The Maharaja Sayajirao University of Baroda Accredited Grade "A" by NAAC



सत्यं शिवं सुन्दरम् Estd. 1949

EXECUTIVE PhD PROGRAMME

www.msubaroda.ac.in admission.msubaroda.ac.in



VISION

The progress of a nation requires that its people should be educated. Knowledge is a necessity of man. It instils in him a desire to question and to investigate, which leads him on the path of progress. Education, in the broadest sense, must be spread everywhere. Progress can only be achieved by the spread of education. Cooperation is necessary to achieve any worthy end and this readiness to cooperate will not be found in people if they are not educated.

H.H. Maharaja Sayajirao Gaekwad III

MISSION

- Promoting and enhancing high standards of teaching, learning and research for an all-round development of students.
- Providing a learning environment that nurtures critical reflections, exchange of ideas and innovation among students to help them realize their optimum potential.
- Increasing access to education by all sections of the society.
- Relating knowledge to the contemporary socio-economic needs and moral concerns.
- Building mutually enriching linkages with the society and its institutions.

ROLL OF HONOUR: CHANCELLORS





MAHARAJA PRATAPSINHRAO GAEKWAD

First Chancellor, visionary ruler of the Baroda state and grandson of Maharaja Sayajirao Gaekwad III, instrumental in the establishment of MSU in 1949, founder of Baroda Cricket Association, expert horse-rider and accomplished polo player. Tenure: 1949 - 1951



MAHARAJA FATEHSINHRAO GAEKWAD

Second Chancellor, son of Maharaja Pratapsinhrao Gaekwad, an astute administrator, ardent sports lover and cricketer, Member of Parliament, Minister in the Government of Gujarat, Cricketer, elected twice as the president of BCCI. Tenure: 1951 - 1988



DR. MRUNALINIDEVI PUAR

Third Chancellor, eminent scholar in the discipline of Foods and Nutrition, Chairperson of the Foods and Nutrition programme committee of the International Federation of Home Economics (France), Member of the Advisory Committee of Rajiv Gandhi Institute of Contemporary Studies, Member of the Commission on Education and Training, IUCNNR, Switzerland, author of several books and articles. Tenure: 1988 - 2014



RAJMATA SHUBHANGINIRAJE GAEKWAD

Present Chancellor, graduated from Lucknow University in 1964, with Honours in History, English Literature and Economics, holds several eminent positions in Social Welfare, Healthcare, Commerce and Environment Protection organizations, President and Chairperson of greenery promotion committee of Society for Clean Environment (SOCLEEN), Member of the World Wide Fund for Nature-India and Senator of The Maharaja Sayajirao University of Baroda since 2012. Tenure: 2015 onwards

ROLL OF HONOUR: VICE CHANCELLORS





Dr. Smt. Hansa Mehta 30-04-1949 to 29-04-1958





Prof. P J Madan 01-01-1975 to 31-12-1980

09



Prof. V C Shah 04-09-1990 to 03-09-1993



Dr. Jyotindra Mehta 30-04-1958 to 29-04-1964

06



Lord Dr. B C Parekh 07-12-1981 to 23-11-1984

10



13



Prof. K C Upadhyay 18-04-2002 to 17-04-2005



Prof. Parimal Vyas 11-02-2016 onwards



Dr. Suresh P Dalal 13-09-1993 to 24-07-1994

14



Dr. Manoj Soni 18-04-2005 to 17-04-2008



Dr. C S Patel 30-04-1964 to 29-04-1970



17-04-1985 to 22-09-1987



07-09-1995 to 07-09-1998



Prof. Ramesh Goyal 22-05-2008 to 21-05-2011



Prof. Yogesh Singh 07-07-2011 to 29-12-2014





Shri. N K Vakil 21-05-1970 to 30-05-1974

08



Prof. R C Patel 27-04-1988 to 14-03-1990



Dr. Anil S Kane 07-09-1998 to 07-09-2001



Ms. Padma Ramchandran









The Maharaja Sayajirao University of Baroda 📈















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A BRIEF PROFILE OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA [MSUB]:

The Maharaja Sayajirao University of Baroda [MSUB] stands among the most renowned higher education institutions in India whose reputation has also travelled to many parts of the world. Founded in the year 1881 as the Baroda Arts and Science College by the visionary Maharaja Sayajirao Gaekwad-III, it took the shape of the University w.e.f. 30th April, 1949 under the patronage of Maharaja Pratapsinhrao Gaekwad. Dotted with beautiful buildings and heritage structures, covering an area of 274.81 acres with six campuses (4 urban and 2 rural), the MSUB carries forward a glorious legacy of the most eminent names among its former teachers and alumni, including Sri Aurobindo, Acharya Vinoba Bhave, Nobel laureate Prof. Venkatraman Ramakrishnan, Former RBI Governor Dr. I. G. Patel and several others, many of whom have also been conferred Padma and Gyanpith awards. The MSUB has adhered to a strong commitment to the sustenance and promotion of academic excellence and development of intellectual, moral, critical and creative capacities of its students and teachers. The University comprises of 98 Departments under the umbrella of 14 Faculties, 3 Constituent Colleges, 9 Institutes, 7 Centres of Excellence, and 38 Cells, Centres and Offices, wherein more than 47,000 students, pursue higher studies under the mentorship and supervision of nearly 1,500 highly qualified and experienced teachers. The university has 9 multipurpose auditoriums, 8 seminar halls, 2 open air theatres, art galleries, Arboretum, Botanical garden, and an Archaeological museum having a collection of Harappan Unicorn Seals, Holy Relics of Lord Buddha, Toraman, terracotta Buddha images, Observatory, Playbox and Animal House. The University campus is Divyangian friendly with ramps, banister, and elevators available in the Faculties of the University as well as in administrative offices. Divyangian friendly restrooms and washrooms are also available in all the faculties. It has been accredited by National Assessment and Accreditation Council with 'A' Grade with CGPA of 3.16 in the year 2016.

OBJECTIVE



The key objective of the Executive PhD Programme is to provide an opportunity to senior and middle level professionals to advance their professional practices, research skills and subject expertise concerning Collaborative Research, Consulting, Training, and Teaching by advancing their own holistic development and professional growth resulting in significant self-confidence and enhancement of social and intellectual stature.

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SCOPE AND STRENGTHS OF THE PROGRAMME:

ΑΙΜ ΤΟ

- Offer opportunities to carry out investigation on socially significant, relevant and impactful research topics.
- Conceive, build and develop indigenous innovative Technological, Social, Economic, and Business models on identified research problems.
- Deploy conscientious efforts to search for innovative ways that would be helpful in handling and managing challenges by recognizing inner human potential to elicit meaningful perspectives that would improve the quality of human lives.
- Look forward to evolving and continually exploring innovative ways with a clear and specific focus on studying and researching Bharat's [India]'s rich legacy, traditions, and national heritage and scientific temper.
- Develop high quality researchers, and policymakers for Profit and Non-Profit Organizations, and Government Institutions/Departments in India and Abroad.
- Nurture independent Top-Quality Thinkers, Thought Leaders, Researchers, Practitioners and Consultants who can make significant meaningful contributions.
- Facilitate carrying out researches in different areas and disciplines such as Pure Sciences, Technology, Engineering, Pharmacy, Environment and other such areas.
- Carry out research in different areas and disciplines of Humanities and Social Sciences such as Businesses, Economics, Accounting and Finance, Commerce and Management, Political Science, Education, Psychology, Family and Community Sciences, Social Work, Leadership and Governance, and Academic Administration.

The MSUB Executive PhD programme is the first of its kind in Gujarat. It is embedded in the rationale of supporting a flexible, interdisciplinary approach to high stature learning through rigorous team mentoring; thereby leading to multiple benefits of improved knowledge perspectives, and a tangible escalation in career growth.





THE MAHARAJA SAYAJIRAO

EXECUTIVE PhD PROGRAMME

The Maharaja Sayajirao University of Baroda [MSUB], Vadodara is offering a Doctoral level Programme that is 'Doctor of Philosophy [PhD]' to be called as **"MSUB Executive PhD Programme"**. The programme shall be offered in observance of University Grants Commission [UGC] Regulations in force which may be amended from time to time as the case may be.

SALIENT FEATURES OF EXECUTIVE PhD PROGRAMME

- Exclusively open for senior and middle-level professionals engaged/occupied in diverse sectors such as Corporate, Industry, Research Institutions, Research Laboratories, Non-profit Organizations/Foundations and Government sectors.
- Scope to conduct research on diverse problems relevant to different groups of stakeholders corporate, industry, government and society at large.
- Scope to carry out interdisciplinary research on multifaceted issues in a specialized field of study.
- Opportunity to enter into academics or continue in industry in the capacity of consultants, trainers and researchers.
- Facilitation of career advancement through advanced degree and knowledge pertaining to senior level issues and problems.
- Offered on a Higher Payment basis.



WHO CAN ENROL?

• The Executive PhD Programme seeks practitioners with academic bent of mind.

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- It shall be open for various groups of professionals from amongst
 - Industry Personnel
 - Technocrats
 - Bureaucrats
 - Scientists
 - R&D Personnel
 - Business Executives
 - Managers and Administrators
 - Government Officials
 - NGO Professionals
 - Entrepreneurs
- The programme is open to all nationalities.

ELIGIBILITY CRITERIA FOR EXECUTIVE PhD

PROGRAMME



- 1. A candidate for the Executive PhD Programme should have a minimum of five years of work experience in a middle-scaled organization of repute in the respective field.
- 2. A candidate for the Executive PhD Programme must have one of the following qualifications obtained from any of the universities incorporated by an act of the Central or State legislature in India or other educational institutions established by an act of parliament or deemed to be the university under section 3 of UGC Act, 1956, or possess an equivalent qualification recognized by the Ministry of HRD, Government of India, or an equivalent qualification from an institution approved by AICTE, New Delhi or Equivalent Statutory Bodies/Councils; or any discipline or allied discipline or a Post-Graduate qualification from recognized foreign universities or institutions.
- A Master's degree in any discipline, with at least 55 percent aggregate marks or Equivalent Grade Point Average OR
- A Post-Graduate Programme/Executive Post-Graduate Programme / Post Graduate Programme for Working Executives from IIMs/IITs and or an Equivalent Educational Qualification obtained from State/Central/Deemed/Private Universities with Minimum Grade Point Equivalent to 6.0 out of 10-Point Scale OR



- A Professional qualification like CA, ICWA, ICMA, CS etc. with at least 55 per cent aggregate marks or Equivalent Grade Point Average OR
- A Five year/Four-year Integrated Master's Degree Programme in any discipline, with at least 55 percent aggregate marks, obtained after completing Higher Secondary schooling (10+2) or equivalent.
 - AND
- Age should not be more than 55 years at the time admission. AND
- Minimum 5 years of Managerial/Entrepreneurial/Professional Experience at the time Admission after Post-Graduation. AND
- The Candidate shall be required to pass the Maharaja Sayajirao University of Baroda Executive PhD Entrance Test (E-PET) with 50%.

EXEMPTION FROM CLEARING THE MSUB EXECUTIVE PhD ENTRANCE TEST [E-PET]

The candidates who have qualified in National/ State level competitive examination such as UGC-CSIR / NET / SET / GATE / GPAT / DBT / ICMR / JRF as well as M.Phil. degree holders are exempted from appearing in Executive PhD Entrance Test [E-PET] Examination.

A BRIEF ABOUT MSUB EXECUTIVE PhD ENTRANCE TEST [E-PET]

- The MSUB Executive PhD Entrance Test will comprise of the Written Test.
- The E-PET will be conducted twice a year.
- The question papers of Executive PhD Entrance Test will be objective type in nature, in English language only.
- The Syllabus of the Executive PhD Entrance Test shall consist of 50% Research Methodology and 50% Subject Specific.
- After gualifying the Executive PhD Entrance Test, candidate shall be required to discuss his or her research through PowerPoint Presentation of Research Proposal on an identified and chosen Research Topic /Research Problem which will be followed by Aptitude Interview and or Viva Voce by a duly constituted Faculty Level Research Advisory Committee (FLRAC)/ Institute Level Research Committee (ILRAC).

COURSEWORK OF EXECUTIVE PhD PROGRAMME

- The Executive PhD Coursework shall be considered as prerequisite for the award of PhD degree preparation.
- All admitted candidates shall be required to complete the PhD course-work before the submission of the Synopsis.
- The nature and type of Executive PhD coursework will vary as per the domain areas, subject areas and discipline(s).
- The Executive PhD Coursework shall include Research Methodology which would cover areas such as Quantitative methods/Qualitative methods, Computer applications, Research ethics and Review of Published Research in the relevant field, Training, Field work, etc.
- The research scholars registered under Executive PhD Programme will be required to undergo on the job assignments to be performed for 120 hours i.e. 8 credits.
- The Classes/Presentation/Visits or Action Oriented Work can be assigned to earn other 6 credits.
- The Executive PhD coursework will be evaluated by the Guide, Co-guide and the Faculty Level Research Advisory Committee (FLRAC)/Institute Level Research Advisory Committee (ILRAC).

DURATION

• The Executive PhD Programme shall be for a minimum duration of three (3) years, including coursework, extendable up to a maximum duration of six (6) years.

FEES STRUCTURE

- The fees payable for the Executive PhD Programme (E-PhD) has been fixed as per the norms of Higher Payment Programmes.
- The tuition fee for this program will be Rs. 30,000 per semester and it will be revised from time to time as per university rules.



per university rules.
There is no provision of scholarship for the prospective candidates.



