



Shiksha Mandal's
Bajaj College of Science, Wardha

Department of Biotechnology
Departmental Teaching Plan

B.Sc. Sem I, III and V

Session 2023-24



Name of Faculty	Semester	Theory/ Practical/Remedial/ Group Project/ Seminar	Units Allotted/Batches Allotted	Number of Lectures allotted per week
Dr. Kunal A. Kale	B.Sc. Sem I	Theory	Unit I	1 Lectures/ Week
	B.Sc. Sem III	Theory	Unit II and III	2 Lectures/ Week
	B.Sc. Sem V	Theory	Unit III, IV and VI	1 Lectures/ Week
	B.Sc. Sem I	GE Theory	Unit I, II and III	2 Lectures/ Week
	B.Sc. Sem V	Practical	Batch F9, F10, and F11	04 Lectures/ Week
Ms. Komal S. Dhumane	B.Sc. Sem I	Theory	Unit III and IV	1 Lectures/ Week
	B.Sc. Sem III	Theory	Unit I and VI	1 Lectures/ Week
	B.Sc. Sem V	Theory	Unit I, II and VI	2 Lectures/ Week
	B.Sc. Sem III	Practical	Batch S9, S10 and S11	8 Lectures/ Week
Ms. Pallavi B. Rode	B.Sc. Sem I	Theory	Unit II, V and VI	2 Lectures/ Week
	B.Sc. Sem III	Theory	Unit IV and V	1 Lectures/ Week
	B.Sc. Sem V	Theory	Unit V	1 Lectures/ Week
	B.Sc. Sem I	Practical	B.Sc. Sem I	4 Lectures/ Week

Dr. Ulka A. Malode-Bidwai
Co-ordinator,
Dept. of Biotechnology
Bajaj College of Science, Wardha



Shiksha Mandal's
Bajaj College of Science, Wardha
Department of Biotechnology
Departmental Teaching Plan
B.Sc. Sem II, IV and VI
Session 2023-24



Name of Faculty	Semester	Theory/ Practical/Remedial/ Group Project/ Seminar	Units Allotted/Batches Allotted	Number of Lectures allotted per week
Dr. Kunal A. Kale	B.Sc. Sem II	Theory	Unit I	1 Lectures/ Week
	B.Sc. Sem IV	Theory	Unit I, II	1 Lectures/ Week
	B.Sc. Sem VI	Theory	Unit II and III	2 Lectures/ Week
	B.Sc. Sem VI	Practical	F9, F10 and F11	4 Lectures/ Week
	B.Sc. Sem II	GE Theory	Unit I, II and III	2 Lectures/ Week
Ms. Komal S. Dhumane	B.Sc. Sem II	Theory	Unit V and VI	1 Lectures/ Week
	B.Sc. Sem IV	Theory	Unit III, IV and V	2 Lectures/ Week
	B.Sc. Sem VI	Theory	Unit I and V	1 Lectures/ Week
	B.Sc. Sem IV	Practical	S9, S10 and S11	8 Lectures/ Week
Ms. Pallavi B. Rode	B.Sc. Sem II	Theory	Unit II, III and IV	2 Lectures/ Week
	B.Sc. Sem IV	Theory	Unit VI	1 Lectures/ Week
	B.Sc. Sem VI	Theory	Unit IV and VI	1 Lectures/ Week
	B.Sc. Sem II	Practical	B.Sc. Sem II	4 Lectures/ Week

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Department of Physics

Teaching Plan for UG (2023-24)

Name of Faculty: Sanjay H Bagade

Odd Semester				
SN	Semester	Paper & Unit	Duration	Topics
1	Sem-V	Physics Unit-I	20 / 06 / 2023 to 10 / 08 / 2023	Quantum Mechanics-I: Introduction to Quantum Mechanics, Failure of classical mechanics, photoelectric effect, Compton effect, de Broglie hypothesis, Davisson and Germer experiment, group velocity and phase velocity, Heisenberg's uncertainty relation, Gamma Ray thought experiment
	Sem-V	Physics Unit-II	11 / 08 / 2023 to 30 / 09 / 2023	Nuclear Physics-I: LINAC, Cyclotron, G M Counter, Bainbridge mass spectrograph, Nucleus, mass defect and binding energy, nuclear reactions, Nuclear fission, Chain Reaction, Nuclear fusion, nuclear reactions, solar cycles
	Sem-V	Physics Unit-III	01 / 10 / 2023 to 15 / 11 / 2023	Relativity: Frame of reference, Inertial and non-Inertial frames, Michelson Morley Experiment, Lorentz transformation, Length contraction, time dilation, velocity addition theorem, mass energy equivalence, Rest mass of photon
2	Even Semester			
	Sem-VI	Physics Unit-I	01 / 01 / 2024 to 30 / 01 / 2024	Quantum Mechanics-II: Schrodinger's equation, Time dependent and time independent equation, operators, Eigen value, Normalized and Orthonormal Wavefunctions free particle in one dimensional box and three dimensional box, Degenerate and non-degenerate energy states.
	Sem-VI	Physics Unit-II	01 / 02 / 2024 to 28 / 02 / 2024	Nuclear Physics-II: Radioactivity, Law of Radioactive Decay, Half life and Average life, Alpha Decay, Geiger Nuttal law, Range and Energy of Alpha particles, Gamow's theory of Alpha decay, Beta Decay, Gamma Decay, Pauli's Neutrino hypothesis

	Sem-VI	Physics Unit-IV	01 / 03 /2024 to 30 / 03 / 2024	Op-Amp and Oscillators: Multistage Amplifiers, Difference amplifiers, Op-Amp Parameters, Application of Op- Amp: OP-Amp in inverting and non- inverting mode Op-Amp as adder, Subtractor, Inttttintegrator and differentiator, Concept of Feedback, Barkhausen criteria, Hartley oscillators, Colpitts oscillator,
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