



# **SNS COLLEGE OF TECHNOLOGY**

**(An Autonomous Institution)**



**COIMBATORE-35**

**Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

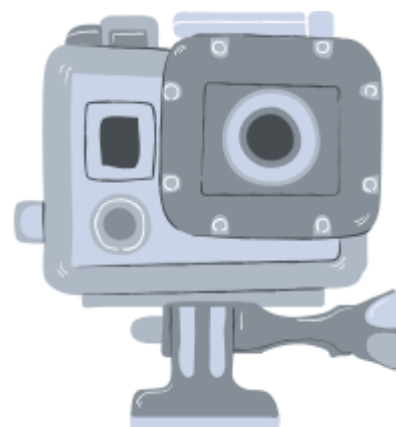
**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**COURSE NAME: 19BMT301/ BIOCONTROL SYSTEM**

**III YEAR / V SEMESTER**

**Unit 5 – Physiological Control System**

**Topic 2: Muscle Stretch Reflex Action**





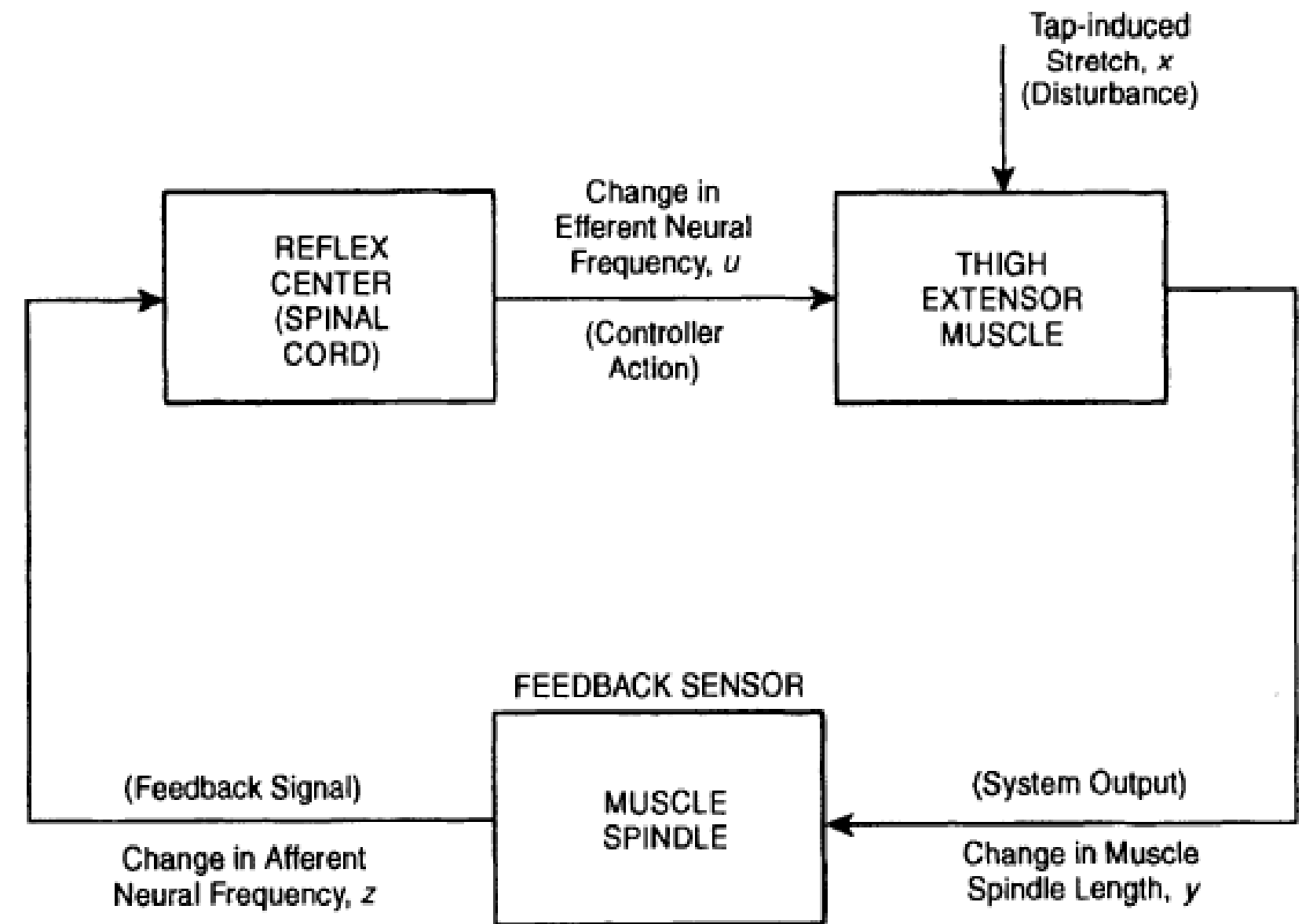
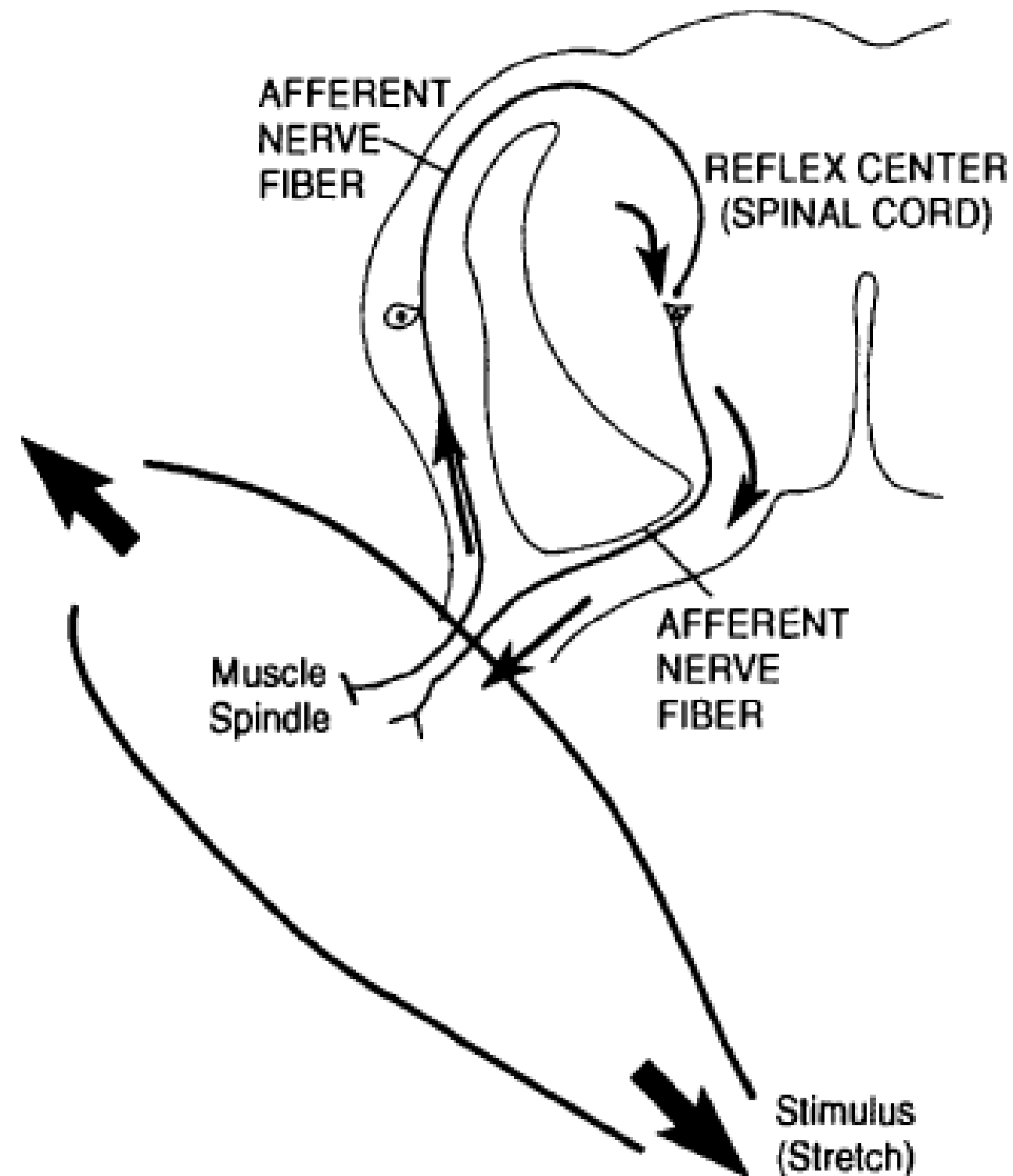
# Muscle stretch reflex



- The most notable example of this kind of reflex is the knee jerk.
- A sharp tap to the patellar tendon in the knee leads to an abrupt stretching of the extensor muscle in the thigh to which the tendon is attached.
- Neural impulses, which encode information about the magnitude of the stretch, are sent along afferent nerve fibres to the spinal cord.
- Since each afferent nerve is synaptically connected with one motor neuron in the spinal cord, the motor neurons get activated and, in turn, send efferent neural impulses back to the same thigh muscle. These produce a contraction of the muscle, which acts to straighten the lower leg.

