

## Lesson Plan

Name of the Assistant professor: Ms. Jyotsana Chahal

Class and Section: B.Sc. (Medical) 2<sup>nd</sup> year (4<sup>th</sup> semester)

Subject: Botany

Lesson Plan: 17 weeks of (Lesson Plan Format lesson: January 2018 to April 2018)

Week 1 Chapter 1: Flower as modified shoot
Assignments
Week 1, Monday, 1 January 2018 <ul style="list-style-type: none"><li>• 1.1.1. Angiosperms taxonomy</li><li>• 1.1.2 system of classification</li></ul>
Week 1, Tuesday, 2 January 2018 <ul style="list-style-type: none"><li>• 1.1.4. systematic: aims and fundamental components</li></ul>
Week 1, Wednesday, 3 January 2018 <ul style="list-style-type: none"><li>• 1.2.1 modern trends in plant taxonomy- chemotaxonomy</li></ul>
Week 1, Thursday, 4 January 2018 <ul style="list-style-type: none"><li>• 1.3.1. cytotaxonomy –numerical taxonomy</li></ul>
Week 1, Saturday, 6 January 2018 <ul style="list-style-type: none"><li>• 1.4.1. binomial nomenclature-principles and rule</li></ul>
Week 2 Chapter 2 : Modern trends in plant taxonomy
Week 2, Monday, 8 January 2018 <ul style="list-style-type: none"><li>• 2.1.1 biological keys</li><li>• 2.1.2. herbarium botanical garden, literature</li></ul>
Week 2, Tuesday, 9 January 2018 <ul style="list-style-type: none"><li>• 2.1.3. indented keys</li><li>• 2.1.4. bracketed keys</li></ul>
Week 2, Wednesday, 10 January 2018 <ul style="list-style-type: none"><li>• 2.2.1. phylogeny of angiosperms- evidences</li></ul>
Week 2, Thursday, 11 January 2018 <ul style="list-style-type: none"><li>• 2.2.2. possible ancestors of angiosperms</li></ul>
Week 2, Friday, 12 January 2018 <ul style="list-style-type: none"><li>• 3.1.1. flower terminology</li></ul>
Week 2, Saturday, 13 January 2018

<ul style="list-style-type: none"> <li>• 3.1.1. flower terminology</li> </ul>
<p>Week 3</p> <p>Chapter3: Inflorescence</p>
<p>Week 3, Monday, 15 January 2018</p> <ul style="list-style-type: none"> <li>• 3.1.2. placentation-types</li> </ul>
<p>Week 3, Tuesday, 16 January 2018</p> <ul style="list-style-type: none"> <li>• 3.1.3. inflorescence-types</li> </ul>
<p>Week 3, Wednesday, 17 January 2018</p> <ul style="list-style-type: none"> <li>• 3.1.4. special types of inflorescence</li> </ul>
<p>Week 3, Thursday, 18 January 2018</p> <ul style="list-style-type: none"> <li>• 4.1.1. Bentham and Hooker system of classification</li> </ul>
<p>Week 3, Friday, 19 January 2018</p> <ul style="list-style-type: none"> <li>• 4.1.2. Engler and Prante of classification</li> </ul>
<p>Week 3, Saturday, 20 January 2018</p> <ul style="list-style-type: none"> <li>• 5.1.1 Description of an angiospermic plant</li> </ul>
<p>Week 4</p> <p>Chapter 5: Important Families of Angiosperms</p>
<p>Week 4, Tuesday, 23 January 2018</p> <ul style="list-style-type: none"> <li>• 5.1.2. Ranunculaceae</li> </ul>
<p>Week 4, Wednesday, 24 January 2018</p> <ul style="list-style-type: none"> <li>• 5.1.3. Brassicaceae</li> </ul>
<p>Week 4, Thursday, 25 January 2018</p> <ul style="list-style-type: none"> <li>• 5.1.4. Malvaceae</li> </ul>
<p>Week 4, Saturday, 27 January 2018</p> <ul style="list-style-type: none"> <li>• 5.1.5. Rutaceae</li> </ul>
<p>Week 5</p> <p>Chapter 6: description of families</p>
<p>Week 5, Monday, 29 January 2018</p> <ul style="list-style-type: none"> <li>• 6.1.1. Fabaceae</li> </ul>
<p>Week 5, Tuesday, 30 January 2018</p> <ul style="list-style-type: none"> <li>• 6.1.2. Apiaceae</li> </ul>
<p>Week 5, Thursday, 1 February 2018</p> <ul style="list-style-type: none"> <li>• 6.1.3. Asteraceae</li> </ul>
<p>Week 5, Friday, 2 February 2018</p> <ul style="list-style-type: none"> <li>• 6.1.4. Asclepiadaceae</li> </ul>
<p>Week 5, Saturday, 3 February 2018</p> <ul style="list-style-type: none"> <li>• 6.1.5. Solanaceae</li> </ul>
<p>Week 6</p>

