# **National Testing Agency**

Question Paper Name: ANIMAL BIOTECHNOLOGY 1st July 2019 Shift2

Subject Name: ANIMAL BIOTECHNOLOGY

**Creation Date:** 2019-07-01 18:50:38

Duration:150Total Marks:640Display Marks:YesShare Answer Key With DeliveryYes

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Actual Answer Key: Yes

# ANIMAL BIOTECHNOLOGY

Group Number:

**Group Id:** 5531726

Group Maximum Duration:

Group Minimum Duration:

Revisit allowed for view?:

No
Revisit allowed for edit?:

No
Break time:

Group Marks:

640

# Part A: ANIMAL BIOTECHNOLOGY

Section Id :55317214Section Number :1Section type :Online

Mandatory or Optional:MandatoryNumber of Questions:160Number of Questions to be attempted:160Section Marks:640Display Number Panel:YesGroup All Questions:No

Sub-Section Number: 1

**Sub-Section Id:** 55317236 **Question Shuffling Allowed:** Yes

Question Number: 1 Question Id: 553172995 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Eme Question Option . No Option Orientation .

Correct Marks: 4 Wrong Marks: 1

Outer mitochondrial membrane contains a free channel porin which can pass molecules up to a molecular weight of

- 1) 10 KD
- 2) 100 KD
- 3) 200 KD
- 4) 500 KD

5531723921.1

5531723922. 2

5531723923.3

5531723924.4

Question Number : 2 Question Id : 553172996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The phase of cell cycle immediately preceding mitosis is called

- 1) G2 Phase
- 2) G1 Phase
- 3) S Phase
- 4) M Phase

# **Options:**

5531723925.1

5531723926. 2

5531723927.3

5531723928. 4

Question Number: 3 Question Id: 553172997 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The following are true for lysosomal enzymes except they

- 1) Show hydrolytic activity
- 2) Usually operate at basic pH
- Are normally isolated for their substrates by the lysosomal membrane
- Can lead to cellular digestion if the lysosomal membrane is disrupted

#### **Options:**

5531723929.1

5531723930.2

5531723931.3

5531723932. 4

Question Number: 4 Question Id: 553172998 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Peroxisomes render H<sub>2</sub>O<sub>2</sub> nontoxic by

- 1) Action of cathepsin
- Transporting H<sub>2</sub>O<sub>2</sub> from blood into peroxisomes
- Oxidizing amino acids with O<sub>2</sub>
- Action of enzyme catalase

#### **Options:**

5531723933.1

5531723934. 2

5531723935.3

Question Number : 5 Question Id : 553172999 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Biological membranes are associated with all of the following except

- Free movement of proteins and nucleic acids across the membrane
- Release of proteins when damaged
- Specific systems for the transport of uncharged molecules
- 4) Sites for biochemical reactions

# **Options:**

5531723937.1

5531723938. 2

5531723939.3

5531723940.4

Question Number : 6 Question Id : 5531721000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is the characteristic of mitochondria?

- Only the outer membrane has transmembrane system for translation of metabolites
- It has no role in apoptosis
- 3) Inner membrane forms cristae
- Mitochondrial DNA has similar nuclear DNA in size and shape

#### **Options:**

5531723941.1

5531723942. 2

5531723943.3

5531723944. 4

Question Number: 7 Question Id: 5531721001 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

In eukaryotes, protein synthesis takes place in

- Free Ribosome
- Smooth endoplasmic reticulum
- Rough endoplasmic reticulum
- 4) Nucleus

#### **Options:**

5531723945. 1

5531723946. 2

5531723947.3

5531723948.4

Question Number: 8 Question Id: 5531721002 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Which one of the following organelles is a series of flattened membranes, involved in secretion of proteins from the cells?

- 1) Endoplasmic reticulum
- 2) Golgi apparatus
- 3) Mitochondrion
- 4) Lysosomes

# **Options:**

5531723949.1

5531723950. 2

5531723951.3

5531723952. 4

Question Number: 9 Question Id: 5531721003 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Coenzyme A serves as a transient carrier for

- 1) Aldehydes
- 2) Acyl groups
- 3) Amino groups
- 4) CO<sub>2</sub>

# **Options:**

5531723953.1

5531723954. 2

5531723955.3

5531723956. 4

Question Number: 10 Question Id: 5531721004 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Cu2+ is a cofactor for enzyme

- Cytochrome oxidase
- Pyruvate kinase
- 3) Urease
- 4) Carbonic anhydrase

#### **Options:**

5531723957.1

5531723958. 2

5531723959.3

5531723960.4

 $Question\ Number: 11\ Question\ Id: 5531721005\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

A functional network comprising interconnected protein complexes is called

- 1) Interactome
- Genome
- 3) Proteome
- Metabolome

5531723961.1

5531723962. 2

5531723963.3

5531723964.4

Question Number: 12 Question Id: 5531721006 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Amino acids can be classified into five types on basis of

- 1) Mass only
- 2) Charge only
- 3) Polarity only
- 4) Both Polarity and Charge

# **Options:**

5531723965.1

5531723966, 2

5531723967.3

5531723968. 4

Question Number: 13 Question Id: 5531721007 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following amino acid contains selenium?

- 1) Serine
- 2) Cysteine
- 3) Histidine
- Selenocysteine

#### **Options:**

5531723969.1

5531723970. 2

5531723971.3

5531723972. 4

Question Number: 14 Question Id: 5531721008 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The study of full complement of proteins of an organism is called

- Proteomics
- 2) Genomics
- 3) Glycomics
- 4) Metabolomics

# **Options:**

5531723973.1

5531723974. 2

5531723975.3

5531723976, 4

Question Number: 15 Question Id: 5531721009 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

#### Correct Marks: 4 Wrong Marks: 1

Zig zag structure found in 'z' conformation of DNA is due to presence of glycosyl angle

- Between sugar & guanosine syn and sugar & cytosine anti conformation
- Between sugar & guanosine anti and sugar & cytosine anti conformation
- Between sugar & guanosine syn and sugar & cytosine syn conformation
- Between sugar & guanosine anti and sugar & cytosine syn conformation

#### **Options:**

5531723977.1

5531723978. 2

5531723979.3

5531723980. 4

Question Number: 16 Question Id: 5531721010 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The protein that lines coated pits is called

- 1) Selectin
- 2) Integrin
- 3) Clathrin
- 4) Immunoglobulins

#### **Options:**

5531723981.1

5531723982. 2

5531723983.3

5531723984.4

Question Number: 17 Question Id: 5531721011 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

One of the common basic feature of protein structure is a

- Covalently linked lipid
- 2) α helix (alpha helix)
- 3) binding groove
- 4) transmembrane domain

#### **Options:**

5531723985.1

5531723986. 2

5531723987.3

5531723988. 4

Question Number: 18 Question Id: 5531721012 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

# Leukotrienes was first found in

- 1) Sperm
- 2) Ovum
- 3) Leukocyte
- 4) RBC

# **Options:**

5531723989.1

5531723990. 2

5531723991.3

5531723992. 4

 $Question\ Number: 19\ Question\ Id: 5531721013\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

Palmitic fatty acid has carbon skeleton of

- 1) 12:0
- 2) 16:0
- 3) 18:0
- 4) 20:0

# **Options:**

5531723993.1

5531723994. 2

5531723995.3

5531723996. 4

Question Number : 20 Question Id : 5531721014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is a omega – 3 – polyunsaturated fatty acid that humans can synthesize?

