

<b>MA in English</b>			
<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
20th Century Women's Writing-Theory Practice	34210	Learn feminism as a movement.	38.66
20th Century Women's Writing-Theory Practice	34211	Get awareness about gender issues.	33.33
20th Century Women's Writing-Theory Practice	34212	Understand the injustices done towards women in patriarchal society.	100
20th Century Women's Writing-Theory Practice	34213	Understand gender sensibility explored in 20th century women writings	40.66
20th Century Women's Writing-Theory Practice	34214	Appreciate the efforts of women writers to subvert the oppression of women in their literary works.	31.33
20th Century Women's Writing-Theory Practice	34215	Learn the problems faced by women in societies of different traditions and culture.	25.33
American Literature	34293	Explain the American Social, Political and Cultural temper.	50.98
American Literature	34300	Appreciate the representative poets, novelists and representative works of American literature.	79.41
American Literature	34302	Learn the use of various literary devices by American writers.	28.43
American Literature	34329	Study the literary expressions of American writers depicting American sensibility.	42.74
The Modern Age-I	34333	Explain the social, political and cultural milieu of the 20th Century England.	0
The Modern Age-I	34336	Learn the impact of World War I and II on 20th Century poetry	28
Literary Criticism-I	35012	Describe the basics of literary/ critical theories.	62.5
Literary Criticism-I	35013	Learn the meaning, elements and characteristics of classical literary criticism.	82.92
Literary Criticism-I	35014	Learn the technique of early literary criticism	100
Literary Criticism-I	35015	Acquire the skills to interpret literary works using literary theories.	86.11
Literary Criticism-II	35017	Develop the skills of literary critical analysis.	100
Indian Writing in English-I	35043	Explain the origin and growth of Indian English Writing.	100
Dalit Literature	35056	Deliberate on the sufferings of marginalised in dalit writings.	85.27
Dalit Literature	35058	Compare and analyse the life of oppressed in various languages translated into English like	87.74

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<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
		Kannada, Gujarathi, Punjabi, Tamil and Telugu.	
Dalit Literature	35063	Compare and analyse the different forms of Dalit Literature based on different experiences.	83.74
Indian Classics in Translation/ Indian Drama	35082	Understand the important aspects and features of Indian Drama.	82.28
Indian Classics in Translation/ Indian Drama	35087	Learn to interpret and appreciate poetic devices in Indian Classical Dramas.	92.19
Indian Classics in Translation/ Indian Drama	35088	Compare and analyse the classical Indian dramas with the contemporary time.	86.67
17th and 18th Century English Literature	39116	Develop skills of critical analysis of poetry restoration poetry	80.39
Elizabethan Age	39117	Analyse Shakespearean Tragedies and Comedies in terms of language, character and themes.	65.94
Elizabethan Age	39121	Develop ability to read, summarize and critically analyse Shakespearean sonnets with various themes.	100
Indian Diaspora Fiction	39123	Learn the background of Diaspora Literature & major themes of Diaspora Literature	79.17
Indian Diaspora Fiction	39133	Compare and Contrast authors' treatment of themes, characters , subject matter etc.	78.29
Indian Diaspora Fiction	39135	Analyse the literary elements like plot, setting, tone, point of view, imagery, etc.	77.34
Indian Diaspora Fiction	39140	Trace the historical event like partition, corruption, migration, etc	92.06
Indian Writing in English - II	39144	Explain the characteristic features of post independent Indian Writing in English .	83.33
A Course in Written and Spoken English	39145	Understand grammar rules and apply them in conversation and communication.	82.57
A Course in Written and Spoken English	39146	Able to write effectively describing impressions, feelings and experiences.	49.38
Indian Writing in English - II	39148	Read, compare and critically analyse partition novels and autobiographies	72.33
New Literatures in English	40061	Learn the social, political and cultural milieus of various Commonwealth countries.	57.14
New Literatures in English	40065	Learn the impact of colonisation on native people and their literature.	0
New Literatures in English	40071	Read the representative texts of various literatures like African, Australian, Canadian and Caribbean countries.	35.72
New Literatures in	40074	Learn to appreciate the perspectives and concerns	42.28

