

**NOTIFICATION OF THE GUJARAT UNIVERSITY**

No. Exam. '4-A' / 64520 / of 2019

**Programme of the M.Sc. Semester - I Examination****Nov-Dec, 2019**

Candidates are requested to be present *fifteen minutes before the time appointed for the starting of the first paper and ten minutes before the time for setting each subsequent paper*. THEY ARE FORBIDDEN TO TAKE ANY BOOK, PAPER OR ANY KIND OF HAND-WRITTEN / TYPED / PRINTED MATERIAL, PROGRAMMABLE CALCULATOR, ANY TYPE OF MOBILE PHONE, ELECTRONICS INSTRUMENT INTO THE EXAMINATION HALL.

The written examination will be conducted in the following order :

<b>Day &amp; Date</b>	<b>M.Sc. Semester - I [Time : 8-30 a.m. to 11-00 a.m.]</b>
Friday, 29th November, 2019	<b>401 - Physics—Paper I</b> (Quantum Mechanics - I Mathematical Physics)
	<b>401 - Chemistry—Paper I</b> (Inorganic Chemistry)
	<b>401 - Botany—Paper I</b> (Microbiology, Mycology & Phycology)
	<b>401 - Zoology—Paper I</b> (Cell Biology)
	<b>401 - Geology—Paper I</b> (Global Tectonics)
	<b>401 - Applied Geology—Paper I</b> Crystallography Mineralogy & Optics
	<b>401 - Microbiology—Paper I</b> (Diversity of Prokaryotic and Eukaryotic Microorganisms)
	<b>401 - Mathematics—Paper I</b> (Functions of Several Variables) (Old)
	<b>401 - Mathematics—Paper I</b> (Mathematical Statistics) (New)
	<b>401 - Statistics—Paper I</b> (Matrix Algebra & Measure Theory)(Old)
	<b>401 - Statistics—Paper I</b> (Matrix Algebra)(New)
	<b>401 - Life Sciences—Paper I</b> (Physical & Biological Chemistry)
	<b>401 - Env Sc —Paper I</b> (Natural and Biological Environment)
	<b>401 - Bio-Chemistry—Paper I</b> (Bioenergetics and Intermediary Metabolism)
	<b>401 - Bio-Medical Technology—Paper I</b> (Instrumentation and Methodology)
	<b>401 - Bio-Technology—Paper I</b> (Cellular Microbiology)
	<b>401 - Bio-Technology (Integrated)—Paper I</b> (Advances in Physiology) (K.K.S.C.)
	<b>401 - Human Genetics—Paper I</b> (Cell Biology)
	<b>401 - Bio-informatics—Paper I</b> (Biological Sciences, Statistics and Computer)
	<b>401 - Electronics - Paper I</b> (Solid State Physics & Semiconductor Devices)
	<b>401 - Food Sciences &amp; Nutrition - Paper I</b> (Nutritional Biochemistry)
	<b>401 - Climate Change — Paper I</b> (Introduction to Climate and its Classification)
	<b>401 - Forensic Science — Paper I</b>
	<b>401 - Animation — Animation Principle &amp; Fundamentals</b>
	<b>401 - Mobile Application — Mobile Network Architecture</b>
	<b>401 - Cancer Biology — Fundamental of Cell and Cancer Cell Biology</b>
	<b>401 - Polymer Science — Adv. Polymer Science</b>
	<b>401 - Computer Science — Enterprise Data Management E.R.P.</b>
	<b>101 - Clinical Research : Elements of Microbiology &amp; Biotechnology - Module-I</b>
	<b>401 - Gio-informatics</b>
	<b>401 - Introduction &amp; Principles of Toxicology</b>
<b>401 - WL-Primers in Wildlife Biology-1</b>	
<b>401 - Pharmaceutical Scienc-Fundamentals of Biology And Clinical Pharmacy</b>	
<b>401 - Cyber Security &amp; Forensics-Fund. of Info. Security &amp; SCADA &amp; IoT</b>	
<b>401 - Horticulture</b>	