- Eicosapentaenoic acid
- Lauric acid
- 3) Myristic acid
- Palmitic acid

#### **Options:**

5531723997.1

5531723998. 2

5531723999. 3

5531724000.4

Question Number : 21 Question Id : 5531721015 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Omega – 6 - polyunsaturated fatty acid has double bond between

- C 1 and C 2
- 2) C-3 and C-4
- 3) C-5 and C-6
- 4) C-6 and C-7

5531724001. 1

5531724002. 2

5531724003.3

5531724004.4

Question Number : 22 Question Id : 5531721016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

An enzyme with a multiple binding site shows a simple Michaelis

- Menten kinetic behavior when
  - 1) Hill coefficient (n) > 1
  - 2) Hill coefficient (n) < 1
  - 3) Hill coefficient (n) = 1
  - 4) Hill coefficient (n) = 0.25

#### **Options:**

5531724005.1

5531724006. 2

5531724007.3

5531724008.4

Question Number : 23 Question Id : 5531721017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

All of the following are true for lipids except

- They are water insoluble
- 2) Majority of fatty acids have even number of carbon atoms
- The double bonds are almost always present in cis configuration
- The double bonds are almost always present in trans configuration

#### **Options:**

5531724009. 1

5531724010.2

5531724011.3

5531724012. 4

Question Number : 24 Question Id : 5531721018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Suicidal inhibitor binds to enzyme through a

- 1) Hydrophobic interaction
- 2) Van der Waals force
- Covalent bond
- 4) Non-Covalent bond

## **Options:**

5531724013. 1

5531724014. 2

5531724015. 3

Question Number : 25 Question Id : 5531721019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1
Platelet - activating factor is a

- 1) Ether lipid
- 2) Glycoprotein
- 3) Protein
- 4) Carbohydrate

# **Options:**

5531724017.1

5531724018. 2

5531724019.3

5531724020. 4

Question Number : 26 Question Id : 5531721020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

What is the net charge on cardiolipin at pH 7?

- 1) 2
- 2) 1
- 3) 0
- 4) 4

#### **Options:**

5531724021.1

5531724022. 2

5531724023.3

5531724024. 4

Question Number: 27 Question Id: 5531721021 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

All of the following are glycerophospholipids except

- Phosphatidic acid
- 2) Ceramide
- 3) Cardiolipin
- Phosphatidyl glycerol

#### **Options:**

5531724025. 1

5531724026. 2

5531724027.3

5531724028. 4

Question Number : 28 Question Id : 5531721022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

# Malonate is the competitive inhibitor of enzyme

- 1) Malate dehydrogenase
- Succinate dehydrogenase
- α ketoglutarate dehydrogenase
- 4) Arginase

#### **Options:**

5531724029.1

5531724030, 2

5531724031.3

5531724032. 4

Question Number : 29 Question Id : 5531721023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The heteropolysaccharide in which one of two monosaccharide unit, a uronic acid and other N – acetylated amino sugar is

- 1) Glycosaminoglycans
- 2) Chitin
- 3) Dextran
- 4) Amylopectin

# **Options:**

5531724033. 1

5531724034. 2

5531724035.3

5531724036. 4

Question Number : 30 Question Id : 5531721024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following monosaccharides has a ketone group?

- D- Fructose, Dihydroxyacetone
- 2) D- Glyceraldehyde, D-Glucose
- 3) D- Glucose, D-Ribose
- 4) D-Fructose, D-Glucose

# **Options:**

5531724037.1

5531724038. 2

5531724039.3

5531724040. 4

Question Number : 31 Question Id : 5531721025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

- D- Erythrose is a monosaccharide with
  - 1) Three carbons
  - 2) Four carbons
  - 3) Five carbons
  - 4) Six carbons

# **Options:**

5531724042. 2 5531724043. 3 5531724044. 4

Question Number: 32 Question Id: 5531721026 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is a six carbon D - ketose

monosaccharide?

- D-Galactose
- 2) D-Sorbose
- 3) D-Mannose
- 4) D-Talose

# **Options:**

5531724045.1

5531724046, 2

5531724047.3

5531724048.4

Question Number : 33 Question Id : 5531721027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is a heteropolysaccharide?

- 1) Dextran
- 2) Starch
- 3) Agarose
- 4) Cellulose

# **Options:**

5531724049.1

5531724050. 2

5531724051.3

5531724052. 4

Question Number : 34 Question Id : 5531721028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

In an oxidation reduction reaction NAD+ is converted to NADH by accepting one

- 1) Hydrogen ion
- 2) Hydride ion
- 3) Hydroxyl ion
- 4) Hydrogen atom

# **Options:**

5531724053.1

5531724054. 2

5531724055. 3

5531724056. 4

Question Number : 35 Question Id : 5531721029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

# Major surfactant present on the inner surface of lung is 1) Lecithin 2) Cephaline

# **Options:**

5531724057.1

4) Ceramide

5531724058. 2

5531724059.3

5531724060.4

Question Number : 36 Question Id : 5531721030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Vitamin A was isolated for the first time from

3) Di-palmitoyl phosphatidylcholine

- 1) Fish liver oil
- 2) Whole milk
- 3) Egg
- 4) Butter

# **Options:**

5531724061.1

5531724062. 2

5531724063.3

5531724064. 4

Question Number: 37 Question Id: 5531721031 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following are fat soluble vitamins?

- 1) A, D, E, K
- 2) A, B, C, D
- 3) B, C, K
- 4) A.C.D.K

## **Options:**

5531724065.1

5531724066. 2

5531724067.3

5531724068. 4

Question Number : 38 Question Id : 5531721032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Cholecalciferol is also known as

- 1) Vitamin D2
- Vitamin D3
- 3) Vitamin A
- 4) Vitamin E

# **Options:**

5531724069.1

5531724070. 2

Question Number : 39 Question Id : 5531721033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following biologically active isoprenoid compounds or derivatives act as a mitochondrial electron carrier?

- 1) Vitamin E
- 2) Vitamin K1
- 3) Ubiquinone
- 4) Warfarin

# **Options:**

5531724073.1

5531724074.2

5531724075.3

5531724076, 4

Question Number : 40 Question Id : 5531721034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The sensitivity of MALDI-TOF-MS in detection of protein molecule is up to

- 1) Millimole
- 2) Micromole
- 3) Nanomole
- 4) Attomole

# **Options:**

5531724077.1

5531724078. 2

5531724079.3

5531724080.4

 $Question\ Number: 41\ Question\ Id: 5531721035\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

What is the basis of separation of proteins by gel filtration chromatography, ion-exchange chromatography, reverse phase HPLC and affinity chromatography?

