

TELANGANA RESIDENTIAL EDUCATIONAL INSTITUTIONS RECRUITMENT BOARD TREI-RB

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	Zoology 16th Aug 2023 Shift 1
Subject Name :	Zoology
Creation Date :	2023-08-16 11:56:23
Duration :	120
Total Marks :	100
Display Marks:	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Zoology

Group Number :	1
Group Id :	59425394
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100

Is this Group for Examiner? : No
Examiner permission : Cant View
Show Progress Bar? : No

Zoology

Section Id : 594253110
Section Number : 1
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 100
Number of Questions to be attempted : 100
Section Marks : 100
Enable Mark as Answered Mark for Review and Clear Response : Yes
Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 594253141
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 1 Question Id : 5942539324 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Colonial forms of life are characterized by

Options :

1. ✘ Individuals that come together in case of predation threat
2. ✔ Individual units with different functions which cannot survive on their own
3. ✘ Individuals of different species that exist together for their growth and reproduction
4. ✘ Individual units with same functions which can survive and reproduce on their own

Question Number : 2 Question Id : 5942539325 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not a feature of Protostome?

- A) Any member of invertebrate phyla
- B) During development, cleavage is spiral
- C) Any member of the phyla Chordata
- D) During development, cleavage is radial

Choose the correct answer:

Options :

- 1. ✘ A, C & D only
- 2. ✘ A & B only
- 3. ✔ C & D only
- 4. ✘ A only

Question Number : 3 Question Id : 5942539326 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statement(s) from the following with reference to organization of Phyla Porifera and Coelenterata

- A) Porifers consists of 2 layers of cells and body lacks symmetry
- B) Coelenterates are diploblastic and bilaterally symmetrical
- C) Coelenterates are diploblastic and radially symmetrical
- D) Coelenterates exhibit polymorphism

Options :

- 1. ✔ A, C & D only
- 2. ✘ A & D only
- 3. ✘ C & D only

4. ✘ D only

Question Number : 4 Question Id : 5942539327 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the **INCORRECT** statement from the following statements with reference to coelom in animals

Options :

1. ✘ Coelom is an extensive internal space
2. ✘ Coelom is developed in diploblastic animals
3. ✘ Coelom separates body wall from gut wall
4. ✔ Coelom provides hydrostatic skeleton in all coelomates

Question Number : 5 Question Id : 5942539328 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct pair of animal phyla that exhibit triploblastic and coelomate conditions and metameric segmentation from the following

Options :

1. ✘ Platyhelminthes and Annelida
2. ✔ Annelida and Arthropoda
3. ✘ Arthropoda and Echinodermata
4. ✘ Nematoda and Mollusca

Question Number : 6 Question Id : 5942539329 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The causative organism of infection in human due to contamination of drinking water with sewage is

Options :

1. ✘ *Plasmodium vivax*
2. ✔ *Entamoeba histolytica*
3. ✘ *Leishmania*
4. ✘ *Trypanosoma*

Question Number : 7 Question Id : 5942539330 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statement(s) with reference to canal system in sponges.

- A) Asconoid type is most complex grade of canal system.
- B) Asconoid type is most simple grade of canal system.
- C) The syconoid type is evolved from asconoid system.
- D) The leuconoid type is derived from asconoid system.

Options :

1. ✘ A only
2. ✘ A & C only
3. ✔ B & C only
4. ✘ B & D only

Question Number : 8 Question Id : 5942539331 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following development stages of Obelia swims freely in water and settles down on the substratum?

Options :

1. ✘ Gastrula
2. ✘ Blastula
3. ✔ Planula
4. ✘ Hydrula

Question Number : 9 Question Id : 5942539332 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct sequence of larvae according to developmental hierarchy.

Options :

1. ✘ Redia – Meracidium — Metacercaria – Cercaria
2. ✔ Meracidium –Redia – Cercaria – Metacercaria
3. ✘ Meracidium - Metacercaria – Cercaria- Redia
4. ✘ Sporocyst – Redia – Cercaria – Metacercaria

Question Number : 10 Question Id : 5942539333 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

What is true metamerism?

Options :

1. ✓ Segmentation of mesoderm results in body segmentation
2. ✗ All segments are alike
3. ✗ Segments of body are dissimilar
4. ✗ Segmentation is found only internally

Question Number : 11 Question Id : 5942539334 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following.