Chapter 6: description of families
Week 6, Monday, 5 February 2018 <ul style="list-style-type: none"> <li>• 6.1.6. Laminaceae</li> </ul>
Week 6, Tuesday, 6 February 2018 <ul style="list-style-type: none"> <li>• 6.1.7. Euphorbiaceae</li> </ul>
Week 6, Wednesday, 7 February 2018 <ul style="list-style-type: none"> <li>• 6.1.8. Liliaceae</li> </ul>
Week 6, Thursday, 8 February 2018 <ul style="list-style-type: none"> <li>• 6.1.6. Poaceaceae</li> </ul>
Week 6, Friday, 9 February 2018 <ul style="list-style-type: none"> <li>• 6.2.1. Economic importance of families</li> </ul>
Week 7
Chapter 7: Type studies of families
Week 7, Monday, 12 February 2018 <ul style="list-style-type: none"> <li>• 7.1.1 Type study of family Brassicaceae</li> </ul>
Week 7, Wednesday, 14 February 2018 <ul style="list-style-type: none"> <li>• 7.1.2 Type study of family Malvaceae</li> </ul>
Week 7, Thursday, 15 February 2018 <ul style="list-style-type: none"> <li>• 7.1.3 Type study of family Solanaceae</li> </ul>
Week 7, Friday, 16 February 2018 <ul style="list-style-type: none"> <li>• 7.1.4 Type study of family fabaceae</li> </ul>
Week 7, Saturday, 17 February 2018 <ul style="list-style-type: none"> <li>• 7.1.4 Type study of family fabaceae</li> </ul>
Week 8
Chapter 7: Type studies of families
Week 8, Monday, 19 February 2018 <ul style="list-style-type: none"> <li>• 7.1.5 Type study of family Euphorbiaceae</li> </ul>
Week 8, Tuesday, 20 February 2018 <ul style="list-style-type: none"> <li>• 7.1.6 Type study of family compositae</li> </ul>
Week 8, Wednesday, 21 February 2018 <ul style="list-style-type: none"> <li>• 7.1.7 Type study of family Liliaceae</li> </ul>
Week 8, Thursday, 22 February 2018 <ul style="list-style-type: none"> <li>• 7.1.8 Type study of family Apiaceae</li> </ul>
Week 8, Friday, 23 February 2018 <ul style="list-style-type: none"> <li>• 7.1.9 Type study of family Solanaceae</li> </ul>
Week 8, Saturday, 24 February 2018 <ul style="list-style-type: none"> <li>• 1.1.1. Floral formula and diagrams concept</li> </ul>
Week 9
unit test of paper 1

