

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Website - www.durguniversity.ac.in, Email - durguniversity@gmail.com



Ph.D. Course Work Syllabus

BOTANY

Session 2020-21

SYLLABUS FOR Ph.D COURSE WORK IN BOTANY (2020-2021)

There will be two papers; one each with 100 maximum marks

Paper-I **Research methodology, Advance Tools & Techniques, Quantitative Data Analyses and Computer Fundamentals, Taxonomic & Ecological Data Analysis.**

Paper-II **Review of Literature & Seminar**

Paper-I		Research methodology, Advance Tool & Techniques	Maximum Marks
Quantitative Data Analyses and Computer Fundamentals, Taxonomic & Ecological Data Analysis.			
A	Research Methodology Essential steps in research; Identification, Selection of objectives, Research design:- Components, Importance of literature collection, Citation & indexing. Research ethics, IPR, Research report Presentation-table, Figure, Formatting and typing.		25
B	Advanced Tools & Techniques Advanced microscopy-confocal phase contrast & electron microscopy, Electrophoresis, HPLC, PCR, DNA & Protein sequencing, spectrophotometry.		25
C	Quantitative Data Analysis and Computer Fundamentals Standard deviation, standard error, coefficient of variation, correlation & regression, t-test, frequency distribution. Computer Application Software for biostatistics, SPSS, COSTAT, MA WORD, MS EXCEL, MS Power Point		25
D	Taxonomic & Ecological Data Analysis Morphological basis of plant identification, Taxonomy in relation to cytology & Biochemistry, Environmental sampling methodology. Isolation, preservation & Identification of micro organisms.		25
Paper-II Review of Literature & Seminar			Maximum Marks
A	Review of Literature – Writing review of literature in the area of the proposed Ph.D program.		50
	Seminar – Based on the review of literature.		50

Note :

- There will be FOUR units (A,B,C& D) of 25 marks. The pattern will include both objective (multiple-choice questions) and objective (Short answer, using 50 to 100 words) questions.
- The candidate must be obtained 50% or more marks to qualify in the course work. The answer paper will be assessed independently by two examiners.