- | | |
|---------------------|-----------------|
| A) Ametabolic | i) Hemiptera |
| B) Hemimetabolous | ii) Diptera |
| C) Heterometabolous | iii) Dragon fly |
| D) Holometabolous | iv) Lepisma |

Options :

1. ✗ A - i; B - iv; C - ii; D - iii
2. ✗ A - iii; B - ii; C - iv; D - i
3. ✗ A - ii; B - iv; C - iii; D - i
4. ✓ A - iv; B - iii; C - i; D - ii

Question Number : 12 Question Id : 5942539335 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following larvae with class of the echinoderms.

- | | |
|-----------------|---|
| A) Bipinnaria | i. Hypothetical ancestor of echinoderms |
| B) Auricularia | ii. Crinoidea |
| C) Pentacrinoid | iii) Ophiuroidea |
| D) Diplurula | iv) Holothuroidea |
| | v) Asteroidea |

Options :

1. ✘ A – iv; B – iii; C – i; D – v
2. ✔ A – v; B – iv; C – ii; D – i
3. ✘ A – iii; B – iv; C – i; D – ii
4. ✘ A – ii; B – i; C – iii; D – v

Question Number : 13 Question Id : 5942539336 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following characteristics of hemichordate larvae is different from echinoderm larvae?

Options :

1. ✘ Presence of ciliated bands
2. ✘ Blastopore becoming anus
3. ✘ Development of coelom
4. ✔ Presence of apical plate with sensory hair

Question Number : 14 Question Id : 5942539337 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following does not belong to Acrania?

Options :

1. ✘ Belanoglossus
2. ✘ Herdmania
3. ✘ Branchiostoma
4. ✔ Petromyzon

Question Number : 15 Question Id : 5942539338 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is a normal constituent of dermis in mammals?

Options :

1. ✔ Pigment cells
2. ✘ Sweat glands
3. ✘ Sebaceous glands
4. ✘ Lacrimal glands

Question Number : 16 Question Id : 5942539339 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

In which of the following groups, two chambered heart is not present?

Options :

1. ✘ Cyclostomes

2. ✘ Elasmobranchs

3. ✘ Teleostei

4. ✔ Dipnoi

Question Number : 17 Question Id : 5942539340 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is **NOT** a cause for failure of metamorphosis in larval amphibians?

Options :

1. ✘ Abundance of food

2. ✘ Cold temperature

3. ✔ Rise in temperature and drying of ponds

4. ✘ Suppressions of genes for transformation of larvae

Question Number : 18 Question Id : 5942539341 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the **INCORRECT** statement with reference to poison apparatus of snakes

Options :

1. ✘ Poison glands are modified parotid glands

2. ✘ Each gland is covered by muscle

3. ✔ During the bite poison glands bursts and poison is released

4. ✘ Snake poison consists of certain enzymes

Question Number : 19 Question Id : 5942539342 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is a **INCORRECT** statement with reference to adaptations of birds?

Options :

1. ✘ Beak compensates for the functions of forelimbs

2. ✘ Loose skin facilitates extensive movements of skeletal muscles

3. ✘ Presence of uricotelic excretion

4. ✔ Muscles of back are greatly developed

Question Number : 20 Question Id : 5942539343 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Elongated limbs, reduction in number of toes and unguligrade nature are adaptations for which type of habit?

Options :

1. ✔ Cursorial

2. ✘ Fossorial

3. ✘ Gliding

4. ✘ Walking

Question Number : 21 Question Id : 5942539344 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following

- | | |
|-----------------|-------------------------------------|
| A) Archinephros | i. Adult amphibians |
| B) Pronephros | ii. Amniotes |
| C) Mesonephros | iii. Invertebrates |
| D) Metanephros | iv. Embryos of all vertebrates |
| | v. Hypothetical vertebrate ancestor |

Options :

1. ✓ A – v; B – iv; C – i; D – ii
2. ✗ A – iii; B – ii; C – iv; D – i
3. ✗ A – ii; B – i; C – iii; D – iv
4. ✗ A – iv; B – iii; C – ii; D – i

Question Number : 22 Question Id : 5942539345 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statement(s) from the following with reference to formation of gonadal ducts in amniotes

- A) Wolffian duct becomes epididymis
- B) Mullerian duct becomes oviduct
- C) Wolffian duct becomes oviduct
- D) Mullerian duct becomes epididymis

Options :

1. ✗ A & C only
2. ✓ A & B only

3. ✖ C & D only

4. ✖ B & D only

Question Number : 23 Question Id : 5942539346 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The F₀-F₁ particles in mitochondria are located

Options :

1. ✖ on outer mitochondrial membrane

2. ✔ on inner side of inner mitochondrial membrane

3. ✖ in the mitochondrial matrix

4. ✖ in between outer and inner mitochondrial membranes

Question Number : 24 Question Id : 5942539347 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following are the mitochondrial functions?

