

Lesson Plan of Botany paper IV & V Session 2019-20

Class: B.Sc Medical

Subject: Botany (BOT201L)

Semester-2nd

& BOT202L

Session 2019-20

Date	Lecture	Topic of Lecture - Paper (IV)
01.01.2020	1-UNIT I	Introduction to ecology
02.01.2020		Guru Gobind Singh Jayanti
03.01.2020	2	Basic concepts, types & scope of ecology
04.01.2020	3	Soil: origin, formation, composition
05.01.2020		Sunday
06.01.2020	4	Soil profile. water: states of water in the envt.
07.01.2020	5	Precipitation types. Effects of light
08.01.2020	6	temp. of plants.
09.01.2020	7	Morphological & anatomical adaptation of hydrophytes
10.01.2020	8	Xerophytes
11.01.2020	9	Test & doubt classes. same as above.
12.01.2020		Sunday
13.01.2020	10	UNIT: 2 Ecosystem: structure & energy flow. trophic levels.
14.01.2020	11	Food chains & food webs.
15.01.2020	12	Ecological pyramids.
16.01.2020	13	Biogeochemical cycles
17.01.2020	14	Hydrological, Carbon, Nitrogen cycles
18.01.2020	15	Phosphorous cycle
19.01.2020		Sunday
20.01.2020	16	Doubt & test.
21.01.2020	17	UNIT: 3 plant communities & phytogeography. qualitative & quantitative characters.
22.01.2020	18	Ecotone and edge effect.
23.01.2020	19	Presentation
24.01.2020	20	Succession, Process for carbonates, Cl, Nitrate
25.01.2020	21	Types (Hydrose. & Xerose) sulphates & O.M by Rapid field test.
26.01.2020		Sunday/Republic Day
27.01.2020	22	Phytogeographical regions of India.
28.01.2020	23	Endemism.
29.01.2020	24	Test + doubt discussion.
30.01.2020		Basant Panchmi/Shri Chhotu Ram Jayanti
31.01.2020	25	class presentation
01.02.2020	26	Test of UNIT: 1, 2, 3 → Model preparation
02.02.2020		Sunday

Practical: identification of specimens & slides.

Practical-1 study of instruments used to measure microclimatic variables.

Practical: 2 → Soil thermometer, maximum & mini, thermocouple, anemometer, psychrometer/hygrometer, rain gauge, and lux meter.

Practical-3. Determination of pH & analysis of two soil samples

Date	Unit	Topic	Notes
03.02.2020	UNIT-4	Pollution & Environmental laws	
04.02.2020	27	Definition & quantitative characters	
05.02.2020	28	Types of pollution	
06.02.2020	29	Source & control of air	
07.02.2020	30	water & Soil Pollution practical	3 - study of Morphology adaptation of two hydrophytes
08.02.2020	31	A basic knowledge of envt. prot. act 1986	of two hydrophytes (Heach).
09.02.2020	32	class discussion	xerophytes
10.02.2020		Sunday/Guru Ravidas's Birthday	
11.02.2020	33	Test	
12.02.2020	34	doubt-classes-1	
13.02.2020	35	Revision & doubt classes-2	
14.02.2020		Unit Test	
15.02.2020		Sunday	
16.02.2020		Sunday	
17.02.2020	36	Solution of Unit-test	
18.02.2020	Paper-V UNIT-1	Plant taxonomy	
19.02.2020	37	Identification	
20.02.2020	38	classification	
21.02.2020	39	Nomenclature, Ranks & categories	
22.02.2020		Maha Shivratri	
23.02.2020	40	taxonomic groups, Principles & rules (ICN)	
24.02.2020		Sunday	
25.02.2020	41	Ranks & names; Binominal system	
26.02.2020	42	typification, author citation	
27.02.2020	43	Valid publication, rejection of names	
28.02.2020	44	Principle of priority & its limitations	
29.02.2020	45	Types of classification, artificial	
01.03.2020	46	Natural & phylogeny (p. APG) - general introduction	
02.03.2020		Sunday	
03.03.2020	47	Doubt classes + Class Test	
04.03.2020	UNIT-II	Herbarium, Botanical Gardens & taxonomic literature	
05.03.2020	48	general introduction & importance	
06.03.2020	49	class presentation of UNIT-1	practical: 4
07.03.2020	50	Botanical gardens of the world (Royal Botanic Garden Kew)	
08.03.2020	51	& India (Acharya Jagdish Bose, Indian Botanical garden, Kolkata)	
09.03.2020	52	Introduction to Botanical survey of India (BSI D. D. D. Dun)	
10.03.2020		stem parasite (Cuscuta), Root parasite (Orchidaceae, Stigma)	Biotic interactions
11.03.2020			Insectivorous plant.
12.03.2020		Holi Break	

13.03.2020		
14.03.2020		
15.03.2020		
16.03.2020	53	Documentation; Introduction to floras.
17.03.2020	54	Monograph & journals
18.03.2020	55	Presentation - I
19.03.2020	56	Doubt classes - UNIT - till now
20.03.2020	57	Journals, ^{Practical: 5 Determination of minimal quadrat size for study of herbaceous vegetation in the college campus by species area curve method.}
21.03.2020	58	Keys: single access ^{visit to preparation of Report on polluting industry/pollution site of different ecosystem.}
22.03.2020		Sunday
23.03.2020		Shahidi Diwas
24.03.2020	59	keys: multiple access.
25.03.2020	60	class Test -
26.03.2020	61	Doubt discussion ^{Practical-6 Quantitative analysis of herbaceous vegetation in the college campus for frequency.}
27.03.2020	62	Modern trends in taxonomy ^{taxonomic evidences from cytology}
28.03.2020	63	Phytochemistry
29.03.2020		Sunday
30.03.2020	64	Molecular data Biometrics
31.03.2020	65	characters, variations
01.04.2020	66	class Presentation - II
02.04.2020		Ram Navmi
03.04.2020	67	Herbarium file discussions ^{Practical: 7.}
04.04.2020	68	OTUs, character weighting ^{floral characters of Ranunculaceae}
05.04.2020		Sunday
06.04.2020		Mahavir Jayanti
07.04.2020	69	coding, cluster & analysis.
08.04.2020	70	Phenograms.
09.04.2020	71	cladograms ^{Practical: 8 → Brassicaceae.}
10.04.2020	72	Repeat discussion on above topic ^{Leguminosae.}
11.04.2020	73	Class - Test - Asteraceae.
12.04.2020		Sunday
13.04.2020	74	study of plant families. ^{UNIT-4:} salient features.
14.04.2020		Dr. B.R. Ambedkar's Jayanti
15.04.2020	75	vegetative features
16.04.2020	76	class test ^{Practical: 9 Camiaceae.}
17.07.2020	77	floral characters ^{Solanaceae}
18.04.2020	78	Revision of UNIT-I-II & III ^{Liliaceae.}
19.04.2020		Sunday
20.04.2020	79	economic importance of the following families.

21.04.2020	80 -	Ranunculaceae, Brassicaceae.
22.04.2020	81	Asteraceae, Leguminosae.
23.04.2020	82	Solanaceae; Lamiaceae
24.04.2020	83	Liliaceae
25.04.2020	84	Revision of UNIT-4
26.04.2020		Sunday
27.04.2020	85	class test
28.04.2020	86	Doubt classes.
29.04.2020	87	class presentation
30.04.2020	88	Test of all syllabus.

Practical +
Revision of all
families floral
formula & systematic
position.