









SHIKSHA MANDAL'S



BAJAJ COLLEGE OF SCIENCE

(Formerly Known as Jankidevi Bajaj College of Science)
An Autonomous College Affiliated to RTM Nagpur University

Jamnalal Bajaj Marg, Civil Line, Wardha - 442001 (M.S.) Phone (Office): 07152 - 241696, Fax: 07152-230515

E-mail: jbsciencewardha@yahoo.co.in / Website: jbsw.shikshamandal.org





Parent Organization Shiksha Mandal

Shiksha Mandal is a century-old institution based at Wardha, the undeclared capital of pre-independence India. Founded by Shri Jamnalal Bajaj, it was deeply influenced by freedom struggle and Gandhiji. Its faculty and students were involved in the freedom movement and one of its institutions was closed by the British. The Nation's first education conference was held in Shiksha Mandal in 1937 and was presided over by Gandhiji. Shiksha Mandal carries on its work of providing quality education, steeped in nationalistic ethos and human values, at an affordable cost. Most of its institutions are affiliated to R. T. M. Nagpur University. Six of its seven institutions are aided by the Government and one upcoming engineering college will be affiliated to Dr. Babasaheb Ambedkar Technological University, (BATU), Lonere. Shri Rahul Bajaj, Chairman, Bajaj Auto Ltd., is its current President. Recently our Management has been honoured with "Ideal Educational Institution Award" from R.T.M. Nagpur University, Nagpur. Eminent Alumni includes Late Shri Madhukar Chaudhary (Ex-Speaker of Maharashtra), Shri Harish Salve and Shri Nitin Gadkari to name a few.

Contact us: Phone: 07152-230506, 230507/Email: shikshamandal@gmail.com



Shri. Rahulji Bajaj President, Shiksha Mandal

INSTITUTES RUN BY SHIKSHA MANDAL

Bajaj College of Science, Wardha

(Formerly known Jankidevi Bajaj College of Science) (Autonomous College - Affiliated to RTMNU) Accredited 'A' grade by NAAC Jamnalal Bajaj Marg, Civil Line, Wardha - 442001 (M.S.)

Jamnalal Bajaj Marg, Civil Line, Wardha - 442001 (M.S.) Ph/Fax : 07152-230515 / E-mail : jbsciencewardha@yahoo.co.in

G. S. College of Commerce & Economics, Nagpur (Autonomous College - Affiliated to RTMNU)

Civil Lines, Amravati Road, Nagpur -440001. Tel -0712-2531760 Fax - 0712-2528747 E-mail: gscollegenagpur@rediffmail.com

G. S. College of Commerce, Wardha

Jamnalal Bajaj Marg, Civil Lines, Wardha-442001 Phone: 07152-230511

E-Mail: gscc_wardha@rediffmail.com

Acharya Shrimannarayan Polytechnic, Wardha

Arvi Road, Pipri, Wardha- 442001 Tel.: 07152-230519, 230520, 230049 E-Mail: astsw@rediffmail.com

Shrikrishnadas Jajoo Grameen Seva Mahavidyalaya, Wardha

Arvi Road, Pipri, Wardha - 442001

Tel.: 07152-230518

Email: info@shikshamandal.org

Department of Management Sciences and Research, Nagpur

(G S College of Commerce and Economics, Nagpur) Amravati Road, Nagpur-440010 Maharashtra, India. Tel.: +91. 712-2544950 Fax: +91. 712-2528124 Email:gsdmsr@rediffmail.com.gsdmsr@gmail.com

Department of Advanced Management Studies, Wardha

(G. S. College of Commerce, Wardha) Jamnalal Bajaj Marg, Civil Lines, Wardha-442001 Phone: 07152-230511 / E-Mail: gscc_wardha@rediffmail.com

Ramkrishna Bajaj College of Agriculture, Wardha

Arvi Road, Pipri, Wardha - 442001

Tel.: 07152-231840 / Email: rbcapipri@gmail.com

Bajaj Institute of Technology, Wardha

Arvi Road, Opposite Ramkrishna Bajaj College of Agriculture, Pipri, WARDHA: 442 001 / Tel.: 07152-255770 Fax: 07152-230507 Email: bit@shikshamandal.com / Web: www.bitshikshamandal.org



Shri. Sanjayji Bhargava Chairman, Shiksha Mandal

AUTONOMY: THE QUEST FOR EXCELLENCE

Shiksha Mandal is a pioneering institution. We believe it is the responsibility of good institutions to continually improve themselves and do what is good and right for its students. In the 1940s we started Commerce education in Hindi and Marathi to make it accessible to a larger section of society. Since then all our institutions consider it their obligation to continually develop.

From this year Jankidevi Bajaj College of Science has been rechristened Bajaj College of Science. Shiksha Mandal is a Bajaj educational trust and it would be beneficial for our colleges if they bear the Bajaj name. The name stands for enduring values of ethics, quality, nationalism and social commitment. Jankideviji would continue to inspire us and her spirit guide us. But the world of tomorrow needs change, and we will continually evolve but stay rooted in our core values.

Autonomy has been the next step in adding higher value to our students. It is Shiksha Mandal policy. Bajaj College of Science, maintaining its tradition of being a pioneer within Shiksha Mandal, has received University Grants Commission approval for becoming an Autonomous College from the 2017-18 session, the first such College under RTM Nagpur University. It is only appropriate that the second grant college to become Autonomous in Vidarbha too is from our stable, viz. GS College of Commerce & Economics, Nagpur. I have to compliment the Principal & faculty of Bajaj College of Science, for working so hard to make it work. The feedback from students about it is consistently positive.

Autonomy has allowed us to upgrade the syllabus and make our students better suited for their careers. More importantly, the examination system has been of high quality in the quality of its questions and assessment. Control over examinations also shortens the time spent on examinations and increase the academic input; and more importantly allows results to be announced well in time.

There were apprehensions that Autonomy would lead to dilution of academic standards and sharply increased fees. In our case neither has happened.

By opting for Autonomy, we have subjected ourselves to some legitimately high standards of accountability. With the moral and professional integrity of our own faculty, we wish to place this institution on par with the most sought- after autonomous ones in the country for the sheer employability of their students.

Our Inspiration The Late Mata Jankidevi Bajaj, Padma Vibhushan (1893 - 1979)

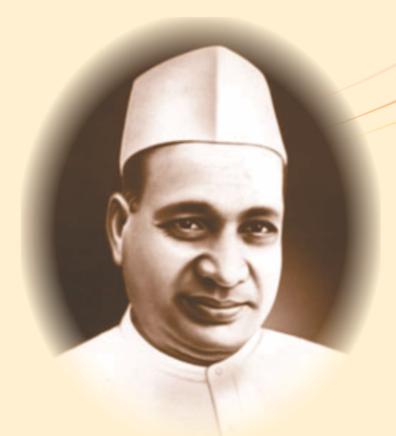


Jankidevi was as much a persona in her own right, as she was a dedicated wife to Jamnalalji. She didn't think twice before giving up her luxurious lifestyle when Jamnalalji adopted the Gandhian way of life. In the fight for her motherland's freedom, she even discarded foreign clothes and took to *swadeshi* and *khadi*. A progressive woman in thought, Jankidevi opposed orthodox customs of parda and untouchability and worked towards the upliftment of women.

After Jamnalalji's demise, and at the insistence of Gandhiji, Jankideviji committed herself to the cause of Go-seva becoming the President of the Goseva Sangh. She actively took part in Vinoba Bhave's 'Bhoodan' movement i.e. donation of land for the landless. Her innovative mind gave the idea of koopdan and she sought donation of wells from house to house. A revolutionary in spirit, Jankidevi undertook padyatras with Vinoba Bhave and was also actively involved in the Bhoodan, Koopdan, Gram Seva and Go-seva movements in post-independence period.

In recognition of her lifelong work, the Government of India honoured her with the Padma Vibhushan in 1956. In 1980, the Jamnalal Bajaj Foundation instituted a special award in her memory for women who are selflessly contributing for the development and welfare of women and children. The aura of her name continues to inspire every individual on the campus to work with a high level of dedication and commitment.

Our Inspiration The Late Shri. Jamnalalji Bajaj (1889 - 1942)



History isn't created overnight. Enterprises aren't built in a day. It takes a visionary to lead a movement that profits the nation, a foresight followed by planning and years of perseverance. Shri Jamnalal Bajaj was one such visionary. His name is integral to the freedom struggle as well as to the Bajaj Group of Companies for sheer earnestness, single-minded commitment, depth and breadth of contribution and making words into deeds.

Humanitarian, freedom fighter, philanthropist, social reformer and a devoted Mahatma Gandhi follower, Jamnalalji was adopted as the fifth son by Gandhiji. He was the alter ego of the Mahatma in the Gandhian constructive movement. He took active part in the Indian freedom struggle. Jamnalalji also undertook pioneering work in the field of Goseva (cow protection), upliftment of the dalits, education of women, propagation of Hindi, spread of Khadi and the development of village industries.

As an industrialist and a businessman, Jamnalalji was singular in enunciating for himself a strict code of ethics. He earnestly tried to practice the Gandhian ethic in every sphere of his life – political, social, business and personal.

