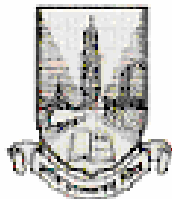


University of Mumbai



(308)
FIRST HALF 2013

PROGRAMME OF THE THIRD YEAR B.Sc. (THREE YEAR DEGREE COURSE) EXAMINATION

Candidates for the above examination are requested to be in attendance at the place of examination, fifteen minutes before the time appointed for setting of the first paper and ten minutes before the time fixed for setting of each subsequent paper.

THEY ARE FORBIDDEN TO TAKE ANY BOOK OR PAPER INTO THE EXAMINATION HALL.

Seat numbers and places of examination will be announced on the college notice boards four days prior to the date of commencement of the examination.

Smoking is strictly prohibited in the examination hall.

The written examination will be conducted in the following order :-

Days and Dates	Time	Paper
Tuesday, April 02, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Electronics Instrumentation – Paper I – Analog Circuits and Instruments.
		Applied Component Group : Agrochemicals – Paper I Introduction to Agrochemicals.
		Applied Component Group : Polymers – Paper I.
		Applied Component Group : Wild Life Management – Paper I.
		Applied Component Group : Heavy & Fine Chemicals Paper – I .
		Applied Component Group : Drugs & Dyes – Paper I – Drugs.
		Applied Component Group : Tissue Culture – Paper I – Basic Aspects.
		Applied Component Group : Medical Laboratory Technology – Paper I- Diagnostic Microbiology .
		Applied Component Group : Petrochemicals Paper – I .
		Applied Component Group : Analytical Instrumentation – Paper I – Electronics, Data Systems and Spectroscopy.
		Applied Component Group : Aquaculture – Paper I – Basic Principles of Aquaculture.
		Applied Component Group : Soil Science Including Soil Analysis and Soil Mechanics – Paper I.
		Applied Component Group : Environmental Science & Pollution – Paper I – Introduction to Environment.
Applied Component Group : Marine Science – Paper I .		

Days and Dates	Time	Paper
Tuesday, April 02, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Material Science – Paper I – Introductory Study of Various Materials.
		Applied Component Group : Computer Science – Paper I – Computer Hardware, Assembly Language Programming and Operating System.
		Applied Component Group : Investment Analysis – Paper I.
		Applied Component Group : Food Production & Processing – Paper I – Food Production .
		Applied Component Group : Waste Recycling & Non-Conventional Source of Energy – Paper I – Non-Conventional Sources of Energy.
		Applied Component Group : Economics Entomology – Economic Entomology – Paper I .
		Applied Component Group : Fishery Biology – Paper I .
		Applied Component Group : Bio-Technology – Paper I Concepts and Methodology in Biotechnology.
		Applied Component Group : Computer Programming & Systems Analysis. Paper – I .
		Applied Component Group : Operations Research. Paper –I. ** (Use of Electronic pocket calculator permitted in the subject of Operations Research).
		Applied Component Group : Paper I – Actuarial Science. ** (Use of Electronic pocket calculator permitted in the subject of Actuarial Science.).
		Applied Component Group : Food & Nutrition & Food Adulteration – Paper I – Food Chemistry & Nutrition.
		Applied Component Group : Gemmology – Paper I.
		Applied Component Group : Horticulture & Gardening Paper – I .
Applied Component Group : Radio & Telecommunication – Paper I – Principles of Radio Communication.		
Applied Component Group : Accountancy and Financial Management – Paper I – Accountancy.		
Applied Component Group : Business Management – Paper I – General and Financial Management.		

Days and Dates	Time	Paper
Tuesday, April 02, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Aerobiology – Paper I.
		Applied Component Group : Environmental Biochemistry – Paper I.
		Applied Component Group : Web Design – Paper I – Principles of Web Design and Web Technologies.
		Vocational Subject : Instrumentation – Paper I – Transducers and Analytical Instrumentation and Signal Conditioning.
		Vocational Subject : Bio-Technology – Paper I – Animal Cell Bio-Technology and Plant Bio-Technology.
		Vocational Subject : Industrial Chemistry – Paper I – Chemical Process Economic and Industrial Chemical Analysis.
		Vocational Subject : Computer Applications – Paper I – Java Programming I & II.
		Vocational Subject : Food Science & Quality Control – Paper I – Food Analysis & Food Toxicology.
		Vocational Subject : Agro Services Paper I – Agricultural Machineries and Power sources, Management and Information.
		Vocational Subject : Industrial Microbiology – Paper I – Biodegradation of Waste and Bio-Fertilizer.
Wednesday, April 03, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Electronics Instrumentation – Paper II – Digital Electronics Microprocessor and its applications, programming in c++ .
		Applied Component Group : Agrochemicals – Paper II – Applied Aspects of Agrochemicals.
		Applied Component Group : Polymers – Paper II .
		Applied Component Group : Wild Life Management – Paper II .
		Applied Component Group : Heavy & Fine Chemicals Paper II .
		Applied Component Group : Drugs & Dyes – Paper II – Dyes.
		Applied Component Group : Tissue Culture – Paper II – Applications.
		Applied Component Group : Medical Laboratory Technology – Paper II – Haematology & Clinical Biochemistry.
		Applied Component Group : Petrochemical Paper II .

