| WEEKs | Lesson plan<br><br>**NAME OF TEACHER- JYOTI SINGH**<br><br>**Session-2020-21 Subject-BOTANY (B.SC-3rd sem)**<br><br>**PAPER- Biology & diversity of seed plants**<br><br>**Plant anatomy** |
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| **1st week** | General character& Diversity of Gymnosperms |
| **2nd week** | Pilger and Melchior's system of classification<br><br>Meristematic &permanent tissue. |
| **3rd week** | Geological time scale<br><br>Cambium structure & function |
| **4th week** | 1. CLASS TEST<br>2. Fossil & fossilization, Growth rings |
| **5th week** | 1. Study of different fossil plants Lyginopteris, Williamsonia, Cycadeoidea |
| **6th week** | 1. . Evolution of seed habit<br><br>2. The shoot system |
| **7th week** | Morphology, anatomy in CYCAS stem, root & leaf. |
| **8th week** | Morphology, anatomy in PINUS stem, root & leaf. |

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| **9th week** | Morphology, anatomy in EPHEDRA stem, root & leaf. |
| **10th week** | General characters of Angiosperms & different types of leaves.<br><br>Tissue & tissue system |
| **11th week** | Primitive Angiosperms, cambium structure & function |
| **12th week** | Secondary growth in stem & root<br><br>Anomalous secondary growth in Dracaena |
| **12th week** | 1 Anomalous secondary growth in Boerhavia & Acyranthes<br><br>2. CLASS TEST |
| **13th week** | Anatomy of typical Monocot & Dicot leaf. |
| **14th week** | 1. Structural modification in roots.<br><br>2. CLASS TEST |
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**Semester 4 , Paper - Botany**
**Teacher Name: Ms Jyoti Singh**
**Session: 2020-21**

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*Week 1*

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Unit-I Fundamental component of taxonomy, Role of chemotaxonomy, cytotaxonomy,

Taximetrics.

*Week 2*

Botanical nomenclature, principles & rules , principle of priority & keys to identification of plants.

*Week 3*

Type concept, taxonomic ranks. Bentham & Hooker and Engler & Prantl classification

*Week 4*

FLORAL TERMS & Type of inflorescence

Class test

*Week 5*

Diagnostic features & economic importance of families- Ranunculaceae, Brassicaceae, Malvaceae

*Week 6*

Diagnostic features & economic importance of families -Rutaceae, Fabaceae, Euphorbiaceae, Cucurbitaceae

*Week 7*

Diagnostic features & economic importance of families- Apiaceae,

Asclepiadaceae, Lamiaceae, Solanaceae, Asteraceae

*Week 8*

Diagnostic features & economic importance of families- Liliaceae & Poaceae

Class test

*Week 9*

Flower as modified shoot, Microsporangium &its dehiscence

*Week 10*

Microsporogenesis, pollen grains and pollen wall

Group discussion

*Week 11*

Pollen germination, male gametophyte, pollen-pistil interaction, pollination types and agencies

*Week 12*

**Megasporangium-** structure, female gametophyte, double fertilization and type of endosperm

*Week 13*

**Embryogenesis** -monocot & dicot, polyembryony

*Week 14*

**Structure** of Monocot & Dicots seed, Fruits & seed dispersal mechanism.

*Week 15*

Class test & revision.