With the sole aim of nation building Jamnalalji established Shiksha Mandal in 1912. Deeply influenced by Gandhiji, the faculty and students of Shiksha Mandal were involved in freedom movement. In 1937, Gandhiji presided over nation's first educational conference at Shiksha Mandal. Following the footsteps of Shri. Jamnalalji Bajaj, Shiksha Mandal has progressed to such an extent that it has been honoured with "Ideal Educational Institution Award" by RTM Nagpur University, Nagpur.

Our Inspiration The Late Shri Kamalnayanji Bajaj (1915 - 1972)



In 1942, at the young age of 28, on the demise of Jamnalalji, his son Kamalnayanji took on the mantle of head of the group. Kamalnayan Bajaj wore many hats effortlessly in his lifetime - thinker, politician, philanthropist and entrepreneur. Raised under the inspirational umbrella of Gandhian principles and values inculcated by his guru Acharya Vinoba Bhave, he returned to India after studying at the University of Cambridge and put his heart into carrying forward the family business. At the same time he joined the fight against the British Raj alongside his mentor Mahatma Gandhi. He devoted himself not only to numerous social causes like education, medical care, famine and flood relief, but also to the promotion of Indian tradition in the form of art, crafts, literature and Ayurveda. He served as a MP from Wardha from 1952 to 1971.

As a member of the company's Board of Directors from 1946 to 1956 and Chairman from 1956 to 1970, he took the family business to the next level by branching out into manufacture of 2 & 3 wheelers, cement, electrical and ayurvedic products. He also started a travel agency.

Under his leadership Shiksha Mandal established the first Science College of Wardha District at Wardha, named after Mata Jankidevi Bajaj. Today, Jankidevi Bajaj College of Science, Wardha is a pioneer in many ways. It's the first college in Vidarbha & third in Maharashtra to get NAAC accreditation, the first science college in Vidarbha to be ranked in top 100 in the first NIRF ranking and the first science college in Vidarbha to receive Academic Autonomous Status.

At the Helm Dr. Om A. Mahodaya, Principal

To You Personally from me

Dear,

For all of us, 2020 is challenging year because of pandemic situation due to COVID-19. As a matter of fact, it is a taxing year specially for educational sector.

Another challenge we personally posses is the period ahead after the completion of three years of autonomy. There are n numbers of avenues of quality attainment during the path of autonomy. After successful established of autonomy in Bajaj College of Science during 1" Phase of 3 years, now we have to step in or direct ourselves towards more quality acquirement which could directly reflect the overall development of our stake holders. This is another testing time for us. It's a truth that the challenges are always precursors of the success. We have accepted this challenge too and obviously the success beneath this challenge will blossom. Student fraternity, cooperation is the main essence to fight all the challenges

coming across thee ducational

lourney.



We are in the realm of enthusiasm since last couple of years as we are now an autonomous institution. No doubt, we are facing some new challanges in its execution but in spite of them, we have applied certain crucial steps in smooth functioning of the autonomy and with the co-ordination among the staff and co-operation from the students, it seems that we have launched it successfully. Our collective efforts would definitely give fruits with respect to career building in science education.

Evidently it is seen when our students crack examinations like Joint admission test for M.Sc. (JAM) conducted by IIT/NIT, get selected for Indian National Science Academy (INSA) internships and INSPIRE fellowships. It is always a moment of our pride when our students go for the higher studies in the topmost national institutes.

Besides the classroom teaching, specific co-curricular and extracurricular activities are implemented to explore hidden talent among the students. Timely scheduled examination and time bound result declaration become soothing to the students.

We are proud to mention that Bajaj College of Science is surging ahead by entering into international level. We have been recognized in "Study in India" project run by MHRD, Government of India which enabled us to admit the overseas students. The student from Bangladesh is the first admission under it. Besides this, MHRD also have identified the institution as IIC as per norms of innovation cell. Undoubtedly ,we may encounter many more challenges in future but we are committed to face them with our integrity.

GOVERNING BODY MEMBERS

Number	Category	Nature	Name of the Member		
	F		Shri. Rahulji Bajaj President, Shiksha Mandal, Wardha. (Bajaj Auto Ltd., Akurdi, Pune – 35)		
5 Members	Management	Trust or management as per the constitution or byelaws, with the chairman or president/ director as the chairperson	Shri. Shekharji Bajaj Trustee, Shiksha Mandal, Wardha		
			Shri. Sanjay Bhargava Chairman, Shiksha Mandal, Wardha		
			Shri. P.D. Khemuka Joint Secretary, Shiksha Mandal, Wardha		
			Dr. C.D. Zanwar Member, Shiksha Mandal, Wardha		
2 Members Teachers of the		Nominated by the Principal based	Dr. S.S. Zade IQAC Co-ordinator and Head, Dept. of Mathematic,Bajaj College of Science, Wardha.		
2 Wellingers	College	on seniority by rotation	Dr. Miss. M.R. Chandrakar Head, Dept. of Zoology, Bajaj College of Science, Wardha.		
1 Member	Educationist or industrialist	Nominated by the management	Prof. Dr. W.N. Gade Ex. Vice Chancellor, Savitribai Phule PuneUniversity, PUNE		
1 Member	UGC Nominee	Nominated by the UGC	Dr. (Mrs) Seema Jain Former Principal, Dept. of English Raghunath Girls Post Graduate College, Western Kutchery Road, Meerut- 250 001.		
1 Member	University Nominee	Nominated by the University	Dr. S. R. Chaudhari Hon'ble Pro Vice Chancellor (Officiating) Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur – 440 033.		
1 Member	Principal of College	Ex-Officio	Dr. Om Mahodaya Principal, Bajaj College of Science, Wardha		
1 Member	Government Nominee	Government official			

ACADEMIC COUNCIL MEMBERS (2020 - 2021)

Sr. No.	Name of the Member	Designation
1	Dr. Om Mahodaya Principal, Jankidevi Bajaj College of Science, Wardha	Chairman
2	Dr. S.J. Charalwar Principal, Shri. Mathuradas Mohata Science College, Nagpur	Member RTM Nagpur University Nominee
3	Dr. Akhilesh Peshve Principal, Dharampeth M.P. Deo Smruti Science College, Nagpur	Member RTM Nagpur University Nominee
4	Dr. D.B. Malpe Professor, Department of Geology, R.T.M. Nagpur University, Nagpur	Member RTM Nagpur University Nominee
5	Dr. Mrs. Aruna Ashok Jain, Ram Nagar, Wardha	Member
6	Shri. Jagdish Chandak, Chartered Accountant, Wardha	Member
7	Dr. Rajendra M. Patrikar Professor, Head of the Department Centre for VLSI and Nanotechnology V.N.I.T., Nagpur	Member
8	Mr. Amitabh Sinha Nagpur	Member
9	Dr. V. V. Shinde Head, Dept of Electronics, Bajaj College of Science, Wardha	Member
10	Dr. V. M. Ghodki Associate Professor, Dept of Electronics, Bajaj College of Science, Wardha	Member
11	Dr. S. S. Zade Head, Dept of Mathematics, Bajaj College of Science, Wardha	Member
12	Dr. Mrs. S. S. Khandare Head, Dept of Microbiology, Bajaj College of Science, Wardha	Member
13	Dr. S. H. Bagade Head, Dept of Physics, Bajaj College of Science, Wardha	Member
14	Dr. P. V. Tekade Associate Prof., Incharge, Dept of Chemistry, Bajaj College of Science, Wardha	Member Secretary
15	Dr. P. F. Dhabarde Assistant Professor, Incharge, Dept of Botany, Bajaj College of Science, Wardha	Member
16	Dr. Miss. M. R. Chandrakar Head, Dept. of Zoology, Bajaj College of Science, Wardha	Member
17	Dr. U. A. Bidwai Co-ordinator, Department of Biotechnology, Bajaj College of Science, Wardha	Member
18	Dr. P. A. Saudagar Co-ordinator, Dept of Computer Science, Bajaj College of Science, Wardha	Member

GAINS FROM AUTONOMY

•	Student-centric approach	
•	More skillful teaching and learning	
•	Supportive learning environment to students	
•	Freedom to determine our own courses of study and syllabi	
•	Freedom to implement novel methods of conducting examinations and evaluation	
•	Inclusion of quality Internal assessment comprising of class test, MCQs, students' seminar	
•	Introduction of Instrumentation training course for students as a part of course work	
•	Improvement in teaching and learning process	
•	Timely Declaration of results	
•	Creating strong feedback system	
•	Enhanced Co-curricular and Extra Curricular Activities	
•	Projects for acquiring more practical knowledge	
•	Internship programme for meritorious students at National Institutes	

1. UNDERGRADUATE PROGRAMME: (BACHELOR OF SCIENCE)

PROGRAMMES	INTAKE CAPACITY
Mathematics Group	
A) Physics, Chemistry, Maths (PCM)	40
B) Physics, Electronics, Maths (PEM)	40
C) Physics, * Computer Science, Maths (PCsM)	20
D) Electronics, * Computer Science, Maths (ECsM)	20
Biology Group	
A) Chemistry, Botany, Zoology (CBZ)	60
B) Chemistry, Botany, Microbology (CBM)	40
C) Chemistry, Zoology, Microbology (CZM)	40
D) Chemistry, Botany, * Biotechnology (CBBt)	20
E) Chemistry, Zoology, * Biotechnology (CZBt)	20
F) Chemistry, Microbology, * Biotechnology (CMBt)	20

^{*} Self financed (Unaided Subjects)

2. POSTGRADUATE PROGRAMME: (MASTER OF SCIENCE)

PROGRAMMES	INTAKE CAPACITY
A) M.Sc. (Botany)	20
B) M.Sc. (Chemistry)	20
C) M.Sc. (Microbology)	20
D) M.Sc. (Zoology)	20

All P.G. programmes are self financed & runs on non-grant-basis

UPCOMING PROGRAMMES	INTAKE CAPACITY
A) M.Sc. (Mathematics)	20
B) M.Sc. (Computer Science)	20

3. DOCTORAL PROGRAMME: Ph.D.

SUBJECT	No. of Ph.D. SUPERVISORS
A) CHEMISTRY	4
B) BOTANY	2

4. CERTIFICATE COURSES for UG and PG STUDENTS

self financed add on courses	DEPARTMENT
A) Herbs and Herbal Products	Botany
B) Clinical Laboratory Technology	Microbiology

ADMISSION ELIGIBILITY

UNDERGRADUATE DEGREE PROGRAMME (B. Sc.)