Days and Dates	Time	Paper
Wednesday, April 03, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Analytical Instrumentation – Paper II – Chromatographic Electro-Analytical and Other.
		Applied Component Group : Aquaculture – Paper II – Management of Aquaculture.
		Applied Component Group : Soil Science Including Soil Analysis and Soil Mechanics – Paper II.
		Applied Component Group : Environmental Science & Pollution – Paper II – Environmental Pollution.
		Applied Component Group : Marine Science – Paper II .
		Applied Component Group : Material Science – Paper II – Materials Characterisation and Testing.
		Applied Component Group – Computer Science – Paper II – Programming in C++ .
		Applied Component Group : Investment Analysis – Paper II.
		Applied Component Group : Food Production & Processing – Paper II – Food Processing .
		Applied Component Group : Waste Recycling & Non-Conventional Sources of Energy – Paper II – Waste Recycling.
		Applied Component Group : Economic Entomology – Economic Entomology – Paper II.
		Applied Component Group : Fishery Biology – Paper II .
		Applied Component Group : Bio-Technology – Paper II – Applications and Advances .
		Applied Component Group : Computer Programming & System Analysis – Paper II .
		Applied Component Group : Operations Research – Paper II.
		Applied Component Group : Acturial Science – Paper II.
		Applied Component Group : Food & Nutrition & Food Adulteration – Paper II – Food Adulteration.
Applied Component Group : Gemmology – Paper II .		
Applied Component Group : Horticulture & Gardening Paper II.		
Applied Component Group : Radio & Telecommunication – Paper II – Telecommunication Systems.		

Days and Dates	Time	Paper
Wednesday, April 03, 2013	03:00 p.m. to 06:00 p.m	Applied Component Group : Accountancy and Financial Management – Paper II – Financial Management.
		Applied Component Group : Business Management – Paper II – Business Operations.
		Applied Component Group : Aerobiology – Paper II.
		Applied Component Group : Web Design – Paper II – Net Technologies.
		Applied Component Group : Environmental Biochemistry – Paper II.
		Vocational Subject : Instrumentation – Paper II – Microprocessor and Entrepreneurship.
		Vocational Subject : Bio-Technology – Paper II – Environmental Bio-Technology and Entrepreneurship.
		Vocational Subject : Industrial Chemistry – Paper II – Pharmaceuticals.
		Vocational Subject : Industrial Chemistry – Paper II – Heavy & Fine Chemicals.
		Vocational Subject : Industrial Chemistry – Paper II – Polymers.
		Vocational Subject : Computer Applications – Paper II – E-Commerce / Entrepreneurship Development.
		Vocational Subject : Food Science & Quality Control – Paper II – Food Adulteration Testing & Introduction to Food Manufacture.
		Vocational Subject – Agro Service - Paper II – Agro-Service, Processing Projects and Credit Planning.
		Vocational Subject : Industrial Microbiology - : Paper II – Fermentation Technology and Immunobiotechnology.
Thursday, April 04, 2013	03:00 p.m. to 06:00 p.m	Biochemistry : Paper I – (6 Units). Biochemistry : Paper I – Bio-Organic and Biophysical Chemistry (3 Units)
Saturday, April 06, 2013	03:00 p.m. to 06:00 p.m	Biochemistry:Paper III –Genetics,Biostatistics and Bioinformatics (6 Unit).
		Computer Science:Paper I- Data Communications, Networking and Security.
		Geology:Paper I-Stratigraphy and Geology of India Maharashtra and Mumbai .
		Chemistry: Paper I- Physical Chemistry (6 Units).