- 1) Net charge, Polarity
- Size, net charge, polarity, specific ligand binding ability
- Size, Polarity
- 4) Polarity, Size, Net charge

#### **Options:**

5531724081.1

5531724082. 2

5531724083.3

5531724084.4

Question Number : 42 Question Id : 5531721036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

#### Correct Marks: 4 Wrong Marks: 1

Prostaglandins contain

- A five-carbon ring originating from the chain of arachidonic acid
- 2) A five-carbon ring originating from the chain of lauric acid
- A six-carbon ring originating from the chain of arachidonic acid
- A six-carbon ring originating from the chain of lauric acid

# **Options:**

5531724085.1

5531724086. 2

5531724087.3

5531724088.4

Question Number: 43 Question Id: 5531721037 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of these antibody assays is a primary binding test?

- 1) Agglutination inhibition
- 2) Agglutination
- Fluorescent antibody
- Complement fixation

#### **Options:**

5531724089.1

5531724090. 2

5531724091.3

5531724092.4

Question Number: 44 Question Id: 5531721038 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The hinge region of an immunoglobulin is flexible because it contains a large amount of

- 1) Proline
- 2) Tyrosine
- Cysteine
- 4) Serine

#### **Options:**

5531724093.1

5531724094. 2

5531724095.3

5531724096. 4

Question Number : 45 Question Id : 5531721039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is quantitative precipitation technique?

- 1) Western blot
- Radio Immunodiffusion
- 3) Gel diffusion
- 4) Immunoelectrophoresis

5531724097.1

5531724098. 2

5531724099.3

5531724100.4

Question Number: 46 Question Id: 5531721040 Question Type: MCQ Option Shuffling: No Display Question Number: Yes

Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following vitamins is responsible for beri-beri?

- 1) Vitamin D
- 2) Vitamin C
- 3) Vitamin B1
- 4) Vitamin A

# **Options:**

5531724101.1

5531724102. 2

5531724103.3

5531724104. 4

Question Number: 47 Question Id: 5531721041 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following vitamins is responsible for scurvy?

- 1) Vitamin A
- 2) Vitamin B1
- 3) Vitamin C
- 4) Vitamin D

#### **Options:**

5531724105.1

5531724106. 2

5531724107.3

5531724108.4

Question Number: 48 Question Id: 5531721042 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The deficiency of which mineral leads to anemia?

- 1) Iron
- Magnesium
- 3) lodine
- 4) Calcium

#### **Options:**

5531724109.1

5531724110. 2

5531724111.3

Question Number : 49 Question Id : 5531721043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following amino acids are responsible for metabolic disorder maple syrup urine disease?

- 1) Leucine, isoleucine, valine
- 2) Glycine, alanine
- Alanine, aspartic acid
- Aspartic acid, glycine

# **Options:**

5531724113.1

5531724114. 2

5531724115.3

5531724116. 4

Question Number : 50 Question Id : 5531721044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Islets of Langerhans secretes hormone

- 1) Insulin only
- 2) Glucagon only
- Insulin and glucagon only
- 4) Insulin, glucagon and somatostatin

# **Options:**

5531724117. 1

5531724118. 2

5531724119.3

5531724120.4

Question Number: 51 Question Id: 5531721045 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following hormones is not secreted by anterior pituitary?

- 1) FSH
- 2) LH
- Vasopressin
- 4) Prolactin

### **Options:**

5531724121. 1

5531724122. 2

5531724123.3

5531724124.4

Question Number: 52 Question Id: 5531721046 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

# Which one of the following is a steroid hormone?

- 1) Epinephrine
- 2) Insulin
- 3) Testosterone
- 4) Retinoic acid

# **Options:**

5531724125.1

5531724126, 2

5531724127.3

5531724128. 4

Question Number: 53 Question Id: 5531721047 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following does not have leptin receptor?

- 1) Hypothalamus
- Anterior pituitary
- Posterior Pituitary
- 4) Reproductive tract

#### **Options:**

5531724129.1

5531724130. 2

5531724131.3

5531724132. 4

Question Number: 54 Question Id: 5531721048 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is not true for kisspeptin?

- 1) It is a neuropeptide
- It acts as a "gatekeep" for GnRH release
- 3) It is secreted from hypothalamic neurons
- 4) It is important regulator of progesterone

#### **Options:**

5531724133.1

5531724134. 2

5531724135.3

5531724136. 4

Question Number: 55 Question Id: 5531721049 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the assays is used to measure serum IgM level?

- Radial immunodiffusion
- Passive hemagglutination
- Direct agglutination test
- 4) Indirect fluorescent antibody test

#### **Options:**

5531724138. 2 5531724139. 3 5531724140. 4

Question Number : 56 Question Id : 5531721050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of these is a secondary binding test?

- 1) Competitive radioimmunoassay
- 2) Western Blot
- Immunoelectrophoresis
- 4) ELISA

#### **Options:**

5531724141.1

5531724142. 2

5531724143.3

5531724144. 4

 $Question\ Number: 57\ Question\ Id: 5531721051\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1
The size of epitope is about

- 1) 20 amino acid residues
- 2) 50 amino acid residues
- 3) 100 amino acid residues
- 4) 5 amino acid residues

# **Options:**

5531724145.1

5531724146, 2

5531724147.3

5531724148. 4

Question Number: 58 Question Id: 5531721052 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Antigen - antibody cross reactions may be due to

- Genetic similarities between species
- Nonspecific antibodies
- Similar epitopes on antigen
- Dissimilar epitopes on antigen

#### **Options:**

5531724149. 1

5531724150.2

5531724151.3

5531724152. 4

Question Number: 59 Question Id: 5531721053 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Which one of the following eukaryotic initiation factors facilitate binding of initiation met-tRNAmet to 40s ribosomal sub-unit?

- 1) elF-2
- 2) eIF-2B
- elF-4A
- 4) eIF-4B

# **Options:**

5531724153.1

5531724154. 2

5531724155.3

5531724156. 4

Question Number: 60 Question Id: 5531721054 Question Type: MCQ Option Shuffling: No Display Question Number: Yes

Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Two foals conceived by in-vitro fertilization of in-vivo matured oocytes were born in 1991 for the first time in

- Germany
- 2) England
- 3) France
- 4) India

#### **Options:**

5531724157. 1

5531724158. 2

5531724159.3

5531724160.4

Question Number: 61 Question Id: 5531721055 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

First calf conceived by in-vitro fertilization was born in

- 1) 1978
- 2) 1981
- 3) 1983
- 4) 1985

# **Options:**

5531724161.1

5531724162. 2

5531724163.3

5531724164. 4

Question Number: 62 Question Id: 5531721056 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Turn over number of prokaryotic DNA polymerase III is

- 1) 300
- 2) 600
- 3) 900
- 4) 9000

5531724165.1

5531724166. 2

5531724167.3

5531724168. 4

Question Number: 63 Question Id: 5531721057 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

60 S ribosomal sub unit contain

1) 20 S, 5.8 S, 5 S ribosomal RNA

2) 28 S, 5.8 S, 5 S ribosomal RNA

28 S, 6.8 S, 4 S ribosomal RNA

4) 28 S, 6.8 S, 5 S ribosomal RNA

#### **Options:**

5531724169.1

5531724170.2

5531724171.3

5531724172. 4

Question Number: 64 Question Id: 5531721058 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following proteins unwinds DNA in E coli?

