

## UNIT II: STRUCTURAL ORGANISATION

# 3. STRUCTURAL ORGANISATION IN ANIMALS [FROG]

1SAQ = 4 M

## ROOT POINTS

- Structural organisation** in animals involves the study of organ (stomach, lung, heart, kidney,...) and organ system( digestive system, respiratory system,...).
- In this chapter we study the anatomy of frogs** (Class Amphibia of phylum Chordata) on behalf of vertebrates.
- Special sense organs** of frog contains touch (Sensory Papillae), taste (Taste Buds), smell(Nasal Epithelium), sight (Eyes)and hearing (Tympanum with Internal Ears) are present in frog. [SAQ]
- Digestive system of the frog** consists of Alimentary canal and Digestive glands. [SAQ]
- Respiratory organs of Frog:** Skin, Buccal cavity, lungs. [SAQ]
- Cutaneous respiration:** In water, skin acts as an aquatic respiratory organ. [SAQ]
- Pulmonary respiration:** Respiration that takes place by lungs. [SAQ]
- The **blood vascular system** of frog includes the heart, blood vessels and blood, while the **lymphatic system** comprises lymph, lymph channels and lymph nodes. [SAQ]
- Male reproductive system** of Frog includes Testes,Seminiferous tubules, [SAQ]  
Vasa Efferentia, Urinogenital Duct, Cloaca
- Female reproductive system** of Frog includes Ovaries,Oviducts,Eggs, Fertilisation,[SAQ]  
Development
- Platypus** animal is not viviparous. [NEET-2015]
- A marine cartilaginous fish that can produce electric current is **Torpedo**. [NEET-2015]
- Ureotelic mode of excretion** is common both in humans and adult frogs. [2012 PMT]
- Ureters acts as urinogenital ducts in **male frogs**. [2011 PMT]
- Frogs differ from humans in possessing **nucleated red blood cells**. [2011 PMT]
- Perissodactyla** represents the order of 'Horse'. [NEET-2017]
- Neophron bears hollow and **pneumatic** long bones. [NEET-2021]
- The unique mammalian characteristics are **Hair, Pinna and Mammary glands**[NEET-2023]
- Frogs respire through their **skin, lungs and buccal cavity** on lands. [NEET-2025]
- Location of the copulatory pad of the male frog is on the **first digit of the fore limb**. [NEET-2025]
- The blood vessel that carries deoxygenated blood from the body to the heart in a frog is the **vena cava**. [NEET-2025]