

Delhi Public School Ghaziabad
Class XI
Biology Lesson plan based on DOL
Chapter 21 – Neural control and coordination

Unit	Human Physiology (Chapter 21 Neural control and coordination)
Class Transaction	Total: 3 periods
Pre-requisite for the course	This lesson requires • Basic knowledge of human neural system • Knowledge of neuron • Knowledge of central nervous system • Basic knowledge of reflex action and reflex arc • Basic knowledge of sensory organs
Assessment of qualifying knowledge	• Written test • Lab activity • Oral questioning
Objective	Students would be able to understand • Neural system • Human neural system • Neuron as structural and functional unit of neural system • Central nervous system • Reflex action and reflex arc • Sensory reception and processing
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • Coordination to maintain homeostasis • Mechanism of generation and conduction of nerve impulse • Concept of transmission of impulse through synapse <u>SKILLS</u>- <i>Students would be able to</i> • Describe mechanism of generation and conduction of nerve impulse • Describe role of neurotransmitters in impulse conduction through synapse • Understand functions of different parts of brain Competencies developed in students: collaborative learning, critical thinking and problem solving, character building, communication, citizenship
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- <i>Brain Storming</i>-The class would start with a discussion on what the students have already learnt in the previous classes and hence what is it that they would learn now. They would also be told the significance of the topic that they would be studying. <i>Introduction of the topic</i>- ppt and Digital Content would be shared <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz, MCQ, Peer Assessment, Case Studies, Lab Activities, Any Other
Resources	NCERT text book, Reference Book, CBSE Exemplar, DPSG Spiral www.learncbse.in/cbse-notes/ https://mycbseguide.com

	www.examfear.com
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their spirals. It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.
Assessments	UNIT TESTS , HALF YEARLY EXAMINATION, ANNUAL EXAMINATION
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For high scoring students:</i> High order thinking questions to be done Encouragement for referring other resources <i>For low scoring students:</i> Spiral questions Peer education PCC classes <i>For differently abled students:</i> Call parents at regular intervals Provide grade-up classes Encourage and motivate them at every level.
Marks	The weightage of whole unit is 18 marks and is given by CBSE.

Day 1:
a. Students will be shown a ppt and will be made aware of the neural system.
b. Students will be told about the neuron as structural and functional unit of neural system
c. Students will be told about generation and conduction of nerve impulse
Guided practice: DOL 1
a. Students will be made to describe structure of neuron.
b. Students will be made to describe and discuss in groups about the central and peripheral nervous system.
Communication and brainstorming: Students develop effective communication skills and learn to put across their views.
Collaboration: Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching.
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.

Day 2:
a. Students will be shown a ppt and will be made aware of different parts of brain.
b. Students will be told about the functions of all parts of brain.
c. Students will be made aware of the reflex action and reflex arc.

Guided practice: DOL 1
a. Students will be made to recall functions of all parts of brain.
c. Students will be asked to describe and discuss in groups about the mechanism of a knee jerk reflex.
Critical thinking and problem solving: Helps students to think critically and solve the given problem
Communication and brainstorming: Students develop effective communication skills and learn to put across their views.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching
b. Discussion on the topic in groups – processing of information by our central nervous system.
Character and citizenship: Group discussion helps to develop interpersonal skills, respecting and valuing views of others
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.
b. Students will be asked to describe diagrammatically parts of brain.

Day 3:
a. Students will be shown a ppt and will be made aware of parts of an eye.
b. Students will be told about mechanism of vision.
c. Students will be told about parts of ear and mechanism of hearing.
Guided practice: DOL 1
a. Students will be made to describe parts of eye.
b. Students will be asked to draw diagram showing parts of an eye.
c. Students will be asked to describe and discuss in groups about mechanism of hearing and vision.
Collaboration: Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.
Communication and brainstorming: Students develop effective communication skills and learn to put across their views.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching
Communication: Involves sharing of ideas and information to advance scientific understanding, processes, theories and discoveries
Independent practice: DOL 3

a. Students will be asked to revise the work done in class.
b. Students will be asked to research on disorders related to eye and ear.

Closure of the lesson
Summarizing the lesson by mind mapping
Giving them revision worksheets