorylation of the transcription factor can increase its impoin binding affinity

4: Dephosphorylation of the transcription factor can increase its impoin binding affinity

369-: If tyrosine level in blood is normal without external supplementation, deficiency of which of the following is ruled out -

1: Tryptophan

2: Phenylalanine

3: Histidine

4: Isoleucine

370-: The following metabolite is a derivative of tryptophan-

1: Melatonin

2: Thyroxine

3: Epinephrine

4: Nor epinephrine

371-: Methionine is synthesised in human body from -

1: Cysteine

2: Homocysteine

3: Cystine

4: Tryptophan

372-: Key enzyme in urea synthesis is:

1: Urease

2: Carbamoyl Synthetase

3: Arginase

4: Ornithine

373-: Creatinine is synthesized from:

1: Glycine,arginine and methionine

2: Glycine and methionine

3: Ornithine and glycine

4: Thymine and ornithine

374-: All of the following are post-translational effects of histone except

1: Acylation

2: Methylation

3: Phosphorylation

4: Glycosylation

375-: Catecholamines are synthesized from -

1: Tyrosine

2: Tryptophan

3: Glycine

4: Glutamate

376-: True statement about hemoglobin is

1: Each hemoglobin molecule is made of 4 polypeptides of each subunit

2: Two alpha and two beta subunits having a O2 attached to each subunit

3: Each hemoglobin molecule binds to only one O2 molecule

4: Each hemoglobin has one heme molecule

377-: pKA=pH when:

1: Solute is completely ionised

2: When the concentration of ionised and unionized form is same

3: Solute is completely unionized

4: All of the above

378-: Co-translational inseion is seen with

1: Translocon

2: Chaperons

3: Ubiquitin

4: Mannose 6- P

379-: Cystine has how many molecules of cysteine?

1: 1

2: 2

3: 3

4: 4

380-: Iron-sulfur proteins are components of

1: Citric acid cycle

2: ATP synthase

3: b-oxidation

4: Respiratory chain

381-: All of the following are essential amino acids except

1: Methionine

2: Lysine

3: Alanine

4: Leucine

382-: Increased uric acid level in plasma is due to

1: Increased purine utilization

2: Decreased purine synthesis

3: Decreased degradation purine

4: Decreased reutilization purine

383-: Rothera's test is for

1: Ketone bodies

2: Proteins

3: Glucose

4: Fatty acids

384-: Lipids and proteins interact in membrane by

1: Hydrophobic interactions

2: Both hydrophobic and covalent interactions

3: Covalent bonds

4: H bonds

385-: Cystine is formed by

1: Hydroxylation of cysteine molecule

2: Carboxylation of cysteine molecule

3: Peptide bond between two cysteine molecule

4: Disulfide bond between cysteine molecule

386-: Aspaate is similar to glutamate in the same way that:

1: Valine is similar to threonine

2: Asparagine is similar to glutamine

3: Phenylalanine is similar to tryptophan

4: Phenylalanine is similar to histidine

387-: Which is an acidic amino acid?

1: Asparagine

2: Glutamine

3: Aspartate

4: Glycine

388-: Protein purification and separation can be done by all except

1: Chromatography

2: Centrifugation

3: Electrophoresis

4: None

389-: Amino acid produced by adding hydroxyl group to phenyl side chain of phenylalanine

1: Threonine

2: Histidine

3: Tyrosine

4: Serine

390-: In comparing the de novo synthesis of IMP and UMP, which one of the following best represents commonalities in the pathways?

1: Both Require PRPP - yes; Both Require Folate Derivatives - no; Both Require Glutamine - yes; Both Require Glycine - no; Both Require Aspartic Acid - yes

2: Both Require PRPP - yes; Both Require Folate Derivatives - no; Both Require Glutamine - no; Both Require Glycine - no; Both Require Aspartic Acid - yes

3: Both Require PRPP - yes; Both Require Folate Derivatives - yes; Both Require Glutamine - yes; Both Require Glycine - no; Both Require Aspartic Acid - no

4: Both Require PRPP - no; Both Require Folate Derivatives - yes; Both Require Glutamine - no; Both Require Glycine - yes; Both Require Aspartic Acid - yes

391-: Secretory proteins are synthesized in -

1: Cytoplasm

2: Endoplasmic Reticulum

3: First in cytoplasm and then in Endoplasmic Reticulum

4: First in Endoplasmic Reticulum and then in cytoplasm

392-: PKU is a congenital amino acid metabotic disorder. In one of the following rare variants of PKU Dihydro Biopterin synthesis is affected. The enzyme deficient is: (PGI June 2008)

1: Histidine decarboxylase

2: Phenylalanine hydroxylase

3: Di hydro pterin reductase

4: Tyrosine deficiency

393-: Homogentisate oxidase deficiency causes -

1: Phenylketonuria

2: Alkaptonuria

3: Methylmalonic aciduria

4: Albinism

394-: Adenosine receptor stability is because of extensive disulfide bonds formed between:

1: Cysteine

2: Methionine

3: Arginine

4: Alanine

395-: The conjugation of bilirubin to glucuronic acid in the liver

1: Conves a hydrophilic compound to a hydrophobic one

2: Conves a hydrophobic compound to a hydrophilic one

3: Enables the bilirubin molecule to cross the cell membrane

4: Is increased during neonatal jaundice

396-: Which is false about Alkaptonuria?

1: Genitourinary system not involved

2: Hemogentistic oxidase deficiency

3: Black urine

4: Calcification in veebral bodies

397-: All are tryptophan derivatives except-

1: Melanin

2: Serotonin

3: Melatonin

4: Niacin

398-: Nitrogen atoms of Urea contributed by:

1: Ammonium and aspartate

2: Ammonium and glutamate

3: Ammonium and glycine

4: Ammonium and asparagine

399-: Which vitamin is essential for metabolism of sulphur containing amino acids?

1: Biotin

2: Folic acid

3: Vitamin C

4: Thiamine

400-: Proteins which have DNA binding domain in its structure are

1: Zinc finger

2: b - Sheet

3: b - band

4: Beta meander

401-: Pyridoxal phosphate is a key cofactor in metabolism. Which one of the following best represents reactions that require this cofactor?

1: Glycogenn Converted to Glucose-1-Phosphate and Glycogenn-1 - yes; Pyruvate Plus Aspartate Producing Alanine and Oxaloacetate - yes; Homocysteine Plus N5-Methyl-THF Produces Methionine and THF - no; Homocysteine Plus Serine Produces Cystathionine - yes; Histidine Produces Histamine - yes

2: Glycogenn Converted to Glucose-1-Phosphate and Glycogenn-1 - yes; Pyruvate Plus Aspartate Producing Alanine and Oxaloacetate - yes; Homocysteine Plus N5-Methyl-THF Produces Methionine and THF - yes; Homocysteine Plus Serine Produces Cystathionine - no; Histidine Produces Histamine - yes

3: Glycogenn Converted to Glucose-1-Phosphate and Glycogenn-1 - yes; Pyruvate Plus Aspartate Producing Alanine and Oxaloacetate - yes; Homocysteine Plus N5-Methyl-THF Produces Methionine and THF - no; Homocysteine Plus Serine Produces Cystathionine - yes; Histidine Produces Histamine - no

4: Glycogenn Converted to Glucose-1-Phosphate and Glycogenn-1 - yes; Pyruvate Plus Aspartate Producing Alanine and Oxaloacetate - no; Homocysteine Plus N5-Methyl-THF Produces Methionine and THF - yes; Homocysteine Plus Serine Produces Cystathionine - no; Histidine Produces Histamine - no

402-: Protein synthesis occurs in -

1: Ribosome

2: Golgi apparatus

3: Lysosomes

4: Endosomes

403-: How many stop codons are seen?

1: 1

2: 2

3: 3

4: 4

404-: Phenylalanine metabolism products are all except

1: Epinephrine

2: Dopamine

3: Melanin

4: Melatonin

405-: The molecular weight of a protein can be determined by

1: Native acrylamide Gel Electrophoresis (PAGE)

2: Sodium dodecyl Sulphate h-PAGE

3: Isoelectric focusing

4: Ion Exchange Chromatography

406-: Radiation affects:

1: RNA

2: DNA

3: Mitochondria

4: Cytoskeleton protein

407-: Which is true about stop codon?

1: 3 codon coding for one amino acid

2: 3 codon coding for whole DNA

3: 3 codon coding for whole RNA

4: 3 codon act as terminator codon

408-: Tryptophan gives rise to

1: Thyroxine

2: Melatonin

3: Melanin

4: Epinephrine

409-: During Protein biosynthesis, high energy bonds are not utilized in which one of the following steps?

1: Formation of aminoacyl RNA

2: Binding of aminoacyl tRNA to A site of ribosome

3: Formation of peptide bone (peptidyl transferase step)

4: Translocation step

410-: The major source of ammonia in kidney

1: Glutamate

2: Glutamine

3: a-ketoglutarate

4: Alanine

411-: Lack of a specific lysosomal hydrolase for glycoproteins will most likely cause

1: oligosaccharidoses

2: I cell disease

3: scurvy

4: Ehlers danlos syndrome

412-: Which amino acid is acidic?

1: Aspartic acid

2: Valine

3: Leucine

4: Aspartate

413-: All of the following are true EXCEPT

1: Absence from the diet of ceain amino acids that are present in most proteins is not deleterious to human health

2: Tetrahydrobiopterin is involved in tryptophan biosynthesis

3: Selenocysteine is an essential component of several mammalian proteins

4: Intermediates of the citric acid cycle and of glycolysis acts as precursors of aspaate, asparagine, glutamate, glutamine, glycine, and serine

414-: Which of the following biochemical reaction is involved in conversion of Histidine to histamine

1: Decarboxylation

2: Carboxylation

3: Deamination

4: Oxidation

415-: Non-Polar Amino Acids are

1: Alanine

2: Tryptophan

3: Isoleucine

4: Lysine

416-: All have aromatic rings except

1: Phenylalanine

2: Tyrosine

3: Tryptophan

4: Lysine

417-: Regarding proteoglycans, false is

1: Chondroitin sulfate is a proteoglycan

2: They hold less amount of water

3: They are made up of sugar and aminoacids

4: They carry charge

418-: Protein is purified using ammonium sulfate by

1: Salting out

2: Ion exchange chromatography

3: Mass chromatography

4: Molecular size exclusion

419-: Glycine can be synthesised from all except

1: Aspaate

2: Alanine

3: Glycoxylate

4: Glutamate

420-: In Hanup&;s disease ..... is excreted in the urine

1: Ornithine

2: Glycine

3: Tryptophan

4: Phenylalanine

421-: Ochronosis is due to deficiency of -

1: Kynureninase

2: Tyrosine hydroxylase

3: Homogentisate oxidase

4: Tyrosinase

422-: Albumin serves as a transpoer of all the following molecules, Except

1: Bilirubin

2: Free fatty acids

3: Thyroxine

4: Iron

423-: Carnitine is made-up of:

1: Leusine

2: Lysine

3: Lysine & methionine

4: Arginine

424-: Xanthoproteic test is used for -

1: Ketone bodies

2: Bile salts

3: Amino acids

4: Reducing sugars

425-: Glutamine synthetase is a

1: Isomerase

2: Ligase

3: Lyase

4: Transferase

426-: What type of protein is Casein?

1: Lipoprotein

2: Phosphoprotein

3: Glycoprotein

4: Flavoprotein

427-: Which of the following dietarily non-essential amino acid becomes dietarily essential in patients of homocystinuria?

1: Cysteine

2: Methionine

3: Homocysteine

4: Phenylalanine

428-: Alpha helix and Beta pleated sheet are examples of-

1: Primary'

2: Secondary structure

3: Tertiary'

4: Quaternary' structure

429-: All of the following are derivatives of tryptophan EXCEPT:

1: Melatonin

2: Serotonin

3: Niacin

4: Creatinine

430-: Phenylalanine is degraded into

1: Fumarate and succinate

2: Fumarate and acetoacetate

3: Fumarate and Malate

4: Fumarate and pyruvate

431-: 2,4 Dinitrophenol is formed from?

1: Phenolic acid

2: Picric acid

3: Nitric acid

4: Glutamic acid

432-: Guanido acetic acid is formed in.... from....

1: Kidney; Arginine + glycine

2: Liver; Methionine + glycine

3: Liver; Cysteine + arginine

4: Muscle; Citrulline + aspartate

433-: All of the following degradation product of Glycine except

1: Serine

2: Oxalates

3: Pyruvates

4: Ornithine

434-: Which of the following X-linked condition presents as urolithiasis with gouty arthritis:

1: Holt oram syndrome

2: Lesch nyhan syndrome

3: SCID

4: Cystic fibrosis

435-: Protein catabolism is increased in

1: Starvation

2: Burns

3: Surgery

4: All of the above

436-: Glycine is required in formation of all except -

1: Heme

2: Purines

3: Glutathione

4: Thyroxine

437-: Type of collagen found in basement membrane is

1: Type I

2: Type II

3: Type III

4: Type IV

438-: Which amino acid has imino group-

1: Proline

2: Glycine

3: Arginine

4: Tryptophan

439-: Quaternary structure of the Protein

1: The sequence of amino acids in a polypeptide chain

2: The folding of sho (3-30 residue), contiguous segments of polypeptide into geometrically ordered units

3: The assembly of secondary structural units into larger functional units such as the mature polypeptide and its component domains

4: The number and types of polypeptide units of oligomeric proteins and their spatial arrangement

440-: Non-protein nitrogen product in food

1: Sucrose

2: Triglyceride

3: Urea

4: Cholesterol

441-: Which of the following statement characterize both Hemoglobin and Myoglobin?

1: Non-helical

2: Subunits which are held together by hydrogen bonds

3: Binds with 2 HEMA

4: HEMA at hydrophobic pockets

442-: Which of the following is polar amino acid -

1: Tryptophan

2: Methionine

3: Glutamic acid

4: Isoleucine

443-: Decarboxylation of Ammo acid produces all except

1: Histamine

2: Proline

3: Tryptamine

4: Tyramine

444-: Proteins directed to which of the following organelles are synthesized by ribosomes attached to the rough endoplasmic reticulum?

