

Adv. M. N. Deshmukh Arts, Science and Commerce College Rajur

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Faculty of Science

| Sr.No | Faculty | Class | Sem | Subject Code | Subject Name |
|-------|---------|----------|-----|-----------------------|--------------------------------------|
| 3 | Science | F.Y.B.Sc | I | PHY-111 | Mechanics & Properties of Matter |
| | | | | PHY-112 | Physics Principles & Applications |
| | | | | PHY-113 | Physics Laboratory-IA |
| | | | | CH-101 | Physical Chemistry |
| | | | | CH-102 | Organic Chemistry |
| | | | | CH-103 | Chemistry Practical-I |
| | | | | MT-111 | Algebra |
| | | | | MT-112 | Calculus-I |
| | | | | MT-113 | Mathematics Practical |
| | | | | BO-111 | Plant life & utilization I |
| | | | | BO-112 | Plant morphology & Anatomy |
| | | | | BO-113 | Practical based on BO-111 & 113 |
| | | | | ZO-111 | Animal Diversity I |
| | | | | ZO-112 | Animal Ecology |
| | | | | ZO-113 | Zoology Practical Paper |
| | | II | II | PHY-121 | Heat & Thermodynamics |
| | | | | PHY-122 | Electricity & Magnetism |
| | | | | PHY-123 | Physics Laboratory-IB |
| | | | | CH-201 | Inorganic Chemistry |
| | | | | CH-202 | Organic Chemistry |
| | | | | CH-203 | Chemistry Practical-I |
| | | | | Analytical Geometry | Analytical Geometry |
| | | | | Calculus-II | Calculus-II |
| | | | | Mathematics Practical | Mathematics Practical |
| | | | | BO-121 | Plant life & utilization II |
| | | S.Y.B.Sc | III | BO-122 | Principles of plant science |
| | | | | BO-123 | Practical based on BO-121 & 122 |
| | | | | ZO-121 | Animal Diversity II |
| | | | | ZO-122 | Cell Biology |
| | | | | ZO-123 | Zoology Practical Paper |
| | | | | PHY-231 | Mathematical methods in Physics |
| | | | | PHY-232A | Electronics -I |
| | | | | PHY-233 | Physics Laboratory-2A |
| | | | | CH-301 | Physical & Analytical Chemistry |
| | | | | CH-302 | Inorganic & Organic Chemistry |
| | | | | CH-303 | Chemistry Practical-III |
| | | | | MT-231 | Calculus of several variables |
| | | | | MT-232A | Numerical methods & its applications |
| | | | | MT-233 | Mathematics Practical |
| | | | | BO-231 | Botany Theory Paper-I |
| | | | | BO-232 | Botany Theory Paper-II |
| | | | | BO-233 | Botany Paper-III |

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| | | | | ZO-231 | Animal Diversity- III |
| | | | | ZO-232 | Applied Zoology- I |
| | | | | ZO-233 | Zoology Practical Paper |
| T.Y.B.Sc (Physics) | V | IV | PHY-241 | Oscillations, waves & sound | |
| | | | PHY-242 | Optics | |
| | | | PHY-123 | Physics Laboratory-2B | |
| | | | CH-401 | Physical & Analytical Chemistry | |
| | | | CH-402 | Inorganic & Organic Chemistry | |
| | | | CH-403 | Chemistry Practical-IV | |
| | | | MT-241 | Linear Algebra | |
| | | | MT-242A | Vector Calculus | |
| | | | MT-243 | Mathematics Practical based on 241, 242 | |
| | | | BO-121 | Botany Theory Paper-1 | |
| | | | BO-122 | Botany Theory Paper-2 | |
| | | | BO-123 | Botany Paper-IV | |
| | | | ZO-241 | Animal Diversity- IV | |
| | | | ZO-242 | Applied Zoology- II | |
| | | | ZO-243 | Zoology Practical Paper | |
| T.Y.B.Sc (Chem) | V | V | PHY-351 | Mathematical methods in Physics-II | |
| | | | PHY-352 | Electrodynamics | |
| | | | PHY-353 | Classical Mechanics | |
| | | | PHY-354 | Atomic & Molecular Physics | |
| | | VI | PHY-355 | Computational Physics | |
| | | | PHY-356-D (Elective-I) | Renewable Energy Sources-I | |
| | | | PHY-357 | Physics Laboratory- 3A | |
| | | | PHY-358 | Physics Laboratory- 3B | |
| | | | PHY-359 | Project- I | |
| | | | PHY-3510-G | Python Programming | |
| | | VI | PHY-3511-N | Acoustics Applications | |
| | | | PHY-361 | Solid State Physics | |
| | | | PHY-362 | Quantum Mechanics | |
| | | | PHY-363 | Thermodynamics & Statistical Physics | |
| | | | PHY-364 | Nuclear Physics | |
| | | | PHY-365-A | Electronics-II | |
| | | | PHY-366-R | Lasers | |
| | | | PHY-367 | Physics Laboratory- 4A | |
| | | | PHY-368 | Physics Laboratory- 4B | |
| | | | PHY-369 | Project- II | |
| | | | PHY-3610-V | Solar PV System: Installation, Repairing and Maintance | |
| | | | PHY-3611-Z | Instrumentation for Agriculture | |
| T.Y.B.Sc (Chem) | V | CH-501 | Physical Chemistry- I | | |
| | | CH-502 | Analytical Chemistry- I | | |
| | | CH-503 | Physical Chemistry Practical- I | | |
| | | CH-504 | Inorganic Chemistry- I | | |
| | | CH-505 | Industrial Chemistry | | |