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FACULTIES OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA



		ARTS	COMMERCE	
		EDUCATION & PSYCHOLOGY	FAMILY & COMMUNITY SCIENCE	s
		FINE ARTS	JOURNALISM & COMMUNICATION	For Parameter
		LAW	MANAGEMENT STUDIES	
		MEDICINE	PERFORMING ARTS	
		PHARMACY	SCIENCE	
		SOCIAL WORK	TECHNOLOGY & ENGINEERING	
CONST	ITUEN	T COLLEGES		
	ALL REAL	POLYTECHNIC COLLEGE	BARODA SANSKRIT MAHAVIDYALAYA	
	ΜΚΔ			

M K AMIN COLLEGE OF ARTS & SCIENCE AND COLLEGE OF COMMERCE



EXECUTIVE PhD PROGRAMME THROUGH INSTITUTE OF INTERDISCIPLINARY STUDIES



Physical Sciences

Physics Applied Physics

Chemical Sciences

Chemistry Applied Chemistry Chemical Engineering

Computational & Mathematical Sciences

Mathematics Applied Mathematics Statistics Computer Science

Earth & Environmental Science

Geology Geography Environmental Science Environmental Engineering

Social Sciences & Humanities

ArtsLawArchaeologyJournalism & CommunicationSocial WorkFamily & Community Sciences

Life & Health Science

Bio-chemistry Microbiology Zoology Botany Cell & Molecular Biology Foods and Nutrition Pharmacy Medicine

Liberal Arts

Performing ArtsForeign LanguagesFine ArtsLiteratureIndian Languages

Commerce & Management

Commerce Management

Engineering Sciences

Applied Mechanics & Structural Engineering Architecture Chemical Engineering Civil Engineering Computer Science & Engineering Electrical Engineering Wa Mechanical Engineering Metallurgical & Materials Engineering Textile Chemistry

Textile Engineering Water Resource Engineering

EXECUTIVE PhD PROGRAMME: THRUST AREAS



// FACULTY OF ARTS //

ECONOMICS

- Issues in Environmental Finance
- Environmental Governance
- International Finance
- Evaluating the Efficiency of International Development Institutions
- The Political Economy of Development Policies
- Sustainable Development
- Social Policy for Economic Development
- Gender Issues and Development
- Spatial Disparities and Economic Development in India
- Corporate Social Responsibility
- Health Sector-Issues and Emerging Challenges

SANSKRIT

• Veda

- Vedanta
- Vedic, Classical and Modern Sanskrit Literature
- Vyakaran
- Purana
- Alamkara Sastra
- Nyaya
- Sanskrit and Indian Music
- Manuscriptology

TRADITIONAL SANSKRIT

HINDI

- Jyotisastra (Bhalit evam Siddhant)
- Sahitya Sastra (Kavya sastradi)
- Vyakaran Sastra
- Vedic Sahitya (Brahman Granth, Arankyakas, Upanishad, Kalpasutradi)
- Vastusastra
- Dharmasastra
- Bharatiya Prachya Vidya
- Prachin Kavya
- Madyakaalin Kavya
- Aadhunik Sahitya-Gadya and Padya
- Hindi ke Sahityakar aur unki rachanao par shodh karya
- Aadhunik Vimarsh-Dalit Vimarsh, Nari Vimarsh, Aadivasi Vimarsh, Kinnar Vimarsh
- Pravasi Sahutya, Lok Sahitya
- Bhartiya aur Paschatya Kavyashastra aur Bhasha Vigyan
- Hindi Bhasha ki Vaishvik Paridhi, Rajbhasha Hindi



GUJARATI

• History of Gujarati Literature

- Criticism
- Gujarati Folk Literature
- Comparative Literature
- Literature and Cinema
- Dalit Literature
- Feminism
- Pedagogy of Literature
- Linguistics

ENGLISH

English studies in India

- English Language Teaching, learning and Testing
- Comparative Literature
- Translation Studies
- Indian English Literature
- Commonwealth Literature
- Canadian Literature
- European Literature
- Diaspora Studies
- Gender Studies
- Historiography of Literature
- Critical Theories
- English for Specific Purposes (ESP)
- Academic Writing

ARCHAEOLOGY AND ANCIENT HISTORY

HISTORY

- South Asian Archaeology
- Prehistory
- Early Food Producing Societies
- Historical Archaeology of India
- Artefact Analysis and Interpretation
- Archaeological Sciences
- Heritage Studies
- Ancient Crafts and Technology
- Art and Architecture
- Epigraphy and Numismatics
- Cultural Landscape Studies
- Medieval South Asian Studies
- Social, Cultural and Economic History of South Asia
- Pre-modern and Modern South Asia
- Social, Cultural and Economic History of Modern
 South Asia
- Gender Studies
- Environmental History
- Transport History
- History of Western India with special reference to Princely States
- Business History
- History of Science and Technology
- History of Media
- Agrarian History
- History of Freedom Movement



PHILOSOPHY	 Indian Philosophy Social Philosophy Ethics Comparative Religion
POLITICAL SCIENCE	 Political Theory/Thought International Relations Indian Government and Politics Regional Cooperation
	 Foreign Policy Gender Studies Justice and Democracy
MARATHI	 Folk Literature and Regional Folk Literature Cultural Studies Women's Literature
	 Comparative Literature Literature and Local History Dalit Literature Muslim Marathi Literature Jain Marathi Literature Translation Studies Sociology of Literature

LIBRARY AND INFORMATION SCIENCES

- Health/Medical Informatics
- Digital Humanities
- Open Educational Resources (OER)
- E-publishing



// FACULTY OF COMMERCE //



ACCOUNTING AND FINANCIAL MANAGEMENT

COMMERCE AND BUSINESS MANAGEMENT

- Financial Accounting
- Cost Accounting
- Management Accounting and International Accounting
- Direct and Indirect taxes
- Tax Accounting
- International Taxation
- Personal Tax Planning
- Taxations Policies and Reforms.
- Funds Management
- Corporate Finance
- Personal Finance
- International Finance
- Venture Capital Financing
- Financial Mathematics
- Promoting Research and Doctoral Studies in the area of National and Regional Priorities
- Organizational Productivity and Effectiveness
- Corporate Governance, Corporate Social Responsibility and Environmental
- Consciousness (People, Planet and Profitability)
- Organizational Challenges and Sustainability
- Creativity-Innovation-and Technology
 Management
- New Knowledge creation and dissemination across the Social Systems
- Societal Structures-Dynamics and Its managerial Implications.
- Culture-Sub Culture- Cross Culture and its Implications for Organizations
- Dimensions of Entrepreneurship and New Venture Creation
- Legal Environmental Framework and its Implications
- Demographic Structures and Dynamics
- Human Development, Welfare and Social Security
- International Studies and Global trends in various functional areas of Management
- Policies and Programme for conservation and enhancement of Ecosystem
- Mental and Physical health and Recreational
 Programmes
- Public Policies-Economic and Infrastructure development-Citizens' Behavior-and Governance Issues
- Individual and Collective Values-Behaviors and its
 Implications



BUSINESS ECONOMICS

Macro Economics including Macro Development Economics

- Open Macroeconomics including Business Process Outsourcing, Globalization
- Issues, Capital Flows and Currency Movements
- Applied Econometrics
- Monetary Economics
- Banking and Financial Institutions
- Economics of Human Resources including Economics of Health and Education
- Economics of Business Environment
- Environmental Economics.
- Land Economics including Urban and Rural Development and Planning
- Core Business Economics
- Industrial Economics including Economics of infrastructure, Small Business and
- MSMEs
- Economics of Infrastructure
- Public Finance and Fiscal Economics
- Regional and Local Economic Development Issues
- Capital Market Issues
- Household Economics including Economics of Household Finance

CO-OPERATIVE MANAGEMENT AND RURAL STUDIES

- Co-operative issues and developments
- Agriculture, Taxation, Food security and allied activities.
- Poverty, Financial Inclusion Rural banking, NBFC, Micro-Finance modes of Rural
- Finance.
- ICT and E-governance for Rural development.
- Corporate Social Responsibility and Sustainable
 Development.
- Rural Marketing and dimensions.
- Educational, Health and Transformation.
- Rural Employment, Rural Human Resource Development and Training, Rural
- Entrepreneurship and Women Empowerment.
- Evaluation of development projects.
- Issues related to Rural and Urban Development study

// FACULTY OF EDUCATION & PSYCHOLOGY //



EDUCATION

- Teacher Education
- Educational Technology
- Education of the disadvantaged group
- Sports Psychology
- Educational Leadership
- Educational Administration and Governance
- Policy Research in Education
- Comparative International Education
- Women in Educational Management

PSYCHOLOGY

- Clinical
- Industrial
- Counseling
- Cognitive
- Educational

// FACULTY OF FAMILY & COMMUNITY SCIENCES //

FOOD AND NUTRITION

- Maternal & Infant Young Child Nutrition
- Adolescent & School health & Nutrition
- Food insecurity, Mapping & spatial analysis, affordability & sustainability of diets
- Food Fortification
- Behavior change communication
- Non communicable disease prevention & management
- Workplace wellness & Nutrition
- Reducing High fat, high sugar, high salt in diets
- Food Security Act & its impact on nutrition
- Preconception Nutrition
- Dual burden of malnutrition & double duty actions for their prevention &
- management
- Reaching the unreached (studies on tribal, Street children, orphanages etc.)
- Inborn errors of metabolism
- Food labeling
- Chrono nutrition
- Sustainable & safe food systems
- Nutrition health Economics : selecting low cost high impact interventions
- Nutrient drug interactions
- Nutrigenomics
- Functional foods in health & disease
- Entrepreneurship for healthy diets & nutrition, startups & innovations, Clycemic
- Index, Clycemic Load and Satiety Index Studies of Foods



FOOD AND NUTRITION

- Pro & Prebiotic foods & their role
- Nutrition in various types of sports for performance & recovery Sports Nutrition
- Functional foods in sports nutrition
- Role of functional foods
- Role of supplements
- Preventive Geriatrics & Gerentology
- For School & Workplace Wellness programs, Geriatric homes & hospitals, its role & benefits

EXTENSION AND COMMUNICATION

- Rural Resurgence in Developing Countries
- Extension Management
- Project Management in Dev Sectors
- Extension Models
- Extension Administration
- Development Comm Strategies
- Designing & Development Comm Strategies
- Development Communication Methods Usage, Barriers
- ICT Applications for Development
- Social & Behavior Change Communication
- Theories of Development
- Dev Comm. -Challenges & Perspectives
- Life Skill Education
- Life Skill education Theories
- Models of Lifelong learning
- Evaluation of agencies working for LLL
- LLL communication Strategies
- Analysis of Life Long education programmes
- Project Designing for an enterprise
- Analysis of Existing models of entrepreneurship dev and its management
- Entrepreneurship training for various target groups
- ICT application in enterprise development and its management
- Sustainable design with minimum wastage and cutting technologies for garments
- Fashion Marketing and Management
- Design development and Innovation in garment design
- Museum Studies (Textiles)
- Nanotechnology for Textile finishing
- Newer fibers for sustainable development
- Wet processing using sustainable and environmentally friendly technologies.
- Product development with traditional crafts for their viability and sustenance
- Design development with newer materials

CLOTHING AND TEXTILE



FAMILY AND COMMUNITY RESOURCE MANAGEMENT

Decision Making

- Management of Resources
- Financial Management
- Communication
- Interior and Exterior Space Planning
- Sustainable Designing
- Designing for Special Needs
- Consumer Education, behaviour, problems and redressal
- Entrepreneurship Mgt.
- Household Equipment's
- Environment Education and Protection
- Hospitality and Tourism Management
- Ergonomics
- Human Resource Management

HUMAN DEVELOPMENT AND FAMILY STUDIES

 Human Development and Family Life: Indic Perspectives, Traditional Texts

- Self, Identity
- Moral Development (Dharma, Karma Yoga)
- Happiness and Well-being
- Sustainable Models for Living
- Culture, Sustainability, Food Choices and Markets
- Gender Equity in Human Development
- CSR Partnerships in Early Childhood Education (ICDS)
- National Education Policy (NEP) 2020
- Values Education and Vocational Development
- Sex Education and Human Rights
- Positive Youth Development and Life skills
- Civic Engagement and Volunteering
- Interpersonal Relationships (Parenting, Friendships, Romantic Relationships)
- Challenges in Adult Life (Divorce, Terminal illness, Singlehood)
- Older Age: Conceptions, Issues, Policies and Programs

// FACULTY OF FINE ARTS //

MUSEOLOGY

- Intangible & Tangible Cultural Studies
- Conservation of Cultural Properties
- Heritage Management
- Documentation and Exhibition

// FACULTY OF JOURNALISM AND COMMUNICATION //



JOURNALISM AND COMMUNICATION

- Core Communication Concepts and Perspectives
- Development Support Communication
- Scope of Media Applications: Print, Radio, Television, New Media
- Trends in Advertising and Media Management
- Communication and Media Policies
- Communication and Society
- The Evolving Digital Landscape
- E-governance
- Media and Gender Intersection
- Media and Culture

// FACULTY OF LAW //

LAW

- International Law
- Family laws and Society
- Environmental Law
- Law and Technology
- Artificial Intelligence: Legal, Ethical and Moral issues
- E Governance
- Law and Health
- Gender Justice in Digital Age
- Transformative Constitutionalism
- Constitutional Law
- Intellectual Property Law
- Commercial Laws & Global trends
- Criminology and Penology
- Common Law
- National Security

// FACULTY OF MANAGEMENT STUDIES //

MANAGEMENT STUDIES

- Managing for Shareholder Value Creation
- Financial Reengineering
- Mergers and Acquisitions
- Strategic Financial Management
- Monetary Policy and Fiscal Policy
- Financial Institutions and Markets
- Exchange Rate Policy
- Agricultural Economics
- International Economic Stratagems
- HRM: Personnel Management, HRD, IR, Compensation Management
- Organisation Behaviour : Leadership, Motivation, conflict management, management functions
- Corporate Governance: Board structure and process, disclosures, responsible business behaviour, sustainability
- Consumer issues
- General Management Any contemporary subject which can be multidisciplinary with above subjects and any other branch of management
- E Commerce
- M Commerce
- Service Marketing
- Retail Management
- Artificial Intelligence in Marketing

// FACULTY OF PERFORMING ARTS //



VOCAL

- Ancient to Modern musical vocal traditions. Classifications, Historical aspects
- Style of performing, style of teaching learning, different forms of presentations.
- Traditional teaching and learning system, Modern system of Music education,
- Mat. Sampradays , Banis, Gharana , Institutional Education, University educations, Impacts & outputs
- Various vocalists, their styles and their contribution to the field
- Various Musical genres for different cultures of the world, their historic roots, rituals and their scientific justifications and studies
- Manufacturing of Musical Instruments, Traditional manufacturing to commercial productions and various aspects of manufacturing and production in regards to materials, Quality, and Trading
- Scientific Study of application of Vocal Music to Yoga, Psychology, Multitasking capacities, Human Anatomy, mind and behaviour and various psychological aspects
- Vocal Music application to other popular Professions of society, change in perspective, holistic development
- Application of vocal music teaching to basic , primary to Higher education level as a subject in form of developmental tool, and its impact on students on various levelS
- Ancient to Modern musical Instruments
- Style of performing, style of teaching learning, different forms of presentations
- Traditional teaching and learning system, Modern system of Music education,
- Mat. Sampradays , Banis, Charana , Institutional Education, University educations, Impacts & outputs
- Various instruments & their noted performers, their styles and their contribution to the field
- Various Musical Instruments, their relation to various culture of the world, rituals and their scientific justifications and studies
- Manufacturing of Musical Instruments, Traditional manufacturing to commercial productions and various aspects of manufacturing and production in regards to materials, Quality, and Trading
- Scientific Study of application of Instrumental Music to Yoga, Psychology
- Multitasking capacities. Human Anatomy, mind and behaviour and various psychological aspects
- Instrumental Music application to other popular Professions of society, change in perspective, holistic development.
- Application of Instrumental music teaching to primary to Higher education level as a subject in form of developmental tool, and its impact on students on various levels