Week 9, Monday, 26 February 2018
<ul style="list-style-type: none"> <li>• Unit test</li> </ul>
Week 9, Tuesday, 27 February 2018
<ul style="list-style-type: none"> <li>• Discussions of topics of test</li> </ul>
Week 10
Chapter 1 Flower
Week 10, Monday, 05 march 2018
<ul style="list-style-type: none"> <li>• Phylogeny, modern taxonomy and chemotaxonomy</li> </ul>
Week 10, Tuesday, 06 march 2018
<ul style="list-style-type: none"> <li>• Unit test paper I assignments</li> </ul>
Week 10, Wednesday, 07 march 2018
<ul style="list-style-type: none"> <li>• 1.2.1. flower structure terminology</li> </ul>
Week 10, Thursday, 08 march 2018
<ul style="list-style-type: none"> <li>• 1.3.1. inflorescence and its type</li> <li>• 1.3.2. classification</li> </ul>
Week 10, Friday, 09 march 2018
<ul style="list-style-type: none"> <li>• 1.4.1. Bentham and Hooker system</li> </ul>
Week 10, Saturday, 10 march 2018
<ul style="list-style-type: none"> <li>• 1.4.2. merits and demerits of Bentham and Hooker system</li> </ul>
Week 11
Chapter 2: Endosperm
Week 11, Monday, 12 march 2018
<ul style="list-style-type: none"> <li>• 2.1.1. Microsporophyll structure.</li> <li>• 2.2.1. Microsporogenesis</li> </ul>
Week 11, Tuesday, 13 march 2018
<ul style="list-style-type: none"> <li>• 2.3.1. Structure of pollen grain</li> </ul>
Week 11, Wednesday, 14 march 2018
<ul style="list-style-type: none"> <li>• 2.3.2. Male gametophytes</li> </ul>
Week 11, Thursday, 15 march 2018
<ul style="list-style-type: none"> <li>• 2.4.1. pollination – self and cross pollination</li> </ul>
Week 11, Friday, 16 march 2018
<ul style="list-style-type: none"> <li>• 2.4.2. Anemophily</li> <li>• 2.4.3. Hydrophily</li> </ul>
Week 11, Saturday, 17 march 2018
<ul style="list-style-type: none"> <li>• 2.4.4. Entomophily</li> <li>• 2.4.5. Ornithophily</li> </ul>
Week 12
Chapter 3: Embryogenesis
Week 12, Monday, 19 march 2018

<ul style="list-style-type: none"> <li>• 3.1.1. Megasporophyll, ovule structure and types</li> </ul>
<p>Week 12, Tuesday, 20 march 2018</p> <ul style="list-style-type: none"> <li>• 3.2.2. Female gametophytes</li> </ul>
<p>Week 12, Wednesday, 21march 2018</p> <ul style="list-style-type: none"> <li>• 3.2.3. types of embryo sac</li> </ul>
<p>Week 12, Thursday, 22 march 2018</p> <ul style="list-style-type: none"> <li>• 3.5.4. fertilization</li> </ul>
<p>Week 12, Friday, 23 march 2018</p> <ul style="list-style-type: none"> <li>• 3.2.5. Self Incompatibility</li> </ul>
<p>Week 12, Saturday, 24 march 2018</p> <ul style="list-style-type: none"> <li>• 3.2.6. pollen-pistil interaction</li> <li>• 3.2.7. Double fertilization</li> </ul>
<p>Week 13</p> <p>Chapter 4: The Fruit</p>
<p>Week 13, Monday, 26 march 2018</p> <ul style="list-style-type: none"> <li>• 4.1.1. endosperm- formation and types</li> </ul>
<p>Week 13, Tuesday, 27 march 2018</p> <ul style="list-style-type: none"> <li>• 4.1.2. embryogenesis- Dicot embryo</li> </ul>
<p>Week 13, Wednesday, 28 march 2018</p> <ul style="list-style-type: none"> <li>• 4.1.3. embryogenesis- Monocot embryo</li> </ul>
<p>Week 13, Thursday, 29 march 2018</p> <ul style="list-style-type: none"> <li>• 4.2.1. Fruit: its classification</li> </ul>
<p>Week 13, Friday, 31 march 2018</p> <ul style="list-style-type: none"> <li>• 4.2.1. Fruit: its classification</li> </ul>
<p>Week 14</p> <p>Chapter 5: The Seed structure and germination</p>
<p>Week 14, Monday, 2 April 2018</p> <ul style="list-style-type: none"> <li>• 5.1.1. Seed- structure, formation and types</li> </ul>
<p>Week 14, Tuesday, 3 April 2018</p> <ul style="list-style-type: none"> <li>• 5.1.2. Seed- germination</li> </ul>
<p>Week 14, Wednesday, 4 April 2018</p> <ul style="list-style-type: none"> <li>• 5.1.3. Dispersal of fruit and seed</li> </ul>
<p>Week 14, Thursday, 5 April 2018</p> <ul style="list-style-type: none"> <li>• 5.2.1. Types of embryo sac</li> </ul>
<p>Week 14, Friday, 6 April 2018</p> <ul style="list-style-type: none"> <li>• 5.2.2. Endosperm- formation and types</li> </ul>
<p>Week 14, Saturday, 7 April 2018</p> <ul style="list-style-type: none"> <li>• 5.2.3. types of ovules</li> </ul>
<p>Week 15</p>

