

**KUMAUN UNIVERSITY, NAINITAL**  
**TENTATIVE Programme of M.A./M.Sc. - IV Semester**  
**Main/Back/Improvement Examination - 2019**

**Time : 03.00 PM-06.00 PM**

<b>Date &amp; Day</b>	<b>Subject</b>	<b>Paper No. Paper Code and Paper Name</b>
16-05-2019 (Thursday)	<u>English</u>	I- (1441)- 20 <sup>th</sup> Century Literary Criticism and Theory
	<u>Economics</u>	I- (1241) - Advanced Macro Economics-II
	<u>Hindi</u>	XIII- (1641)- कुमाऊँनी साहित्य <b>OR</b> XIII- (1642) - उत्तराखण्ड के हिन्दी कवि <b>OR</b> XIII- (1643) - उत्तराखण्ड के हिन्दी कथाकार
	<u>History</u>	<b>Ancient / Archaeology/ Medieval &amp; Modern Indian Group</b> I- (1741/1841/1941) - Modern World History (A.D. 1871-1945)
	<u>Sanskrit</u>	I- (2741) - व्याकरण एवम् निबन्ध
	<u>Political Science</u>	I- (2541) - Contemporary Political Philosophy
	<u>Sociology</u>	I- (2841) - Modern Sociological Perspective
	<u>Education</u>	I- (1341) - Comparative Education
	<u>Drawing &amp; Painting</u>	XIII- (1141) - European High Renaissance Painting
	<u>Psychology</u>	I- (2641) - Theories of Personality
	<u>Home Science</u>	I- (2041) - Indian Embroidery and Textile
	<u>Music</u>	I- (2241)- Applied Theory of Music (Tabla) <b>OR</b> I- (2341) - Applied Theory of Music (Sitar) I- (2441) - Applied Theory of Music (Vocal)
	<u>Geography</u> (M.A. / M.Sc.)	I- (1541/4541) - Advanced Geography of Uttarakhand
21-05-2019 (Tuesday)	<u>Botany</u>	XIV- (4142) - (i) Forest Ecology <b>OR</b> XIV- (4143) - (ii) Plant Pathology <b>OR</b> XIV- (4144) - (iii) Taxonomy of Angiosperms <b>OR</b> XIV- (4145) - (iv) Ethnobotany, Traditional Knowledge and Intellectual Property Right <b>OR</b> XIV- (4146) - (v) Bryology <b>OR</b>
	<u>Chemistry</u>	III- (4245) - Inorganic Chemistry (Environmental Chemistry) <b>OR</b> II- (4252) - Organic Chemistry (Chemistry of Natural Products and Heterocycle Compounds) <b>OR</b> II - (4262) - Physical Chemistry (Advanced Chemical Dynamics and Thermodynamics) - II
	<u>Zoology</u>	II- (5142) - (A) Fish and Fisheries (Applied Ichthyology) <b>OR</b> II- (5144) - (B) Entomology (Biology of Insect : Morphology Physiology and Developmental Biology)-II (b) <b>OR</b> II- (5146) - I (C) Immunology (Applied Immunology) <b>OR</b> II- (5150) - I (D) Animal Biotechnology (Transgenics, Cloning & IPR)

