

# University of Mumbai



(55)  
**Second Half - 2008**

## **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: -

<b>Days and Dates</b>	<b>Time</b>	<b>Paper</b>
Tuesday, 14 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	Mathematics : Paper III – Differential Equations & Mechanics.
		Biochemistry : Paper III – Biochemistry of Gene and Advanced Genetics (6 Unit)
Wednesday, 15 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	** Physics : Paper I – Solid State Physics and Electronics. ** (Use of Single non-programmable scientific calculator permitted in the subject of Physics).
		Chemistry : Paper III – Organic Chemistry (6 Units).
		Life Sciences : Paper I – Genetics & Immunology.
		Computer Science : Paper I – Systems Software, Data Communications and Networking.
		Microbiology : Paper I – Genetics Molecular Biology and Virology.
		Geology : Paper I – Crystallography, Crystal Optics & Mineralogy.
		Biotechnology : Paper I – Cell Biology, Genetics, General Microbiology, Biostatistics and Bioinformatics.
Thursday, 16 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	Zoology : Paper II – Physiology, Homeostasis and Regulations, Haematology and Immunology.
Friday, 17 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	Physics : Paper III – Mechanics, Statistical and Thermal Physics.
		Chemistry : Paper IV – Analytical Chemistry (6 Unit).
		Life Sciences : Paper III – Fermentation Technology & Genetic Engineering.
		Computer Science : Paper III – Operating Systems, System Study and Unix System Programming.
		Botany : Paper IV – Current Trends in Plant Sciences.
		Zoology : Paper I – Animal Types, Comparative Chordate Anatomy, Development Biology and Histology and Endocrinology.
		Geology : Paper IV – Ore Genesis, Mining Geology and Engineering Geology.
		Statistics : Paper I – Probability and Distribution Theory ** (Candidates will be permitted to use simple six function calculator)
		Biotechnology : Paper III – Molecular Biology and recombinant DNA Technology.

<b>Days and Dates</b>	<b>Time</b>	<b>Paper</b>
Saturday, 18 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	Statistics : Paper IV – Applied Statistics – II.
		Biochemistry Paper II – Metabolism, Nutrition and Advanced Biochemical Concepts (3 Units) – (Old).
		Biochemistry Paper II – Metabolism, Nutrition and Advanced Biochemical Concepts (3 Units) – (Rev).
Monday, 20 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	Botany : Paper I – Plant Diversity – III.
		Mathematics : Paper IV – Analysis – III.
Tuesday, 21 <sup>st</sup> October,2008	02:30 PM to 05:30 PM	Physics : Paper IV – Relativity & Cosmology, Electrodynamics.
		Chemistry : Paper I – Physical & Inorganic Chemistry (3 Units).
		Chemistry : Paper II – Inorganic Chemistry (6 Units).
		Statistics : Paper II – Statistical Inference.
		Zoology : Paper III – Molecular Biology, Biotechnology & Biostatistics, Genetics and Evolution & Toxicology.
		Microbiology : Paper III – Microbial Biochemistry.
		Geology : Paper III – Geomorphology, Cartographic and Morphometric Analysis, Palaeontology and Regional Geology of Maharashtra
		Biotechnology : Paper IV – Industrial Biotechnology.
Wednesday, 22 <sup>nd</sup> October,2008	02:30 PM to 05:30 PM	Mathematics : Paper I – Multivariable Calculus.
		Biochemistry : Paper I – Biochemical Physiology and Biochemical Pathology (6 Units)
		Statistics : Paper III – Applied Statistics – I.
		Biochemistry : Paper I – Bio-Organic Chemistry and Bio-Physical Chemistry (3 Units) – (Old.).
		Biochemistry : Paper I – Bio-Organic and Biophysical Chemistry (3 Units) (Rev)
Thursday, 23 <sup>rd</sup> October, 2008	02:30 PM to 05:30 PM	Chemistry : Paper II – Organic & Analytical Chemistry (3 Units).
		Life Sciences : Paper IV – Life and Environment & Global Issues and Resources.
		Computer Science : Paper IV – Structured System Analysis and Design Object Oriented Analysis and Design and Software Testing.
		Zoology : Paper IV – Environmental Science – Environmental Biology, Epidemiology, Biostatistics.
		Microbiology : Paper IV – Bioprocess Technology.
Friday 24 <sup>th</sup> October, 2008	02:30 PM to 05:30 PM	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 – Medical Microbiology and Immunology.
		Applied Component Group : Petrochemicals Paper – I.
		Applied Component Group : Analytical Instrumentation – Paper I – Electronics, Data Systems and Spectroscopy.

Days and Dates	Time	Paper
Friday, 24 <sup>th</sup> October,2008	02:30 PM to 05:30 PM	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
		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 – Basic Concepts (Old)
		Applied Component Group : Bio-Technology – Paper I Concepts and Methodolgy in Biotechnology (Rev)
		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.
		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.		

<b>Days and Dates</b>	<b>Time</b>	<b>Paper</b>
Friday, 24 <sup>th</sup> October, 2008	02:30 PM to 05:30 PM	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.
Saturday, 1 <sup>st</sup> November, 2008	02:30 PM to 05:30 PM	Physics : Paper II – Atomic & Molecular Physics and Nuclear Physics.
		Life Sciences : Paper II – Development Biology & Neurobiology.
		Computer Science : Paper II – Advanced Java, Visual C++
		Microbiology : Paper II – Medical Microbiology, Chemo-therapy and Immunology.
		Geology : Paper II – Igneous, Sedimentary and Metamorphic Petrology.
		Biochemistry : Paper IV – Immunology and Biostatistics. (6 Units)
		Biotechnology : Paper II – Immunology, Biochemistry and Instrumentation.
Monday, 3 <sup>rd</sup> November, 2008	02:30 PM to 05:30 PM	Botany : Paper II – Plant Diversity – IV
		Mathematics : Paper II – Algebra.
		Biochemistry : Paper II – Pharmaceutical and Environmental Biochemistry (6 Units)
Tuesday, 4 <sup>th</sup> November, 2008	02:30 PM to 05:30 PM	Botany : Paper III – Functional Botany.
		Chemistry : Paper I – Physical Chemistry (6 Units).
Wednesday, 5 <sup>th</sup> November, 2008	02:30 PM to 05:30 PM	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.		

Days and Dates	Time	Paper
Wednesday, 5 <sup>th</sup> November, 2008	02:30 PM to 05:30 PM	Applied Component Group : Petrochemical Paper II.
		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 (Old)
		Applied Component Group : Bio-Technology – Paper II – Applications and Advances (Rev)
		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.
		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.		

<b>Days and Dates</b>	<b>Time</b>	<b>Paper</b>
Wednesday, 5 <sup>th</sup> November,2008	02:30 PM to 05:30 PM	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.

Mumbai – 400 098

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CONTROLLER OF EXAMINATIONS