A) Electron transport coupled with ATP production

B) ATP production during Glycolysis

C) Fatty acid breakdown

D) Production of reduced coenzymes

Choose the correct answer:

Options :

1. ✖ A only

2. ✖ A & C only

3. ✓ A, C & D only

4. ✗ B only

Question Number : 25 Question Id : 5942539348 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Identify the function of Nucleolus

Options :

1. ✗ DNA methylation

2. ✗ DNA synthesis

3. ✗ Acetylation of histones

4. ✓ Biogenesis of ribosomal units

Question Number : 26 Question Id : 5942539349 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is related to cytoskeleton?

A) Gibberellin and Auxin

B) α -Tubulin and β -Tubulin

C) Microfilaments and Microtubules

D) Glomerulus

Choose the correct answer:

Options :

1. ✗ A & D only

2. ✗ A, C & D only

3. ✘ C & D only

4. ✔ B & C only

Question Number : 27 Question Id : 5942539350 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

S in the 30S ribosome subunit stands for

Options :

1. ✘ Solubility factor

2. ✔ Svedberg unit

3. ✘ Salt concentration

4. ✘ Sulphur content

Question Number : 28 Question Id : 5942539351 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Spontaneous point mutations can occur by

Options :

1. ✔ Deamination of Cytosine to form Uracil

2. ✘ Dephosphorylation of Cytosine to form Uracil

3. ✘ Methylation of Cytosine to form Uracil

4. ✘ Acetylation of Cytosine to form Uracil

Question Number : 29 Question Id : 5942539352 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following:

- | | |
|----------------|-------------------------|
| A) Promoter | i. UAA |
| B) Splicing | ii. 7-methylguanosine |
| C) 5' capping | iii. Primary transcript |
| D) Start codon | iv. TATA box |
| | v. AUG |

Options :

1. ✓ A – iv; B – iii; C – ii; D – v
2. ✗ A – ii; B – i; C – iv; D – iii
3. ✗ A – v; B – iv; C – ii; D – iii
4. ✗ A – iii; B – iv; C – i; D – ii

Question Number : 30 Question Id : 5942539353 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Purification of Maturation-promoting factor (MPF) revealed that it is composed of

Options :

1. ✗ cDNAs
2. ✗ Cytochromes and nucleosomes
3. ✓ Cyclin and cyclin-dependent protein kinase
4. ✗ ATP and GTP molecules

Question Number : 31 Question Id : 5942539354 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

DNA polymerases add

Options :

1. ✘ Deoxyribonucleotides in 3' → 5' direction
2. ✔ Deoxyribonucleotides in 5' → 3' direction
3. ✘ Ribonucleotides in 3' → 5' direction
4. ✘ Ribonucleotides in 5' → 3' direction

Question Number : 32 Question Id : 5942539355 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is NOT concerned with initiation of transcription in eukaryotic genes?

Options :

1. ✔ Binding of DNA polymerase
2. ✘ Binding of TFIID to TATA BOX
3. ✘ Binding of TFIIA and TFIIB
4. ✘ Assembly of RNA polymerase II

Question Number : 33 Question Id : 5942539356 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following statements are true with respect to linked genes?

- A) Linked genes do not assort independently
- B) Linked genes assort independently
- C) Linked genes occasionally switch from one homologous chromosome to the other
- D) Linked genes show high mutation rates

Choose the correct answer:

Options :

- 1. ✘ A & B only
- 2. ✘ B & C only
- 3. ✔ A & C only
- 4. ✘ D only

Question Number : 34 Question Id : 5942539357 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following:

- | | |
|--------------------------|------------------------|
| A) Crossing over | i. Modern bread wheat |
| B) Deletions | ii. Replication errors |
| C) Allopolyploidy | iii. Down's syndrome |
| D) Mismatched base pairs | iv. Chiasmata |
| | v. Pseudodominance |

Options :

- 1. ✘ A – i; B – iv; C – ii; D – iii
- 2. ✘ A – ii; B – iii; C – v; D – iv
- 3. ✘ A – v; B – ii; C – iii; D – i

4. ✓ A – iv; B – v; C – i; D – ii

Question Number : 35 Question Id : 5942539358 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The phenomenon of one gene masking the effect of another gene at a different locus is known as

Options :

1. ✗ Epigenesis

2. ✓ Epistasis

3. ✗ Dominance

4. ✗ Pseudodominance

Question Number : 36 Question Id : 5942539359 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is characteristic of Gain of function mutation?