INSTRUMENTAL





TABLA

- Historical Aspects of Percussion Instruments
- Percussion instruments and its therapeutic applications
- Aesthetical Aspects of Percussion Instruments
- Indian Percussion Instruments and its Global Scenario
- Study of Archaeological evidences of Percussion Instruments in India
- Study of Indian Treatise in reference to Percussion Instruments
- Study of endangered dance forms
- Benefit of dance education for mentally challenged children
- Historical Aspects of Ancient Dance forms.
- Dance and its therapeutic applications.
- Aesthetical Aspects of various Gharanas/Banis
- Indian Classical Dance and its Global Scenario
- Study of temple sculptures and dance.
- Study of various texts and Manuscripts with reference to dance
- Interrelationship of visual Arts and Dance
- Interrelationship of various Performing
- Dance as medium for reliving stress
- Dance and child psychology
- Impact of Visual art on Education
- Education through Performing Arts
- Psychological aspect of learning through Visual arts
- Natyashashtra by Bharatmuni& Sanchar Siddhanta
- Theatre & Management
- Bhartiya approach for development stage of human beings as an Individual / Group / Society / Nation
- Traditional teaching and learning system, Modern approach to theatre studies
- Theatre & Anthropology
- Theatre Architecture & Space Design
- Costume & Fashion Technology Design
- Actor's Training Methodology & Body
- Anatomy Nervous System
- Constitutional & Fundamental Framework of Media

DANCE

DRAMATICS



// FACULTY OF PHARMACY //

PHARMACY

- Formulation Development and Optimization of **IR, SR and MR dosage forms**
- Solubility, Stability and Bioavailability enhancement approaches
- Formulation Development of: New Drug Delivery **Systems**
- Controlled and targeted Drug Delivery systems
- Micro and nanoparticulate drug delivery systems
- Impurity profiling
- Analytical and bioanalytical method development and validation
- Molecular modeling and Computer Aided Drug Design
- Synthesis of Novel Therapeutic Moieties
- Pharmacological, molecular and toxicological screening of New Therapeutic
- Moieties and Herbal extracts
- Pharmacodynamic and pharmacokinetic studies on novel formulations
- Extraction, screening and standardization of **Herbal Drugs and extracts**

// FACULTY OF SCIENCE //

BOTANY	 Remote sense covers Plant Ecolog Cytogenetic: Plant Tissue micropropage Developmen Fungal Biote Plant Ecolog Plant function biology, Prog Cytogenetic: Coastal Ecolog Angiosperm Structural and taxonomy, P Plant Behavio Plant stress
CHEMISTRY	 Organic Che Inorganic Che Physical Che Analytical Che Industrial and
COMPUTER APPLICATIONS	 Cloud Comp Sustainable Autonomic

- sing of ecological aspects of forest
- gy, Ecophysiology and Remote Sensing
- cs, Cytotaxonomy, and Biodiversity
- Culture , in vitro morphogenesis, gation
- ntal Biology , Plant Anatomy and echnology
- gy and Pollution Ecology
- onal genomics, Plant developmental grammed cell death in plants
- cs and Molecular Biology
- logy and Remote Sensing
- ns Taxonomy, Phytochemistry
- ind developmental botany, Angiosperm Pteridophyte taxonomy
- vior, Ethanobotany
- Biology

emistry

- hemistry
- emistry
- Chemistry
- nd Sutainable Chemistry

puting

- e and Green Computing
- Computing
- Internet of Things



	Esto
COMPUTER APPLICATIONS	 Block-chain and Trusted Computing Machine learning Artificial Neural Networks Deep Learning Image Processing Data Mining
ENVIRONMENTAL STUDIES	 Climate Change Biological Tools for Cleaner Production of Technology Sustainable Management of Natural Resources
GEOGRAPHY	 Applied Remote Sensing and GIS Climate Change Disaster Management Studies Environment Management Health and Diseases Studies Landscape Planning Regional Development and Planning Urban Planning and Smart Cities Water Resource Management
	 Environmental Microbiology Antimicrobial Resistance Host - Pathogen Interactions Plant associated microbes Microbial enzymes and other products Genetic engineering of microbes microbes for industrial and environmental applications Probiotic microorganisms Plant-microbe interactions Plant pathology Biological control Microbial biofilms Microbiological assessment and testing of ethnobotanical products Biological Effluent treatment Food Microbiology Genomics and Bioinformatic analysis of microbial genomes and metagenomes
MICROBIOLOGY [BIOTECHNOLOGY]	 Immuno-oncology Clinical Biomarkers Exploration Drug Targets Identification, Validation Efficacy/toxicity screening Immuno metabolomics Autoimmunity: Disease pathogenesis Biotechnological approaches for Agricultural, Industrial and environmental applications Cell culture and expression systems for engineered products Diagnostic Platforms
	Stem Cell Research and Diseaese Pathogenesis

CELL AND MOLECULAR BIOLOGY



ZOOLOGY

PHYSICS

- Toxicology
- Cancer and Nutrition
- Neurobiology
- Wildlife Biology
- Chronobiology
- Regeneration
- Fisheries Biology
- Metabolic Physiology and Endocrinology
- Biodiversity
- Entomology
- Condensed Matter Physics
- Nuclear Physics
- Materials Science
- Bio-Physics

// FACULTY OF SOCIAL WORK //

SOCIAL WORK

- Public Health and Community Participation
- Social Aspects of New Education Policy 2020
- Women Empowerment and Gender Equity Policy
- Sustainable development goals 2030
- Unorganized Labour in the Social Security sector
- Socio Economic and cultural development of Marginalized Segment (SC/ST/OBC) of Indian Society
- Social Development through (Samajik Samrasta)
- Indianization and Bhratiyakaran of Social work education and Profession
- Status of Startups and Skill Initiatives in making mightier India
- Correctional administration in Government
 Programmes
- Industrial Policy
- HR in Digital Era
- Sustainable Development Goals and CSR
- Diversity and Inclusion at Workplace
- Technology Embedded Society
- Public Health & Development
- Climate Change, Environment and SDG
- Leadership in Global Market Economy
- Youth, Entrepreneurship and Skill Development
- Rural Transformation and Development
- Transformative HR
- Social Work and Governance
- OD & OB
- Quality of Worklife

// FACULTY OF TECHNOLOGY AND ENGINEERING //



APPLIED CHEMISTRY	 Liquid crystals Polymers Organic synthesis Surfactants
	 Mesoporous materials Applied Chemistry Ionic Liquid Nanocomposite & Designed Materials
APPLIED MATHEMATICS	 Wavelets & image processing/signal processing Mathematical modelling oflubrication theory Numerical analysis Mathematical control theory & its applications Soft computing techniques in medical science Dynamical systems
	 Dynamical systems Special functions Speech recognition Time series analysis Fuzzy dynamical systems Applied Mathematics General theory of retativity Orbital dynamics Fractional calculus Fractional differential equations Wavelet Analysis BioMathematics Industrial Mathematics Optimization
APPLIED MECHANICS AND STRUCTURAL ENGINEERING	 Structural Engineering Geotechnical Engineering Earthquake Engineering Pile & Piled raft foundation Composite Structure Structural health Assessment
APPLIED PHYSICS	 Optical Science and Applied Optics Condensed Matter Physics Nanoscience and Technology Optoelectronics Theoretical Physics and Simulations
CHEMICAL ENGINEERING	 Extraction of heavy Metals Fine particles synthesis Phase Equilibrium Thermodynamics Plastic waste management Reaction Engineering

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	 Architecture & design pedagogy for sustainable development Building construction & management for affordable built spaces Health, Safety, technological advances & elements of future architecture and planning Climate change & approaches to architecture & planning Impact evaluation of development projects Disaster risk management & development Image of the city & smart city development Environment psychology & built environment Urban and regional development policies & governance Heritage conservation & development strategies Architecture criticism & Post occupancy analysis
CIVIL ENGINEERING	 Hydraulic Structures Water Resources Environmental Engineering
COMPUTER SCIENCE AND ENGINEERING	 Agricultural prediction for optimizing quality of crop using Machine Learning Summarisation of Natural Language text content using NLP Real-time system design and Application IOT based application for health and hygiene
ELECTRICAL ENGINEERING	 Power Electronics and drives Improved power quantity converters Active power filters Multipulse converters Multilevel inverters Resonant converters control systems Artificial intelligence Machine Learning applications for control
MECHANICAL ENGINEERING	 CAD/CAM/CAE Robotics & automation Dynamics of Machines Composite manufacturing & analysis Meshless methods Solar energy Jet propulsion Refrigeration & Air Conditioning Additive manufacturing, etc.
MECHANICAL ENGINEERING	 Process Metallurgy Physical Metallurgy Advanced Materials Corrosion Engineering Welding Technology Computational Metallurgy & Materials Engineering

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TEXTILE CHEMISTRY

TEXTILE ENGINEERING

- Development in Environmentally Wet Processing
- Extraction, Application & Evaluation of Natural Dyes on various Textile Fibers
- Application of enzymes in various Textile Processing
- Developments in special Wet Processing for value Addition to textile
- Technical Textile
- Composites
- Coating & Lamination
- Geotextile
- Medical Textile
- Polymer nanocornposites
- Shape weaving
- Filtration
- Hybrid yarns
- Winding

WATER RESOURCE ENGINEERING MANAGEMENT INSTITUTE

- Water Resources Engineeing
- Irrigation water Management
- Climate Change Impacts on Water Resources
- RS & GIS application in Water Resources & agriculture
- On Farm Irrigation Systems

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RESEARCH PROFILE OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

The Maharaja Sayajirao University of Baroda [MSUB] is a research oriented academic institution and has a robust research culture. MSUB has adopted a transparent mechanism to support research activities, which has resulted in a flourishing research culture with multiple thrust areas ranging from Life and Health Sciences, Physical and Chemical Sciences, Pharmaceutical Sciences, Earth Sciences, Humanities and Social Studies, Family and Community Sciences, Commerce and Business Management and Engineering Sciences.

RESEARCH PROJECTS [2016-21]





Estd. 1949

ACADEMIC PROGRAMMES*

The University offers a wide range of Academic Programmes from early childhood to Under-Graduate and Post-Graduate levels Degrees and Diplomas including PhD, with Choice Based Credit System (CBCS) and Electives for UG and PG students to select value added subjects of their interest, other than Grants-in-Aid academic programmes.



सत्यं शिवं सुन्दरम् Estd. 1949



*Excluding Faculty of Medicine

REGULAR ACADEMIC PROGRAMMES [GRANT-IN AID]

FACULTY OF ARTS

- Bachelor of Library & Information Science (B.LIS)
- Bachelor of Arts (BA) in Archaeology & Ancient History
- Bachelor of Arts (BA) in Economics
- Bachelor of Arts (BA) in English
- Bachelor of Arts (BA) in French
- Bachelor of Arts (BA) in Geography
- Bachelor of Arts (BA) in German
- Bachelor of Arts (BA) in Gujarati
- Bachelor of Arts (BA) in Hindi
- Bachelor of Arts (BA) in History
- Bachelor of Arts (BA) in Linguistics
- Bachelor of Arts (BA) in Marathi
- Bachelor of Arts (BA) in Mathematics
- Bachelor of Arts (BA) in Persian
- Bachelor of Arts (BA) in Philosophy
- Bachelor of Arts (BA) in Political Science
- Bachelor of Arts (BA) in Psychology
- Bachelor of Arts (BA) in Russian Studies
- Bachelor of Arts (BA) in Sanskrit
- Bachelor of Arts (BA) in Sociology
- Diploma in French
- Diploma in German
- Diploma in Modern Persian

- Diploma in Russian
- Master of Library & Information Science (M.LIS)
- Master of Arts (MA) in Archaeology & Ancient History
- Master of Arts (MA) in Economics
- Master of Arts (MA) in English
- Master of Arts (MA) in German
- Master of Arts (MA) in Gujarati
- Master of Arts (MA) in Hindi
- Master of Arts (MA) in History
- Master of Arts (MA) in Linguistics
- Master of Arts (MA) in Marathi
- Master of Arts (MA) in Persian
- Master of Arts (MA) in Philosophy
- Master of Arts (MA) in Political Science
- Master of Arts (MA) in Psychology
- Master of Arts (MA) in Russian Studies (Philology)
- Master of Arts (MA) in Russian Studies (Military Aviation)
- Master of Arts (MA) in Sanskrit
- Master of Arts (MA) in Sociology
- Post Diploma in French
- Post Diploma in German
- Post Diploma in Russian Studies
- PhD in All Disciplines

FACULTY OF COMMERCE

- Bachelor of Commerce (B.Com.)
- U.G. Diploma in Cooperative Management
- Master of Commerce (M.Com.) in Accounting and Financial Management
- Master of Commerce (M.Com.) in Banking and
 Insurance
- Master of Commerce (M.Com.) in Business Economics
- Master of Commerce (M.Com.) in Commerce and Business Management (Marketing Management)
- Master of Commerce (M.Com.) in Commerce and Business Management (Human Resource Management)
- Master of Commerce (M.Com.) in Cooperative Management and Rural Studies
- PG Diploma in Banking
- PG Diploma in Applied Economics
- PG Diploma in Co-operative
 Management
- PhD in All Disciplines

PhD in All Disciplines

FACULTY OF EDUCATION AND PSYCHOLOGY

- Bachelor of Education (B.Ed.)
- Master of Education (M.Ed.)
- Master of Management Studies (Education)

FACULTY OF FAMILY AND COMMUNITY SCIENCES

- B.Sc. (F.C.Sc.) in General Level Program
- B.Sc. (F.C.Sc.) in Clothing and Textiles
- B.Sc. (F.C.Sc.) in Fashion Designing
- B.Sc. (F.C.Sc.) in Hospitality Management
- B.Sc. (F.C.Sc.) in Interior Design
- B.Sc. (F.C.Sc.) in Extension and Communication
- B.Sc. (F.C.Sc.) in Human Development and Family Studies
- B.Sc. (F.C.Sc.) in Dietetics
- B.Sc. (F.C.Sc.) in Public Health Nutrition
- B.Sc. (F.C.Sc.) in Food Science and Quality Control
- M.Sc. (F.C.Sc.) in Foods & Nutrition- Dietetics
- **FACULTY OF FINE ARTS**
- Bachelor of Visual Arts (BVA) in Applied Arts
- Bachelor of Visual Arts (BVA) in Art History
- Bachelor of Visual Arts (BVA) in Painting
- Bachelor of Visual Arts (BVA) in Sculpture
- Diploma in Visual Arts in Painting
- Diploma in Visual Arts in Applied Arts
- Diploma in Visual Arts in Sculpture
- Master of Visual Arts (MVA) in Applied Arts
- Master of Visual Arts (MVA) in Art History
- Master of Visual Arts (MVA) in Graphic Arts

