

DAYALBAGH EDUCATIONAL INSTITUTE
DEPARTMENT OF AGRICULTURE SCIENCE / BOTANY (FACULTY OF SCIENCE)
B.Sc. Honours in Applied Botany / B.Sc. Honours (Research) in Applied Botany
Degree Programmes
COURSE LIST & SYLLABUS: REVISED AS PER NEP 2024

COURSE NUMBER	COURSE TITLE	COURSE TYPE	CREDITS	END SEM.EXAM EXISTS	Theory/ Practical
FIRST SEMESTER					
ABS 101	FUNDAMENTALS OF BOTANY& ITS APPLIC.	DS Major/ DS Minor	3.0	YES	T
ABS 102	PRINCIPLES OF AGRONOMY	DS Major/ DS Minor	3.0	YES	T
ABS 103	APPLIED BOTANY AND AGRONOMY PRACTICAL	DS Major/ DS Minor	2.0	YES	P
ABS 104	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 101	ALGAE AND LICHENS	DS Major/ DS Minor	3.0	YES	T
BOM 102	FUNGI AND PLANT PATHOLOGY	DS Major/ DS Minor	3.0	YES	T
BOM 103	PRACTICALS FOR ALGAE, FUNGI AND PLANT DISEASES	DS Major/ DS Minor	2.0	YES	P
BOM 104	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOW101	BOTANICAL GARDEN & HERBAL TECHNOLOGY I	Skill Enhancement	2.0	No	P
BOW102	WORK EXPERIENCE-DAIRY PRODUCTS I	Skill Enhancement	2.0	No	P
BOW103	MODERN CROP PRODUCTION TECH. I	Skill Enhancement	2.0	No	P
BOW104	MUSHROOM CULTIVATION I	Skill Enhancement	2.0	No	P
BOW105	SINGLE CELL PROTEIN PRODUCTION TECHNOLOGY I	Skill Enhancement	2.0	No	P
ESC 191	ENVIRONMENTAL STUDIES	COMMON VALUE ADDED COURSE	2.0	No	T
GKC191	SC.METH.,G.K. & CURRENT AFFAIRS	COMMON VALUE ADDED COURSE	1.0	No	T
RDC 191	RURAL DEVELOPMENT	SKILL ENHANCEMENT COURSE	1.0	No	P
CEC 191	CULTURAL EDUCATION	COMMON VALUE ADDED COURSE	2.0	No	P
*HIH/ENH/STH	ANY ONE LANGUAGE COURSE	Ability Enhancement	2.0	NO	T
TOTAL CREDITS FOR 1ST SEMESTER			28		
SECOND SEMESTER					
ABS 201	FUNDAMENTAL OF SOIL SCIENCE	DS Major/ DS Minor	3.0	YES	T
ABS 202	FUNDAMENTAL OF HORTICULTURE	DS Major/ DS Minor	3.0	YES	T
ABS 203	SOIL SCIENCE AND HORTICULTURE BASED PRACTICAL	DS Major/ DS Minor	2.0	YES	P
ABS 204	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 201	BACTERIA,VIRUS AND MYCOPLASMA	DS Major/ DS Minor	3.0	YES	T
BOM 202	CELL BIOLOGY	DS Major/ DS Minor	3.0	YES	T
BOM 203	PRACTICALS RELATED TO BACTERIA, VIRUS & MYCOPLASMA & THEIR DISEASES AND CELL BIOLOGY	DS Major/ DS Minor	2.0	YES	P
BOM 204	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOW201	BOTANICAL GARDEN & HERBAL TECHNOL.II	Skill Enhancement	2.0	No	P
BOW202	WORK EXPERIENCE-DAIRY PRODUCTS II	Skill Enhancement	2.0	No	P
BOW203	MODERN CROP PRODUCTION TECH. II	Skill Enhancement	2.0	No	P
BOW204	MUSHROOM CULTIVATION II	Skill Enhancement	2.0	No	P
BOW205	SINGLE CELL PROTEIN PRODUCTION TECHNOLOGY II	Skill Enhancement	2.0	No	P
GKC 291	SC.METH. G.K. & CURRENT AFFAIRS II	COMMON VALUE ADDED COURSE	1.0	NO	T
RDC 291	AGRICULTURE OPERATIONS	Skill Enhancement	1.0	NO	P
RDC 292	SOCIAL SERVICE	Skill Enhancement	1.0	NO	P
