

Section-A

Multiple Choice Questions(MCQ's)

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

- (i) Marine invertebrates and Hagfish have _____ body fluid.
 (a) Hypertonic (b) Hypotonic (c) Isotonic (d) Natural
- (ii) A clone exactly resembles with:
 (a) Mother (b) Egg donor (c) Diploid nucleus donor
 (d) Haploid donor
- (iii) Night blindness is caused due to deficiency of:
 (a) Vitamin K (b) Vitamin A (c) Vitamin C (d) Minerals
- (iv) The blastoderm splits into:
 (a) Epimere and hypomere (b) Mesomere and epimere
 (c) Entomere and mesomere (d) Epiplasia and hypoblast
- (v) Excretory organ of Insects is:
 (a) Kidney (b) Malpighian Tubules (c) Protonephridia
 (d) Metanephridia
- (vi) Bones of skulls are joined by:
 (a) Fixed joint (b) Sliding joint (c) Pivot joint
 (d) Hinge joint
- (vii) The part of brain which can be reprogrammed to ignore or respond to a stimulus is:
 (a) Thalamus (b) Reticular formation (c) Pons
 (d) Cerebellum
- (viii) A human skeleton is about _____ of total weight.
 (a) 15% (b) 16% (c) 17% (d) 18%

Section-B Short Answer

Note: Answer any TEN for the following questions. Question No:2 is compulsory which carries 03 marks and all other questions carry 02 marks each.

- Q.2: Differentiate between:
 (a) Protonephridia and Metanephridia
 (b) Bones and cartilage
- Q.3: Why neurolemma is polarized during unstimulated conditions?
- Q.4: What is deamination and where does it occur?
- Q.5: What is Tetany?
- Q.6: In fishes, reptiles and birds the cleavage is termed as meroblastic or incomplete, why?
- Q.7: Define the locomotion in Jellyfish?
- Q.8: Give major signs and symptoms of Dextrocardia?
- Q.9: Define flagellary movement giving examples?
- Q.10: Why kidney act both as osmoregulatory and excretory organ?
- Q.11: Where does cerebral hemisphere lie and what does it consist of?
- Q.12: Define hormonal control of reproductive cycle?

Q.13: Enlist basic steps of recombinant DNA technology?

Q.14: What does negative feedback refer to?

Section-C
Descriptive Answer

Note: Answer any ONE of the following questions, which carries 13(7+6) marks.

- Q.15 (a) Define Gastrulation. Explain the formation of three germinal layers.
 (b) Why protection and conservation of environment is essential?
- Q.16 (a) Describe regulatory functions of Kidney.
 (b) What is gene therapy? How is it helpful in treating diseases?