

ZOOLOGY

MODEL QUESTIONS

➤ **Instructions:** -

Choose the Correct answer from the choices given under each bit.

Unit – I

- In Hirudinaria the excretory organs are –
(a) Green Gland (c) Organ of Bojanus
(b) Chloragogen cells (d) Nephridia
- In Aquatic Mamals retae mirabilis is associated with –
(a) Digestive System (c) Circulatory System
(b) Nervous System (d) Excretory System
- Which of the following is not a Flight Muscle?
(a) Pectoralis Major (c) Coracobrachialis Brevis
(b) Coracobrachialis Longus (d) Gastronemius
- Which of the following amphibians carries eggs in its Vocalsacs?
(a) Notopterus (c) Pipa
(b) Cryptobatrachus (d) Rinoderma Darwinii
- Which of the following is the probable ancestor of Tetrapod?
(a) Actinistia (c) Rhipidistia
(b) Ichthyostega (d) Dipnoi
- Rhabditiform Larva is seen in –
(a) Trichinella Spiralis (c) Ascaris Lumbricoides
(b) Talnia Solium (d) Wuchereria Bancrofti
- Which of the following is a larval form of Starfish?
(a) Nauplius (c) Brachiolaria
(b) Trochophore (d) Auricularia
- Which of the following features of Amphioxus exhibits its non-chordate affinity?
(a) Notochord
(b) Dorsal Tubular Notochord
(c) Protonephridia with Solenocytes
(d) Pharyngeal Gill Slits

Unit – II

1. Cell Cycle is divided into –
 - (a) G₁, S, G₂ Phase
 - (b) Interphase and Mitotic Phase
 - (c) Interphase and Prophase
 - (d) Karyokinesis and Cytokinesis
2. In a dilugbrid ends the ratio of 9:7 is due to –
 - (a) Epistatic Genes
 - (b) Complimentary Genes
 - (c) Supplementary Genes
 - (d) Lethal Genes
3. The genotype of Turner's Syndrome is –
 - (a) 44^A + X0
 - (b) 44^A + XXX
 - (c) 44^A + XX
 - (d) 44^A + XXY
4. A gene which synthesizes a repressor protein is –
 - (a) Regulator Gene
 - (b) Structural Gene
 - (c) Operator Gene
 - (d) Promoter Gene
5. Location of Poly-Adenylic Acid found in Eukaryotes is –
 - (a) t RNA at 3' end
 - (b) t RNA at 5' end
 - (c) m RNA at 3' end
 - (d) m RNA at 5' end
6. T2 bacteriophage consists of -
 - (a) Single Standard DNA
 - (b) Double Standard DNA
 - (c) Double Standard RNA
 - (d) Single Standard RNA
7. The initiation codon for protein synthesis in Eukaryotes is –
 - (a) AGU
 - (b) AUG
 - (c) AAU
 - (d) UAA
8. The phase DNA enters into the host bacterium by the process of –
 - (a) Transformation
 - (b) Transduction
 - (c) Sexduction
 - (d) Transfection

Unit – III

1. Which one of the following is required for blood coagulation?
 - (a) Cl^-
 - (b) K^+
 - (c) Na^+
 - (d) Ca^{++}
2. Which vitamin is excreted through Urine in higher vertebrate?
 - (a) Vit A
 - (b) Vit D
 - (c) Vit K
 - (d) Vit C
3. The reabsorption of water in the Kidneys is under the control of the hormone –
 - (a) STH
 - (b) ACTH
 - (c) LH
 - (d) ADH
4. Which of the following set of ions is necessary for transmission of Nerve Impulse?
 - (a) Na^+ and K^+
 - (b) Ca^{+2} and Na^+
 - (c) Ca^{+2} and K^+
 - (d) Na^+ and Mg^{+2}
5. Which compound acts as second messenger during the action of peptide hormones?
 - (a) CAMP
 - (b) ATP
 - (c) GTP
 - (d) UTP
6. The primary target for the hypothalamic secretion is
 - (a) Pineal Gland
 - (b) Pituitary
 - (c) Thymus
 - (d) Testis
7. Which of the following secretes the hormone oxytocin?
 - (a) Adenohypophysis
 - (b) Neurohypophysis
 - (c) Hypothalamus
 - (d) Pars Intermedia

