Ques. Paper : Sr. Demonstrator - BioChemistry

Mode of Exam:	Online
Date of Exam:	20-07-2015
Duration of Exam:	2 hours
No of Questions:	100

Ques # :1

Which of the following is not a single membrane bound cell organelles

1) Golgi bodies
2) Ribosome
3) Peroxisomes
4) Lysosomes

Ques # :2

Which of the following has the lowest glycemic index

1) Maltose
2) Fructose
3) Milk
4) Polished rice

Ques # :3

The primary transporter for fructose in small intestine and testes:

1) GLUT-1
2) GLUT-5
3) GLUT-3
4) GLUT-2

Ques # :4

The patients excrete milky urine in disorder

1) Ketonuria
2) Chyluria
3) Lactosuria
4) Galactosuria

Ques # :5

Lysolecithin is formed from lecithin by the action of

1) Phospholipase A1
2) Phospholipase A2
3) Phospholipase C
4) Phospholipase D

Ques # :6

Which of the following is considered as a dignostic marker for early apoptotis

1) Cardiolipin
2) Gangliosides
3) Cephalin
4) Aryl Sulphate

Ques # :7

Allosteric inhibitor of gultamate dehydrogenase enzyme is

1) AMP
2) ATP
3) GMP
4) ADP

Ques # :8

Ubiquitin is required for

1) Lysosomal degradation of proteins
2) Synthesis of ubiquinone
3) Cytosolic degradation of proteins
4) Synthesis of urea

Ques # :9

The commited step in biosynthesis of pyrimidine is catalysed by

1) dihydrorotase
2) dihydrorotase dehydrogenase
3) Carbamoylphosphate synthetase
4) Aspartate transcarbamoylase

Ques # :10

Which of the following has the strongest tendency to gain electrons

1) Co Enzyme Q
2) Cytochrome C
3) NAD
4) Oxygen

Ques # :11

Acetyl CoA is an allosteric inhibitor of:

1) Succinate dehydrogenase
2) Malate dehydrogenase
3) Pyruvate dehydrogenase
4) Isocitrate dehydrogenase

Ques # :12

Normal anion gap in plasma is about

1) 15 mEq/L
2) 10 mEq/L
3) 5 mEq/L
4) 0 mEq/L

Ques # :13

pKa of dehydrogen phosphate is

1) 5.8
2) 6.1
3) 6.8
4) 7.1

Ques # :14

Hypo-osmotic dehydration is the condition seen in :

1) Hypernatremia
2) Hyponatremia
3) Pulmonary edema

4) All

Ques # :15

Congestive heart failure is characterized by

1) Increase plasma volume
2) Decreased plasma volume
3) Increased sodium loss
4) Decreased potassium retention

Ques # :16

Osmoreceptors are present in

1) Capillaries
2) Aortic arch
3) Carotid sinus
4) Hypothalamus

Ques # :17

A:G ration could be reserved in all , EXCEPT

1) Acute viral hepatitis
2) Nephrotic Syndrome
3) Cirrhosis
4) Advanced alcoholic liver disorder

Ques # :18

Cystatin C is marker for

1) Distal tubular function
2) Renin angeotensin system
3) Glomerular function
4) none of them

Ques # :19

Ferrochelatase is deficient in

1) Acute intermittent porphyria
2) Porphiria cutanea
3) Hereditary corproporphyria
4) Protoporphyria

Ques # :20

A person on a fat free carbohydrate rich diet continues to grow obese. Which of the following lipoprotein is likely to be elevated in his blood

1) Chylomicrons
2) VLDL
3) LDL
4) HDL

Ques # :21

The RDA for lipids per day for normal adults is:

1) 20 gms
2) 45 gms
3) 40 gms
4) 50 gms

Ques # :22

Hormone response elements are located in:

1) Nucleus
2) Mitochondria
3) Cell membrane
4) Cytosol

Ques # :23

CD 4 is a transmembrane protein present in

1) Plasma cells
2) Cytotoxic C cells
3) Helper T cells
4) Suppressor T cells

Ques # :24

Antibodies are classified on the basis of their :