	<u>Physics</u>	<b>II (a) - (4946) - Advanced Electronics -II</b> <b>II (b) - (4947) - High Energy Physics-II</b> <b>II (c) - (4948) - Spectroscopy-II</b> <b>II (d) - (4949) - Astrophysics-II</b> <b>II (e) - (4950) - Advanced Condensed Matter Physics-II</b>	<b><u>OR</u></b> <b><u>OR</u></b> <b><u>OR</u></b> <b><u>OR</u></b>
	<u>Statistics</u> (M.A. / M.Sc.)	<b>II - (5042 / 2942) - Statistical Computing</b>	
	<u>Defence Studies</u> (M.A. / M.Sc.)	<b>II- (3042) - Geo-Politics &amp; Military Geography</b>	
	<u>Information Technology</u>	<b>II- (4742) - Management Information System (New Course)</b> <b>II- (4742) - Operating Systems : Case Study of Linux - II</b>	
	<u>Forestry</u>	<b>II - (4442)- Forest Plantation and Bio-fuels</b>	
	<u>Mathematics</u> (M.A./M.Sc.)	<b>I - (5341) - Dynamics of Rigid Bodies</b>	
24-05-2019 (Friday)	<u>English</u>	<b>II- (1442) - Indian Literature in English after 1960</b>	
	<u>Economics</u>	<b>II- (1242) - International Economics - II</b>	
	<u>Hindi</u>	<b>II- (1644) - लोक साहित्य</b> <b>II- (1645) - कुमाऊँनी लोक साहित्य</b>	<b><u>OR</u></b>
	<u>History</u>	<b><u>Ancient / Archaeology/ Medieval &amp; Modern Indian Group</u></b> <b>II- (1742/1842/1942) - Indian National Movement (AD 1919-1950)</b>	
	<u>Sanskrit</u>	<b>II- (2742) - संस्कृत नाट्य एवं चम्पू काव्य</b>	<b><u>OR</u></b>
	<u>Political Science</u>	<b>II- (2542) - Political Thought from Lenin to Rawls</b>	
	<u>Sociology</u>	<b>II- (2842) - Sociology of Development in Indian Context</b>	
	<u>Education</u>	<b>II- (1342) - Population Education</b>	
	<u>Drawing &amp; Painting</u>	<b>XIV- (1142) - History of Modern European Painting</b>	
	<u>Psychology</u>	<b>II- (2642) - Counselling Psychology</b>	
	<u>Home Science</u>	<b>II- (2042) - Housing and Interior Decoration</b>	
	<u>Music</u>	<b>II- (2242) - General Theory of Music (Tabla)</b> <b>II- (2442) - General Theory of Music (Vocal)</b> <b>II (2342) - General Theory of Music (Sitar)</b>	<b><u>OR</u></b>
<u>Geography</u> (M.A. / M.Sc.)	<b>II- (1542 / 4542) - Population Geography &amp; Human Resource Development</b>		
27-05-2019 (Monday)	<u>Chemistry</u>	<b>III - (4253) - Organic Chemistry (Medicinal Chemistry)</b> <b>III - (4243) - Inorganic Chemistry (Inorganic Polymers &amp; Supermolecular Chemistry) - II</b> <b>III- (4263) - Physical Chemistry (Advanced Photochemistry and Nuclear Chemistry)</b>	
	<u>Statistics</u> (M.A. / M.Sc.)	<b>III - (2926 / 5043) - Econometrics</b>	
	<u>Defence Studies</u> (M.A. / M.Sc.)	<b>III - (3043) - Defence Psychology</b>	
	<u>Information Technology</u>	<b>III- (4743) - Software Engineering-II</b>	
	<u>Forestry</u>	<b>III(ii) - (4443) - Environmental Impact Assessment and Management</b>	
<u>Geology</u>	<b>II- (4642) - Tectonic Geomorphology</b>		

	Mathematics (M.A./M.Sc.)	II - (5342) - Functional Analysis
29-05-2019 (Wednesday)	<u>English</u>	III-(1491)- (i) Post Second World War : American Literature-B <b>OR</b> III-(1492)- (ii) Post Independence : Indian Literature in Translation-B <b>OR</b> III-(1493)- (iii) Applied Linguistics and Stylistics- B
	<u>Economics</u>	III - (1243) - Economics of Growth & Development II
	<u>Hindi</u>	विशिष्ट अध्ययन XV - (1681) - (क) प्रेमचन्द <b>OR</b> XV - (1683) - (ग) कबीरदास <b>OR</b> XV - (1684) - (घ) सूरदास <b>OR</b> XV - (1685) - (ङ) सुमित्रानन्दन पंत <b>OR</b>
	<u>History</u>	<b>Ancient / Archaeology Group</b> III- (1743/1843) - Society and Culture of India (320 AD-1200 AD) <b>Medieval &amp; Modern Indian Group</b> III- (1943)- Society and Culture of India (1708 AD-1950)
	<u>Sanskrit</u>	III - (2744) - काव्य-शास्त्र
	<u>Political Science</u>	III - (2543) - Post Cold War International Relations
	<u>Sociology</u>	III - (2843) - Gender and Society
	<u>Education</u>	IV - (1343) - Educational Technology
	<u>Psychology</u>	III - (2643) - Psychopathology -II
	<u>Home Science</u>	III - (2043) - Entrepreneurship Development
	<u>Geography</u> (M.A. / M.Sc.)	III - (1543 / 4543) - Biogeography
31-05-2019 (Friday)	<u>Chemistry</u>	IV - (4244) - Inorganic Chemistry (Photo Inorganic Chemistry)
	<u>Information Technology</u>	IV - (4744) - Artificial Intelligence-IV (i) <b>OR</b> IV - (4745) - Programming with Visual Basic .Net-II - IV(ii)
	<u>Defence Studies</u> (M.A. / M.Sc.)	IV - (3044) - Area Studies of South Asia in the context of any two selected countries
	<u>Geology</u>	III - (4643) - Mineral Exploration and Mineral Economics
	Mathematics (M.A./M.Sc.) <b>II &amp; IV Semester</b>	III - (5343) - Calculus of Variation and Integral Equations
03-06-2019 (Tuesday)	<u>Economics</u>	IV - (1281) - Research Methodology and Essay-IV(i) <b>OR</b> IV - (1283)- Agriculture Economics - IV (iii) <b>OR</b> IV - (1284) - Labour Economics - IV (iv) <b>OR</b> IV - (1287) - Advanced Statistics - IV (vii) <b>OR</b> IV - (1288) - Demography - IV (viii) <b>OR</b> IV - (1289) - Industrial Economics - IV (ix) <b>OR</b> IV - (1295) - History of Economics Analysis - IV (xv)
	<u>Political Science</u>	IV - (2544) - Human Rights IV (i) <b>OR</b> IV - (2545) - International Organisation - IV (ii) <b>OR</b> IV - (2547) - Research Methodology - IV (iv)
	<u>Sociology</u>	IV - (2844) - Social Demography
	<u>Education</u>	IV - (1344) - Measurement & Testing in Education Evaluation

