

LESSON PLAN

Name: Dr. Sombir Singh

Subject: Diversity of microbes, algae, fungi and archegoniates (B23-BOT101)

Course Code: CC-1MCC-31

Class : BSc.. First Year (NEP)

Semester: 1st Sem.

S. No	Week	Topic
1.	22/07/25-26/07/25	Bacteria: Structure, nutrition, reproduction and economic importance.
2.	28/07/25-02/08/25	Viruses: General account of Viruses including structure of TMV and Bacteriophages.
3.	04/08/25-09/08/25	Fungi: General characters, Introductory classification; economic importance; and life history of <i>Phytophthora</i> (Mastigomycotina),
4.	11/08/25-16/08/25	<i>Puccinia</i> (Basidiomycotina), <i>Colletotrichum</i> (Deuteromycotina).
5.	18/08/25-23/08/25	Algae: General characters, Introductory classification; economic importance; and life cycle (excluding development) of <i>Volvox</i> (Chlorophyceae),
6.	25/08/25-30/08/25	<i>Vaucheria</i> (Xanthophyceae), <i>Ectocarpus</i> (Phaeophyceae) and <i>Polysiphonia</i> (Rhodophyceae).
7.	01/09/25-06/09/25	Bryophyta: Bryophytes: General characteristics, classification up to classes (Smith, 1935), alternation of generations, structure and reproduction (excluding development) of <i>Marchantia</i> (Hepaticopsida),
8.	08/09/25-13/09/25	<i>Anthoceros</i> (Anthocerotopsida), <i>Funaria</i> (Bryopsida), ecological and economic importance of bryophytes.
9.	15/09/25-20/09/25	Pteridophyta: General characters, classification up to classes (A. R. Smith, 2006)
10.	22/09/25-27/09/25	Structure and reproduction (excluding development) of <i>Rhynia</i> (Psilopsida)
11.	29/09/25-04/10/25	Structure and reproduction (excluding development) of <i>Equisetum</i> (Sphenopsida) and <i>Pteris</i> (Pteropsida)
12.	06/10/25-11/10/25	Heterospory and seed habit, stelar evolution
13.	13/10/25-18/10/25	Ecological and economic importance.
14.	19/10/25-26/10/25	DIWALI BREAK

15.	27/10/25-01/11/25	Gymnosperms: General characteristics, classification up to classes (Smith 1955),
16.	03/11/25-08/11/25	Morphology, anatomy and reproduction of <i>Cycas</i> (developmental details not to be included)
17.	10/11/25-15/11/25	Morphology, anatomy and reproduction of <i>Pinus</i> (developmental details not to be included); Distribution and economic importance;
18.	17/11/25-24/11/25	General account of Palaeobotany and Geological timescale.

Name: Dr. Sombir Singh

Subject: Plant Physiology
Class : BSc. Second Year (NEP)

Course Code: CC-3MCC-4 (B23-BOT301)
Semester: 3rd Sem.

S. No	Week	Topic
1.	22/07/25-26/07/25	Plant water relations: absorption, water potential
2.	28/07/25-02/08/25	Transpiration; role of micro and macro nutrients.
3.	04/08/25-09/08/25	Photosynthesis
4.	11/08/25-16/08/25	Respiration.
5.	18/08/25-23/08/25	Biosynthesis, mechanism of action and uses of auxin, gibberellin, cytokinin,
6.	25/08/25-30/08/25	Abscisic acid, ethylene
7.	01/09/25-06/09/25	Lipid metabolism
8.	08/09/25-13/09/25	Nitrogen metabolism
9.	15/09/25-20/09/25	Structure, function and mechanisms of action of phytochromes;
10.	22/09/25-27/09/25	Stomatal movement
11.	29/09/25-04/10/25	Photoperiodism
12.	06/10/25-11/10/25	Biological clocks, mechanism of flowering.
13.	13/10/25-18/10/25	Concepts of plant growth
14.	19/10/25-26/10/25	DIWALI BREAK
15.	27/10/25-01/11/25	Factors affecting germination and dormancy of seeds;
16.	03/11/25-08/11/25	Physiological and biochemical changes associated with senescence and abscission.
17.	10/11/25-15/11/25	Physiological and biochemical changes associated with senescence and abscission.

18.	17/11/25-24/11/25	Revision
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