1) Size
2) Heavy chains
3) Light chains
4) Idiotypes

Ques # :25

The antibody present in lowest concentration in plasma

1) Ig E
2) Ig D
3) Ig G
4) Ig A

Ques # :26

The genes for the light chains of Immunoglobulins are located on chromosomes

1) 2 and 22
2) 2 and 14
3) 2 and 16
4) 2 and 10

Ques # :27

Waldenstrom's macroglobulinemia occurs due to increase of

1) Ig A
2) Ig M
3) Ig D
4) Ig G

Ques # :28

Ciprofloxacin inhibits the synthesis of :

1) m RNA
2) DNA
3) t RNA
4) r RNA

Ques # :29

Which of the following is not a protein misfolding disorder

1) Tuberculosis
2) Alzheimer's disease
3) Cystic fibrosis
4) Prion disease

Ques # :30

Which type of RNA has the highest percentage of modified base

1) m RNA
2) t RNA

3) r RNA
4) Sn RNA

Ques # :31

The first gene therapy in human was carried out by French Anderson in:

1) 1990
2) 1970
3) 1980
4) 1995

Ques # :32

Aging cell will release iron with the help of a copper containing protein called

1) Hepcidin
2) Hephaestin
3) Hemosiderin
4) Hemopexin

Ques # :33

Which monosaccharide causes sequestering of phosphate in cell

1) Glucose
2) Fructose
3) Ribose
4) Galactose

Ques # :34

Amino acid with thio-ether group is

1) Cysteine
2) Histidine
3) Methionine
4) Threonine

Ques # :35

Hydrolysis of ATP into ADP and Pi liberates energy of

1) 3.4 kcal/mol
2) 5.0 kcal/mol
3) 7.3 kcal/mol
4) 10.3 kcal/mol

Ques # :36

Enzyme used as a therapeutic agent

1) Asparaginase
2) Gamma glutamyltransferase
3) Taq Polymerase
4) Restriction endonuclease

Ques # :37

Which molecular form of vitamine- A has role in skin disease

1) Beta-carotene
2) Retinol
3) Retinoic acid
4) Retinal

Ques # :38

Peptide linkage is present in which vitamine structure

1) Riboflavin
2) Pantothenic acid
3) Biotin
4) Niacin

Ques # :39

Iodide pump in thyroid gland functions by:

1) Primary active transport system
2) Carrier type transport system
3) Vesicular type transport system`
4) Secondary active transport system

Ques # :40

Detoxification of methanol and ethanol is done through

1) Hydrolysis
2) Oxidation
3) Reduction
4) Conjugation

Ques # :41

Major cause of metabolic acidosis is:

1) Overdose of narcotics
2) Potassium deficiency
3) Hepatic failure
4) Diabetic ketoacidosis

Ques # :42

Specific Dynamic Action(SDA) is highest for

1) Carbohydrates
2) Lipids
3) Proteins
4) Vitamins

Ques # :43

Dietary fibers have beneficial effects in:

1) Cancers
2) Diabetes mellitus
3) Obesity
4) All of them

Ques # :44

Trace metal used for prevention of peroxidation of lipids

1) Selenium
2) Chromium
3) Cobalt
4) Molybdenum

Ques # :45

Disease associated with impaired synthesis of collagen protein

1) Scurvy
2) Alport syndrome
3) Ehlers-Danlos syndrome
4) all of them

Ques # :46

Pauly's test is for the presence of

1) Histidine
2) Arginine
3) Tyrosine

4) Tryptophan

Ques # :47

Allopurinol is structural analog of:

1) Hypoxanthine
2) Xanthine
3) Uric acid
4) Alloxanthine

Ques # :48

Coenzyme that is not a vitamin derivative

1) S-adenosyl methionine
2) Lipoic acid
3) Pyridoxyl phosphate
4) Tetrahydrofolate

Ques # :49

Hydroxylatiom of 25-hydroxycholecalciferol by 1-α hydroxylase occurs in :

