

Delhi Public School Ghaziabad
Class XI
Biology Lesson plan based on DOL
Chapter 18 – Body fluids and circulation

Unit	Human Physiology (Chapter 18 Body fluids and circulation)
Class Transaction	Total: 3 periods
Pre-requisite for the course	This lesson requires • Basic knowledge of blood and lymph • Knowledge of circulatory pathways • Knowledge of double circulation • Basic knowledge of cardiac activity
Assessment of qualifying knowledge	• Written test • Lab activity • Oral questioning
Objective	Students would be able to understand • Blood • Lymph • Circulatory pathways • Double circulation • Regulation of cardiac activity • Disorders of circulatory system
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • All the components of human circulatory system • Mechanism of coagulation of blood • Concept of human blood group <u>SKILLS</u>- <i>Students would be able to</i> • Describe circulatory pathways • Describe cardiac cycle • Understand electrocardiograph 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 different components of blood.
b. Students will be told about the blood groups.
c. Students will be told about erythroblastosis foetalis.
Guided practice: DOL 1
a. Students will be made to describe preventive measure of erythroblastosis foetalis.
b. Students will be made to describe and discuss in groups about the universal donor and universal recipients.
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 coagulation of blood.
b. Students will be told about the lymph.
c. Students will be made aware of circulatory pathways and human heart.

Guided practice: DOL 1
a. Students will be made to recall mechanism of blood coagulation.
c. Students will be asked to describe and discuss in groups about double circulation in human heart.
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 – Role of SA node and AV node in cardiac activity.
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 structure of heart.

Day 3:
a. Students will be shown a ppt and will be made aware of cardiac cycle.
b. Students will be told about disorders of circulatory system.
c. Students will be told about ECG.
Guided practice: DOL 1
a. Students will be made to describe cardiac cycle.
b. Students will be asked to list all the disorders of circulatory system.
c. Students will be asked to describe and discuss in groups about clinical significance of ECG.
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 of circulatory system.

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