**MA in English**

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English		of commonwealth writings.	
New Literatures in English	40076	Appreciate the use of various literary devices by commonwealth writers.	38.09
The Modern Age-II	40080	Explain the social, political and cultural milieu of the age.	48.57
The Modern Age-II	40086	Learn and appreciate the use of various literary devices and postmodern techniques like the Stream of Consciousness, Dark Humour in modern writings.	86.56
The Modern Age-II	40089	Develop new perspectives on modern representative writers and their writings.	58.96
The Modern Age-II	40093	Describe the new theatres evolved in modern age.	57.14
Indian English Poetry After Independence	42648	Learn the characteristics of modern Indian poets and their poetry.	53.33
Indian English Poetry After Independence	42654	Explain and appreciate the human values and human predicament in modern India depicted in modern poetry.	39.34
Indian English Poetry After Independence	42656	Acquire the knowledge on trend setting themes explored in contemporary Indian poetry.	38.67
19th Century English Literature	42692	Explain the period with an overview of the Romantic and Victorian age.	39.09
19th Century English Literature	42696	Learn the impact of industrialization and urbanization on the life of people during 19th Century	21.88
19th Century English Literature	42700	Recognize and understand figurative language, such as allegory, metaphor, rhyme, and rhythm	46.88
American Literature	42732	Describe the African American sensibility based on the readings of Toni Morrison, Jamaica Kincaid and Fredrick Douglas's writings.	54.12
20th Century Women's Writing-Theory Practice	44485	Understand in details with examples Fiction of 20th century women writers	90
A Course in Written and Spoken English	44501	Understand the characteristics of writing essays of various topics	66.78
A Course in Written and Spoken English	44504	Identify the characteristics of learning basic grammar	88.27
A Course in Written and Spoken English	44552	Write down in details with application, if applicable, speaking skills	68.86
A Course in Written and Spoken English	44555	Learn the skills of writing resume and business applications	87.63
Indian Diaspora Fiction	44581	Understand in details the interpretation of Indian diaspora fiction	91.84
17th and 18th Century	44587	Deliberate the details of restoration period	85.83

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English Literature			
17th and 18th Century English Literature	44589	Specify the classification and characteristics of restoration period	92.85
Indian English Poetry After Independence	44595	Understand the details of interpretation of indian poetry after independence	59.81
Indian English Poetry After Independence	44614	Understand in details with application, if applicable, Aesthetics of Indian poetry after Independence	0
Indian Writing in English - II	44670	Identify in details with examples appreciation of the fiction of Arundhati Roy and Amitav Ghosh	86.33
Indian Writing in English - II	44724	Understand in depth literary essays of Gayatri Spivak, Aijaz Ahamed and Meenakshi Mukherjee	90.37
Indian Writing in English-I	44738	Specify in details with examples poetry of Toru Dutt, Tagore, Sarojini Naidu and Aurobindo	93.33
Indian Writing in English-I	44747	Learn in depth plays of Girish Karnad, Tendulkar, and Dattani	82.5
Indian Writing in English-I	44791	Specify in depth Novels of R K Narayan, Mulk Raj Anand and Raja Rao	70.67
Indian Writing in English-I	44799	Appreciate and understand the critical essays of Hiriyan, Coomaraswamy and Aurobindo	94.44
Literary Criticism-I	45456	Write down the details of Aristotle's poetics, Longinus' On the Sublime	79.2
Literary Criticism-II	45767	Understand in depth the various schools of literary criticism	79.55
Literary Criticism-II	45871	Deliberate the details of critical essays of T S Eliot, F R Leavis, Carl Jung	91.97
Literary Criticism-II	45902	Deliberate the details of interpretation of critical essays of Elaine Showalter, Helene Cixous and Spivak	91.11
New Literatures in English	46100	Specify the classification and characteristics of aesthetics of commonwealth Literature	45.72
The Modern Age-I	46257	Identify the characteristics of Modern English poetry	86.67
The Modern Age-I	46259	Learn the details of Modern English poetry	85
The Modern Age-I	46359	Learn to interpret and appreciate the poetic devices of Modern poetry.	44
English Literature from Chaucer to Milton	50735	Deliberate in depth Jacobian, Metaphysical poetry	85.23
English Literature from Chaucer to Milton	50751	Deliberate the details of Chaucer to Milton poetry	85.87
English Literature	50767	Deliberate the characteristics of sonnets of	83.16