1) Skin
2) Liver
3) Kidneys
4) Intestine

Ques # :50

Eating excess raw eggs causes deficiency of

1) Riboflavin
2) Niacin
3) Folic acid
4) Biotin

Ques # :51

A salivary protein Gusten contains

1) Zinc
2) Manganese
3) Selenium
4) Chromium

Ques # :52

The tubular maximum for glucose (TmG) is

1) .350 mg/min
2) .350 mg/dl
3) .350 mg/ml
4) .350 ml/min

Ques # :53

Porphyria inherited as autosomal recessive disorder :

1) Erythropoietic protoporphyria
2) Congenital erythropoietic porphyria
3) Acute intermittent porphyria
4) Variegate porphyria

Ques # :54

Achlorhydria condition is seen in:

1) Zollinger-Ellison syndrome
2) Gastric Carcinoma
3) Pernicious anemia
4) Duodenal ulcer

Ques # :55

Water excretion by kidneys is tightly regulated by:

1) Aldosterone
2) Epinephrine
3) Oxytocin
4) Vasopressin

Ques # :56

In replication the function of following enzyme is comparable with Zip opener

1) DNA Liagase
2) DNA Helicase
3) DNA Gyrase
4) DNA topoisomerase

Ques # :57

In translation, the number of high energy phosphate bonds used for incorporating a single

amino acid is

1) 3
2) 4
3) 5
4) 6

Ques # :58

Oncogenic virus which is not a DNA virus

1) Adenovirus
2) Papovirus
3) Retro virus
4) Herpes virus

Ques # :59

Seperation of molecules in electrophoresis depends on

1) Size
2) Charge
3) Magnitude of current
4) All of them

Ques # :60

Prostanoids includes all EXCEPT

1) Prostacyclins
2) Lipoxins
3) Thromboxanes
4) Prostaglandin

Ques # :61

Triple Helix structure is seen in

1) Collagen
2) Silk
3) Myoglobin
4) Hemoglobin

Ques # :62

Trehalose is :

1) Non reducing disaccharide
2) Major sugar of insect hemolymph

3) Hydrolyzed into two-α glucose molecule
4) All of them

Ques # :63

The Phase-I biotransformation includes all reactions except

1) Oxidation
2) Conjugation
3) Hydrolysis
4) Reduction

Ques # :64

Release of which hormone from endronic gland is facilitated by calcium ions

1) Insulin
2) PTH
3) Calcitonin
4) All of them

Ques # :65

Hypoxia Occuring in high altitudes causes

1) Metabolic acidosis
2) Respiratory alkalosis
3) Metabolic acidosis
4) Respiratory acidosis

Ques # :66

Increased urinary excretion of uroblinogen is observed in

1) Hemolytic jaundice
2) Hepatic jaundice
3) Obstructive jaundice
4) All of them

Ques # :67

Kidneys regulate electrolyte balance through

1) Aldosterone
2) Atrial natriuretic factor
3) Bradykinin and Kallidin
4) All of them

Ques # :68

Clinical manifestation of Kwashiorkor includes EXCEPT

1) Oedema
2) Diarrhoea
3) Moon face
4) Emaciation

Ques # :69

Minamata disease is due to toxicity of:

1) Mercury
2) Arsenic
3) Cadmium
4) Lead

Ques # :70

Which immunoglobulin mediates primary immune response

1) Ig G
2) Ig A
3) Ig M
4) Ig D

Ques # :71

High degree of fidelity during replication is maintained by:

1) DNA topoisomerase
2) DNA Helicase
3) DNA polymerase
4) DNA ligase

Ques # :72

The promotors elements of transcription are present on:

1) Template strand
2) Coding strand
3) RNA polymerase
4) hn-RNA

Ques # :73

Which one is antioncogene:

1) c-ras
2) v-ras
3) c-myc
4) RB1

Ques # :74

All the following are glycoproteins EXCEPT:
1) TSH
2) Globosides
3) Alkaline Phosphotase
4) Lectins

Ques # :75

The property of surface tension is applied in all processes except:
1) Digestion and Absorption of fats
2) Exchange of gases in lungs
3) Oedema due to hypoalbuminemia
4) Detections of bile salts in urine

