

Guidance for Competitive exam

The current era is full of competition and the students should appear in number of competitive examinations. All the students should be encouraged and guided to prepare for such challenging examinations. Various departments are conducting their regular classes and various activities while keeping a track with the need of the day. The institute sometimes conduct special lectures and different competitive classes for the development of the students. Number of students derives benefit of the activities conducted by this. They acquire knowledge about how to plan and prepare tactfully for the examinations. Through interactions they recognize their true potentials and abilities to attain success. Regular classes are held for Engineering students (GATE), Pharmacy graduates (GPAT), basic science students (NET) and other courses scholars for preparation of examination like NISM, ICAR, Judiciary classes etc.

The Graduate Aptitude Test in Engineering (GATE) is an examination which primarily assesses the comprehensive understanding of various undergraduate subjects in engineering and science, for admission into the Masters Program and recruitment by some Public Sector Companies.

The National Eligibility Test (NET), also known as UGC NET or NTA-UGC-NET, is the examination for determining the eligibility for the post of assistant professor and/or Junior Research Fellowship award in Indian universities and colleges. The Teacher Eligibility Test, known as TET, is the minimum qualification required in India for a person to be eligible for an appointment as a teacher for Classes I to VIII. The test is mandatory for teaching jobs in Indian government schools.Candidates should have obtained a Diploma in Education or Bachelor of Education (B. Ed) or completed any other prescribed teacher training programme/course.

Lower Judiciary Services – The eligibility criteria for appearing in Judicial Services Examination is a degree in LL. B and he/she can be enrolled or qualified to be enrolled as an Advocate under the Advocates' Act 1961. No experience is required and final year candidates can also appear.

NISM :Anyone who is 18 years and above can participate in the NISM exam and become a mutual fund distributor/ advisor. There is no educational qualification listed as per the Association of Mutual fund (AMFI) website. (BBA and B Com).



Students benefited by guidance for competitive examinations offered by the

Institution during the 2016-17

Deptt	Year	Name of the Activity conducted by the HEI to offer guidance for competitive examinations offered by the institution during the last five years	Participants	Number/ <mark>Hyperlink</mark>
B.TECH (CEA)	2016-17	Gate Preparation	5	4
B.TECH (CE)	2016-17	Preparation classes for GATE 48		9
B.TECH (ECE)	2016-17	GATE Preparation Program 13		14
B.TECH (EE)	2016-17	GATE classes 27		18
B.TECH (ME)	2016-17	GATE classes	62	25
Biotechnology	2016-17	Competitive exam Prepration	2	33
Education	2016-17	Special classes for the preparation of TET/CTET 8		37
IBM UG	2016-17	Classes of Developing Competitive Edge	eloping Edge 11	
IPR	2016-17	Graduate Pharmacy Aptitude Test (GPAT Classes)	6	43



Department of Computer Engineering & Applications

About GATE 2016

The Graduate Aptitude Test in Engineering (GATE) is an examination conducted in India that primarily tests the comprehensive understanding of various undergraduate subjects in engineering and science for admission into the Masters Program and Job in Public Sector Companies. GATE is conducted jointly by the Indian Institute of Science and seven Indian Institutes of Technologies at Roorkee, Delhi, Guwahati, Kanpur, Kharagpur, Chennai (Madras) and Mumbai (Bombay) on behalf of the National Coordination Board – GATE, Department of Higher Education, Ministry of Education (MoE), Government of India.

The GATE score of a candidate reflects the relative performance level of a candidate. The score is used for admissions to various post-graduate education programs (e.g. Master of Engineering, Master of Technology, Master of Architecture, Doctor of Philosophy) in Indian higher education institutes, with financial assistance provided by MHRD and other government agencies. Recently, GATE scores are also being used by several Indian public sector undertakings for recruiting graduate engineers in entry-level positions. It is one of the most competitive examinations in India.



Department of Computer Engineering & Applications

Notice

Date:01/09/2016

All students of B. Tech. III year and IV year are informed that GATE classes are being arranged from 28 September 2016 onwards. All the interested students can give their names in the department for the same till 15th September, 2016.

Programme Name	B. Tech (CSE)				
Semester/Section	VII/V/All				
Session	2016-17				
Name of Faculty	Mr. Kailash Kumar (Assistant Prof. CEA) Mr. Jitesh Bhatia (Assiatnt Prof. CEA)				
Subject	GATE 2017 for CSE				
Date	28 September 2016 (Onwards)				
Day/Timing	Monday - Friday (4-6 P. M.)				
Venue	Room No. 211, AB-I				

(Prof. Anand Singh Jalal) rtment Head of Department, CEA Institute GLA University, Mathura



Department of Computer Engineering & Applications

Syllabus

CS Computer Science and Information Technology

General Aptitude(GA): Common Syllabus for all papers

The GATE CS Syllabus consists of GA section which will follow the same pattern of questions and marking scheme for all the papers of GATE 2017. This section is considered to be easy and will test your English skills and general numeric ability.

Verbal Ability: English grammar, sentence completion, verbal analogies, word groups, instructions, critical reasoning and verbal deduction.

Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.

Section1: Engineering Mathematics

Discrete Mathematics: Propositional and first order logic. Sets, relations, functions, partial orders and lattices.Groups. Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions.

Linear Algebra: Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition.

Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.

Probability: Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.

Computer Science and Information Technology

Section 2: Digital Logic

Boolean algebra. Combinational and sequential circuits.Minimization.Number representations and computer arithmetic (fixed and floating point).

Section 3: Computer Organization and Architecture



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Machine instructions and addressing modes. ALU, data path and control unit.Instruction pipelining. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).

Section 4: Programming and Data Structures

Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.

Section 5: Algorithms

Searching, sorting, hashing. Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, dynamic programming and divide and conquer. Graph search, minimum spanning trees, shortest paths.

Section 6: Theory of Computation

Regular expressions and finite automata. Context-free grammars and push-down automata.Regular and contex-free languages, pumping lemma.Turing machines and undecidability.

Section 7: Compiler Design

Lexical analysis, parsing, syntax-directed translation. Runtime environments.Intermediate code generation.

