**AKANIMO EMEM**

**18/MHS02/026**

**NURSING SCIENCE**

**200L**

**Elucidate the pathway involved in taste**

1. **RECEPTORS**

The sensation for taste are the type III cells of taste buds. Each taste bud is innervated by about 50 sensory nerve fibres and each neve fibre supplies at least five taste buds through its terminals.

1. **FIRST ORDER NEURON**

These are in in the nuclei of three different cranial nerves of which are situated in the medulla oblongata. Dendrites of the neurons are distributed to the taste buds, the fibres reach he cranial nerve nuclei by running along the chorda tympani fibres, glossopharyngeal nerve fibres, vagal fibres.

1. **SECOND ORDER NEURON**

These are in the neurons of the nucleus of tractus solitarius. Axons of second order neurons run through medial lemniscus and terminate in posteroventral nucleus of thalamus.

1. **THIRD ORDER NEURON**

These are in the posteroventral nucleus of the thalamus. Axons of the third order neuros project into parietal lobe of thee cerebral cortex.

1. **TASTE CENTER**

Centre for taste sensation in opercular insular cortex, I.e. in the lower part of the post central gyrus, which receives cutaneous sensations from face. The taste fibres do no have an independent cortical projection.