For Admission in Semester I

A candidate for being eligible for admission to the three years integrated programme leading to the degree of Batchelor of Science (B.Sc.) must have passed the Higher Secondary School Certificate (H.S.C.) Examination conducted by Maharashtra State Board of Secondary and Higher Secondary Education with science subjects Physics, Chemistry, Biology, Mathematics & Statistics OR Geology OR Geography OR Economics OR Psychology.

OR The candidate must have passed an examination of another Board or University recognized as equivalent to H.S.C. Examination conducted by Maharashtra State Board of Secondary and Higher Secondary Education.

Essentials for Admission:

- Two recent passport sized photographs
- Original and two photocopies of School/College Leaving Certificate
- Original and three photocopies of H.S.C. marksheet
- Copy of caste certificate
- Copy of Non-creamylayer certificate (For OBC/NT/SBC) students
- Eligibility or Migration Certificate (For other Board/University)
- Gap Certificate (If necessary)
- Sports Certificate
- Maharashtra State Domicile Certificate (Failure to produce this, candidate will not be considered for any reservation)
- Affidavit on stamp paper of Rs. 100/- for Linguistic Hindi Minority students in following proforma given below.

Proforma of Affidavit to be Submitted by Linguistic Minority Students Only

महाविद्यालय में प्रथम प्रवेश के समय हिन्दी भाषी (हिन्दी मातृभाषा वाले) छात्र तथा उसके माता या पिता से लिये जानेवाले शपथपत्र का नमुना (₹ १००/- के स्टॅम्प पेपर पर)
मै
तथा मेरा पुत्र / पुत्री उम्र व्यवसाय रहवासी
शपथ पूर्वक कहते है कि हम हिन्दी भाषी है और जाति से है । तथा महाराष्ट्र में क्रमश: वर्ष और वर्ष से निवासी है।
हमारी मातृभाषा है। तथा हम और हमारा परिवार भाषा घर मे और व्यवहार मे उपयोग मे लाते है जो
भारत सरकार द्वारा घोषित ८ वे शेडयूल के पार्ट 'ए' मे उल्लेखित हिन्दी भाषा के अंतर्गत समाविष्ट है । हम हिन्दी भाषी है इसलिए यह
शपथ पत्र आज दिनांकको (शहर का नाम) मे किया है।
सत्यापन
मै —
एवं मेरा पाल्य — उम्र व्यवसाय — (दोनो का पता)
प्रतिज्ञापूर्वक सूचित करते कि उपरोक्त शपथ पत्र में लिखा हुआ मजमून हमारे कहे मुताबिक लिखा गया है । उसे हम दोनो ने पढकर देखा है । उपरोक्त जानकारी सत्य एवं सही है । यदि इसमें कोई अंतर आता है उस स्थिती में हम दोनो व्यक्तिगत रूप से और संयुक्त रूप से कानूनी तौर पर न्यायालयीन कार्यवाही के लिए जिम्मेदार रहेगें । अत: आज दिनांक को यह शपथपत्र लिख रहे है और इस शपथपत्र पर हस्ताक्षर किये है।
प्रतिज्ञापूर्वक सूचित करते कि उपरोक्त शपथ पत्र मे लिखा हुआ मजमून हमारे कहे मुताबिक लिखा गया है । उसे हम दोनो ने पढकर देखा है । उपरोक्त जानकारी सत्य एवं सही है । यदि इसमें कोई अंतर आता है उस स्थिती मे हम दोनो व्यक्तिगत रूप से और संयुक्त रूप से कानूनी तौर पर न्यायालयीन कार्यवाही के लिए जिम्मेदार रहेगें । अत: आज दिनांक को यह शपथपत्र लिख रहे है और इस शपथपत्र



- Visit Bajaj College of Science and obtain admission form and Prospectus OR Visit the college website http://jbsw.shikshamandal.org/ for admission form
- · Fill up the admission form carefully



- Attach the photo copies of leaving Certificate, HSC Marksheet, Gap Certificate, Affidevit for Minority, Caste Certificate, Ex-Servicemen Certificate, Physically handicapped Certificate, Sports Certificates, etc. (whichever applicable) to the admission form.
- Submit all these documents to the Admission Committee 2019-20, Bajaj College of Science, Civil Lines, Wardha (MS) - 442001 well before the last date.



- Merit list will be displayed on the notice board of the college.
- Note down the important dates and follow the instructions related to admission process



- If your name appears in the provisional list or merit list, report to the admission committee along with all necessary documents in original with THREE sets of photocopies of all these documents and three recent passport size color photograph on respective date.
- Wait in the admission hall till the announcement of your name.
- Submit the original documents for verification and further admission process*



- After successful verification of the original documents, fill the enrollment form.
- Visit to the admission in-charge, finalise your admission, pay the required fee.
- Get the admission receipt and report to the admission committee again for confirmation.
- Getyour College Roll number.



- Congratulations! You have made it to the Bajaj College of Science, Wardha.
- Get your uniform stiched.
- Attend the classes regularly.
- · Have a habit of daily visit to library.

^{*} At this stage, if any discrepancies are found, your application will be rejected and admission committee will not be responsible for the errors committed by you while filling up the form.

RESERVATION POLICY

- Being a Hindi Linguistic Minority College, 50% seats are reserved for Hindi speaking students domiciled in Maharashtra.
- Remaining 50% seats and Vacancies left in Hindi Linguistic Minority quota will be available
 for non Non-Hindi speaking students and will be filled according to Maharashtra Government
 Rules and Regulations.

13%
7%
3%
2.5%
3.5%
2%
19%
2%
3%
3%

Change in the reservation criteria, if any, will be as per the government resolution.

List of Languages Grouped under Hindi

As per the eight Schedule to the constitution of India, following languages are grouped under 'Hindi' language

1) Awadhi	13) Garhwali	27) Lodhi	41) Rajasthani	
2) Bagheli/ Baghel	14) Harauti	28) Magadhi/Magahi	42) Sadan/ Sadri	
khandi	15) Haryanvi	29) Maithili30) Malvi	43) Sanori	
3) Bagri Rajasthani	16) Hindi	30) Malvi	44) Sirmauri	
4) Banjari	17) Jaunsari	31) Mandeali	45) Sondwari	
5) Bharmauri/ Gaddi	18) Kangri	32) Marwari	46) Sugali	
6) Bhojpuri	19) Khairari	33) Mewari	47) Surgujia	
7) Braj Bhasa	20) Kortha/ Khotta	34) Mewati	48) Sujapuri	
8) Bundeli/ Bundel	21) Kulvi	35) Nagpuria		
khandi	22) Kumauni	36) Nimadi		
9) Chambeali	23) Kurmali Thar	37) Pahari		
10) Chattisgarhi	24) Labani	38) Pachpargania		
11) Churahi	25) Lamani/ Lambadi	39) Pangwali		
12) Ddhundhari	26) Laria	40) Pawari/ Powari		

SCHEME OF TEACHING

CREDIT BASED SYSTEM (CBS)

Subject	Theory/ Practical	No. of Lectures per week	No. of Tutorials / Remedial Classes (per batch)	Internal Assesment (Max. Marks)	Semester End Exam. (Max. Marks)	Min. Passing Marks	Total Marks	Alloted Credits
Compulsory English	Theory	4	1T	15	60	30	75	3
Supp. Eng./ Marathi/ Hindi	Theory	3	Nil	15	60	30	75	3
Dhawina	Theory	6	1/2 T	20	100	48	150	
Physics	Practical	6 per batch	Nil	Nil	30	12	150	6
Electronics	Theory	6	1/2 T	20	100	48	150	6
Liectionics	Practical	6 per batch	Nil	Nil	30	12	130	ŭ
Mathematics	Paper-I	4	1T	15	60	- 60	150	6
Matrematics	Paper-II	4	1T	15	60			
Computer Science	Theory	6	1/2 T	20	100	48	150	6
computer science	Practical	6 per batch	Nil	Nil	30	12	130	ŭ
Cl	Theory	6	1R	20	100	48	150	
Chemistry	Practical	6 per batch	Nil	Nil	30	12	150	6
	Theory	6	1R	20	100	48		
Botany	Practical	6 per batch	Nil	Nil	30	12	150	6
	Theory	6	1R	20	100	48		
Microbiology	Practical	6 per batch	Nil	Nil	30	12	150	6
Baiataahnalaa	Theory	6	1R	20	100	48	150	6
Boiotechnology	Practical	6 per batch	Nil	Nil	30	12	150	0
Zoology	Theory	6	1R	20	100	48	150	6
20010gy	Practical	6 per batch	Nil	Nil	30	12		