Section 8: Operating System

Processes, threads, inter process communication, concurrency and synchronization. Deadlock.CPU scheduling.Memory management and virtual memory. File systems. Section 9: Databases

ER model. Relational model: relational algebra, tuple calculus, SQL. Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.

Section 10: Computer Networks



Department of Computer Engineering & Applications

Concept of layering. LAN technologies (Ethernet). Flow and error control techniques, switching. IPv4/IPv6, routers and routing algorithms (distance vector, link state). TCP/UDP and sockets, congestion control. Application layer protocols (DNS, SMTP, POP, FTP, HTTP). Basics of Wi-Fi. Network security: authentication, basics of public key and private key cryptography, digital signatures and certificates, firewalls.



Department of Civil Engineering GLA University, Mathura

Date: 01st Sep, 2016

Notice

This is to notify that student of Civil Engineering IV year can attend the preparatory sessions for GATE. Interested students can register their name and attend the sessions to prepare efficiently. Interested candidates should contact Mr. Anuj Goyal before 07th September, 2016, Schedule of the classes will be shared on/before 10th Sep, 2016.

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Head Department of Civil Engineering

Vinter



Department of Civil Engineering

SCHEDULE

1	· · ·	Schedule for GATE Classes 20)16-2017
S/N	Date	10:00-12:00	2:00-4:00
1.	10/09/2016	Engineering Mechanics	Engineering Mechanics
2	18/09/2016	Soil Mechanics	Soil Mechanics
3	26/09/2016	Structural Analysis	Structural Analysis
4	4/10/2016	Construction Material	Construction Material
5	12/10/2016	Concrete Structures	Concrete Structures
6	20/10/2016	Steel Structures	Steel Structures
7	28/10/2016	Transportation Engineering	Transportation Engineering
8.	06/11/2016	Engineering Survey	Engineering Survey
9	14/11/2016	Fluid Mechanics	Fluid Mechanics
10	22/11/2016	Hydrology	Hydrology
11	30/11/2016	Irrigation	Irrigation
12	. 8/12/2016	Water and waste water	Water and waste water
3	16/12/2016	Soil Mechanics	Soil Mechanics
4.	24/12/2016	Highway Engineering	Highway Engineering

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Signature of HOD

Signature of coordinator

Section 1: Engineering Mathematics

Linear Algebra: Matrix algebra; Systems of linear equations; Eigen values and Eigen vectors.

Calculus: Functions of single variable; Limit, continuity and differentiability; Mean value theorems, local maxima and minima, Taylor and Maclaurin series; Evaluation of definite and indefinite integrals, application of definite integral to obtain area and volume; Partial derivatives; Total derivative; Gradient, Divergence and Curl, Vector identities, Directional derivatives, Line, Surface and Volume integrals, Stokes, Gauss and Green's theorems.

Ordinary Differential Equation (ODE): First order (linear and non-linear) equations; higher order linear equations with constant coefficients; Euler-Cauchy equations; Laplace transform and its application in solving linear ODEs; initial and boundary value problems.

Partial Differential Equation (PDE): Fourier series; separation of variables; solutions of onedimensional diffusion equation; first and second order one-dimensional wave equation and two-dimensional Laplace equation.

Probability and Statistics: Definitions of probability and sampling theorems; Conditional probability; Discrete Random variables: Poisson and Binomial distributions; Continuous random variables: normal and exponential distributions; Descriptive statistics - Mean, median, mode and standard deviation; Hypothesis testing.

Numerical Methods: Accuracy and precision; error analysis. Numerical solutions of linear and non-linear algebraic equations; Least square approximation, Newton's and Lagrange polynomials, numerical differentiation, Integration by trapezoidal and Simpson's rule, single and multi-step methods for first order differential equations.

Section 2: Structural Engineering

Engineering Mechanics: System of forces, free-body diagrams, equilibrium equations; Internal forces in structures; Friction and its applications; Kinematics of point mass and rigid body; Centre of mass; Euler's equations of motion; Impulse-momentum; Energy methods; Principles of virtual work.

Solid Mechanics: Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; Theories of failures; Simple bending theory, flexural and shear stresses, shear centre; Uniform torsion, buckling of column, combined and direct bending stresses.

Structural Analysis: Statically determinate and indeterminate structures by force/ energy methods; Method of superposition; Analysis of trusses, arches, beams, cables and frames; Displacement methods: Slope deflection and moment distribution methods; Influence lines; Stiffness and flexibility methods of structural analysis.

Construction Materials and Management: Construction Materials: Structural steel - composition, material properties and behaviour; Concrete - constituents, mix design, short-term and long-term properties; Bricks and mortar; Timber; Bitumen. Construction Management: Types of construction projects; Tendering and construction contracts; Rate analysis and standard specifications; Cost estimation; Project planning and network analysis - PERT and CPM.

Concrete Structures: Working stress, Limit state and Ultimate load design concepts; Design of beams, slabs, columns; Bond and development length; Prestressed concrete; Analysis of beam sections at transfer and service loads.

Steel Structures: Working stress and Limit state design concepts; Design of tension and compression members, beams and beam- columns, column bases; Connections - simple and eccentric, beam-column connections, plate girders and trusses; Plastic analysis of beams and frames.

Section 3: Geotechnical Engineering

Soil Mechanics: Origin of soils, soil structure and fabric; Three-phase system and phase relationships, index properties; Unified and Indian standard soil classification system; Permeability - one dimensional flow, Darcy's law; Seepage through soils - two-dimensional flow, flow nets, uplift pressure, piping; Principle of effective stress, capillarity, seepage force and quicksand condition; Compaction in laboratory and field conditions; One-dimensional consolidation, time rate of consolidation; Mohr's circle, stress paths, effective and total shear strength parameters, characteristics of clays and sand.

