

# Savitribai Phule Pune University

Pune-411 007

24-May-2025

## BACHELOR OF SCIENCE ((REV. 2019))

### Paper List

[COURSE GRADE POINTS:90-100 O 10, 75-89 A+ 9, 60-74 A 8, 55-59 B+ 7, 50-54 B 6, 45-49 C 5, 40-44 D 4, 0-39 F 0, 0--1 P 0, 0--1 EX 0, NIL AAA 0]  
[AAA=ABSENT, FFF=FAIL, \*=APPRARING, P=PREVIOUS,\$=0.1, #=0.4, &=0.163, !=Non Countable Credit Course,]

#### Semester: 1

Code	Paper Title
BO-111	PLANT LIFE AND UTILIZATION-I
BO-112	PLANT MORPHOLOGY AND ANATOMY
BO-113	PRACTICAL BASED ON BO111 AND BO112
CH-101	PHYSICAL CHEMISTRY
CH-102	ORGANIC CHEMISTRY
CH-103	CHEMISTRY PRACTICAL
CHNA-111	ESSENTIALS OF COMPUTERS-I
CHNA-112	COMPUTER ORGANIZATION-I
CHNA-113	CHNA LAB-I
DS101	INDIA'S NATIONAL SECURITY: KEY CONCEPT
DS102	EVOLUTION OF DEFENCE ORGANIZATION IN INDIA
DS103	INDIA AND ITS NEIGHBOURS
EL-111	BASICS OF APPLIED ELECTRONICS
EL-112	ELECTRONIC DEVICES AND CIRCUITS
EL-113	PRACTICAL COURSE-I
EVS-111	FUNDAMENTAL OF ENVIRONMENTAL BIOLOGY
EVS-112	FUNDAMENTAL OF ENVIRONMENTAL CHEMISTRY & PHYSICS
EVS-113	ENVIRONMENTAL SCIENCE PRACTICAL PAPER
GG-111	INTRODUCTION TO PHYSICAL GEOGRAPHY-I (GEOMORPHOLOGY)
GG-112	INTRODUCTION TO PHYSICAL GEOGRAPHY -II (GEOGRAPHY OF ATMOSPHERE)
GG-113	PRACTICAL IN PHYSICAL GEOGRAPHY
GL 111 T	FUNDAMENTALS OF GEOLOGY
GL 112 T	MINERALOGY AND CRYSTALLOGRAPHY
GL 113 P	PRACTICALS RELATED TO GL 111 AND GL 112
IMB 111	INTRODUCTION TO INDUSTRIAL MICROBIOLOGY AND MICROORGANISMS
IMB 112	INTRODUCTION TO INDUSTRIAL PROCESS AND ECONOMICS
IMB 113	PRACTICAL COURSE BASED ON THEORY PAPER I AND II
