



SECTION 'A' (Multiple Choice Questions) (Max Marks 22)

NOTE: Attempt all multiple-choice questions. All carry equal marks.

- _____ is the largest part of brain .
a) Telecephalon b) Amygdala c) pons d) diencephalon
- In man sperms are stored in _____.
a) Urethra b) epididymus
c) seminiferous tubules d) Vasa deferens
- The animals are active at Dusk or Dawn is known as _____.
a) Nocturnal b) diurnal c) crepuscular d) All of these
- Ovulation is initiated by _____ hormone.
a) LH b) ACTH c) ADH d) FSH
- The approximate number of Human gene on 23 pairs of chromosomes are _____.
a) 30,000 to 35,000 b) 40,000 to 45000 c) 5000 to 50,000 d) 20,000 to 25000
- The joints of Elbow and Knee are _____.
a) ball and socket joint b) hinge joint c) girdles d) pivot joint
- Microcephaly is caused due to _____ disorder.
a) genetic disorder b) nutritional deficiency c) viral disease d) bacterial
- Tooth decay is caused due to deficiency of _____.
a) Chlorine b) Fluorine c) Bromine d) iron
- The concentration of water in urine is _____.
a) 95 % b) 90 % c) 97 % d) 87
- Treponema pallidum causes _____.
a) Syphilis b) Gonorrhoea c) AIDS d) Genital herpes
- Germinal Continuity Theory was proposed by _____.
a) Darwin b) Weismann c) Lemarks d) Hardy- Weinberg
- The egg of Hen is Laid at the stage of _____.
a) gastrula b) Blastula c) morula d) Cleavage
- The Element necessary for muscles contraction is _____.
a) Ca⁺ b) H₂O c) Cl⁻ d) O₂
- Cranial, vagas, and spinal nerve are a part of _____.
a) Parasympathetic Nervous System b) autonomic nervous system
c) sympathetic nervous system d) All of these
- The connection between mother and fetus is through _____.
a) placenta b) uterus c) endometrium wall d) None of these
- The period starting from conception upto the birth of a baby is called _____.
a) Gestation b) pregnancy c) menstruation d) lactation
- The spongy Vascular internal Lining of the Uterus is called _____.
a) myomatrium b) Endomertrium c) mesoderm d) All of these
- Ornithine requires Ammonia and CO₂ to produce _____.
a) Urea b) Citruline c) Arginine d) Uric acid
- The end of fertility in women is known as _____.
a) Menstruation b) Menopause c) puberty d) None of these

20. The deficiency of iodine cause _____.
 a) Goiter b) BP c) Myxedema d) Cretinism
21. The safest and cheapest source of Energy is _____.
 a) Hydroelectric Energy b) nuclear energy c) atomic energy d) Thermal energy
22. AIDS is caused by _____.
 a) tuberculosis b) HIV c) Neisseria Gonorrhoea d) Gonorrhoea

SECTION 'B' (Short- Answer Questions) (Max Marks 14)

Note:- Attempt any four questions from reasoning questions and three from non-reasoning question. All questions carry equal marks.

(a) Reasoning Questions:

- i. Why testes descends down in Human male Foetus before birth? OR How does SCID different from AIDS?
- ii. How the rains become acidic? Reason? OR Why is Synapse termed as Motor end Plate?
- iii. Why the degree of concentration of urine varies in human being?
- iv. Excreting ammonia by animals is advantageous reason?
- v. Why crystallization occur in uric acid? OR Which compound serve as high reserve energy for muscles?
- vi. Why a tiring condition produced in muscles after exercise?

(b) Non Reasoning Questions:

- i. Define joints. Name different types of joints? OR What is DNA finger printing? Give its advantages?
- ii. Describe the function of encapsulated receptors of the skin. OR Write a note on Haemodialysis.
- iii. Explain osmoregulation in fresh water fish or Marine water fish. OR What is the importance of plasmids in recombinant DNA technology?
- iv. Describe all STD and write their causes, symptoms, treatment and precaution. OR Write a note on: Aging, Abnormal development
- v. Write four differences of the following: Nervous coordination and chemical coordination
- vi. Write about Disc slip OR Thymus Gland

SECTION 'C' (DETAILED ANSWER QUESTIONS) (Max Marks 9)

Note: Attempt any one question. All questions carry equal marks. Attempt all parts of a question.

- Q3a)** Explain the mechanism of development and transmission of nerve impulse with diagram showing chemical transmission at the Synapse and Nerve Impulse.
b) How homiotherms maintain their body temperature in hot and cold season in mammals.
- Q4a)** Describe the structure and mechanism of contraction of skeletal muscles.
b) Describe the control of muscle contraction.
- Q5a)** What is menstrual cycle? Discuss its various phases and the events taking place in each phase.
 OR
 Describe in detail central nervous system of man. (Diagram is not required).
b) Explain the spermatogenesis OR Oogenesis.
- Q6a)** What is biotechnology? Explain four steps of recombinant DNA technology.
b) Lamarck's theory. Explain all the examples also.