Foundation Engineering: Sub-surface investigations - scope, drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests; Earth pressure theories - Rankine and Coulomb; Stability of slopes - finite and infinite slopes, method of slices and Bishop's method; Stress distribution in soils - Boussinesq's and Westergaard's theories, pressure bulbs; Shallow foundations - Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table; Combined footing and raft foundation; Contact pressure; Settlement analysis in sands and clays; Deep foundations - types of piles, dynamic and static formulae, load capacity of piles in sands and clays, pile load test, negative skin friction.

Section 4: Water Resources Engineering

Fluid Mechanics: Properties of fluids, fluid statics; Continuity, momentum, energy and corresponding equations; Potential flow, applications of momentum and energy equations; Laminar and turbulent flow; Flow in pipes, pipe networks; Concept of boundary layer and its growth.

Hydraulics: Forces on immersed bodies; Flow measurement in channels and pipes; Dimensional analysis and hydraulic similitude; Kinematics of flow, velocity triangles; Basics of hydraulic machines, specific speed of pumps and turbines; Channel Hydraulics - Energy-depth relationships, specific energy, critical flow, slope profile, hydraulic jump, uniform flow and gradually varied flow

Hydrology: Hydrologic cycle, precipitation, evaporation, evapo-transpiration, watershed, infiltration, unit hydrographs, hydrograph analysis, flood estimation and routing, reservoir capacity, reservoir and channel routing, surface run-off models, ground water hydrology - steady state well hydraulics and aquifers; Application of Darcy's law.

Irrigation: Duty, delta, estimation of evapo-transpiration; Crop water requirements; Design of lined and unlined canals, head works, gravity dams and spillways; Design of weirs on permeable foundation; Types of irrigation systems, irrigation methods; Water logging and drainage; Canal regulatory works, cross-drainage structures, outlets and escapes.

Section 5: Environmental Engineering

Water and Waste Water: Quality standards, basic unit processes and operations for water treatment. Drinking water standards, water requirements, basic unit operations and unit processes for surface water treatment, distribution of water. Sewage and sewerage treatment, quantity and characteristics of wastewater. Primary, secondary and tertiary treatment of wastewater, effluent discharge standards. Domestic wastewater treatment, quantity of characteristics of domestic wastewater, primary and secondary treatment. Unit operations and unit processes of domestic wastewater, sludge disposal.

Air Pollution: Types of pollutants, their sources and impacts, air pollution meteorology, air pollution control, air quality standards and limits.

Municipal Solid Wastes: Characteristics, generation, collection and transportation of solid wastes, engineered systems for solid waste management (reuse/ recycle, energy recovery, treatment and disposal).

Noise Pollution: Impacts of noise, permissible limits of noise pollution, measurement of noise and control of noise pollution.

Section 6: Transportation Engineering

Transportation Infrastructure: Highway alignment and engineering surveys; Geometric design of highways - cross-sectional elements, sight distances, horizontal and vertical alignments; Geometric design of railway track; Airport runway length, taxiway and exit taxiway design.

Highway Pavements: Highway materials - desirable properties and quality control tests; Design of bituminous paving mixes; Design factors for flexible and rigid pavements; Design of flexible pavement using IRC: 37-2012; Design of rigid pavements using IRC: 58-2011; Distresses in concrete pavements.

Traffic Engineering: Traffic studies on flow, speed, travel time - delay and O-D study, PCU, peak hour factor, parking study, accident study and analysis, statistical analysis of traffic data; Microscopic and macroscopic parameters of traffic flow, fundamental relationships; Control devices, signal design by Webster's method; Types of intersections and channelization; Highway capacity and level of service of rural highways and urban roads.

Section 7: Geomatics Engineering

Principles of surveying; Errors and their adjustment; Maps - scale, coordinate system; Distance and angle measurement - Levelling and trigonometric levelling; Traversing and triangulation survey; Total station; Horizontal and vertical curves.

Photogrammetry - scale, flying height; Remote sensing - basics, platform and sensors, visual image interpretation; Basics of Geographical information system (GIS) and Geographical Positioning system (GPS).



Ref No- GATE/ECE/2016-17/06

Date-19-09-2016

NOTICE

This is bring to your kind notice that, Department of ECE is going to conduct weekend GATE Preparation class for B.Tech EC (3rd and 4th year) students. This class will be conducted on every Saturday in starting from 7th October, 2016. Interested students are directed to contact Mr. Dheeraj Kumar (Asst. Prof ECE Department) for more details.

I request you to attend this course.

Mr Anjan Kumar Competitive Examination Preparation Co-Ordinator Department of ECE GLA University, Mathura

Copy to:

- 1. PA to HOD ECE
- 2. Notice Boards of hostels and Department
- 3. Dean Academic

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Period	1	,	3	4	5	6	7	8
	10:0 0- 11:0	-	12:00-	01:0 0- 02:0 0	02:0 0- 3:00	3:00 - 4:00	4:00- 5:00	5:00- 6:00
DAY/TIME	0	11:00-12:00	01.00				Dig	gital
1 st Saturday		Math					Elect	ronics
2 nd Saturday							An Elect	alog ronics
•	Net	WORK Analysis					Di	gital
3rd Saturday		Math					Elect	ronics
4 th Saturday	Communication		Control System					

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Syllabus to be covered in preparation class

Section 1: Engineering Mathematics

Linear Algebra: Vector space, basis, linear dependence and independence, matrix algebra, eigenvalues and Eigen vectors, rank, solution of linear equations – existence and uniqueness.

Differential Equations: First order equations (linear and nonlinear), higher order linear differential equations, Cauchy's and Euler's equations, methods of solution using variation of parameters,

Probability and Statistics binomial, Poisson, exponential and normal; Joint and conditional probability; Correlation and regression analysis.

Section 2: Networks, Signals and Systems

Network solution methods: Nodal and mesh analysis; Network theorems: superposition, Thevenin and Norton's, maximum power transfer; Wye-Delta transformation; Steady state sinusoidal analysis using phasors; Time domain analysis of simple linear circuits; Solution of network equations using Laplace transform;

Section 3: Electronic Devices

P-N junction, Zener diode, BJT, MOS capacitor, MOSFET, LED, photo diode and solar cell; Integrated circuit fabrication process: oxidation, diffusion, ion implantation, photolithography and twin-tub CMOS process.

