

# HLA SYSTEM

**Definition** of a *GRAFT*: Transfer of an organ/tissue, on individual to another OR from location within the same individual

## Types of Graft:

- Auto-graft (Done in the same individual)
- Allograft (Done between 2 genetically individuals)
- Isograft (Done between 2 identical twins)

## NOTE:

**Zenograft**: Done between 2 genetically different species

Example: Dog and Cat

## Response of Immune system to each graft:

### AUTOGRAFT:

- Always accepted
- It has identical HLA marker
- The immune system will recognize it as self

### ALLOGRAFT:

- Rejected
- It has different HLA markers
- The immune system will recognize it as non self

### ISOGRAFT:

- Usually accepted
- 100% success

### Non-self:

→Harmless substances (EX: Dust)

→Graft

→- Pathogen microbes

- Bacteria
- Virus
- Parasites
- Fungi