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| | | | | | CH-506 | Inorganic Chemistry Practical- I |
| | | | | | CH-507 | Organic Chemistry- I |
| | | | | | CH-508 | Chemistry of Biomolecules |
| | | | | | CH-509 | Organic Chemistry Practical- I |
| | | | | | CH-510 B | Polymer Chemistry |
| | | | | | CH-511 A | Environmental Chemistry |
| | | | VI | | CH-601 | Physical Chemistry- II |
| | | | VI | | CH-602 | Physical Chemistry- III |
| | | | VI | | CH-603 | Physical Chemistry Practical- II |
| | | | VI | | CH-604 | Inorganic Chemistry- II |
| | | | VI | | CH-605 | Inorganic Chemistry- III |
| | | | VI | | CH-606 | Inorganic Chemistry Practical- II |
| | | | VI | | CH-607 | Organic Chemistry- II |
| | | | VI | | CH-608 | Organic Chemistry- III |
| | | | VI | | CH-609 | Organic Chemistry Practical- II |
| | | | VI | | CH-610 B | Introduction of Forensic Chemistry |
| | | | VI | | CH-611 A | Analytical Chemistry- II |
| | T.Y.B.Sc (Botany) | V | | | BO-351 | Algae and Fungi |
| | T.Y.B.Sc (Botany) | V | | | BO-352 | Archegoniate |
| | T.Y.B.Sc (Botany) | V | | | BO-353 | Spermatophyta & Paleobotany |
| | T.Y.B.Sc (Botany) | V | | | BO-354 | Plant Ecology |
| | T.Y.B.Sc (Botany) | V | | | BO-355 | Cell & Molecular Biology |
| | T.Y.B.Sc (Botany) | V | | | BO-356 | Genetics |
| | T.Y.B.Sc (Botany) | V | | | BO-357 | Practical based on BO-351 and BO-352 |
| | | | | | BO-358 | Practical based on BO-353 and BO-354 |
| | | | | | BO-359 | Practical based on BO-355 and BO-356 |
| | | | | | BO-3510 | Medicinal Botany |
| | | | | | BO-3511 | Plant Diversity & Human Health |
| | | VI | | | BO-361 | Plant Physiology |
| | | VI | | | BO-362 | Biochemistry |
| | | VI | | | BO-363 | Plant Pathology |
| | | VI | | | BO-364 | Evolution & Population Genetics |
| | | VI | | | BO-365 | Advanced Plant Biotechnology |
| | | VI | | | BO-366 | Plant Breeding & Seed Technology |
| | | VI | | | BO-367 | Practical based on BO-361 and BO-362 |
| | | VI | | | BO-368 | Practical based on BO-363 and BO-364 |
| | | VI | | | BO-369 | Practical based on BO-365 and BO-366 |
| | | VI | | | BO-3610 | Nursery & Gardening Management |
| | | VI | | | BO-3611 | Biofertilizers |
| | T.Y.B.Sc (Zoology) | V | | | ZO-351 | Pest Management |
| | T.Y.B.Sc (Zoology) | V | | | ZO-352 | Histology |
| | T.Y.B.Sc (Zoology) | V | | | ZO-353 | Biological Chemistry |
| | T.Y.B.Sc (Zoology) | V | | | ZO-354 | Genetics |
| | T.Y.B.Sc (Zoology) | V | | | ZO-355 | Developmental Biology |

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| | | | | ZO-356 | Parasitology |
| | | | | ZO-357 | Zoology Practical Paper-1 |
| | | | | ZO-358 | Zoology Practical Paper-2 |
| | | | | ZO-359 | Zoology Practical Paper-3 |
| | | | | ZO-3510 | Aquarium Management |
| | | | | ZO-3511 | Poultry Management |
| | | | VI | ZO-361 | Medical & Forensic Zoology |
| | | | | ZO-362 | Animal Physiology |
| | | | | ZO-363 | Molecular Biology |
| | | | | ZO-364 | Entomology |
| | | | | ZO-365 | Techniques in Biology |
| | | | | ZO-366 | Evolutionary Biology |
| | | | | ZO-367 | Zoology Practical Paper-1 |
| | | | | ZO-368 | Zoology Practical Paper-2 |
| | | | | ZO-369 | Zoology Practical Paper-3 |
| | | | | ZO-3610 | Environmental Impact Assessment |
| | | | | ZO-3611 | Project |
| | | M.Sc.I (Botany) | I | 40111 | Botany Theory Paper-I Plant Systematics-I |
| | | | | 40112 | Botany Theory Paper-II Cell Biology |
| | | | | 40113 | Botany Theory Paper-III Cytogenetics, Plant Breeding & Evolution |
| | | | | 40114P | Botany Practical Paper-4 based of BODT-114 |
| | | | | 40114T(B) | Botany Theory Paper-4B Pomoculture & Food Process |
| | | | | 40115 | Botany Practical Paper based on BOUT 111, BOUT 112 & BOUT 113 A |
| | | | II | 40191 | Human Rights-I |
| | | | | 40192 | Introduction to Cyber Security-I |
| | | | | 40211 | Botany Theory Paper-1 Plant Systematics-II |
| | | | | 40212 | Botany Theory Paper-2 Molecular Biology |
| | | | | 40213 | Botany Theory Paper-3 Biochemistry |
| | | | | 40214P | Botany Practical Paper-4 based on BODT- 124 |
| | | | | 40214T(A) | Botany Practical Paper-4 (A) Floriculture & Nursery Management OR (B) Mushroom Cultivation & BiopesticideTechnology |
| | | | | 40215 | Botany Practical Paper based on BOUT 121, BOUT 122 & BOUT 123 |
| | | | | 40291 | Human Rights-II |
| | | | | 40292 | Introduction to Cyber Security-II |
| | | M.Sc.II (Botany) | III | 40321 | Botany Theory Paper-1 Computational Botany |