Section 4: Analog Circuits

Small signal equivalent circuits of diodes, BJTs and MOSFETs; Simple diode circuits: clipping, clamping and rectifiers; Single-stage BJT and MOSFET amplifiers: biasing, bias stability, mid frequency small signal analysis and frequency response; BJT and MOSFET amplifiers: multi-stage, differential, feedback, power and operational; Simple op-amp circuits

Section 5: Digital Circuits

arithmetic circuits, code converters, multiplexers, decoders and PLAs; Sequential circuits: latches and flipflops, counters, shift-registers and finite state machines; Data converters: sample and hold circuits, ADCs and DACs; Semiconductor memories: ROM, SRAM, DRAM; 8-bit microprocessor (8085): architecture, programming, memory and I/O interfacing.

Section 6: Control Systems

Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Frequency response; RouthHurwitz and Nyquist stability criteria; Bode and root-locus plots; Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems.

Section 7: Communications

Random processes: autocorrelation and power spectral density, properties of white noise, filtering of random signals through LTI systems; Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, super heterodyne receivers, circuits for analog communications; Information theory: entropy, mutual information and channel capacity theorem.



Activity Report

Department of Electronics &Communication Engineering

Name of Activity	:	GATE Preparation Program
Date and Duration	:	07-10-2016 to 24-12-2016. (2.5 months)
Resource Person	:	In house Subject expert from ECE Department
No. of Participants	:	13 Students

Event Overview

In order to help students prepare for the GATE exam, the Electronics and Communication Engineering department held a 2.5 months weekend special programme. Mr Anjan Kumar, from the Department of Electronics and Communication Engineering, provided a motivational address to kick off the class. During his discussion, he discussed the significance of the GATE test, a technique for preparation, significant areas on which more questions are asked, and the books that are necessary for the exam preparation. he Shared the details about the syllabus for GATE and explained how to go with every subject. Key ideas in digital electronics, network analysis, analog and digital communication, analog electronics, mathematics and control systems were covered by a number of professors from the department. The lecture was attended by thirteen students from the ECE department, as well as a few younger faculty members.



Mr Aasheesh Shukla and Mr Anjan Kumar taking lecture session

Electronics & Communication Engg GLA University, Mathura

Department of Electrical Engineering





Department of Electrical Engineering



	Schedule for GATE Classes 2016-17									
Sr. No.	Week Date 8:00 AM-9:		8:00 AM-9:00 AM	2:00 AM-3:00 AM						
1		4-Jun-2016	Electric Circuit	Power System						
2		5-Jun-2016	Electric Circuit	Power System						
3	Week - 1	6-Jun-2016	Electric Circuit	Power System						
4		7-Jun-2016	Electric Circuit	Power System						
5		8-Jun-2016	Electric Circuit	Power System						
6		11-Jun-2016	Engg. Mathematics	Power Electronics						
7		12-Jun-2016	Engg. Mathematics	Power Electronics						
8	Week - 2	13-Jun-2016	Engg. Mathematics	Power Electronics						
9		14-Jun-2016	Engg. Mathematics	Power Electronics						
10		15-Jun-2016	Engg. Mathematics	Power Electronics						
11		18-Jun-2016	Electric Machines	Control System						
12		19-Jun-2016	Electric Machines	Control System						
13	Week - 3	20-Jun-2016	Electric Machines	Control System						
14		21-Jun-2016	Electric Machines	Control System						
15		22-Jun-2016	Electric Machines	Control System						
16		25-Jun-2016	Signals & Systems	Electric Machines						
17		26-Jun-2016	Signals & Systems	Electric Machines						
18	Week - 4	27-Jun-2016	Signals & Systems	Electric Machines						
19		28-Jun-2016	Signals & Systems	Electric Machines						
20		29-Jun-2016	Signals & Systems	Electric Machines						

Electrical Engineering



21		2-Jul-2016	Power System	EMFT	
22		3-Jul-2016	Power System	EMFT	
23	Week - 5	4-Jul-2016	Power System	EMFT	
24		5-Jul-2016	Power System	EMFT	
25		6-Jul-2016	Power System	EMFT	
26		9-Jul-2016	EMFT	Electrical & Electronics Measuring Instruments	
27	Week - 6	10-Jul-2016	EMFT	Electrical & Electronics Measuring Instruments	
28		Week - 6 11-Jul-2016 EMF		EMFT	Electrical & Electronics Measuring Instruments
29		12-Jul-2016 EMFT		Electrical & Electronics Measuring Instruments	
30		13-Jul-2016	EMFT	Electrical & Electronics Measuring Instruments	
33		16-Jul-2016	Electrical & Electronics Measuring Instruments	Digital Electronics	
34		17-Jul-2016	Electrical & Electronics Measuring Instruments	Digital Electronics	
35	Week - 7	18-Jul-2016	Electrical & Electronics Measuring Instruments	Digital Electronics	
36		19-Jul-2016	Signals & Systems	Digital Electronics	
37		20-Jul-2016	Signals & Systems	Digital Electronics	
38		23-Jul-2016	Engg. Mathematics	Digital Electronics	
39		24-Jul-2016	Engg. Mathematics	Digital Electronics	
40	Week - 8	25-Jul-2016	Engg. Mathematics	Digital Electronics	
41		26-Jul-2016	Engg. Mathematics	Signals & Systems	
42		27-Jul-2016	Engg. Mathematics	Signals & Systems	

Electrical Engineering



FACULTY ALLOTTED

Subject	Faculty
Electric Circuit	Mr Mayank Goyal, Mr. Shakti Singh Soni
Power System	Mr. Ravishankar Tiwari, Dr. Abhilash Gupta
Engineering Mathematics	Dr. Amit Kr. Saraswat
Power Electronics	Mr Vinay Kumar Dwivedi, Mr. O. P. Jaga
Electrical Machines	Mr Gaurav Gupta, Mr. Ram Naresh Mishra
Control system	Mr Indresh Yadav, Mr. Ashish Kumar Shakya
Signal & System	Mr. Mayank Goyal, Mr. ApoorvaSaxena
EMFT	Mr. O.P Jaga, Mrs. Anjali Gupta
Electrical and Electronics Measuring instruments	Mr. Prashant Prakash, Ms. Sautami Basu
Digital Electronics	Mr. Subhash Chandra, Mr. Vikas Kumar

Electrical Engineering



GATE SYLLABUS

EE: Electrical Engineering

SECtion 1: Engineering Mathematics

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigenvalues, EigenvECtors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improperintegrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series, VECtor identities, DirECtional derivatives, Line integral, Surface integral, Volume integral, Stokes's theorem, Gauss's theorem, GrECn's theorem.