MB-111	INTRODUCTION TO MICROBIAL WORLD
MB-112	BASIC TECHNIQUES IN MICROBIOLOGY
MB-113	PRACTICAL COURSE BASED ON THEORY PAPER I AND II
MT-111	ALGEBRA
MT-112	CALCULUS-I
MT-113	MATHEMATICS PRACTICAL
NS-111	FUNDAMENTALS OF NANOSCIENCE
NS-112	MATERIALS SCIENCE
NS-113	NANOSCIENCE AND NANOTECHNOLOGY LABORATORY-IA
PHY-111	MECHANICS AND PROPERTIES OF MATTER
PHY-112	PHYSICS PRINCIPLES AND APPLICATIONS
PHY-113	PHYSICS LABORATORY-IA
PSY-111	FOUNDATIONS OF PSYCHOLOGY
PSY-112	EXPERIMENTAL PSYCHOLOGY
PSY-113	PSYCHOLOGY PRACTICAL: EXPERIMENTS
RE-A-FC-101	COMPONENT: FOUNDATION -I
RE-A-FC-101P	COMPONENT: FOUNDATION -I (PRACTICAL PAPER)
RE-E-FPHE-105-1	COMPONENT: (4) FAMILY PLANNING AND HEALTH EDUCATION-I
RE-E-NCC-103-1	COMPONENT: (2) NATIONAL CADET CORPS-I
RE-E-NSS-102-1	COMPONENT: (1) NATIONAL SERVICE SCHEME-I
RE-E-PE-104-1	COMPONENT: (3) POPULATION EDUCATION-I
RE-E-SP-106-1	COMPONENT: (5) SPORTS-I
ST 1.1	PAPER-I MORPHOLOGY
ST 1.2	PAPER-II PLANT BREEDING AND TESTING FOR CULTVIAR GENUINESS
ST 1.3	PRACTICAL BASED ON ST 1.1 AND ST 1.2
ST-111	DESCRIPTIVE STATISTICS-I
ST-112	DISCRETE PROBABILITY
ST-113	STATISTICS PRACTICAL PAPER-I
VBT-111	BIOLOGICAL CHEMISTRY
VBT-112	BIOTECHNOLOGY CONCEPTS AND APPLICATIONS
VBT-113	LAB COURSE-I : PRACTICAL IN BIOCHEMISTRY
VOC-EEM111	MAINTENANCE OF DOMESTIC EQUIPMENTS-A (HEATING APPLIANCES)
VOC-EEM112	ELEMENTS OF ELECTRONIC EQUIPMENT DESIGN-A (PCB TECHNIQUES)
VOC-EEM113	PRACTICAL COURSE-I
ZO-111	ANIMAL DIVERSITY-I
ZO-112	ANIMAL ECOLOGY
ZO-113	ZOOLOGY PRACTICAL PAPER