A) Appearance of new trait in all tissues

B) Appearance of new trait in an appropriate tissue

C) Appearance of new trait at an inappropriate time in development

D) Appearance of new trait in an inappropriate tissue

Choose the correct answer:

Options :

1. ✓ C & D only

2. ✗ A & B only

3. ✘ A only

4. ✘ B only

Question Number : 37 Question Id : 5942539360 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Patau's syndrome is characterized by

Options :

1. ✘ Tetrasomy 18

2. ✘ Monosomy of X chromosome

3. ✔ Trisomy 13

4. ✘ Reciprocal translocation between X- chromosome and chromosome 21

Question Number : 38 Question Id : 5942539361 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following represent heterozygous genotype for sickle cell anaemia?

Options :

1. ✘ $Hb^A Hb^o$

2. ✘ $Hb^A Hb^i$

3. ✘ $Hb^S Hb^o$

4. ✔ $Hb^A Hb^S$

Question Number : 39 Question Id : 5942539362 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Expansion of which repeated trinucleotide in DNA is associated with Huntington's chorea?

Options :

1. ✘ UAG

2. ✔ CAG

3. ✘ GAC

4. ✘ AGC

Question Number : 40 Question Id : 5942539363 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Alkaptonuria is caused due to lack of the enzyme that metabolizes

Options :

1. ✘ Glucose into Carbon dioxide and water

2. ✔ Homogentisic acid into Maleylacetoacetate

3. ✘ Pyruvate into Acetyl CoA

4. ✘ Pheylalanine into Tyrosin

Question Number : 41 Question Id : 5942539364 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

A polyploid individual will have

Options :

1. ✓ Complete extra sets of chromosomes
2. ✗ Few chromosomes in multiple copies
3. ✗ Multiple genes in many copies
4. ✗ Multiple mutations

Question Number : 42 Question Id : 5942539365 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

One or more genes when present in many copies on a chromosome is referred to as

Options :

1. ✗ Translocation
2. ✗ Aneuploid
3. ✓ Duplication
4. ✗ Pericentric inversion

Question Number : 43 Question Id : 5942539366 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Mutation in a codon resulting in substitution of one amino acid with another amino acid in the encoded polypeptide is known as

Options :

1. ✗ Frameshift mutation
2. ✗ Nonsense mutation

3. ✓ Missense mutation

4. ✘ Neutral mutation

Question Number : 44 Question Id : 5942539367 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statement(s) with reference to cellular components of blood in man

- A) Red blood cells are nucleated and produced in bone marrow
- B) Red blood cells are not nucleated and produced in bone marrow
- C) All types of white blood cells are produced in the spleen
- D) Lymphocytes are nucleated and differentiated in lymphoid organs

Options :

1. ✘ A & C only

2. ✘ A & D only

3. ✓ B & D only

4. ✘ B & C only

Question Number : 45 Question Id : 5942539368 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statements with reference to functions of plasma proteins

- A) Maintain colloidal osmotic pressure of blood
- B) Essential for immunological reactions of the body
- C) Essential for blood clotting
- D) Transport major quantity of oxygen

Options :

1. ✘ A & B only
2. ✘ A & C only
3. ✔ A, B & C only
4. ✘ A, B, C & D

Question Number : 46 Question Id : 5942539369 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The Protein present in thin filament of skeletal muscle fibre

Options :

1. ✘ Traopomyosin
2. ✘ Troponin
3. ✔ Actin
4. ✘ Myosin

Question Number : 47 Question Id : 5942539370 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

With reference to transport of oxygen choose the correct statement(s)

- A) Entire transport of oxygen is by haemoglobin
- B) Haemoglobin reversibly combines with oxygen
- C) One molecule of haemoglobin combines with 4 molecules of oxygen
- D) One molecule of haemoglobin combines with 6 molecules of oxygen

Options :

1. ✘ A & D only
2. ✔ B & C only
3. ✘ A & C only
4. ✘ B & D only

Question Number : 48 Question Id : 5942539371 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

What causes transmission of nerve impulse in a chemical synapse?

Options :

1. ✔ Acetyl choline induced opening of sodium channels in post synaptic membrane
2. ✘ Spreading of wave of depolarisation from pre-synaptic membrane to post-synaptic membrane across the synaptic cleft
3. ✘ Release of sodium ions from pre-synaptic membrane
4. ✘ Acetyl choline induced entry of potassium into post-synaptic membrane

Question Number : 49 Question Id : 5942539372 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

What is the role of calcium ions in the initiation of skeletal muscle contraction?

