

SYLLABI AND PATTERN OF ENTRANCE EXAMINATIONS

1. The questions in the Entrance Examination for admission to a programme will be of the standard which a student, having passed qualifying examination for admission to that programme, is expected to answer. For example, the questions in the Entrance Examination for admission to M.Com. programme will be of the standard which a student, having passed B.Com. or equivalent qualifying examination, is expected to answer. Similarly, the questions in the Entrance Examination for admission to MBA 5-year and LLB 5-year programmes will be of the standard which a student, having passed 12th standard with syllabus prescribed by Board of School Education, Haryana, is expected to answer.
2. The syllabi of M.A./M.Sc./M.Com./equivalent examination (Previous & Final both) will constitute the syllabi for setting question papers for Entrance Examinations for admission to the respective M.Phil/Pre-Ph.D. programmes including University Research Scholarship
3. Each Entrance Examination paper will carry 100 questions of one mark each.
4. Duration of the Entrance Examination shall be 75 minutes.
5. The main topics along with no. of questions are given in the table below. Refer to University's website <<http://www.mdurohtak.ac.in>> & <www.mdurohtak.com> for details of the topics.
6. The Entrance Exam.(s) question papers shall be both in Hindi and English, as before.

PATTERN OF QUESTION PAPERS

Sr.No.	Name of the Programme	Syllabi	No. of Questions
Master Degree Programmes			
i.	Chemistry	a) Organic Chemistry b) Inorganic Chemistry c) Physical Chemistry	34 33 33
ii.	Commerce	a) Financial Accounting b) Business Mgt. c) Mercantile Law d) Comp. Law & Secretarial Practice e) Money & Banking f) Business Statistics g) Higher Accountancy h) Cost Accounting i) Income Tax Law & Problems j) Indian Economic Problems k) Mgt. Accounting & Fin. Mgt. l) Auditing	10 10 08 08 08 08 08 08 08 08 08 08
iii.	Economics (UTD)	a) Microeconomics b) Macroeconomics c) Economic Development d) Indian Economy e) Reasoning & Quantitative Aptitude	20 20 20 20 20
iv.	English (UTD)	a) Applied Grammar b) Comprehension (Poetry) c) Comprehension (Prose) d) General Awareness of English Literature e) Art and Culture in India (Persons, Places, Events, Awards etc. Relating to Current Cultural and Literary Scenes) f) Vocabulary	35 08 07 25 15 10



Sr.No.	Name of the Programme	Syllabi	No. of Questions
v.	Geography	a) Physical Geography b) India c) Economic Geography d) Human Geography e) Cartography	25 25 20 20 10
vi.	Hindi	a) History of Hindi Literature b) Kavya Shastra c) Grammar and Language	70 20 10
vii.	History (UTD).	B.A. Ist Year (MDU) Option I: History of India (earliest times to A.D. 1526) Option II: History of Haryana B.A. IInd Year (MDU) Option I: History of India (1526-1857) Option II: History of India (1857-1950) B.A. IIIrd Year (MDU) Option I: Ancient and Medieval World Option II : History of Modern World	15 15 15 15 20 20
viii.	Journalism and Mass Communication	a) Current Affairs b) Aptitude Test c) Language Test (English-Hindi)	50 25 25
ix.	LL.M	a) Indian Constitutional Law b) Jurisprudence c) Law of Contract d) Law of Marriage & Divorce e) Indian Penal Code f) Public Inter-national Law	20 20 15 15 15 15
x.	Master of Computer Applications (MCA)	1) Mathematical Ability (30 questions) a) Sets and Relations b) Algebra c) Matrices d) Quadratic Equations e) Probability f) Average g) Co-ordinate Geometry h) Permutation and Combination i) Complex Numbers j) Calculus k) Trigonometry 2) Logical & Analytical Ability (20 questions) a) Reasoning b) Puzzle Test c) Number and Letter Series d) Data Interpretation e) Coding and Decoding f) Analogy g) Classification of Numbers h) Problem Solving i) Finding the rule 3) English/Comprehension (20 questions) a) Fill in the Blanks b) Grammar c) Comprehension d) Prepositions, articles e) Voices f) Sentence correction g) Question Tags h) Spelling i) Tenses j) Phrases k) Essay writing l) Precise writing	30 20 20