T: Tutorial R: Remedial

EXAMINATION SCHEME AT GLANCE ODD Semesters (Sem. I, III, V)

Regular Exam (Regular + Ex. Student)	Supplementary Exam
October/November	February / March
Result	Result
December	April

EVEN Semesters (Sem. II, IV, VI)

Regular Exam (Regular + Ex. Student)	Supplementary Exam
March / April	June
Result	Result
April	December -

INTERNAL ASSESSMENT FOR THEORY

A. For the subjects Compulsory English, Supplementary English, Marathi, Hindi and Mathematics:

Sr. No.	Evaluation Type			
1	Assignments	4		
2	Class Test(s)	8		
3	Instructional deliveries (case studies/ seminar/ presentation), Overall conduct as a responsible learner, manners, sincerity, skill in articulation, leadership qualities demonstrated through organizing co-curricular activities, Active participation in routine class, etc.	3		
	Total	15		

B. For the subjects Physics, Electronics, Computer Science, Chemistry, Botany, Microbiology, Zoology and Biotechnology:

Sr. No.	Evaluation Type	Marks
1	Seminar	5
2	Unit Test(s)	5
3	Assignments	5
4	Overall Performance (based on overall conduct as a responsible learner, manners, sincerity, skill in articulation, leadership qualities demonstrated through organizing co-curricular activities, Active participation in routine class, etc.	5
	Total	20

Grade Awards: Seven Points rating scale is used for the evaluation of the performance of the student to provide letter grade for each course.

Marks obtained out of 150	Marks obtained out of 100	Marks obtained out of 75	Marks obtained out of 25	Grade Point	Grade	Remarks
136 - 150	91 - 100	68 - 75	23 - 25	10	0	Outstanding
121 - 135	81 - 90	61 - 67	21 - 22	9	A+	Excellent
106 - 120	71 - 80	53 - 60	18 - 20	8	Α	Very Good
91 - 105	61 - 70	46 - 52	16 - 17	7	B+	Good
76 - 90	51 - 60	38 - 45	13 - 15	6	В	Fair
61 - 75	41 - 50	31 - 37	11 - 12	5	С	Average
= 60	= 40	= 30	= 10	4	Р	Below Average
< 60	< 40	< 30		0	F	Fail
Absent	Absent	Absent		0	AB	Fail

Computation of Semester Grade Point Average (SGPA) for each semester:

$$SGPA = \frac{\text{(Credits in the subject X Grade Points Obtained)}}{\text{Total Credits in the Semester}}$$

Computation of Cumulative Grade Point Average (CGPA) after completion of Program:

Sem-I Sem-II		Sem-III		Sem-IV		Sem-V		Sem-VI			
Credits	SGPA	Credits	SGPA	Credits	SGPA	Credits	SGPA	Credits	SGPA	Credits	SGPA

ACADEMIC CALENDAR (2020 - 2021)

Bajaj College of Science, Wardha

Tentative Academic Calendar for the session 2020-2021

(As per RTM Nagpur University, Nagpur Academic Calender)

16th June 2020

Month	Date/Day	Events/Activities	Date/ Day	Events/Activities
July	After declaration of HSC Result 15 th -30 th	Issuing of Prospectus		Issuing of Prospectus
August	3 rd (Mon)	Admission of B.Sc I Commencement of B.Sc Sem III & Sem V Classes		
	15 th (Sat)	Independence Day Celebration	29 th (Sat)	Departmental Seminars
September	1 st (Tue)	Address of Principal to B.Sc Semester I students & Commencement of B.Sc Sem I classes.	12 th (Sat)	Extra Curricular Activity
	5 th (Sat)	Teachers Day Celebration	19 th (Sat)	Allotment of Project/ Seminar for B.Sc Sem I
	8 th (Tue)	International Literacy Day	26 th (Sat)	Parent Teacher Meet
	2 nd (Fri)	Mahatma Gandhi Jayanti	17 th (Sat)	Seminars for B.Sc Sem I
October 5 th – 10 th		Internal Class Exam (ICE-I)	24 th (Sat)	Project Review for Sem III & Sem V
November	7 th (Sat)	Project Review for B.Sc Sem III & Sem V	10 th -16 th	Diwali Holidays
	21 st (Sat)	Extra Curricular Activities	23 rd – 28 th	Internal Class Exam (ICE-II)
	1 st (Tue)	World AIDS Eradication Day	7 th -12 th	College Test Exam
December	6 th (Sun)	Dr. Ambedkar Mahaparinirvan Day	17 th	Odd Semester Theory Exam
	25.12.2020 To 15.01.2021		Winter Vacation	
January	16 th	Commencement of Even Semester	23 rd (Sat)	Birth Anniversary of Kamalnayan Bajaj
	18 th	Commencement of Spoken English/ Computer Evaluation	26 th	Republic Day celebration
February	12 th -13 th	College Day Function	28 th (Sun)	National Science Day
March	1 st -2 nd	Scintillation – 2021	8 th	International Women Day
	9 th -13 th	Internal Class Exam (ICE - I)	23 rd	World Environment Day
April	3 rd	Project work	10 th	Project Work
	24 th	Submission of Project	26 th -30 th	Internal Class Exam (ICE-II)
May	8 th	Project Presentation & Evaluation	10 th -15 th	College Test Exam
	22 nd	Even Semester Theory Exam		
	26.05.2021 To 25.06.2021		Summer Vacation	

^{*} The schedule dates may change due to outbreak of COVID-19 pandemic.

BOTANY DEPARTMENT

ABOUT THE DEPARTMENT

Department of Botany was established in 1963. Dr. V. P. Damle was the founder Principal and Mrs. K. V. Damle, the founder Head of Botany Department. Since its inception, the department is recognized for teaching and research in the various areas of Botany. M.Sc. program was initiated in 2003-04. Department has undertaken research projects financed by UGC, DBT, DST and other agencies in Plant physiology, Algae, Medicinal Plants, Paleobotany, Ethnobotany and Taxonomy. Faculty members have active collaborations with scientists from National Institutes and NGOs. Department has received a status of recognized research centre by RTM Nagpur University, Nagpur in 2012. Department imparts quality education at B.Sc., M.Sc. and Ph.D level.

GLIMPSES OF THE DEPARTMENT

- Well equipped labs with sophisticated instruments.
- Separate Plant Tissue Culture Laboratory.
- Certificate course in "Herbs and Herbal Products"
- Ms. Trupti Jagtap (2011-2012) and Mr. Chetan Shriwas (2012-2013) achieved Ist Merit positions in M. Sc. exams of RTM Nagpur University, Nagpur.
- Two recognised faculties as Ph.D supervisors.
- Three students awarded Ph.D and two students submitted Ph.D thesis.
- Two major and two minor research projects funded by UGC are completed.
- Consultancy services provided in a) Identification of medicinal plants and Algae b)
 Photomicrography.

MAJOR INSTRUMENTS

Cooling Centrifuge, Tilak Air Sampler, Water Analysis Kit, Laminar Air Flow, Incubator Shakar, Spectrophotometer













BOTANY DEPARTMENT

SYLLABUS HIGHLIGHTS

B.Sc. Programme overview:

Department conducts theory and practical sessions on various topics in Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, Palaeobotany and Morphology of Angiosperms for B.Sc.I. The papers for B.Sc.II include Angiosperm Taxonomy, Cell Biology, Plant Breeding, Anatomy, Embryology, Genetics and Molecular Biology. The B.Sc.III includes papers in Biochemistry & Plant Physiology, Plant Ecology, Plant Biotechnology, Biotechniques and Plant Utilisation. Throughout this B.Sc. programme, students are encouraged to see blending of field and laboratory based teaching and research which makes them equipped for agri- and plant-based industries like plant tissue culture labs and hybrid seed companies.

M.Sc. Programme overview:

Department conducts theory and practical sessions for M.Sc.-I in Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, Paleobotany, Cytology & Genetics, Biochemistry & Plant Physiology, Cell & Molecular Biology, Plant development and Angiosperm Morphology. The other papers conducted for M.Sc.-II include Plant Ecology, Angiosperm, Aesthetic Botany, Advanced Cell & Molecular Biology, Plant Biotechnology and Plant Resources. Department offers two specialised subjects in 3rd and 4th semester i.e. a) Molecular Biology & Plant Biotechnology and b) Applied Mycology & Plant Pathology. Apart from these papers, students also carry out research work and prepare research thesis as a part of their curriculum. The theoretical and practical content of M.Sc. (Botany) enables students to get job opportunities in academic and research sectors apart from agri-based industries.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. P. F. Dhabarde Assistant Professor, Incharge M.Sc., Ph.D 15 yrs Name Designation Qualification Experience

Dr. L. P. Dalal Associate Professor M.Sc., Ph.D, B.Ed. 28 yrs Name Designation Qualification Experience

Dr. D. D. Naik Assistant Professor M.Sc., Ph.D 5 yrs

Name Qualification Experience

Swati N. Kalode Assistant Professor (Contract Basis) M.Sc., M.Phil., B.Ed. 11 yrs Name Designation Qualification Experience

Dr. Arati Pranjale Ghuse Assistant Professor (Contract Basis) M.Sc., Ph.D. 03 yrs Name Designation Qualification

Dr. A.A. Maheshwari Assistant Professor M.Sc., NET, Ph.D.

