General characters of Amphibians

- 1) Amphibians are cold blooded vertebrates which can hue on land and in water.
- 2) Amphibians show four limbs with which they can swim in water and jump or walk on the land, (But In apoda limbs are absent.)
- 3) In Amphibians animals exoskeleton is absent. But in apoda animals small cycloid scales are present.
- 4) In Amphibians the adult animals lungs are present. Gills are absent. But In some urodelans the gills are present.

- 5)Amphibians Skin is a respiratory organ.
- 6) The Amphibians skull is dicondylic.
- 7) Amphibians Ribs are absent.
- 8)In Amphibians The body divisible into head and trunk Tail is present in, urodela animals.
- 9)Amphibians Digestive system is well developed. A well developed liver Is present

- 10) External ear is absent. Middle and inner ears are present, the middle ear columella auris Is present.
- 11)Amphibians Heart is 3 chambered with 2 auricles and 1 ventricle The blood contains R.B.C. They are nucleated. They contain hemoglobin.
- 12) Blood vascular system contain hepatic and renal portal systems.
- 13) Amphibians Kidneys are mesonephric.
 Urinary bladder is present. It stores urine.

- 14) Central nervous system is well developed.
 The brain occupies completely the cranial
 cavity. The brain is divided into fore, mid and
 hind brains. Brain continuous as spinal cord.
- 15)10 pairs of cranial nerves will arise.
- 16) Sexes are separate.
- 17) Male and female can be indentified Sexual dimorphism.
- 18) In Amphibians the life history a <u>larva</u> stage may be present.
- 19) Amphibian Eggs are telolecithal, Cleavage is holoblastic unequal.