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| | | | | | 40322 | Botany Theory Paper-2 Developmental Botany |
| | | | | | 40323 | Botany Theory Paper-3 Plant Physiology |
| | | | | | 40324F | Botany Theory Paper-4 Seed Science |
| | | | | | 40325 | Botany Practical Paper based on BODT 234 |
| | | | | | 40326 | Botany Practical Paper based on BOUT 232 |
| | | | | | 40392 | Introduction to Cyber Security-III |
| | | | | | 40394 | Skill Development-I |
| | | | | | 40395 | Introduction to Constitution |
| | | | IV | | 40421 | Botany Theory Paper-1 Botanical Techniques |
| | | | | | 40422 | Botany Theory Paper-2 Advanced Ecology |
| | | | | | 40423B | Botany Theory Paper-3 Advanced Medicinal Botany |
| | | | | | 40424 | Botany Practical Paper based on BODT-243 |
| | | | | | 40425B | Botany Theory Paper-4 Herbal Technology |
| | | | | | 40426 | Botany Practical Paper based on BODT-244 |
| | | | | | 40428 | Botany Practical Paper based on BOUT-241 & BOUT-242 |
| | | | | | 40492 | Introduction to Cyber Security-IV |
| | | | | | 40494 | Skill Development-II |
| | M.Sc.I (Org.chem) | I | | | 33121 | CHP-110: Physical Chemistry-I |
| | | | | | 33122 | CHI-130: Inorganic Chemistry-I |
| | | | | | 33123 | CHO-150: Organic Chemistry-I |
| | | | | | 33124C | CHA-190 (C) Introduction to Chemical Biology-I |
| | | | | | 33125A | CHA-190 (A) Inorganic Chemistry- Material analysis, synthesis & applications |
| | | II | | | 33126 | CHP-107: Basic Practical Chemistry-I |
| | | | | | 33191 | Human Rights-I |
| | | | | | 33192 | Introduction to Cyber Security -IS |
| | | | | | 33221 | CHP-210: Physical Chemistry-II |
| | | | | | 33222 | CHI-230: Inorganic Chemistry-II |
| | | | | | 33223 | CHO-250: Organic Chemistry-II |
| | | | | | 33224B | CHG-290 (B) Organometallic & Inorganic Reaction Mechanism |
| | | | | | 33225A | CHG-290 (A) Electroanalytical Techniques of Analysis |
| | | | | | 33226 | CHP-227: Basic Practical Chemistry-II |
| | | | | | 33291 | Human Rights-II |
| | | | | | 33292 | Introduction to Cyber Security-II |
| | M.Sc.II | III | | | 33321 | CHO-350: Organic Reaction |

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| | | (Org.che m) | | | Mechanism & Biogenesis |
| | | | 33322 | | CHO-351: Structure Determination of Organic Compounds |
| | | | 33323 | | CHO-352: Stereochemistry & Assymetric Synthesis of... |
| | | | 33324 | | CHO-353A: Protection-Deprotection, Chiron Approach & C... |
| | | | 33325 | | CHO-354: Practical-I Solvent free Organic Synthesis |
| | | | 33392 | | Introduction to Cyber Security-III |
| | | | 33394 | | Skill Development-I |
| | | | 33395 | | Introduction to Constitution |
| | | IV | 33421 | | CHO-450: Chemistry of Natural Products |
| | | | 33422 | | CHO-451: Organometallic Reagents in Organic Synthesis |
| | | | 33423A | | CHO-452 A: Medicinal Chemistry |
| | | | 33424B | | CHO-453 B: Carbohydrates Synthesis & Isolation of Nat... |
| | | | 33424C | | CHO-453 C: Project/Industrial Training/Internships,Sum... |
| | | | 33425 | | CHO-454: Practical-II Convergent & Divergent Organics |
| | | | 33492 | | Introduction to Cyber Security-IV |
| | | | 33494 | | Skill Development-II |