#### Semester: 2

Code Paper Title

continued....

299	DEMOCRACY, ELECTION AND GOVERNANCE
BO-121	PLANT LIFE AND UTILIZATION-II
BO-122	PRINCIPLES OF PLANT SCIENCE
BO-123	PRACTICAL BASED ON BO121 AND BO122
CH-201	INORGANIC CHEMISTRY
CH-202	ANALYTICAL CHEMISTRY
CH-203	CHEMISTRY PRACTICAL-II
CHNA-121	ESSENTIALS OF COMPUTERS-II
CHNA-122	COMPUTER ORGANIZATION-II
CHNA-123	CHNA LAB-IB
DS201	INFORMATION WARFARE
DS202	HOMELAND SECURITY OF INDIA
DS203	DISASTER MANAGEMENT AND NATIONAL SECURITY
EL-121	FUNDAMENTALS OF DIGITAL ELECTRONICS
EL-122	ANALOG AND DIGITAL DEVICE APPLICATIONS
EL-123	ELECTRONICS LAB IB
EVS-121	FUNDAMENTAL OF ENVIRONMENTAL GEOSCIENCES
EVS-122	FUNDAMENTAL OF ENVIRONMENTAL POLLUTION
EVS-123	ENVIRONMENTAL SCIENCE PRACTICAL PAPER
G-1	Physical Education
GG-121	INTRODUCTION TO HUMAN GEOGRAPHY
GG-122	POPULATION AND SETTLEMENT GEOGRAPHY
GG-123	PRACTICALS IN HUMAN GEOGRAPHY
GL 121 T	STRATIGRAPHY AND SEDIMENTATION
GL 122 T	PETROLOGY AND GEOCHEMISTRY
GL 123 P	PRACTICALS RELATED TO GL 121 AND GL 122
IMB 121	QUANTITATIVE INDUSTRIAL MICROBIOLOGY
IMB 122	INDUSTRIAL BIOPROCESSES AND MICROBIAL PRODUCTS
IMB 123	PRACTICAL COURSE BASED ON THEORY PAPER I AND II
MB-121	BACTERIAL CELL AND BIOCHEMISTRY
MB-122	MICROBIAL CULTIVATION AND GROWTH
MB-123	PRACTICAL COURSE BASED ON THEORY PAPERS MB121 AND MB122
MT-121	ANALYTICAL GEOMETRY
MT-122	CALCULUS - II
MT-123	Mathematics Practical
NS-121	CHEMICAL AND BIOLOGICAL TECHNIQUES FOR SYNTHESIS OF NANOMATERIALS
NS-122	BASIC CHARACTERIZATION TECHNIQUES
NS-123	NANOSCIENCE AND NANOTECHNOLOGY LABORATORY-IB
PHY-121	HEAT AND THERMODYNAMICS
PHY-122	ELECTRICITY AND MAGNETISM
PHY-123	PHYSICS LABORATORY-IB
PSY-121	INTRODUCTION TO SOCIAL PSYCHOLOGY
PSY-122	PSYCHOLOGICAL TESTING
PSY-123	PSYCHOLOGY PRACTICAL : TESTS
RE-A-FC-111	COMPONENT: FOUNDATION -II
RE-A-FC-111P	COMPONENT: FOUNDATION -II (PRACTICAL PAPER)
RE-E-FPHE-115-1	COMPONENT: (4) FAMILY PLANNING AND HEALTH EDUCATION-II
RE-E-NCC-113-1	COMPONENT: (2) NATIONAL CADET CORPS-II
RE-E-NSS-112-1	COMPONENT: (1) NATIONAL SERVICE SCHEME-II
RE-E-PE-114-1	COMPONENT: (3) POPULATION EDUCATION-II
RE-E-SP-116-1	COMPONENT: (5) SPORTS-II
ST 1.4	PAPER-III SEED PHYSIOLOGY
ST 1.5	PAPER-IV SEED PRODUCTION
ST 1.6	PRACTICAL BASED ON ST 1.4 AND ST 1.5
ST-121	DESCRIPTIVE STATISTICS II
ST-122	DISCRETE PROBABILITY DISTRIBUTIONS
ST-123	STATISTICS PRACTICAL PAPER II
VBT-121	BIOINSTRUMENTATION
VBT-122	BIOSTATISTICS AND COMPUTERS FOR BIOLOGISTS
VBT-123	LAB COURSE-II : PRACTICAL IN BIOINSTRUMENTATION, BIOSTATISTICS AND COMPUTERS
VOC-EEM121	MAINTENANCE OF DOMESTIC EQUIPMENTS-B (COOLING APPLIANCES)
VOC-EEM122	ELEMENTS OF ELECTRONIC EQUIPMENT DESIGN-B (OPEN SOURCE TOOLS)
VOC-EEM123	PRACTICAL COURSE-II
ZO-121	ANIMAL DIVERSITY II
ZO-122	CELL BIOLOGY
ZO-123	ZOOLOGY PRACTICAL PAPER

Semester: 3

Code	Paper Title
23601	(C COMPONENT) PHARMACEUTICAL CHEMISTRY I

continued....