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<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
from Chaucer to Milton		Sidney, Spenser and Surrey	
Elizabethan Age	50920	Deliberate the characteristics of Elizabethan theatre	205
Elizabethan Age	50968	Understand in depth plays of Marlowe and Thomas Kyd	80.21
Elizabethan Age	51006	Write down the classification and characteristics of plays of Shakespeare- Macbeth, Julius Caesar and As You Like It	119.64
19th Century English Literature	51701	Write down in details appreciating the novels of Austen's Emma, Emily Bronte's Wuthering Heights	26.16
19th Century English Literature	51724	Describe the views explicated in J S Mill's On Liberty, John Ruskin's Unto This Last	19.57
Literary Criticism-II	55074	Write down in depth essays of T S Eliot, F R Leavis, Carl Jung, Northrop Frye, Derrida, Elaine Showalter, Helene Cixous etc.	74.74
American Literature	55153	Identify in details with examples ability to explore human condition in different periods of the American literature.	52.94
Dalit Literature	55249	Understand the classification and characteristics of Dalit Movement in post independent India	96.88
17th and 18th Century English Literature	56264	Deliberate the characteristics of Comedy of Manners	75.64

<b>MA in Kannada</b>			
<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Prachina Kannada Sahithya - Patya-Adi Purana	51732	Understand in depth about Pampa	88.97
Prachina Kannada Sahithya - Patya-Adi Purana	51776	Understand the characteristic feature of Adipurana	83.22
Prachina Kannada Sahithya - Patya-Adi Purana	51781	Study in depth Adipurana	89.62
Prachina Kannada Sahithya Hinnale	51819	Understand the classification and characteristics of Champu Kavya	78.9
Prachina Kannada Sahithya Hinnale	51825	Study in depth Boudha, Jaina, Shaiva and Vaidika	85.54
Prachina Kannada Sahithya Hinnale	51837	Deliberate the classification and characteristics of Kannada Jaina Puraana, Ramayana, Mahabarartha	86.43
Prachina Kannada Sahithya Hinnale	51846	Identify the details of ashtadasha Varnane	74.8

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Kannada Chandassina Adhyayana	54064	Specify in details with examples Chandassu	52.77
Kannada Chandassina Adhyayana	54087	Learn the characteristics of 'Praasa'	41.46
Kannada Chandassina Adhyayana	54093	Understand in depth 'Kanda'	40.58
Kannada Chandassina Adhyayana	54100	Understand the classification and characteristics of Tripadi	57.28
Kannada Chandassina Adhyayana	54108	Learn the details of Sonnet	34.28
Vimarsheya Adhyayana	54120	Understand in depth Preface to Lyrical Ballads	85.76
Vimarsheya Adhyayana	54132	Identify the classification and characteristics of Practical Criticism	80.88
Vimarsheya Adhyayana	54135	Deliberate the classification and characteristics of Marxian criticism	82.14
Vimarsheya Adhyayana	54152	Write down the details of Post-Colonial criticism	82.69
Bhasha Vignyanada Moolathatvagalu	54168	Identify the details of Language	51.09
Bhasha Vignyanada Moolathatvagalu	54170	Understand the characteristics of Phonetics	38.76
Bhasha Vignyanada Moolathatvagalu	54250	Learn in details with examples Bashe mattu Baraha	41.37
Bhasha Vignyanada Moolathatvagalu	54274	Write down in details with examples Morphology	94.57
Madhyakalina kannadasahithya -patya	54288	Specify in depth Vachanas' of Jedara Dasimayya	82.34
Madhyakalina kannadasahithya -patya	54304	Understand the characteristics of Vachanas' of Basavanna	85.08
Madhyakalina kannadasahithya -patya	54319	Specify in details with examples Vachanas' of Akkamahadevi	93.7
Madhyakalina kannadasahithya -patya	54320	Deliberate the details of Vachanas' of Ambigara Chowdayya	85.62
Madhyakalina kannadasahithya - hinnele	54344	Identify in details with examples Political background of Medieval Kannada Literature	81.82
Madhyakalina kannadasahithya - hinnele	54364	Deliberate in depth Religious background of Medieval Kannada Literature	83
Madhyakalina kannadasahithya	54374	Identify the characteristics of Kinds of	85.91