Day & Date	M.Sc. Semester - I [Time : 8-30 a.m. to 11-00 a.m.]
Saturday, 30th November, 2019	<p>402 - Physics—Paper II (Classical Mechanics - I, &amp; Statistical Mechanics)</p> <p>402 - Chemistry—Paper II (Organic Chemistry)</p> <p>402 - Botany—Paper II (Cryptogams, Gymnosperms &amp; Paleobotany)</p> <p>402 - Zoology—Paper II (Biochemistry)</p> <p>402 - Geology—Paper II (Structural Geology)</p> <p>402 - Applied Geology—Paper II (Igneous Petrology)</p> <p>402 - Microbiology—Paper II (Advances in Microbial Biochemistry)</p> <p>402 - Mathematics—Paper II (Metric Spaces) (Old)</p> <p>402 - Mathematics—Paper II (Measure &amp; Integration) (New)</p> <p>402 - Statistics—Paper II (Probability Theory) (Old &amp; New)</p> <p>402 - Life Sciences—Paper II (Principles of Microbial Sciences)</p> <p>402 - Environmental Science—Paper II (Environmental Issues and Impacts)</p> <p>402 - Bio-Chemistry—Paper II (Microbial Biochemistry)</p> <p>402 - Bio-Medical Technology-Paper II (Clinical Biochem. &amp; Serology-I)</p> <p>402 - Bio-Technology—Paper II (Advances in Biochemistry)</p> <p>402 - Bio-Technology (Integrated)—Paper II (Genetics and Molecular Biology) (K.K.S.C.)</p> <p>402 - Human Genetics—Paper II (Techniques in Cytogenetics and Tissue Culture)</p> <p>402 - Bio-informatics—Paper II (Biochemistry, Human Physiology and Immunology)</p> <p>402 - Electronics - Paper II (Electronic Communication - I)</p> <p>402 - Food Sciences &amp; Nutrition - Paper II (Functional Properties of Food)</p> <p>402 - Climate Change — Paper II (Climate Science)</p> <p>402 - Forensic Science — Paper II</p> <p>402 - Animation — Elements of Design, Visual Language &amp; Aesthetics</p> <p>402 - Mobile Application — Mobile Device Architecture</p> <p>402 - Cancer Biology — Cytogenetics - I</p> <p>402 - Polymer Science — Polymeric Materials</p> <p>402 - Computer Science — Adv. Java Technology</p> <p>102 - Clinical Research : Fundamentals of Anatomy, Physiology &amp; Pathology Module-II</p> <p>402 - Gio-informatics</p> <p>402 - Analytical Toxicology</p> <p>402 - WL-Primers in Wildlilfe Biology-II</p> <p>402 - Pharmaceutical Scienc-Pharmaceutical Analysis</p> <p>402 - Cyber Security &amp; Forensics-Network Security</p> <p>402- Horticulture</p>

Day & Date	M.Sc. Semester - I [Time : 8-30 a.m. to 11-00 a.m.]
Monday 2nd December, 2019	<p>403 - Physics—Paper III (Electrodynamics - I &amp; Programming in 'C')</p> <p>403 - Chemistry—Paper III (Physical Chemistry)</p> <p>403 - Botany—Paper III (Plant Taxonomy)</p> <p>403 - Zoology—Paper III (Animal Diversity)</p> <p>403 - Geology—Paper III (Mineralogy)</p> <p>403 - Applied Geology—Paper II (Sedimentary Petrology)</p> <p>403 - Microbiology—Paper III (Microbial Genetics and Biostatistics)</p> <p>403 - Mathematics—Paper III (Complex Analysis - I) (Old)</p> <p>403 - Mathematics—Paper III (Complex Analysis - I) (New)</p> <p>403 - Statistics—Paper III (Estimation Theory) (Old)</p> <p>403 - Statistics—Paper III (Parametric Estimation) (New)</p> <p>403 - Life Sciences—Paper III (Molecular Cell Biology)</p> <p>403 - Env Sci—Paper III (Energy and Environment)</p> <p>403 - Bio-Chemistry—Paper III (Molecular Cell Biology)</p> <p>403 - Bio-Medical Technology—Paper III (Parasitology)</p> <p>403 - Bio-Technology—Paper III (Genetics and Biostatistics)</p> <p>403 - Bio-Technology (Integrated)—Paper III (Biotech Enterprise) (K.K.S.C.)</p> <p>403 - Human Genetics—Paper III (Genetics)</p> <p>403 - Bio-informatics—Paper III (Cell Biology &amp; Analytical Technique)</p> <p>403 - Electronics - Paper III (Linear IC's and Their Applications)</p> <p>403 - Food Sciences &amp; Nutrition - Paper III (Molecular Cell Biology)</p> <p>403 - Climate Change — Paper III (Global Warming and Climate Change)</p> <p>403 - Forensic Science — Paper III</p> <p>403 - Mobile Application — Mobile Application Development</p> <p>403 - Cancer Biology — Cellular and Molecular Basis of Cancer - I</p> <p>403 - Polymer Science — Natural &amp; Synthetic Fibers</p> <p>403 - Computer Science — O.O.A.D. &amp;</p> <p>103 - Clinical Research : General Pharmacology &amp; Pharmacokinetic &amp; Pharmacodynamic of Drugs - Module-III</p> <p>403 - Gio-informatics</p> <p>403 - Systemic Toxicology</p> <p>403 - WL-Biogeography &amp; Fundamental Ecology</p> <p>403 - Pharmaceutical Scienc-General Pharmacology &amp; Toxicology</p> <p>403 - Cyber Security &amp; Forensics-Advance Web Application Security</p> <p>403 - Horticulture</p>