Options :

1. ✘ Facilitates inflow of sodium ions into muscle fibre

2. ✘ Facilitates spreading of wave of depolarisation along length of muscle membrane
3. ✔ Exposes active sites on actin filaments by attaching to troponin
4. ✘ Attaches to tropomyosin to activate actin

Question Number : 50 Question Id : 5942539373 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

With reference to vision choose the correct statement(s)

- A) Cones are involved in colour vision
- B) Rods cannot produce colour vision
- C) Cones are sensitive certain colours whereas rods respond to other colours
- D) Cones need bright light whereas rods can be sensitive in dim light

Options :

1. ✘ A only
2. ✘ A & B only
3. ✔ A, B & D only
4. ✘ A, C & D only

Question Number : 51 Question Id : 5942539374 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Choose the correct statement(s) with reference to ultrafiltration in a nephron

- A) Filtration of blood is due to high capillary pressure in glomerulus
- B) Filtration of blood is due to porous nature of glomerular membrane
- C) Colloidal osmotic pressure of plasma proteins facilitates filtration
- D) Colloidal osmotic pressure of plasma proteins opposes capillary pressure in glomerulus

Options :

- 1. ✘ A only
- 2. ✘ B only
- 3. ✔ A, B & D only
- 4. ✘ A & B only

Question Number : 52 Question Id : 5942539375 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is osmotic problem of freshwater fish?

Options :

- 1. ✔ Inflow of water from medium into the body
- 2. ✘ Outflow of water from body to medium
- 3. ✘ Inflow of salts from medium into the body
- 4. ✘ Prevention of accumulation of salts in blood

Question Number : 53 Question Id : 5942539376 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following:

- | | |
|----------------------|---------------|
| A) Neck cells | i. Acid |
| B) Chief cells | ii. Serotonin |
| C) Parietal cells | iii. Lipase |
| D) Argentaffin cells | iv. Pepsin |
| | v. Mucus |

Options :

1. ✓ A - v; B - iv; C - i; D - ii

2. ✗ A - iv; B - i; C - ii; D - v

3. ✗ A - v; B - iv; C - ii; D - i

4. ✗ A - v; B - i; C - iv; D - ii

Question Number : 54 Question Id : 5942539377 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following

- | | |
|---------------------------|--------------------|
| A) Protein | i. Testosterone |
| B) Peptide | ii. Gonadotrophins |
| C) Amino acid derivatives | iii. Insulin |
| D) Steroid | iv. Thyroxine |
| | v. Prostaglandins |

Options :

1. ✗ A - v; B - i; C - iii; D - ii

2. ✓ A - ii; B - iii; C - iv; D - i

3. ✘ A – iv; B – v; C – i; D – ii

4. ✘ A – i; B – ii; C – iii; D – v

Question Number : 55 Question Id : 5942539378 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which hormone is predominantly secreted by the ovary during luteal phase of the menstrual cycle?

Options :

1. ✘ LH

2. ✘ Estrogen

3. ✔ Progesterone

4. ✘ FSH

Question Number : 56 Question Id : 5942539379 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is a hetero polysaccharide?

Options :

1. ✘ Starch

2. ✔ Hyaluronic acid

3. ✘ Cellulose

4. ✘ Glycogen

Question Number : 57 Question Id : 5942539380 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following acts as final acceptor of hydrogen in respiratory chain?

Options :

1. ✘ Nicotinamide adenine dinucleotide (NAD)
2. ✘ Flavin adenine dinucleotide (FAD)
3. ✘ Cytochrome b
4. ✔ Oxygen

Question Number : 58 Question Id : 5942539381 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Hardy Weinberg law assumes

Options :

1. ✘ Small population size, absence of migration, selection, random mating and mutation
2. ✔ Large population size, prevalence of random mating, absence of migration, selection and mutation
3. ✘ Non-random mating, small population size, frequent migration and prevalence of mutation
4. ✘ Large population size, random mating, survival of heterozygotes, absence of mutation and migration

Question Number : 59 Question Id : 5942539382 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Discrete species exist as a consequence of which post-zygotic isolating mechanisms?