- 1) DnaA
- 2) DnaB
- 3) DnaC
- 4) DnaG

#### **Options:**

5531724173. 1

5531724174. 2

5531724175.3

5531724176.4

Question Number: 65 Question Id: 5531721059 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which DNA polymerase has  $3' \rightarrow 5'$  and  $5' \rightarrow 3$  exonuclease activity in *E coli*?

- 1) Polymerase III only
- Polymerase II only
- Polymerase I only
- Both Polymerase I and II

# **Options:**

5531724177.1

5531724178. 2

5531724179.3

5531724180. 4

Question Number : 66 Question Id : 5531721060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

How many base pairs bound tightly around the eight-part histone core of nucleosome?

- 1) 200
- 2) 146
- 3) 250
- 4) 292

## **Options:**

5531724181.1

5531724182. 2

5531724183.3

5531724184. 4

Question Number: 67 Question Id: 5531721061 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

In eukaryotes, the codon for amino acid methionine in eukaryote

is

- 1) AAG
- 2) AUG
- 3) GUG
- 4) AUC

#### **Options:**

5531724185. 1

5531724186.2

5531724187.3

5531724188.4

Question Number : 68 Question Id : 5531721062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the enzymes synthesizes a RNA primer at 5' end of leading strand?

- 1) Primase
- RNA polymerase
- DNA polymerase
- 4) Topoisomerase

# **Options:**

5531724189.1

5531724190. 2

5531724191.3

5531724192.4

Question Number : 69 Question Id : 5531721063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

# Stop codons in eukaryotes are:

- 1) UAA, UGA, UAG
- 2) UAA, UGA, UAC
- UAU, UGU, UGC
- 4) UAC, UGC, UAA

#### **Options:**

5531724193.1

5531724194. 2

5531724195.3

5531724196.4

Question Number : 70 Question Id : 5531721064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1 RNA polymerase 1 transcribes

- 1) rRNAs (ribosomal RNAs)
- 2) tRNA (transfer RNAs)
- hnRNA (heterogenous nuclear RNA)
- SnRNAs (small nuclear RNAs)

#### **Options:**

5531724197.1

5531724198. 2

5531724199.3

5531724200.4

Question Number: 71 Question Id: 5531721065 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Helix rise per base pair in B- form of DNA is

- 1) 2.6A
- 2) 3.4Å
- 3) 3.7Å
- 4) 2.8 Å

# **Options:**

5531724201.1

5531724202. 2

5531724203.3

5531724204. 4

Question Number : 72 Question Id : 5531721066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

In all cellular DNA, the number of adenosine residues is equal to the number of thymidine residues and number of guanosine residues is equal to the number of cytidine residues was given by

- E. Chargaff
  - F. Miescher
  - 3) O.T. Avery
- 4) J D Watson

5531724205.1

5531724206. 2

5531724207.3

5531724208.4

Question Number: 73 Question Id: 5531721067 Question Type: MCQ Option Shuffling: No Display Question Number: Yes

Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Karst Hoogsteen in 1963 first recognized the potential for pairing

as

- 1) Triplex DNAs
- 2) Tetraplex DNAs
- 3) Cruciform structures
- 4) Double helix

## **Options:**

5531724209.1

5531724210. 2

5531724211.3

5531724212. 4

Question Number: 74 Question Id: 5531721068 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

About how much percentage of human genome is coding?

- 1) 10
- 2) 50
- 3) 70
- 4) 2

#### **Options:**

5531724213.1

5531724214. 2

5531724215.3

5531724216.4

Question Number: 75 Question Id: 5531721069 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is NOT a gastrointestinal hormone?

- Gastrin
- Cholecystokinine
- Secretin
- 4) Renin

# **Options:**

5531724217.1

5531724218. 2

5531724219. 3

Question Number: 76 Question Id: 5531721070 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

H.M.G CoA reductase which controls cholesterol biosynthesis is stimulated by

- 1) Glucagon
- 2) Cortisol
- 3) Insulin
- 4) Bile Acid

# **Options:**

5531724221.1

5531724222, 2

5531724223.3

5531724224. 4

 $Question\ Number: 77\ Question\ Id: 5531721071\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

The most common hydrogen bonding patterns in DNA was defined by J. D. Watson and F. Crick in

- 1) 1951
- 2) 1953
- 3) 1955
- 4) 1957

# **Options:**

5531724225.1

5531724226. 2

5531724227.3

5531724228. 4

Question Number : 78 Question Id : 5531721072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

A primary culture is characterized by

- Cell culture that is formed by culturing cells directly obtained from tissue
- Infinite time span
- The ultimate predominance of cell lineage with a high proliferative capacity
- Degree of uniformity in cell population

# **Options:**

5531724229.1

5531724230. 2

5531724231.3

5531724232. 4

Question Number: 79 Question Id: 5531721073 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

# Explant culture involves

- 1) Tissue fragments
- 2) Cell dispersed by trypsin
- 3) Cell line
- 4) Monolayer

#### **Options:**

5531724233.1

5531724234. 2

5531724235.3

5531724236.4

Question Number: 80 Question Id: 5531721074 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The precursor molecule for biosynthesis of steroid hormone is

- 1) Amino acid
- 2) Sugar
- 3) Cholesterol
- 4) Protein

# **Options:**

5531724237. 1

5531724238. 2

5531724239.3

5531724240.4

Question Number: 81 Question Id: 5531721075 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following is the correct denaturation temperature in PCR?

- 1) 50 °C
- 2) 70 °C
- 3) 95 °C
- 4) 72°C

#### **Options:**

5531724241.1

5531724242. 2

5531724243.3

5531724244. 4

Question Number: 82 Question Id: 5531721076 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Which one of the following are the chemical components of PCR?