- M.Sc. (F.C.Sc.) in Foods & Nutrition- Public Health Nutrition
 M.Sc. (F.C.Sc.) in Family & Community Resource Management-Hospitality and Resource Management

Professional Diploma in Educational Management (PDEM)

- M.Sc. (F.C.Sc.) in Family and Community Resource Management - Interior Design
- M.Sc. (F.C.Sc.) in Clothing & Textiles
- M.Sc. (F.C.Sc.) in Extension and Communication
- M.Sc. (F.C.Sc.) in Human Development and Family Studies -Child Development and Education for Sustainable Development
- M.Sc. (F.C.Sc.) in Human Development and Family Studies -Life Span Development
- PG Diploma in Development Management (DM)
- PG Diploma in Early Childhood Care Education
- PhD in All Disciplines
- Master of Visual Arts (MVA) in Painting
- Master of Visual Arts (MVA) in Sculpture
- Master of Arts, MA (Fine) in Museology
- One Year In-Service Post-Diploma in Museology
- Post-Diploma in Sculpture
- Post-Diploma in Painting
- Post-Diploma in Graphic Arts (Print Making)
- Post-Diploma in Applied Arts
- PhD in Arts History and Museology



सत्यं शिवं सुन्दरम् Estd. 1949

FACULTY OF JOURNALISM AND COMMUNICATION

PhD

PROVIDENT OF THE PROVIDENCE OF सत्यं शिवं सुन्दरम् Estd. 1949

FACULTY OF LAW

- Bachelor of Law (LL.B.) Special
- Bachelor of Law (LL.B.) General
- Master of Law (LL.M.) in Business Law

FACULTY OF MANAGEMENT STUDIES

- Master of Business Administration (MBA)
- PhD

FACULTY OF MEDICINE

- Bachelor of Medicine and Bachelor of Surgery (MBBS)
 Doctor of Medicine (MD) in Pathology
- Bachelor of Physiotherapy
- Bachelor of Science (Nursing)
- Diploma in Clinical Pathology
- Diploma in Ophthalmology
- Diploma in Gynaecology & Obstetrics
- Diploma in Child Health
- Diploma in Venereal Diseases
- Diploma in Otorhinolaryngology
- Diploma in Anesthesia
- Diploma in Radiology Diagnosis
- Diploma in Public Health
- Diploma in Tuberculosis & Chest Diseases
- Master of Science (M.Sc.) in Medical Microbiology
- Master of Science (M.Sc.) in Medical Bio-Chemistry
- Master of Science (M.Sc.) in Anatomy
- Master of Science (M.Sc.) in Physiology
- Master of Science (M.Sc.) in Pharmacology
- Doctor of Medicine (MD) in Anatomy
- Doctor of Medicine (MD) in Physiology
- Doctor of Medicine (MD) in Bio-Chemistry
- Doctor of Medicine (MD) in Microbiology

FACULTY OF PERFORMING ARTS

- Bachelor of Performing Arts (BPA) in Indian Classical Music (Vocal)
- Bachelor of Performing Arts (BPA) in Indian Classical Music (Tabla)
- Bachelor of Performing Arts (BPA) in Dramatics
- Bachelor of Performing Arts (BPA) in Dance (Bharatanatyam)
- Bachelor of Performing Arts (BPA) in Dance (Kathak)
- Bachelor of Performing Arts (BPA) in Instrumental Music (Sitar)
- Bachelor of Performing Arts (BPA) in Instrumental Music (Violin)
- Diploma in Performing Arts (Dance-Bharatnatyam)
- **Diploma in Performing Arts (Dance-Kathak)**
- Diploma in Performing Arts (Drama)
- Diploma in Performing Arts (Music-Sitar) •

PhD

Master of Law (LL.M.) in Criminal Law

- Doctor of Medicine (MD) in Pharmacology
- Doctor of Medicine (MD) in Forensic Medicine
- Doctor of Medicine (MD) in General Medicine
- Doctor of Medicine (MD) in Preventive and Social Medicine
- Doctor of Medicine (MD) in Pulmonary Medicine
- Doctor of Medicine (MD) in Emergency Medicine
- Doctor of Medicine (MD) in Radio Diagnosis
- Doctor of Medicine (MD) in Skin and Venereal Disease
- Doctor of Medicine (MD) in Anesthesia
- Doctor of Medicine (MD) in Psychiatry
- Doctor of Medicine (MD) in IHBT
- Doctor of Medicine (MD) in Paediatrics
- Master of Surgery (MS) in General Surgery •
- Master of Surgery (MS) in ENT
- Master of Surgery (MS) in Orthopedics
- Master of Surgery (MS) in Gynecology
- Master of Surgery (MS) in Ophthalmology
- Master of Physiotherapy
- M.Ch. in Plastic Surgery
- PhD in All Disciplines
- **Diploma in Performing Arts (Music-Violin)**
- **Diploma in Performing Arts (Music-Vocal)** •
- **Diploma in Performing Arts (Music-Tabla)**
- Master of Performing Arts (M.P.A) in **Dance (Bharatanatyam)**
- Master of Performing Arts (M.P.A) in Dance (Kathak)
- Master of Performing Arts (M.P.A) in Dramatics
- Master of Performing Arts (M.P.A) in Instrument (Sitar)
- Master of Performing Arts (M.P.A) in Instrument (Violin)
- Master of Performing Arts (M.P.A) in Music (Tabla)
- Master of Performing Arts (M.P.A) in Music (Vocal)
- PG Diploma in Nattuvangam
- PhD in All Disciplines

FACULTY OF PHARMACY

- Bachelor of Pharmacy
- Master of Pharmacy (M.Pharm.) in Herbal Drug Technology
- Master of Pharmacy (M.Pharm.) in New Drug Delivery Systems
- Master of Pharmacy (M.Pharm.) in
- Pharmaceutical Chemistry

FACULTY OF SCIENCE

- Bachelor of Science (B.Sc.) in Botany
- Bachelor of Science (B.Sc.) in Chemistry
- Bachelor of Science (B.Sc.) in Geography
- Bachelor of Science (B.Sc.) in Geology
- Bachelor of Science (B.Sc.) in Mathematics
- Bachelor of Science (B.Sc.) in Physics
- Bachelor of Science (B.Sc.) in Statistics
- Bachelor of Science (B.Sc.) in Zoology
- Bachelor of Science (B.Sc.) in Supplementary
- Master of Science (M.Sc.) in Biochemistry
- Master of Science (M.Sc.) in Biotechnology
- Master of Science (M.Sc.) in Botany

FACULTY OF SOCIAL WORK

• Master of Social Work (MSW)

- Master of Pharmacy (M.Pharm.) in Pharmaceutical Quality Assurance
- Master of Pharmacy (M.Pharm.) in
 Pharmaceutical Technology
- Master of Pharmacy (M.Pharm.) in Pharmacology
- PhD in Pharmacy
- Master of Science (M.Sc.) in Chemistry
- Master of Science (M.Sc.) in Geography
- Master of Science (M.Sc.) in Geology
- Master of Science (M.Sc.) in Mathematics
- Master of Science (M.Sc.) in Microbiology
- Master of Science (M.Sc.) in Physics
- Master of Science (M.Sc.) in Statistics
- Master of Science (M.Sc.) in Zoology
- Master of Science (M.Sc.) in Applied Geology
- P.G. Diploma in Applied Bio-Chemistry
- PhD in All Disciplines
- PhD in Social Work

FACULTY OF TECHNOLOGY AND ENGINEERING

- Bachelor of Engineering (B.E.) in Civil Engineering
- Bachelor of Engineering (B.E.) in Mechanical Engineering
- Bachelor of Engineering (B.E.) in Electrical Engineering
- Bachelor of Engineering (B.E.) in Chemical Engineering
- Bachelor of Engineering (B.E.) in Electronics Engineering
- Bachelor of Engineering (B.E.) in Computer Science & Engineering
- Bachelor of Engineering (B.E.) in Civil-Irrigation Water Management
- Engineering
- Bachelor of Engineering (B.E.) in Metallurgical & Materials
 Engineering
- Bachelor of Engineering (B.E.) in Textile Engineering
- Bachelor of Engineering (B.E.) in Textile Technology
- Bachelor of Architecture (B.Arch.)
- Bachelor of Engineering (B.E.) in Textile Processing
- Diploma in Textile Technology
- Diploma in Textile Chemistry
- Master of Science (M.Sc.) in Applied Chemistry
- Master of Science (M.Sc.) in Applied Physics
- Master of Science (M.Sc.) in Applied
- Mathematics/Industrial Mathematics
- Master of Science (M.Sc.) in Bio-Informatics
- Master of Science (M.Sc.) in Polymer Science
- Master of Computer Application (MCA)
- Master of Engineering (M.E.) in Fracture Mechanics
- Master of Engineering (M.E.) in Geotechnical Engineering
- Master of Engineering (M.E.) in Structural Engineering
- Master of Engineering (M.E.) in Environmental Engineering

- Master of Engineering (M.E.) in Highway & Transportation Engineering
- Master of Engineering (M.E.) in Hydraulic Structures
- Master of Engineering (M.E.) in Irrigation & Water
 Management
- Master of Engineering (M.E.) in Water Resource Engineering
- Master of Engineering (M.E.) in Petrochemical Engineering
- Master of Engineering (M.E.) in Polymer Technology
- Master of Engineering (M.E.) in Automatic Control & Robotics
- Master of Engineering (M.E.) in Electrical Power Engineering
- Master of Engineering (M.E.) in Industrial Electronics
- Master of Engineering (M.E.) in Microprocessor System &
- Application
- Master of Engineering (M.E.) in Jet Propulsion & Gas Turbine Plants
- Master of Engineering (M.E.) in Production
 Engineering
 - Master of Engineering (M.E.) in Thermal Science
- Master of Engineering (M.E.) in Material Technology
 - Master of Engineering (M.E.) in Industrial Metallurgy


FACULTY OF TECHNOLOGY AND ENGINEERING

- Master of Engineering (M.E.) in Man Made Textile
- Master of Engineering (M.E.) in Textile Engineering
- Master of Engineering (M.E.) in Textile Chemical Processing
- Master of Engineering (M.E.) in Textile Processing
- Master of Engineering (M.E.) in Welding Technology
- Post B.Sc. Diploma in Textile Chemistry

- PG Diploma in Computer Applications (PGDCA)
- PG Diploma Corrosion Technology
- PG Diploma Solid State Electronics
- PG Diploma Polymer Science & Technology
- PG Diploma Analytical Techniques
- PhD in All Disciplines

BARODA SANSKRIT MAHAVIDYALAYA

- Shastri (B.A.) in Jyotishshastra
- Shastri (B.A.) in Vyakaranshastra
- Shastri (B.A.) in Dharmashastra
- Shastri (B.A.) in Vedantshastra
- Shastri (B.A.) in Vastushastra
- Shastri (B.A.) in Shahityashastra
- Shastri (B.A.) in Shukla-Yajurveda
- Shastri (B.A.) in Shukla Yajurveda Yagniki
- Visharad in Jyotishshastra
- Visharad in Vyakaranshastra
- Visharad in Vastushastra
- Visharad in Shukla-Yajurveda
- Visharad in Shukla Yajurveda Yagniki

- Acharya (M.A.) in Jyotishshastra
- Acharya (M.A.) in Shukla-Yajurveda
- Acharya (M.A.) in Vyakaranshastra
- Acharya (M.A.) in Vastushastra
- Acharya (M.A.) in Dharmashastra
- Acharya (M.A.) in Shahityashastra
- Acharya (M.A.) in Vedantshastra
- Acharya (M.A.) in Shukla Yajurveda Yagniki
- Certificate Course in Jyotishshastra
- Certificate Course in Vyakaranshastra
- Certificate Course in Yagniki
- Certificate Course in Vastushastra
- PhD (Vachaspati) in All Disciplines

M K AMIN ARTS AND SCIENCE COLLEGE AND COLLEGE OF COMMERCE

- Bachelor of Commerce (B.Com.)
- Bachelor of Science (B.Sc.)

POLYTECHNIC COLLEGE

- Diploma in Civil Engineering (D.C.E.)
- Diploma in Mechanical Engineering (D.M.E.)
- Diploma in Electrical (D.E.E.)

- Diploma in Petrochemical Technology (D.P.T.)
- Diploma in Information Technology (D.I.T.)







The Maharaja Sayajirao University of Baroda ,

EMINENT ALUMNI OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BA<mark>RODA</mark>



Acharya Vinoba Bhave [Bharat Ratna]

He was an Indian advocate of nonviolence and human rights. Often called Acharya (Sanskrit for teacher), he is best known for the Bhoodan Movement. The Gita has also been translated into Marathi language by him with the name as Geetai means mother Geeta. He was associated with Mahatma Gandhi in the Indian independence movement. In 1940 he was chosen by Gandhi to be the first individual Satyagrahi (an individual standing up for Truth instead of a collective action) against the British rule. He was a scholar, thinker, and writer who produced numerous books. He was a translator who made Sanskrit texts accessible to the common man.



Shri Aurobindo, Principal, Baroda College

He was an Indian philosopher, yoga guru, maharishi, poet, and Indian nationalist. He was also a journalist, editing newspapers like Bande Mataram. He joined the Indian movement for independence from British colonial rule, till 1910 was one of its influential leaders and then became a spiritual reformer, introducing his visions on human progress and spiritual evolution. At Pondicherry, Shri Aurobindo developed a spiritual practice he called <u>Internal Yoga</u>. In 1926, with the help of his spiritual collaborator, Mirra Alfassa (referred to as "The Mother"), Shri Aurobindo Ashram was founded.



Dr. B R Ambedkar [Bharat Ratna]

He was an Indian jurist, economist, politician and social reformer, who inspired the Dalit Buddhist movement and campaigned against social discrimination towards the untouchables (Dalits). He was British India's Minister of Labour in Viceroy's Executive Council, Chairman of the Constituent Drafting committee, independent India's first Minister of Law and Justice, and considered the chief architect of the Constitution of India. He was a prolific student, earning doctorates in economics from both Columbia University and the London School of Economics, gaining reputation as a scholar for his research in law, economics and political science.



