## **Lecture - 3 : Classification of phylum Arthropoda**

Arthro-Joint, Poda –Foot

## The arthropods possess

- The segmented body
- Bilateral symmetry
- Paired jointed appendages usually terminates in a claws
- Chitinous exoskeleton
- Ventral nervous system
- Dorsal heart
- Open type of circulatory system

Phylum arthropoda is classified into 7 classes

- ✓ Onychophora (claw bearing) eg: peripatus
- ✓ Crustacea (crusta-shell) eg: prawns, crabs, wood louse
- ✓ Arachnida (Arachine-spider) eg:scorpion, spider, ticks, mites

- ✓ Chilopoda (chilo-lip, poda-legs) eg:centipedes
- ✓ Diplopoda (diplo-two,poda-legs) eg:millipedes
- √ Trilobita (an extinct group)
- √ Hexopoda (hexa-Six, poda-legs) eg:insects

## **Characters of Class insecta:**

- 1. Body divided in to head, thorax and abdomen
- 2. Possess three pairs of legs, hence the name Hexapoda
- 3. Presence of one or two pairs of wings
- 4. A pair of antennae
- 5. Respiration by means of internal air tubes known as trachea

- 6. Genital opening situated at the posterior end of the body
- 7. Presence of metamorphosis (incomplete/complete) during development
- 8. Possess exoskeleton made up of hard cuticle which plays important role for survival.
- 9.Excretion is mainly by malpighian tubules which help in maintaining ionic balance

## Female grasshopper **Abdomen** Thorax Head forewing tympanum simple hindwing compound eye ovipositor spiracles antenna air sac spiracle tracheae