

# 1 Mark Questions

- Among the following phyla, one evolutionarily closest to the phylum—Chordata is
  - Annelida
  - Arthropoda
  - Echinodermata
  - Oncychochophora
- The orders—Anura, Urodela and Apoda belong to the class
  - Amphibia
  - Reptilia
  - Mammalia
  - Pisces
- Humans originated in the epoch known as
  - Pleistocene
  - Eocene
  - Holocene
  - Miocene
- The neotropic biogeographical region per terrestrial species is not bounded by the following biogeographical region is
  - Nearctic
  - Afrotropic
  - Antarctic
  - Indo-Malayan
- The condition albinism in man is linked to the deficiency of the enzyme
  - glucose 6-phosphate dehydrogenase
  - arginase
  - tyrosinase
  - xanthin oxidase
- Of the following, identify the one which is not a stop codon
  - UAA
  - UAG
  - UGA
  - UAC
- In a human cell, the number of moles of which one of the elements is the highest
  - carbon
  - oxygen
  - nitrogen
  - hydrogen
- The body temperature of the following groups of animals occur in the order
  - Prototheria > Metatheria > Eutheria > Aves
  - Aves > Eutheria > Metatheria > Prototheria
  - Eutheria > Aves > Metatheria > Prototheria
  - Metatheria > Eutheria > Aves > Prototheria
- The combination of closely linked genetic markers which tend to be transmitted as a unit to the next generation is called
  - allotype
  - haplotype
  - karyotype
  - isotype
- The hormone epinephrine is involved in
  - red blood cell synthesis
  - stress response
  - control of blood sugar level
  - control of metabolic rate
- Which of the following amongst the four is not a respiratory organ?
  - Dorsal line
  - Trachea
  - Gills
  - Lungs
- The hypervariable region of antibody molecule was first demonstrated by
  - Edelman and Porter
  - Kabat and Porter
  - Sastry and Pillai
  - Milstein and Kohler
- The vector responsible for the spread of filariasis is
  - Anopheles
  - Culex
  - Aedes
  - Sand fly
- Which of the following is not a second messenger?
  - ATP
  - Inositol 1, 4, 5-triphosphate
  - Ca<sup>2+</sup>
  - cAMP
- Early pregnancy detection test detects the presence of which one of the following hormones?
  - Human chorionic gonadotropin
  - Luteinizing hormone
  - Follicle stimulating hormone
  - Oestrogen

16. Selective transfer of which one of the following antibodies is responsible for passive humoral immunity in infants?  
(a) IgA (b) IgM  
(c) IgG (d) IgE
17. The animal that most recently became extinct is  
(a) woolly mammoth (b) giant moa  
(c) dodo (d) tasmanian wolf
18. The man who championed the theory of evolution of Darwin and often referred to as Darwin's bulldog is  
(a) Jullian Huxley (b) Aldous Huxley  
(c) TH Huxley (d) Andrew Huxley
19. If you were asked to clone a man from a single cell and you are provided with the following cells, which one you would choose?  
(a) Sperm (b) Erythrocyte  
(c) Lymphocyte (d) Kidney fibroblasts
20. Community suckling of young ones is found in  
(a) cats (b) dogs  
(c) lions (d) humans
21. The number of complementarity determining region(s) present in human Kappa chain are  
(a) 1 (b) 2  
(c) 3 (d) 4
22. Transfer RNA genes are transcribed by  
(a) RNA polymerase I  
(b) RNA polymerase II  
(c) RNA polymerase III  
(d) RNA dependent RNA polymerase
23. Shine-Dalgarno sequence is associated with  
(a) translation (b) transcription  
(c) replication (d) recombination
24. Gonadotropin releasing factor is synthesized by  
(a) anterior pituitary (b) hypothalamus  
(c) adrenal gland (d) thymus gland
25. In eukaryotic cells, DNA synthesis occurs during the phase of the cell cycle  
(a) G<sub>1</sub> (b) G<sub>2</sub>  
(c) M (d) S