Differential equations: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.

Complex variables:Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylorseries, Laurent series, Residue theorem, Solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete and Continuous distributions, Poisson distribution, Normal distribution, Binomial distribution, Correlation analysis, Regression analysis.

NumericalMethods: Solutions of nonlinear algebraic equations, Single and Multistep methods fordifferential equations.

Transform Theory: Fourier Transform, Laplace Transform, z-Transform.

SECtion 2: Electric Circuits

Network graph, KCL, KVL, Node and Mesh analysis, Transient response of dc and ac networks, Sinusoidal steady state analysis, Resonance, Passive filters, Ideal current and voltage sources, Thevenin's theorem, Norton's theorem, Superposition

Electrical Engineering



theorem,Maximumpower transfer theorem,Twoportnetworks,ThrECphase circuits, Power and power factor in ac circuits.

SECtion 3: Electromagnetic Fields

Coulomb's Law, ElECtricFieldIntensity,ElECtricFluxDensity,Gauss's Law, Divergence, ElECtricfield and potential due to point, line, plane and spherical chargedistributions, Effect of dielectric medium, Capacitance of simple configurations, Biot Savart's law, Ampere's law, Curl, Faraday's law, Lorentz force,Inductance,Magnetomotiveforce,Reluctance,Magneticcircuits,Self andMutualinductanceof simple configurations.

SECtion 4: Signals and Systems

Representation of continuous and discrete-time signals, Shifting and scaling operations, Linear Time Invariant andCausalsystems,Fourierseries representation of continuous periodic signals,Sampling theorem,Applications of Fourier Transform, Laplace Transform and z-Transform.

SECtion 5: Electrical Machines

Single phase transformer: equivalent circuit, phasor diagram, open circuit and circuittests, regulation and efficiency;**Three** phase transformers: short connECtions, parallel operation; Auto transformer, Electrommechanical energy conversion principles, DC machines: Separately excited, series and shunt, motoring generating mode of operation and their characteristics, starting and speed and phaseinductionmotors: controlofdcmotors;**Three** Principleofoperation, types, performance, torque-speed characteristics, no load and blocked rot or tests, equivalent circuit, starting and speed control; Operating principle of single phase induction motors;**Synchronous** machines: Cylindrical and salient pole machines, performance, regulationandparalleloperationofgenerators, starting of synchronous motor, characteristics; Types of losses and efficiency calculations of elECtric machines.

SECtion 6: Power Systems

Power generation concepts, ac and dctransmissionconcepts, Modelsand performance of transmission lines and cables, Series and shunt compensation, Electric field distribution insulators, Distribution systems, Per unit quantities,

Electrical Engineering



Busadmittancematrix, Gauss-Seideland Newton-Raphsonloadflow methods, VoltageandFrequencycontrol, PowerfactorcorrECtion, Symmetricalcomponents, Symmetrical and unsymmetrical fault analysis, Principlesofover current, differential and distance protECtion; Circuit breakers, System stability concepts, Equal area criterion.

SECtion 7 : Control Systems

Mathematical modeling and representation of systems, FECdback principle, transfer function,Block diagrams and Signal flow graphs, Transient and Steady state analysis of linear time invariant systems, Routh-Hurwitz and Nyquist criteria, Bode plots, Root loci, Stability analysis, Lag, Lead and Lead-Lag compensators; P, PI and PID controllers; State space model, State transition matrix.

SECtion 8 : Electrical and Electronic Measurements

Bridges and Potentiometers, Measurement of voltage, current, power, energy and power factor; Instrument transformers, Digital voltmeters and multimeters, Phase, Time and Frequency measurement; Oscilloscopes, Error analysis.

SECtion 9 : Analog and Digital Electronics

Characteristics of diodes, BJT, MOSFET; Simple diode circuits: clipping, Equivalent circuit and Frequency clamping, rectifiers; Amplifiers: Biasing, amplifiers: Oscillators and FECdback amplifiers; Operational response; Characteristics and applications;Simple active filters. VCOsandTimers, CombinationalandSequentiallogiccircuits,Multiplexer,Demultiplexer,Schmitttrigge r, Sampleand hold circuits, A/Dand D/A converters. 8085 Microprocessor: Architecture, Programming and Interfacing.

SECtion 10 : Power Electronics

Characteristics of semiconductor power devices: Diode, Thyristor, Triac, GTO, MOSFET, IGBT; **DC to DC conversion:** Buck, BoostandBuck-Boostconverters; Single and thrEC phase configuration of uncontrolled rECtifiers, Line commutated thyristor based converters, BidirECtionalac todcvoltage sourcEConverters, Issuesof linECurrentharmonics, Powerfactor, Distortion factor of actod converters, Single phase and thrEC phase inverters, Sinusoidal pulse width modulation



Department of Mechanical Engineering

Date:24.10.2016

GLAU/ME/GATE/17/01

NOTICE

All the students of B.Tech. ME IV Year who have registered in GATE-2017 are hereby informed that their classes for GATE preparation will be held from 01.11.2016 to 06.01.2017 between 11:00 am - 1:00 pm in Room No. 210.

(Prof. Piyush Singhal Head, Dept. of Mech. Engg.