1: Lysosomes

2: Mitochondria

3: Nucleus

4: Peroxisomes

445-: In hemoglobin the innate affinity of heme for carbon monoxide is diminished by the presence of

1: His F8

2: His E7

3: GlyB6

4: ThrC4

446-: Hemoprosthetic group is found in

1: Myoglobin

2: Cytochrome oxidase

3: Xanthine oxidase

4: Tyrosine

447-: Phenylketonuria is caused by deficiency of

1: Tyrosine transminase

2: Tyrosine hydroxylase

3: Phenylalanine transaminase

4: Phenylalanine hydroxylase

448-: A sick child laboratory test reveal low white blood count,metabolic acidosis,increased anion gap,mild hyperammonemia.Measurements of plasma amino acids reveal elevated glycine and measurement of urinary organic acids reveals increased amounts of propionic acid and methyl citrate. which of the following processes is most likely?

1: Glycine catabolism disorder

2: Propionic acidemia

3: A fatty acid oxidation disorder

4: Vitamin B12 deficiency

449-: The conjugation of bilirubin to glucuronic acid in the liver;

1: Converts a hydrophilic compound to a hydrophobic one

2: Converts a hydrophobic compound to a hydrophilic one

3: Enables the bilirubin molecule to cross the cell membrane

4: Is increased during neonatal jaundice

450-: An obese patient undergoes a gastric bypass procedure in order to lose weight but never returns for follow-up or continuing care. Three years later, he presents to an emergency room with fatigue, a glossy tongue, and a macrocytic and hyperchromic anemia. Which one of the following is deficient or malfunctioning in this patient, leading to this anemia?

1: Intrinsic factor

2: Gastrin

3: Iron

4: Lead

451-: Which of the following are metalloporphyrins?

1: Hemoglobin

2: Catalase

3: Bilirubin

4: Cytochrome

452-: Which of the following signals directs a protein to the lysosomes?

1: A lys-asp-glu- leu (KDEL) sequence in the protein

2: Dolichol phosphate

3: Attached carbohydrate with terminal mannose-6-phosphate

4: Attached carbohydrate with terminal mannose

453-: Ceruloplasmin contains -

1: Zn

2: Cu

3: Se

4: Fe

454-: Which of the following amino acid has a high risk for CHD (Coronary heart diseases):

1: Homocysteine

2: Methionine

3: Glycine

4: None of the above

455-: Following clinical manifestation is a feature of

1: Hyperammonemia type 1

2: Hyperammonemia type 2

3: Argininosuccinic aciduria

4: Argininemia

456-: Nitric oxide is synthesized from this amino acid:

1: Arginine

2: Lysine

3: Leucine

4: Isoleucine

457-: Glutathione is composed of

1: Cysteine & Glycine

2: Glutamic acid, cysteine & glycine

3: Glutamic acid, glycine & cystine

4: Lysine & methionine

458-: One molecule of Hb can bind to a maximum number of

1: Two molecules of oxygen

2: One molecule of oxygen

3: Four molecules of oxygen

4: Six molecules of oxygen

459-: Fluorescamine is used to detect

1: Amino acids

2: Fatty acids

3: Glucose

4: Fructose

460-: All of the following amino acids are one-carbon donors, EXCEPT

1: Glycine

2: Serine

3: Histidine

4: Threonine

461-: Which one of the following occurs in the urea cycle?

1: Carbamoyl phosphate is derived directly from glutamine and CO2.

2: Ornithine reacts with aspartate to generate argininosuccinate.

3: The a-amino group of arginine forms one of the nitrogens of urea.

4: Ornithine directly reacts with carbamoyl phosphate to form citrulline.

462-: Not a metabolic product of urea cycle -

1: Citrulline

2: Ornithine

3: Alanine

4: Arginine

463-: Increased level lipoprotein A predisposes to

1: Liver cirrhosis

2: Atherosclerosis

3: Nephrotic syndrome

4: Pancreatitis

464-: Rossman flod associated NADH domain is found in

1: Pyruvate dehydrogenase

2: Lactate dehydrogenase

3: Acetyl coA dehyrogenase

4: Isocitrate dehydrogenase

465-: Rothera's test is utilized for detection of?

1: Glucose

2: Proteins

3: Urea

4: Ketone bodies

466-: Which of these is a conservative mutator?

1: Glutamic acid-glutamine

2: Histidine glycine

3: Alanine-leucine

4: Arginine-aspaic acid

467-: A 6-month-old boy was admitted with failure to thrive. Laboratory tests showed hypoglycemia and high glutamine and uracil levels in urine. Gastric tube feeding was not tolerated. The child became comatose and then parenteral dextrose was given. The child recovered from coma within 24 hrs. Which of the following enzyme is defective?

1: Argininosuccinate synthase

2: Carbamoyl phosphate synthase I

3: Argininosuccinate lyase

4: Ornithine transcarbamoylase

468-: Which one of the following can be homologous substitution for isoleucine in a protein in sequence?

1: Methionine

2: Aspartic acid

3: Valine

4: Arginine

469-: An infant presented to the OPD with a history of vomiting and poor feeding. Musty odor is present in the baby's sweat and urine. Guthrie test was done and it was found to be positive. All are true regarding this disease except:

1: Phenylacetate positive in urine

2: Tandem mass spectrometry is the gold standard test

3: Phenylalanine hydroxylase enzyme defect

4: mental retardation is absent

470-: Nicotinamide is derived from

1: Histidine

2: Methionine

3: Tryptophan

4: Phenylalanine

471-: Increased level of 5 HIAA is seen in which disease?

1: Alkaptonuria

2: Albinism

3: Carcinoid tumor

4: Phenylketonuria

472-: All of the following Aminoacids absorb light at 280 nm, except:

1: Phenylalanine

2: Tyrosine

3: Tryptophan

4: Methionine

473-: Positive Ferric chloride urine test is due to:

1: Phenylalanine

2: Phenylacetate

3: Phenylpyruvate

4: Phenylaspaate

474-: Intracellular sorting and packing done by: (PGI Dec 2007)

1: ER

2: Golgi apparatus

3: Ribosome

4: Cytoplasm

475-: Enzyme deficiency in albinism is:

1: Tyrosinase

2: Tyrosine hydroxylase

3: Phenylalanine hydroxylase

4: Homogentisate oxidase

476-: Precursor of norepinephrine

1: Tryptophan

2: Tyrosine

3: Methionine

4: Asparagine

477-: Chaperones are used for-

1: Protein folding

2: Protein targeting

3: Protein synthesis

4: Protein modification

478-: Creatine is synthesized from which of the following?

1: Methionine

2: Histidine

3: Proline

4: Lysine

479-: which of the following is a essential amino acid ?

1: Lysine

2: Alanine

3: Asparagine

4: Glycine

480-: Disulfide bonds are formed by pairs of which aminoacid?

1: Methionine

2: Homocysteine

3: Serine

4: Cysteine

481-: At physiological pH, the carboxy-terminal of a peptide is

1: Positively charged

2: Negatively charged

3: Neutral

4: Infinitely charged

482-: Urea cycle occurs in

1: Liver

2: Gastrointestinal tract

3: Spleen

4: Kidney

483-: Which of the following is true about IgG antibody?

1: Produced in primary immune response

2: Cannot cross placenta

3: Provides local protection

4: Produced in secondary immune response

484-: Amino acid carrying ammonia from muscle to liver-

1: Alanine

2: Glutamine

3: Arginine

4: Lysine

485-: Which of the following mucopolysaccharide does not contain an acidic sugar?

1: Chondroitin sulfate

2: Keratan sulfate

3: Dermatan sulfate

4: Heparin

486-: Amino acid which contributes to biosynthesis of purine ribonucleotide are all EXCEPT:

1: Aspartate

2: Histidine

3: Glutamate

4: Glycine

487-: FIGLU is related to -

1: Tyrosine

2: Tryptophan

3: Histidine

4: Proline

488-: Amyloid protein in human being is:

1: A naturally present protein in normal individuals

2: Involves selectively blood vessels

3: Is visible by naked eyes as whitish cheesy material

4: A material which gets deposited in extracellular spaces

489-: 'Boiled cabbage' smell of urine is feature of?

1: Phenylketonuria

2: Hawkinsuria

3: Hypermethioninemia

4: Maple Syrup Urine Disease

490-: Cysteine is abundantly found in:

1: Keratin

2: Chondroitin S04

3: Creatine

4: Spermine

491-: Storage form of proteins in humans:

1: Titin

2: Collagen

3: Starch

4: None

492-: Electrophoresis done under pH gradient is

1: Isoosmotic

2: Isoelectric

3: Ion exchange

4: None

493-: Which end product of citric acid cycle is used in detoxification of ammonia in brain

1: Oxaloacetate

2: Alphaketoglutarate

3: Succinate

4: Citrate

494-: Acidic amino acids are

1: Asparagine

2: Arginine

3: Glutamine

4: None

495-: Urea is formed from which substrate:

1: Arginine

2: Orginine

3: Citrulline

4: Aspartate

496-: Tryptophan is-

1: Glucogenic

2: Ketogenic

3: Both glucogenic & ketogenic

4: None

497-: Immunoglobulins are:

1: Proteins

2: Glycoproteins

3: Proteoglycan

4: Glycoside

498-: Alpha helix of primary polypeptide structure is stabilized by

1: Disulfide linkage

2: Hydrophobic interactions

3: Covalent bonding

4: Hydrogen bonds

499-: The amino acid which serves as a carrier of ammonia from skeletal muscle to liver is:

1: Alanine

2: Methionine

3: Arginine

4: Glutamine

500-: Which of the following protein can't have quaternary structure?

1: Albumin

2: Immunoglobulin

3: Hemoglobulin

4: Collagen

501-: Bend of DNA is made of which amino acid

1: Glycine

2: Alanine

3: Cysteine

4: Lysine

502-: Which of the following amino acids is purely ketogenic-

1: Phenylalanine

2: Leucine

3: Proline

4: Tyrosine

503-: Melanin is synthesized from :

1: Tyrosine

2: Tryptophan

3: Phenyl alanine

4: Threonine

504-: Prostaglandins are derived from:

1: Stearic acid

2: Arachidonic acid

3: Glutamic acid

4: Aspartic acid

505-: Glutathion synthetase requires -

1: Copper

2: Selenium

3: Magnesium

4: Iron

506-: Which amino acid induces bends in a helix?

1: Glycine

2: Valine

3: Leucine

4: Isoleucine

507-: Which of the following is not true about Cystinosis?

1: Cysteine stones in urine common

2: Corneal crystals

3: Fanconi syndrome

4: White blond hair and photophobia

508-: True about Proto-oncogenes are

1: Normally involved in cell cycle proliferation

2: Produces tumor

3: Normally involved in suppression of tumour production

4: True about Proto-oncogens on mutation causes cancer

509-: Pellagra like symptoms seen in which amino acid deficiency

1: Tryptophan

2: Tyrosine

3: Glutamine

4: Phenylalanine

510-: Hartnup disease, limiting amino acid -

1: Tyrosine

2: Tryptophan

3: Phenylalanine

4: None

511-: Collagen present in skin is

1: Type I

2: Type II

3: Type IV

4: Type V

512-: Melatonin is derived from-

1: Tyrosine

2: Phenylalanine

3: Alanine

4: Tryptophan

513-: Vitamin C is present in largest amount in body in

1: Eye

2: Kidney

3: Testis

4: Adrenal coex

514-: Nontoxic form of storage and transpoation of ammonia:

1: Aspaic acid

2: Glutamate

3: Glutamine

4: Glutamic acid

515-: Serotonin is produced from?

1: Tryptophan

2: Phenylalanine

3: Tyrosine

4: Melatonin

516-: Soing of protein molecules is performed in

1: Mitochondria

2: Golgi apparatus

3: Nucleosome

4: Endosome

517-: An infant presented with mental retardation,regression of motor skills,problems with feeding,impaired head control,macrocephaly.MRI Of the infant is given below.what is the most probable diagnosis?

1: Hawkinsinuria

2: Canavans disease

3: Oasthouse syndrome

4: Hanup disease

518-: In first step of Heme synthesis, what is required?

1: Fe

2: Folate

3: Glycine

4: Histidine

519-: All of the following are characteristics of phenylalanine hydroxylase, EXCEPT

1: Mixed function oxidase

2: Tetrahydrobiopterin is a cofactor

3: NADPH provides the reducing power

4: Vitamin C is a cofactor

520-: The nucleotide triplet CTC in the sixth position of the l3-chain in DNA forms the complementary nucleotide on (mRNA) that codes for glutamic acid. A point mutation on the l3-chain resulting in the nucleotide triplet CAC forms a complementary nucleotide on mRNA that codes for valine. In sickle cell anemia, you would expect the complementary nucleotide triplet on mRNA from 5&; to 3&; to read

1: GAG

2: CTC

3: GTG

4: GUG

521-: Deficiency of arginosuccinate synthase causes-

1: Citrullinemia

2: Hyperargininemia

3: Argininosuccinic aciduria

4: Type I hyperammonemia

522-: A 6-month-old boy admitted with failure to thrive with high glutamine and Uracil in urine. Hypoglycemia, high blood ammonia. Treatment given for 2 months. At 8 months again admitted for failure to gain weight. Gastric tube feeding was not tolerated. Child became comatose. Parenteral Dextrose given. Child recovered from coma within 24 hours. What is the enzyme defect?

1: CPS1

2: Ornithine transcarbamoylase

3: Arginase

4: Argininosuccinate synthetase

523-: All are ketogenic & glucogenic amino acids except

1: Tyrosine

2: Isoleucine

3: Phenyalanine

4: Serine

524-: False about signal recognition paicle ?