- A) Hybrid sterility
- B) Hybrid breakdown
- C) Gametic isolation
- D) Hybrid inviability

Choose the correct answer:

Options :

- 1. ✘ A & C only
- 2. ✘ A & D only
- 3. ✘ C only
- 4. ✔ A, B & D only

Question Number : 60 Question Id : 5942539383 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Genetic drift occurs in

Options :

- 1. ✘ Large populations
- 2. ✘ Aquatic populations
- 3. ✔ Small populations
- 4. ✘ Terrestrial populations

Question Number : 61 Question Id : 5942539384 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Evolutionary relationships among group of organisms are termed as

Options :

1. ✓ Phylogeny
2. ✗ Promogeny
3. ✗ Polygeny
4. ✗ Parageny

Question Number : 62 Question Id : 5942539385 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not concerned with the speciation process?

- A) Two identical populations genetically diverge to a point at which their subsequent merger will not occur
- B) Pre-mating isolating mechanisms promote divergence of populations
- C) Post-mating isolating mechanisms that ensues population divergence
- D) Mechanisms that promote gene exchange between populations

Choose the correct answer:

Options :

1. ✗ A & C only
2. ✗ B & C only
3. ✓ D only

4. ✘ A, B & D only

Question Number : 63 Question Id : 5942539386 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following are haploid cells in the testis?

- A) Spermatogonia
- B) Spermatid
- C) Primary spermatocytes
- D) Spermatozoa

Options :

1. ✘ A & C only

2. ✘ A & B only

3. ✔ B & D only

4. ✘ C & D only

Question Number : 64 Question Id : 5942539387 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Acrosome of sperm is a modified form of

Options :

1. ✘ Mitochondria

2. ✔ Golgi complex

3. ✘ Nucleolus

4. ✘ Peroxisomes

Question Number : 65 Question Id : 5942539388 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not a function of the placenta?

Options :

1. ✘ Exchange of respiratory gasses
2. ✘ Removal of foetal metabolic wastes
3. ✘ Hormone secretion
4. ✔ Breakdown of complex food molecules

Question Number : 66 Question Id : 5942539389 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is fused with decidua at the maternal foetal interphase?

Options :

1. ✘ Amnion
2. ✔ Chorion
3. ✘ Yolk sac
4. ✘ Allantois

Question Number : 67 Question Id : 5942539390 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which is the process wherein first time multi-layered embryo is formed?

Options :

1. ✘ Cleavage
2. ✔ Gastrulation
3. ✘ Blastulation
4. ✘ Neurulation

Question Number : 68 Question Id : 5942539391 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which cell type of bone is involved in bone resorption?

Options :

1. ✘ Osteoblasts
2. ✔ Osteoclasts
3. ✘ Osteocytes
4. ✘ Progenitor cells

Question Number : 69 Question Id : 5942539392 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The condition, where a single layer of epithelium appears as more than one layer because the nuclei of component cells lie at various levels is called _____

Options :

1. ✘ stratified epithelium

2. ✓ pseudostratified epithelium

3. ✗ transitional epithelium

4. ✗ columnar epithelium

Question Number : 70 Question Id : 5942539393 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which region of the skin contains sweat glands?

Options :

1. ✗ Dermis

2. ✗ Hypodermis

3. ✓ Epidermis

4. ✗ Stratum granulosum

Question Number : 71 Question Id : 5942539394 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The folds in the small intestine especially in lower part of Duodenum and Jejunum are termed _____

Options :

1. ✗ rugae

2. ✓ plicae circularis

3. ✗ villi

4. ✘ appendix

Question Number : 72 Question Id : 5942539395 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following:

- | | |
|------------------|-----------------------------|
| A) Sertoli cells | i) Divides mitotically |
| B) Leydig cells | ii) Divides meiotically |
| C) Spermatogonia | iii) Supporting cell |
| D) Spermatocytes | iv) Testosterone synthesis |
| | v) Defence against microbes |

Options :

1. ✓ A – iii; B – iv; C – i; D – ii

2. ✘ A – iv; B – iii; C – ii; D – v

3. ✘ A – iii; B – ii; C – v; D – i

4. ✘ A – v; B – iii; C – ii; D – i

Question Number : 73 Question Id : 5942539396 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one of the following types of ovarian follicles does not contain antrum?

Options :

1. ✓ Primary follicle

2. ✘ Pre-ovulatory follicle

3. ✘ Tertiary follicle

4. ✘ Graafian follicle

Question Number : 74 Question Id : 5942539397 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Find out the mismatch with reference to cell types of the pancreas and their secretions

Options :

1. ✘ Acinar cells – Enzymes

2. ✘ β cells – Insulin

3. ✔ α cells – Somatostatin

4. ✘ ϵ cells – Ghrelin

Question Number : 75 Question Id : 5942539398 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which component of the nephron reabsorbs water depending upon water requirement of the body?