CC to: All Faculty Members

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DEPARTMENT OF MECHANICAL ENGINEERING

	Time table of GATE Classes (GATE 2017)											
Room no. 303 (1/11/2016-4/11/2016)												
Batch-21,22	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4				
ME	Monday			Manufacturing science	Operation research							
ME	Tuesday			Manufacturing science	Operation research		100					
ME	Wednesday			Manufacturing science	Operation research							
ME	Thursday			Manufacturing science	Operation research							

14			Room no.	303 (7/11/2016-	11/11/2016)			
Batch-21,22	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			IC Engine	Fluid Mechanics			
ME	Tuesday			Manufacturing science	Fluid Mechanics			
ME	Wednesday			IC Engine				
ME	Thursday			IC Engine	Fluid Mechanics		7	
ME	Friday			Fluid Mechanics				

Batch-20	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			SOM	DOM			
ME	Tuesday		·	SOM	DOM			
ME	Wednesday			SOM	DOM			
ME	Thursday		1 A	SOM	DOM			

		f	Room no.	302 (21/11/2021	-27/11/2016	5)		The second
Batch-20	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			Fluid Machinery	RAC			
ME	Tuesday			Fluid Machinery	RAC			
ME	Wednesday			Fluid Machinery	RAC			
ME	Thursday			Fluid Machinery	RAC			
ME	Friday			Fluid Machinery	RAC			

			Room no.	303 (28/11/2016	5-4/12/2016)			
Batch-21,22	8 to 9	9 to 10	10 to 11	· 11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			MATHS	КОМ			
ME	Tuesday			MATHS	КОМ			
ME	Wednesday			MATHS	КОМ			and the second
ME	Thursday			MATHS	КОМ			
			Room no.	303 (7/11/2016-	11/11/2016)			
Batch-21,22	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			IC Engine	Fluid Mechanics			
ME	Tuesday			Manufacturing science	Fluid Mechanics			1000
ME	Wednesday			IC Engine				
ME	Thursday			IC Engine	Fluid Mechanics			
ME	Friday			. Fluid Mechanics				i

A sector			Room n	o. 302 (12/12/16	-18/12/16)	Strate 1		
Batch-20	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			Applied thermo	Industrial Engineering			
ME	Tuesday			Applied thermo	Industrial Engineering			
ME	Wednesday			Applied thermo	Industrial Engineering			
ME	Thursday			Applied thermo	Industrial Engineering			
		F	Room no.	302 (20/12/2016	-27/12/2016)			
Batch-20	8 to 9	9 to 10	10 tó 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4
ME	Monday			Applied thermo	Industrial Engineering			i.
ME	Tuesday			Applied thermo	Industrial Engineering			
ME	Wednesday			Applied thermo	Industrial Engineering			
ME	Thursday			Applied thermo	Industrial Engineering			
ME	Friday		Applied thermo		Industrial Engineering			

ME Mechanical Engineering

Section 1: Engineering Mathematics

Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues and eigenvectors.

Calculus: Functions of single variable, limit, continuity and differentiability, mean value theorems, indeterminate forms; evaluation of definite and improper integrals; double and triple integrals; partial derivatives, total derivative, Taylor series (in one and two variables), maxima and minima, Fourier series; gradient, divergence and curl, vector identities, directional derivatives, line, surface and volume integrals, applications of Gauss, Stokes and Green's theorems.

Differential equations: First order equations (linear and nonlinear); higher order linear differential equations with constant coefficients; Euler-Cauchy equation; initial and boundary value problems; Laplace transforms; solutions of heat, wave and Laplace's equations.

Complex variables: Analytic functions; Cauchy-Riemann equations; Cauchy's integral theorem and integral formula; Taylor and Laurent series.

Probability and Statistics: Definitions of probability, sampling theorems, conditional probability; mean, median, mode and standard deviation; random variables, binomial, Poisson and normal distributions.

Numerical Methods: Numerical solutions of linear and non-linear algebraic equations; integration by trapezoidal and Simpson's rules; single and multi-step methods for differential equations.

Section 2: Applied Mechanics and Design

Engineering Mechanics: Free-body diagrams and equilibrium; trusses and frames; virtual work; kinematics and dynamics of particles and of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations, collisions.

Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of hardness and impact strength.

Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope.

Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts.

Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs.

Section 3: Fluid Mechanics and Thermal Sciences

Fluid Mechanics: Fluid properties; fluid statics, manometry, buoyancy, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary tayer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings.

Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan-Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

Thermodynamics: Thermodynamic systems and processes; properties of pure substances, behaviour of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.

Applications: Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Air-standard Otto, Diesel and dual cycles. Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis and Kaplan turbines.

Section 4: Materials, Manufacturing and Industrial Engineering

Engineering Materials: Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.

Casting, Forming and Joining Processes: Different types of castings, design of patterns, moulds and cores; solidification and cooling; riser and gating design. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing, bending) metal forming processes; principles of powder metallurgy. Principles of welding, brazing, soldering and adhesive bonding.

Machining and Machine Tool Operations: Mechanics of machining; basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes; principles of work holding, design of jigs and fixtures.

Metrology and Inspection: Limits, fits and tolerances; linear and angular measurements; comparators; gauge design; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly.

Computer Integrated Manufacturing: Basic concepts of CAD/CAM and their integration tools.

Production Planning and Control: Forecasting models, aggregate production planning, scheduling, materials requirement planning.

Inventory Control: Deterministic models; safety stock inventory control systems.

Operations Research: Linear programming, simplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM.

