**OFFICE OF THE PRINCIPAL GOVT. P.G. COLLEGE FOR WOMEN SEC-14 PANCHKULA**

**Lesson Plan (2020-21) Odd Semester**

**Name of the Assistant/ Associate Professor:** Dr. Reena (Extension Lecturer in Botany)

**Class and Section:** BSc. I ,II (Medical)

**Subject/Paper-** Botany

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| **August** | ***Cycas****-*:Morphology, anatomy of Root,Stem, Leaflet and Rachis of *Cycas,* Reproduction of *Cycas.*  ***Pinus*-**: Morphology of *Pinus,* Anatomy of Root, Long Shoot and its Secondary growth in *Pinus*. | Remarks |
| **September** | ***Pinus* Continued**-: Anatomy of Dwarf Shoot and Needle of *Pinus*, Reproduction.  ***Ephedra***-: Morphology, Anatomy of Root, Stem and Leaf of *Ephedra,* Reproduction |  |
| **October** | General account of Cyanobacteria (with reference to *Nostoc)*  General characters of Algae  Classification of algae (upto classes),  Important features of Chlorophyceae, Xanthophyceae, Phaeophyceae and Rhodophyceae,  Important Features and life History of *Volvox*, *Oedogonium, Vaucheria*, |  |
| **November** | Important Features and life History of *Ectocarpus, Polysiphonia*  Bacteria: Structure, Nutrition and Reproduction.  Economic Importance of Algae, Economic importance of Bacteria.  ***Phytophthora, Mucor*:** vegetative structure,reproduction, life cycle  ***Penicillium, Puccinia:*** vegetative structure, reproduction, life cycle  ***Agaricus, Colletotrichum,* Lichens:** vegetative structure, reproduction, life cycle. | Assignment-I  Class-Test |
| **December** | Fungi: general, Fungi :Classification, Fungi: Economic importance.  Structure and Functions of Cell wall, Structure and functions of Plasma Membrane, Ultra Structure and Functions of Nucleus, Chromatin: Euchromatin and Heterochromatin  Ultrastructure and Function of Golgi Apparatus, Endoplasmic reticulum, Chloroplast, Mitochondria, Lysosomes, Peroxisomes.  Chromosomal Alterations: Deletions and Duplications, Translocations, inversions | Assignment-II  Class-Test |
| **January** | Variations in Chromosome number- Aneuploidy and Polyploidy, Sex Chromosomes and Sex determination.  Vacuoles.  Cell division: Mitosis and Meiosis , Importance of Cell division.  Chromosome Morphology, Organization, Ultrastructure of Centromere and Telomere | Unit-Test  Revision |