

# ZOOLOGY

2015

Time: 15 Minutes

Max. Marks: 09

## SECTION "A" MULTIPLE CHOICE QUESTIONS

1. Choose the correct answer for each from the given options:

- (i) In Archaeopteryx tail, the number of vertebrae is:  
• 10 • 15 • 20 • 25
- (ii) The excretory organs of cockroach are called:  
• Malpighian tubules • Nephridia  
• Green glands • Flame cells
- (iii) The enzyme used to seal the DNA is:  
• Restriction enzyme • Ligase enzyme  
• Polymerase enzyme • Endonuclease
- (iv) Number of Actin filaments surrounding each Myosin filament is: • 4 • 6 • 8 • 10
- (v) Gleno-humeral articulation is present in the:  
• Elbow • Knee • Shoulder • Thigh
- (vi) Emergency hormone is secreted by:  
• Adrenal cortex • Adrenal medulla  
• Pituitary gland • Pineal gland
- (vii) The most advanced type of learning is:  
• Insight learning • Imprinting  
• Latent learning • Habituation
- (viii) This is an example of multifactorial defect:  
• Down's Syndrome • Diabetes mellitus  
• Cystic fibrosis • Cholera
- (ix) This percentage of the water of the world is retained as glaciers and polar ice: • 0.052 • 2 • 4 • 93
- (x) The study of abnormalities during embryonic development is called:  
• Embryology • Gerontology  
• Neurology • Teratology
- (xi) Cells of bones are called:  
• Oocytes • Osteocytes • Spermatocytes • Tendons
- (xii) ADH, Aldosterone and Parathormone influence the working of:  
• Kidneys • Brain • Liver • Stomach
- (xiii) The science of Ageing is called:  
• Gerontology • Ichthyology  
• Haematology • Teratology
- (xiv) This has been controlled by gene therapy:  
• Epilepsy • Diabetes • Cystic fibrosis • AIDS
- (xv) The unit of measurement intensity of noise level is:  
• Litre • Decibel • Milligram • Metre
- (xvi) The longest and strongest bone in the human body is:  
• Humerus • Radio Ulna • Femur • Sternum
- (xvii) If carbon dioxide is withdrawn from the biosphere, the first to experience negative biological effect will be:  
• Primary consumers • Secondary consumer  
• Producers • Environment
- (xviii) The interaction between a particular organism and its environment is called:  
• Community • Fertilization • Ecosystem • Biosphere

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Time: 1 Hours 45 Minutes

Marks: 36

## SECTION 'B' (SHORT-ANSWER QUESTIONS)(22)

NOTE: Answer 11 questions from this section.

- 2.(i) Write about the different types of Neurons.
- (ii) Write a note on Lithotripsy or Acid Rain.
- (ii) Describe Osmoregulation in Terrestrial animals.
- (iv) Define Renewable & Non-renewable resources and give examples.
- (v) Write the basic steps of recombination DNA technology.
- (vi) Explain Hardy Weinberg Law.
- (vii) Write four functions of Skeleton.
- (viii) Define Deamination. Draw the chart of Ornithine cycle.
- (ix) Write four differences between Nervous coordination and Chemical coordination.
- (x) Write a note in DNA Fingerprinting.
- (xi) Name the marked parts of the following Diagram.
- (xii) Write four differences between Diffused and Centralized nervous system.
- (xiii) Write a note on Oestrous cycle.
- (xiv) Explain the role of Brain in the regulation of body temperature.
- (xv) What is the function Pelvic girdle? Name its three important bones.
- (xvi) Describe the functions of Encapsulated receptors of the Skin.

## SECTION 'C' DETAILED-ANSWER QUESTIONS

NOTE: Answer 2 question from this section(14)

3. Define Menstrual cycle. Describe its various phases and the changes occurring in each phase.

OR Define Endocrine glands. Describe Pituitary gland as master gland.

4. Describe Nerve impulse under the following headings:

a) AMP      b) RMP      c) SYNAPSE

5. Describe Darwin theory of Natural selection and the objections raised against it.