Unit – IV

1. Natural selection acts directly on -
 - (a) Phenotype
 - (b) Genotype
 - (c) Entire Genome
 - (d) Entire Gene pool
2. The species which is morphologically distinct, geographically isolated but could interbreed –
 - (a) Sibling Species
 - (b) Polytypic Species
 - (c) Allopatric Species
 - (d) Sympatric Species
3. Which one of the following air pollutants is not a factor for Skin Cancer?
 - (a) NH_4
 - (b) CFC
 - (c) SO_2
 - (d) Nitrous Oxide
4. Embryonic Foetal cells of 5 – 8 weeks old are –
 - (a) Totipotent
 - (b) Pleuripotent
 - (c) Unipotent
 - (d) Multipotent
5. Morphallaxin explains –
 - (a) Healing of Injury
 - (b) Regeneration with Blastema
 - (c) Growth of Lost Limbs
 - (d) Reconstruction of Whole Body
6. Which one of the following may not always occur following Fertilization?
 - (a) Decrease in Electric Potential
 - (b) Increase in Ca^{++}
 - (c) Increase in P^{H}
 - (d) Increase in Respiratory Rate
7. Fertilizing is a –
 - (a) Mucopolysaccharide
 - (b) Cholesterol
 - (c) Glycoprotein
 - (d) Phospholipid
8. Best formation of Pearl is obtained through –
 - (a) Gonadal Implantation
 - (b) Implantation in Pedal Tissue
 - (c) Implantation over Mantle
 - (d) Implantation in Mantle Tissue

Unit – V

1. The process of transfer of denatured DNA bands from the gel to the nitrocellulose membrane is called –
 - (a) Eastern Blotting
 - (b) Southern Blotting
 - (c) Western Blotting
 - (d) Northern Blotting
2. By which enzyme small pieces of DNA can be spliced (Joined) into a Vector DNA which is also Cleaved by the same enzyme creating recombinant DNA?
 - (a) Restriction Endonuclease
 - (b) DNA Ligase
 - (c) DNA Polymerase
 - (d) Transcriptase
3. Which technique is used for separation of segments of genomic DNA of different sizes before the use of a Molecular probe?
 - (a) Gel Electrophoresis
 - (b) Ultracentrifugation
 - (c) Chromatography
 - (d) Autoradiography
4. Which one of the following is not required in PCR?
 - (a) Taq DNA Poltmerase
 - (b) Four Nucleoside triphorsphates
 - (c) Primer Strands
 - (d) Cloning Vector
5. Beer – Lambert Laws govern which of the following techniques in Quantitative Biochemical Investigations?
 - (a) Autoradiography
 - (b) Chromatography
 - (c) Spectrophotometry
 - (d) Electrophoresis
6. Which member of Cytokine Proteins is used for treatment of Hepatitis – B, Cancer and Viral infections like AIDS for preventing Viral Replication or Boosting Immunity?
 - (a) Monoclonal Antibodies
 - (b) DNA Vaccines
 - (c) Interferons
 - (d) Engineered Hormones
7. The Chemical signals produced by Exocrine Glands causing changes in behavioural, reproductive and developmental process in the same species are –
 - (a) Hormones
 - (b) Pheromones
 - (c) Enzymes
 - (d) Interferons
8. The diurnal and nocturnal, behavioural and physiological activities in Organisms controlled by Biological Clock is known as –
 - (a) Circadian Rhythm
 - (b) Circannual Rhythm
 - (c) Lunar Rhythm
 - (d) Tidal Rhythm
9. The ideal level of significance chosen while applying t-test for biological sample is –
 - (a) 1%
 - (b) 3%
 - (c) 5%
 - (d) 10%

ANSWER KEYS

UNIT - I	1. (d)	2. (c)	3. (d)	4. (d)	5. (c)	6. (c)	7. (c)	8. (c)	
UNIT - II	1. (b)	2. (b)	3. (a)	4.(a)	5. (c)	6. (c)	7. (b)	8.(a)	
UNIT - III	1. (d)	2. (d)	3. (d)	4.(a)	5. (a)	6. (b)	7. (c)		
UNIT - IV	1. (a)	2. (b)	3. (c)	4.(b)	5. (d)	6. (d)	7. (a)	8.(a)	
UNIT - V	1. (b)	2. (b)	3. (a)	4.(d)	5. (c)	6. (c)	7. (b)	8. (a)	9. (c)