Sr.No.	Name of the Programme	Syllabi	No. of Questions
		4) Computer Awareness (30 questions) a) Organization of a computer b) Central Processing Unit (CPU) c) Structure of instructions in CPU d) Input/output devices e) Computer Memory f) Memory Organization g) Back up devices h) Representation of characters, integers, and fractions i) Binary and Hexadecimal representations j) Addition, subtraction, division, multiplication, single arithmetic and two complement arithmetic, floating point representation of numbers, normalized floating point representation k) Boolean Algebra, truth tables	30
xi	Maths & Maths with Computer Science	a) B.A./B.Sc.-I b) B.A./B.Sc.-II c) B.A./B.Sc.-III MDU Syllabus	30 30 40
xii.	Physics	a) B.Sc. Part-I b) B.Sc. Part-II c) B.Sc. Part-III MDU Syllabus	30 30 40
xiii.	Political Science	a) B.A. Part-I Option- I : Pol. Theory Option-II : Pol. Theory, Concepts b) B.A. Part-II Option- I : Indain Govt. & Politics Option-II : Int. Relations c) B.A. Part-III Option- I : Comp. Govt. & Politics (Govt. of UK, USA, China, Switzerland) Option-II : Pub. Admin. MDU Syllabus	18 18 16 16 16 16
xiv.	Psychology	a) Mental Abilities b) General Science (Phy., Chem., & Bio. at par with 10th standard) c) Numerical Ability (at par with Indian Adaptation of DAT) d) Social/Physiological Psychology e) Experimental Psychology f) Abnormal Psychology	30 10 10 10 15 25
xv.	Public Administration	a) B.A.-I b) B.A.-II c) B.A.-III (Option-I) d) B.A.-III (Option-II) MDU Syllabus	30 30 20 20
xvi.	Sanskrit	Sanskrit Grammar History of Sanskrit Literature Chhand Alankar	50 40 10
xvii.	Sociology	a) Sociology Syllabus upto B.A. Level b) Current Affairs c) General Studies	60 20 20



Sr.No.	Name of the Programme	Syllabi	No. of Questions
M.Phil/Pre-Ph.D. programmes including URS			
i.	Biotechnology, Biochemistry, Botany, Genetics, and Zoology	<p>Part-I Molecules & their Interaction Relevant to Biology Cellular Organization Fundamental Processes Cell Communication & Signaling Development Biology</p> <p>Part-II System Physiology-Plant System Physiology-Animal Inheritance Biology Diversity of Life Forms Ecological Principles Evolution and Behaviour Applied Biology Methods in Biology</p> <p>Note: 1. For students of Botany (Plant Sciences), syllabus of System Physiology- Animal will be considered deleted and 10 marks meant for System Physiology-Plant shall be doubled. The same criteria shall be applicable on students of Zoology (Animal Sciences) i.e. System Physiology, Plant will be considered as deleted and 10 marks of System Physiology, Animal shall be doubled. 2. For students of Life Sciences subjects other than Botany (Plant Sciences) or Zoology (Animal Sciences), there will be 50% choice of questions from system Physiology-Plant and System Physiology-Animal i.e. they will be required to attempt 10 questions out of 20 questions from each system of Physiology.</p>	<p>10 07 07 07 05</p> <p>10 10 07 07 07 06 07 10</p>
ii.	Microbiology	<p>i) Microbiology ii) Microscopy iii) Microbial Energetics and Biochemistry iv) Molecular Biology v) Microbial bioprocesses vi) Fermentation Technology vii) Immunology and medical microbiology viii) Genetics Engineering ix) Bioinformatics x) Biostatistics</p>	<p>15 5 15 10 10 10 10 10 10 10 5</p>
iii.	Bio-informatics	<p>i) Biological database ii) Computer fundamental and biological algorithm iii) Programming concepts iv) Object oriented programming v) Systems Biology vi) Computational Genomics vii) Proteomics viii) Molecular modeling ix) Drug Designing x) Chemo-informatics</p>	<p>10 10 10 10 10 10 10 10 10 10</p>
iv.	Forensic Science	<p>1. General Forensic Science including Criminology & Law 2. Questioned Document Examination 3. Finger Prints Examination 4. Computer Forensics & Forensic Psychology 5. Criminalistics 6. Research Methodology and Biostatics 7. Instrumental Analysis 8. Forensic Ballistics 9. Forensic Chemistry 10. Forensic Toxicology 11. Forensic Biology 12. Forensic Serology including DNA forensics 13. Forensic Physical Anthropology and Forensic Medicine</p>	<p>05 05 05 05 05 05 10 10 10 10 10 10 10</p>