1: SRP R is a docking protein

2: SRP-SRP R are GTP bound

3: Binding of signal sequence to SRP resumes translation

4: Sec 61 complex is a 3 membrane protein conducting channel

525-: Which of the following is caused by defective transport of tryptophan -

1: Hartnup disease

2: Maple syrup urine disease

3: Alkaptonuria

4: Phenylketonuria

526-: In Hartnup's disease which of the following is excreted in the urine:

1: Ornithine

2: Glycine

3: Tryptophan

4: Cystine

527-: If urine sample darkens on standing: the most likely conditions is -

1: Phenylketonuria

2: Alkaptonuria

3: Maple syrup disease

4: Tyrosinemia

528-: The predominant isoenzyme of LDH in cardiac muscle is

1: LDH 1

2: LDH 2

3: LDH 3

4: LDH 5

529-: In determining protein structure, mercaptoethanol is used to:

1: Identify C-terminal residue

2: Denature protein

3: Reduce disulfide bonds

4: Oxidize disulfide bonds

530-: Number of optical isomers possible for Glucose is

1: 2

2: 4

3: 8

4: 16

531-: Albinism is due to deficiency of -

1: Homogentisate oxidase

2: Tyrosinase

3: Phenylalanine hydroxylase

4: Tyrosine transaminase

532-: Which of the following enzymes does not contain Cu2+

1: Ceruloplasmin

2: Cytochrome Oxidase

3: Xanthine oxidase

4: Dopamine b-hydroxylase

533-: Melatonin is synthesised from

1: Tryptophan

2: Serotonin

3: Phenyllanine

4: Histidine

534-: Collagen contains amino acids Proline, Lysine and:

1: Glycine

2: Isoleucine

3: Cysteine

4: Methionine

535-: What directs vesicles carrying proteins modified in the Golgi cisternae to their appropriate place in the cell?

1: A sequence of amino acids within the proteins

2: A specific carbohydrate bound to the proteins

3: Coatomer or clathrin proteins coating the vesicle

4: Complementary SNARE proteins on the vesicle and its target organelle

536-: Interaction involved in primary structure of protein

1: Hydrogen bond

2: Disulfide bond

3: Peptide bond

4: Electrostatic bond

537-: A 65-year-old man visits his primary physician because of tingling in his hands and feet, and a sense that he is forgetting things more than usual. A CBC indicates a mild anemia. The patient states that his diet has not changed, other than eating more red meat than before. This patient can be best treated by which one of the following?

1: Oral administration of vitamin B12

2: Oral administration of folic acid

3: Oral administration of methionine

4: Injections of B12

538-: A 9-month-old infant had been in and out of the hospital due to frequent infections. Blood test demonstrated the virtual lack of B and T cells and the almost complete absence of a thymic shadow on a chest X-ray. Measurement of metabolites in the blood would be expected to show elevated levels of which one of the following?

1: Uric acid

2: Orotic acid

3: Deoxyadenosine

4: NADPH

539-: Tyrosine enters gluconeogenesis by forming which substrate

1: Succinyl CoA

2: Alpha - ketoglutarate

3: Fumarate

4: Citrate

540-: NO is synthesized by

1: Uracil

2: Aspaate

3: Guanosine

4: Arginine

541-: Major type of collagen in basement membrane:

1: Type I

2: Type II

3: Type III

4: Type IV

542-: Molecular separation of two proteins with same charge can be done by

1: Ion exchange chromatography

2: Dialysis

3: Gel diffusion chromatography

4: Electrophoresis

543-: An infant unable to feed properly, weak, and not gaining proper weight. His mother comes to OPD with complaints of multiple episodes of urination and baby cries each time he passes urine. She also tells that the baby often smells of rotten fish in his urine and his sweat. Which of the following would you test in the urine of the infant?

1: Vinyl mandalic acid

2: Isovaleric acid

3: Trimethylamine

4: Oxoisocaproic acid

544-: Which of the following transports nitrogen from muscle to liver -

1: Lactate

2: Alanine

3: Glutamine

4: Aspertate

545-: Creatinine is synthesized from -

1: Arginine

2: Alanine

3: Histidine

4: Cysteine

546-: Pyridoxine deficiency leads to altered metabolism of?

1: Phenylalanine

2: Tryptophan

3: Methionine

4: Tyrosine

547-: Creatine is made up of all, except

1: Glycine

2: Alanine

3: Methionine

4: Arginine

548-: Oxaloacetate is formed from?

1: Proline

2: Glutamate

3: Aspartate

4: Lysine

549-: The amino acids producing ammonia in kidney is

1: Methionine

2: Glycine

3: Glutamine

4: Alanine

550-: The higher levels of protein structure are suppoed by

1: Hydrogen bonds

2: Disulphide bonds

3: Electrostatic interactions

4: All the above

551-: Which of the following is not a protein misfolding disorder?

1: Tuberculosis

2: Creutzfeldt Jakob disease

3: Alzheimer's disease

4: Cystic fibrosis

552-: Which of the following amino acid can have o-Glycoxylation linkage in oligosaccharide molecule:

1: Asparagine

2: Glutamine

3: Serine

4: Cysteine

553-: Protein fragments separation is/are done by

1: Western blot

2: Chromatography

3: Centrifugation

4: Ultrafiltration

554-: Collagen in basement membrane -

1: Type I

2: Type II

3: Type III

4: Type IV

555-: Active sites of serine protease contain

1: Histidine

2: Lysine or threonine

3: Arginine

4: Serine

556-: Hemoglobin electrophoresis is based on

1: molecular weight

2: charge

3: solubility

4: calorimetric properties

557-: A 7 day old infant presented with lethargy, decreased feeding, emesis, poor weight gain,hypotonia, a high-pitched cry, seizures, and the characteristic maple syrup smell of the urine.The following features are due to defect in

1: Oxidaton

2: Deamination

3: Carboxylation

4: Decarboxylation

558-: Putrescene - a polyamine is formed by decarboxylation of:

1: Arginine

2: Ornithine

3: Citrulline

4: Adenine

559-: Intact peptide bond is necessary for which test?

1: UV diffraction

2: Ninhydrin

3: Diazo reaction

4: All

560-: All of the following are excreted in Cysteinuria EXCEPT

1: Cystine

2: Cysteine

3: Arginine

4: Ornithine

561-: Isovaleric academia is caused by deficiency of -

1: Branched chain ketoacid dehydrogenase

2: Isovaleryl CoA decarboxylase

3: Isovaleryl CoA dehydrogenase

4: Isovaleryl CoA synthase

562-: X chromosome belongs to which group?

1: A

2: B

3: C

4: D

563-: A Carbamoyl phosphate synthetasel structure is marked by change in the presence of:

1: N-Acetyl glutamate

2: N-Acetyl Aspartate

3: Neuraminic acid

4: Oxalate

564-: Which of the following technique for protein separation is based on molecular size?

1: Ion exchange chromatography

2: Gel filtration chromatography

3: Affinity chromatography

4: Hydrophobic interaction chromatography

565-: Folding protein are

1: GLUT-1

2: Calnexin

3: Cytochrome 450

4: Insulin receptor

566-: In which organelle (s) of hepatocyte, the elongation of long chain fatty acid takes place?

1: Endoplasmic reticulum (ER)

2: Golgi body

3: Mitochondria

4: Lysosomes

567-: In HbS, Glutamic acid replaced by valine. What will be its electrophoretic mobility?

1: Increased

2: Decreased

3: No change

4: Depends on level of concentration of HbS

568-: Boiled cabbage or rancid butter smelling urine is seen in?

1: Phenylketonuria

2: Tyrosinemia

3: Isovaleric Acidaemia

4: Multiple carboxylase deficiency

569-: In argininosuccinase deficiency, what should be supplemented to continue the urea cyce -

1: Aspartate

2: Arginine

3: Citrull in

4: Argininosuccinate

570-: Which of the following pairs are examples of enantiomers

1: D Glucose and D Galactose

2: D Glucose and D Fructose

3: Alpha D Glucose and Beta D Glucose

4: D Glucose and L Glucose

571-: Which of the following is a purely ketogenic aminoacid?

1: Phenylalanine

2: Tyrosine

3: Tryptophan

4: Leucine

572-: Hyperammonemia type I is due to deficiency of -

1: CPS-I

2: CPS-n

3: Arginase

4: Arginosuccinase

573-: All of the following amino acids are conveed to Succinyl CoA, except

1: Methionine

2: Isoleucine

3: Valine

4: Histidine

574-: Disulphide bond is seen between

1: Arginine and histidine

2: Arginine and cysteine

3: Cysteine and cysteine

4: Lysine and cysteine

575-: Flexibility of protein depends on:

1: Glycine

2: Tryptophan

3: Phenylalanine

4: Histidine

576-: Which of the following has two aminogroups in the side chain -

1: Glycine

2: Arginine

3: Lysine

4: Asparagine

577-: In leucine zipper model, Leucine residue is seen after every

1: 3 amino acids

2: 6 amino acids

3: 7 amino acids

4: 12 amino acids

578-: A 28-year-old man presents to the emergency room (ER) with a large amount of blood and protein in his urine. He has had a sensorineural hearing loss since his teen years and has misshaped lenses (anterior lenticonus). The physician is suspicious of a genetic disorder that may lead to eventual kidney failure. If this is the case, the patient most likely has a mutation in which one of the following proteins?

1: Spectrin

2: a1-Antitrypsin

3: Collagen

4: Fibrillin

579-: Nontoxic form of storage and transportation of ammonia:

1: Aspartic acid

2: Glutamic acid

3: Glutamine

4: Glutamate

580-: Plasma tyrosine level in Richner-Hanhart syndrome is:

1: 1-2 mg/dL

2: 2-3 mg/dL

3: 4-5 mg/dL

4: 8-10 mg/dL

581-: The normal Nitrogen content in 200gm protein is

1: 8 g

2: 16 g

3: 32 g

4: 64 g

582-: Glutathione is composed of:

1: Glycine

2: Cycteine

3: Glutamate

4: All of the above

583-: Nitrogen fixation is done by which plant -

1: Legumes

2: Nuts

3: Cereales

4: Vegetables

584-: In the given cycle shown, Hydrolysis of Arginine forms what:

1: Lysine

2: Arginine

3: Ornithine

4: Urocanic acid

585-: Tyrosine utilized in synthesis of all except -

1: Melanin

2: Melatonin

3: Dopamine

4: Thyroxine

586-: Enzyme catalyzing reversible step in glycolysis is/are

1: Phosphofructokinase

2: Enolase

3: Pyruvate kinase

4: Phospho - glyceromutase

587-: Keratin of skin and nail differ because of

1: Disulphide bond

2: Covalent bond

3: Vander Waal bond

4: Hydrogen bond

588-: Non-protein amino acid is

1: Aspaate

2: Histidine

3: Ornithine

4: Tyrosine

589-: Which one of the following combination is wrong?

1: Phenylalanine - Niacin

2: Trytophon - Serotonin

3: Phenylalanine - Melanin

4: Tyrosine - Epinephrine

590-: GABA (Gamma amino butyric acid) is characteristic of

1: Post-synaptic excitatory transmitter

2: Post-synaptic inhibitory transmitter

3: Activator of glia-cell function

4: Inhibitor of glia cell function

591-: 5' to 3' exonuclease activity is seen in:

1: Proof reading

2: Repair of damaged DNA

3: DNA synthesis

4: DNA polymerase

592-: Imediate precursor of creatine -

1: Carbamoyl phosphate

2: Arginosuccinate

3: Guanidoacetate

4: Citrulline

593-: The portion of the antigen molecule which is recognized by antibody is known as:

1: Hapten

2: Epitope

3: Complement

4: Variable region

594-: In Wobble hypothesis, the true statement regarding variation is

1: 3' end of anticodon

2: 5' end of anticondon

3: m-RNA

4: t-RNA

595-: Tryptophan loading test is done to detect deficiency of:

1: TPP

2: PLP

3: Biotin

4: Folate

596-: At pH 7 the binding of 2,3-BPG to hemoglobin occurs at which site?

1: Sulphydryl group

2: Carboxy terminal

3: Amino terminal

4: Histidine

597-: 45 years male, blood sample gives purple-brown colour in Ehrich&;s solution, the substance is

1: Urobilinogen

2: Conjugated bilirubin

3: Unconjugated biliburin

4: Haemosedrin

598-: Protein synthesis occurs in which part of the cell:

1: Smooth endoplasmic reticulum

2: Rough endoplasmic reticulum

3: Golgi body

4: All of the above

599-: All of the following are tyrosine derivatives, EXCEPT

1: Serotonin

2: Melanin

3: Epinephrine

4: Thyroxine

600-: Which of the following is a cause of Unconjugated Hyperbilirubinemia?

1: Crigler-Najjar syndromes types I

2: Rotor syndrome

3: Dubin-Johnson syndrome

4: Hepatitis

601-: The transpoer gene defective in Hanup's disease:

1: SLC 6A 19

2: SLC 6A 18

3: SLC 36 A2

4: SLC 7A7

602-: Protein folding is done by:

1: Chaperone

2: Endoplasmic reticulum

3: Peroxisome

4: Lysosome

603-: Mothers with phenylketonuria (PKU) are at increased risk of having children with

1: Hydrocephaly

2: Spina bifida

3: Skeletal dysplasia

4: Mental retardation

604-: Frame shift mutation:

1: Substitution of amino acid

2: Changed mRNA base at 3rd nucleotide of codon

3: Due to stop codon

4: Deletion of 2 bases

605-: The ratio of carbon dioxide produced to oxygen consumed is known as

1: Basal metabolic rate

2: Respiratory quotient

3: Specific dynamic action

4: Paial pressure of carbon dioxide

606-: Co-enzyme used in transamination -

1: NAD

2: Biotin

3: Pyridoxal phosphate

4: Riboflavin

607-: Column chromatography using phenyl Sepharose beads separates proteins based on the

1: Affinity to ligand

2: Charge

3: Hydrophobicity

4: Stokes' radius

608-: Proteins are absorbed from GIT as:

1: Amino acids

2: Peptides

3: Peptones

4: All of the above

609-: A 42-year-old woman has been diagnosed with liver cancer and is being treated with 5-FU. 5-FU is successful in destroying the tumor cells because it blocks the production of which one of the following?

1: FH4

2: dTMP

3: UMP

4: Methylcobalamin

610-: For conversion of asparatate to asparagine, nitrogen comes from -

1: Alanine

2: Glutamate

3: Glutamine

4: Histidine

611-: Side chain of which amino acid contains sulfhydryl group -

1: Aspargine

2: Cysteine

3: Isoleucine

4: Threonine

612-: Amino acid which is both glucogenic and ketogenic

1: Leucine

2: Alanine

3: Serine

4: Tryptophan

613-: Defect in phenylketonuria-

1: Phenylanine hydroxylase

2: Homogentisate oxidase

3: Pyruvate hydroxylase

4: Fumarylacetoacetate hydroxylase

614-: Proteins are sorted by:

1: Golgi bodies

2: Mitochondria

3: Ribosomes

4: Nuclear membrane

615-: Which of the following aminoacid in a protein is involved in urea cycle and is required for synthesis of NO?

