

## UNIT-1 RECEPTORS

Receptors are sensory (afferent) nerve endings that terminate in periphery as bare **unmyelinated endings** or in the form of specialized **capsulated structures**.

Receptors give response to the stimulus. When stimulated, receptors produce a series of impulses, which are transmitted through the afferent nerves.

### Classification of receptors

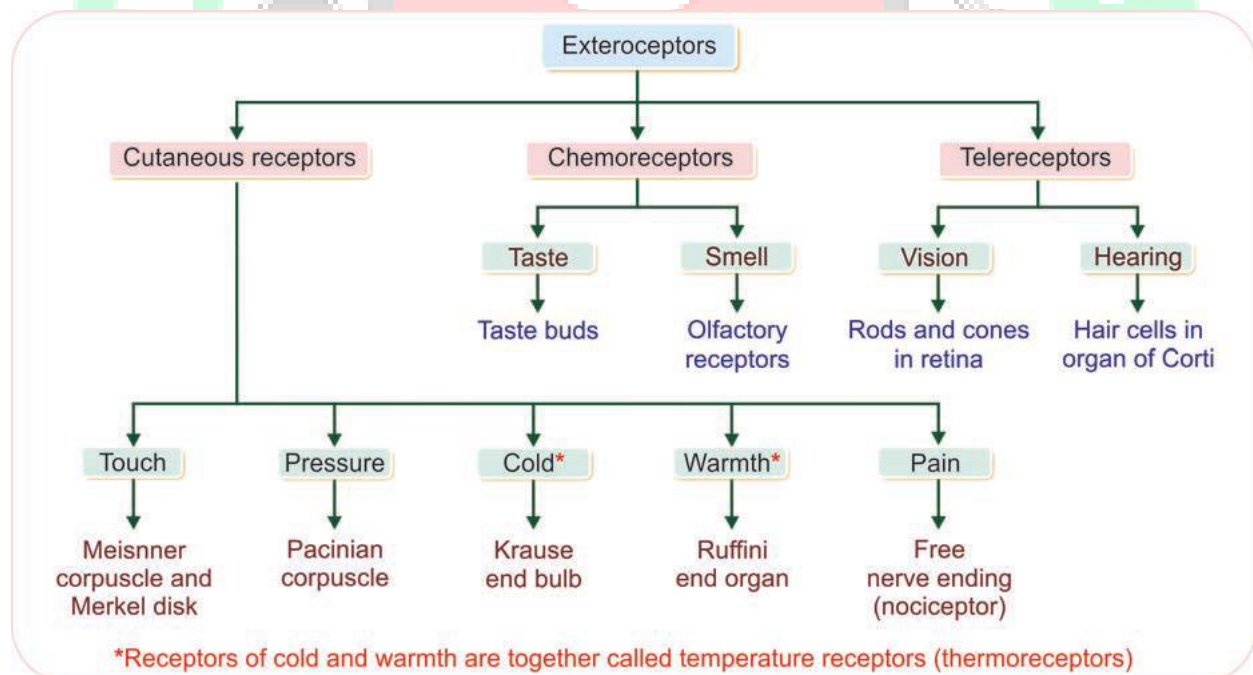
Generally, receptors are classified into two types:

A. Exteroceptors

B. Interoceptors

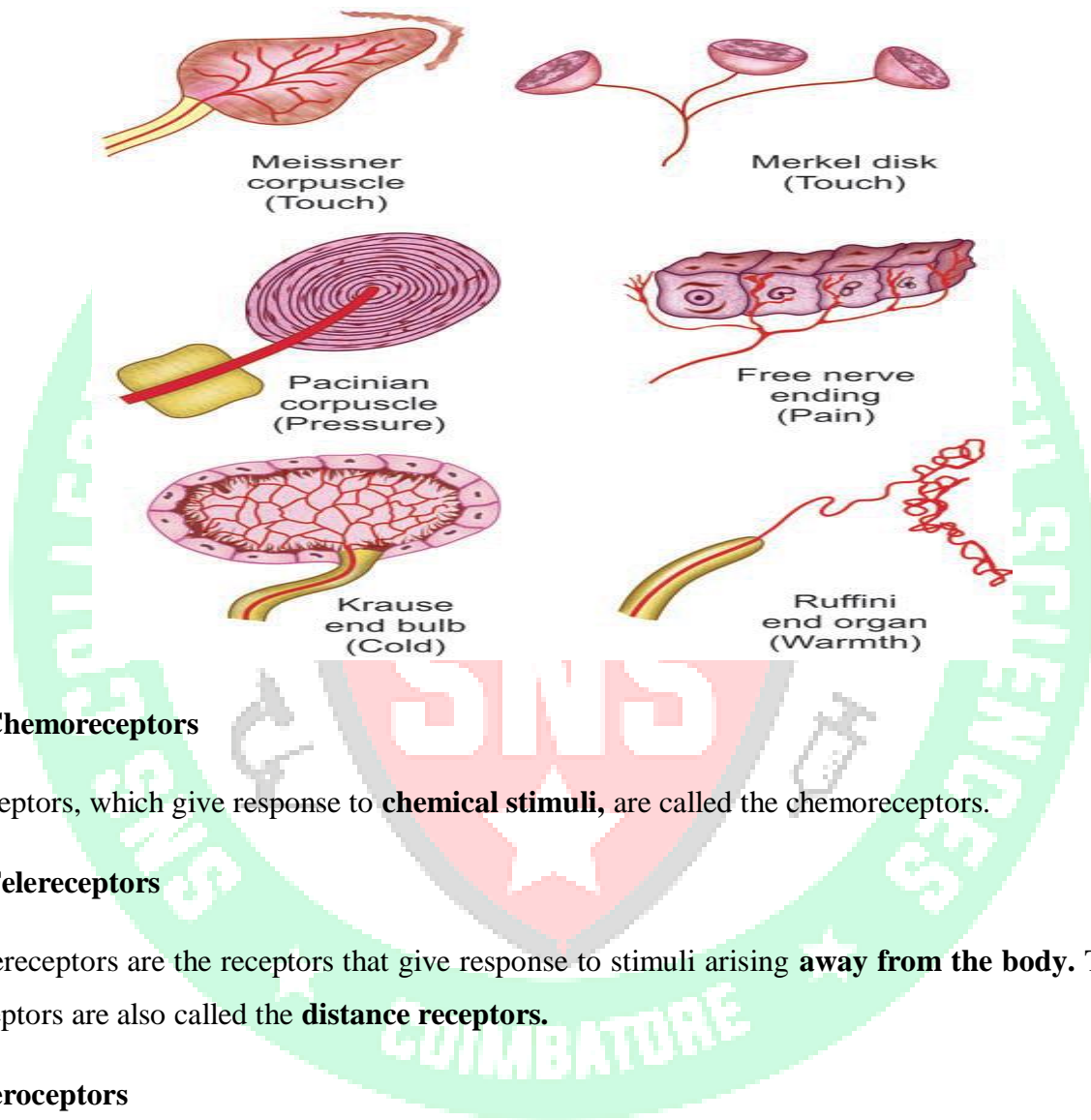
### Exteroceptors

Exteroceptors are the receptors, which give response to stimuli arising from **outside the body**.



## Cutaneous Receptors or Mechanoreceptors

Receptors situated in the skin are called the cutaneous receptors. Cutaneous receptors are also called mechanoreceptors because of their response to **mechanical stimuli** such as touch, pressure and pain. Touch and pressure receptors give response to **vibration** also.



### 2. Chemoreceptors

Receptors, which give response to **chemical stimuli**, are called the chemoreceptors.

### 3. Telereceptors

Telereceptors are the receptors that give response to stimuli arising **away from the body**. These receptors are also called the **distance receptors**.

### Interoceptors

Interoceptors are the receptors, which give response to stimuli arising from **within the body**.

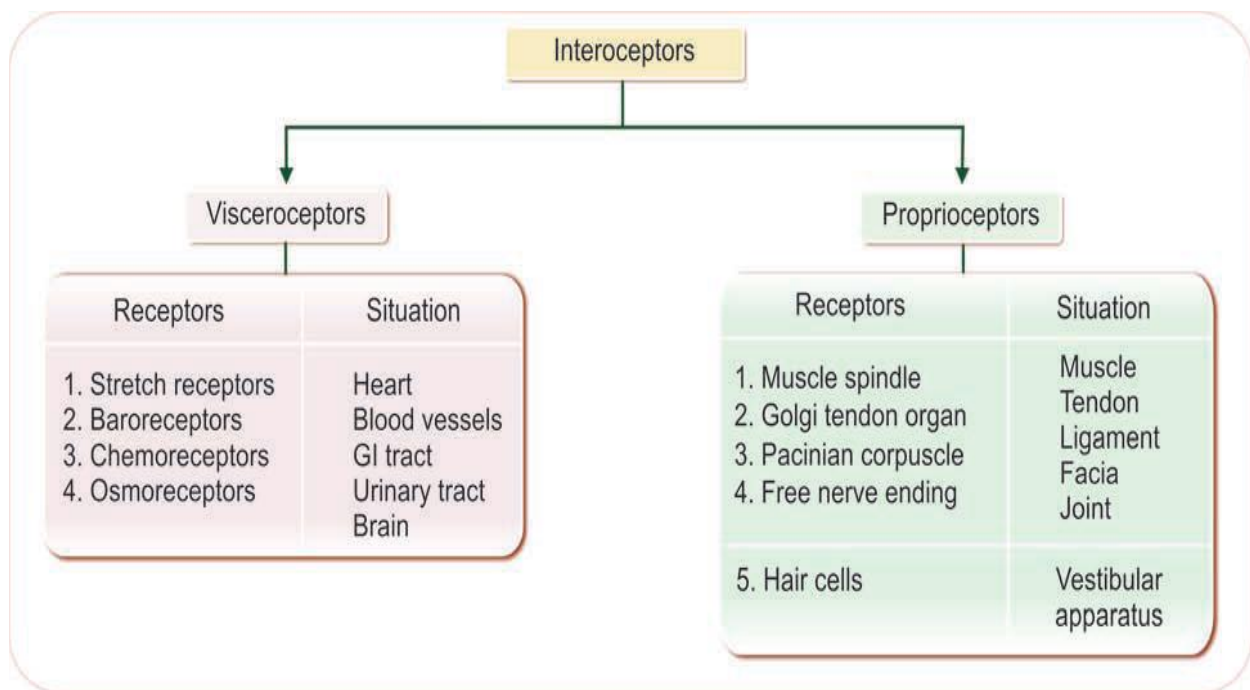
- **Visceroceptors**

Receptors situated in the viscera are

called visceroreceptors.

- **Proprioceptors**

Proprioceptors are the receptors, which give response to **change in the position** of different parts of the body.



### Properties of receptors

- Specificity of response – Müller law
- Adaptation – sensory adaptation
- Response to increase in strength of stimulus – Weberfechner law
- Sensory transduction
- Receptor potential
- Law of projection