Ques # :76

One amino acid may have more than one codon. The property of genetic code is :
1) Degeneracy
2) Specificity
3) Universality
4) Unambiguity

Ques # :77

Tumour marker associated with carcinoma thyroid gland:
1) Alphafetoprotein
2) CA-125
3) Calcitonin
4) Neuron specific enolase

Ques # :78

Hormone that causes obesity
1) Laptin
2) Ghrelin
3) Adiponectin

4) PYY-36

Ques # :79

Compound acting as inhibitor of complex-I of electron transport chain

1) Malonate
2) Amobarbital
3) Antimycin-A
4) Cyanide

Ques # :80

Level of structural organization preserved during denaturation of proteins:

1) Primary
2) Secondary
3) Tertiary
4) Quaternary

Ques # :81

Cardiolipin is associated with

1) Barth syndrome
2) Parkinson's disease
3) Tangier's disease
4) All of them

Ques # :82

The nitrogen atoms in urea originates from:

1) Ammonia and alanine
2) Ammonia and glutamine
3) Glutamate and aspartate
4) Alanine and aspartate

Ques # :83

Barlows disease is due to deficiency of :

1) Vitamin-A
2) Vitamin-C
3) Vitamin-K
4) Vitamin-B3

Ques # :84

Argentaffinomas in malignant carcinoid are usually seen in cells of :

1) Brain
2) Gastrointestinal tract
3) Heart
4) Lungs

Ques # :85

The compound providing color to stool is :

1) Bilirubin
2) Stercobilinogen
3) Stercobilin
4) Urobilinogen

Ques # :86

the amino acid required for the synthesis of Nitric oxide

1) Alanine
2) Argininoosuccinate
3) Tryptophan
4) Arginine

Ques # :87

Regulatory gene in Lac-operon is:

1) Lac-I
2) Lac-Z
3) Lac-Y
4) Lac-A

Ques # :88

Inhibition of glycolysis by oxygen is known as:

1) Krebs effect
2) Hills effect
3) Cori's effect
4) Pasteur effect

Ques # :89

The hormone that stimulates mammotropic and lactogenic action is

1) TSH
2) Prolactin
3) LH
4) Progestrone

Ques # :90

The Biochemical marker for the assessment of lipid peroxidation is:

1) Hydroperoxide
2) Reactive hydrogen species
3) Malondialdehyde
4) Ceruloplasmin

Ques # :91

The nucleotide used in the treatment of orotic aciduria is:

1) Adenosine
2) Guanosine
3) Thymidine
4) Uridine

Ques # :92

Bence Jones protein in urine is detected by:

1) FIGLU test
2) Bradshaw's test
3) Hay's test
4) Rothera's test

Ques # :93

Which type of solution is used to reduce the intracranial pressure?

1) Isotonic
2) Hypotonic
3) Hypertonic
4) Colloidal

Ques # :94

Choline plays role in all except

1) Transmethylation
2) Nerve transmission
3) Blood coagulation

4) Lipotropic factor

Ques # :95

In-vitro techniques used for the production of monoclonal antibodies is :

1) Recombinant DNA technology
2) Hybridoma technology
3) Polymerase chain reaction
4) ELISA

Ques # :96

The most damaging radiation to the tissues are

1) Alpha rays
2) Beta rays
3) Gamma rays
4) Radiowaves

Ques # :97

Disease related to diffective repair of DNA damage are all except

1) Xeroderma pigmentosum
2) Prion Disease
3) Cockayne syndrome
4) Ataxia telangiectasia

Ques # :98

Carnitine is sythesized from amino acids

1) Lysine and cysteine
2) Lysine and arginine
3) Lysine and glycine
4) Lysine and Methionine

Ques # :99

In myocardial infaction serum level of the which LDH enzyme is elevated :

1) LDH-1
2) LDH-3
3) LDH-4
4) LDH-5

Ques # :100

Vitamin used in the management of hyperlipidemia

1) Niacin
2) Folic acid
3) Cobalamine
4) Thymine