1: Arginine

2: Histidine

3: Tryptophan

4: Lysine

616-: DNA to mRNA is called as

1: Transcription

2: Translation

3: DNA replication

4: None

617-: Which of the following nitrogen base is not seen in RNA:

1: Adenine

2: Thymine

3: Guanine

4: Cytosine

618-: Precursor of melanin synthesis:

1: Tyrosine

2: Glycine

3: Phenylalanine

4: Lysine

619-: Branched-chain keto acid decarboxylation is defective in

1: Alkaptonuria

2: GM1 gangliosidosis

3: Maple syrup urine disease

4: Hanup's disease

620-: The collagen triple helix structure is not found in

1: Cytoplasm

2: Golgi apparatus

3: Lumen of endoplasmic reticulum

4: Intracellular vesicles

621-: A glycoprotein that regulates folding of proteins that are expoed from the cell is

1: Mucins

2: Transferrin

3: Calnexin

4: Lectin

622-: Ammonia is toxic to the brain because it leads to depletion of which substrate?

1: Succinate

2: Alpha ketoglutarate

3: Isocitrate

4: Fumarate

623-: Most commonly occurring amino acid in the collagen structure is

1: Serine

2: Glycine

3: Hydroxy proline

4: Proline

624-: Which is not ketogenic?

1: Leucine

2: Lysine

3: Methionine

4: Tryptophan

625-: The following separation technique depends on the molecular size of protein:

1: Chromatography on a carboxymethyl (CM) cellulose column

2: Isoelectric focusing

3: Gel filtration chromatography

4: Chromatography on a diethyl amino ethyl (DEAE)cellulose column

626-: In alkaptonuria the urine contains

1: Hemogentisic acid

2: Phenylalanine

3: Ketonis

4: Acetates

627-: Quarter staggered arrangement is seen in:

1: Immunoglobulin

2: Hemoglobin

3: Collagen

4: Keratin

628-: In which of the following reactions magnesium is required

1: ATPase

2: Dismutase

3: Phosphatase

4: Aldolase

629-: Maximum buffering capacity at physiological pH is for:

1: Valine

2: Cysteine

3: Histidine

4: Glycine

630-: What is the metabolic defect in Primary Oxaluria Type II?

1: Glycine cleavage system

2: Alanine glyoxalate amino transferase

3: D GIycerate dehydrogenase

4: Excess vitamin C

631-: Keratin is a

1: Globular protein

2: Cylindrical protein

3: Fibrous protein

4: None of the above

632-: Glycine is present in

1: Hemoglobin

2: Gulatathione

3: Purine

4: All

633-: Phenylketonuria I is due to deficiency of -

1: Phenylalanine hydroxylase

2: Homogentisate oxidase

3: Tyrosinase

4: None

634-: Keratin of skin is softer than keratin in nail because keratin in skin has

1: Less number of disulphide bridges

2: Less number of salt bridges

3: High sodium content

4: Different affinity for water

635-: An amino acid which does not paicipate in alpha helix formation is

1: Leucine

2: Glycine

3: Proline

4: Lysine

636-: Enzyme deficient in maple syrup urine disease:

1: Branched chain alpha keto acid decarboxylase

2: Methionine adenosyl transferase

3: Fumarylacetoacetate hydrolase

4: Tyrosine aminotransferase

637-: Which is/are not transport protein (s):

1: Transferrin

2: Collagen

3: Ceruloplasmin

4: Hemoglobin

638-: Which of the following factors gives the elastin molecule the ability to stretch and recoil?

1: Hydroxylation of proline and lysine rich regions

2: Cross-links between lysine residues

3: Elastase activity

4: Triple helix formation

639-: Millon's test is used for detection of -

1: Phenylalnine

2: Cystine

3: Tyrosine

4: Tryptophan

640-: All the following are characteristic of I-cell disease except

1: Coarse facial features

2: Corneal clouding

3: Failure to thrive

4: Buphthalmos

641-: Which of the following group of proteins assist in the folding of other proteins?

1: Proteases

2: Proteosomes

3: Templates

4: Chaperones

642-: Xanthurenic acid, accumulation occurs due to pyridoxine deficiency, is a metabolite of which amino acid?

1: Tyrosine

2: Phenylalanine

3: Tryptophan

4: Alanine

643-: Which is not a protein misfolding disease?

1: Prion disease

2: Alzheimer's disease

3: Beta thalassemia

4: Ehler's Danlos syndrome

644-: Urea is end product of

1: Aminoacid-nitrogen metabolism

2: HMP. Pathway

3: Fatty acid- oxidation

4: Glycogenolysis

645-: Organelle involved in protein soing is

1: Golgi apparatus

2: Mitochondria

3: Ribosomes

4: Nuclear membrane

646-: Cytochrome C of the bacteria has 50% identity of amino acid sequence with that of human. Which of the following is the most conserved parameter in these 2 proteins

1: Quaernary structure

2: Teiary structure

3: Amino acid sequence

4: Loop and turn segments

647-: UAC to UAG

1: Nonsense mutation

2: Frameshift mutation

3: Deletion

4: Missense mutation

648-: Which of the following is not an essential amino add?

1: Methionine

2: Tryptophan

3: Leucine

4: Alanine

649-: Collagen ------ forms the main pa of anchoring fibrils in epithelial tissues

1: VII

2: IV

3: VIII

4: I

650-: Which of the following amino acid is extracted predominantly by muscle, having been spared by the liver in postprandial state?

1: Valine

2: Glutamine

3: Glutamate

4: Alanine

651-: Branched chain ketoacid decarboxylation is defective in:

1: Maple syrup urine disease

2: Hartnup disease

3: Alkaptonuria

4: GMI gangliosidosis

652-: All of the following amino acids undergo transamination except?

1: Arginine

2: Alanine

3: Proline

4: Glycine

653-: First protein to be broken down for energy in prolonged starvation is from-

1: Skeletal muscle

2: Smooth muscles

3: Kidney

4: Liver

654-: The technique used for separation and detection of RNA is which one of the following?

1: Northern Blot

2: Southern Blot

3: Eastern Blot

4: Western Blot

655-: Which is not a biological derivative of tyrosine?

1: Melanin

2: Melatonin

3: Epinephrine

4: Dopamine

656-: Cysteine is synthesized from -

1: Methionine

2: Arginine

3: Histidine

4: Lysine

657-: Hb saturation with oxygen is mostly dependent on

1: pO2

2: pCO2

3: HCO3-levels

4: Hb %

658-: Sulphur containing bond is not found in

1: Chondroitin

2: Keratan

3: Dermatan

4: Hyaluronic acid

659-: Sulphur containing amino acids metabolism needs-

1: Pyridoxine

2: Folic acid

3: Vitamin B12

4: All of the above

660-: In Maple syrup urine disease, which of the following compounds is accumulated:

1: Homogentisic acid oxidase

2: Methyl malonyl CoA

3: a-keto acid decarboxylase

4: Transaminase

661-: Which hormone synthesized from Tyrosine?

1: Cakitrioi

2: Calcitonin

3: Thyroxin

4: Cortisol

662-: Proteins responsible to prevent faulty folding of protein is?

1: Chaperones

2: Histones

3: Proteases

4: Proteosomes

663-: 21st aminoacid is -

1: b alanine

2: Selenocysteine

3: Pyrrolysine

4: Hydroxyproline

664-: Enzyme deficiency in Alkaptonuria is

1: Tyrosine hydroxylase

2: Homogentisate acid oxidase

3: Phenyl alanine hydroxylase

4: Cystathione synthase

665-: Sites of heme synthesis are all of these except:

1: RBC

2: Hepatocytes

3: Osteocytes

4: Bone marrow

666-: Uronic acid pathway is important for the formation of-

1: GAG (glycosamine glycans)

2: Glycoproteins

3: Conjugation of bilirubin

4: All of the above

667-: Which of the following amino acid contains free sulphydryl group -

1: Cysteine

2: Methionine

3: Serine

4: Glycine

668-: Free SH group is present in

1: Cysteine

2: Methionine

3: Taurine

4: Homoserine

669-: Polypeptide formation in amino acid is by:

1: Primary structure

2: Secondary structure

3: Tertiary structure

4: Quaternary structure

670-: In Maple syrup urine disease, the amino acids excreted in urine are all EXCEPT:

1: Leucine

2: Phenylalanine

3: Isoleucine

4: Valine

671-: Which is an inhibitor of ferrochelatase ?

1: Lead

2: Mercury

3: Iron

4: Arsenic

672-: Mousy (musty) odour of urine is feature of

1: Phenylketonuria

2: Maple syrup urine disease

3: Glutaric acidemia

4: Howkinsinuria

673-: When the following amino acids are separated by running them on agarose gel, at pH 7, which one of them will migrate slowest to the anodic end?

1: Glycine

2: Valine

3: Aspaic acid

4: Lysine

674-: Peptide bond is formed between:-

1: Carboxyl group on one amino acid and the R-group of adjacent amino acid

2: Carboxyl group on both amino acids

3: Amino group on one amino acid and the carboxyl group of the adjacent amino acid

4: The amino group of both amino acids

675-: Albinism is due to deficiency of

1: Tyrosinase

2: Homogentisate oxidase

3: Fumaryl acetoacetate hydrolase

4: Chylomicrons

676-: A 70-year-old man presented with itching, jaundice and mass palpable per abdomen and clay coloured stools. Two tests done in his urine sample is shown here. It gave positive results. What is the type of Jaundice he is suffering from?

1: Obstructive jaundice

2: Hemolytic jaundice

3: Prehepatic jaundice

4: Hepatic jaundice

677-: If cellular proteins do not fold into a specific conformation, their function is affected. Ceain disorders arise if specific proteins are misfolded. Which of the following disorders arises due to conformational isomerization?

1: Familial fatal insomnia

2: Hepatitis delta

3: Pernicious anemia

4: Lesch-Nyhan syndrome

678-: All of the following are cofactors for Branched chain ketoacid dehydrogenase, EXCEPT

1: FAD

2: Lipoamide

3: NADP

4: Thiamin pyrophosphate

679-: All of the following are true regarding cytosolic eukaryotic gene expression EXCEPT:

1: Capping helps in attachment of mRNA to 40 S Ribosome

2: N formyl methionine t-RNA will be the first t-RNA to come into action

3: EF2 shifts between GDP & GTP

4: Releasing factor releases the polypeptide chain from the P site

680-: Niacin is derived from which amino acid -

1: Tyrosine

2: Phenylalanine

3: Tryptophan

4: Methionine

681-: Bicarbonate moves out of RBC in peripheral tissues in exchange for

1: Na+

2: HP02 4-

3: Cl-

4: S02 4-

682-: The composition of creatine is:

1: Glycine, arginine, methionine

2: Glycine and histidine

3: Glycine, glutamate, aspartate

4: Histidine and methionine

683-: Gamma amino butyrate is synthesized from

1: Fumarate

2: Glutamate

3: Histidine

4: Glycine

684-: What amount of tryptophan produces 1 gm of niacin?

1: 40 mg

2: 50 mg

3: 60 mg

4: 70 mg

685-: Which of the following is NOT seen in DNA:

1: Cytosine

2: Adenine

3: Guanine

4: Uracil

686-: All of the following vitamins are involved in sulphur containing amino acid metabolism except?

1: Vitamin B3

2: Vitamin B6

3: Vitamin B9

4: Vitamin B12

687-: Following amino acid form an integral part of collagen synthesis:

1: Lysine

2: Leucine

3: Arginine

4: Glutamic acid

688-: Which of the following special amino acid is not formed by post-translational modification?

1: Triodothyronine

2: Hydroxyproline

3: Hydroxylysine

4: Selenocysteine

689-: Amino acids excreted in the urine in cystinosis

1: Cystine

2: Ornithine

3: Arginine

4: All of the above

690-: Hyperornithinemia-hyperammonemia- homocitrullinuria {HHH} syndrome is due to deficiency of-

1: Ornithine permease

2: Ornithine translocase

3: Ornithine decarboxylase

4: Ornithine Transcarbamoylase

691-: Which of the following is a modified amino acid?

1: Arginine

2: Cysteine

3: Asparagine

4: Threonine

692-: Which is 21st amino acid-

1: Alanine

2: Cystine

3: Arginine

4: Seleno cysteine

693-: Urea cycle linked to kreb's cycle by?

1: Fumarate

2: Oxaloacetate

3: Ornithine

4: Citrullin

694-: At physiological pH, the carboxy-terminal of a peptide is -

1: Positively charged

2: Negatively charged

3: Neural

4: Infinitely charged

695-: Succinyl CoA is formed by?

1: Valine

2: Isoleucine

3: Methionine

4: All of the above

696-: Tertiary structure of protein is best determined by:

1: Chromatography

2: X- Ray diffraction crystallography

3: Electrophoresis

4: Mass spectrometry

697-: Which one of the following is the amino acid in Hb that accepts H+ and allows Hb to act as a buffer to acids?

1: Alanine

2: Histidine

3: Serine

4: Threonine

698-: Tripeptide used for oxidation-raduction reaction -

1: Creatinine

2: Glutathione

3: Melanin

4: None

699-: Xanthurenic acid is produced in

1: Tyrosine metabolism

2: Tryptophan metabolism

3: Cysteine metabolism

4: Valine metabolism

700-: The following metabolite is a derivative of tryptophan

1: Melatonin

2: Thyroxine

3: Epinephrine

4: Nor epinephrine

701-: The 'catalytic triad' in the active centre of proteases contains the following amino acids?

1: Ser, Lys, Arg

2: Ser, His, Asp

3: His, Phe, Trp

4: None of the above

702-: Which of the following clinical laboratory observations is suggestive of Hartnup disease?

1: Burnt-sugar smell in urine

2: High plasma phenylalanine levels

3: Extremely high levels of citrulline in urine

4: High fecal levels of tryptophan and indole derivatives

703-: Which of the following is elevated in Pyridoxal Phosphate deficiency?

1: FIGLU

2: Homocystine

3: Methylmalonic acid

4: Xanthurenic acid

704-: Which technique is used to study structure of molecules?