PHOTO GALLERY



"Botany the eldest Daughter of Medicine"

CHEMISTRY DEPARTMENT

ABOUT THE DEPARTMENT

Chemistry is the central science. Its applications encompass all the aspects of human civilization. Over the centuries the subject has offered wide scale career opportunities to young and innovative minds. Since its establishment the department has made enormous progress in academics and research. The department provides quality education in the subject with sufficient flexibility to enable students to specialize in the areas of interest to them.

Besides teaching, faculty members are also involved in research activities and have published papers in National and International peer reviewed journals. They have successfully completed nine minor research projects funded by UGC.

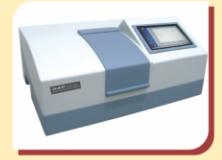
GLIMPSES OF THE DEPARTMENT

- Qualified and experienced faculty
- Well equipped laboratories and instrumental facility
- Exposure of sophisticated instruments to the students through Skill enhancement programme
- Recognition of laboratory as a place for higher learning and research.
 Four students awarded Ph.D. degree from our Department.
- Students consistently qualifying NET, SET, GATE, IIT-JAM exams. (27 B.Sc. students cleared IIT-JAM examination & 8 M.Sc. students cleared NET/SET/GATE examination.)
- Department undertakes various activities viz. guest lecturers of eminent scientists/academicians, educational tour, students' seminars etc under the banner of chemical society
- Department has started google class-room, NET-SET Cell for PG student.
- Students participating in intercollegiate seminars, quiz, elocution, conferences, workshops etc.
- Placement of students to various industries
- Department has implemented micro scale level practical at UG level, to certain extents which saves lot of chemicals.
- Department offers consultancies for Fourier-Transform Infra-red spectrophotometer, Flame Photometer, UV -Visible Spectrophotometer
- Department has implemented Moodle online Learning Management Systems (LMS) since 2017

MAIOR INSTRUMENTS

Fourier-Transform Infra-red spectrophotometer, UV -Visible, Spectrophotometer, Flame Photometer, Polarograph, Guoy's Balance, Centrifuge machine (16000 rpm), Microwave Synthesis set up, Rota Evaporator













CHEMISTRY DEPARTMENT

SYLLABUS HIGHLIGHTS

Syllabus provides comprehensive knowledge of chemistry (theory & practicals) and will prepare students for entry into a wide variety of careers. It covers wide range of topics from Inorganic, Organic and Physical Chemistry as

- Fundamentals of core Chemistry
 Nuclear Chemistry
- Stereochemistry
- Heterocyclic Compounds
- Natural Products
- Thermodynamics
- Reaction Dynamics
- Electrochemistry

- Surface Chemistry
- Retrosynthesis
- Quantum Chemistry
- Spectroscopy
- Coordination Chemistry
- Biochemistry

- Photochemistry/ Pericyclics
- Environmental Chemistry
- Analytical Chemistry
- Green Chemistry
- Organometallics
- Instrumental Analysis

TEACHING STAFFS

Designation Qualification Experience

Dr. O. A. Mahodaya Principal M.Sc., Ph.D., D.B.M. 34 Yrs

Designation Qualification Experience

Dr. R. D. Raut Associate Professor M.Sc., B.Ed., Ph.D. 33 Yrs

Designation Qualification Experience

Dr. P. V. Tekade Associate Prof. & Incharge M.Sc., B.Ed., SET, NET, GATE, Ph.D. 16 Yrs

Name Designation Qualification Experience

Dr. Mrs. N. P. Mohabansi Assistant Professor M.Sc., B.Ed., SET, Ph.D.

Name Designation Qualification Experience

Dr. K. M. Dadure Assistant Professor M.Sc., M. Phil., Ph. D., B. Ed. 13 Yrs

Name Designation Qualification Experience

Mr. M. D. Bansinge Assistant Professor M.Sc., NET 07 Yrs

Name Designation Qualification Experience

Mr. N. A. Barwat Assistant Professor M.Sc., SET, NET

Name Designation Qualification

Dr. P. G. Borkar Assistant Professor M.Sc., SET, NET, GATE. Ph.D., Post Doc 04 Yrs

Name Designation Qualification Experience

Dr. A. V. Nakhate Assistant Professor M.Sc., NET, GATE, Ph.D., Post-Doc. 06 Month

Name Designation Qualification Experience

Dr. Mahejabeen A. Hague Assistant Professor M.Sc., B.Ed., SET, Ph.D. 06 Month

Name Mrs. Bhagyashree Tale Designation Assistant Professor (Contract Basis) Qualification M.Sc., SET, B.Ed. Experience

Name Designation Qualification Experience

Ms. Monali Awchat Assistant Professor (Contract Basis) M.Sc., GATE,

PHOTO GALLERY



"Molecules rule the Universe, we rule the Molecules"

ZOOLOGY DEPARTMENT

ABOUT THE DEPARTMENT

Since the inception of the college, in year 1962, the Department of Zoology has been established as a leading centre for higher education in animal sciences. The department has a basic equipped instrument facility, which has been upgraded and a number of new modern Analytical instruments have been added. At present, the department is running 3 years UG (B.Sc. course) and 2 years PG course. Laboratory has been upgraded with audio-Visual facility. Department has up- to-date departmental library with latest edition of books, internet facilities for students and well established museum of local fauna having unique collection.

GLIMPSES OF THE DEPARTMENT

- Teaching faculties with different specializations.
- Group Projects.
- Hands on trainings for students.
- Workshop for students skill enhancement
- Educational tours.
- Upgraded laboratory with latest instruments and animal cell culture laboratory.
- Up- to -date departmental library, internet facilities for students and well established museum.

MAJOR INSTRUMENTS

Trinocular Research Microscope, Digital cell Image analysis system, Double beam U. V. Visible Spectrophotometer, Magnus inverted microscope, Microfilt Biosafety Cabinet class II Type A2, CO² Incubator Water jacketed series, Cooling Centrifuge, Cryostat.













ZOOLOGY DEPARTMENT

SYLLABUS HIGHLIGHTS

At Undergraduate Level:

Theory and practicals related to Animal Diversity –Non chordates; Environment Biology & Ecology; Cell Biology; Animal Diversity (Chordates) & Evolution; Genetics; Developmental Biology; Molecular Biology and Immunology; General Mammalian Physiology; Bio molecules, Biotechnology and animal cell culture will be included. Projects would also be part of practical. The syllabus has been reframed considering students should be able to clear competitive exams and should be able to opt for higher studies.

At Postgraduate Level:

Theory and practicals related to Invertebrates; Physiology Cell Biology and Genetics; Reproductive Biology; Vertebrates; Molecular Biology and Biotechnology; Parasitology and Immunology; Entomology; Fish and Fisheries; Bio-technique, Bio statistics, Ethology, Toxicology and Bio informatics. Projects would also be part of practical. The syllabus has been reframed considering students should be able to clear competitive exams and should be able to opt for research.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. M. R. Chanadrakar Assistant Professor M.Sc., Ph.D., SET 18 Yrs

Name Designation Qualification Experience

Dr. V. J. Sharma Assistant Professor M.Sc., Ph.D 06 Yrs Name Designation Qualification Experience

Dr. A. D. Theng Assistant Professor M.Sc, Ph.D., NET 08 Yrs

Name Designation Qualification Experience

Dr. S. P. Biswas Assistant Professor M.Sc. NET, Ph.D. 04 Yrs

Ms. T. R. Bhute

M.Sc.

01 Yrs

Assistant Professor on contractual basis

Name Designation Qualification Experience Designation Qualification Experience

Name

Mr. V. P. Khandwekar Assistant Professor M.Sc., NET 08 Yrs

Name Designation Qualification Experience

Ms. R. K. Lonkar
Assistant Professor on contractual basis
M.Sc.
O1 Yrs

PHOTO GALLERY



"If you want to learn past, present and future of human race......learn Zoology!!!"

MICROBIOLOGY DEPARTMENT

ABOUT THE DEPARTMENT

Department of Microbiology started in 1980 and now recognized as centre of excellence in Microbiology with respect to teaching and learning. The department runs B. Sc. Course with Microbiology as one of the subject at undergraduate level. Additional non grant U. G. course was introduced in 2006 with Biotechnology, Microbiology and Chemistry. M. Sc. Microbiology started in 2007 (CBCS pattern). Career Oriented Programme, Clinical Laboratory Technology (on Self Finance basis) started from 2016 with intake capacity of 40 students.

GLIMPSES OF THE DEPARTMENT

- Well equipped laboratory
- Highly qualified staff
- Self sufficient departmental library with several books
- Consistent improvement in the result of the department.
- The department provides the consultancy services for microbial analysis of water, soil and biofertilizers.
- The alumni of the department occupy the higher positions at NCCS, Pune, Institute of Microbial Technology, Chandigarh and some are working with NEERI, Institute of clinical research, Nagpur and National research centre for Citrus, Nagpur.