		List	of students						
	GATE prepration classes (GATE 2017)								
	GLA University, Mathura								
S.No.	S.No. Course Roll No Name								
1	1 B.Tech. 131300012 AJAY KUMAR SINGH JAD.								
2	B.Tech.	131200030	AJAY KUMAR YADAV						
3	B.Tech.	131200049	AMIT KUMAR						
4	B.Tech.	131200050	AMIT KUMAR GUPTA						
5	B.Tech.	131200051	AMIT KUMAR PASWAN						
6	B.Tech.	131200070	ANMOL CHATURVEDI						
7	B.Tech.	131200071	ANMOL SINGH						
8	B.Tech.	131200072	ANSHUMAN CHITRANSH						
9	B.Tech.	131200073	ANSHUMAN MISHRA						
10	B.Tech.	131200074	ANUJ GUPTA						
11	B.Tech.	131200081	ARPIT YADAV						
12	B.Tech.	131200082	ASHHAR KHAN						
13	B.Tech.	131200083	ASHISH BANSAL						
14	B.Tech.	131200084	ASHISH KULSHRESTHA						
15	B.Tech.	131200085	ASHISH SARSWAT						
16	B.Tech.	131200086	ASHISH TIWARI						
17	B.Tech.	131200087	ASHUTOSH KUMAR SINGH						
18	B.Tech.	Fech. 131200103 BHUVNESH KUMAR LODHI							
19	B.Tech.	n. 131200104 BIBEK KUMAR RONIYAR							
20	B.Tech.	131200105	BIDYABHUSHAN SINGH						
21	B.Tech.	131200106	CHETAN SHARMA						
22	B.Tech.	131200107	CHITRANSH						
23	B.Tech.	131200108	DAYA RAM						
24	B.Tech.	131500115	GAURAV AGRAWAL						
25	B.Tech.	131200132	GAURAV KUMAR						
26	B.Tech.	131200133	GAURAV SARASWAT						
27	B.Tech.	131200134	GAURAV SHUKLA						
28	B.Tech.	131200135	GAUTAM KUMAR						
29	B.Tech.	131200136	GAUTAM SHRIVASTAVA						
30	B.Tech.	131200137	GOVIND SINGH						
31	B.Tech.	131200175	KRISHNA KUMAR MISHRA						
32	B.Tech.	131200176	KULDEEP SHRIVASTAVA						
33	B.Tech.	131200177	KULDEEP YADAV						
34	B.Tech.	131200178	KULDEEP YADAV						
35	B.Tech.	131200179	KULMEET PRATAP SINGH						
36	B.Tech.	131200207	MUKUL AGRAWAL						
37	B.Tech.	131200208	NAMAN ARORA						
38	B.Tech.	131200209	NAMAN KUMAR						
39	B.Tech.	131200210	NAVAL KISHORE SHARMA						
40	B.Tech.	131200211	NAVEEN KUMAR						

41	B.Tech.	131200213	NEETESH SINGH
42	B.Tech.	131200214	NIKHIL KUMAR SINGH
43	B.Tech.	131200215	NILAY SHARMA
44	B.Tech.	131200216	NISHANT YADAV
45	B.Tech.	131200217	OJASVA SRIVASTAVA
46	B.Tech.	131200218	PANKAJ KUMAR
47	B.Tech.	131200220	PANKAJ SINGH YADAV
48	B.Tech.	131200305	SHASHANK KUMAR OJHA
49	B.Tech.	141299005	SHASHANK PAHARIYA
50	B.Tech.	131200301	SHASHANK SHEKHAR NAGAICH
51	B.Tech.	131200307	SHASHANK SINGH
52	B.Tech.	131200325	SHUBHAM GARG
53	B.Tech.	131200326	SHUBHAM GOYAL
54	B.Tech.	131200327	SHUBHAM KAUSHAL
55	B.Tech.	131200329	SHUBHAM SACHDEVA
56	B.Tech.	131200330	SHUBHAM SAXENA
57	B.Tech.	131200333	SHUBHAM ТНАРАК
58	B.Tech.	131200371	VIKAS KUMAR SHARMA
59	B.Tech.	131200372	VIKAS SINGH
60	B.Tech.	131200370	VIKASH KUMAR MANDAL
61	B.Tech.	131000258	VIRENDRA SINGH
62	B.Tech.	131200373	VISHAL AGRAWAL

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Notice

Department of Biotechnology

GLA University, Mathura

Date: 10 June 2016

This is to notify that students of B.Sc. and M.Sc. Biotechnology and Microbiology Final year attend the preparatory classes for competitive exam will be held in the department from 19 June 2016. The sessions will be taken by the faculty of the department of biotechnology.

<u>Time Table for</u>

Event Title- Competitive Exam Effective from 19 June 2016

	10:00 to 11:00 AM	11:00 to 12:00 PM	12:00 to 1.00 PM	1:00 to 2:00 PM	2:00 to 3:00 PM	3:00 to 4:00 PM	4:00 to 5:00 PM
Mon	Immunology (AKB)	Plant Biotechnology (PKC)	Food & Ind. Biotech. (GP)		Batch- B - Immuno Batch-A - RDT	RDT (NW)	
Tue	Food & Ind. Biotech. (GP)	Immunology (AKB)	Biochemistry (VK)		Batch- A - Immunology Lab (GP) Batch-B - RDT Lab (NW)		Plant Biotechnology (PKC)
Wed	Immunology (AKB)	competitive exam class	RDT (NW)	N	Plant Biotechnology (PKC)	competitive exam class	Food & Ind. Biotech. (GP)
Thu	Plant Biotechnology (PKC)	Biochemistry (VK)	Immunology (AKB) C H		Batch-A- Biochem Lab (VK) Batch-B - Plant Biotech Lab (JS)		Biochemistry (VK)
Fri	RDT (NW)	Food & Ind. Biotech. (GP)	RDT (NW)		Batch-B - Bioche Batch-A - Plant Bio	m Lab (VK) otech Lab (JS)	Biochemistry (VK)

Syllabus for Competitive Exam

Name of Activity: Competitive Exam Nature of Activity: NET GATE PREPRATION Duration of Activity: 6 Months

