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Subject - Zoology (Biology)

Class - XI

ANIMAL KINGDOM

viii) Phylum - Arthropoda (Arthro = joint, podos = Foot)

Characters

- (i) These are free living animals and found in the air, water and on the land.
- (ii) segmented and triploblastic animals
- (iii) Body are divided into head, thorax and Abdomen.
- (iv) The leg are jointed so called Arthropoda
- (v) Nervous system are well developed
- (vi) Excretion by malpighian tubules
- (vii) sexes are separate
e.g - Palaemon (Prawn), spider, Apis (Honey bee), Cockroach.

ix) Phylum - Mollusca

- (i) These are found in fresh water and on the land
- (ii) The body is bilaterally symmetrical
- (iii) These are triploblastic animals.
- (iv) Respiration by gills or lung
- (v) well developed circulatory system.
- (vi) soft body is covered by membranous mantle.
- (vii) sexes are separate
e.g - Unio, octopus

x) Echinodermata (Echin = spines, dermatos = skin)

- (i) The animal are found in marine, coelomate animals.
- (ii) The coelom is present and coelom develop three system
water vascular system, haemal system, Perihemal system.
- (iii) Alimentary canal is mostly coiled
- (iv) excretory organ are absent
- (v) nervous system is less developed

- (vi) sexes are separate
 - (vii) sexual reproduction and fertilization is internal & development in direct or indirect
 - (viii) During larval form development then it metamorphosis to the adult animal.
- e.g. Asterias (Star-fish) Holothuria (sea cucumbers)

(X) Sub phylum - Hemichordata

characters

- (i) The lives in marine water
 - (ii) The body is soft elongated and divided into proboscis, collar and trunk.
 - (iii) Anus at the posterior end of the trunk.
 - (iv) Pharynx with many gill slits and notochord at the anterior end only.
- e.g. Balanoglossus.

(XI) Phylum - Chordata

characters

- (i) These animals are present in notochord.
 - (ii) Presence of pharyngeal gill slits
 - (iii) Dorsotubular nervous system are present
 - (iv) Presence of Coelom
 - (v) Presence of haemoglobin in RBC
 - (vi) Tail is present
- e.g. - Dog fish, Salamander, Birds, Reptiles, Mammals.

(A) Super class - Pisces

- (i) The animal are Aquatic poikilotherm (Cold blooded) &
- (ii) Respiration by gills or lung
- (iii) Heart is two chamber (an auricle and one ventricle.
- (iv) Notochord is generally replaced by cartilaginous or bony vertebrate
- (v) Internal ear is present
- (vi) Ten pairs of cranial nerves
- (vii) Body is covered by scales
- (viii) Swimming body is with different kinds of fins. One pair pectoral and pelvic fin and unpaired are dorsal ventral and caudal fin.

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