

Delhi Public School Ghaziabad
Class XI
Biology
Lesson plan based on DOL
Chapter 6 – Anatomy of Flowering Plants

Unit	Structural Organisation in Animals and Plants (Ch 6. Anatomy of Flowering Plants)
Class Transaction	Total: 04 periods
Pre-requisite for the course	This lesson requires: • Basic knowledge of the tissues. • Basic knowledge of meristematic and permanent tissues • Basic knowledge of monocotyledonous and dicotyledonous plants
Assessment of qualifying knowledge	• Written test • Lab activity • Online quiz
Objective	To provide students with knowledge of the tissues, meristematic and permanent tissues, monocotyledonous and dicotyledonous plants, secondary growth in plants
Learning Outcomes	KNOWLEDGE- <i>Students will know and understand</i> The tissues, meristematic and permanent tissues, monocotyledonous and dicotyledonous plants, secondary growth in plants SKILLS- <i>Students would be able to</i> Understand and differentiate between meristematic and permanent tissues. Understand mechanism of secondary growth
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: Student - teacher interaction, collaborative learning, independent research, differentiated teaching, peer learning Competencies developed in students: collaborative learning, critical thinking and problem solving, character building, communication, citizenship
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> Encouragement for referring other resources

	<i>For low scoring students:</i> Peer education, Provide grade-up classes, <i>For differently abled students:</i> Call parents at regular intervals, Provide PCC classes, Encourage and motivate them at every level.
Marks	Weightage of the unit is 12 marks and is provided by CBSE

Day 1:
a. Students will be shown a ppt and will be made aware of meristematic and permanent tissues.
b. Students will be told about the tissues and tissue systems.
c. Students will be told about the types of meristematic tissues and permanent tissues.
Guided practice: DOL 1
a. Students will be made to draw diagrams to show structure of apical meristem of root and stem.
b. Students will be made to draw diagrams to show types of simple tissues.
c. Students will be asked to describe the structure and function of xylem and phloem.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching.
b. Discussion on the topic in groups: Sophisticated machinery of transport of water and minerals
Collaboration, Character and citizenship: Group discussion helps to develop interpersonal skills, respecting and valuing views of others
Creativity and innovation: Students use the knowledge given in class and create projects and models and perform research to give innovative solutions to the problem studied.
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.
b. Students will be asked to draw diagrams of simple and complex tissues.

Day 2:
a. Students will be shown a ppt and will be made aware of epidermal tissue system.
b. Students will be told about the ground tissue system.
c. Students will be made aware of vascular tissue system
Guided practice: DOL 1
a. Students will be made to recall cells found in epidermal tissue system.
b. Students will be asked to make a diagram of stomatal apparatus.
c. Students will be asked to list all types of vascular bundles.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching

b. Discussion on the topic in groups – vascular bundles and correlation with anatomy of plants.
Creativity and innovation: Students use the knowledge given in class and create projects and models and perform research to give innovative solutions to the problem studied. Collaboration and communication: Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.
b. Students will be asked to describe types of vascular bundles.

Day 3:
a. Students will be shown a ppt and will be made aware of anatomy of monocotyledonous and dicotyledonous leaf, stem and root.
b. Students will be told about the differences in monocotyledonous and dicotyledonous leaf, stem and root.
c. Students will be made to observe slides of monocotyledonous and dicotyledonous leaf, stem and root.
Guided practice: DOL 1
a. Students will be made to draw a diagram to show monocotyledonous and dicotyledonous leaf, stem and root.
b. Students will be asked to list all differences in monocotyledonous and dicotyledonous leaf, stem and root.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching
b. Discussion on the topic in groups – importance of studying anatomy of plants.
Collaboration and communication: Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.
b. Students will be asked to explain salient features of monocotyledonous and dicotyledonous leaf, stem and root.
c. Students will be asked to draw a diagram to show monocotyledonous and dicotyledonous leaf, stem and root.

Day 4:
a. Students will be shown a ppt and will be made aware of secondary growth in stem and root.
b. Students will be told about formation of vascular cambium and cork cambium.
c. Students will be made aware of lenticels and their importance.

Guided practice: DOL 1
a. Students will be made to investigate and discuss importance of annual rings.
b. Students will be asked to explain formation of periderm.
c. Students will be asked to describe and discuss in groups differences in vascular cambium and cork cambium.
Summarize and check for understanding: DOL 2
a. Oral questioning based on the day's teaching
b. Discussion on the topic in groups – Formation of annual rings.
Collaboration and communication: Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.
Independent practice: DOL 3
a. Students will be asked to revise the work done in class.
b. Students will be asked to describe formation of heartwood and sapwood.
c. Students will be asked to describe the secondary growth in roots.

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