Chapter 5: Dispersal in fruits and seeds
Week 15, Monday, 9 April 2018 Unit test –II (Paper II)
Week 15, Tuesday, 10 April 2018 <ul style="list-style-type: none"> <li>• Question discussion in unit test</li> </ul>
Week 15, Wednesday, 11 April 2018 <ul style="list-style-type: none"> <li>• 6.1.1. flower a modified shoot</li> </ul>
Week 15, Thursday, 12 April 2018 <ul style="list-style-type: none"> <li>• 6.1.2. microsporangium</li> </ul>
Week 15, Friday, 13 April 2018 <ul style="list-style-type: none"> <li>• 6.1.3. pollen- pistil interaction</li> </ul>
Week 16 Chapter 6: : Dispersal in fruits and seeds
Week 16, Monday, 16 April 2018 <ul style="list-style-type: none"> <li>• 6.2.1. Megasporangium</li> </ul>
Week 16, Tuesday, 17 April 2018 <ul style="list-style-type: none"> <li>• 6.3.2. Female gametophyte</li> </ul>
Week 16, Wednesday, 18 April 2018 <ul style="list-style-type: none"> <li>• 6.3.3. Double fertilisation</li> </ul>
Week 16, Thursday, 19 April 2018 <ul style="list-style-type: none"> <li>• 6.4.1. embryogenesis</li> </ul>
Week 16, Friday, 20 April 2018 <ul style="list-style-type: none"> <li>• 6.5.1. Dicot and monocot seed</li> </ul>
Week 16, Saturday, 21 April 2018 <ul style="list-style-type: none"> <li>• 6.6.1. Fruit Types</li> </ul>
Week 17 Discussions
Week 17, Monday, 23 April 2018 <ul style="list-style-type: none"> <li>• Discussions on Dispersal of fruit and seed</li> </ul>
Week 17, Tuesday, 24 April 2018 <ul style="list-style-type: none"> <li>• Discussions on topic of paper I</li> </ul>
Week 17, Wednesday, 25 April 2018 <ul style="list-style-type: none"> <li>• Discussions on topic of paper I</li> </ul>
Week 17, Thursday, 26 April 2018 <ul style="list-style-type: none"> <li>• Discussions on topic of paper II</li> </ul>
Week 17, Friday, 27 April 2018 <ul style="list-style-type: none"> <li>• Discussions on topic of paper II</li> </ul>
Week 17, Saturday, 28 April 2018 <ul style="list-style-type: none"> <li>• Doubts related to complete syllabus</li> </ul>