CAC 291	CO-CURRICULAR ACTIVITIES	COMMON VALUE ADDED COURSE	2.0	NO	P
CRC 291	COMPARATIVE STUDY OF RELIGION	COMMON VALUE ADDED COURSE	2.0	NO	T
*HIH/ENH/STH	ANY ONE LANGUAGE COURSE	Ability Enhancement	2.0	NO	T

	TOTAL CREDITS FOR 2 ND SEMESTER		29		
	THIRD SEMESTER				
SDC 391	SAFETY AND DISASTER MANAGEMENT	Multidisciplinary (Faculty Ancillary)	2.0	YES	T
ABS 301	PLANT BIOTECHNOLOGY	DS Major/ DS Minor	3.0	Yes	T
ABS 302	ORGANIC FARMING	DS Major/ DS Minor	3.0	Yes	T
ABS 303	WEED SCIENCE	DS Major/ DS Minor	3.0	Yes	T
ABS 304	APPLIED BOTANY PRACTICALS RELATED TO PLANT BIOTECHNOLOGY; ORGANIC FARMING AND WEED SCIENCE	DS Major/ DS Minor	3.0	Yes	P
ABS 305	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 301	BRYOPHYTA	DS Major/ DS Minor	3.0	Yes	T
BOM 302	PTERIDOPHYTA	DS Major/ DS Minor	3.0	Yes	T
BOM 303	GYMNOSPERMS & PALAEOBOTANY	DS Major/ DS Minor	3.0	Yes	T
BOM 304	PRACTICALS RELATED TO BRYOPHYTA; PTERIDOPHYTA AND GYMNOSPERMS	DS Major/ DS Minor	3.0	Yes	P
BOM 305	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOW301	BOTANICAL GARDEN & HERBAL TECHNOL.III	Skill Enhancement	2.0	No	P
BOW302	WORK EXPERIENCE-DAIRY PRODUCTS III	Skill Enhancement	2.0	No	P
BOW303	MODERN CROP PRODUCTION TECH. III	Skill Enhancement	2.0	No	P
BOW304	MUSHROOM CULTIVATION III	Skill Enhancement	2.0	No	P
BOW305	SINGLE CELL PROTEIN PRODUCTION TECHNOLOGY III	Skill Enhancement	2.0	No	P
GKC 391	SC.METH. G.K. & CURRENT AFFAIRS III	COMMON VALUE ADDED COURSE	1.0	NO	T
	TOTAL CREDITS FOR 3 RD SEMESTER		31		
	FOURTH SEMESTER				
ABS 401	ECONOMIC BOTANY I	DS Major/ DS Minor	3.0	Yes	T
ABS 402	ECONOMIC BOTANY II	DS Major/ DS Minor	3.0	Yes	T
ABS 403	PLANT METABOLITES& SEPARATION TECH.	DS Major/ DS Minor	3.0	Yes	T
ABS 404	APPLIED BOTANY PRACTICALS RELATED TO ECONOMIC BOTANY AND PLANT METABOLITE SEPARATION	DS Major/ DS Minor	3.0	Yes	P
ABS 405	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 401	ANATOMY OF ANGIOSPERMS	DS Major/ DS Minor	3.0	Yes	T
BOM 402	BIOMOLECULES	DS Major/ DS Minor	3.0	Yes	T
BOM 403	TAXONOMY OF ANGIOSPERMS	DS Major/ DS Minor	3.0	Yes	T
BOM 404	PRACTICALS RELATED TO ANATOMY;BIOMOLECULES AND TAXONOMY	DS Major/ DS Minor	3.0	Yes	P
BOM 405	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
CAC 491	CO-CURRICULAR ACTIVITIES	COMMON VALUE ADDED COURSE	3.0	NO	P
GKC 491	SC.METH. G.K. & CURRENT AFFAIRS IV	COMMON VALUE ADDED COURSE	1.0	NO	T
	TOTAL CREDITS FOR 4 TH SEMESTER		30		
	FIFTH SEMESTER				
ABS 501	CROP PHYSIOLOGY & BIOCHEMISTRY	DS Major	4.0	Yes	T
ABS 502	PR. OF PLANT BREEDING & CYTOGENETICS	DS Major	4.0	Yes	T
ABS 503	SEED SCIENCE AND TECHNOLOGY	DS Major	4.0	Yes	T
ABS 504	PRACTICALS OF PHYSIOLOGY;PLANT BREEDING AND SEED TECHNOLOGY	DS Major	4.0	Yes	P