Dr. Venkatraman Ramakrishnan [Nobel Laureate]

He is an Indian-born British-American structural biologist who shared the 2009 Nobel Prize in Chemistry with Thomas A. Steitz and Ada Yonath, "for studies of the structure and function of the ribosome". Since 1999, he has worked as a group leader at the Medical Research Council (MRC) Laboratory of Molecular Biology (LMB) on the Cambridge Biomedical Campus, UK and is a Fellow of Trinity College, Cambridge. He served as President of the Royal Society from 2015-2020.



Kanaiyalal Munshi, Founder, Bhartiya Vidya Bhavan

Popularly known by his pen name Ghanshyam Vyas, he was an Indian independence movement activist, socialist, politician, writer and educationist from Gujarat state. A lawyer by profession, he later turned to author and politician. He is a well-known name in Gujarati literature. He founded Bharatiya Vidya Bhavan, an educational trust, in 1938. After the independence of India, Munshi, Sardar Patel and N. V. Gadgil visited the Junagadh State to stabilise the state with help of the Indian Army. In Junagadh, Patel declared the reconstruction of the historically important Somnath temple.



The Maharaja Sayajirao University of Baroda

EMINENT ALUMNI OF THE MAHARAJA SAYAJIRAO UNIVERSITY OF BA<mark>RODA</mark>



Smt. Hansa Mehta [Padma Bhushan]

She was a reformist, social activist, educator, independence activist, writer, and Parliamentarian. She was on the UN Committee responsible for drafting the Universal Declaration of Human Rights. She was one of the 15 women in India's first Constituent Assembly, which has 289 members in all. Together they helped draft the Constitution of India. In 1949, she became the Vice-Chancellor of Baroda College (now called The M S University of Baroda) and became the first woman Vice-Chancellor of a university in India.



Dr. Vijay Bhatkar [Padma Bhushan]

He is an Indian computer scientist, IT leader and educationalist. He is best known as the architect of India's national initiative in supercomputing where he led the development of Param supercomputers. Indian computer magazine Dataquest placed him among the pioneers of India's IT industry. He was the founder executive director of C-DAC and is currently working on developing Exascale supercomputing mission for India. He has been the Chancellor of Nalanda University, India since January 2017. Prior to that, he served as the Chairman of Board of Governors of IIT Delhi from 2012 to 2017.



Dr. Ajay Bhatt [Co-inventor of USB]

He is an Indian-born American computer architect who defined and developed several widely used technologies, including USB (Universal Serial Bus), AGP (Accelerated Graphics Port), PCI Express, Platform Power Management architecture and various chipset improvements. In April 2013 he was awarded the Outstanding Achievement in Science & Technology Award at The Asian Awards in London.



Kamlesh N Vyas, Secretary, DAE

He is a top nuclear scientist of the country. He had completed Bachelor of Engineering in Mechanical Engineering with first class from The Maharaja Sayajirao University of Baroda. In 1978, he quantified as a scientist trainee of the most prestigious Training School of Bhabha Atomic Research Centre. After graduating from BARC training school, he joined as a scientist in the Reactor Engineering Division of BARC. IN February 2016, he was appointed as the Director of BARC for his outstanding national and international contributions in nuclear energy.



Dr. I G PATEL [Padma Vibhushan] Former Governor, RBI

He was an Indian economist and a civil servant who served as the fourteenth Governor of the Reserve Bank of India from 1 December 1977 to 15 September 1982. He served as Director of the London School of Economics, making him the first person of Indian origin to head a higher education institute in the United Kingdom. He also served as Chairperson of the Board of Governors from 1996 to 2001 at Indian Institute of Management, Ahmedabad. He also became the Deputy Administrator at United Nations Development Programme headquarters in New York in 1972, a post that he held for five years.



The Maharaja Sayajirao University of Baroda 🔥

महाराजा सयाजीराव विश्वविद्यालय गीत

अमे वडोदराना विद्यापीठना सपना सारवनारा अमे ज्योत जलावी सृष्टि नवली सहसा सर्जनहारा ।

अमे गगनकुसुम कर धरनारा अमे मगन मगन थई फरनारा अगन बाथ अमे भरनारा अमे दैन्यतिमिरने हरनारा

श्री सयाजी विद्यापीठना ज्ञानदीपने धरनारा सत्यं शिवम् सुन्दरम् नो मंत्र अनन्तर भणनारा ।

Logan you

Prof. Chandravadan Chimanlal Mehta



The Maharaja Sayajirao University of Baroda Accredited Grade "A" by NAAC

Maharaja Fatehsinhrao Gaekwad Road Fatehgunj Vadodara 390002

Landline Number 0265- 2795521 Websites www.msubaroda.ac.in http://msub.digitaluniversity.ac

Please visit the following sites for more details:

Links to information about--

- Ordinances of the Executive PhD programme
- Research Handbook of MSUB
- Schools/Faculties of MSUB
- Areas of Research

For more information, write an e-mail to: ephd@msubaroda.ac.in

EXECUTIVE PHD ORDINANCE

O.EXEC.Ph.D.1 Eligibility criteria for Admission to the Executive Ph.D. Programme [Exec-Ph.D.]

- **1.1.** Candidates for admission to the Executive Ph.D. Programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate without including the grace mark or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.
- **1.2.** A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/SEBC (Non-creamy layer)/Differently-abled and other categories of candidates as per the decision of the Government of Gujarat and other Statutory bodies, as applicable, from time-to-time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark.
- **1.3.** Candidates who have cleared the M.Phil. Course-work with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completing the M.Phil. Degree shall be eligible to proceed for Research work leading to the Ph.D. Degree in the same Institution in an integrated programme. A person whose M.Phil. dissertation has been evaluated and the viva voce is pending may be admitted to the Ph.D. Programme of the same Institution; Candidates possessing a Degree considered equivalent to M.Phil. Degree of an Indian Institution, from a Foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to Executive Ph.D. Programme.
- **1.4.** Related/Conjunct subject(s) shall be recommended and approved by the concerned Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee. Such introduction of Related/Conjunct Subject(s) shall have to be proposed by the concerned Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee. Such introduction of Related/Conjunct Subject(s) must be reported to the Council of Post- Graduate Studies and Research and the Syndicate for information.
- **1.5.** Notwithstanding anything contained hereinabove, whenever any candidate, after possessing requisite qualification of marks not less than 55% in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) in certain subject, applies for joining the Executive Ph.D. Programme under the subject different from or not related to his/her post- graduation or an allied subject (Related/Conjunct Subject) under the

Faculty/Institution, he/she may be permitted to join Executive Ph.D. Programme in the desired subject upon recommendation from the from the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee.

- **1.6.** The application for this purpose shall have to be made by the desirous candidate to the concerned Faculty/Institute. Such cases must be reported to the Council of Post-Graduate Studies and Research and the Syndicate for information.
- **1.7.** Notwithstanding anything contained hereinabove, a person intending to register for the Executive Ph.D. Programme of this University, working in a National Laboratory/Industry/Government Department/Institution etc. shall be considered eligible to register for Executive Ph.D. Programme only. Such applications must be addressed, considered and approved by the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee.

Such cases must be reported to the Council of Post-Graduate Studies and Research and the Syndicate for information.

1.8. Joint Executive Ph.D. Programme can be offered subject to the Memorandum of Understanding with the collaborating Institution and the Faculty/Institute of the University, upon the recommendation by the Council of Post-Graduate Studies and Research and approval by the Syndicate.

O. EXEC. Ph.D.2 Duration of the Executive Ph.D. Programme:

- **2.1.** Executive Ph.D. Programme shall be for a minimum duration of Three (03) Years, including Ph.D. Course-work extendable up to a maximum duration of Six (06) Years.
- 2.2. The Synopsis for the Executive Ph.D. Programme can be submitted after a minimum period of Three (03) Years from the date of Ph.D. registration along with the prescribed Examination fees to be deposited to the Deputy Registrar (Academics) through the Guide and Co-guide for research degree, and the Dean of the concerned Faculty/Director of the Institute. Before submission of the Synopsis, a Research scholar needs to present the Synopsis before the Faculty Level Research Advisory Committee [FLRAC]/Institute Level Research Advisory Committee [ILRAC], at most Three (03) month before the submission of the Synopsis. The Synopsis must be submitted to the Deputy Registrar (Academics) within Three (03) month from the of presentation before FLRAC/ILRAC, with date necessary amendment(s)/correction(s), if any, suggested by FLRAC/ILRAC, as the case may be.
- **2.3.** The minimum time limit for submitting the Ph.D. thesis shall be after Thirty-Six (36) months from the date of Ph.D. registration along with necessary fees for submission of Ph.D. Thesis. Accordingly, the Ph.D. Degree notification shall be issued only after completion of Three (03) Years from the date of registration. The candidate registered for Ph.D. degree shall be required to present an open seminar in the Faculty/Institute, at least once in a year to review the progress of research work of the candidate.
- **2.4.** A Candidate who has so renewed the period for Executive Ph.D. Programme registration, shall be required to submit the Ph.D. Thesis within a period of not more than Six (06) Years/Twelve (12) Semesters for Executive Ph.D. Programme, from the

date of Original Registration.

- **2.5.** Notwithstanding the provision contained hereinabove O.EXEC.Ph.D.2.4, the Vice-Chancellor, in Special Cases, may permit the Research Scholar to submit the Ph.D. thesis late by granting necessary extension. Such Research Scholar is required to pay the necessary additional fees for Executive Ph.D. Programme for each additional Year(s)/Semester(s) or a part thereof. Such action taken by the Vice-Chancellor shall be reported to the Syndicate through Council of Post-Graduate Studies and Research for information.
- **2.6.** The candidate registered for Executive Ph.D. Executive Programme Degree shall be required to pay the tuition and other fees as prescribed from time-to-time for all the terms from the date of registration to the date of submission of thesis on production of Six-monthly Progress Report.

O. EXEC. Ph.D.3 Procedure for Admission to Executive Ph.D. Programme and Progression of Study

- 3.1. The University shall admit Ph.D. candidate through an Entrance Test to be conducted by The Maharaja Sayajirao University of Baroda. The Candidate who fulfils the conditions as stated in O.EXEC.Ph.D.1, and have qualified in the National/State Level Eligibility Test the Tests such UGCor as CSIR/NET/SET/GATE/GPAT/DBT/ICMR/ICAR/JRF/NBHM/DST-INSPIRE/Teacher Fellowship Tests etc. or such other Eligibility Tests of National Level, as recognized equivalent thereto by the Council of Post-Graduate Studies and Research or have passed M.Phil. Programme shall be exempted from appearing in the Ph.D. Entrance Test to be conducted by The Maharaja Sayajirao University of Baroda.
- **3.2.** The candidates otherwise fulfil the requirement as stated in O.EXEC.Ph.D.1 but have not qualified in the National/State Level Eligibility Test or the Tests such as UGC-CSIR/NET/SLET/GATE/DBT/ICMR/ICAR/JRF/Teacher Fellowship Tests etc. shall have to qualify in the Ph.D. Entrance Test (PET) of The Maharaja Sayajirao University of Baroda in the concerned conjunct /Relevant/Allied subject.
- **3.3.** The offer and conduct Executive Ph.D. Programme shall:
 - 3.3.1. Decide on an annual basis a predetermined and manageable number of Ph.D. scholars to be admitted depending on the number of available Guide for research degree and other academic and physical facilities available, keeping in mind the norms regarding the Research scholar: Teacher ratio (as indicated in O.EXEC.Ph.D.4.16.1, O.EXEC.Ph.D.4.16.1, and, O.EXEC.Ph.D.4.16.3), laboratory, library and such other facilities;
 - 3.3.2. The concerned guide may inform about the availability of positions for Research Scholars through the concerned Dean of the faculty/Director of the institute to the University and the same shall be advertised and notified and such announcement shall have to be posted on the University Website.
 - 3.3.3. Notify well in advance on the Faculty/Institute/University website and through advertisement in National Newspapers, of which at least one shall be in the regional language whereas the number of seats for admission,

subject/discipline-wise distribution of available seats, criteria for admission, procedure for admission, examination center(s) where entrance test(s) shall be conducted and all other relevant information for the benefit of the candidates shall have to be posted on the Institution/Faculty/University Website.

- 3.3.4. Admission to the Executive Ph.D. Programme shall adhere to the National/State-level Reservation Policy, as applicable.
- **3.4.** The admission shall be based on the criteria notified by the University, keeping in view the guidelines/norms in this regard issued by the UGC and other statutory bodies concerned, and considering the reservation policy of the Central/State Government in force and that shall be amended from time-to-time.
- **3.5.** Notwithstanding anything contained hereinabove, a person working in a National Laboratory or an Institution outside the University area recognized by this University for purposes of giving guidance for Research and intending to register for the Executive Ph.D. Programme of this University shall forward the application in the prescribed form for admission. Such person complying to the eligibility criteria as stated in 0.EXEC.Ph.D.1 and 0.EXEC.Ph.D.3 hereinabove is eligible for such admission by virtue of having a qualifying degree of this or any University, or an equivalent qualification having marks not less than 55% in aggregate or its equivalent grade 'B' in the UGC 7- point scale (or an equivalent grade in a point scale wherever grading system is followed). The application form duly completed and signed by the recognized Guide for research degree shall be sent by the Head of the Laboratory/Institution to the concerned Dean of the Faculty/Director of the Institute.
- **3.6.** The University shall admit candidates for Ph.D. by a two-stage process through:
 - 3.6.1. An Entrance Test shall be qualifying test with qualifying marks as 50%. The syllabus of the Entrance Test shall consist of 50% of Research Methodology and 50% shall be Subject/Discipline/Area specific.
 - 3.6.2. An interview/viva-voce to be organized by the Faculty Level Research Advisory Committee [FLRAC]/Institute Level Research Advisory Committee [ILRAC]. The candidates are shall also be required discuss in detail his/her Research proposal/Research interest/area supported with a presentation before Faculty Level Research Advisory Committee [FLRAC]/Institute Level Research Advisory Committee [ILRAC].
 - 3.6.3. The interview/viva voce shall also consider the following aspects, viz. whether:
 - 3.6.3.1. The candidate possesses the competence for the proposed research;
 - 3.6.3.2. The proposed area of research can contribute to new/additional knowledge.
- **3.7.** A student has to pay Yearly fees/Half-yearly fees, as prescribed from time-to-time, and in force, for admission required under relevant ordinances. The student shall apply for admission to the University only after obtaining the Certificate of eligibility on production of the required documents and the prescribed fees. On receipt of the completed application for registration and the prescribed fees, the University will issue a Registration Certificate showing the name of the Research scholar, the date of

registration, the Provisional title of research and the year in which the Research scholar is entitled to submit the Thesis.

The title for the Ph.D. thesis will be finalized at the time of submission of the Synopsis, and the same will be submitted to the Office of Academic section for record.