23602	(C COMPONENT) ENERGY STUDIES I
23603	(C COMPONENT) HORTICULTURE AND ITS MANAGEMENT I
23604	(C COMPONENT) APPLIED ENTOMOLOGY I
23605	(C COMPONENT) DAIRY SCIENCE I
23651	(D COMPONENT) SOAP MANUFACTURING I
23652	(D COMPONENT) RADIO REPAIRING I
23653	(D COMPONENT) NURSERY DEVELOPMENT I
23654	(D COMPONENT) MEDICAL LAB TECHNICIAN I
23655	(D COMPONENT) MILK AND MILK PRODUCTS I
AECC-I	ENVIRONMENTAL AWARENESS
AECC-II (A)	LANGUAGE: ENGLISH
AECC-II (B)	LANGUAGE: MARATHI
AECC-II (C)	LANGUAGE: HINDI
AECC-II (D)	LANGUAGE: ARABIC FUNCTIONAL
AECC-II (E)	LANGUAGE: SANSKRIT
BO-231	Taxonomy of Angiosperms and Plant Ecology
BO-232	Plant Physiology
BO-233	Practical based on BO 231 & BO 232
CH-301	Physical and Analytical Chemistry
CH-302	Inorganic and organic Chemistry
CH-303	Practical Chemistry-III
CHNA-231	Operating System & Diagnostics Tools
CHNA-232	Microprocessor & Interfacing-I
CHNA-233	CHNA Lab-IA
DS301	SCIENCE, TECHNOLOGY & NATIONAL SECURITY
DS302	MILITARY GEOGRAPHY & GEOPOLITICS
DS303	COTEMPORARY WARFARE
EL-231	Communication Electronics
EL-232	Digital System Design
EL-233	Practical Course
EVS-231	Ecology & Ecosystem
EVS-232	Natural Resource Conservation and Management
EVS-233	Practical Course Based on EVS-231 & EVS-232
GG-231	Environmental Geography-I
GG-232	Geography of Maharashtra (Physical)-I
GG-233	Surveying-I
GL 211	Structural Geology
GL 212(A)	Principles of Stratigraphy and Sedimentation
GL 212(B)	PALAEONTOLOGY
GL 213	Practicals related to GL 211 & 212
IMB 211	BIO-REACTORS-DESIGN & OPERATION
IMB 212	SCREENING & PROCESS OPTIMIZATION
IMB 213	PRACTICALS BASED ON IMB211 AND IMB212
LA 231	English/Marathi
MB-231	Medical Microbiology and Immunology
MB-232	Bacterial Physiology and Fermentation Technology
MB-233	Practical based on MB 231 and MB 232
MT-231	Calculus of Several Variables
MT-232(A)	Numerical Methods and Its Applications
MT-232(B)	Graph Theory
MT-233	Mathematics Practical based on MT - 231 and MT - 232
NS-231	Physical Techniques for synthesis of Nanomaterials
NS-2310	Environment-I
NS-2311	Language-I
NS-232	Properties of Nanomaterials (Physical, chemical, Optical and Magnetic)
NS-233	Nanoscience and Nanotechnology Laboratory-2A
PHY-231	Mathematical Methods in Physics I
PHY-232(A)	Electronics-I
PHY-232(B)	Instrumentation
PHY-233	Physics Laboratory-2A
PSY-231	Psychology of Adjustment
PSY-232	Research Methods In Behavioral Sciences
PSY-233	Psychology Practical : Tests and Group Testing
ST 2.1	HYBRID SEED PRODUCTION
ST 2.2	SEED TESTING
ST 2.3	PRACTICALS BASED ON ST 2.1 AND ST 2.2
ST-231	Discrete Probability Distributions And Time Series
ST-232	Continuous Probability Distributions
ST-233	Statistics Practical
VBT-211	Cell biology & Microbial Genetics

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VBT-212	Molecular Biology
VBT-213	Lab Course III: Practical in Cell & Molecular Biology.
VOC-EEM-231	Basic level maintenance of smart phone
VOC-EEM-232	Smart phone based electronic equipment design
VOC-EEM-233	Practical course-III
ZO-231	Animal Diversity III
ZO-232	Applied Zoology I
ZO-233	Zoology Practical Paper