- 1) Template, Primer, Taq DNA polymerase
- 2) Primers, dNTPs, Reaction buffer
- Taq DNA polymerase, Template, Primers, dNTPs, Reaction buffer
- 4) Template, dNTPs, Taq DNA polymerase, Primers

#### **Options:**

5531724245.1

5531724246. 2

5531724247.3

5531724248. 4

Question Number: 83 Question Id: 5531721077 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Zygote is an example of

- 1) Multipotent stem cell
- 2) Pluripotent stem cell
- 3) Totipotent stem cell
- Induced pluripotent stem cell

#### **Options:**

5531724249.1

5531724250.2

5531724251.3

5531724252. 4

Question Number: 84 Question Id: 5531721078 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Critical genes responsible for transformation of fibroblast into induced pluripotent stem cells identified by Shinya Yamanaka in vear

- 1) 2001
- 2) 2003
- 3) 2004
- 4) 2006

#### **Options:**

5531724253. 1

5531724254. 2

5531724255.3

5531724256. 4

Question Number: 85 Question Id: 5531721079 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Japanese researcher Shinya Yamanaka in 2006 identified following critical genes responsible for transfer of fibroblast into induced pluripotent stem cell

- 1) Oct 3 / 4, Sox2
- 2) Oct 3 / 4, C-Myc
- 3) Oct 3 / 4, K1f4
- Oct 3 / 4, Sox2, C-My c, K1f4

#### **Options:**

5531724257.1

5531724258. 2

5531724259.3

5531724260.4

Question Number: 86 Question Id: 5531721080 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

HBs Ag recombinant sub unit vaccine is grown in

- 1) Insect Cells
- 2) Prokaryote
- 3) Frog cells
- Yeast cells

# **Options:**

5531724261.1

5531724262. 2

5531724263.3

5531724264. 4

Question Number: 87 Question Id: 5531721081 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following statements is true for eukaryotic DNA replication?

- Topoisomerase catalyze changes in the linking number, facilitating unwinding of the parental strands
- Okazaki fragments form on the leading strand within a replication fork.
- Separating the parental DNA strands to form the replication fork is an energy neutral process.
- Only one replisome forms because there is a single origin of replication

# **Options:**

5531724265.1

5531724266, 2

5531724267.3

5531724268.4

Question Number: 88 Question Id: 5531721082 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

A small ringlet DNA which floats freely into cytoplasm of certain bacterial cells and replicates independently are called as

- 1) Plasmids
- 2) Cosmids
- 3) Vectors
- 4) Phages

#### **Options:**

5531724269. 1

5531724270. 2

5531724271.3

5531724272. 4

Question Number: 89 Question Id: 5531721083 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Cytoplasmic division occurs in which stage of cell cycle?

- 1) G1 (GAP1)
- 2) G2(GAP2)
- 3) S (Synthesis)
- 4) Mitosis (M)

# **Options:**

5531724273. 1

5531724274. 2

5531724275. 3

5531724276. 4

Question Number : 90 Question Id : 5531721084 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

During cell cycle DNA replication occurs in

- 1) G1 stage
- 2) G2 stage
- S (synthesis) stage
- Mitosis (M) stage

#### **Options:**

5531724277.1

5531724278. 2

5531724279.3

5531724280. 4

Question Number : 91 Question Id : 5531721085 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Proteins generally associated with DNA molecule which maintains their shape are

- Histones
- 2) Glycoproteins
- 3) Albumin
- 4) Immunoglobulins

5531724281.1

5531724282. 2

5531724283.3

5531724284. 4

Question Number: 92 Question Id: 5531721086 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Match 'A' and 'B' columns. Select the correct answer from the codes given below:

# A

A. Restriction

Endonuclease

B. DNA ligase

C. DNA polymerase

В

Separation of DNA

strands Major DNA

replication enzyme

3. Sealing nicks on the DNA strand

D. Helicase

# **Options:**

5531724285.1

5531724286. 2

5531724287.3

5531724288. 4

Molecular scissors

Question Number: 93 Question Id: 5531721087 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The enzymes that are used to recognize and cleave the phosphodiester backbone of both the stands of the DNA to generate 3'-OH and 5'-P04 terminals are

- 1) Restriction endonucleases
- Exonucleases
- Hydrolases
- Ligases

# **Options:**

5531724289. 1

5531724290.2

5531724291.3

5531724292. 4

Question Number: 94 Question Id: 5531721088 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Which one among the following is an advantage of using serum in cell culture media?

- Serum contains adequate levels of cell specific growth factors.
- Low risk of contamination with virus, fungi and bacteria.
- 3) For most cells, serum is a physiological fluid
- 4) Contains basic nutrients in solution and bound to proteins

# **Options:**

5531724293.1

5531724294. 2

5531724295.3

5531724296. 4

Question Number: 95 Question Id: 5531721089 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which statement among the following is incorrect in respect of monoclonal antibodies (MAbs)?

- Monoclonal antibodies even when prepared well with standard protocol tends to differ from batch to batch
- MAbs produced by single clone cell react with single antigenic determinant
- 3) MAbs are easily manipulated
- MAbs for specific target antigen can be achieved even without prior purification of antigen.

#### **Options:**

5531724297.1

5531724298. 2

5531724299. 3

5531724300.4

 $Question\ Number: 96\ Question\ Id: 5531721090\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

Part of the gene insertion that are NOT translated into proteins is termed as

- 1) Exons
- 2) Introns
- Transcriptons
- 4) Codons

#### **Options:**

5531724301.1

5531724302. 2

5531724303.3

5531724304.4

Question Number: 97 Question Id: 5531721091 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

The first restriction enzymes *Hind II* and *Hind III* were isolated by Hamilton Smith and coworkers from the microorganisms

- 1) Escherichia coli
- 2) Haemophilus influenza
- 3) Streptococcus albus
- 4) Acetobacter aceti

# **Options:**

5531724305.1

5531724306. 2

5531724307.3

5531724308.4

Question Number : 98 Question Id : 5531721092 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Assertion (A)

Original Tag polymerase purified from the bacterium

Thermophilus aquaticus is considered to be low fidelity enzyme

Reason (R)

Tag polymerase lacks 3'-5' exonuclease (proof reading) activity.

- Both "A" and "R" are correct and "R" is correct reasoning for "A".
- 2) "A" is correct but "R" is not correct.
- 3) "A" is correct but "R" is not correct reasoning for "A".
- 4) Both "A" and "R" are not correct

## **Options:**

5531724309.1

5531724310.2

5531724311.3

5531724312. 4

Question Number : 99 Question Id : 5531721093 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The enzyme that catalyzes the transfer of terminal phosphate group of ATP to 5'hydroxylated terminal of DNA or RNA is

- Alkaline phosphatase
- Polynucleotide kinase
- 3) Deoxynucleotidyl transferase
- DNA polymerase-I

# **Options:**

5531724313.1

5531724314. 2

5531724315.3

5531724316. 4

Question Number: 100 Question Id: 5531721094 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Invitro synthesis of cDNA from mRNA can be done by an enzyme.