ABS 505	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 511	ECOSYSTEM AND ITS DYANAMICS	DS Minor	4.0	Yes	T
BOM 512	TAXONOMY OF ANGIOSPERMS	DS Minor	4.0	Yes	T
SIB 501	SUMMER INTERNSHIP	Summer Internship	3.0	No	P
	TOTAL CREDITS FOR 5 TH SEMESTER		28		
	SIXTH SEMESTER				
ABS 601	PRODUCTION TECH.OF MEDICINAL& AROMATIC PLANTS	DS Major	4.0	Yes	T
ABS 602	PLANT CELL & TISSUE CULTURE	DS Major	4.0	Yes	T
ABS 603	BIOSTATISTICS& COMPUTER APPLICATION	DS Major	4.0	Yes	T
ABS 604	PRACTICALS ON MEDICINAL PLANTS;TISSUE CULTURE AND COMPUTER APPLICATIONS	DS Major	4.0	Yes	P
ABS 605	SEMINAR AND GROUP DISCUSSION	Ability Enhancement	1.0	No	P
BOM 611	FUNDAMENTALS OF EMBRYOLOGY	DS Minor	4.0	Yes	T
BOM 612	ECONOMIC IMPORTANCE OF PLANTS AND THEIR PRODUCTS	DS Minor	4.0	Yes	T

	TOTAL CREDITS FOR 6TH SEMESTER			25		
	SEVENTH SEMESTER WITH RESEARCH					
ABS 701	COMMERCIAL ENTERPRISES	DS Major	4.0	Yes	T	
ABS 702	APPLIED AGRICULTURAL MICROBIOLOGY	DS Major	4.0	Yes	T	
ABS 703	INTRODUCTORY MOLECULAR BIOLOGY	DS Major	4.0	Yes	T	
ABS 704	PLANT BIODIVERSITY	DS Major	4.0	Yes	T	
ABS 705	PRACTICALS ON COMMERCIAL ENTERPRISES, APPLIED AGRICULTURAL MICROBIOLOGY, INTRODUCTORY MOLECULAR BIOLOGY, PLANT BIODIVERSITY	DS Major	4.0	Yes	P	
ABS 706	BIOINFORMATICS AND ITS APPLICATION	DS Minor	4.0	Yes	T	
ABS 707	PRACTICAL APPLICATION OF BIOINFORMATICS	DS Minor	4.0	Yes	P	
ABS 708	PRE-DISSERTATION	DS Major	2.0	No	T	
	TOTAL CREDITS FOR 7TH SEMESTER			30		
	SEVENTH SEMESTER WITHOUT RESEARCH					
ABS 701	COMMERCIAL ENTERPRISES	DS Major	4.0	Yes	T	
ABS 702	APPLIED AGRICULTURAL MICROBIOLOGY	DS Major	4.0	Yes	T	
ABS 703	INTRODUCTORY MOLECULAR BIOLOGY	DS Major	4.0	Yes	T	
ABS 704	PLANT BIODIVERSITY	DS Major	4.0	Yes	T	
ABS 705	PRACTICALS ON COMMERCIAL ENTERPRISES, APPLIED AGRICULTURAL MICROBIOLOGY, INTRODUCTORY MOLECULAR BIOLOGY, PLANT BIODIVERSITY	DS Major	4.0	Yes	P	
ABS 706	BIOINFORMATICS AND ITS APPLICATION	DS Minor	4.0	Yes	T	
ABS 707	PRACTICAL APPLICATION OF BIOINFORMATICS	DS Minor	4.0	Yes	P	
	TOTAL CREDITS FOR 7TH SEMESTER			28		
	EIGHT SEMESTER WITH RESEARCH					
ABS 801	AGRO ECOSYSTEMS	DS Major	4.0	Yes	T	
ABS 802	PLANT BIOCHEMISTRY	DS Major	4.0	Yes	T	
ABS 803	COMMERCIAL HORTICULTURE	DS Major	4.0	Yes	T	
ABS 804	TAXONOMY	DS Major	4.0	Yes	P	
ABS 805	DISSERTATION	DS Major	10.0	Yes	T	
ABS 807	PHYTOCHEMISTRY	DS Minor	4.0	Yes	T	
	TOTAL CREDITS FOR 7TH SEMESTER			30		
	EIGHT SEMESTER WITHOUT RESEARCH					
ABS 801	AGROECOSYSTEMS	DS Major	4.0	Yes	T	
ABS 802	PLANT BIOCHEMISTRY	DS Major	4.0	Yes	T	
ABS 803	COMMERCIAL HORTICULTURE	DS Major	4.0	Yes	T	
ABS 804	TAXONOMY	DS Major	4.0	Yes	T	
ABS 806	PRACTICALS ON AGROECOSYSTEM, PLANT BIOCHEMISTRY, COMMERCIAL HORTICULTURE & TAXONOMY	DS Major	8.0	Yes	P	
ABS 807	PHYTOCHEMISTRY	DS Minor	4.0	Yes	T	
	TOTAL CREDITS FOR 8TH SEMESTER			28		