



RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

M.Sc. THIRD SEMESTER (C B C S) EXAMINATION OF SUMMER, 2018

-: PROGRAMME (WRITTEN) :-

TIME : 9.30 A.M. TO 12.30 P.M.

Sr. No	Subject	Day Date Paper	Wednesday 21-03-2018 I	Friday 23-03-2018 II	Tuesday 27-03-2018 III	Saturday 31-03-2018 IV
1.	Physics	Quantum Mechanics II	Solid State Physics and Spectroscopy	Elective 1. Materials Science – I 2. X-rays – I 3. Nanoscience and Nanotechnology – I 4. Atomic and Molecular Physics– I 5. Applied Electronics – I 6. Methods of Theoretical Physics –I 7. Nonlinear Dynamics-I	Foundation Course Fundamentals of Spectroscopy Fundamentals of Nanoscience and Nanotechnology Subject Centric Core : Solid Earth Geophysics Subject Centric Core : Nanoscience And Nanotechnology Subject Centric Core : Quantum Computing Subject Centric Core : Digital Electronics And Micro processor	
2.	Chemistry	Special I – Inorganic / Organic / Physical / Analytical	Special II – Inorganic / Organic / Physical / Analytical	Elective –Nuclear / Environmental / Polymer / Medicinal	Foundation-/-Applied Analytical Chemistry-I Core(Subject Centric) Spectroscopy-I	
3.	Bio-Chemistry	Advanced Molecular Biology	Biotechnology	A) Toxicology (Biochemical & Environmental Toxicology) OR B) Nutrition (Nutritional Biochemistry)	Biomolecules and Basic Metabolism OR Core (Subject Centric) Bioresearch Techniques-I	
4.	Microbiology	Molecular Biology and Genetics (MBG)	Recombinant DNA Technology and Nanobiotechnology (RDTN)	Elective 1) Microbial Diversity, Evolution and Ecology (MDEE)-I OR 2) Bioinformatics (BIF)-I	Foundation – General Microbiology(GM) OR Core (Subject Centric) Drugs And Disease Management (DDM)-I	
5.	Botany	Plant Ecology and Conservation Biology	Angiosperms-II	Elective 1) Molecular Biology and Plant Biotechnology 2) Reproductive Biology of Angiosperms 3) Advanced Phychology and Hydrobiology 4) Mycology and Plant Pathology 5) Palaeobotany 6) Palynology 7) Plant Physiology	Foundation 1) General Botany Subject Centric 1) Aesthetic Botany	
6.	Zoology	Parasitology & Immunology	Special Group – Paper – I Entomology Fish and Fisheries Mammalian Reproductive Physiology (MRP) Animal Physiology Cell Biology Fresh Water Zoology Aquaculture Environmental Biology Sericulture	Special Group – Paper – II Entomology Fish and Fisheries Mammalian Reproductive Physiology Animal Physiology Cell Biology Fresh Water Zoology Aquaculture Environmental Biology Sericulture	Foundation I Elementary Zoology Basic Entomology Fresh Water Fisheries Human Physiology Core (Subject Centric)-I Wild Life Avian Biology	

Sr. No	Subject	Day Date Paper	Wednesday 21-03-2018 I	Friday 23-03-2018 II	Tuesday 27-03-2018 III	Saturday 31-03-2018 IV
7.	Geology	Hydrogeology & Watershed Management (3+1)	Geomorphology, Remote Sensing and GIS (1+2+1)	Elective 1. Mining Geology And Mineral Exploration(1+3) 2. Applied And Industrial Micropaleontology 3. Petroleum Exploration	Foundation Course Introduction to Geology OR Core (Subject Centric) Environmental Geology & Engineering Geology (2+2)	
8.	Environmental Science	Physico – Chemical Treatment of Water & Waste Water	Biological Process in Wastewater Treatment	Elective Water & Water Treatment OR Water Supply and Resources	Foundation 1. Fundamentals of Environment Science –I 2. Core (Subject Centric) Advance Water Wastewater Treatment	
9.	Statistics	Decision Theory and Non Parametric Methods	Linear and Nonlinear Modeling	Elective 1. Mathematical Programming 2. Computer Programming 3. Survival Analysis 4. Bioassay	Core (Subject Centric) 1. Industrial Process And Quality Control 2. Demography 3. Statistical Ecology 4. Statistical Genetics 5. Mathematical Statistics Foundation Course Biostatistics-I	
10.	Mathematics	Complex Analysis	Functional Analysis	Mathematical Methods	Core Elective Paper (opt any one of the following) 1. Fluid Dynamics – I 2. General Relativity Paper V:- Tuesday, 03-04-2018 Foundation Paper (opt any one of the following) 1. Elementary Mathematics 2. Elementary Mathematics Method 3. Elementary Numerical Method 4. Fuzzy Mathematics I Core (Subject Centric) Operations Research – I	
11.	Electronics	Network Analysis and Synthesis	Fuzzy Logic and Artificial Neural Networks	Elective Digital Signal Processing Digital Image Processing	Foundation Course : Basic Electronics Core (Subject Centric) Mechatronics	
12.	Computer Science	Data Communication and Networks	Software Engineering	Elective Neural Network Multimedia Technologies ASP. NET	Foundation Operating System Concepts Principles of Management E-Business Core (Subject Centric) Mobile Computing Core (Subject Centric) Digital & Cyber Forensics	
13.	Sericulture	Silkworm Seed and Rearing Technology	Biology and Mulberry Silkworm Rearing Technology	Elective A) Genetics and Breeding of Mulberry Silkworms OR B) Genetics and Breeding of Silkworms and Host Plants	Sericulture, Commercial insect conservation & Management	