Note: All the progress reports submitted prior to the submission of the Synopsis will contain the Provisional title (or the Final title, as the case may be). However, the Synopsis will be submitted along with the Provisional title as well as the Final title.

- **3.8.** The Faculty/Institute and the University shall maintain the list of all the Ph.D. registered candidates on the Website on year-wise basis. The aforesaid list shall include the Name of the registered candidate, Topic of his/her research, Name of his/her Guide and Co-guide for research degree, Date of registration etc.
- **3.9.** A candidate for Ph.D. degree after the registration shall be required to work for a minimum period of three years under the guidance of a Guide and Co-guide(s) for research degree. All those candidates who have been permitted to work in Recognized National Laboratory/Industry/Government Department/Institution etc. shall also be required to work under the Guide for research degree and Co-guide(s) for a minimum period of three years.
- **3.10.** Employees who are in-service in any other recognized University/College/Research Institute/Industry/Organization/Government department etc. in India and have a minimum of five years teaching/research/entrepreneurial/administrative experience, may be considered for registration to Executive Ph.D. Programme.

Employees who are in-service at senior and middle level as professionals from amongst Industry, Technocrats, Bureaucrats, Scientists, R&D Personnel, Business Executives, Managers, Administrators & Government officials may be considered for registration to the Executive Ph.D. Programme.

The candidate shall also be required to submit 'No Objection Certificate' from their present employer for pursuing Ph.D.

Self-employed Professionals such as Chartered Accountants, Cost & Management Accountants, Company Secretary etc. .and self-employed entrepreneurs who with a successful track record of managing a small or mid-sized business unit etc. may be considered for registration to the Executive Ph.D. Programme.

The university decision shall be final and binding to all in assessing and determining the eligibility of candidate having a minimum of 5 years of work experience in the Senior / Middle Level Cadre of a mid-sized organization of National / International repute in its field.

3.11. A Research scholar, in case of essentiality, may apply for the 'Change of Title for Ph.D. Thesis' to the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee through his/her Guide and Co-guide (s) for research degree. The FLRAC/ILRAC may, after suitable academic consideration, shall recommend the application appropriately to the university, which is empowered to approve such applications. The information to this effect shall be required to be submitted by the concerned Dean of the Faculty/Director of the Institute to the Deputy Registrar

(Academics) for making the necessary changes in the University records.

- **3.12.** Guide and Co-guide (s) for research degree may propose the cancellation of Ph.D. registration in the event of the Research scholar is not exhibiting/showing satisfactory progress before the Faculty Level Research Advisorv Committee/Institute Level Research Advisory Committee. The recommendations of FLRAC/ILRAC will be suitably considered by Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee, which shall be empowered to cancel the registration of a Research scholar. Such action shall be required to be resolved in the meeting and shall be reported to the Deputy Registrar (Academics) through Dean of the concerned Faculty/Director of the Institute for making the necessary changes in the University records. Such action taken approved by the Vice-Chancellor and the decision thereupon shall be required to be reported to the Syndicate through Council of Post-Graduate Studies and Research for information.
- 3.13. Deleted

O. EXEC Ph.D.4 Eligibility Criteria and Allocation of the Guide for Research Degree, Co-guide(s), and Number of Ph.D. Scholars Permissible Per Guide and Co guide(s) for Ph.D. Research Degree:

4.1. Any Professor of the University with at least five Research publications in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences and successfully guided at least one Research Scholar for Ph.D. shall be deemed as recognized as Guide/Co-guide for research degree. (Provided that he/she holds a Doctoral Degree or Equivalent research publications) in the subject/area/discipline, without referring their cases to the Council Post-Graduate Studies and Research and the Syndicate.

However, such Professor shall be required to inform in writing their willingness to offer the services as Guide/Co-guide for research degree to the University. Their applications shall have to be forwarded through the Dean of the Faculty upon recommendation from the concerned Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee with all necessary documentary evidences about aforesaid criteria for their Research Publications.

Provided that in areas/disciplines where there are only a limited number of journals in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences are available or no such journals are available as such, the University may relax the above condition for recognition of a person as Guide/Co-guide for research degree with reasons recorded in writing. Such a case shall be reported to the Syndicate through the Council of Post-Graduate Studies and Research for information.

4.2. Any Associate Professor/Assistant Professor of this University with a Ph.D. degree and at least two Research publications in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences and successfully guided at least one Research Scholar for Ph.D. may be recognized as Guide/Co-guide for research degree in the respective subject, without referring their cases to the Council Post-Graduate Studies and Research and the Syndicate. However, such Associate Professor/Assistant Professor shall be required to apply in writing their willingness to offer the services as Guide/Co-guide for research degree to the University. Their applications shall have to be forwarded through the Dean of the Faculty upon recommendation of the Faculty Level Research

Advisory Committee/Institute Level Research Advisory Committee with all necessary documentary evidences about aforesaid criteria for their Research Publications.

Provided that in areas/disciplines where there are only a limited number of journals in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences are available or no such journals are available as such, the University may relax the above condition for recognition of a person as Guide for research degree with reasons recorded in writing. Such a case shall be reported to the Syndicate through the Council of Post-Graduate Studies and Research for information.

- **4.3.** Provided further that for the applicants applying for recognition as Guide/Co-guide for the research degree from the Faculty of Fine Arts and Faculty of Performing Arts, the existing stipulations as per the Syndicate resolution number 22 dated 29/11/2013 and Syndicate resolution number 32 dated 27/12/2013 shall remain effective.
- **4.4.** Every recognized Guide for research degree must be attached to the Faculty/Institution of this University, and the recognition will continue so long as one answers the designation on the basis of which the recognition was granted, till the date or retirement and/or if the services of such Guide for research degree is continued as per the UGC's scheme. The Faculty-level Research Advisory Committee (FLRAC) is empowered to allow to extend/continue the guide-ship of such Guide for research degree either for those already registered Research scholars or for remaining period of the services, as the case may be. Those Guide for research degree whose services are extended under the scheme of statutory bodies will be permitted for registration of new Research scholars within the First year of newly extended period within the aforesaid stipulation. Such action shall be required to be reported to the Deputy Registrar (Academics) through proper channel for making necessary changes in the University records and is to be reported to the Syndicate through the Council of Post-graduate Studies and Research for noting.
- **4.5.** The Syndicate may, at any time, on the recommendation of the Council of Post-Graduate Studies and Research shall be empowered to withdraw the recognition of a Guide/Co-guide for research degree.
- **4.6.** The Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee shall have to recommend the application for **Co-guide** to the University. The recognition of Co-guide shall be as per the stipulated rules as specified in the present O.EXEC.Ph.D.4 and recognition letter shall be issued by the University.
- **4.7.** The Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee, on the recommendation of the Guide for research degree, may appoint scholars of eminence who shall be residing in India or abroad, as Co-guide.
- **4.8.** The following shall be the guidelines to which the Council of Post-graduate Studies and Research will give due consideration while recognizing **External Co-guide** (**Persons from Outside the University**) for research degree as qualified for guiding candidates for Ph. D. Degree:

For appointment of 'Co-guide', outside the university, the guidelines shall be as follows:

- 4.8.1. Any person from Institutions/Laboratories or Research Institution/Industry/Government Department/Institution etc. be deemed recognized Co-guide(s) for research degree for guiding Ph.D. candidates without referring their cases to the Council of Post-Graduate Studies and Research and the Syndicate, provided such persons are from Scientific/Technical/Managerial/Administrative/Government cadre and having Ph.D. degree in the respective subject should submit a formal application in the prescribed form to the University.
- 4.8.2. He/She has obtained Ph.D. Degree.
- 4.8.3. He/She should have obtained Master's Degree with at least 55% having consistently good academic record from a recognized Institution as approved by the MHRD, Government of India and also by the concerned statutory body/ council such as UGC/AICTE etc. and the degree of PhD has been accorded equivalence by AIU, New Delhi.
- 4.8.4. He/She possesses comparable 'Research/Academic/Managerial /Administrative experience of at least five years.
- 4.8.5. Minimum of 02 Research publications in UGC-CARE Reference List, SCOPUS Listing or WEB of Science, arising from research work other than Ph.D Thesis. OR
 Minimum of 02 Granted Patents.
 OR
 He/she should have successfully completed at least two Major Research Projects preferably funded by funding agency recognized by State/Central Government Industry etc. (Excluding Self-Sponsored Own Research Projects)
- 4.9. Every-recognized Co-guide must be a permanent employee of the concerned Institution/Laboratory/Corporate/Industry/Government Department etc. and the recognition will continue so long as one answers the designation on the basis of which the recognition was accorded and is in the employment of the same Institution/Laboratory/Corporate/Industry/Government Department etc. However, if such a Co-guide for research degree/Co-guide has guided for Four Terms or more and if he/she is willing continue after to leaving the Institution/Laboratory/Laboratory/Corporate/Industry/Government Department etc. recognized by this University, his/her application in this matter will be favorably considered by the University.
- **4.10.** The recognized Co-guide for research degree should maintain active academic interactions with this University.
- **4.11.** The Syndicate may, at any time, on the recommendation of the Council of Post-Graduate Studies and Research shall be empowered to withdraw recognition of Co-guide recognized from outside the university.
- **4.12.** The Dean of the concerned Faculty and the Director of the institute shall act as Coordinator/Chairperson for establishing liaison between the Research scholar, the Guide, recognized from within the University and Co-guide, recognized from Outside the University as the case may be.

- **4.13.** The Coordinator shall be required to ensure that the Research scholar comes to University Faculty/Institute at least once a year to submit and present the progress of the research work done during the year before the concerned Faculty-level Research Committee/ Institute-level Research Committee.
 - 4.13.1. Coordinating for submission of recommendation for appointment of External Examiner.
 - 4.13.2. Coordinator shall ensure verification of the incorporation of the suggested corrections/recommendations/suggestions etc. by the Research Scholar.
 - 4.13.3. Coordinating with the External Examiner and student for the Open Public Viva-voce (Open defense) Examination.
 - 4.13.4. Coordinator authenticates and forward the reports on the open Public Vivavoce (Open defense) Examination of the student.
- **4.14.** The allocation of Guide(s)/Co-guide(s) recognized from within the university and Coguide recognized from outside the University for research degree for a selected Research scholar shall be decided by the Faculty/Institute concerned depending on the number of scholars per Guide for research degree, the available specialization among the Guides/Co-guide (s) for research degree and research interests of the Research scholars as indicated by them at the time of interview/viva voce.
- **4.15.** In case of topics which are of inter-disciplinary nature where the concerned Faculty/Institute feels that the expertise in the Faculty/Institute has to be supplemented from outside, the Faculty/Institute may appoint a Guide recognized from within the university and Co-guide recognized from outside the University for research degree. Such application for recognition of the Co-guide shall be granted by the Vice-Chancellor and reported to the Syndicate through the Council of Post-Graduate Studies and Research upon such terms and conditions as may be specified and agreed upon for noting and information.
- **4.16.** Number of Ph.D. Scholars Permissible Per Guide and Co Guide(s) for Ph.D. Research Degree:
 - 4.16.1. A Guide for research degree who is a Professor/Co-guide, at any given point of time, cannot guide more than Eight [08] Ph.D. scholars. The new vacancy for afresh Ph.D. Registration will be created in proportion to the submission of the Ph.D. thesis of those students who have registered under the respective Guide for research degree.
 - 4.16.2. An Associate Professor/Co-guide as Guide for research degree can guide up to a maximum of Six [06] Ph.D. scholars. The new vacancy for afresh Ph.D. Registration will be created in proportion to the submission of the Ph.D. thesis of those students who have registered under the respective Guide for research degree.
 - 4.16.3. An Assistant Professor as Guide for research degree can guide up to a maximum of four [04] Ph.D. scholars. The new vacancy for afresh Ph.D. Registration will be created in proportion to the submission of the Ph.D. thesis of those students who have registered under the respective Guide for research degree.

- **4.17.** An Associate Professor, at any given point of time, can guide up to a maximum of Six [06] Ph.D. scholars. The new vacancy for afresh Ph.D. Registration will be created in proportion to the Ph.D. Notification of those candidates who have registered under the respective Guide for research degree.
- **4.18.** An Assistant Professor, at any given point of time, can guide up to a maximum of One Four [04] Ph.D. scholars. The new vacancy for afresh Ph.D. Registration will be created in proportion to the Ph.D. Notification of those candidates who have registered under the respective Guide for research degree.
- **4.19.** A candidate desirous of changing the Guide/Co-guide for research degree shall apply to the Faculty-level / Institute Level Research Advisory Committee through both the existing Guide and Co-guide for research degree and the proposed Guide for research degree, FLRAC/ILRAC shall be empowered to act on such application with the reason(s) to be recorded in writing. Such action shall be required to be reported to the Deputy Registrar (Academics) through proper channel for updating in the University records.

Provided that in the cases of retirement of a Guide/Co-guide for research degree or death of a Guide/Co-guide or long leave or prolonged sickness of a Guide/Co-guide or the cases of similar nature, a candidate may apply to the Faculty-level/Institute Level Research Advisory Committee for changing the Guide/Co-guide for research degree. FLRAC/ILRAC shall be empowered to act on such application with the reason(s) to be recorded in writing. Such action shall be required to be reported to the Deputy Registrar (Academics) through proper channel for updating in the University records.

4.20. In case of relocation of an Ph.D. scholar, the research data shall be allowed to be transferred to the University to which the scholar intends to relocate provided all the other conditions in these regulations are followed in letter and spirit and the research work does not pertain to the project secured by the Parent institution/Guide (or) Coguide for research degree from any funding agency. The scholar will however give due credit to the parent Guide/Co-guide and the University/Institution for the part of research already done.

4.21. Equivalence for Ph.D.:

As per AICTE Notification dated 01/03/2019, the person of eminence wishing to become the Guide for research degree not holding the Ph.D. degree but have;

- 4.21.1. 5 Research publications in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences with the criteria that each Journal having a cumulative impact index of not less than 2.0, with incumbent as the main author and all 5 publications being in the authors' area of specialization; **OR**
- 4.21.2. An incumbent should have obtained at least two patents; **OR**
- 4.21.3. An incumbent contributed to the increased productivity in the place of work recognized at State or National level or elected as a Fellow of any of the National academies

However, the administrative procedure of providing such equivalence for Ph.D. shall be as per the procedure of this University.