Sr.No.	Name of the Programme	Syllabi	No. of Questions
v.	Chemistry	Part I Inorganic Chemistry 10 Physical Chemistry 10 Organic Chemistry 10 Spectroscopy 10 Part II Inorganic Chemistry 60 or Physical Chemistry 60 or Organic Chemistry 60	
vi.	Commerce	Accounting for Managerial Decisions 13 Management Concepts and Organizational Behaviour 12 Business Environment 12 Managerial Economics 12 Statistical Analysis for Business and Quantitative Techniques for Managerial Decisions 13 Computer Applications to Business 13 Strategic Management 12 Accounting Theory and Practice 13	
vii.	Computer Science & Applications	Unit I Computer Organization & Arithmetic 10 Programming Languages 05 Data Structure 10 Unit II System programming and Compiler 08 Software Engineering 09 Computer Graphics 08 Unit III Database 10 Data Warehousing 08 Data mining 07 Unit IV Computer Network 09 Web-developments 09 Operating System 07	
viii.	Defence & Strategic Studies	Unit I Theories and Concepts 20 Unit II Problems of place & security 20 Unit III Global Security Issues 20 Unit IV Issues in Conflict Resolution 20 Unit V Economic, Science and Technology issues and National Security 20 Note: Admission to M.Phil programme shall be made on the basis of academic merit in the qualifying examination.	
ix.	Economics	Microeconomics 20 Macroeconomics 20 Development economics 10 Indian Economy 10 Public Economy 10 Mathematics for Economics 10 Statistical Techniques 10 Inter-national Economics 10	



Sr.No.	Name of the Programme	Syllabi	No. of Questions
x.	Education	Phil. Fdns. of Education Socio. Fdns of Education Psychological Fdns. of Education Educational Research	17 17 33 33
xi.	English	The Entrance Examination paper will consist of 100 questions of one mark each, based on the syllabus of M.A (Previous) and M.A. (Final) for the last year of the University, but not necessarily on the authors and texts prescribed in the syllabus. The paper will consist of two parts. The first part will consist of 50 questions with multiple choice answers. The second part will also have 50 questions.	100
xii.	Environmental Biotechnology and Environmental Sciences	Unit I Fundamentals of Environmental Chemistry; Chemical composition of air water Chemistry; Toxic chemicals in the environment; Principles of analytical methods Unit II Ecosystems; Population Ecology; Common flora and fauna in India; Biodiversity and its conservation; Natural Resources Unit III Environmental Geosciences; The Earth Systems and Biosphere; Earth's Processes and Geological Hazards; Mineral resources and environment; Water resources and environment; Environmental Geochemistry Unit IV Environmental Biotechnology; Biosensors; Genetic Engineering; Environmental Genomics; Biosafety	25 25 25 25
xiii.	Food Technology	Introductory Food Technology Fruits and Vegetable Processing Cereals, Pulses and Oil seeds Processing Technology of Milk & Milk Products Technology of Meat/Fish/Poultry Products Food Quality Management Food Engineering/Packaging and Labeling Food Biotechnology	15 15 15 15 10 10 10 10
xiv.	Geography	Geomorphology Climatology Geographical Thought Population Geography Economic Geography Political Geography Social Geography Geography of India Regional Planning Statistical Methods	10 10 10 10 10 10 10 10 10 10
xv.	Hindi	The entrance examination paper will consist of 100 questions of one mark each, based on the syllabus of M.A. (Previous) and M.A.(Final) History of Hindi literature Kavya Shastra Language	 60 20 20