- 1) DNA polymerase
- 2) Deoxyribonuclease
- Reverse transcriptase
- 4) Restriction endonuclease

# **Options:**

5531724317.1

5531724318. 2

5531724319.3

5531724320.4

Question Number : 101 Question Id : 5531721095 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The process of removal of intervening introns from the primary transcript of mRNA is called

- Cleavage
- 2) Splicing
- 3) Terminal 3' capping
- Methylation

# **Options:**

5531724321.1

5531724322. 2

5531724323.3

5531724324. 4

Question Number: 102 Question Id: 5531721096 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following statements is NOT CORRECT in respect of prokaryotic RNA transcription?

- 1) Prokaryotic mRNAs are very short lived.
- 2) All prokaryotic RNAs are transcribed by the same enzyme.
- Sigma factor is loosely bound to the core polymerase required for recognition of start signal
- 4) Prokaryotic mRNA are mono cistronic

#### **Options:**

5531724325.1

5531724326. 2

5531724327.3

5531724328. 4

Question Number: 103 Question Id: 5531721097 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

During chromatin remodelling which one of the following is acetylated to loosen its contact with DNA

- 1) DNA
- Histone protein
- 3) Nucleosome
- 4) Histone acetyltransferase

# **Options:**

5531724329.1

5531724330. 2

5531724331.3

5531724332. 4

Question Number: 104 Question Id: 5531721098 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which statement among the following is NOT CORRECT in respect of cDNA library?

- 1) cDNA library carries only the gene sequence
- It represents entire genome of the organism
- 3) cDNA has only coding sequences
- It is smaller as compared to genomic library.

#### **Options:**

5531724333.1

5531724334. 2

5531724335.3

5531724336.4

Question Number: 105 Question Id: 5531721099 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

For the separation and detection of DNA which blotting techniques among following is used?

- 1) Northern Blotting
- 2) Southern Blotting
- 3) Western Blotting
- 4) Eastern Blotting

#### **Options:**

5531724337.1

5531724338. 2

5531724339.3

5531724340.4

Question Number: 106 Question Id: 5531721100 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

#### Assertion (A)

In sodium dodecyl sulphate electrophoresis (SDS-PAGE) proteins are separated on the basis of size and molecular weight

# Reason(R)

Sodium dodecyl sulphate is an anionic detergent and imparts negative charges to all proteins.

- Both 'A' and 'R' are correct and 'R' is correct explanation of 'A'.
- Both 'A' and 'R' are correct but 'R' is not correct explanation of 'A'.
- 'A' is correct but 'R' is not correct
- 4) Both 'A' and 'R' are incorrect

#### **Options:**

5531724341.1

5531724342. 2

5531724343.3

5531724344. 4

Question Number: 107 Question Id: 5531721101 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

In Sanger's DNA sequencing method, the molecule involved in terminating polymerization of DNA at any nucleotide is

- 1) ddNTPs
- 2) dNTPs
- 3) dATP
- 4) dGTP

#### **Options:**

5531724345. 1

5531724346. 2

5531724347.3

5531724348.4

Question Number: 108 Question Id: 5531721102 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Holding your breath for one minute can increase the concentration of CO<sub>2</sub> gas in the blood. The resultant pH of extracellular fluid will be in the range of:

- 1) 7.35-7.45
- 2) 7.60-7.80
- 3) 7.00-7.30
- 4) 8.00-8.20

#### **Options:**

5531724349.1

5531724350. 2

5531724351.3

5531724352. 4

Question Number: 109 Question Id: 5531721103 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

How many possible stereoisomers can the amino acids have?

- 1) Two
- 2) Four
- 3) Six
- 4) Eight

#### **Options:**

5531724353.1

5531724354. 2

5531724355.3

5531724356. 4

Question Number: 110 Question Id: 5531721104 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

A peptide secreted by the posterior pituitary and which stimulates uterine contractions is a

- 1) Dipeptide
- 2) Octapeptide
- 3) Nonapeptide
- 4) Decapeptide

#### **Options:**

5531724357.1

5531724358. 2

5531724359.3

5531724360.4

Question Number: 111 Question Id: 5531721105 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following reagents was used by Sanger for identifying the amino-terminal amino acid residue?

- 1) Dabysl Chloride
- 1- Fluoro-2,4-Dinitrobenzene
- Dansyl chloride
- 4) Phenyl isothiocyanate

#### **Options:**

5531724361.1

5531724362. 2

5531724363.3

5531724364. 4

 $Question\ Number: 112\ Question\ Id: 5531721106\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

The contribution of weak interactions to protein stability are generally predominated by

- 1) Hydrophilic
- 2) Hydrophobic
- lonic
- Vander Waals

5531724365.1

5531724366. 2

5531724367.3

5531724368.4

Question Number: 113 Question Id: 5531721107 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The α- keratins (fibrous proteins) are found only in:

- 1) Avians
- 2) Insects
- 3) Mammals
- 4) Reptiles

#### **Options:**

5531724369. 1

5531724370. 2

5531724371.3

5531724372. 4

Question Number: 114 Question Id: 5531721108 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

A deficiency disease characterized by general degeneration of connective tissue and manifested as numerous small

hemorrhages is:

- Encephalomalacia
- 2) Osteomalacia
- 3) Rickets
- 4) Scurvy

## **Options:**

5531724373. 1

5531724374. 2

5531724375.3

5531724376, 4

Question Number: 115 Question Id: 5531721109 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Bovine spongiform encephalopathy is possibly caused by alterations in :

- 1) Carbohydrates
- 2) Proteins
- 3) Lipids
- 4) Nucleic acids

# **Options:**

5531724377.1

5531724378. 2

5531724379.3

Question Number: 116 Question Id: 5531721110 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the followings is the major antibody in secondary immune response initiated by memory B-cells?

- 1) IgA
- 2) IgD
- 3) IgE
- 4) IgG

#### **Options:**

5531724381.1

5531724382. 2

5531724383.3

5531724384. 4

Question Number: 117 Question Id: 5531721111 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

A catalytically active enzyme together with its bound coenzyme

and/or metal ions is called a:

- Cofactor
- 2) Prosthetic group
- 3) Holoenzyme
- 4) Apoenzyme

#### **Options:**

5531724385.1

5531724386, 2

5531724387.3

5531724388. 4

Question Number: 118 Question Id: 5531721112 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Diisopropylfluorophosphate binds covalently with or destroys a functional group on an enzyme for its activity is an example of:

- Mixed inhibition
- Un competitive inhibition
- Irreversible inhibition
- 4) Feedback inhibition

#### **Options:**

5531724389.1

5531724390. 2

5531724391.3

5531724392.4

 $Question\ Number: 119\ Question\ Id: 5531721113\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Which of the following mimics the structure of a  $\beta$ - lactam antibiotic and forms a covalent adduct with the  $\beta$ - lactase active site?