	<u>Psychology</u>	<b>IV - (2644) - Psychotherapies</b>
	<u>Home Science</u>	<b>IV - (2044) - Community Nutrition and Public Health</b>
	<u>Geography</u> (M.A. / M.Sc.)	<b>IV- (1544/4544) - (a) Integrated Watershed Management</b> <b><u>OR</u></b> <b>IV- (1545/4545)- (b) GIS &amp; GPS Applications</b> <b><u>OR</u></b> <b>IV- (1546/4546)- (c) Disaster Management</b>
06-06-2019 (Thursday)	<u>Botany</u>	<b>XIII- (4141) - Plant Resource, Utilization and Conservation of Biodiversity</b>
	<u>Chemistry</u>	<b>I- (4242) - Inorganic Chemistry-I</b> (General & Organometrics Chemistry) <b><u>OR</u></b> <b>I- (4251) - Organic Chemistry-I</b> (Organic Synthesis) <b><u>OR</u></b> <b>I- (4261) - Physical Chemistry-I</b> (Physical Organic and Quantum Chemistry)
	<u>Zoology</u>	<b>I- (5141) - I (a) - Fish and Fisheries</b> (General and Ichthyology) <b><u>OR</u></b> <b>I- (5143) - I (b)- Entomology</b> (Systematics and Applied Entomology) <b>I- (5145) - I (c) Immunology</b> (Fundamental of Immunology) <b><u>OR</u></b> <b>I- (5149) - I (c) Animal Biotechnology (Animal Cell Culture)</b>
	<u>Physics</u>	<b>XV- (4941) - I (A) - Advanced Electronics -I</b> <b><u>OR</u></b> <b>XV- (4942) - I (B) - High Energy Physics-I</b> <b><u>OR</u></b> <b>XV- (4943) - I (C) - Spectroscopy-I</b> <b><u>OR</u></b> <b>XV- (4944) - I (D) - Astrophysics-I</b> <b><u>OR</u></b> <b>XV- (4945) - I (E) - Advanced Condensed Matter Physics-I</b>
	<u>Statistics</u> (M.A. / M.Sc.)	<b>I- (5041/2941) - Stochastic Process and Reliability Theory</b>
	<u>Defence Studies</u> (M.A. / M.Sc.)	<b>I- (3041) - Defence Economics</b>
	<u>Information Technology</u>	<b>I - (4741) - Advanced Java (New Course)</b> <b>I- (4741) - Java Programming-II</b>
	<u>Forestry</u>	<b>I-(4441) - Forest Products and Industries</b>
	<u>Geology</u>	<b>I- (4641) - Engineering Geology</b>
	<u>Mathematics</u> (M.A./M.Sc.) <b>II &amp; IV Semester</b>	<b>IV &amp; V (iv) - IV(ii) - (5372) Riemannian Geometry</b>
08-06-2019 (Saturday)	<u>Mathematics</u> (M.A./M.Sc.) <b>II &amp; IV Semester</b>	<b>IV (iv) - IV(iv) 5374 - Operation Research</b>
	<u>Geology</u>	<b>IV(a) (4644) - Himalayan Geology</b> <b>IV(b) (4645) - Paleo Climatology</b>
11-06-2019 (Tuesday)	<u>Mathematics</u> (M.A./M.Sc.) <b>II &amp; IV Semester</b>	<b>IV &amp; V (i) - IV(i) - (5371) - Relativity</b> <b>IV &amp; V (iv) - IV(ix) - (5379) - Dynamical System</b> <b>IV &amp; V (iii) - IV(iii) - (5373) - Advanced Abstract Algebra</b>
13-06-2019 (Thursday)	<u>Mathematics</u> (M.A./M.Sc.) <b>II &amp; IV Semester</b>	<b>IV &amp; V (v) - IV(v) - 5375 - Statistical Analysis</b> <b>IV &amp; V (vii) - IV(vii) - 5377 - Design and Analysis of Algorithm</b>

15-06-2019 (Saturday)	Mathematics (M.A./M.Sc.) <b>II &amp; IV Semester</b>	<b>IV &amp; IV (vi) - IV(vi) - 5376</b> - Theory of Computation <b>IV - IV (viii) - 5378</b> Coding Theory
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Note - No guarantee can be given to the candidates regarding the order of the question papers.

Place: Nainital  
Date :08-04-2019

Controller of Examinations  
Kumaun University, Nainital