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- hinnele		Medival Kannada Lieterature	
Madhyakalina kannadasahithya - hinnele	54394	Deliberate in depth Influence of Dravidian Languages on Medival Kannada Lieterature	85.42
Kannada vyakaranagala thowlanika samekshe	54478	Specify the classification and characteristics of Old Kannada Grammar and Works	84.3
Kannada vyakaranagala thowlanika samekshe	54482	Specify in details with examples Kannada Grammar	95.79
Kannada vyakaranagala thowlanika samekshe	54487	Identify in details with examples Samasa	75.32
Thoulanika Sahithya - Patya - Mahakavya Nataka	55947	Understand the classification and characteristics of Compative Literature	84.51
Thoulanika Sahithya - Patya - Mahakavya Nataka	55975	Understand in depth Girish Karnad's Tughlaq	92.77
Thoulanika Sahithya - Patya - Mahakavya Nataka	56002	Understand in details with examples Hamlet	96.25
Thoulanika Sahithya - Patya - Mahakavya Nataka	56025	Learn in depth Homer's Illiad	89.88
Adhunika Kannada Sahithyada Hinnale	56139	Learn in details Romaneticism	84.11
Adhunika Kannada Sahithyada Hinnale	56142	Learn the classification and characteristics of Progressive Liteature	86.26
Adhunika Kannada Sahithyada Hinnale	56145	Learn the characteristics of Modern Literature	82.96
Adhunika Kannada Sahithyada Hinnale	56149	Understand in details with examples Dalit Literature	91.88
Bharathiya Kavya Mimamse	56160	Write down the characteristics of Sanskrit Poetics	71.89
Bharathiya Kavya Mimamse	56162	Learn in details with examples Kannada Poetics	31.02
Bharathiya Kavya Mimamse	56172	Learn in details with examples Tamil Poetics	51.52
Bharathiya Kavya Mimamse	56175	Identify the characteristics of Folk Poetics	61.71
Samshodana Vidhana mathu ganaka jnana	56177	Understand the classification and characteristics of Research methodology	81.75
Samshodana Vidhana mathu ganaka jnana	56180	Learn the characteristics of Thesis	76.78
Samshodana Vidhana mathu ganaka jnana	56206	Learn in details with examples Computer application	93.8
Bhasha vijnana adhyayana- upabhasha vijnana (kannada)	56209	Specify in details with examples Dialects	64.66

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Bhasha vijnana adhyayana-upabhasha vijnana (kannada)	56210	Learn the characteristics of Kannada Dialects	9.08
Bhasha vijnana adhyayana-upabhasha vijnana (kannada)	56213	Identify the classification and characteristics of Dialectology	43.36
Bhasha vijnana adhyayana-upabhasha vijnana (kannada)	56228	Write down the details of Survey of Dialects	59.58
Kannada bhashe mathu sahitya	56235	Learn the details of Kavirajamarga	66.11
Kannada bhashe mathu sahitya	56240	Specify in depth Vachanas' of Basavanna	94.41
Kannada bhashe mathu sahitya	56243	Write down in depth Vachanas' of Akkamahadevi	78.93
Kannada bhashe mathu sahitya	56249	Learn the characteristics of Short Stories	85.18
Adhunika kannada sahitya - patya	56253	Learn the details of Selected Poems	80.36
Adhunika kannada sahitya - patya	56262	Understand in depth Modern Kannada Poetry	91.11
Adhunika kannada sahitya - patya	56263	Identify in depth Kannada Novel	96.71
Adhunika kannada sahitya - patya	56265	Learn in depth Purnachandra Tejaswi	94.08
Bhasha vijnana adhyana - kannada bhasha swaropa - aaida patyagalu	56341	Learn the characteristics of History of Kannada Language	89.66
Bhasha vijnana adhyana - kannada bhasha swaropa - aaida patyagalu	56344	Learn in depth relationship between Liteature and Language	85.87
Bhasha vijnana adhyana - kannada bhasha swaropa - aaida patyagalu	56359	Write down in details with examples the usage of Technology and Kannada Language	81.88
Bhasha vijnana adhyana - kannada bhasha swaropa - aaida patyagalu	56365	Understand the details of Mothertongue	86.02