1: X-ray crystallography

2: Electron microscopy

3: Ion exchange thromatography

4: Agarose gel electrophoresis

705-: Protein acts as buffer due to which propey

1: Colloid

2: Basic

3: Acidic

4: Amphipathic (amphoteric in nature)

706-: Hartnup disease is due to defective transport of -

1: Histidine

2: Argine

3: Lysine

4: Tryptophan

707-: Most common enzyme deficient in urea cycle:

1: Ornithine transcarbamoylase

2: Arginase

3: Carbamoyl phosphate synthase I

4: Arginosuccinate synthase

708-: All of the following are essential aminoacids except

1: Methionine

2: Lysine

3: Alanine

4: Leucine

709-: The protein defective in cystinosis is responsible for

1: Absorption of cysteine from intestine

2: Absorption of cysteine from renal tubules

3: Efflux cysteine from endoplasmic reticulum

4: Efflux of cysteine from lysosome

710-: One of the following is an example of phosphoprotein

1: Histone

2: Casein

3: Ceruloplasmin

4: Albumin

711-: Which of the following is an amine hormone -

1: TSH

2: T4

3: Insulin

4: FSH

712-: True about glutathione is

1: 4 amino acids

2: Gamma peptide

3: Alpha peptide

4: 3 amino acids

713-: Glutamate dehydrogenase in mitochondria is activated by:

1: ATP

2: GTP

3: NADH

4: ADP

714-: Dopamine beta-hydroxylase catalyzes

1: Dopa to dopamine

2: Norepinephrine to dopamine

3: Epinephrine to norepinephrine

4: Dopamine to norepinephrine

715-: In collagen synthesis, hydroxyproline is formed from

1: Proline

2: Lysine

3: Hydroxylysine

4: None of the above

716-: Methotrexate (an older cancer treatment medication) can be used as first-line therapy for rheumatologic and psoriatic diseases. One of the side effects of methotrexate usage mimics which one of the following vitamin deficiencies?

1: Pyridoxine (B6)

2: Biotin (B7)

3: Niacin (B2)

4: Folate (B9)

717-: Which of the following is the ratelimiting enzyme in the biosynthesis of catecholamines?

1: Dopamine hydroxylase

2: Tyrosinase

3: DOPA decarboxylase

4: Tyrosine hydroxylase

718-: In Alkaptonuria deficiency is:

1: Phosphofructo kinase

2: HMG CoA reductase

3: Homogentisate oxidase

4: Xanthine oxidase

719-: Amino acid required for formation of thyroxine

1: Tryptophan

2: Tyrosine

3: Glutamine

4: Cysteine

720-: Chaperone proteins play a role in

1: Protein folding

2: Protein misfolding

3: Denaturation

4: All the above

721-: Dopamine is synthesized from:

1: Tryptophan

2: Threonine

3: Tyrosine

4: Lysine

722-: Phenylketonuria is due to deficiency of -

1: Phenylalanine transaminase

2: Phenylalanine hydroxylase

3: Tyrosine transaminase

4: Tyrosine hydroxylase

723-: Neutral amino acid is

1: Aspaate

2: Arginine

3: Glycine

4: Histidine

724-: What constitutes the driving force for transpo of proteins into and out of the nucleus?

1: ATP hydrolysis within the cytosol

2: ATP hydrolysis within the nucleus

3: GTP hydrolysis within the cytosol

4: GTP hydrolysis within the nucleus

725-: Which of the following is polar?

1: Isoleucine

2: Methionine

3: Glutamic acid

4: Tryptophan

726-: All the following are hydrophilic amino acids Except

1: Cysteine

2: Proline

3: Glycine

4: Serine

727-: Hanup disease is mainly due to:

1: Niacin deficiency

2: Defective transpo of tryptophan

3: Defective serotonin biosynthesis

4: Thiamine deficiency

728-: Vesicles leaving the trans-Golgi carry on their surfaces a protein which targets them to the appropriate organelle. This protein is:

1: t-SNARE

2: Coatomer

3: v-SNARE

4: Clathrin

729-: Which amino acid required in infants and not in adults?

1: Histidine

2: Glycine

3: Isoleucine

4: Valine

730-: Nitric oxide is derived from which amino acid-

1: Histidine

2: Lysine

3: Methionine

4: Arginine

731-: Glucogenic amino acid are all except

1: Valine

2: Alanine

3: Tryptophan

4: Methionine

732-: Maple syrup urine disease is due accumulation of -

1: Phenylalanine

2: Tyrosine

3: Branched chain amino acids

4: Tryptophan

733-: Which process involves formation of non essential amino acid from keto acid ?

1: Deamination

2: Transamination

3: Dehydrogenation

4: Oxidation

734-: Type of collagen found in space of Disse in liver is

1: Collagen I & II

2: Collagen III & IV

3: Collagen II & III

4: Collagen II & V

735-: The enzyme trypsin is specific for peptide bonds of:

1: Basic amino acids

2: Acidic amino acids

3: Aromatic amino acids

4: Next to small amino acid residues

736-: Transpo of glucose from the lumen to the mucosal cell is dependent on the diffusion of

1: K+

2: HCO3

3: Na+

4: Proteins

737-: Deficiency of which of the following micronutrient results in Menkes syndrome

1: Magnesium

2: Copper

3: Selenium

4: Manganese

738-: Sulphur of cystein are not used/ utilized in body for the following process/product:

1: Help in conversion of cyanide to thiocynate

2: Thiosulphate formation

3: Introduction of sulphur atom in methionine

4: Disulfide bond formation b/w two adjacent peptide

739-: Which of the following are intracellular events occurring in fibroblast during synthesis of collagen?

1: Hydrolysis of procollagen to collagen

2: Glycosylation of proline

3: Formation of triple helix

4: Formation of covalent cross link b/w fibrils

740-: Urea cycle occurs in:

1: Cytoplasm

2: Mitochondria

3: Both

4: Endoplasmic reticulum

741-: Strength and rigidity in keratin is due to -

1: Leucine

2: Cysteine

3: Lithium

4: None of the above

742-: The Watson's Crick double helix model of DNA is

1: Right handed anti parallel

2: Left handed anti parallel

3: Right handed parallel

4: Left handed parallel

743-: Glutamate is not a precursor of

1: Ammonia

2: Proline

3: Glutathione

4: Histidine

744-: Which one of the following molecules serve as the earliest marker in myocardial infarction

1: Myoglobin

2: Troponin

3: HbA2

4: CK MB

745-: Hartnup disease related to -

1: Rickets symptoms

2: Pellagra symptoms

3: Burning foot syndrome

4: Angular stomatitis

746-: Albinism results from the deficiency of

1: Homogentisic acid oxidase

2: Phenylalanine hydroxylase

3: Tyrosinase

4: Xanthine oxidase

747-: On consumption of which aminoacid, requirement of methionine is reduced because of sparing effect?

1: Homocysteine

2: Cysteine

3: Lysine

4: Arginine

748-: All of the following represent disorders or protein misfolding, except

1: Alzheimer's disease

2: Tuberculosis

3: Cystic fibrosis

4: Creutzfeldt-Jakob disease

749-: A young male presented with X-linked recessive disorder with hyperuricemia and mild retardation develops

1: Bronch chain amino acids metabolites deficiency

2: Hemogentisate oxidase defective enzymes

3: Hypoxanthine phosphoribosyl transferase deficiency

4: Phenylalanine hydroxylase deficiency

750-: HHH syndrome results from the defect in the enzyme is

1: Ornithine Permease

2: Ornithine Transcarbamoylase

3: Argininosuccinate Synthase

4: Argininosuccinate Lyase

751-: Role of selenocystein is important in -

1: Hydroxylation of dopamine

2: Oxidation of drugs

3: Antioxidant mechanism

4: None of the above

752-: Keratin contains

1: Arginine

2: Histidine

3: Lysine

4: All

753-: Heme is which porphyrin?

1: Type I

2: Type II

3: Type III

4: Type IV

754-: True about Lesch Nyhan Syndrome:

1: Patient have normal intellectual capacity

2: Pyrimidine overproduction is the cause

3: Uric acid stones are frequently formed

4: X- Linked dominant

755-: The amino acid that can be converted into a vitamin is:

1: Glycine

2: Tryptophan

3: Phenylalanine

4: Lysine

756-: Cystinuria presents with excess of

1: Cysteine

2: Tyrosine

3: Glutamine

4: Valine

757-: Ubiquitin is involved in

1: Protein folding

2: Protein degradation

3: Synthesis of nucleic acid

4: Glycosylation of proteins

758-: Which of the following amino acid can be synthesised from a glycolytic intermediate in human body?

1: Aspaate

2: Glutamate

3: Histidine

4: Serine

759-: Most abundant type of collagen in human body

1: Type I

2: Type III

3: Type IV

4: Type VI

760-: The amino acid that produces kinks in the b pleated structure of proteins is

1: Glycine

2: Serine

3: Proline

4: Alanine

761-: Tyrosinosis most common cause is:

1: Fumarylacetoacetate hydrolase

2: Tyrosine transaminase

3: Parahydroxy phenyl pyruvate hydroxylase

4: Homogentisate oxidase

762-: Which of the following can be a homologous substitution for valine in hemoglobin?

1: Isoleucine

2: Glutamic acid

3: Phenylalanine

4: Lysine

763-: Oxaloacetate synthesized from which amino acid -

1: Aspartate

2: Glycine

3: Serine

4: Valine

764-: Covalent bond is seen in

1: Hydrogen bond

2: Disulphide bond

3: Electrostatic bond

4: Ionic bond

765-: Which of the following may be presenting feature of phenylketonuria?

1: Salaam spasms

2: Huntington's chorea

3: Diarrhoea

4: Haematemesis

766-: In the body, metabolism of 10 gms. of protein would produce approximately

1: 1 K. Caorie

2: 41 K calories

3: 410 K calories

4: 41 calories

767-: All of the following are essential amino acids except:

1: Methionine

2: Lysine

3: Alanine

4: Leucine

768-: Glutathione consists of cysteine plus glutamate plus -

1: Leucine

2: Lysine

3: Glycine

4: Valine

769-: Creatinine is formed from all except -

1: Glycine

2: Arginine

3: Methionine

4: Asparagine

770-: Which of the following is not true for alpha helix?

1: It is one of the most impoant secondary structure

2: It has a net dipole moment

3: All hydrogen bonds are aligned in the same direction

4: Long stretches of left handed helices occur in proteins

771-: Proteins are transported into the cell by?

1: Pinocytosis

2: Osmosis

3: Active diffusion

4: Passive diffusion

772-: Protein is purified using ammonium sulfate by:

1: Salting out

2: Ion exchange chromatography

3: Mass chromatography

4: Molecular size exclusion

773-: Which is not an essential amino acid?

1: Tryptophan

2: Threonine

3: Histidine

4: Cystein

774-: All of the following amino acids forms acetyl CoA Pyruvate Dehydrogenase EXCEPT

1: Glycine

2: Hydroxyproline

3: Tyrosine

4: Alanine

775-: Alpha helix and beta pleated sheet is seen in

1: Primary structure of protein

2: Secondary structure of protein

3: Teiary structure of protein

4: Quaternary structure of protein

776-: Which of the following is a negative phase proteins:

1: Transthyretin

2: C-Reactive Protein

3: Ferritin

4: Ceruloplasmin

777-: Glucogenic amino acid is-

1: Leucine

2: Lysine

3: Glutamine

4: None

778-: Enediols are formed by treating the sugars with

1: Dilute acid

2: Concentrated acid

3: Dilute alkali

4: Concentrated alkali

779-: What is Isoelectric point?

1: When pH = pI

2: When zwitterion exists

3: Protein precipitation occurs

4: All

780-: The biosynthesis of Epinephrine from Norepinephrine requires

1: Pyridoxal phosphate

2: Biotin

3: Cytochrome P450

4: S-adenosyl methionine

781-: Hexokinase is a

1: Transferase

2: Reductase

3: Oxidoreductase

4: Oxidase

782-: Which amino acid causes hypoglycemia?

1: Phenylalanine

2: Lysine

3: Leucine

4: Valine

783-: Albumin is exclusively synthesized by

1: Liver

2: Kidneys

3: Spleen

4: Skeletal muscle

784-: Which of the following techniques for purification of proteins can be made specific for a given protein?

1: Dialysis

2: Affinity chromatography

3: Gel filtration chromatography

4: Ion exchange chromatography

785-: Cystine is formed from

1: Arginine

2: Histidine

3: Cysteine

4: Alanine

786-: Non-essential amino acid

1: Valine

2: Leucine

3: Tryptophan

4: Aspaate

787-: Tyrosinase is

1: Oxidase

2: Transferase

3: Lyase

4: Isomerase

788-: Glucose-6 Phosphatase deficiency is seen in

1: Von Gierke disease

2: Tay sach disease

3: Pompe disease

4: Anderson disease

789-: Boiled cabbage or rancid butter smelling urine is seen in Phenylketonuria

1: Tyrosinemia

2: Isovaleric Acidaemia

3: Multiple carboxylase deficiency

4: Phenylketonuria

790-: The following enzyme defect causes acute intermittent porphyria

1: Uroporphyrinogen III synthase

2: Uroporphyrinogen decarboxylase

3: Hydroxymethylbilane synthase

4: Protoporphyrinogen oxidase

791-: Which of the following amino acids shows a tendency to form a left-handed helix?

1: Cysteine

2: Glycine

3: Arginine

4: Histidine

792-: Which among the following amino acids absorbs UV light?

1: Leucine

2: Lysine

3: Tyrosine

4: Valine

793-: Branched chain ketoaciduria is a defect of catabolism of all the following aminoacids except-

1: Leucine

2: Isoleucine

3: Valine

4: Methionine

794-: Lipids and proteins interact in membrane by: (PGI June 2007)

1: Hydrophobic interactions

2: Both hydrophobic and covalent interactions

3: Covalent bonds

4: H bonds

795-: Cysteine is formed from -

1: Methionine and serine

2: Methionine and glycine

3: Alanine and glycine

4: Serine and glycine

796-: Proteins are separated on the basis of charge in -

1: SDS-PAGE

2: Ultracentrifugation

3: Affinity chromatography

4: HPLC

797-: Rate limiting enzyme in catecholamine synthesis-

1: Dopa decarboxylase

2: N-methyltransferase

3: Dopamine hydroxylase

4: Tyrosine hydroxylase

798-: McArdle disease can be caused by a problem with the metabolism of which particular compound.