Options :

1. ✘ Bowman's capsule

2. ✘ Proximal convoluted tubule

3. ✔ Distal convoluted tubule

4. ✘ Loop of Henle

Question Number : 76 Question Id : 5942539399 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which one the following is **NOT** a component of a portal triad in the liver?

Options :

1. ✘ A branch of portal vein
2. ✘ A branch of hepatic artery
3. ✘ An interlobular bile duct
4. ✔ Sinusoids

Question Number : 77 Question Id : 5942539400 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which tissue is found in tendons and ligaments?

Options :

1. ✔ Dense connective tissue
2. ✘ Loose connective tissue
3. ✘ Areolar tissue
4. ✘ Stratified columnar epithelium

Question Number : 78 Question Id : 5942539401 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is an ecosystem where rivers meet the sea having a unique plant and animal communities?

Options :

1. ✘ Intertidal ecosystem
2. ✘ Lentic ecosystem
3. ✔ Estuarine ecosystem
4. ✘ Tundra

Question Number : 79 Question Id : 5942539402 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which are the heterotrophic organisms in an ecosystem?

- A) Algal aggregations
- B) All animals
- C) All perennial plants
- D) All bacteria and fungi

Choose the correct answer:

Options :

1. ✘ A & D only
2. ✘ A, C & B only
3. ✘ A & C only
4. ✔ B & D only

Question Number : 80 Question Id : 5942539403 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which are the two major forces that influence the initial population growth in a given ecosystem?

- A) Biotic potential
- B) Environmental resistance
- C) Air pressure
- D) Humidity

Choose the correct answer:

Options :

- 1. ✘ A & D only
- 2. ✘ C & D only
- 3. ✔ A & B only
- 4. ✘ B, C & D only

Question Number : 81 Question Id : 5942539404 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The ecosystems are classified based on the ratio between photosynthesis (P) and respiration (R). Which of the following is considered to be autotrophic where

Options :

- 1. ✔ $P/R = 1$
- 2. ✘ $P/R > 1$
- 3. ✘ $P/R < 1$
- 4. ✘ $P/R = 0$

Question Number : 82 Question Id : 5942539405 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

In aquatic ecosystems, Phosphorus occurs as

- A) Inorganic Phosphorus
- B) Dissolved organic Phosphorus
- C) Metallophosphorus
- D) Particulate organic Phosphorus

Choose the correct answer:

Options :

- 1. ✘ A & D only
- 2. ✔ A, B & D only
- 3. ✘ C only
- 4. ✘ A, B, C & D

Question Number : 83 Question Id : 5942539406 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following statements defines Protocooperation?

Options :

- 1. ✘ Interaction between two species where one is harmed and the other is neither harmed nor benefited
- 2. ✘ Interaction between two species where one is benefited and the other is not
- 3. ✘ Interaction between two species where both are benefited and the relationship is obligatory

Interaction between two species where both are benefited but the relationships are not obligatory

4. ✓

Question Number : 84 Question Id : 5942539407 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is NOT a characteristic of climax community in a pond?

Options :

1. ✓ Abundance of secondary consumers

2. ✗ Increase in biomass

3. ✗ Abundance of organic matter

4. ✗ Increase in species diversity

Question Number : 85 Question Id : 5942539408 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not a secondary lymphoid organ?

Options :

1. ✗ Peyer's patches

2. ✗ Tonsils

3. ✓ Bone marrow

4. ✗ Spleen

Question Number : 86 Question Id : 5942539409 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Match the following:

- | | |
|--------------------|--|
| A) NK Cell | i. Histamine |
| B) Interferons | ii. Grave's disease |
| C) Mast cells | iii. Inhibition of viral replication |
| D) Immunoglobulins | iv. Perforin |
| | v. Complementarity Determining Regions |

Options :

1. ✘ A – v; B – i; C – ii; D - iii
2. ✔ A – iv; B – iii; C – i; D – v
3. ✘ A – ii; B – i; C – iii; D – iv
4. ✘ A – iii; B – v; C – ii; D – iv

Question Number : 87 Question Id : 5942539410 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following statement is NOT true with respect to thymus?