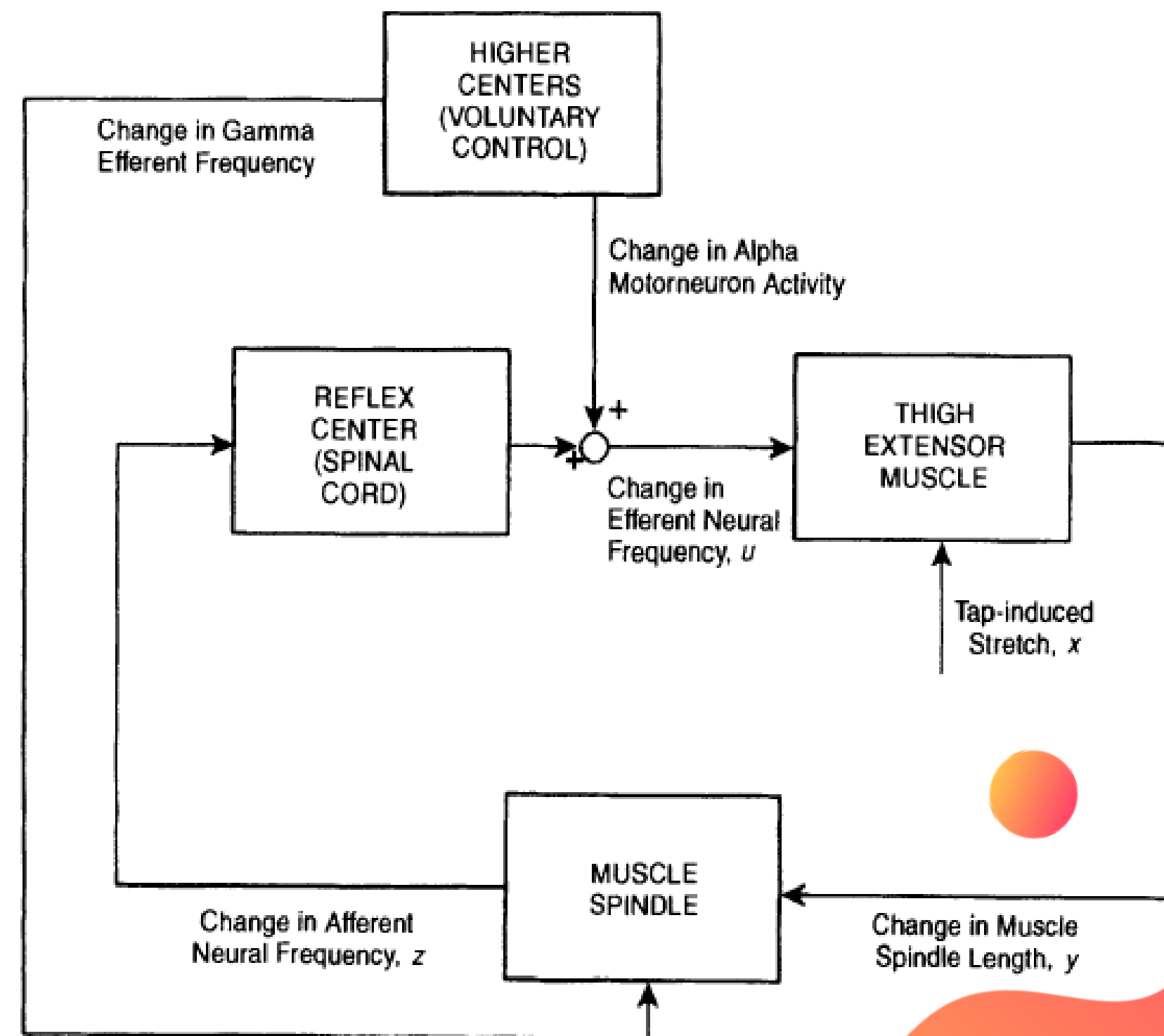
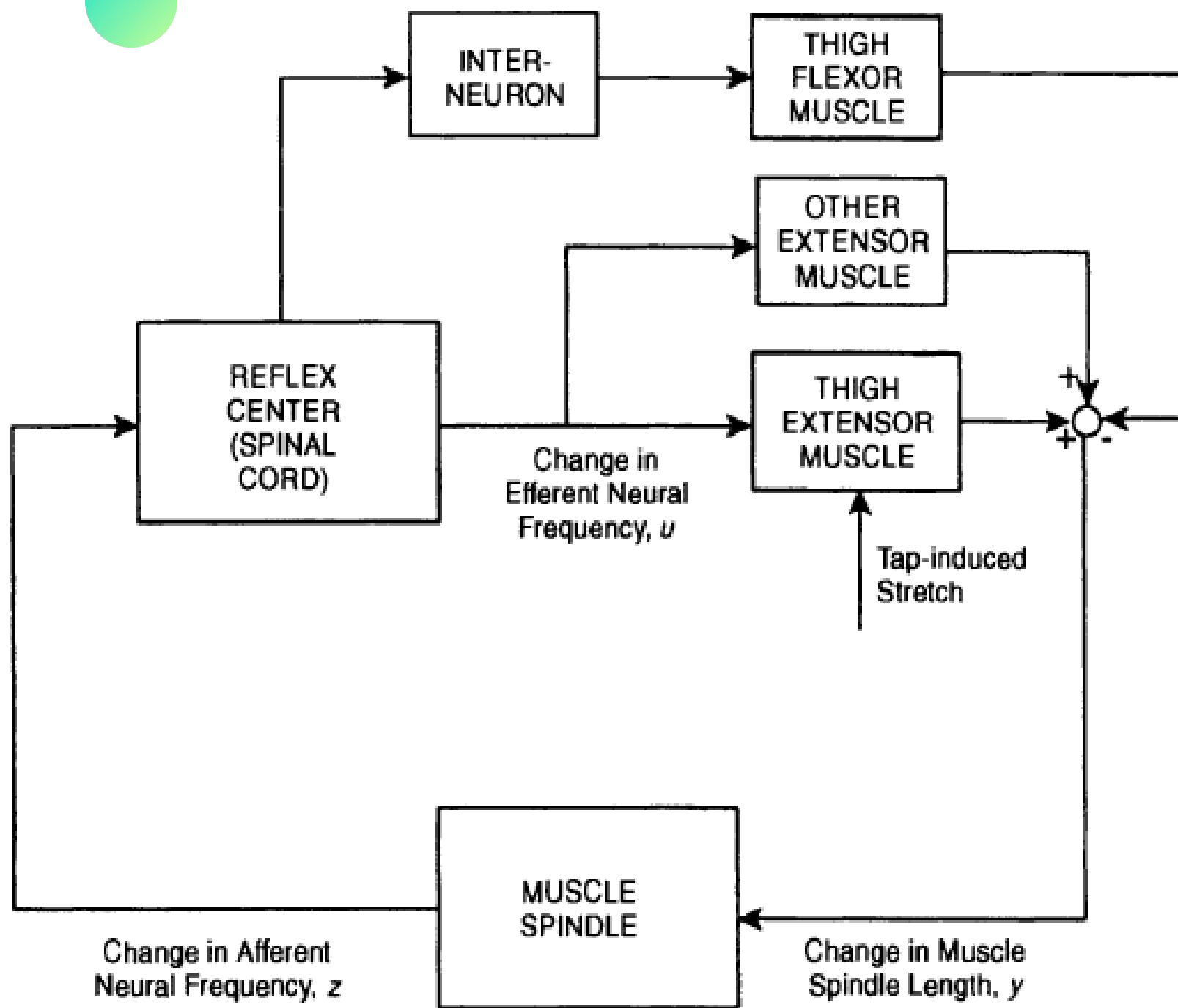


# Muscle stretch reflex





# Muscle stretch reflex





# ASSESSMENT

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Dear student,

Quiz is posted in your Google class room

Allotted time for quiz is 5 min

No of Questions is 10





KEEP  
LEARNING..  
**Thank u**

SEE YOU IN NEXT CLASS