

# Govt. College, Ropar

## Department of Botany

Class B.Sc. 3<sup>rd</sup> Sem.

(Session 2021-2022)

Week	Lesson scheduled
1 <sup>st</sup>	<ul style="list-style-type: none"><li>➤ Gymnosperms: General features and classification; Origin of Gymnosperms, Distribution, cytology and economic importance of Indian gymnosperms.</li><li>➤ Class test</li></ul>
2 <sup>nd</sup>	<ul style="list-style-type: none"><li>➤ Fossil gymnosperms, Class test</li></ul>
3 <sup>rd</sup>	<ul style="list-style-type: none"><li>➤ General characters of Pro-gymnosperms, General characters and classification of Cycadales</li><li>➤ Class test</li></ul>
4 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Morphology, anatomy, reproduction and life cycle of <i>Cycas</i>, General characters and classification of coniferales,.</li><li>➤ Class test</li></ul>
5 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Morphology, anatomy, reproduction and life cycle of <i>Pinus</i>, General characters of Ephederales and Welwitschiales</li><li>➤ Class test</li></ul>
6 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Morphology, anatomy, reproduction and life cycle of <i>Ephedra</i>, <i>Welwitschia</i></li><li>➤ Class test</li></ul>
7 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ General characters, morphology, anatomy, reproduction and life cycle of <i>Gnetum</i></li><li>➤ Revision</li></ul>
8 <sup>th</sup>	MST
9 <sup>th</sup>	MST
10 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Angiosperm taxonomy, Origin and evolution of angiosperms</li><li>➤ Class test</li></ul>
11 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Classification of angiosperms, Brief account on herbarium, botanical gardens</li></ul>

	<ul style="list-style-type: none"> <li>➤ Class test</li> </ul>
12 <sup>th</sup>	<ul style="list-style-type: none"> <li>➤ Brief account on floras and manual, Role of embryology, cytology and palynology in taxonomy</li> <li>➤ Class test</li> </ul>
13 <sup>th</sup>	<ul style="list-style-type: none"> <li>➤ Salient features of International code of botanical nomenclature</li> <li>➤ Basic terms of flowering plant description.</li> <li>➤ Class test</li> </ul>
14 <sup>th</sup>	<ul style="list-style-type: none"> <li>➤ Ranunculaceae, Brassicaceae, Malvaceae, Rutaceae, Fabaceae</li> <li>➤ Class test</li> </ul>
15 <sup>th</sup>	<ul style="list-style-type: none"> <li>➤ Apiaceae Cucurbitaceae, Rosaceae, Lamiaceae, Euphorbiaceae</li> <li>➤ Class test</li> </ul>
16 <sup>th</sup>	<ul style="list-style-type: none"> <li>➤ Asteraceae, Liliaceae, Poaceae</li> <li>➤ Revision and class test</li> </ul>

*Shikha*

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# Govt. College, Ropar

Department of Botany

Class B.Sc.4<sup>th</sup> Sem.

(Session 2021-2022)

Week	Lesson scheduled
1 <sup>st</sup>	<ul style="list-style-type: none"><li>➤ Tissue systems; simple permanent tissues, parenchyma, collenchymas and sclerenchyma.</li><li>➤ Vegetative reproduction; Natural methods</li></ul>
2 <sup>nd</sup>	<ul style="list-style-type: none"><li>➤ Epidermis: Types of epidermis, structure, types and differentiation of stomata</li><li>➤ Artificial methods of vegetative reproduction</li></ul>
3 <sup>rd</sup>	<ul style="list-style-type: none"><li>➤ Trichomes and Idioblasts</li><li>➤ Flower and inflorescence type</li></ul>
4 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Meristematic tissues Meristem; type structure and function of different types of meristems.</li><li>➤ Fruit; development and types of fruit</li></ul>
5 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Vascular tissues; Xylem</li><li>➤ Structure of male gametophyte</li></ul>
6 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Vascular tissues; Phloem</li><li>➤ Structure of female gametophyte</li></ul>
7 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Secondary growth in angiosperm and anomalous stem in angiosperm</li><li>➤ Self Incompatability</li><li>➤</li></ul>
8 <sup>th</sup>	MST
9 <sup>th</sup>	MST
10 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ The root system</li><li>➤ Pollination types, vector, pollen pistil interaction and double fertilization</li></ul>
11 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ The shoot system</li><li>➤ Post fertilization changes, endosperm</li></ul>
12 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Leaf anatomy in dicots</li><li>➤ Embryo development</li></ul>
13 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Leaf anatomy in monocots</li><li>➤ Seed development</li></ul>
14 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Anatomy in relation to ecology; special modification in root</li><li>➤ Seed structure and dispersal</li></ul>
15 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Special modification in stem and leaf with respect to environment</li><li>➤ Seed dormancy</li></ul>
16 <sup>th</sup>	<ul style="list-style-type: none"><li>➤ Revision</li></ul>

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