1: Glycogen

2: Collagen

3: Dopamine

4: Valine

799-: Which of the following is NOT a protein misfolding disorder:

1: Alzheimer's disease

2: Creutzfeldt Jakob disease

3: Cystic fibrosis

4: Tuberculosis

800-: Cysteine is synthesized from

1: Methionine

2: Arginine

3: Histidine

4: Lysine

801-: Which of the following enzymes, requires Biotin as the coenzyme

1: Pyruvate Dehydrogenase

2: Pyruvate Kinase

3: Pyruvate Carboxylase

4: PEP Carboxy Kinase

802-: Which enzyme defect causes phenylketonuria?

1: Phenylalanine oxidase

2: Phenylalanine hydroxylase

3: Tyrosinase

4: Tyrosine transaminase

803-: Rough endoplasmic reticulum is site of synthesis for

1: Protein

2: Cholesterol

3: Carbohydrate

4: Fat

804-: Creatinine is formed from:

1: Arginine

2: Lysine

3: Leucine

4: Histamine

805-: 1st product of tryptophan Catabolism -

1: Kynurenine

2: Xantheurenic acid

3: Bradykinin

4: Melatonin

806-: 21st Amino acid is

1: Selenocysteine

2: Valine

3: Tyrosine

4: Hydroxyproline

807-: Tyrosine is synthesized from-

1: Tryptophan

2: Phenylalanine

3: Histidine

4: Methionine

808-: A screening test for phenylketonuria (PKU) is performed on umbilical cord blood from a fair-skinned blond, blue-eyed infant born to dark-complexioned parents. The test is repoed as negative, and no dietary restrictions are imposed. At 1 year of age, the child is seen again, this time with obvious signs of severe mental retardation, and a diagnosis of PKU is made. The diagnosis was missed at bih because

1: cord blood is not a good source of fetal blood.

2: the screening (Guthrie) test has low sensitivity.

3: the test should have been performed on maternal blood.

4: the test was performed too early

809-: Selenocysteine is similar to

1: Arginine

2: Alanine

3: Cysteine

4: Lysine

810-: Intracellular soing and packing done by

1: ER

2: Golgi apparatus

3: Ribosome

4: Cytoplasm

811-: Alpha helix is stabilized by?

1: Disulfide linkage

2: Covalent bonding

3: Hydrophobic interactions

4: Hydrogen bonds

812-: Source of maltose is

1: Beet sugar

2: Milk

3: Germinating Cereals

4: Yeast

813-: Gamma amino butyrate is synthesized from? -

1: Fumarate

2: Glutamate

3: Histidine

4: Glycine

814-: Agranular cytoplasmic reticulum is involved in the synthesis of

1: Protein

2: Lipid

3: Vitamin

4: Carbohydrate

815-: Nitric oxide acts by:

1: cGMP

2: cAMP

3: Calcium

4: Kinase

816-: The most predominantly occurring amino acid in collagen is

1: Valine

2: Cysteine

3: Arginine

4: Glycine

817-: Synthesis of secretory proteins takes place in

1: Golgi complex

2: Endoplasmic reticulum

3: First in cytoplasm then in nucleus

4: First in endoplasmic reticulum then in cytoplasm

818-: The initiation of hemoglobin synthesis requires:

1: Histidine

2: Glycine

3: Folate

4: Iron

819-: Which of the following amino acids is purely ketogenic?

1: Phenylalanine

2: Leucine

3: Proline

4: Tyrosine

820-: Glutathione contains all except-

1: Cysteine

2: Glutamine

3: Glutamic acid

4: Glycine

821-: Nitisinone is an example of

1: Enzyme activation therapy

2: Enzyme replacement therapy

3: Substrate addition therapy

4: Substrate reduction therapy

822-: Most specific marker of pheochromocytoma:

1: VMA

2: Catecholamine

3: 5 - HIAA

4: Serotonim

823-: Essential amino acid amongst the following

1: Arginine

2: Lysine

3: Threonine

4: All

824-: Which of the following interactions contributes most to protein folding

1: Covalent Bond

2: Ionic interactions

3: Hydrophobic

4: Vander waal's interaction

825-: Which of the following sequence is directed in a retrograde manner to EPR in COP-1 vesicles?

1: KDEL

2: KDAL

3: DALK

4: KDUL

826-: All are true about selenocystiene EXCEPT:

1: Considered as 21stAmino acid

2: Coded by UGA

3: Occurs in glutathione peroxidase

4: Made of cysteine and methionine

827-: Rate limiting step in catecholamine synthesis:-

1: Phenylethanolamine N-methyltransferase

2: Dopadecarboxylase

3: Tyrosine hydroxylase

4: Tryptophan decarboxylase A

828-: Which is 21st amino acid?

1: Alanine

2: Cystine

3: Arginine

4: Seleno cysteine

829-: Which of the following is based on ionic charge -

1: Filtration

2: Dialysis

3: Electrophoresis

4: Ultracentrifugation

830-: Not seen in alpha helix

1: Alanine

2: Leucine

3: Proline

4: Isoleucine

831-: A protein with molecular weight of 100 kD is subjected to SDS PAGE electrophoresis. The SDS PAGE electrophoresis pattern shows two widely separated bands of 20kD after addition of Mercaptoethanol. The true statement regarding this will be

1: The protein has undergone complete lysis

2: The protein is a monomer of 20kD and 30kD protein

3: The protein is a dimer of two 20kD proteins

4: The protein is a tetramer of 20kd and 30kD proteins

832-: Ketogenic amino acids are all except-

1: Leucine

2: Lysine

3: Tryptophan

4: Histidine

833-: Most important amino acid which acts as methyl group donor-

1: Cysteine

2: Methionine

3: Tyrosine

4: Tryptophan

834-: Which amino acid can protonate and deprotonate at neutral pH?

1: Histidine

2: Leucine

3: Glycine

4: Arginine

835-: Aspaame contains

1: Phenylalanine

2: Histidine

3: Tryptophan

4: Tyrosine

836-: Branched chain amino acid which is both ketogenic and glucogenic -

1: Leucine

2: Isoleucine

3: Valine

4: Tryptophan

837-: Trypsin cleaves

1: Arginine

2: Glutamate

3: Lysine

4: Proline

838-: Which of the following aminoacids is a component of Thioredoxin reductase-

1: Selenocysteine

2: Cysteine

3: Methionine

4: Homocysteine

839-: Taurine is synthesized from which amino acid?

1: Tryptophan

2: PhenylAlanine

3: Cysteine

4: Alanine

840-: Serotonin is:

1: 5 Hydroxy tryptophan

2: 5 Hydroxy tryptamine

3: 5 Carboxy tryptamine

4: 5 Carboxy tryptophan

841-: Only ketogenic aminoacid is -

1: Leucine

2: Isoleucine

3: Tyrosine

4: Tryptophan

842-: Urea cycle enzymes are

1: Glutaminase

2: Asparginase

3: Arginosuccinate synthetase

4: Ornithine transcaroxylase

843-: PKU is a congenital amino acid metabolic disorder. In the following rare variants of PKU, dihydrobiopterin synthesis is affected. The enzyme deficient is

1: Histidine decarboxylase

2: Phenylalanine hydroxylase

3: Dihydropterin reductase

4: Tyrosine deficiency

844-: Ninhydrin test is used for -

1: Bile salts

2: Amino acids

3: Nucleic acid

4: Lipids

845-: The amino acid which serves as a carrier of ammonia from skeletal muscle to liver is

1: Alanine

2: Methionine

3: Arginine

4: Glutamine

846-: 1st product of tryptophan catabolism is?

1: Kynerunine

2: Bradykinin

3: PAF

4: Xantheurenate

847-: The rate-limiting step for norepinephrine synthesis

1: Conversion of phenylalanine to Tyrosine

2: Conversion of Tyrosine to DOPA

3: Conversion of DOPA to dopamine

4: Conversion of dopamine to norepinephrine

848-: All of the following amino acids are conveed to succinyl-CoA, except

1: Methionine

2: Isoleucine

3: Valine

4: Histidine

849-: Blood group antigens belong to the class

1: Conjugated proteins

2: Unconjugated protein

3: Simple protein

4: Hemoglobin binding protein

850-: All of the following are conditions associated with negative nitrogen balance, EXCEPT:

1: Burns

2: Convalescence

3: Infection

4: Malnutrition

851-: Proteins are separated on the basis of size by

1: SDS - PAGE

2: HPLC

3: Affinity Chromatography

4: Ion-exchange Chromatography

852-: All are aromatic amino acids EXCEPT:

1: Phenylalanine

2: Tyrosine

3: Tryphophan

4: Lysine

853-: Which of the following enzymes is used in Recombinant DNA research for Homopolymer tailing

1: Reverse transcriptase

2: S1 Transferase

3: Polynucleotide kinase

4: Terminal transferase

854-: Hanup disease, limiting amino acid

1: Tyrosine

2: Tryptophan

3: Rhenylalanine

4: None

855-: Precursor of norepinephrine -

1: Tryptophan

2: Tyrosine

3: Methionine

4: Asparagine

856-: A child with pellagra like symptoms, amino acids in urine, family history of one siblings affected and three normal. Parents are normal. What is the diagnosis?

1: Phenylketonuria

2: Alkaptonuria

3: Maple syrup urine disease

4: Hanup's disease

857-: Maple syrup urine disease is due accumulation of

1: Phenylalanine

2: Tyrosine

3: Branched chain amino acids

4: Tryptophan

858-: The common feature of Nuclear Localization Signals is

1: They are rich in acidic amino acid residues and are located at the C-terminus of the protein

2: They are rich in basic amino acid residues and are located at the C-terminus of the protein

3: They are rich in acidic amino acid residues and may be located anywhere in the protein sequence

4: They are rich in basic amino acid residues and may be located anywhere in the protein sequence

859-: DNA fragments formed by restriction enzymes are separated by

1: Ultra centrifugation

2: Agarose gel electrophoresis

3: Paper chromatography

4: HPLC

860-: Urea,Creatine and Nitric oxide are synthesized from?

1: Alanine

2: Arginine

3: Aspaate

4: Glycine

861-: HHH syndrome is due to a defect of which pathway?

1: HMP shunt

2: Citric acid cycle

3: Bile acid synthesis

4: Urea cycle

862-: In Hanup's disease, the following amino acids are excreted into the urine

1: Basic amino acids

2: Acidic amino acids

3: Neutral amino acids

4: Hydrophilic aminoacids

863-: Maple syrup urine disease is characterised by all except -

1: Hypotonia

2: Hypertonia

3: Pancreatitis

4: Hypopigmentation

864-: Hartnup disease can present with:

1: Pellagra like symptoms

2: Nephrolithiasis

3: Protein intolerance

4: Microcephaly

865-: Serotonin is synthesized from-

1: Tiyrosine

2: Alanine

3: Tryptophan

4: Glycine

866-: Creatine is made up of all, except -

1: Glycine

2: Alanine

3: Methionine

4: Arginine

867-: Amide group containing amino acid is:

1: Asparate

2: Glutamine

3: Glutamate

4: Glutamic acid

868-: At which level does methionine enter the TCA cycle?

1: Acetyl co A

2: Succinyl co A

3: Oxaloacetate

4: Pyruvate

869-: Rate limiting step in porphyrin synthesis is

1: ALA dehydratase

2: ALA synthase

3: UPG decarboxylase

4: Ferrochelatase

870-: Increased 5 Hydroxy-Indole-acetic acid in urine is seen in:

1: Pheochromocytoma

2: Ogilvie syndrome

3: Carcinoid syndrome

4: Tumor lysis syndrome

871-: Hay's sulpher test is used to detect w hich of the following -

1: Bile salts in urine

2: Reducing sugar in urine

3: Ketone bodies in urine

4: Urobilinogen in urine

872-: Which of the following structure is not affected in protein denaturation?

1: Primary structure

2: Secondary structure

3: Tertiary structure

4: Quaternary structure

873-: Enzyme defect in Classic Phenylketonuria

1: Phenylalanine hydroxylase

2: Dihydrobiopterin reductase

3: Fumarylacetoacetate hydrolase

4: Homogentisate oxidase

874-: Proteins can be separated by the following methods except:

1: Electrophoresis

2: Ultra-centrifugation

3: Gas-liquid Chromatography

4: Salt separation

875-: Tryptophan is

1: Glucogenic

2: Ketogenic

3: Both glucogenic & ketogenic

4: None

876-: Type I Tyrosinemia is caused by:

1: Tyrosine transaminase

2: Fumarylacetoacetate hydrolase

3: 4 Hydroxy phenyl pyruvate hydroxylase

4: Maleyl acetoacetate isomerase

877-: In type I collagen, telopeptide corresponds to-

1: COOH-terminal with super helical conformation NH2- terminal with super helical conformation

2: Both COOH and NH2-terminals are not super helical conformation

3: Both COOH and NH2-terminals super helical conformation

4: Both COOH and NH2-terminals super helical conformation

878-: Enzyme deficient in alkaptonuria -

1: Phenylalanine hydroxylase

2: Homogentisate oxidase

3: Tyrosinase

4: None

879-: The difference in molecular weight between Phenylalanine & Tyrosine is by :

1: 17

2: 16

3: 64

4: 32

880-: The conversion of optically pure isomer (enantiomer) into a mixture of equal amounts of both dextro and levo forms is called as

1: Polymerization

2: Stereoisomerization

3: Racemization

4: Fractionation

881-: Enzyme involved in Variegate porphyria

1: Ferrochelatase

2: Protoporphyrinogen oxidase

3: Uroporphyrinogen decarboxylase

4: ALA dehydratase

882-: Which is the common amino acid between urea cycle and TCA?

1: Asparate

2: Alanine

3: Asparagine

4: Glutamate

883-: Deficiency of which of the following enzymes is associated with Tyrosinosis:

1: Tyrosine aminotransferase

2: 4-Hydroxyphenylpyruvate dioxygenase

3: Homogentisate oxidase

4: Fumarylacetoacetate hydroxylase

884-: Which is denatured collagen in humans?