Molecules and their Interaction	Structure of atoms, molecules and chemical bonds, Composition, structure and function of biomolecules, Stablizing interactions, Principles of biophysical chemistry, Bioenergetics, glycolysis, oxidative phosphorylation, coupled reaction, group transfer, biological energy transducers, Principles of catalysis, enzymes and enzyme kinetics, enzyme regulation, mechanism of enzyme catalysis, isozymes, Conformation of proteins, Conformation of nucleic acids, Stability of proteins and nucleic acids, Metabolism of carbohydrates, lipids, amino acids nucleotides and vitamins.
Fundamental Processes	DNA replication, repair and recombination, RNA synthesis and processing, Protein synthesis and processing and Control of gene expression at transcription and translation level
Cell Communication and Cell Signaling	Host parasite interaction, Cell signaling, Cellular communication, Cancer and Innate and adaptive immune system
Developmental Biology	Basic concepts of development, Gametogenesis, fertilization and early development, Morphogenesis and organogenesis in animals, Morphogenesis and organogenesis in plants and Programmed cell death, aging and senescence.
System Physiology- Plant	Photosynthesis, Respiration and photorespiration, Nitrogen metabolism, Plant hormones, Sensory photobiology, Solute transport and photoassimilate translocation, Secondary metabolites and Stress physiology.
System Physiology- Animals	Blood and Circulation, Cardiovascular system, Respiratory system, Nervous System, Sense Organs, Excretory system, Thermoregulation, Stress and Adaptation, Digestive System, and Endocrinology and Reproduction.
Inheritance Biology	Mendelian principles, Concept of Gene, Extensions of Mendelian Principles, Gene mapping methods, Extra chromosomal inheritance, Microbial genetics, Human Genetics, Quantitative Genetics, Mutation, Structural and numerical alterations of chromosomes and Recombination



Lecture Plan

DATE: 08-10-2016 to 05-11-2016

Venue: Room No - 412 (Block-9)

DAY	DATE	TIMING	TOPIC NAME	Resource Person
1	08/10/2016	10:00 AM -12:00 PM	Child Development	Mrs.Jyoti Sharma
	08/10/2016	01:00 PM -03:00 PM	Child Development	Mrs.Jyoti Sharma
2	15/10/2016	10:00 AM -12:00 PM	Learning	Mr. Hem Kumar
	15/10/2016	01:00 PM -03:00 PM	Motivation & Adjustment	Mr. Hem Kumar
3	22/10/2016	10:00 AM -12:00 PM	Personality	Mrs.Preeti Verma
	22/10/2016	01:00 PM -03:00 PM	Intelligence	Mrs.Preeti Verma
4	29/10/2016	10:00 AM -12:00 PM	RTE-09,NCF-05	Dr. Amit Kumar Kaushik
	29/10/2016	01:00 PM -03:00 PM	Measurement & Evaluation	Dr. Amit Kumar Kaushik
5	05/11/2016	10:00 AM -12:00 PM	Action Research & Achievement Test	Dr. Amit Kumar Kaushik
	05/11/2016	01:00 PM -03:00 PM	Individual differences & Special Education	Mrs.Jyoti Sharma

Special classes of reasoning & quants

Institute of Business Management

GLA University, Mathura



Date: 01-Aug-2016

GLAIBM/Office/3082/2016

Notice

All final year students of BBA & BBA (FB) are hereby intimated that university is planning to conduct **Special Classes of Reasoning & Quants** (10am to 12pm) on Saturdays in Ground floor conference hall A-B V.

All the students of above mentioned courses are required to attend the same.

(Prof. SomeshDhamija)

Head, IBM-UG

SPECIAL CLASSES ON REASONING AND QUANTS-V

Semester V

Quantitative Aptitude:Real Function-I:Definition of Functions, Domain, Range, Codomain, Problems on finding Domain and Range of functions, Classification of functions on the basis of Domain and Codomain, Defining inverse of function, Problem on finding Inverse of function, Graphing of algebraic function, Shifting of Curves. <u>Reasoning Ability: Selections:</u> Problems related to selection of people and group of people from large groups on predefined set of conditions. <u>Quantitative Aptitude: Games and tournament;</u>1. Questions based on Seed or Rank (Knockout tournament)2. Questions based on scheduling of tournament or who won/lost against whom3. Questions based on goals for /goals against etc.



(Special classes of reasoning & quants)

Institute of Business Management

GLA University, Mathura



Date: 02-Jan-2017

GLAIBM/Office/3085/2017

Notice

All final year students of BBA & BBA (FB) are hereby intimated that university is planning to conduct **Special Classes of Reasoning & Quants** (10am to 12pm) on Saturdays in Ground floor conference hall A-B V.

All the students of above mentioned courses are required to attend the same.

Somesh Shamija

(Prof. SomeshDhamija)

Head, IBM-UG

SPECIAL CLASSES ON REASONING AND QUANTS-VI

Semester VI

Quantitative Aptitude: Reasoning Ability: CUBES: Cutting of Cubes, Painting of Sides of Cubes, Counting cubes of identical colour faces Quantitative Aptitude: Alphabet and Number Series: Problems related to Sequencing of Alphabets, Finding out Next or Previous number in Series. Inequalities: Defining of Inequalities, Solving multivariable equations and Inequalities. Reasoning Ability: Logical Connectives: Defining different types of logical Connectives and Solving Different types of problem relating with these connectives.



(Special classes of reasoning & quants)



GLA University, Mathura

Institute of Pharmaceutical Research

IPR/Notice-CE/2016/1188a

NOTICE

Date: 31/08/2016

The GPAT Classes for B.Pharm. students would commence from September 3, 2020on every Saturday from 10:30 A.M. onward.

Students, please note and be particular to attend.

Meerah.

Prof. Meenakshi Bajpai

(Head of Department) Institute of Pharmaceutical Research UP) C



<u>GRADUATE PHARMACY APTITUDE TEST (GPAT)</u> <u>SYLLABUS</u>

SUBJECTS

- Physical Chemistry
- Physical Pharmacy
- Organic Chemistry
- Pharmaceutical Chemistry
- Pharmaceutics
- Pharmacology
- Pharmacognosy
- Pharmaceutical Analysis
- Biochemistry
- Biotechnology
- Microbiology
- Pathophysiology
- Biopharmaceutics and Pharmacokinetics
- Clinical Pharmacy and Therapeutics
- Human Anatomy and Physiology
- Pharmaceutical Engineering
- Pharmaceutical Management
- Pharmaceutical Jurisprudence
- Dispensing and Hospital Pharmacy

Note: The selected topics were discussed by respective faculty members in the above subjects