Days and Dates	Time	Paper
Saturday, April 06, 2013	03:00 p.m. to 06:00 p.m	<p>Chemistry: Paper I- Physical & Inorganic Chemistry (3 Units).</p> <p>Mathematics: Paper I- Real Analysis and Multivariable Calculus.</p> <p>Biotechnology: Paper III- Molecular Biology.</p> <p>Microbiology : Paper III- Microbial Biochemistry.</p> <p>Zoology : Paper III – Molecular Biology, Biotechnology, Genetics, Evolution and Taxicology.</p> <p>Botany: Paper I - Plant Diversity - III .</p>
Monday, April 08, 2013	03:00 p.m. to 06:00 p.m	<p>Physics: Paper IV- Special Theory of Relativity & Cosmology, Electrodynamics.</p> <p>Chemistry : Paper II- Inorganic Chemistry (6 Units).</p> <p>Chemistry : Paper II- Organic & Analytical Chemistry (3 Units).</p> <p>Statistics: Paper III- Applied Statistics- I.</p> <p>Computer Science : Paper II – Advanced Java.</p> <p>Geology: Paper II – Igneous, Sedimentary and Metamorphic Petrology.</p> <p>Biochemistry : Paper IV – (6 Units).</p> <p>Mathematics : Paper II – Algebra II</p> <p>Biotechnology: Paper IV- Applications of Biotechnology.</p> <p>Microbiology : Paper IV- Bioprocess Technology.</p> <p>Botany: Paper IV - Current Trends in Plant Sciences II .</p> <p>Life Sciences: Paper III -Biotechnology.</p> <p>Zoology : Paper IV – Environmental Science- Environmental Biology, Epidemiology, Biostatistics.</p>
Wednesday, April 10, 2013	03:00 p.m. to 06:00 p.m	<p>Mathematics: Paper III - Topology of Metric Spaces.</p> <p>Physics : Paper II – Solid State Physics and Electronics.</p> <p>Chemistry : Paper III - Organic Chemistry (6 Units).</p> <p>Computer Science : Paper III – Operating Systems and Linux.</p> <p>Statistics : Paper IV– Applied Statistics– II.</p> <p>Geology : Paper III – Structural Geology and Engineering Geology.</p> <p>Biochemistry : Paper II – (6 Units).</p> <p>Biochemistry: Paper II - Metabolism, Nutrition & Advanced Biochemical Concepts (3 Units)</p>
Friday, April 12, 2013	03:00 p.m. to 06:00 p.m	<p>Biotechnology : Paper I - Cell Biology and Medical Microbiology.</p>

Days and Dates	Time	Paper
Friday, April 12, 2013	03:00 p.m. to 06:00 p.m	Zoology: Paper I-Animal Types, Comparative Chordate Anatomy, Development Biology and Histology and Endocrinology.
		Life Sciences: Paper IV- Environmental Biology.
		Physics: Paper I - Mathematical and Statistical Physics, Classical Mechanics and Chaos.
Monday, April 15, 2013	03:00 p.m. to 06:00 p.m	Chemistry : Paper IV -Analytical Chemistry (6 Units).
		Geology : Paper IV – Remote Sensing and Image Interpretation, Photogrametry, Geographical Information Systems.
		Mathematics: Paper IV -
		Elective A- Numerical Methods.
		Elective B- Number Theory and Its Applications.
		Elective C- Graph Theory and Combinatorics.(OLD)
		Elective C- Graph Theory and Combinatorics.(REV.)
		Elective D - Probability and Application to Financial Mathematics.
		Computer Science : Paper IV – DBMS II and Software Engineering.
		Microbiology: Paper I - Genetics Bioinformatics, Molecular Biology and Virology.
Statistics: Paper I - Probability Theory and Stochastic Process **(Candidates will be permitted to use simple six function calculator).		
Wednesday, April 17, 2013	03:00 p.m. to 06:00 p.m	Physics: Paper III- Atomic and Molecular Physics, Nuclear Physics.
		Biotechnology : Paper II – Immunology, Biochemistry and Instrumentation.
		Zoology: Paper II- Physiology, Haematology and Immunology.
Thursday, April 18, 2013	03:00 p.m. to 06:00 p.m	Statistics : Paper II – Statistical Inference.
		Life Sciences : Paper I - Genetics & Immunology.
		Botany : Paper II – Plant Diversity- IV.
Saturday, April 20, 2013	03:00 p.m. to 06:00 p.m	Microbiology: Paper II - Medical Microbiology and Immunology.
Monday, April 22, 2013	03:00 p.m. to 06:00 p.m	Botany : Paper III – Form and Functions- III .
		Life Sciences : Paper II – Development Biology & Neurobiology.

N.B. :- IF ANY CORRECTION / ADDITION / DELETION ETC. IN THE ABOVE PROGRAMME KINDLY COMMUNICATE WITHIN FIFTEEN DAYS FROM DATE OF RECEIPT OF THIS PROGRAMME.

Mumbai - 400 098
7th January, 2013

(DEEPAK. G. WASAVE)
I/c. Controller of Examinations