#### Master of Commerce

Course	COID	CO	Attainment
Accounting Theory	46183	Deliberate the characteristics of structure of accounting theory	21.35
Accounting Theory	46258	Understand in detail with examples conceptual frame work for financial reporting	53.05
Accounting Theory	46313	Identify the characteristics of recognition, measurement and disclosure of elements of financial statements	42.13
Advanced Financial	46772	Understand in depth financial management	31.96



<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Management		concepts and its important functions	
Advanced Financial Management	46786	Specify the detail of Process of evaluation of projects	45.58
Advanced Financial Management	46794	Identify the detail of Capital structure theories	25.8
Business Policy and Environment	46980	Specify in detail with examples Policy formation	63.36
Business Policy and Environment	46988	Understand the detail of Environmental factors that influence business	55.4
Business Policy and Environment	46996	Deliberate the detail of Principles of business ethics	68.72
Business Policy and Environment	47002	Learn in detail with examples Control of MRTP	54.85
Business Research Methods	48190	Learn in detail with examples Objectives and role of business research	56.71
Business Research Methods	48198	Understand in depth Developing research proposal	47.04
Business Research Methods	48202	Learn in detail with examples Questionnaire design	50.26
Business Research Methods	48205	Write down in detail with application Measurement and scaling concepts in Research	49.38
Capital Market Instruments	49178	Learn the characteristics of capital market in india	39.52
Capital Market Instruments	49185	Deliberate the classification and characteristics of various capital market instruments	78.33
Capital Market Instruments	49188	Specify the characteristics of dynamics of global capital markets	48.72
Capital Market Instruments	49203	Understand the classification and characteristics of derivatives in risk management	32.24
Corpoate Tax Law and Planning	49246	Understand in detail with examples incidence of tax on residential status of the company	24.79
Corpoate Tax Law and Planning	49287	Understand the detail of different sources of income for corporate assesses	0.94
Corpoate Tax Law and Planning	49297	Specify in depth impudence of tax planning	7.88
Corpoate Tax Law and Planning	49300	Understand in depth procedure for assessment	10.06
Corporate Governance and Business Ethics	49316	Understand in depth concept of corporate governance	65.12
Corporate Governance and Business Ethics	49334	Deliberate in depth corporate ethics and cultural influences	80.66
Corporate Governance and Business Ethics	49347	Understand the detail of Corporate social responsibility and accountability	71.57
Corporate Governance	49380	Write down the detail of Committees in	82

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and Business Ethics		corporate governance	
Current Trends in Business and Commerce	49407	Specify the detail of reforms in the areas of banking and insurance	66.64
Current Trends in Business and Commerce	49416	Learn in depth trends in inflation, budget, housing, social security, NPA, health	58.36
Current Trends in Business and Commerce	49429	Understand in depth trends in international business and collaboration	54.18
Current Trends in Business and Commerce	49440	Deliberate in depth social, economics and political event in the country	55.68
Entrepreneurial Development	49823	Understand the characteristics of foundations and different dimensions of entrepreneurial development	32.6
Entrepreneurial Development	49862	Write down in detail with examples techniques of project planning, implementation and execution	38.16
Goods and Service tax and customs duty	49911	Understand in detail with examples principles of taxation and incidence process of indirect taxes in market oriented economy	27.85
Goods and Service tax and customs duty	49938	Specify in depth impact of GST on Domestic, National and International trade	25.48
Human Resource Management	49957	Learn in depth significance and management of human resources in organisations	37.94
Human Resource Management	49966	Specify in depth human resource planning	19.43
Human Resource Management	49977	Understand in detail with examples human resource development	3.7
Human Resource Management	49991	Specify the characteristics of reward system	8.78
Human Resource Management	50015	Deliberate in detail with examples 360 degree appraisal	10.61
International Accounting	50054	Understand in depth international accounting issues related to global financial reporting	26.8
International Business	50094	Write down in depth scope of international business along with drivers of globalisation	35.97
International Business	50099	Specify the characteristics of policy and practice skills related to international business	38.09
International Business	50154	Understand the classification and characteristics of international business environment and the issues associated with them	45.49
International Business	50161	Learn the detail of functions of WTO and	53.98