- 1) Clavulanic acid
- 2) Glutamic acid
- 3) Lactic acid
- 4) Streptomycin

## **Options:**

5531724393.1

5531724394.2

5531724395.3

5531724396.4

Question Number: 120 Question Id: 5531721114 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Two sugars that differ only in the configuration around carbon atom are called:

- 1) Isomers
- 2) Epimers
- 3) Anomers
- 4) Tautomers

#### **Options:**

5531724397.1

5531724398. 2

5531724399.3

5531724400.4

Question Number : 121 Question Id : 5531721115 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Dextran's are bacterial and yeast polysaccharides made up of:

- (α 1 →6)- Linked poly-D-glucose
- 2) (α 1→4)- Linked poly-D-glucose
- (α 1→6)-Linked poly-D-galactose
- 4) (α 1→4)- Linked poly-D-galactose

## **Options:**

5531724401.1

5531724402.2

5531724403.3

5531724404. 4

Question Number: 122 Question Id: 5531721116 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Agar, a mixture of sulfated heteropolysaccharides is found in cell walls/plasma membrane of:

- 1) Protozoa
- 2) Bacteria
- 3) Fungus
- 4) Marine red algae

### **Options:**

5531724405.1

5531724406, 2

5531724407.3

5531724408. 4

Question Number: 123 Question Id: 5531721117 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following is the dominant feature of the outer membrane of gram-negative bacteria?

- 1) Proteoglycans
- 2) Lipopolysaccharides
- 3) Glycoproteins
- 4) Glycolipids

## **Options:**

5531724409.1

5531724410.2

5531724411.3

5531724412. 4

Question Number: 124 Question Id: 5531721118 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following is a purine base?

- 1) Cytosine
- 2) Guanine
- 3) Thymine
- 4) Uracil

## **Options:**

5531724413. 1

5531724414. 2

5531724415.3

5531724416. 4

Question Number: 125 Question Id: 5531721119 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Among various glucose transporters identified, which one of the following is the only insulin responsive glucose transporter?

- 1) GLUT-1
- 2) GLUT-3
- 3) GLUT-4
- 4) GLUT-7

#### **Options:**

5531724417. 1

5531724418. 2

5531724419.3

5531724420.4

Question Number: 126 Question Id: 5531721120 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Nonhuman primates and guinea pigs cannot synthesize their own Vitamin C due to lack of enzyme:

- L-gulonolactone oxidase
- 2) Pyruvate Kinase
- L-xylulose reductase
- Gulonate dehydrogenase

## **Options:**

5531724421.1

5531724422. 2

5531724423.3

5531724424. 4

Question Number: 127 Question Id: 5531721121 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

How much energy is yielded by complete oxidation of a mole of glucose to CO<sub>2</sub> and H<sub>2</sub>O?

- 1) 266 Kcal
- 2) 690 Kcal
- 3) 50 Kcal
- 4) 14 Kcal

## **Options:**

5531724425.1

5531724426, 2

5531724427.3

5531724428. 4

Question Number: 128 Question Id: 5531721122 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Hepatic ketogenesis is increased in diabetes and is regulated by the rate limiting transfer across the mitochondrial membrane of:

- 1) Oxaloacetate
- 2) Acetyl CoA
- 3) Free fatty acid
- 4) Acetoacetate

#### **Options:**

5531724429. 1

5531724430. 2

5531724431. 3

Question Number: 129 Question Id: 5531721123 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Prostaglandins, thromboxane's and leukotrienes are derived

## from

- 1) Saturated fatty acids
- 2) Amino acids
- 3) 20 carbon polyunsaturated fatty acids
- 4) Proteins

### **Options:**

5531724433.1

5531724434. 2

5531724435.3

5531724436. 4

Question Number: 130 Question Id: 5531721124 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following is NOT a paracrine hormone?

- Phosphatidylinositol
- Prostaglandins
- Leukotrienes
- 4) Thromboxane

#### **Options:**

5531724437.1

5531724438. 2

5531724439.3

5531724440.4

Question Number: 131 Question Id: 5531721125 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Excess of mineralocorticoids contribute to the generation of:

- 1) Metabolic acidosis
- Metabolic alkalosis
- Respiratory alkalosis
- Respiratory acidosis

## **Options:**

5531724441. 1

5531724442. 2

5531724443.3

5531724444. 4

Question Number: 132 Question Id: 5531721126 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

In which of the following disorders, increased anion gap is not observed?

- Diabetes mellitus
- Grain overload
- 3) Ketosis
- 4) Hypoalbuminemia

## **Options:**

5531724445.1

5531724446. 2

5531724447.3

5531724448. 4

Question Number: 133 Question Id: 5531721127 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Addison's disease results in development of:

- 1) Hypokalemia
- 2) Hyperkalemia
- Hypernatremia
- 4) Hyperglycemia

## **Options:**

5531724449. 1

5531724450. 2

5531724451.3

5531724452. 4

Question Number: 134 Question Id: 5531721128 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Hyperlipidemia is NOT encountered during:

- Hypoadrenocorticism
- Nephrotic syndrome
- 3) Pancreatitis
- Hypothyroidism

#### **Options:**

5531724453.1

5531724454. 2

5531724455.3

5531724456. 4

Question Number: 135 Question Id: 5531721129 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following enzymes is NOT involved in ketogenesis by liver?

- Acetoacetyl-CoA thiolase
- Glutamate dehydrogenase
- Hydroxymethylglutaryl CoA synthase
- 4) Hydroxymethylglutaryl-CoA-lyase

## **Options:**

5531724457. 1 5531724458. 2 5531724459. 3 5531724460. 4

Question Number: 136 Question Id: 5531721130 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Urea cycle is closely linked to the tricarboxylic acid cycle through conversion of:

- 1) L- Citrulline to L-ornithine
- 2) Fumarate to malate
- 3) 1,3- diphosphoglycerate to 3-phosphoglycerate
- 4) L- Arginine to L- Arginosuccinate

#### **Options:**

5531724461.1

5531724462. 2

5531724463.3

5531724464. 4

Question Number: 137 Question Id: 5531721131 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which one of the following acute phase proteins was first recognized by Pepys in 1981?

- 1) Serum Amyloid A
- 2) Haptoglobin
- 3) a-1 Acid glycoprotein
- 4) c- reactive protein

## **Options:**

5531724465.1

5531724466, 2

5531724467.3

5531724468. 4

Question Number: 138 Question Id: 5531721132 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The condition which results in organ injury and dysfunction due

to accumulation of iron in parenchymal cell is called:

- 1) Hemochromatosis
- Hemosiderosis
- 3) Erythroblastosis
- Poikilocytosis

## **Options:**

5531724469.1

5531724470.2

5531724471.3

Question Number: 139 Question Id: 5531721133 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following bioactive agents is NOT promoted during ischemia?

- 1) Platelet activating agents
- 2) Endothelin
- 3) Prostacyclin
- Thromboxane A<sub>2</sub>

## **Options:**

5531724473.1

5531724474. 2

5531724475.3

5531724476. 4

Question Number: 140 Question Id: 5531721134 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the followings is not a common finding in dogs and cats suffering from spontaneous chronic renal failure?

