Syllabus Completion Report
&
Attendance Report

A.Y. 2018-19

Dr. S.M. Jagtap,

Department of Botany

Syllabus Completion Report

F. Y. B. Sc. Botany: 2018 - 19

Plant Diversity

(Term – I; Paper I)

Sr. No	Month	Topics Covered
1	July	**Introduction**: General outline of plant kingdom, Introduction to plant diversity with reference to following groups:- Cryptogams: Thallophyta (Algae, Fungi, Lichens, And Bacteria), Bryophyta and Pteridophyta, Phanerogams: Gymnosperms and Angiosperms.
2	July& Aug	**Algae**: General characters, Outline classification according to G.M. Smith (1955) up to classes with reasons. Life cycle of *Spirogyra*. **Fungi**: General characters, Outline classification according to G.M. Smith (1955) up to classes with reasons. Life cycle of *Cystopus* (*Albugo*).
3	Aug	**Lichens**: General characters, Nature of Association, Types of Lichens on the basis of thallus morphology, Economic importance of lichens. **Bryophytes**: General characters, Outline classification according to G.M. Smith (1955) up to classes with reasons. Life cycle of *Riccia*.
4	Sep	**Pteridophytes:** General characters, Outline classification according to G.M. Smith (1955) up to classes with reasons. Life cycle of Nephrolepis.. **Gymnosperms:** General characters, Outline classification according to Chamberlain (1934) up to classes with reasons. Life cycle of *Cycas*.
5	Oct	**Angiosperms**: General characters, Causes of evolutionary success of Angiosperms, comparative account of monocotyledons and dicotyledons **Revision & Question paper discussion** **Internal Theory Examination**

Dr. Jagtap S.M.

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Syllabus Completion Report

F. Y. B. Sc. Botany: 2012-13

Industrial Botany

(Term – I; Paper II)

Sr. No.	Month	Topics Covered
1	July	**Introduction to Industrial Botany** *Concept of Industrial Botany. Plant resources and industries: Food, fodder, fibers, medicines, timber, dyes, gum, tannins. (Two examples of each resource and the relevant industries with which they are associated).* **Floriculture Industry** *Introduction to floriculture.* *Important floricultural crops, open cultivation practices, harvesting and marketing of Tuberose. Greenhouse technology: Concept, advantages and limitations. Cultivation practices (greenhouse technology), harvesting and marketing of Rose and Gerbera.*
2	Aug	**Plant Nursery Industry** *Concept and types of nurseries: ornamental plant nursery, fruit plant nursery, medicinal plant nursery, vegetable plant nursery, orchid nursery, forest nursery (with reference to infrastructure required, outputs, commercial applications and profitability).* *Propagation methods: Seed propagation, natural vegetative propagation and artificial vegetative propagation (Cutting: Stem, Layering: Air layering, Grafting: Stone grafting and Approach grafting, Budding : T budding).*
3	Sep	**Agri Industries:** *Organic Farming: Concept, need of organic farming, Types of organic fertilizers, advantages and limitations, Seed industries-* *Importance of seed industries, seed production, seed processing and seed marketing with reference to cotton. Major seed industries and corporations of India.* **Plant Tissue Culture Industry** *Concept of tissue culture.* *Culture techniques: Types of explants, preparation of media, methods of sterilization, Inoculation techniques, incubation and hardening.* *Commercial significance.*

4	Oct	**Mushroom Industries:** Mushroom cultivation: Plant resources, cultivation practices of Oyster mushroom, uses of mushrooms, value added products, commercial significance **Revision & Question paper discussion** **Internal Theory Examination**

Dr. Shilpa Jagtap

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Teaching Plan

F. Y. B. Sc. - Botany: 2018- 19

Plant Diversity

(Term – I; Paper I)

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3	Sep	**Pteridophytes:** General characters, Outline classification according to G.M. Smith (1955) up to classes with reasons. Life cycle of *Nephrolepis*. **Gymnosperms:** General characters, Outline classification according to Chamberlain (1934) up to classes with reasons. Life cycle of *Cycas*.	SMJ
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Syllabus Completion Report

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Plant Diversity

(Term – I; Paper I)

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(Term – I; Paper I)

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Teaching Plan
F. Y. B. Sc. - Botany: 2018- 19
Industrial Botany
(Term – I; Paper – II)

Sr. No	Month	Topics	Teacher
1	July	**Introduction to Industrial Botany** Concept of Industrial Botany. Plant resources and industries: Food, fodder, fibers, medicines, timber, dyes, gum, tannins. (Two examples of each resource and the relevant industries with which they are associated).	SMJ
2	July & August	**Floriculture Industry** Introduction to floriculture. Important floricultural crops, open cultivation practices, harvesting and marketing of Tuberose. Greenhouse technology: Concept, advantages and limitations. Cultivation practices (greenhouse technology), harvesting and marketing of Rose and Gerbera.	SMJ
3	August	**Plant Nursery Industry** Concept and types of nurseries: ornamental plant nursery, fruit plant nursery, medicinal plant nursery, vegetable plant nursery, orchid nursery, forest nursery (with reference to infrastructure required, outputs, commercial applications and profitability). **Propagation methods**: Seed propagation, natural vegetative propagation and artificial vegetative propagation (Cutting: Stem, Layering: Air layering, Grafting Stone grafting and Approach grafting, Budding : T budding).	SMJ
4	Sep	**Agri industries:** Organic Farming: Concept, need of organic farming, Types of organic fertilizers, advantages and limitations. **Seed industries:** Importance of seed industries, seed production, seed Processing and seed marketing with reference to cotton. Major seed industries and corporations of India. **Plant Tissue Culture Industry** Concept of tissue culture. Culture techniques: Types of explants, preparation of media, methods of sterilization.	SMJ
5	Oct	**Plant Tissue Culture Industry** Inoculation techniques, incubation and hardening. Commercial significance. **Mushroom Industries:** Mushroom cultivation: Plant resources, cultivation practices of Oyster mushroom, uses of mushrooms, value added products, commercial significance. **Revision & Question paper discussion** **Revision & Question paper discussion** **Internal Theory Examination**	SMJ

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4	Oct	**Mushroom Industries:** Mushroom cultivation: Plant resources, cultivation practices of Oyster mushroom, uses of mushrooms, value added products, commercial significance **Revision & Question paper discussion** **Internal Theory Examination**

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