Sr.No.	Name of the Programme	Syllabi	No. of Questions
xvi	History	M.A. (Previous) a) Ancient Societies b) Medieval Societies c) Modern world d) State in India e) History of Haryana M.A. Final a) Historiography: concepts, methods and tools b) Indian Archaeology c) Ancient Indian History d) Medieval Indian History e) Modern Indian History	10 10 10 10 10 10 10 10 10
xvii.	Law	Jurisprudence Constitution of India Law of Contract Indian Penal Code Law of Torts Inter-national Law	20 16 16 16 16 16
xviii.	Business Management	Managerial Economics Organizational Behavior Human Resource Mgt. Financial Management Marketing Management Production Management Statistical Tools for Business Research Use of Computers and Software in Management Subjects	10 10 10 10 10 10 10 20 20
xix.	Journalism and Mass Communication	Basic Concepts in Communication Mass Media and Society Essential of Journalism Evolution of Media in India Development Communication Communication Research Inter-national Communication Radio, T.V. & New Media Production Advertising and Public Relations Media Writing	10 10 10 10 10 10 10 10 10 10
xx	Mathematics	Advanced Abstract Algebra; Real Analysis; Topology; Complex Analysis; Differential Equations; Integration Theory and Functional Analysis; Partial Differential Equations; Mechanics	100
xxi	Music	Analytic study of Ragas Comparative study of Ragas Detailed knowledge of different Musical forms Detailed study of technical study of music Contribution of musicians Introduction of talas Study of granthas of music Origin & development of instruments Research methodology Knowledge of folk music of different states Note: Admission to M.Phil will made on the basis of academic merit in the qualifying examination	10 10 10 10 10 10 10 10 10 10



Sr.No.	Name of the Programme	Syllabi	No. of Questions
xxii	Pharmaceutical Sciences	Natural Products Pharmacology Medicinal Chemistry Pharmaceutics Pharmaceutical Jurisprudence Pharmaceutical Analysis Biochemistry Microbiology Clinical Pharmacy	10 15 15 10 10 10 10 10 10
xxiii	Physical Education	Sports Psychology History & principles of Physical Education & Sports Kinesiology Anatomy, Physiology, Physiology Exercise and Sports Medicine Sports Sociology Bio-mechanics in Physical Education Officiating and Coaching (rules, dimensions, regulations of major athletic & sports (games event) Health Education Yoga Research Methodology Test Measurement and Evaluation in Physical Education Sports Management Computer Applications Current Affairs Sports Training	08 08 08 10 05 08 08 05 05 08 08 04 05 05 05
xxiv	Physics	Unit -I Mathematical Physics Classical Mechanics-I Electronic Devices Unit-II Statistical Mechanics Quantum Mechanics-II Nuclear and Particle Physics Atomic and Molecular Physics-I Unit-III Computational Methods & Programming Atomic & Molecular Physics-II Solid State Electronics Digital Electronics Unit-IV Electrodynamics & Wave Propagation Condensed Matter Physics Informatics-I Electronics-II	6 6 6 7 6 6 6 7 6 6 6 6 7 6 6 6 7
xxv	Political Science	Political Theory and Thought Comparative Politics and Political Analysis Indian Government and Politics Public Administration Inter-national Relations	20 20 20 20 20
xxvi	Psychology	Theories of Psychology Research Methods and Statistics Experimental Psychology and Cognitive Processes Current issues in pure and Applied Psychology	30 30 30 10
xxvii	Public Administration	Administrative Theory and Thoughts Indian Administration Development Administration Research Method	25 25 25 25



Sr.No.	Name of the Programme	Syllabi	No. of Questions
xxviii	Sanskrit	Part-I Vedic Literature Indian Philosophy Sanskrit Grammar Classical Literature Linguistics (Bhasha Vigyan) Indian Culture Part-II Sanskrit Grammer or Indian Philosophy or Classical Literature or Vedic Literature	10 10 10 10 10 10 40 40 40 40
xxix	Statistics	Probability theory Statistical Methods Inference Sampling Techniques Design of Experiments	20 20 20 20 20
xxx	Sociology	Introduction to Sociology/ Basic Concepts Sociological Thinkers Classical Sociology Theories Research Methodology Society and culture in India Advanced Sociological Theories Understanding Indian Society Rural Sociology Quantitative Techniques	15 10 10 15 10 10 10 10 10
xxxi	Visual Arts	Art Introduction & Appreciation Methods & Materials Art Appreciation History of Art	10 10 30 50
xxxii	Computer Science & Engg.	Database Management system Operating system Data Structures Computer Networks Software Engg. Automata Theory Analysis & Design of Algorithms Advanced Computer Architecture Programming Languages Discrete Structures	10 10 10 10 10 10 10 10 10 10
xxxiii	Bio-technology Engg.	Molecular Biology and genetics engineering Immunology and diagnostics Biotechniques Plant biotechnology Industrial Biotechnology and fermentation technology Drug and Vaccine development Animal Biotechnology Bioprocess Engineering Bioinformatics Genomics & Proteomics Biosensors IPR, Bioethics and Biosafety Environmental Biotechnology Stem, cells Biostatistics	10 10 10 10 10 5 5 5 5 5 5 5 5 5 5