O.EXEC. Ph.D.5 Course-Work, Credit Requirements, Number, Duration, Syllabus, Minimum Standards for Completion, etc. for Executive Ph.D. Programme

- **5.1.** The minimum credits for the Ph.D. Course-Work for Executive Ph.D. Programme shall be of 08 Credits, [120 Hours] to be decided by the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee and as per the approved guidelines of the Post-Graduate Council of Studies and Research in force and as may be amended from time-to-time.
- **5.2.** All candidates admitted to the Executive Ph.D. Programme shall be compulsorily required to complete the Ph.D. Coursework prescribed by the Faculty/Institute and as per the approved guidelines of the Post-Graduate Council of Studies and Research during the initial one or two semesters.
- **5.3.** The Faculty-level/Institute-level Ph.D. Coursework shall be of a minimum of 08 credits and a maximum of 16 credits. A minimum of Four [04] credits shall be assigned to one or more courses on Research Methodology which could cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc. Other courses shall be advanced level courses for preparing the students for the Ph.D. degree.

All courses prescribed for Ph.D. course work shall be in conformity with the credit hour instructional requirement and shall specify content, instructional and assessment methods. They shall be duly approved by the authorized academic bodies.

- **5.4.** They shall be duly approved by the concerned Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee and as per the approved guidelines of the Council of Post-graduate Studies and Research in force and that shall be amended from time-to-time.
- **5.5.** The Faculty/Institute where the scholar pursues the research work shall prescribe the course(s) to him/her based on the recommendations of the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee, as stipulated under O.EXEC.Ph.D.4 herein under, for the Research scholar.
- **5.6.** The Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee shall suggest courses related to the subject within and outside the University, equivalent to at least minimum 08 credits (1 credit = 15 hours of teaching) in the relevant/allied/conjunct area. This Faculty Level/Institute Level course-work may also include other specialized areas of studies, based on the need of the approved research topic for the studies, which the Guide/Co-guide(s) for research degree considers necessary and that the Research scholar must acquire the proficiency in these areas as well.
- **5.7.** A candidate having completed the Ph.D. Coursework as per the UGC Regulations from any another University/College/Institute/Laboratory/Center recognized by the concerned statutory Body/Council or the Ministry of Education, New Delhi shall be exempted from the Ph.D. Coursework. The credits so obtained shall be treated at par with the credits of this University. However, such a candidate will have to appear in the University Entrance Examination (PET) as applicable to Fresh Candidates directly

registering for Ph.D.

Notwithstanding anything contained hereinabove, the Vice-Chancellor shall be authorized for consideration of equivalence of the Ph.D. Coursework completed outside the University based on the merit of the case.

- **5.8.** Candidates already holding M. Phil. degree and admitted to the Exec. Ph.D. Programme, or those who have already completed the Course-Work in M.Phil. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the Department Faculty-level /Institute-level from the Ph.D. course-work. All other candidates admitted to the Ph.D. Programme shall be required to complete the Ph.D. course-work prescribed by the Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee and as per the approved guidelines of the Post-Graduate Council of Studies and Research in force and as may be amended from time- to-time.
- **5.9.** Grades in the Ph.D. Coursework including course on Research Methodology and other prescribed courses shall be finalized by the Faculty level /Institute level Research Advisory Committee and after a combined assessment by the Faculty level /Institute level Research Advisory Committee, the final Grades of each of the candidate (s) shall be submitted by the Chairperson of Faculty level /Institute level Research Advisory Committee to the University.
- **5.10.** The Ph.D. scholar has to obtain a minimum of 55% of marks in the prescribed Grade Point Scale as per the approved Structure of the University of the Ph.D. Course-work in order to become eligible to continue in the respective Ph.D. Programme and submit the Ph.D. Thesis, as the case may be.

O. EXEC.Ph.D.6 The Faculty Level Research Advisory Committee/Institute Level Research Advisory Committee, and its functions

6.1. There shall be a Faculty Level Research Advisory Committee[FLRAC]/Institute Level Research Advisory Committee [ILRAC] for each of the Ph.D. scholar.

The constitution of this the Faculty-level /Institute Level Research Advisory Committee shall be as under:

- Dean of the concerned Faculty /Director of the Institute shall act as 'Chairperson"
- Guide for Research Degree Convener
- Co-guide for Research Degree Co-convener
- One Professor [Must be a Guide for Research Degree] Member
- One Associate Professor [Must be a Guide for Research Degree] Member
- One Assistant Professor [Must be a Guide for Research Degree] Member
- Two Subject Experts from the Institution Laboratory / Corporate / Industry / Government Department [As nominated by Vice-Chancellor] Member(s)

Note:

Where the Guide for research degree is also the Dean of the concerned Faculty / Director of the concerned Institute concerned, then a senior teacher Dean of the concerned/Relevant/Allied subject/area/discipline concerned who is a recognized Guide for research degree be included in FLRAC/ILARC Where the Guide for research degree is both Head of the Department and Dean of the Faculty concerned, then two such teachers of the concerned/Relevant/Allied

Faculty/Institute/Department be included in the DRC FLRAC/ILARC. If the concerned faculty/Institute concerned does not have the required number of such teachers, then such number of senior teachers who are Guide for research degree from the concerned conjunct /Relevant/Allied Faculty/Institute/Department be included in the FLRAC/ILARC so that in any given situation, the FLRAC/ILARC consists of not less than two other such teachers in addition to the Guide/Co-guide(s) /Subject Expert (s) for research degree.

The FLRAC/ILARC shall meet at least once every three months, and submits the proceedings to the university. The proceedings of DRC FLRAC/ILARC shall be required to be placed before the office of the Vice Chancellor for consideration and approval please and it should be placed before the Post-Graduate Council of Studies & Research as defined herein under for information and noting about the actions within its empowerment.

This FLRAC/ILARC Committee shall have to perform the following functions and responsibilities:

- i. To hold the interview and viva-voce for the Research scholar intending to join Ph.D. and recommend the area/subject/discipline of research based on the review of research proposal;
- ii. To recommend the Guide/Co-guide(s) for research degree as per the area/subject/discipline of research of the applicant;
- iii. To plan and conduct online and or offline Ph.D. Couse Work under the interdisciplinary subject/subject;
- iv. To recommend the concerned conjunct/Relevant/Allied subject(s) for the concerned faculty/Institute;
- v. To suggest, recommend and prescribe the subjects and areas of Faculty/Institute Level Ph.D. Course-work;
- vi. To review the progress of research work periodically upon the presentation from Research scholar and assist him or her in the progress of the research work and studies of the Research scholar;
- vii. Deleted
- viii. To vet, scrutinize and recommend the applications for the Guide/Co-guide from within the University or outside the University from the Institution/Laboratory/Corporate/Industry/Government Department of repute etc. for imparting the Research work or an Institution, if need be, and dealt with the extension of research-work within and outside the University;
- ix. To attend the Open Public Viva-voce (Open defense) and recommend the critique, if any;
- x. To review/examine ethical issues involved in undertaking research on the topic, research methodology plan of the Research scholar and to suggest changes required (if any), as applicable.
- xi. To undertake such other duties, as recommended and entrusted upon, in order to elevate, maintain and enhance the research standards from time-to-time.

A Research scholar shall be required to appear online and or offline before the FLRAC/ILARC *at least* once in six months to make a presentation of the progress of the research work and studies for evaluation/assessment and further guidance.

The six-monthly progress reports shall be submitted by to the to the office of the Vice Chancellor University through FLRAC/ILARC with a copy to the Research scholar for consideration and approval please and it should be placed before the Post-Graduate Council of Studies & Research as defined herein under for information and noting about the actions within its empowerment.

In case the progress of the Research scholar is unsatisfactory, the FLRAC/ILARC shall record the reasons for the same and suggest corrective measure(s). If the Research scholar fails to implement these corrective measures, the FLRAC/ILARC be authorized to recommend—with specific reasons for cancellation of the Ph.D. registration of the Research scholar-to the office of the Vice Chancellor University with a copy to the Research scholar for consideration and approval please, and it should be placed before the Post-Graduate Council of Studies & Research as defined herein under for information and noting about the actions within its empowerment.

O.EXEC.Ph.D.7 Evaluation and Assessment Methods, Minimum Standards/Credits for Award of the Ph.D. Degree

- **7.1.** Upon satisfactory completion of Ph.D. Course-Work, and obtaining a minimum of 55% of marks in the prescribed Grade Point Scale and Structure of the University (As prescribed in O.EXEC.Ph.D.-V-8) the Ph.D. Scholar shall be required to undertake research work and submit a Draft Synopsis before completion of One year (Extendable by a maximum period of One year) from the completion of Three (03) (Extendable up to a maximum period of Six (06) Years from the date of Ph.D. registration.
- **7.2.** At most One (01) month prior to the submission of the Ph.D. Synopsis, the Research scholar shall make a presentation before the FLRAC/ILARC, which shall also be open to all Faculty/Institute members and other Research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft Ph.D. Thesis in consultation with the FLRAC/ILARC.
- **7.3.** The Ph.D. Thesis can be submitted at any time during the year, after the prescribed period in this Ordinance.
- **7.4.** The Ph.D. Thesis shall be written in English language, or otherwise when its subject matter is related to or based on a Modern European or Indian Languages, it may be written in the relevant language.
- **7.5.** The Ph.D. thesis shall be submitted through the Guide for research degree, to the concerned Dean of the Faculty/Director of the Institute along with a certificate duly signed by the candidate and the Guide as well as Co-guide (s) for research degree as stipulated under O.EXEC.Ph.D.3.
- **7.6.** The FLRAC/ILARC concerned shall recommend a list of at least Eight [**08**] Examiners for evaluation of Ph.D. Thesis. The FLRAC/ILARC will be empowered for submission of names of External Examiners as specified here in above to the office of the Deputy Registrar (Academics) and thereafter it should be placed before the Post-Graduate Council of Studies & Research as defined herein under for consideration and approval and also for carrying out the actions within its empowerment.
 - 7.6.1. 02 Examiners/Referees shall be preferably from outside the country in case of those subjects of Ph.D. Theses concerning areas of Science/Technology/Pharmacy/Engineering [Excluding Humanities & Social Sciences] and 06 shall be from within the country preferably Outside the State of Gujarat.

- 7.6.2. Minimum 06 Examiners/Referees shall be preferably from outside the state of Gujarat in case of subjects of Ph.D. Theses concerning Humanities & Social Sciences; at the most 02 Examiners/Referees shall be nominated from within the State of Gujarat, if available, as the case may be. Vice-Chancellor of the University is empowered to relax this requirement, upon the academic considerations on a case-to-case basis, for which the reasons are to be recorded in writing, and shall be reported to the Syndicate through the Council of Post-Graduate Studies and Research.
- 7.6.3. It would be mandatory to have the External Examiners preferably from University Departments/Reputed Institutions/Premier Institutes, and she/he should at least be rank of an Associate Professor/Professor.
- 7.6.4. External Examiner once appointed by Hon'ble Vice-Chancellor and assigned the responsibility to act as Evaluator for Ph.D. thesis, his/her name should not be recommended by the concerned FLRAC/ILARC at least for another period of One (01) Year again. The format for the recommendation of the Panel of External Examiners must include certification for this criterion. This is to be designed by the office of Academic section and approved by the Hon'ble Vice-Chancellor.

Certification to the fulfillment of this criterion shall be obtained from the Chairman/Chairperson of the concerned FLRAC/ILARC. In extra ordinary circumstances, Hon'ble Vice-Chancellor is authorized to relax this condition.

The panel of External Examiners shall be recommended by the Guide Chairman/Chairperson of the concerned FLRAC/ILARC for research degree directly to the office of the Deputy Registrar (Academics), The Maharaja Sayajirao University of Baroda, Vadodara and shall be required to be submitted in a sealed envelope to the Office of the Deputy Registrar (Academics), The Maharaja Sayajirao University of Baroda, Vadodara. The Chairman/Chairperson of the concerned FLRAC/ILARC for research degree, while recommending the list of Examiners, shall have to ensure that the Examiners are well below the superannuation age (i.e. 62 Years, as of now, as amended from time-to-time by the Government of Gujarat). Guide/Co-guide (s) of research degree shall also be invited during the meeting of the FLRAC/ILARC as an invitee member or he/she shall have to be included in the chain of circulation of the panel of External Examiners, if he/she is not the member of respective FLRAC/ILARC, as the case may be.

- Note: Vice-Chancellor of the University is empowered to relax this requirement, upon the academic considerations on case-to-case basis, for which the reasons to be recorded in writing, and shall be reported to the Syndicate through the Council of Post-Graduate Studies and Research.
- **7.7.** In case, if the Board of studies is not likely to meet, the Provisional Panel of External Examiners shall be recommended by circulation among all the members of the concerned Board of studies. The Provisional Panel of referees submitted by the guide for research degree shall be sent for circulation through an email by the Office of Academic section. Following documents are to be submitted while submission of Ph.D. synopsis:

- Forwarding Letter with Outward Number, Date & Signature of the Guide, the Head, and, the Dean;
- Final Eligibility Certificate (If applicable);
- Registration Certificate;
- Course-work Certificate/M.Phil. Degree Certificate;
- Extension Letter and/or Renewal Letter (If applicable);
- Last Term Fee Slip (Paid)
- Guide Change Letter (If applicable)
- Filled Examination form (If applicable)
- Panel submission certificate

All the members of the concerned Boards of Studies will be given 10 working days' time for vetting of the submitted Panel of referees in light of the submitted Synopsis. If all the members of the Boards of Studies are in agreement for the Panel of referees, then such agreement will be communicated to the Office of Academic section. If no communication(s) is(are) received within 10 working days, from the members of the Boards of Studies are in agreement of Studies are in agreement of the submitted Panel of referees, and the Office of Academic section will process the Panel of referees further.

- **7.8.** The Ph.D. scholars must publish at least Two [02] Research papers in the journals listed in UGC CARE Reference List, SCOPUS Listing or WEB of Sciences and make Two [02] Paper presentations in Conference(s)/Seminar(s) before the submission of the Ph.D. Thesis for adjudication, and produce evidence for the same in the form of Hard Copy and/or Soft Copy [Scanned Copy] with clear evidence for the same in the form of Presentation Certificate(s) and/or Reprint(s) if available, else Acceptance letter from the Publisher/Editor, with own undertaking in writing that he/she shall submit the Presentation Certificate(s) and/or Reprint(s) before the conduct of Open Public Viva-voce (Open defense) Examination or actual release of Notification for conferring award of degree of Ph.D.
- **7.9.** Before submission of Ph.D. Thesis, each Research scholar shall be required to fulfil the requirements prescribed by the Post-Graduate Council of Studies and Research of The Maharaja Sayajirao University of Baroda, Vadodara with respect to detection of plagiarism and any other forms of Academic Dishonesty. The Ph.D. Thesis while submitted for evaluation, shall be accompanied with the original report of the antiplagiarism software approved by The Maharaja Sayajirao University of Baroda, Vadodara, an undertaking from the Research scholar and a Certificate from the Guide for research degree attesting to the originality of the work, vouching that there is no plagiarism and any other Academic dishonesty and that the work has not been submitted for the award of any other Degree/Diploma of The Maharaja Sayajirao University of Baroda, Vadodara, or to any other University/Institution as the case may be. The percentages of allowable plagiarism shall be as notified by the University Grants Commission from time-to- time.
- **7.10.** Guidelines for the requirement of the number of Research publications before submission of Ph.D. Thesis, as issued by The Maharaja Sayajirao University of Baroda, Vadodara, and amended from time-to-time and displayed on the official website of the University shall be required to be followed by the Research scholars.
- 7.11. The Ph.D. Thesis shall be submitted in Spiral bound/Soft bound/Book type bound

form along with a soft copy [in PDF Format] as per the required format. Along with the Ph.D. Thesis, 02 copies of the 'Abstract' (Other than the Synopsis) shall be submitted in prescribed format to the Deputy Registrar (Academics), The Maharaja Sayajirao University of Baroda, Vadodara. Ph.D. Thesis. The Research scholar and the Guide for research degree shall jointly verify and ensure that the contents of the softcopy of the 'Abstract' are as per the prescribed format.