Sr. No	Subject	Day Date Paper	Wednesday 21-03-2018 I	Friday 23-03-2018 II	Tuesday 27-03-2018 III	Saturday 31-03-2018 IV
14.	Molecular Biology and Genetic Engineering		Industrial Application of Genetic Engineering	Recombinant DNA Technology-I	Elective 1. Molecular Diagnostics Methods	Foundation 1. Biostatics/French/German/Communication Skill-I 2. 3. Core (Subject Centric)Personality Deveolpment Through Fine Art
15.	M.Sc. Tech. Applied Geology		Instrumentation Techniques, Geostatistics and Computer Application in Geology	Indian Mineral Deposits and Mineral Economics	Ore Geology	Mining Geology & Valuation of Mineral Property
16.	Information Technology		Data Communication and Networks	Software Engineering	Elective 1. Soft Computing 2. Distributed Databases 3. Object Oriented Analysis and Design using UML	Foundation Operating System Concepts Principles of Management E- Business Core (Subject Centric) CORBA Core (Subject Centric) Digital & Cyber Forensics CORBA
17.	Biotechnology		Genetic Engineering & its Application	Plant Biotechnology	Elective A) Industrial Biotechnology I OR B) Environmental Biotechnology I	Introductory Biotechnology OR Core (Subject centric) Diagnostic Medical Biotechnology
18.	Forensic Science		Instrumentation Quality Management, Research Methodology and Statistics	Special – I : Questioned Documents Analysis Special – I : Advanced forensic Toxicology	Special – II : Advanced Fingerprint Development Methods Special – II : Advanced Forensic Chemistry	Foundation Course Applied Analytical Chemistry-I Paper V:- Tuesday, 03-04-2018 Special – I :Forensic Serology Special – I : Operating System and Web Security Paper VI:- Thursday, 05-04-2018 Special – II : Forensic Biology Special – II : Advanced Computer Network and Network Secutiry
19.	Medicinal Plants		Immunology and Microbiology	Herbal Cosmetics	Core Elective Natural Plant Products & Phytochemistry -I OR Forensic and Industrial Botany-I	Foundation Course Fermentation Technology OR Core Subject Centric Cultivation and Utilization of Medicinal Plants

GENERAL INSTRUCTIONS FOR SEATING ARRANGEMENT

The name of the Examination Centre is already printed on the Admission Card of each candidate. However, it is notified for general information of the candidates that, the seating arrangement for the Examination Centre will be notified separately seven days prior to the commencement of the written examination at the respective Examination Centre. The candidates concerned will also be able to get the necessary information about his/her Examination Centre from the concerned College of the candidate.

Nagpur

Date: 8Th January 2018

Sd/-
Director
Board Of Examination & Evaluation
Rashtrasant Tukadoji Maharaj
Nagpur University

M.Sc. Tech. (APPLIED GEOLOGY) 5TH SEMESTER(CBCS) EXAMINATION OF SUMMER, 2018
-: PROGRAMME (WRITTEN) :-
TIME : 2.30 P.M. TO 5.30 P.M.

Sr. No	Subject	Day Date Paper	Tuesday 20-03-2018 I	Thursday 22-03-2018 II	Saturday 24-03-2018 III	Monday 26-03-2018 IV
1	M.Sc. TECH. Applied Geology	Ore Microscopy and Ore Dressing (1+3)		Hydrogeology and Watershed Management (3+1)	Core Elective 1 Optional (Any One) 1. Exploration Geochemistry (4) 2. Quaternary Geology and Limnogeology (3+1)	Foundation Coures 1 Introduction to Geology OR Core (Subject Centric)1 Environmental Geology & Geohazards

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