Semester: 4

Code	Paper Title
24601	(C COMPONENT) PHARMACEUTICAL CHEMISTRY II
24602	(C COMPONENT) ENERGY STUDIES II
24603	(C COMPONENT) HORTICULTURE & ITS MANAGEMENT II
24604	(C COMPONENT) APPLIED ENTOMOLOGY II
24605	(C COMPONENT) DAIRY SCIENCE II
24651	(D COMPONENT) SOAP MANUFACTURING II
24652	(D COMPONENT) RADIO REPAIRING II
24653	(D COMPONENT) NURSERY DEVELOPMENT II
24654	(D COMPONENT) MEDICAL LAB TECHNICIAN II
24655	(D COMPONENT) MILK AND MILK PRODUCTS II
AECC-III	ENVIRONMENTAL AWARENESS
AECC-IV (A)	LANGUAGE - ENGLISH
AECC-IV (B)	LANGUAGE - MARATHI
AECC-IV (C)	LANGUAGE - HINDI
AECC-IV (D)	LANGUAGE - ARABIC FUNCTIONAL
AECC-IV (E)	LANGUAGE - SANSKRIT
BO 241	Plant Anatomy and Embryology
BO 242	Plant Biotechnology
BO 243	Practical based on BO 241 & BO 242
CH-401	Physical and Analytical Chemistry
CH-402	Inorganic and Organic Chemistry
CH-403	Chemistry Practical - IV
CHNA-331	NETWORKING FUNDAMENTALS
CHNA-332	MICROPROCESSOR & INTERFACING - II
CHNA-333	CHNA LAB-IB
DS401	INTERNATIONAL SECURITY
DS402	DEFENCE ECONOMICS
DS403	DEFENCE JOURNALISM
EL-241	Analog Circuit Design
EL-242	Microcontroller and Python programming
EL-243	Practical Course
EVS-241	Biological Diversity & its Conservation
EVS-242	Environmental Pollution Control Technology
EVS-243	Practical Course Based on EVS - 241 & EVS - 242
GG 241	Environmental Geography-II
GG 242	Geography of Maharashtra (Human)-II
GG 243	Surveying-II
GL 221	Global Tectonics and Geodynamics of the lithosphere
GL 222	Environmental Geology and Geogenic disasters
GL 223	Practicals related to GL 221 & 222
IMB 221	MICROBIAL FERMENTATION PROC.& DOWNSTREAM PROC.ING
IMB 222	QUALITY ASSURANCE IN INDUSTRIAL PRODUCT
IMB 223	PRACTICALS BASED ON IMB221 & IMB222
MB 241	Bacterial Genetics
MB 242	Air, water and soil microbiology
MB 243	Practical based on MB 241 and MB 242
MT-241	Linear Algebra
MT-242(A)	Vector Calculus
MT-242(B)	Dynamical Systems
MT-243	Mathematics Practical based on MT - 241 and MT-242
NS-241	Organic and polymer science of nanomaterials
NS-242	Advanced Techniques for Characterization of Nanomaterials
NS-243	Nanoscience and Nanotechnology Laboratory-2B
PHY-241	Oscillations, waves and Sound
PHY-242	Optics
PHY-243	Physics Laboratory-2B
PSY-241	HEALTH PSYCHOLOGY
PSY-242	PSYCHOLOGICAL TESTING & APPLICATION
PSY-243	PSYCHOLOGY PRACTICAL : TESTS AND GROUP TESTING

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ST 2.4	VOC	Vegetable Seed Production
ST 2.5	VOC	Seed Quality Control
ST 2.6	VOC	Practicals based on ST 2.4 and ST 2.5
ST-241		Tests of Significance And Statistical Methods
ST-242		Sampling Distributions And Exact tests
ST-243		Statistics Practical
VBT-221		Genetic Engineering
VBT-222		Bioinformatics
VBT-223		Lab Course IV: Practical in Genetic Engineering & Bioinformatics
VOC-EEM-241		Basic level maintenance of home and community equipment
VOC-EEM-242		Computer based electronic equipment design
VOC-EEM-243		Practical course-IV
ZO-241		Animal Diversity IV
ZO-242		Applied Zoology II
ZO-243		Zoology Practical Paper

## SAVITRIBAI PHULE PUNE UNIVERSITY

(FORMERLY UNIVERSITY OF PUNE)

24-May-2025

PUNE-411 007

BACHELOR OF SCIENCE ((REV. 2019))

College Ledger(April-2025)

PunCode :CAAP010490 College :[0164] SAMAJBHUSHAN BABURAO ALIAS APPASAHEB JEDHE ARTS,  
COMMERCE AND SCIENCE COLLEGE, PUNE  
Branch : Not applicable(NA)