- 1) Azotemia
- Hyperphosphatemia
- Hypoalbuminemia
- 4) Hypocholesterolemia

#### **Options:**

5531724477.1

5531724478. 2

5531724479.3

5531724480.4

Question Number: 141 Question Id: 5531721135 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Hypercortisolism results in development of:

- 1) Conn's Syndrome
- Cushing's Syndrome
- 3) Adrenogenital Syndrome
- Addison's disease

#### **Options:**

5531724481.1

5531724482. 2

5531724483.3

5531724484. 4

Question Number: 142 Question Id: 5531721136 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

lodination reactions for synthesis of thyroid hormones are not blocked by :

- 1) Sulfa drugs
- 2) Thioureas
- 3) Para aminobenzoic acid
- 4) Thiocyanate

#### **Options:**

5531724485. 1

5531724486. 2

5531724487.3

5531724488. 4

 $Question\ Number: 143\ Question\ Id: 5531721137\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

Blind staggers in livestock is due to toxic effects of:

- 1) Cobalt
- 2) Manganese
- Selenium
- 4) Copper

#### **Options:**

5531724489.1

5531724490.2

5531724491. 3

5531724492.4

Question Number: 144 Question Id: 5531721138 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Glycogen storage disease II (Pompe disease) is due to the deficiency of which of the following enzymes?

- 1) Beta-Galactosidase
- Acid alpha-Glucosidase
- Beta-Glucuronidase
- 4) Alkaline Phosphatase

## **Options:**

5531724493.1

5531724494. 2

5531724495.3

5531724496. 4

Question Number: 145 Question Id: 5531721139 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

For separation and purification of enzymes, which of the following chromatographic techniques is recommended?

- 1) Adsorption chromatography
- Partition chromatography
- 3) Ion exchange chromatography
- 4) Affinity chromatography

#### **Options:**

5531724497.1

5531724498. 2

5531724499.3

5531724500.4

Question Number: 146 Question Id: 5531721140 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Half-life of radioisotope 125 is:

- 1) 14.3 days
- 2) 25.4 days
- 3) 59.6 days
- 4) 87.4 days

## **Options:**

5531724501.1

5531724502. 2

5531724503.3

5531724504. 4

Question Number: 147 Question Id: 5531721141 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

According to Beer Lamberts Law, which of the following ways the absorption is related to transmittance?

- 1) A multiple of transmittance
- A negative logarithm of transmittance
- 3) A logarithm of transmittance
- A reciprocal of transmittance

#### **Options:**

5531724505.1

5531724506. 2

5531724507.3

5531724508. 4

Question Number: 148 Question Id: 5531721142 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Which of the following organelle contains digestive enzymes?

- (1) Lysosomes
- (2) Peroxisomes
- (3) Mitochondria
- (4) Ribosomes

## **Options:**

5531724509.1

5531724510. 2

5531724511.3

Question Number: 149 Question Id: 5531721143 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 Match column A and column B and select appropriate answer from the code given below-Column A Column B A) Mitochondria 1) Lipid Synthesis B) Smooth Endoplasmic Reticulum 2) Electron transport chain C) Peroxisomes 3) Protein synthesis D) Ribosomes 4) Oxidation of very long chain fatty acids Select the correct option: (1) A-1, B-2, C-3, D-4 (2) A-2, B-1, C-4, D-3 (3) A-3, B-4, C-1, D-2 (4) A-4, B-3, C-2, D-1 **Options:** 5531724513.1 5531724514. 2 5531724515.3 5531724516. 4 Question Number: 150 Question Id: 5531721144 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 The amino acids having 'R' group with net negative charge at pH Aspartate and glutamate (2) Serine and threonine (3) Lysine and histidine (4) Cysteine and methionine **Options:** 5531724517.1 5531724518. 2 5531724519.3 5531724520.4 Question Number: 151 Question Id: 5531721145 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 How many subunits are present in the cell organelle ribosome? (1) Two (2) Four (3) Five (4) Zero

**Options:** 

5531724521. 1 5531724522. 2 5531724523. 3 5531724524. 4 Question Number: 152 Question Id: 5531721146 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Thyroid hormones are classified as:

- (1) Steroid hormones
- (2) Amine derivatives
- (3) Protein hormones
- (4) Polypeptide hormones

### **Options:**

5531724525.1

5531724526. 2

5531724527.3

5531724528. 4

 $\label{eq:Question Number: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

The amino acid which is NOT constituent of protein is

- (1) Omithine
- (2) Cysteine
- (3) Lysine
- (4) Methionine

#### **Options:**

5531724529. 1

5531724530. 2

5531724531.3

5531724532. 4

Question Number: 154 Question Id: 5531721148 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The essential trace element which is a component of thyroid

hormone is

- (1) Iron
- (2) Selenium
- (3) lodine
- (4) Chromium

## **Options:**

5531724533.1

5531724534. 2

5531724535.3

5531724536. 4

Question Number: 155 Question Id: 5531721149 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

# Oxygen binding of haemoglobin is modulated by

- (1) 2,3 diphosphoglycerate
- (2) Glucose-6-phophate
- (3) Fructose 1,6 biphosphate
- (4) Dihydroxyacetone

#### **Options:**

5531724537.1

5531724538. 2

5531724539.3

5531724540.4

 $Question\ Number: 156\ Question\ Id: 5531721150\ Question\ Type: MCQ\ Option\ Shuffling: No\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ 

Correct Marks: 4 Wrong Marks: 1

The glycosaminoglycan constituent of cartilage is

- (1) Heparin
- (2) Heparan
- (3) Chondroitin sulphate
- (4) Hyaluronic acid

## **Options:**

5531724541.1

5531724542. 2

5531724543.3

5531724544. 4

Question Number: 157 Question Id: 5531721151 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Most abundant lipid in plasma membrane is

- (1) Cholesterol
- (2) Glycolipid
- (3) Sterol
- (4) Phospholipid

# **Options:**

5531724545.1

5531724546. 2

5531724547.3

5531724548.4

Question Number: 158 Question Id: 5531721152 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Most of the time inside the cell of living organism DNA exists as

- (1) A-DNA
- (2) B-DNA
- (3) Z-DNA
- (4) A and B DNA

#### **Options:**

5531724550. 2 5531724551. 3 5531724552. 4

Question Number: 159 Question Id: 5531721153 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The active form of vitamin B6 coenzyme is

- (1) Pyridoxal phosphate
- (2) Coenzyme A
- (3) Thiamine pyrophosphate
- (4) Flavin mononucleotide

## **Options:**

5531724553. 1

5531724554. 2

5531724555.3

5531724556. 4

Question Number : 160 Question Id : 5531721154 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Two final products in the β-oxidation of odd chain fatty acids are-

- (1) Acetyl CoA and Malonyl CoA
- (2) Acetyl CoA and acetyl CoA
- (3) Acetyl CoA and propionyl CoA
- (4) Acetyl CoA and succinyl CoA

#### **Options:**

5531724557.1

5531724558. 2

5531724559.3