

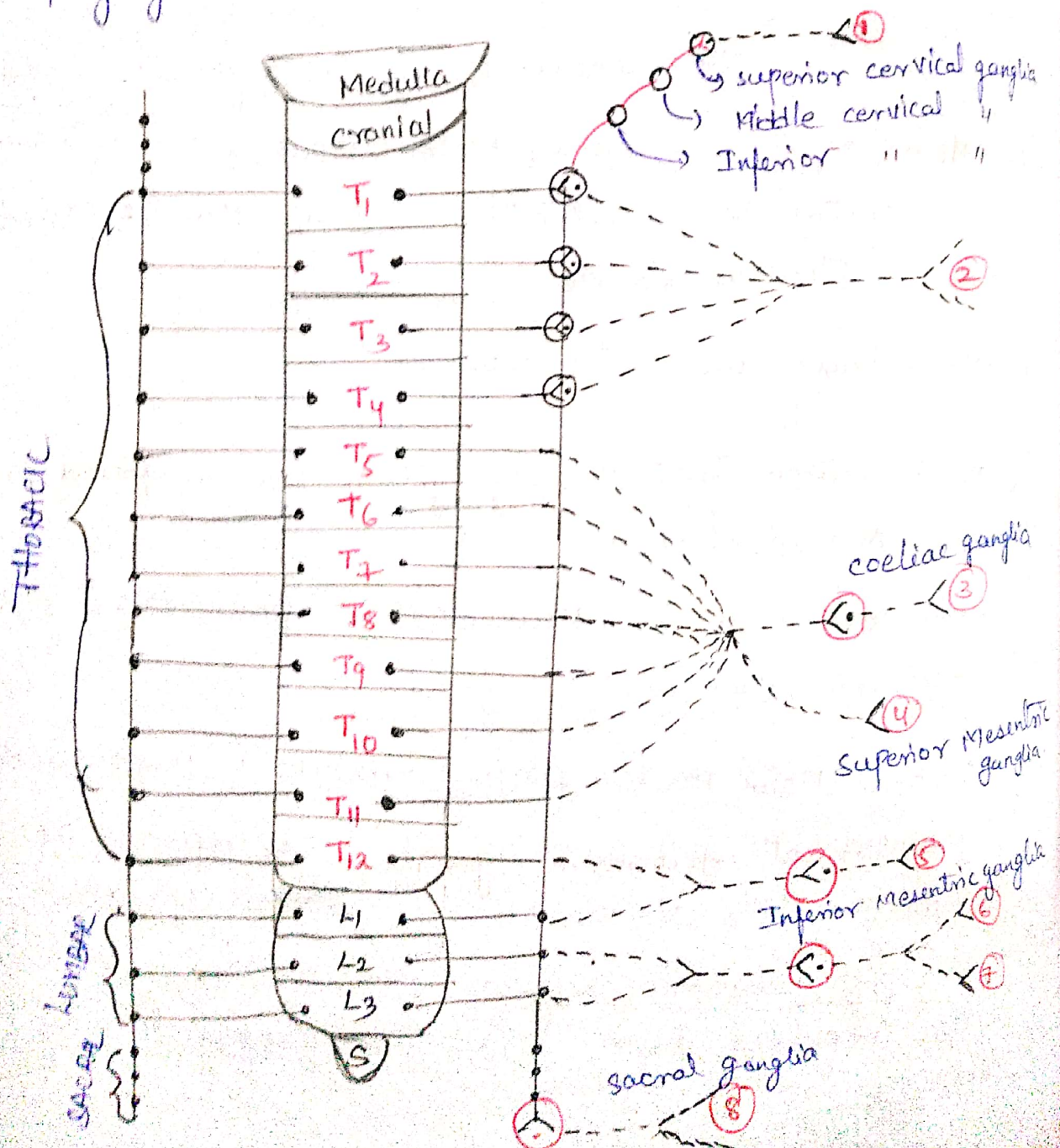
Sympathetic (Adrenergic) Nervous system

- Sympathetic NS extends from thoracic to lumbar vertebrae.
- SNS prepares the individuals to face emergency situations.

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So it is known as the fight (or) flight division.

Anatomical organization:-

Sympathetic division is characterized by the presence of preganglionic neurons, sympathetic ganglia and postganglionic neurons.



- ① Radial muscle of Iris, Blood vessels of heart, on sweat and salivary glands.
- ② Heart, respiratory Tract and Thorax
- ③ stomach, hepatic and renal Blood vessels and sweat glands.
- ④ Adrenal medulla
- ⑤ colon, rectum and kidney.
- ⑥ Genitals
- ⑦ Blood vessels of lower extremities.
- ⑧ sex organs and urinary bladder.

Functions of SNS:-

(1) This system get Activated (or) predominates over its counter part i.e: PNS during **Stimulation**

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Excitement, Exercise, Emergency and Embarrassment

- The response produced by this part of Nervous system is called **fight-or-flight** response.

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Mainly involves those body Activities that Increase Energy production as well as physical Activity.

- Two Major sympathetic Hormones, **Adrenaline and Noradrenaline** mediate Fight (or) Flight response.

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released from Adrenal Medulla into systemic circulation.

- The sympathetic responses produced during stressful conditions including dilation of pupil, ↑ Heart rate, Blood pressure, force of contraction, ↑ rate of respiration, ↑ Blood supply to essential organs like **Heart, Liver, Skeletal Muscles etc.**