	INT	EXT	PR	PR	Tot	Crd	Ern	Grd	Grd	Crd
Min	006	014	014	020			Crd		Pnt	Pnt
Max	015	035	035	050						

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PRN: 1172205687 SEAT NO.: 63680 NAME: SHINDE SAKSHI RAJESH Mother - SONALI  
SEMESTER: 3

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|-------------|-------|-------|-------|-----|-----|-----|---|----|---|-----|
| AECC-I      | P 013 | P 023 | ---   | --- | 036 | 2   | 2 | A  | 8 | 16  |
| AECC-II (A) | P 006 | P 024 | ---   | --- | 030 | 2   | 2 | A  | 8 | 16  |
| BO-231      | P 011 | P 017 | ---   | --- | 028 | 2   | 2 | B+ | 7 | 14  |
| BO-232      | P 013 | P 023 | ---   | --- | 036 | 2   | 2 | A  | 8 | 16  |
| BO-233      | P 007 | ---   | P 027 | --- | 034 | 2   | 2 | A  | 8 | 16  |
| CH-301      | P 007 | * 008 | ---   | --- | 015 | FFF | 2 | 0  | F | 0 0 |
| CH-302      | P 011 | * 024 | ---   | --- | 035 | 2   | 2 | A  | 8 | 16  |
| CH-303      | P 008 | ---   | P 018 | --- | 026 | 2   | 2 | B  | 6 | 12  |
| MB-231      | P 014 | P 018 | ---   | --- | 032 | 2   | 2 | A  | 8 | 16  |
| MB-232      | P 009 | * 014 | ---   | --- | 023 | 2   | 2 | C  | 5 | 10  |
| MB-233      | P 011 | ---   | P 023 | --- | 034 | 2   | 2 | A  | 8 | 16  |

Third Semester SGPA : ----- Credits Earned/Total : 20/22 Total Credit Points: 148

SEMESTER: 4

|             |       |       |       |     |     |     |   |    |   |     |
|-------------|-------|-------|-------|-----|-----|-----|---|----|---|-----|
| AECC-III    | * 010 | * 027 | ---   | --- | 037 | 2   | 2 | A  | 8 | 16  |
| AECC-IV (A) | * 011 | * 021 | ---   | --- | 032 | 2   | 2 | A  | 8 | 16  |
| BO 241      | * 014 | * 019 | ---   | --- | 033 | 2   | 2 | A  | 8 | 16  |
| BO 242      | * 011 | * 026 | ---   | --- | 037 | 2   | 2 | A  | 8 | 16  |
| BO 243      | * 012 | ---   | * 026 | --- | 038 | 2   | 2 | A+ | 9 | 18  |
| CH-401      | * 009 | * 004 | ---   | --- | 013 | FFF | 2 | 0  | F | 0 0 |
| CH-402      | * 013 | * 010 | ---   | --- | 023 | FFF | 2 | 0  | F | 0 0 |
| CH-403      | * 012 | ---   | * 023 | --- | 035 | 2   | 2 | A  | 8 | 16  |
| MB 241      | * 009 | * 014 | ---   | --- | 023 | 2   | 2 | C  | 5 | 10  |
| MB 242      | * 014 | * 024 | ---   | --- | 038 | 2   | 2 | A+ | 9 | 18  |
| MB 243      | * 013 | ---   | * 027 | --- | 040 | 2   | 2 | A+ | 9 | 18  |

Fourth Semester SGPA : ----- Credits Earned/Total : 18/22 Total Credit Points: 144

Second Year Result : Fail A.T.K.T. Total Credits Earned : 38/44

First Year Credits Earned : 44 Total Credit Points: 365

MEDIUM OF INSTRUCTION: ENGLISH

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Total Appeared Students: 00001  
 Number of students passed: 00000  
 Number of students with ATKT: 00001  
 Number of students passed+ATKT: 00001  
 Number of students failed: 00000  
 Number of students reserved: 00000  
 Passing percentage: 000.00 %  
 Passing+ATKT percentage: 100.00 %