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		MNCs	
Management of Financial Services	50248	Deliberate the detail of trends in financial services in India	77.5
Management of Financial Services	50289	Identify in detail with examples futures of financial services industries	75
Marginal costing and Decision making	50297	Deliberate in depth skill relating to marginal costing	27.59
Marginal costing and Decision making	50344	Deliberate the detail of techniques of controlling cost through standard costing	30.82
Organisational Behaviour	50361	Learn in depth individual behaviour in the organization	40
Organisational Behaviour	50365	Understand in detail with examples foundation of individual behaviour	56.3
Organisational Behaviour	50367	Deliberate the detail of skills in motivation	58.82
Organisational Behaviour	50369	Deliberate in detail with examples individual behaviour in group	45.56
Organisational Behaviour	50374	Identify in detail with examples resolve the conflicts	55.92
Personal Financial Management	50391	Learn the detail of plan personal budget	61.9
Personal Financial Management	50402	Specify the detail of financial planning in the changing personal and financial environment	78.67
Personal Financial Management	50416	Identify in depth various investment alternatives of personal financial planning	70.43
Retail Banking	50435	Understand the detail of functions associated with banking principles and practices	70.38
Retail Banking	50445	Deliberate in detail with examples services provided by banks to individual customers	72.78
Retail Banking	50477	Learn in depth retail banking scenario	77.73
Security Analysis and Portfolio Management	50533	Understand in depth practical aspects of investment analysis	79.01
Security Analysis and Portfolio Management	50552	Deliberate in depth skills to construct investment portfolio	68.2
Security Analysis and Portfolio Management	50571	Identify in depth technical analysis of portfolio management	70.49
Statistics for Business Decisions	50582	Understand the detail of probability theory and sampling	36.58
Statistics for Business Decisions	50586	Learn in detail with examples various methods of theoretical probability distribution	66.2
Statistics for Business Decisions	50589	Specify the detail of different tools in taking business decision	10
Statistics for Business Decisions	50594	Understand the detail of advanced application oriented test	51.83

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Strategic Management	50606	Deliberate the detail of strategy formulation	38.2
Strategic Management	50622	Deliberate in detail with examples implementation of strategy	13.38
Strategic Management	50627	Identify the detail of strategic analysis and choice	57.55
Strategic Management	50637	Specify in depth strategy evaluation	36.31
Supply Chain Management	50680	Understand the detail of fundamentals of supply chain management	34.05
Supply Chain Management	50697	Deliberate the detail of foundational role of logistics management	62.08
Supply Chain Management	50717	Learn in depth channel management	20.94
Supply Chain Management	50726	Identify the detail of staffing the sales team	19.36
Tools and Techniques of control	50740	Specify the detail of cost control and management	31.56
Tools and Techniques of control	50764	Deliberate the detail of cost control and management tools	30.02
Tools and Techniques of control	50831	Identify the classification and characteristics of uniform costing and inter-firm comparison	14.57
Organisational Behaviour	51638	Deliberate in depth Study of individual behaviour and its components	53.13
Global Strategic Management	66022	Deliberate the details of vision mission and purpose	18.75
Global Strategic Management	66026	Write down in details with examples strategic analysis and choice	14.79
Global Strategic Management	66030	Specify in details with examples strategy implementation	22.61

### **MSc in Biochemistry**

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Chemistry and Metabolism of Proteins and Nucleic Acids	47922	Identify the details of amino acids and proteins	68.18
Chemistry and Metabolism of Proteins and Nucleic Acids	47923	Understand in details with application, if applicable, nitrogen metabolism and degradation	83.33
Chemistry and Metabolism of Proteins and Nucleic Acids	47924	Write down the classification and characteristics of synthesis of amino acids and proteins	84.3
Chemistry and Metabolism of Proteins and Nucleic Acids	47925	Write down in details with application, if applicable, metabolism of nucleic acids	85.38
Experiments in Biochemical	47926	Identify the details of	63.3