- **7.12.** The Ph.D. Thesis shall be presented in accordance with the following specifications:
 - 7.12.1. The paper used for printing shall be of A4 size.
 - 7.12.2. Printing shall be in a standardized form on both sides of the paper and in1.5-line spacing.
 - 7.12.3. A margin of 1.5 inches shall be on the left-hand side.
 - 7.12.4. The card for cover shall not be more than 330GSM.
 - 7.12.5. The title of the Ph.D. Thesis, Name of the Candidate, Degree, and Name of the Guide for research degree, Details about Name of the concerned Faculty/Institute as well as Department or Institute, and the Month and Year of submission shall be required to be printed on the Title Page and the Front Cover of the final Ph.D. Thesis as the case may be.
- **7.13.** The candidate shall submit to the Deputy Registrar (Examinations), The Maharaja Sayajirao University of Baroda, Vadodara, 02 copies along with Softcopies (In MS-WORD and/or PDF) (In 03 separate CDs) (02 for External Examiners + 01 Proof of Submission) of the Ph.D. Thesis and produce an acknowledgement of the receipt of Deputy Registrar (Examinations), The Maharaja Sayajirao University of Baroda, Vadodara to the Guide for research degree and the Dean of the concerned Faculty and/or Director of the concerned Institution.
- **7.14.** The Ph.D. Thesis shall include a Certificate of the Guide/Co-guide(s) for research degree and a Declaration by the Candidate that the research work reported in the Ph.D. Thesis has been carried out by the Research scholar himself/herself and that the material from other sources, if any, is duly acknowledged.
- **7.15.** The Vice-Chancellor shall nominate Two [02] External Examiners for evaluation of Ph.D. Thesis from among the names (preferably Professors or equivalent in ranks) recommended by the Council of Post-Graduate Studies and Research upon the preparation of the panel of examiners by the relevant panel of External Examiners ies. The Guide for research degree shall ordinarily be the Guide for research degree under whom the Research scholar has worked.
- **7.16.** The Ph.D. Thesis submitted by a Research scholar shall be evaluated by the Guide for research degree and at least Two External Examiners, who are not in the Employment of The Maharaja Sayajirao University of Baroda, Vadodara, of whom one examiner preferably should be from outside the Gujarat State/Country. The Open Public Vivavoce (Open defense) Examination, based among other things, on the critiques given in the evaluation report, shall be conducted by the Guide for research degree and at least One of the External Examiners, and shall be open to be attended by the members FLRAC/ILARC, well as by all faculty members of the as of the Department/Faculty/Institution/College, other Research scholars and other interested experts/researchers as the case may be. The External Examiners shall submit the detailed report on the evaluation of the Ph.D. Thesis and clear recommendations as per the prescribed format.

- **7.17.** After the receipt of the reports as prescribed herein under, the Open Public Viva- voce (Open defense) Examination shall be proposed by the Guide and Co-guide(s) for research degree by inviting online or offline at least one of the External Examiners who have evaluated the Ph.D. Thesis.
- **7.18.** Viva-voce examination of the Research scholar may be preferably held in concerned University Faculty/Institute. However, Vice-Chancellor is empowered to take appropriate decision in exigent conditions, on case-to-case basis.
- **7.19.** Open online or offline Public Viva-voce (Open defense) Examination of the Thesis:
 - 7.19.1. The Open online or offline Public Viva-voce (Open defense) Examination shall be chaired by the External Examiner and in presence of the Guide and Co-guide (s) as well as Chairperson and members of the FLRAC/ILRAC for research degree.
 - 7.19.2. The day, date, time and the place for the online or offline Open Public Viva-voce (Open defense) Examination of Ph.D. Thesis shall be notified by the Dean of the Faculty/Director in case of an institution, at least seven days in advance. Normally, the Open Public Viva-voce (Open defense) Examination of the Ph.D. thesis shall be arranged in the University Faculty/Institute. In exceptional cases, the Vice-Chancellor may allow the offline Open Public Viva-voce (Open defense) Examination to be conducted at a forum outside the campus of The Maharaja Sayajirao University of Baroda, Vadodara. In such a case, the procedure and norms for the conduct of Open Public Viva-voce (Open defense) Examination, payments, etc. shall be as laid down by the Maharaja Sayajirao University of Baroda, Vadodara.
 - 7.19.3. The chairperson and members of the of the FLRAC/ILRAC, Guide and Co-guide(s) as well as other faculty members and Research scholars belonging to an allied subject (Related/Conjunct Subject) of various other Department(s)/Faculty/Institute, and various other interested experts/researchers may also attend the online or offline Open Public Viva-voce (Open defense) Examination of Ph.D. Thesis.
 - 7.19.4. The Dean of the concerned Faculty/Director of the concerned institute will coordinate and invite the member of the Council of Post-Graduate Studies and Research of concerned constituency while organizing the Open Public Viva-voce (Open defense) Examination, in consultation with the Internal Guide and the members of the FLRAC/ILRAC.
 - 7.19.5. All Open online or offline Public Viva-voce (Open defense) Examination must be recorded in the Videography. Deans of the concerned Faculty shall be required to preserve, store and maintain the safe custody of the footage of Open Public Viva-voce (Open defense) Examination separately for each candidate. These footages are primarily not required to be forwarded to the university, but the same may be provided on demand basis.
 - 7.19.6. In case of any dispute, the Dean of the concerned Faculty/Director of the concerned institute shall take an appropriate decision.
- 7.20. In order to have the academic enrichment, the members of the Council of

Postgraduate Studies and Research recommend that the External Examiner visiting the department will be invited to deliver at least one lecture/interaction with the Students, Research Scholars and Staff members. Extra remuneration may be paid from the budget head of 'Academic Activity Fee' or any other suitable head of an approved budget of the concerned Faculty/Institute.

- **7.21.** The virtual or physical Open Public Viva-voce (Open defense) Examination of the Research scholar to defend the Ph.D. Thesis shall be conducted only if the evaluation reports of both the External Examiners/Referees are satisfactory and include a specific recommendation for conducting the Open Public Viva-voce Examination.
- **7.22.** If the External Examiners ask for certain clarifications, before giving their clear recommendation, the Guide and Co-guide (s) for research degree may get in touch with the Research scholar to obtain the required information, and communicate the same to the External Examiner. In such cases, where the External Examiners reserve their recommendations and suggest an online or offline Open Public Viva-voce (Open defense) Examination, then, the candidate will need to satisfy the Viva-voce committee [The Guide and Co-guide (s) for research degree and the External Examiner (Chairperson) present], on the points raised by the two External Examiners.
- **7.23.** If One of the evaluation reports of the External Examiners in case of Ph.D. thesis, is unsatisfactory and does not recommend Open Public Viva-voce (Open defense) Examination, the Deputy Registrar (Examinations), The Maharaja Sayajirao University of Baroda, Vadodara shall forward the Ph.D. Thesis to another External Examiner, as nominated by Vice-Chancellor, from out of the approved panel of examiners. Provided further that when it is decided to appoint third External Examiner the copies of the reports of both the External Examiners, favourable as well as adverse, be sent to the third External Examiner for the perusal, without disclosing the identity of earlier External Examiners.
- **7.24.** The online or offline Open Public Viva-voce (Open defense) Examination shall be held only if the report of the third External Examiner is satisfactory. If the report of the third External Examiner is also unsatisfactory, the Ph.D. Thesis shall be rejected and the Research scholar shall be declared ineligible for the award of the Ph.D. Degree.
- **7.25.** If both the External Examiners consider that the thesis is unacceptable for the award of the Ph.D. Degree, Open Public Viva-voce (Open defense) Examination test of the Research scholar shall be not be conducted, and the Reports of all the External Examiners shall be placed before the Syndicate. The decision of the Syndicate shall be final for either non-award of the Ph.D. degree or any other directive concerning the research work submitted by the scholar in the form of PhD thesis.
- **7.26.** After the successful completion of the Open Public Viva-voce (Open defense) Examination both the Guide for research degree and the External Examiner (Chairperson) shall prepare a joint final consolidated report on the Open Public Viva-voce (Open defense) Examination [In case of Virtual Public Viva-voce (Open defense), both the External examiners, through an email to the concerned Dean of the Faculty Any one External examiner will act as a Chairperson] and certify that all suggested changes have been incorporated along with the reply given to the queries raised by the External Examiner in the written form, signed and accepted by the members of the

Viva-voce Panel as well as the list of the persons attended the Open Public Viva-voce (Open defense) Examination in respect of the award of the Ph.D. degree immediately after the Open Public Viva-voce (Open defense) Examination is over.

However, if the guide for research degree is not available due to any unforeseen reason(s) like unfortunate death, discharge from active services of the University.... etc. and such like other reason(s) leading to unavailability of guide for research degree during the ongoing Ph.D. Studies after submission of the Synopsis/Ph.D. thesis, Dean of the concerned faculty in consultation with the Head of the respective Department (Wherever Departmental Heads are available) shall be the Convener of the Open Public Viva-voce (Open defense) Examination for preparation of a joint final consolidated report on the Open Public Viva-voce (Open defense) Examination [In case of Virtual Public Viva-voce (Open defense), both the External examiners, through an email to the Dean of the concerned Faculty] and certify that all suggested changes have been incorporated along with the reply given to the queries raised by the External Examiner(s) in the written form, signed and accepted by the members of the Public Viva-voce (Open defense) Panel as well as the list of the persons attended the Open Public Viva-voce (Open defense) Examination in respect of the award of the Ph.D. degree immediately after the Open Public Viva-voce (Open defense) Examination is over. Dean of the concerned Faculty shall forward all necessary communications in this regard.

- **7.27.** In case the online or offline Open Public Viva-voce (Open defense) Examination is not satisfactory, the examiners may unanimously recommend with reasons that a fresh online or offline Open Public Viva-voce (Open defense) Examination of the Ph.D. Thesis be organized within a period of not less than one month. If the online or offline Open Public Viva-voce (Open defense) examination is still not satisfactory, the panel for Viva-voce Examination would record the reasons for the same and may recommend the resubmission of the Ph.D. Thesis with suggested changes or recommend the rejection of the Ph.D. Thesis, as the case may be.
- **7.28.** The concerned Research scholar shall be required to submit the softcopy of the Executive summary of the Ph.D. thesis consisting of the Table of contents, the brief Research methodology, the Key findings, Conclusions, and the Recommendations / Suggestions etc. along with the Bibliography and Webliography for hosting the same on the website of the University for a period of 10 days at least.

Following modality will have to be followed:

- 7.28.1. After the receipt of TWO Clear and Positive Evaluation Reports from the External Referees, the Open Public Viva-voce (Open defense) will be conducted.
- 7.28.2. After the conduct of Open Public Viva-voce (Open defense), the Guide for research degree and the External Examiner (Chairperson) shall prepare a joint final consolidated report on the Open Public Viva-voce (Open defense).
- 7.28.3. After the receipt of Joint final consolidated report recommending the research work for the award of Ph.D. degree (After incorporation of every suggested corrections / modifications), the soft-copy of the Research work will be hosted on the University website on every 10th day/20th day/30th day of the

respective month, as per the date of receipt of the aforesaid report and the soft-copy in the required format to the Office of Examination section.

7.28.4. As soon as the Joint final consolidated report on the Open Public Viva-voce (Open defense) Examination is received from the Guide for research degree and the External Examiner(s), Deputy Registrar (Examinations) is authorized for the acceptance of the thesis for the Ph.D. degree.

However, if the guide for research degree is not available due to any unforeseen reason(s) like unfortunate death, discharge from active services of the University....etc. and such like other reason(s) leading to unavailability of guide for research degree during the ongoing Ph.D. Studies after submission of the Synopsis/Ph.D. thesis, Dean of the concerned faculty shall act as a convener for the conduct of Open Public Viva-voce (Open defense) Examination, in consultation with the Head of the Department (Wherever Departmental Heads are available) and Dean of the concerned Faculty shall forward all necessary communications in this regard.

7.28.5. The Office of Examination section immediately notifies the Ph.D. Notification of the concerned Research scholar, after due administrative formalities.

Note: If the 10th day/20th day/30th day of respective month fall on the holiday; the next working day will be considered for hosting of the aforesaid submission.

7.29. An honorarium @ ₹5,000/-each shall be paid for evaluation of the Ph.D. Thesis, to the Guide for research degree as well as Co-guide, if any. In addition, each Examiner conducting the Open Public Viva-voce (Open defense) Examination, including the Co-guide, if any, shall be paid ₹3,000/- as the honorarium.

The present Ordinance for Executive Ph.D. Programme is introduced upon the recommendation of the Council of Post-graduate Studies and Research through the proposal number PGC-1 dated 27/07/2020 – 17/09/2020 – SR-33 dated 21/09/2020.

Glossary:

Institute:

The word Institute means the Institute of Interdisciplinary Studies – Addition of New Ordinance 304 in Hand Book Part II 1984 as approved under S.R. No 13 dated 19.02.2018

Guide for research degree:

The word Guide for research degree means the Research Supervisor.

Co-guide for research degree:

The word Co-guide for research degree means the Co-supervisor.

Student:

"Student' means a person admitted to and pursing a specified Degree/Diploma/Certificate/Vocational Programme approved by the University, for the present

Ordinance, a student means the Research scholar.

Academic Programme:

Academic Programme means a Higher Education Programme pursued for a Degree specified by the University.

Statutory Body:

"Statutory / Regulatory Body" means a body so constituted by a Central Act or a State Government Act for Setting and Maintaining Standards in the Relevant Areas of Higher Education.

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