MAJOR INSTRUMENTS

PCR thermal cycler, Gel Documentation System, U.V. Visible spectrophotometer, Fermentor, Trinocular Microscope, Bio safety cabinet, BOD incubator, Rotary incubator shaker.













MICROBIOLOGY DEPARTMENT

SYLLABUS HIGHLIGHTS

Undergraduate Programme

Major topics to be covered under UG programme is as follows:

- Microbial physiology
- Medical Microbiology
- Molecular biology
- Techniques in Advance Microbiology
- Industrial Microbiology
- Environmental MicrobiologyGenetic Engineering

On completion of the B.Sc. Microbiology Programme the students will

- Get the knowledge of bacteriological analysis of drinking water, Biofertilizer production, Microbiological analysis of Milk, Industrial production of Antibiotics, Organic solvents, Single cell proteins, Vitamins.
- Have sound skills in various techniques like gel electrophoresis, Chromatography, Immunoelectrophoresis, PCR.
- Develop themselves as a entrepreneur

Postgraduate Programme

Major topics covered under this programme is as follows:

Bioenergetics, Biomarker genes, Designs and applications of GC, HPTLC. Nanotechnology, DNA sequencing, Drug designing and delivery system, Bioinformatics, Medical Microbiology, Immunotechniques, Recombinant DNA technology, Animal Tissue culture.

On completion of the M.Sc Microbiology Programme the students will

- Get the knowledge of DNA Cloning, Transformation, Restriction digestion, animal tissue culture, plant tissue culture, PCR, Fermentation kinetics, Industrial production of Antibiotics, Single cell proteins.
- Have sound skills in Identification of Bacteria and various techniques like gel electrophoresis, Ion exchange chromatography, Immunoelectrophoresis, PCR, SDS PAGE.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. Mrs. S. S. Khandare Associate Professor & Head M.Sc., Ph.D. 32 Yrs

Name Designation Qualification Experience

Mr. M. G. Ingale Assistant Professor M.Sc., NET 06 Yrs Name Designation Qualification Experience

Dr. U. A. Bidwai Assistant Professor M.Sc., Ph.D. 17 Yrs

Name Designation Qualification Experience

Dr. B.V. Mohite Associate Professor M.Sc., M.Phil, Ph.D. 11 Yrs

PHOTO GALLERY



PHYSICS DEPARTMENT

ABOUT THE DEPARTMENT

The department of Physics was established in 1962 under the guidance of Dr. D.S. Supe which is now one of the best well-equipped centre for undergraduate studies in this part of India. Department aims to enable students to enjoy the subject and to stimulate an interest in the social and economic implications of Physics in society. It has three separate laboratories including a dark room containing more than 100 experimental set up. Every year it caters around 300 UG students for in-depth understanding of the subject.

GLIMPSES OF THE DEPARTMENT

- Well-equipped spacious laboratories with more than 100 experimental set ups, computer and internet facility, separate departmental library
- Involvement in the organization of state level and national level event (Scintillation and Innervate)
- Online Digital Teaching Methodology used, includes, online video classes using digital platforms, YouTube video lectures by faculty members of Department, e-contents, Google classrooms, Moodle, etc.
- Certificate course on Nanoscience and Nanotechnology (Nanosense)
- Recognized center for National Graduate Physics Examination (NGPE).
- ullet Guidance for active participation in various intercollegiate competitions viz. quiz, s e m i n a r s
- Linkage for student Internship programme in national recognized research institute/departments
- Night sky watching (Astro club activity)

MAJOR INSTRUMENTS

X- ray diffractometer (XRD), G.M. Counter, Digital Ultrasonic Pulse Echo Velocity Meter, Hall Effect Apparatus, Magnetic Susceptibility apparatus, Four probe Apparatus, Dielectric Constant and Curie Temperature apparatus, , Dual Trace C.R.O, digital polarimeter, Fabry-Perrot













PHYSICS DEPARTMENT

HIGHLIGHTS OF THE SYLLABUS

Syllabus contains the core branches including mechanics, oscillations and waves, thermodynamics, electro statics, electricity and magnetism, electrodynamics, optics, atomic and molecular physics, statistical mechanics, solid state physics, quantum mechanics, electronics and solid state devices, nano physics, astrophysics, relativity, nuclear physics. Along with the theory, skill oriented experiments including some innovative projects will prepare the students to orient themselves to bridge the gap between science and technology.

The course design will ensure that graduating students with Physics as one of the subject will have the academic standard pre-requisites to take post-graduate programme in Physics as well as in many allied fields in India and abroad. The multi disciplinary skills they will be acquired will be of tremendous value to them especially if they choose to enter such cutting edge research areas; be it in Academia or in Industry. We believe that the graduates with physics will be a complete package to face any national competitive exams held for the graduates.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. S.H. Bagade Associate Professor & Head M.Sc., Ph.D.,SET. 19 Yrs Name Designation Qualification Experience

Prof. R.G. Jadhao Associate Professor M.Sc. 34 Yrs Name Designation Qualification Experience

Dr. G.V. Lakhotiya Assistant Professor M.Sc., SET, GATE, Ph.D. 07 Yrs

Name Designation Qualification Experience

Dr. S. R. TipleAssistant Professor
M.Sc., Ph.D.
03 Yr

Name Designation Qualification Experience

Dr. M. M. Yerpude Assistant Professor (Contract Basis) M.Sc., NET, Ph.D. O2 Yr

PHOTO GALLERY



"Physics is Everywhere"

ELECTRONICS DEPARTMENT

ABOUT THE DEPARTMENT

Electronics today stands at the forefront of the rapidly expanding horizon of Science and Technology. Growth in the eld of electronics has been so phenomenal in the recent years that it has entirely changed the life style of people. The ease, the precision, the sophistication and the exibility provided by electronics in all walks of life and industrial systems has made it a very important subject of study. It is indeed considered as a catalyst of scientific and technological progress. Electronics has, therefore, become a core subject in the curricula of all disciplines. Bajaj College of Science, Wardha started three year B.Sc. (Electronics) programme in 1985.

GLIMPSES OF THE DEPARTMENT

- Well-equipped electronics laboratory
- Computer laboratory for languages and simulations
- Consistent good results
- Seminars and projects for the students
- ICT based teaching aids
- Qualified staff

MAJOR INSTRUMENTS

Temperature Dependent Two Probe Resistivity Measurement Set Up, NI ELVIS, Spartan 3 FPGA Based Development Board, Digital storage Oscilloscope, Kelvin Double Bridge, AM Transmitter













ELECTRONICS DEPARTMENT

SYLLABUS HIGHLIGHTS

Syllabus includes the following core topics of electronics:

- Electronic Components,
 Network Theorems
 & Semiconductor devices
- Fundamentals of Digital Electronics
- Semiconductor Devices
- Advanced Digital Electronics
- OP AMP And Power Supply

- Electronic Circuit Design
- Analogue And Digital Techniques
- Electronic Instrumentation
- Electronic Communication
- Fundamentals of Microprocessor
- Programming in "C"
- Microcontroller 8051

On completion of the B.Sc. (Electronics) Programme, the student will:

- Directly employed or start his/her own work as Electronic circuit designer, Electronics consultant, Testing professional, and even an entrepreneur in electronic industry
- Compete for seats for advanced degree courses like M.Sc. (Electronics).
- Have sound knowledge of the theory behind core subjects like, Electronic components, Electronic measuring and testing instruments, Analog and Digital IC's, Electronic circuit design and implementation, Troubleshooting and maintenance of electronic and electrical devices.
- Have sound skills in assembly Language and High Level Language programming, interfacing of electronic devices with computers, etc.
- Be in a position to develop industrial and entrepreneur applications.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. V.V. Shinde Associate Prof. & Head M.Sc., PGDCS, Ph.D. 34 Yrs Name Designation Qualification Experience

Dr. V.M. Ghodki Associate Professor M.Sc., PGDCS, Ph.D. 32 Yrs Name Designation Qualification Experience

Dr. P.A. Saudagar Assistant Professor M. Sc., PGDCS, M.C.A., NET, Ph. D 07 Yrs

PHOTO GALLERY



"Technology is teaching us to be human again"

MATHEMATICS DEPARTMENT

ABOUT THE DEPARTMENT

The Mathematics department was established in the year 1962, offering Mathematics at UG (B.Sc.) level. The department has an intake of 120 students. Students are imparted Mathematical education founded on value based academic principles where in all involved contribute effectively, efficiently and responsibly. The faculties take keen interest and efforts for the overall development of students through academic and co-curricular activities.