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Techniques and Enzymology and Seminar		spectrophotometer	
Experiments in Biochemical Techniques and Enzymology and Seminar	47927	Identify the details of specific activity of enzymes	63.72
Experiments in Biochemical Techniques and Enzymology and Seminar	47928	Deliberate the characteristics of gel electrophoresis	62.04
Experiments in Biochemical Techniques and Enzymology and Seminar	47929	Deliberate the characteristics of use of pipettes	60
Enzymology	47930	Write down in details with examples enzyme kinetics	83.02
Enzymology	47931	Identify in details with examples enzyme catalysed reactions	107.23
Enzymology	47932	Identify the characteristics of cooperativity reactions	100
Enzymology	47933	Learn the classification and characteristics of multienzyme complex reactions	59.65
Chemical Principles and Biochemical Reactions	47934	Specify in details with examples chemical principles and bonding	85.64
Chemical Principles and Biochemical Reactions	47935	Write down in depth thermodynamics	77.54
Chemical Principles and Biochemical Reactions	47936	Learn in details with application, if applicable, stereochemistry	46.08
Chemical Principles and Biochemical Reactions	47937	Deliberate in depth secondary metabolites	54.46
Analytical Biochemistry–II	47938	Identify in details with application, if applicable, flow cytometry	75.82
Analytical Biochemistry–II	47940	Specify the characteristics of biosensor technology	75.6
Analytical Biochemistry–II	47941	Understand in details with examples spectroscopy	87.55
Analytical Biochemistry–II	47942	Write down the details of x-ray crystallography	72.91
Chemistry and Metabolism of Carbohydrates and Lipids	47943	Understand the classification and characteristics of chemistry of carbohydrates	80.52
Chemistry and Metabolism of Carbohydrates and Lipids	47944	Deliberate the classification and characteristics of bioenergetics	75
Chemistry and Metabolism of Carbohydrates and Lipids	47945	Write down the characteristics of chemistry of lipids	100
Experiments in Immunology and	47947	Understand in details with examples	50.49

Course	COID	CO	Attainment
Biochemical Estimations and Seminar		antigen antibody reactions	
Experiments in Immunology and Biochemical Estimations and Seminar	47949	Specify in details with application, if applicable, oils and fats estimation	64.33
Experiments in Immunology and Biochemical Estimations and Seminar	47950	Understand in depth acid value principle and determination	61.79
Experiments in Immunology and Biochemical Estimations and Seminar	47951	Identify in details with examples mitosis and meiosis	30.71
Immunology and Microbiology	47952	Identify in details with examples antigens and antibodies	118.14
Immunology and Microbiology	47953	Understand the details of cellular basis of immunity	118.4
Immunology and Microbiology	47955	Identify the classification and characteristics of MHC Complex	62.5
Immunology and Microbiology	47956	Learn in depth basic concepts of microbiology	80.27
Human Physiology and Nutrition	47958	Identify in depth digestive and excretory systems	49.15
Human Physiology and Nutrition	47959	Learn in details with application, if applicable, concepts of nutrition	69.7
Human Physiology and Nutrition	47960	Specify the details of vitamins and minerals	71.91
Cell Biology, Endocrinology and Cell Signaling	47961	Specify in details with examples cellular organization	71.93
Cell Biology, Endocrinology and Cell Signaling	47962	Learn the characteristics of endocrinology	68.61
Cell Biology, Endocrinology and Cell Signaling	47963	Learn in depth cell signaling	55.47
Cell Biology, Endocrinology and Cell Signaling	47964	Write down the characteristics of membrane biology	64.81
Clinical Biochemistry	47965	Identify in details with application, if applicable, specimen collection and analysis	52.79
Clinical Biochemistry	47966	Specify in details with application, if applicable, metabolic disorders	61.07
Clinical Biochemistry	47967	Write down the characteristics of hormonal disorders	60.84
Clinical Biochemistry	47968	Write down in details with application, if applicable, hematology	70.65
Biotechnology	47973	Write down the characteristics of tools of genetic engineering	100.79