1: Gelatin

2: Homocollagen

3: Tropocollagen

4: None

885-: Edman's reagent is -

1: 2-4 dinitrophenol

2: 1 -fluoro-2, 4-dinitrobenzene

3: Phenyl-isocyanate

4: Cynogen bromide

886-: The protein synthesis is soed out at/by

1: Ribosomes

2: Mitochondria

3: Golgi-apparatus

4: Endoplasmic reticulum

887-: Substrate for gluconeogenesis include?

1: Glycerol

2: Leucine

3: Fatty acids

4: Acetyl CoA

888-: Reichert-Meissl number:

1: 0.1 N KOH

2: 0.5 KOH

3: 0.1 N NaOH

4: 0.5 NaOH

889-: The following separation technique depends on the molecular size of the protein

1: Chromatography on a carboxymethyl cellulose column

2: Iso-electric focusing

3: Gel filtration chromatography

4: Chromatography on a diethylaminoethyl (DEAE) cellulose column

890-: The function of g DNA Polymerase

1: DNA repair

2: Mitochondrial DNA synthesis

3: Processive, leading strand synthesis

4: Primase

891-: Which protein is abundant in our body:

1: Collagen

2: Albumin

3: Myoglobin

4: Hemoglobin

Answers

Question No	Answer Option	Answer
1	1	Heme
2	3	Telomerase
3	2	Tyrosine
4	4	Less ammonia
5	3	Hydroxy lysine
6	2	Citrate synthase
7	1	Ochronosis
8	2	Ligase
9	1	Enteropeptidase
10	1	X-ray Crystallography
11	1	Ribosome
12	2	Fibrous
13	3	Active transport
14	1	Ornithine transcarbamoylase deficiency
15	4	Alanine
16	2	Proline
17	1	Arginine
18	1	Melatonin
19	3	Niacin deficiency
20	1	Histidine
21	3	Glycine
22	2	Secondary structure

23	3	Introduction of sulphur in methionine
24	1	Cyclooxygenase
25	2	Tyrosine
26	1	Scurvy
27	2	Tryptophan metabolism
28	4	Aspaate
29	3	Phenylalanine
30	3	Uric Acid
31	4	21, 30
32	1	Net loss of muscle protein due to increased breakdown
33	3	Succinyl CoA
34	4	Serine
35	1	Kynurenine
36	3	Alanine
37	2	Insulin
38	1	Multiple carboxylase deficiency
39	1	Disulphide
40	2	T3
41	3	Arginine
42	1	Alanine
43	2	Transthyretin
44	1	Serine
45	3	Formyl-methionine
46	4	Fumarate

47	1	Glycine
48	1	a-ketoacid decarboxylase
49	4	Quaternary structure
50	3	Alanine
51	2	Relieve torsional strain
52	4	Alanine
53	3	Hydroxylysine
54	2	Glycine
55	1	Cysteine
56	4	Non polar, essential, both glucogenic & ketogenic
57	1	Isocitrate
58	2	Beta pleated sheet
59	2	Pseudogout enzyme
60	2	Beta
61	4	Optically inactive
62	4	Leucine
63	1	Choline
64	1	Produce ATP
65	2	Alkaptonuria
66	2	Tryptophan
67	4	Transferases
68	2	Charge
69	3	Carboxypeptidase
70	4	Glycine

71	2	Carcinoid syndrome
72	3	Aspaate & NH3
73	4	Type IV
74	1	Glucocerebrosides
75	2	3.4 mg
76	3	Alanine
77	3	Xantheurenic acid
78	2	Cysteine
79	2	Phenylalanine hydroxylase
80	4	Teiary & quaernary
81	2	Lysine
82	2	Endoplasmic reticulum
83	2	Glutamine
84	4	Provides low resolution
85	1	Phenylketonuria
86	2	Premature atherosclerosis
87	3	Myoglobin
88	3	Methylation
89	1	Serine
90	3	Myeloma cell lines
91	1	Protein
92	1	Gain in weight / protein consumed
93	4	The inter relation and arrangement of polypeptides in a protein with more than 2 polypeptides chains
94	2	Ornithine

95	1	Proline and hydroxyproline
96	1	X-ray crystallography
97	1	Carbamoyl Phosphate Synthetase II
98	1	Proline to hydroxyproline
99	4	All of the above
100	4	Proline
101	1	Kynerunine
102	2	Phenylalanine hydroxylase
103	1	Glutathione
104	1	SCID
105	3	Non-protein alpha amino-acid
106	4	Tryptophan
107	1	Have Net charge 'O'
108	3	Pyridoxin
109	2	Deamination
110	2	Hydroxyproline
111	3	Pheochromocytoma
112	2	Fibrous
113	3	Limiting the substrate for deficient enzyme
114	4	Phenylketonuria
115	2	Tyrosine
116	1	Acetyl Co A & alanine
117	1	Alanine
118	1	Carboxyl group
119	1	Aspaic acid

120	2	Plasmids, Bacteriophage, Cosmids
121	4	Base pair substitution
122	2	Phenylalanine hydroxylase
123	2	Secondary
124	2	Threonine
125	1	Glycine
126	4	Angiotensin-III
127	4	Hydrophobic interactions
128	3	Chopped liver
129	2	Leucine
130	2	Threonine
131	2	Glucokinase
132	2	Pyridoxin
133	3	Homogentisic acid oxidase
134	2	a-2 globulin
135	4	Fumarate
136	2	FRAP
137	1	Tryptophan
138	2	Histidine
139	4	Proline
140	1	Primary structure
141	3	Niacin
142	4	Hepatocellular carcinoma
143	3	Tripeptide
144	1	Chaperones

145	3	Water produced by metabolism
146	3	Tryptophan
147	2	Alanine
148	3	Golgi - apparatus
149	4	Immunodeficiency
150	3	Dopamine
151	2	Ornithine
152	3	Energy dependent protein degradation
153	1	X -ray crystallography
154	1	Golgi apparatus
155	1	Protein
156	1	Chaperones
157	1	a-ketoacid decarboxylase
158	1	Urea
159	2	Glutamine
160	3	Homocarnosine
161	1	Arginine
162	1	Peptidayl transferase activity
163	1	2,4 dinitrophenol
164	4	Aspartate and asparagine
165	2	Hydroxyproline
166	1	Mass
167	1	Phenylanine hydroxylase
168	4	Valine
169	1	Cysteine

170	1	Aspoate transcarbamylase
171	3	Isoelectric focusing
172	2	Selenocysteine
173	3	Histidine
174	3	Pyridoxin
175	4	None
176	4	Carboxy peptidase
177	3	Tryptophan
178	2	Arginase
179	2	Transamination
180	4	Kidney failure
181	3	Oxaloacetate
182	4	Acts through c AMP
183	3	Methionine
184	4	Valine
185	2	Tyrosine
186	3	Phenylketonuria
187	1	Alanine
188	1	Bence Jones Protein
189	2	Tryptophan
190	2	Collagen
191	4	In unfolded extended form without chaperones
192	2	Intron
193	4	Thyroxine
194	1	Arginine

195	1	Acidic Amino Acid
196	3	Urine Benedict's test is negative
197	1	Glutathione peroxidase
198	4	Sialic acid
199	2	That leads to sequestration of calcium in endoplasmic reticulum
200	1	Green
201	1	Transaminases
202	4	Protein quality
203	1	Glycine
204	3	IV
205	1	Tryptophan
206	2	Lysyl Oxidase
207	1	Folded, using a C-terminal or internal signal sequence
208	2	Tyrosine
209	3	Ammonia
210	4	Arginine
211	4	Ornithine transporter
212	3	Valine
213	1	Glutaminase
214	1	Breakdown of muscle proteins
215	2	Prion protein
216	3	+ ve ions = -ve ions
217	1	Phenylketonuria
218	1	Increased troponin I

219	1	Xeroderma pigmentosum
220	4	Are a major source of nitrogen for alanine and glutamine produced in muscle
221	4	Molisch's test
222	1	Peptidyl transferase
223	3	Asparagine
224	1	Increased breakdown of muscle proteins
225	1	Endothelium
226	1	Lysine and Arginine
227	3	From external source
228	1	Glycine, Arginine and Methionine
229	1	Transaminases
230	2	Muscle contraction
231	4	Alanine
232	3	Methylene THFA to Methyl-THFA
233	4	Alanines
234	3	Limiting the substrate for deficient enzyme
235	1	Kuru
236	4	Phenylalanine
237	3	Homogentisate oxidase
238	3	IV
239	1	Methionine and serine
240	2	Alanine
241	1	Histidine
242	3	Obstructive jaundice

243	3	t-RNA
244	2	Phenylalanine hydrolaxase
245	4	Molecular weight
246	3	Formyl-methionine
247	1	Type I
248	3	Give injections of vitamin B12
249	4	Type I & III uroporphyrins
250	2	Pellagra
251	3	Tryptophan
252	1	Niacin
253	1	Primary
254	4	Immunodeficiency
255	4	Lysine
256	3	Phenyl ketonuria
257	3	Glycine
258	2	Bacteria
259	3	Tryptophan
260	1	Urea
261	3	Tryptophan
262	4	Protein folding
263	3	From external source
264	1	Glycine
265	3	Liver
266	4	Glutaric acidemia
267	1	Methylation

268	3	Aspartate & NH3
269	3	Tryptophan
270	4	Niacin
271	4	L-Xylulose
272	4	Lipophilic.
273	1	Guanine - cytosine
274	1	Alkaptonuria
275	2	Histidine
276	4	Glycine
277	4	Proline
278	1	D- B- A-C
279	1	Lysine
280	2	Phenylalanine hydroxylase (PAH)
281	2	Arginine
282	3	CD4/CD8 estimation in AIDS
283	4	All
284	3	Ornithine
285	2	Cysteine
286	3	Km is the enzyme-substrate complex association constant
287	2	Hydrogen bond
288	3	Melanin
289	1	Liver
290	3	Alkaptonuria
291	2	Glutamine

292	4	Protein folding
293	3	Limiting the substrate for deficient enzyme
294	3	Methionine
295	2	Hydroxylation of proline occurs in Golgi apparatus
296	4	Methylation
297	4	Cysteine
298	4	Type IV
299	2	Vanillyl Mandelic Acid
300	2	Absorption mass spectroscopy
301	4	All of the above
302	4	Tetrahydrobiopterin
303	1	Net charge of protein is zero
304	4	Glutamine
305	4	Purines
306	3	Transamination reactions
307	3	Peptide bond
308	2	Secondary structure
309	1	Occurs in the M-phase of the cell cycle
310	2	IgM
311	1	Hydrophobic pocket
312	3	Simple globular proteins
313	2	Lysine
314	2	FRAP
315	2	Fumarate

316	2	Gel filtration chromatography
317	3	X-linked disorder
318	3	Leucine
319	3	Tryptophan
320	3	Arginine
321	1	a-ketoacid decarboxylase
322	3	Tripeptide
323	4	Densitometry
324	4	Fibronectin
325	1	CPS-I
326	2	Gel filtration chromatography
327	1	Liver
328	2	Tryptophan
329	1	Disulfide bonds
330	3	AUG
331	3	Cysteine and cysteine
332	2	Hyaline Cartilage
333	2	Histidine
334	4	Free to rotate
335	4	Tryptophan
336	1	Glycine
337	2	Endoplasmic Reticulum
338	2	3.6
339	4	Activate acetyl CoA carboxylase
340	1	Succinate thiokinase

341	4	Methionine
342	4	Ubiquitin
343	2	Phenylalanine
344	4	B6
345	2	Tryptophan
346	3	Golgi body
347	3	Structure C
348	3	Deficiency of homogentisic acid oxidase
349	4	Cystine
350	1	Glutamine
351	4	Vitamin B 12
352	2	Golgi apparatus
353	4	Detecting with UV light at 280 nm
354	3	Sephadex
355	4	Type IV
356	3	Phenylalanine
357	1	Gel chromatography
358	1	CO
359	3	GLUT 5
360	3	Tryptophan
361	2	Concentration
362	4	Cellulose
363	1	Adrenaline
364	1	Covalent
365	3	Phenylketonuria

366	3	G=C
367	3	ATP citrate lyase
368	2	Phosphorylation of impoin protein increases its binding affinity for transcription factors
369	2	Phenylalanine
370	1	Melatonin
371	2	Homocysteine
372	2	Carbamoyl Synthetase
373	1	Glycine,arginine and methionine
374	4	Glycosylation
375	1	Tyrosine
376	1	Each hemoglobin molecule is made of 4 polypeptides of each subunit
377	2	When the concentration of ionised and unionized form is same
378	1	Translocon
379	2	2
380	3	b-oxidation
381	3	Alanine
382	4	Decreased reutilization purine
383	1	Ketone bodies
384	1	Hydrophobic interactions
385	4	Disulfide bond between cysteine molecule
386	2	Asparagine is similar to glutamine
387	3	Aspartate
388	4	None

389	3	Tyrosine
390	1	Both Require PRPP - yes; Both Require Folate Derivatives - no; Both Require Glutamine - yes; Both Require Glycine - no; Both Require Aspartic Acid - yes
391	2	Endoplasmic Reticulum
392	3	Di hydro pterin reductase
393	2	Alkaptonuria
394	1	Cysteine
395	2	Conves a hydrophobic compound to a hydrophilic one
396	1	Genitourinary system not involved
397	1	Melanin
398	1	Ammonium and aspartate
399	2	Folic acid
400	1	Zinc finger
401	1	Glycogenn Converted to Glucose-1-Phosphate and Glycogenn-1 - yes; Pyruvate Plus Aspartate Producing Alanine and Oxaloacetate - yes; Homocysteine Plus N5-Methyl-THF Produces Methionine and THF - no; Homocysteine Plus Serine Produces Cystathionine - yes; Histidine Produces Histamine - yes
402	1	Ribosome
403	3	3
404	4	Melatonin
405	2	Sodium dodecyl Sulphate h-PAGE
406	2	DNA
407	4	3 codon act as terminator codon