Options :

- Size of the thymus in a just born baby is larger than the thymus of 55 years old
1. ✘ individual
 2. ✘ Thymus is an organ where lymphocytes undergo the process of maturation
 3. ✔ Thymic medullary and cortical cells secrete antibodies

Thymus is a paired pyramid shaped organ located in the thoracic region in humans

4. ✘

Question Number : 88 Question Id : 5942539411 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

The immunity acquired by the foetus due to transplacental passage of antibodies from mother is

Options :

1. ✔ Naturally acquired passive immunity
2. ✘ Artificially acquired passive immunity
3. ✘ Naturally acquired active immunity
4. ✘ Artificially acquired active immunity

Question Number : 89 Question Id : 5942539412 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

β 2-microglobulin is a component of

Options :

1. ✔ MHC Class I molecule
2. ✘ MHC Class II molecule
3. ✘ MHC Class III molecule
4. ✘ CD molecule

Question Number : 90 Question Id : 5942539413 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is NOT concerned with ELISA?

Options :

1. ✘ Horse Radish Peroxidase
2. ✘ SDS Polyacrylamide gel electrophoresis
3. ✘ Western blotting
4. ✔ X-ray diffraction

Question Number : 91 Question Id : 5942539414 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Identify the correct order of events related to antibody production

- A) Differentiation of B lymphocytes into plasma cells
- B) Production of IgM and IgG
- C) Activation of specific clone of B lymphocytes
- D) Binding of antigen to B cell receptor

Choose the correct answer:

Options :

1. ✘ B, A, D, C
2. ✔ D, C, A, B
3. ✘ C, B, D, A
4. ✘ C, A, B, D

Question Number : 92 Question Id : 5942539415 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is NOT the function of macrophages?

Options :

1. ✘ Antigen processing and presentation
2. ✘ Phagocytosis
3. ✘ Secretion of cytokines
4. ✔ Synthesis and secretion of immunoglobulins

Question Number : 93 Question Id : 5942539416 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Identify the functions of Thymus

- A) Regulation of inflammation
- B) Breakdown of dead Red Blood Cells
- C) Development of CD4+ and CD8+ T lymphocytes
- D) Central and peripheral tolerance

Choose the correct answer:

Options :

1. ✘ A, B & C only
2. ✘ B & D only
3. ✔ C & D only
4. ✘ A & C only

Question Number : 94 Question Id : 5942539417 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Attenuated vaccines contain

Options :

1. ✘ Wild pathogenic organism in its original form
2. ✔ Weakened pathogen
3. ✘ Dead pathogen
4. ✘ Decayed pathogen

Question Number : 95 Question Id : 5942539418 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Identify the microorganisms which use toxoid vaccines for immunization

- A) *Entamoeba histolytica*
- B) *Corynebacterium diphtheria*
- C) *Clostridium tetani*
- D) Poliovirus

Choose the correct answer:

Options :

1. ✘ A & D only
2. ✘ A, B, C & D
3. ✘ A, C & D only
4. ✔ B & C only

Question Number : 96 Question Id : 5942539419 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following autoimmune disease is caused due to deposition of IgM-IgG complexes on the blood vessel walls and synovial membrane of joints?

Options :

1. ✓ Rheumatoid arthritis
2. ✗ Myasthenia gravis
3. ✗ Hashimoto's disease
4. ✗ Grave's disease

Question Number : 97 Question Id : 5942539420 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Immunoglobulin A (IgA) is concerned with

Options :

1. ✗ Allergic rhinitis
2. ✗ Immediate hypersensitivity
3. ✓ Mucosal immunity
4. ✗ Delayed type hypersensitivity

Question Number : 98 Question Id : 5942539421 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Hermaphroditism in humans is a condition which is characterized by

Options :

1. ✘ Loss of speech and vision
2. ✘ Absence of external genitals
3. ✔ Discrepancy between gonads and external genitals
4. ✘ Absence of gonads

Question Number : 99 Question Id : 5942539422 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Valuable molecular marker used in mapping the chromosomes of man

Options :

1. ✘ Palindromic sequences
2. ✘ RNA-DNA hybrid sequences
3. ✘ Soluble RNA sequences
4. ✔ Restriction fragment length polymorphisms

Question Number : 100 Question Id : 5942539423 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0.25

Which of the following is true with respect to smooth endoplasmic reticulum?

- A) Fatty acid synthesis
- B) Abundant in specialized cells that produce secreted proteins
- C) Abundant in hepatocytes
- D) Synthesis of phospholipids

Choose the correct answer:

Options :

- 1. ✘ A & B only
- 2. ✔ A, C & D only
- 3. ✘ B only
- 4. ✘ B & C only