GLIMPSES OF THE DEPARTMENT

- Qualified and experienced faculty
- · Sincere efforts for mathematical and overall development of students.
- · Interactive teaching learning
- · Efforts to develop conceptual understanding, problem solving skills and applications
- Guidance for co-curricular activities and competitive exams

SYLLABUS HIGHLIGHTS

Mathematics is the core of every academic discipline and essential to the development of science and technology. The present syllabus has been designed as per the UGC model curriculum. A few changes to the extent of 20% according to the guidelines of UGC are intended which mostly include the application of mathematics as per the present need of industry and employability. Some topics in applied mathematics such as Numerical analysis, Graph theory, LPP have been added. The present syllabus would also support other subjects, especially Physics at the undergraduate level. The curriculum aims to improve conceptual understanding, problem solving skills and relating Mathematics to applications.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. S. S. Zade

Associate Professor and Head M.Sc., M.Phil., D.C.S. & A., Ph.D. 26 Yrs Name Designation Qualification Experience

Mr. R. T. Katre Assistant Professor M.Sc., B.Ed., SET 13 Yrs

PHOTO GALLERY





"Math is the problem, thinking is the solution"

BIOTECHNOLOGY DEPARTMENT

ABOUT THE DEPARTMENT

current intake capacity is sixty students for undergraduate course. We offer Biotechnology subject with Chemistry and any one option from Microbiology/Botany/Zoology. The department also runs Post graduation courses during 2010-2014. The department has highly qualified, experienced and dedicated faculty with specialization in Molecular Biology, Plant Tissue Culture, Agricultural Environmental Microbiology, Immunology and Bioinformatics. The aim of department is to foster knowledge in students pertaining to basic and advance in biotechnology field.

Bajaj College of Science, Wardha has been granted autonomous status from the academic year 2017-18. The curriculum under autonomy has been modified 20% by highly experienced subject experts in consultation with academicians, research scientists and industry personnel to meet the latest requirements of biotechnology industries. The faculty and the students of the department are involved in various co curricular and extracurricular activities. It is also inculcating entrepreneurial skills in biotechnology graduates who would fulfill the role of job providers rather than jobseekers.

The department has well furnished laboratories with all equipments to impart more hands on training to the students and to carry out their projects. It has both college central library and departmental library where reputed International and National editions of books are made available to the students and faculties. Coordinator,

Alumni of the department occupy good positions in various industries like Meril Diagnostic Pvt.Ltd., Glenmark Pharmceutical Ltd., Wipro Ltd, TCS, Eclerx services; Capgemini India Pvt Ltd. Graduating students normally find good fellowships in higher education and pursue their career in reputed institutes like NISER, Bhubaneswar and IIT-

SYLLABUS HIGHLIGHT

Syllabus included some important topics like historical overview of Biotechnology and Environment, Health and Agricultural Biotechnology, Nano Biotechnology, Bioinformatics, etc. Along with the theory, skill oriented experiment including some innovated projects will prepare the student to orient themselves to bridge the gap between science and technology. The present syllabus has been designed in such a way that it not only includes new topics but also involves appropriate chronological sequence of paper per semester, which helps students and teachers to establish a proper link between teaching and learning.

TEACHING STAFFS

Name Designation Qualification Experience

Dr. Ulka A. Malode-Bidwai Co-coordinator and Assistant Professor at Department of Microbiology M.Sc. Ph.D. 17 Yrs

Name Designation Qualification Experience

Dr. Anchal Priya Assistant Professor M.Sc. Ph.D. 01 Yrs Teaching Ex.: 8 Yrs Name Designation

Dr. Kunal Kale Assistant Professor Qualification M.Sc. Ph.D. Experience 02 Yrs

Name Designation Qualification Experience

Miss. Komal S. Dhumne Assistant Professor M.Sc. 01 Yrs

MAJOR INSTRUMENTS

Incubator, Gel electrophoresis, Micro centrifuge, Cooling centrifuge, Orbital shaking incubator, Autoclave 35 Lit, Cap., Microwave oven, Vertical Laminar air flow, Microscope Olympus.

PHOTO GALLARY



"Once we begin to understand the world, it becomes technology"

COMPUTER SCIENCE DEPARTMENT

ABOUT THE DEPARTMENT

The Department of Computer Science is one amongst the nine academic departments of the Bajaj College of Science, Wardha. The Department came into existence in 1988 and is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University. Global Excellence, teaching and technology development is the vision of the Department. Since 1988, it has been committed to the best IT education and has been continuously scaling new heights in the eld of Information Technology. It is providing quality education to students.

GLIMPSES OF THE DEPARTMENT

- Well-equipped laboratory
- ICT Center and Language Laboratory
- Departmental e-Library
- Live Projects, Seminars by the students
- Laboratory with computers of highest configuration
- Internet Broadband Facility with 100 Mbps Speed
- Computer Awareness Course to impart basic computer skills for all the UG students of the college.
- Skill enhancement courses for the students apart from their regular syllabit through Spoken Tutorial Programme of IIT Bombay.

HIGHLIGHTS OF THE UNDERGRADUATE PROGRAMME

On completion of the B.Sc. Computer Science Programme, the students:

- Will have sound knowledge of the Programming languages such as C,C++,Java,VB and SQL. Also they will have knowledge about Information technology, Operating System, System Analysis and Design and Development.
- Can participate in campus internships, independent study projects, part-time computer employment, lectures by guest speakers, Society of Computing Students programming and oncampus employment as lab assistants, lab supervisors and Helpdesk assistants.
- Can develop industrial and entrepreneur applications.

Major Subjects To Be Covered Under This Programme

Programming In 'C'
 Fundamentals of Information Technology
 Object Oriented
 Programming Using 'C++'
 System Analysis and Design
 Data Structures
 Operating
 Systems
 Java Programming
 Linux Operating System
 Visual Basic Programming
 Data Base Management System
 Compiler Construction
 SQL and PL/SQL

TEACHING STAFFS



Dr. P.A. Saudagar Co-ordinator M. Sc., PGDCS, M.C.A., NET, Ph.D. 07 Yrs Name Designation Qualification Experience

Mr. S. A. Durge Assistant Professor (Contract Basis) MCA, M.Sc. (CS) NET, SET 07 Yrs Name Designation Qualification Experience

Mr. M. M. Wasu Assistant Professor (Contract Basis) M.Sc., MCA, SET 06 Yrs

PHOTO GALLERY



"The Computer was born to solve problems that did not exist before"

DR. DAMLE LIBRARY

ABOUT LIBRARY

Newly constructed Library the college is committed to fulfill its mission by acquiring the requisite information and documents to cater the needs of its borrowers to help them in achieving excellence in teaching and learning.

Library is fully computerized using customized software 'LibTech'. All transactions are carried out in automated environment. All the books are provided with barcode so as to avoid mistakes in manual feeding. Barcode scanner is available in the library for scanning. Our software is installed in IBM Server and all machines are in LAN. Terminals are provided in reading room for access of OPAC and Internet.

The library is housed in 1102.624 Sq.mt. area where in there is a separate Reading Room, Reference Section, Issue Counter, Stack Rooms and Bound Volume Room. The capacity of the reading room is to accommodate 150 readers. Separate arrangement is done for faculties to study in the library.

FACILITIES

- Reading Room Facility •
- Reprography Facility
- Orientation to Users
- Internet Facility
- Display of New Arrivals
- INFLIBNET Facility
- Books on Deposit Basis

HEALTHY PRACTICES

- Reprography
- Display of new arrivals
- Orientation to users
- Suggestion box
- Working in an automated environment Online Public Access Catalogue (OPAC)
 - Free Internet access.
 - Issue of books on deposit basis during exam period
 - CCTV Cameras surveillances in library

Statistical Data Of Library

Total Number Of Books: 42359

Text: 26885 Reference:2326 Other: 13148

Total Number Of Bound Volumes: 1704

Total Number Of Journals: 26 Total Number Of Periodicals:19 Total Number Of News Papers:13

Total Number Of Multimedia Collection: 371

Some of our pride collection includes

- Encyclopedia Britannica
- Cambridge Natural History
- · Scientific American Resource Library
- Encyclopaedias
- Bharativa Sanskriti Kosh
- MarathiVishwakosh
- Tropica
- Botanica
- Rich collection of Floras

Name Designation Qualification

Experience

Mr. Praful B. Bhoyar Librarian M.L.I. Sc., SET, M.Phil

For our collection visit:

http://jbsw.shikshamandal.org/wp-content/uploads/2018/06/library Catalogue.pdf



"Nothing is charming than exploring a library"

DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS

SPORTS FOR MEN

1	Swimming	9	Base Ball	17	Archery
2	Basket Ball	10	Chess	18	Badminton
3	Hand Ball	11	Foot Ball	19	Cricket
4	Boxing	12	Ball Badminton	20	Hockey
5	Kho-Kho	13	Soft Ball	21	Taikwando
6	Kabaddi	14	Base Ball	22	Lawn Tennis
7	Volley Ball	15	Table Tennis	23	Sepak Takraw
8	Athletics	16	Net Ball		

SPORTS FOR WOMEN

1	Swimming	9	Base Ball	17	Archery
2	Basket Ball	10	Chess	18	Badminton
3	Hand Ball	11	Foot Ball	19	Cricket
4	Boxing	12	Ball Badminton	20	Hockey
5	Kho-Kho	13	Soft Ball	21	Taikwando
6	Kabaddi	14	Base Ball	22	Lawn Tennis
7	Volley Ball	15	Table Tennis	23	Sepak Takraw
8	Athletics	16	Net Ball		

PHOTO GALLERY



DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS



SANKET INGOLE
National Ball Badminton
Champiom, Imphal (Manipur)
University Ball Badminton
Champion, Kuppam (A.P.)



JAGDISH KADU University Ball Badminton Champion, Kuppam (A.P.)



KU. JUHI RAUT University Ball Badminton Champion, Vishakhapatanam (A.P.)