Sr.No.	Name of the Programme	Syllabi	No. of Questions
xxxiv	Electronics & Communication Engg.	Analog & Digital Electronics Control system Communication Engg. Satellite Communication	5+5 10 10 10
		VLSI Microprocessors DSP Data Communication Wireless Communication Optical Network	10 10 10 10 10 10
xxxv	Electrical Engg.	Power System Protection Electrical Machines Control system Network theory Microprocessors Generation Transmission Distribution Power Electronics Mathematics (Laplace, z-transform, Matrices)	10 10 10 10 10 10 10 10 10 10
xxxvi	Mechanical Engg.	Manufacturing & production Design Thermal Engg Industrial Engg. CAD/CAM/CIM Robotics & Automation	20 20 20 15 15 10
xxxvii	Textiles Engg.	Group-A: Compulsory :Weightage:-50% i.e., 50 questions, containing general subjects: Textile Raw Material Fibre Science Testing Fabric Structure Technical Textiles Group: B Optional: Weightage:-50% i.e., 50 questions, containing Textile Technology related subjects: Spinning Weaving Texturising Structure & Properties of Fibres Group C: Optional: Weightage:-50% i.e., 50 questions, containing Textile Chemistry related subjects: Preparatory processes Dyeing Printing Finishing Recent developments in Chemical Processing Group D: Optional: Weightage: 50% i.e., 50 questions, containing Fashion & Apparel Engineering related subjects: Fashion Designing Garment Manufacturing Technology Apparel Construction Pattern Making, grading & draping	10 10 10 10 10 15 15 10 10 10 10 10 10 10 10 15 15 10 10



Sr.No.	Name of the Programme	Syllabi	No. of Questions
Professional Programmes			
xxxviii	LLB 3-year (Morning & Evening)	a) General English b) General Hindi c) General Knowledge The General Knowledge area will cover the following fields of knowledge: 1) Current Events of National and Inter-national Importance 2) General Science 3) History of India 4) Geography 5) Indian Polity & Economy Standard of questions will be as may be expected of a graduate who has not made any special study in any of the areas given above.	25 25 50
xxxix	LLB 5-year Integrated	a) Legal Aptitude b) Reasoning c) General English d) General Hindi e) General Knowledge The General Knowledge area will cover the following fields of knowledge:- 1) Current Events of National and Inter-national Importance 2) General Science 3) History of India 4) Geography 5) Indian Polity & Economy Note: The standard of questions will be that of 12th standard as prescribed by the Board of School of Education, Haryana..	20 20 20 20 20
xl	MBA 2-year	a) General English (including comprehension, vocabulary, usage and grammar etc.) b) Numerical Ability and Reasoning c) General Awareness d) Management Aptitude Standard of questions will be as may be expected of a graduate who has not made any special study in any of the areas given above.	25 25 25 25
xli	MBA 5-year	a) General English (including comprehension, vocabulary, usage and grammar etc.) b) Numerical Ability and Reasoning c) General Awareness d) Management Aptitude Note: The standard of questions for General English and numerical ability will be that of 10th standard as prescribed by the Board of School Education Haryana, Bhiwani.	25 25 25 25
xlii	M.P.Ed.	a) Sports Terms b) History of Sports c) Sports performance d) Sportspersons and Games e) Sports Awards and their winners f) Trophies and Games to which they are associated and winners of these Trophies g) Anatomy and Physiology h) Allied Sports and Rules & Regulations of various Games played in India i) General I.Q./Current Affairs (not necessarily related to Sports)	10 10 10 10 10 10 10 10 20