CBSE TEST PAPER-01 CLASS - XI BIOLOGY (Animal Kingdom)

General Instruction:

- All questions are compulsory.
- Question No. 1 to 3 carry one marks each. Question No. 4 to 6 carry two marks each. Question No. 7 and 8 carry three marks each. Question No. 9 carry five marks.
- 1. Name an example of egg- laying mammals
- 2. What is polymorphism
- 3. Which animal is popularly called ploughman of nature & why?
- 4. List any four identifying features of arthopoda & give examples.
- 5. Distinguish between diploblastic & triploblastic animals.
- 6. What is protochordates? How is it classified.
- 7. "All vertebrates are chordates but all chordates are not vertebrates" justify the statement.
- 8. "Mammals are the most successful & dominant animals today" Give evidence

9. How are non chordates different from chordates. Write the major phyla of non- chordate & give examples.

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1. Duck- bill platyhelminthes

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2. The phenomena when an organism have different kinds of zooids for different function is called polymorphism.

3. Earthworms are popularly known as Natures ploughman because it brings subsoil over the surface & create fine burrows for aeration.

4. i) Animals having jointed appendages ii) Triploblastic, coelomate, & bilaterally symmetrical iii) Body is covered by chitinous cuticle & segments are not separated by septa iv) Arthropods are unisexual animals v) eg. crab, Apis, spider, Anopheles

- Diploblastic animals are primitive metazoans, whereas triploblastic animals include advanced metazoans.
- Diploblastic animals have two germ layers including ectoderm and endoderm while triploblastic animals have three germ layers including ectoderm, mesoderm, and endoderm.
- Diploblastic animals include Cnidarians and Ctenophores, while triploblastic animals include worms, arthropods, echinoderms, molluscs, and vertebrates. In certain diploblastic animals, mesoglea is found in between ectoderm and endoderm whereas, in triploblastic animals, mesoderm separates the ectoderm and endoderm.
- It is believed that triploblastic animals have evolved from diploblastic animals around 580 to 650 million years ago.
- Unlike triptoblastic animals, diploblastic animals lack body cavities and true organs (certain triploblastic animals like acoelomates have become secondarily simplified and lost their body cavities).

6. Protochordates are the primitive non vertebrate ehordates. There are three subphylaa) Hemichordata eg. Belanoglossus. b) Urochordata eg. salpa & Herdmania. c)Cephalochordate eg. Amphioxus.

7. All vertebrates are chordates because they possess three basic chordate features as:-i) All chordates posses a notochord ii) All chordates have a dorsal hollow nerve cord. iii) All

chordates have pharyngeal gill cleft in some stages of lift cycle

All chordates are not vertebrates. Vertebrates have vertebral column but protochordates & agnatha have notochord that is not replaced by vertebral column.

8. Mammals are the most successful & dominant animals today. They thrive very well in

most environment of world & The unique characteristics of mammals are:-

i) Body covered with hair

ii) Presence of sebaceous & sweat glands in skin

iii) Presence of mammary glands in females

iv) Presence of a pair of external ears & three ear osciscles

v) Heart is four chambered

vi) RBCS are biconcave & enucleated

vii) Corpus callosum unites two cerebral hemisphere

viii) Testis are extra abdominal

ix) Mostly viviparous & embryo attached to uterine wall by placenta.

9.

| Non - Chordates | Chordates |
|---|---|
| i) Notochord is present | i) Notochord is absent |
| ii) Central Nervous system dorsal, hollow & single. | ii) Central nervous system is ventral solid & double |
| iii) Pharynx is perforated by slits | iii) Gill slits absent |
| iv) Heart Ventral | iv) Heart dorsal |
| v) A post anal metamerically segmented tail present | v) Terminal part unsegmented |

Major phyla of non – chordates are:-

i) Phylum - porifera:- adults sessile having cellular grade of organization & body is porous eg. Spongilla.

ii) Phylum – coelentrata:- Radially symmetrical & tentacles present in polyps & medusa eg. Aurelia.

iii) Phylum – Platyhelminthes:- Dorsoventrally flattened & organ of excretion is

protonephridia eg. Taenia.

iv) Phylum - Nematoda:- Parasitic forms with elongated round body eg. Enterobius.

v) Phylum - Annlida:- Body metamerically segmented eg. Hiduneria.

vi) Phylumn - Arthopoda:- Exoskeleton of chitin, Jointed appendages eg. Bombax mori vii) Phylum – Mollusc:- soft bodies shelled animals having foot, mantle & visceral mass eg. chiton

viii) Phylum – Echinodermata:- Exclusively marine having spiny skin & water vascular system with tube feet eg. ophiothrix.