KU. MANJIRI DHANUSKAR University Ball Badminton Champion, Vishakhapatanam (A.P.)



KU. SAMIKSHA GHODE University Hockey Champion, Gwalior



RAJ KHARDE
University Handball Champion,
Cwalior & Gold Medal in
All India
University Handball Champ.



KU. AARZOO PATEL University Handball Champion, Gwalior



KU. MANISHA SAHU University Handball Champion, Gwalior



KU. NIKITA ALURI University Baseball Champion, Baramati



ADARSH BANGADE University Softball Champion, Kudapa Vemana



CHETAN BOTKULE University Softball Champion, Kudapa Vemana



SUSHANT MENDHE University Softball Champion, Kudapa Vernana



KU. JHAVERIYA QURESHI University Sepak Takaraw Champion, Bareli



KU. MAYURI KAPSE University Sepak Takaraw Champion, Bareli



VIJAYSINGH TOMAR University Sepak Takaraw Champion, Bareli



KU. KALYANI BADHIYE University Netball Champion, Annamalai



RAHUL BAISWARE University Netball Champion, Calicut

EXTRA-CURRICULAR ACTIVITIES

Cultural Events

Every year cultural programmes are organized by college as **College Day Celebration**. Students are encouraged to participate in various activities like Dance, Drama, Singing, Plays, etc including various competitions such as Debate, elocution, quiz, etc. Artistic students are promoted for the participation in **Youth Festival** organized by RTMNU, Nagpur.

NSS

National Service Scheme (NSS) has been in operation in our college since 1965. Since then it has been involved in various social service activities including blood donation, plantation drive, gender empowerment, national integration & social harmony, disaster management, environment protection and awareness, engaging with new frontiers of knowledge, social defense, health and well-being, legal literacy, awareness building about India's national heritage, culture and traditions, road safety campaigns, etc. NSS functions as a learning and resource centre for the benefit of the youth.

CWSS

Centre for Womens Studies and Services established in the college in 2001-02. This centre stress to increase the analysing capacity, research ability and leadership qualities among the students. Various programmes are conducted as per the directives of UGC, Government of Maharashtra and RTM Nagpur University, Nagpur. CWSS facilitates students to learn various social problems like, water pollution and harvesting, dowry system, organic farming, child labor, woman literacy, equality and laws for women, health and family welfare. CWSS activity helps the students to study these issues which help to develop their overall personality. The students get the incentive marks and the marks are counted for division and merit.

PEC

Population Education is an integral part of Adult Education and Extension activity. It is important because it changes the way of living and use of natural resources. It learns to realize the responsibility regarding the population, situation of small family and the communities. It is also needed to control the population growth and to improve the better quality of life. Objectives: (1) To create awareness about the population explosion problems related to population. (2) To create awareness for small family (3) To create health awareness (4) Social and personality development.

NCC

National Cadet Corps Girls as well as Boys battalion is integrated in our college. Active participation of students in various events at the State as well as National level.



CO-CURRICULAR ACTIVITIES

Seminars & Conferences

In order to promote awareness and understanding of emerging trends in science, our college organizes INNERVATE Series (National Seminars & Conferences) on various topics as innovations in basic sciences in the realm of modern educational system, Life science technologies: an Emerging Frontier, Stepping up with bio scientific technologies, Nano technology.

Students Seminar Competition

Scintillation is the state level Seminar Competition organized by Bajaj College of Science, Wardha every alternate year. The aim of this competition is to provide an academic platform to the B. Sc. students for expressing their views on a science topic of their own interest.

Skill Enhancement Programme

To improve the skills of the students, hands on training is provided on sophisticated instruments like FTIR, PCR, XRD, etc., either by engaging parallel sessions or by conducting Workshops on topics like Micro scale techniques, Synthesis of Nonmaterials.

Inter-Collegiate Competitions

Students of the college are encouraged to participate n various inter-collegegiate competitions. Our college has a tradition of bagging prizes every year at various seminar, quiz, project competitions. Our students have also excelled in various talents search examinations and aptitude tests.

Students Internship Programme

Meritorius B.Sc. students have received prestigious INSA summer interns in the summer season of 2019. These INSA recipients of BCS had received research training in some of prestigious National Institutions such as National Centre for Cell Science (NCCS), Pune, Central Drug Research Institute (CDRI), Lukhnow and Indian Institute of Astrophysics (IIA), Bangalore. Apart from these internship placements, other meritorious B.Sc. and M.Sc. students have received summer training in other Institute from Pune. BCS teaching staff enthusiastically support and help B.Sc. and M.Sc. students for various internship programmes.



STUDENT'S ACHIEVEMENTS

University Rank Holders









Joint Admission Test for M.Sc. (JAM) - 2020



Kaustubh Raut (Chemistry)



Shubham Mandaokar (Physics)

Glimpses of Autonomy Indian National Science Academy (INSA) Summer Intern Fellows - 2019



Mr. Kartik Gokhe



Miss Trupti Murkute



Miss Annam Sayyad

Opportunities Encashed

Title of the linkage	Name of the partnering institution/ industry/research lab with contact details	Duration (From-To)	Participant
Summer Internship program for UG	Centre for Materials for Electronics Technology C-MET Pune: Ministry of Electronics & Information Technology (MeitY), Govt. of India	02/05/2019 to 05/07/2019	Ms. Urvi Gupta
students	National source of microbial resource (NCMR), Pune	20/05/2019 to 28/06/2019	Ms. Kalyani Badhiye
	National Institute of Technology, Rourkela, Odisha	May 2019 to July 2019 (3 Months)	Ayushi D Chaudhari
	National Institute of Technology, Rourkela, Odisha	May 2019 to July 2019 (3 Months)	Aaditya Vilas Bhaskarwar
	Department of Instrumentation Science, Savitribai Pune University, Pune	6/5/2019 to 17/6/2019	Mr A C Nagrale
Summer Research Fellowship	Sponsored by IASC (Banglore) and INSA (New Delhi) and NASI (Allahabad)	2/5/2019 to 2/7/2019	Mr Kartik G Gokhe
Programme	National centre for cell sciences (NCCS), Pune	10/5/2019 to 12/07/2019	Ms. Trupti Murkute
	Wadia College, Pune	22/5/2019 to 23/6/2019	Ms. Naincy Jalan

INFRASTRUCTURE AND FACILITIES

The college is spread over 37.55 acre area. It has well ventilated sufficient number of spacious classrooms. These classrooms are well acquainted with conventional as well as advanced teaching aids. All science departments have separate sections and laboratories for general as well as research programmes. The college has got a separate multipurpose hall (Gandhi Memorial Hall) and a separate seminar hall. Newly constructed Dr. Damle library with a massive diverse collection of books adds to the strength of the college. Special research facilities include Central Instrumentation laboratory which has high-end research equipment like X-ray diffraction, FTIR, UV-vis., Gel doc, PCR etc. Other teaching-learning facilities include Language Laboratory cum ICT center with net connectivity for students. College also has a separate Girl's common room. Girls' hostel and faculty quarters are located in the campus itself.

College has a separate health center, gymnasium, botanical garden, canteen and different playgrounds for different sports. Open area activity center Kalaniketan adds to the rich cultural heritage of the college. Recently college has got a newly constructed separate life science wing and smart classrooms.

Explore our campus via google earth: https://goo.gl/XtYLby



Access to library Stacks



College Canteen



Wi-Fi Facility



High Speed Internet in ICT Center



Reprography Facility









Sanitary Napkin Vending Machine & Incinerator

Why to get into Bajaj College of Science?

Study in India for International Students Autonomous
Institute with NAAC 'A'
Grade &
RUSA Supported

College with Potential for Excellence (UGC

Hostel Facility (Girls)

ICT Center & Language Lab.

Central Instrumentation
Centre (CIC)

Career Guidance & Placement Cell

NSS/CWSS NCC (Girls Boys)

Co-curricular & Extra-curricular activities

Nationalistic, values based, quality Education of Science, Wardha wa

Bajaj College of Science, Wardha was established in 1962 by Shiksha Mandal, Wardha with the prime objective of catering science education. It is a grant-in-aid college affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and is recognized by UGC 2(f) and 12(B). It is a Linguistic Minority institution offering undergraduate, postgraduate and Ph.D. programme in science. The college was the first institution to be accredited in the entire Vidarbha in 1999. The 55 year long academic voyage of the college has culminated in reaccreditation by NAAC with CGPA 3.21 leading to 'A' grade institute. Recently, it has been recognized as 88th among 100 topmost Institutes of India by Govt. of India. College has already been honored with a status of College with Potential for Excellence (CPE-II) by UGC, New Delhi and selected under 'Star College Scheme' by DBT, Govt. of India. Since its inception in 1962, the college has continuously produced number of scientific minds who are rendering their services in different reputed institutions of our Nation. Now, as an autonomous institute, we are ready to fly even higher to provide more opportunities to our students for higher education and placement.



Sports (Gymnasium, separate playgrounds of Basketball, Volleyball, Badminton, Cricket, Football etc.) **Qualified Staff**

Well Equipped Laboratories

Astro Club
A venture by Dept. of Physics

Spacious and ventilated
Classrooms with
AV facilities

Linkage with topmost National Research Institutes

Dr. Damle Library (With reading room & Internet facility)