**M.Sc. Sem -I [4]**

<b>Day &amp; Date</b>	<b>M.Sc. Semester - I [Time : 8-30 a.m. to 11-00 a.m.]</b>
Tuesday 3rd December, 2019	<p>404 - <b>Physics—Paper IV</b> (Solid State Physics and Electronics-I)            404 - <b>Chemistry—Paper IV</b> (Analytical Chemistry)            404 - <b>Botany—Paper IV</b> (Phyto Resources, Ethnobotany &amp; Phytochemistry)            404 - <b>Zoology—Paper IV</b> (Physiology)            404 - <b>Geology—Paper IV</b> (Palaentology Principles, Vertebrates &amp; Plants)            404 - <b>Applied Geology—Geochemistry, Geophysics &amp; Engineering Geology</b>            404 - <b>Microbiology—Paper IV</b> (Microbial Physiology and Immunology)            404 - <b>Mathematics—Paper IV</b> (Ordinary Differential Equations) (Old)            404 - <b>Mathematics—Paper IV</b> (Ordinary Differential Equations) (New)            404 - <b>Statistics—Paper IV</b> (Sampling Theory)(Old) (Theory of Sampling) (New)            404 - <b>Life Sciences—Paper IV</b> (Developmental and Stem Cell Biology)            404 - <b>Env Sci—Paper IV</b> [Environment and Soil]            404 - <b>Bio-Chemistry—Paper IV</b> (Stem Cell Biology and Toxicology)            404 - <b>Bio-Medical Technology—Paper IV</b> (Haematology)            404 - <b>Bio-Technology—Paper IV</b> (Physiology and Immunology)            404 - <b>Human Genetics—Paper IV</b> (Biological Chemistry)            404 - <b>Bioinformatics—Paper IV</b> (Fundamentals of Programming using 'C' &amp; HTML)            404 - <b>Electronics - Paper IV</b> (Digital Systems Design and Microprocessor-I)            404 - <b>Food Sciences &amp; Nutrition - Paper IV</b> (Human Nutrition and Nutrients)            404 - <b>Climate Change — Paper IV</b> (Observed Climate Change and International Responses)            404 - <b>Forensic Science — Paper IV</b>            404 - <b>Mobile Application — Mobile Web Application</b>            404 - <b>Cancer Biology — Cancer Epidemiology and Etiology</b>            404 - <b>Polymer Science — Bio-Polymers,</b>            404 - <b>Geo-informatics—Globe Navigation &amp; Satellite System</b>            404 - <b>Horticulture</b>            404 - <b>Computer Science — Adv. Relational Database Management System</b>            404 - <b>WL-Population Ecology and Remote Sensing</b>            404 - <b>Pharmaceutical Technology</b>            404 - <b>Advance Mobile Application Security</b>            404 - <b>Toxicology-Cell And Molecular Biology</b></p>
Wednesday 4th December, 2019	<p>405 - <b>Mathematics—Paper V</b> (Measure and Integration) (Old)            405 - <b>Polymer Science — Conducting Polymers</b>            405 - <b>Computer Science — Adv. Data Structure</b>            405 - <b>Gio-informatics</b></p>

The centres for the M.Sc.-Semester - I (Reg & Ext. Students) Examination will be as under :

- ( 1 ) **01** — **Ahmedabad** : (Places will be declared later on.)  
 ( 2 ) **43** — **Gandhinagar** : (Places will be declared later on.)

No Old Course is available in any of the subjects except it is specifically provided in the Programme.

The Practical Examinations will take place before the Theory Examination. Viva-Examination for Mathematics will also take place before the conclusion of theory examination. Due notice will be given by the Examiners (on the University website) of the dates, time and places of Practical and Viva examinations and the order in which candidates are to present themselves. *Candidates are directed to be present at the time and place appointed for their practical examinations. Those who fail to present themselves at the appointed time and place will not be examined in the practical afterwards.*

The use of calculator is allowed, but programmable calculator is not allowed in the Programme.  
 Ahmedabad-380 009