408	2	Melatonin
409	3	Formation of peptide bone (peptidyl transferase step)
410	2	Glutamine
411	1	oligosaccharidoses
412	1	Aspartic acid
413	2	Tetrahydrobiopterin is involved in tryptophan biosynthesis
414	1	Decarboxylation
415	1	Alanine
416	4	Lysine
417	2	They hold less amount of water
418	1	Salting out
419	1	Aspaate
420	3	Tryptophan
421	3	Homogentisate oxidase
422	4	Iron
423	3	Lysine & methionine
424	3	Amino acids
425	2	Ligase
426	2	Phosphoprotein
427	1	Cysteine
428	2	Secondary structure
429	4	Creatinine
430	2	Fumarate and acetoacetate
431	2	Picric acid

432	1	Kidney; Arginine + glycine
433	4	Ornithine
434	2	Lesch nyhan syndrome
435	4	All of the above
436	4	Thyroxine
437	4	Type IV
438	1	Proline
439	4	The number and types of polypeptide units of oligomeric proteins and their spatial arrangement
440	3	Urea
441	4	HEMA at hydrophobic pockets
442	3	Glutamic acid
443	2	Proline
444	1	Lysosomes
445	2	His E7
446	1	Myoglobin
447	4	Phenylalanine hydroxylase
448	2	Propionic acidemia
449	2	Converts a hydrophobic compound to a hydrophilic one
450	1	Intrinsic factor
451	1	Hemoglobin
452	3	Attached carbohydrate with terminal mannose-6-phosphate
453	2	Cu
454	1	Homocysteine

455	3	Argininosuccinic aciduria
456	1	Arginine
457	2	Glutamic acid, cysteine & glycine
458	3	Four molecules of oxygen
459	1	Amino acids
460	4	Threonine
461	4	Ornithine directly reacts with carbamoyl phosphate to form citrulline.
462	3	Alanine
463	2	Atherosclerosis
464	2	Lactate dehydrogenase
465	4	Ketone bodies
466	3	Alanine-leucine
467	4	Ornithine transcarbamoylase
468	3	Valine
469	1	Phenylacetate positive in urine
470	3	Tryptophan
471	3	Carcinoid tumor
472	4	Methionine
473	3	Phenylpyruvate
474	2	Golgi apparatus
475	1	Tyrosinase
476	2	Tyrosine
477	1	Protein folding
478	1	Methionine

479	1	Lysine
480	4	Cysteine
481	2	Negatively charged
482	1	Liver
483	4	Produced in secondary immune response
484	1	Alanine
485	2	Keratan sulfate
486	2	Histidine
487	3	Histidine
488	4	A material which gets deposited in extracellular spaces
489	3	Hypermethioninemia
490	1	Keratin
491	4	None
492	2	Isoelectric
493	2	Alphaketoglutarate
494	4	None
495	4	Aspartate
496	3	Both glucogenic & ketogenic
497	2	Glycoproteins
498	4	Hydrogen bonds
499	1	Alanine
500	1	Albumin
501	1	Glycine
502	2	Leucine

503	1	Tyrosine
504	2	Arachidonic acid
505	3	Magnesium
506	1	Glycine
507	1	Cysteine stones in urine common
508	1	Normally involved in cell cycle proliferation
509	1	Tryptophan
510	2	Tryptophan
511	1	Type I
512	4	Tryptophan
513	4	Adrenal coex
514	3	Glutamine
515	1	Tryptophan
516	2	Golgi apparatus
517	2	Canavans disease
518	3	Glycine
519	4	Vitamin C is a cofactor
520	4	GUG
521	1	Citrullinemia
522	2	Ornithine transcarbamoylase
523	4	Serine
524	3	Binding of signal sequence to SRP resumes translation
525	1	Hartnup disease
526	3	Tryptophan

527	2	Alkaptonuria
528	1	LDH 1
529	3	Reduce disulfide bonds
530	4	16
531	2	Tyrosinase
532	3	Xanthine oxidase
533	1	Tryptophan
534	1	Glycine
535	4	Complementary SNARE proteins on the vesicle and its target organelle
536	3	Peptide bond
537	4	Injections of B12
538	3	Deoxyadenosine
539	3	Fumarate
540	4	Arginine
541	4	Type IV
542	3	Gel diffusion chromatography
543	3	Trimethylamine
544	2	Alanine
545	1	Arginine
546	2	Tryptophan
547	2	Alanine
548	3	Aspartate
549	3	Glutamine
550	4	All the above

551	1	Tuberculosis
552	3	Serine
553	2	Chromatography
554	4	Type IV
555	4	Serine
556	2	charge
557	4	Decarboxylation
558	2	Ornithine
559	2	Ninhydrin
560	1	Cystine
561	3	Isovaleryl CoA dehydrogenase
562	3	C
563	1	N-Acetyl glutamate
564	2	Gel filtration chromatography
565	2	Calnexin
566	1	Endoplasmic reticulum (ER)
567	2	Decreased
568	2	Tyrosinemia
569	2	Arginine
570	4	D Glucose and L Glucose
571	4	Leucine
572	1	CPS-I
573	4	Histidine
574	3	Cysteine and cysteine
575	1	Glycine

576	2	Arginine
577	3	7 amino acids
578	3	Collagen
579	3	Glutamine
580	3	4-5 mg/dL
581	3	32 g
582	4	All of the above
583	1	Legumes
584	3	Ornithine
585	2	Melatonin
586	2	Enolase
587	1	Disulphide bond
588	3	Ornithine
589	1	Phenylalanine - Niacin
590	2	Post-synaptic inhibitory transmitter
591	2	Repair of damaged DNA
592	3	Guanidoacetate
593	2	Epitope
594	2	5' end of anticondon
595	2	PLP
596	3	Amino terminal
597	1	Urobilinogen
598	2	Rough endoplasmic reticulum
599	1	Serotonin
600	1	Crigler-Najjar syndromes types I

601	1	SLC 6A 19
602	1	Chaperone
603	4	Mental retardation
604	4	Deletion of 2 bases
605	2	Respiratory quotient
606	3	Pyridoxal phosphate
607	3	Hydrophobicity
608	1	Amino acids
609	2	dTMP
610	3	Glutamine
611	2	Cysteine
612	4	Tryptophan
613	1	Phenylanine hydroxylase
614	1	Golgi bodies
615	1	Arginine
616	1	Transcription
617	2	Thymine
618	1	Tyrosine
619	3	Maple syrup urine disease
620	1	Cytoplasm
621	3	Calnexin
622	2	Alpha ketoglutarate
623	2	Glycine
624	3	Methionine
625	3	Gel filtration chromatography

626	1	Hemogentisic acid
627	3	Collagen
628	3	Phosphatase
629	3	Histidine
630	3	D GIycerate dehydrogenase
631	3	Fibrous protein
632	4	All
633	1	Phenylalanine hydroxylase
634	1	Less number of disulphide bridges
635	3	Proline
636	1	Branched chain alpha keto acid decarboxylase
637	2	Collagen
638	2	Cross-links between lysine residues
639	3	Tyrosine
640	4	Buphthalmos
641	1	Proteases
642	3	Tryptophan
643	4	Ehler's Danlos syndrome
644	1	Aminoacid-nitrogen metabolism
645	1	Golgi apparatus
646	2	Teiary structure
647	1	Nonsense mutation
648	4	Alanine
649	1	VII
650	1	Valine

651	1	Maple syrup urine disease
652	3	Proline
653	1	Skeletal muscle
654	1	Northern Blot
655	2	Melatonin
656	1	Methionine
657	1	pO2
658	4	Hyaluronic acid
659	4	All of the above
660	3	a-keto acid decarboxylase
661	3	Thyroxin
662	1	Chaperones
663	2	Selenocysteine
664	2	Homogentisate acid oxidase
665	1	RBC
666	4	All of the above
667	1	Cysteine
668	1	Cysteine
669	1	Primary structure
670	2	Phenylalanine
671	1	Lead
672	1	Phenylketonuria
673	4	Lysine
674	3	Amino group on one amino acid and the carboxyl group of the adjacent amino acid

675	1	Tyrosinase
676	1	Obstructive jaundice
677	1	Familial fatal insomnia
678	3	NADP
679	2	N formyl methionine t-RNA will be the first t-RNA to come into action
680	3	Tryptophan
681	3	Cl-
682	1	Glycine, arginine, methionine
683	2	Glutamate
684	3	60 mg
685	4	Uracil
686	1	Vitamin B3
687	1	Lysine
688	4	Selenocysteine
689	4	All of the above
690	2	Ornithine translocase
691	2	Cysteine
692	4	Seleno cysteine
693	1	Fumarate
694	2	Negatively charged
695	4	All of the above
696	2	X- Ray diffraction crystallography
697	2	Histidine
698	2	Glutathione

699	2	Tryptophan metabolism
700	1	Melatonin
701	2	Ser, His, Asp
702	4	High fecal levels of tryptophan and indole derivatives
703	4	Xanthurenic acid
704	1	X-ray crystallography
705	4	Amphipathic (amphoteric in nature)
706	4	Tryptophan
707	1	Ornithine transcarbamoylase
708	3	Alanine
709	4	Efflux of cysteine from lysosome
710	2	Casein
711	2	T4
712	4	3 amino acids
713	4	ADP
714	4	Dopamine to norepinephrine
715	1	Proline
716	4	Folate (B9)
717	4	Tyrosine hydroxylase
718	3	Homogentisate oxidase
719	2	Tyrosine
720	1	Protein folding
721	3	Tyrosine
722	2	Phenylalanine hydroxylase

723	3	Glycine
724	3	GTP hydrolysis within the cytosol
725	3	Glutamic acid
726	2	Proline
727	2	Defective transpo of tryptophan
728	3	v-SNARE
729	1	Histidine
730	4	Arginine
731	3	Tryptophan
732	3	Branched chain amino acids
733	2	Transamination
734	2	Collagen III & IV
735	1	Basic amino acids
736	3	Na+
737	2	Copper
738	3	Introduction of sulphur atom in methionine
739	3	Formation of triple helix
740	3	Both
741	2	Cysteine
742	1	Right handed anti parallel
743	4	Histidine
744	1	Myoglobin
745	2	Pellagra symptoms
746	3	Tyrosinase
747	2	Cysteine

748	2	Tuberculosis
749	3	Hypoxanthine phosphoribosyl transferase deficiency
750	1	Ornithine Permease
751	3	Antioxidant mechanism
752	4	All
753	3	Type III
754	3	Uric acid stones are frequently formed
755	2	Tryptophan
756	1	Cysteine
757	2	Protein degradation
758	4	Serine
759	1	Type I
760	3	Proline
761	1	Fumarylacetoacetate hydrolase
762	2	Glutamic acid
763	1	Aspartate
764	2	Disulphide bond
765	1	Salaam spasms
766	2	41 K calories
767	3	Alanine
768	3	Glycine
769	4	Asparagine
770	4	Long stretches of left handed helices occur in proteins
771	1	Pinocytosis

772	1	Salting out
773	4	Cystein
774	3	Tyrosine
775	2	Secondary structure of protein
776	1	Transthyretin
777	3	Glutamine
778	3	Dilute alkali
779	4	All
780	4	S-adenosyl methionine
781	1	Transferase
782	3	Leucine
783	1	Liver
784	2	Affinity chromatography
785	3	Cysteine
786	4	Aspaate
787	1	Oxidase
788	1	Von Gierke disease
789	1	Tyrosinemia
790	3	Hydroxymethylbilane synthase
791	2	Glycine
792	3	Tyrosine
793	4	Methionine
794	4	H bonds
795	1	Methionine and serine
796	4	HPLC

797	4	Tyrosine hydroxylase
798	1	Glycogen
799	4	Tuberculosis
800	1	Methionine
801	3	Pyruvate Carboxylase
802	2	Phenylalanine hydroxylase
803	1	Protein
804	1	Arginine
805	1	Kynurenine
806	1	Selenocysteine
807	2	Phenylalanine
808	4	the test was performed too early
809	3	Cysteine
810	2	Golgi apparatus
811	4	Hydrogen bonds
812	3	Germinating Cereals
813	2	Glutamate
814	2	Lipid
815	1	cGMP
816	4	Glycine
817	2	Endoplasmic reticulum
818	2	Glycine
819	2	Leucine
820	2	Glutamine
821	4	Substrate reduction therapy

822	1	VMA
823	4	All
824	3	Hydrophobic
825	1	KDEL
826	4	Made of cysteine and methionine
827	3	Tyrosine hydroxylase
828	4	Seleno cysteine
829	3	Electrophoresis
830	3	Proline
831	3	The protein is a dimer of two 20kD proteins
832	4	Histidine
833	2	Methionine
834	1	Histidine
835	1	Phenylalanine
836	2	Isoleucine
837	1	Arginine
838	1	Selenocysteine
839	3	Cysteine
840	2	5 Hydroxy tryptamine
841	1	Leucine
842	3	Arginosuccinate synthetase
843	3	Dihydropterin reductase
844	2	Amino acids
845	1	Alanine
846	1	Kynerunine

847	2	Conversion of Tyrosine to DOPA
848	4	Histidine
849	1	Conjugated proteins
850	2	Convalescence
851	1	SDS - PAGE
852	4	Lysine
853	4	Terminal transferase
854	2	Tryptophan
855	2	Tyrosine
856	4	Hanup's disease
857	3	Branched chain amino acids
858	4	They are rich in basic amino acid residues and may be located anywhere in the protein sequence
859	2	Agarose gel electrophoresis
860	2	Arginine
861	4	Urea cycle
862	3	Neutral amino acids
863	4	Hypopigmentation
864	1	Pellagra like symptoms
865	3	Tryptophan
866	2	Alanine
867	2	Glutamine
868	2	Succinyl co A
869	2	ALA synthase
870	3	Carcinoid syndrome

871	1	Bile salts in urine
872	1	Primary structure
873	1	Phenylalanine hydroxylase
874	3	Gas-liquid Chromatography
875	3	Both glucogenic & ketogenic
876	2	Fumarylacetoacetate hydrolase
877	4	Both COOH and NH2-terminals super helical conformation
878	2	Homogentisate oxidase
879	2	16
880	3	Racemization
881	2	Protoporphyrinogen oxidase
882	1	Asparate
883	4	Fumarylacetoacetate hydroxylase
884	1	Gelatin
885	3	Phenyl-isocyanate
886	3	Golgi-apparatus
887	1	Glycerol
888	1	0.1 N KOH
889	3	Gel filtration chromatography
890	2	Mitochondrial DNA synthesis
891	1	Collagen