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Biotechnology	47974	Learn in depth DNA Cloning	71.42
Biotechnology	47975	Write down the characteristics of Industrial biotechnology and gene therapy	49.82
Biotechnology	47976	Identify in depth biosafety and bioethics	53.91
Molecular Biology and Gene Regulation	47981	Write down the characteristics of DNA characteristics and replication	71.16
Molecular Biology and Gene Regulation	47982	Write down in depth Transcription and regulation	69.14
Molecular Biology and Gene Regulation	47983	Learn in depth translation	41.25
Molecular Biology and Gene Regulation	47985	Identify in depth translational regulation	91.9
Genetics and Genetic Engineering	47986	Deliberate in details with examples gene organization	100
Genetics and Genetic Engineering	47987	Understand the classification and characteristics of population genetics	85.71
Genetics and Genetic Engineering	47988	Deliberate the details of cloning vectors	75
Genetics and Genetic Engineering	47989	Understand the details of applications of genetic engineering	75

#### **MSc in Biotechnology**

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Gene Technology	38575	Helps to learn different molecular tools used in recombinant DNA technology	56.31
Gene Technology	38578	Applications like gene sequencing, variants of PCR, gene therapy, human genome project, molecular markers, microarray	33.04
Cell Signalling & Communication	39011	Understanding the multi-cellularity of organisms	59.09
Cell Signalling & Communication	39014	Role of extracellular matrix in signalling	49.22
Cell Signalling & Communication	39015	various signalling pathways from the cell surface to the nucleus	62.68
Biomolecules and Bioenergetics	46273	Identify the characteristics of composition of living matter,	49.71
Biomolecules and Bioenergetics	46297	Learn in depth composition of living matter, protein structure	43.62
Biomolecules and Bioenergetics	46327	Deliberate in depth Enzyme characterization, enzyme kinetics	25.76
Biomolecules and	46354	Identify in details with application, if	32.61

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Bioenergetics		applicable, carbohydrates and lipids	
Biomolecules and Bioenergetics	46395	Understand the details of bioenergetics	30.11
Bioanalytical Techniques	46461	Write down the classification and characteristics of Buffers, spectroscopy techniques	38.24
Bioanalytical Techniques	46473	Understand in depth chromatography techniques	45.03
Bioanalytical Techniques	46501	Specify in details with examples Electrophoresis	20.57
Bioanalytical Techniques	46512	Write down in details with application, if applicable, centrifugation techniques	69.27
Bioanalytical Techniques	46518	Understand the characteristics of Radioactivity	37.5
Molecular Genetics	49652	Specify in details with application, if applicable, microbial growth and physiology	60.29
Molecular Genetics	49662	Specify in depth microbial interaction and infection	53.3
Molecular Genetics	49671	Understand in details with application, if applicable, microbes and environment	59.56
Molecular Biology	49755	Deliberate in details with examples DNA topology	44.85
Molecular Biology	49756	Deliberate the classification and characteristics of DNA replication	26.35
Molecular Biology	49778	Learn in details with application, if applicable, genetic code	44.12
Molecular Biology	49782	Learn the details of transcription	40.03
Molecular Biology	49785	Deliberate in depth translation	32.17
Molecular Biology	49792	Understand in depth regulation of gene expression	28.49
Food and Environmental Biotechnology	49999	Understand the classification and characteristics of fermented foods	47.05
Food and Environmental Biotechnology	50009	Learn in details with examples enzymes in food industry	37.01
Food and Environmental Biotechnology	50016	Identify in depth functional foods	38.63
Food and Environmental Biotechnology	50023	Deliberate in details with application, if applicable, renewable and non renewable sources	61.03
Food and Environmental Biotechnology	50026	Deliberate the classification and characteristics of bioremediation	60.66
Food and Environmental Biotechnology	50027	Identify in details with examples solid waste management	48.53



<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Biostatistics, Bioinformatics & Bioprocess Technology	50129	Learn the classification and characteristics of media design and industrial cultures	37.41
Biostatistics, Bioinformatics & Bioprocess Technology	50130	Learn in details with examples types of fermenters	48.65
Biostatistics, Bioinformatics & Bioprocess Technology	50134	Specify the characteristics of microbial growth kinetics	77.21
Applied Biotechnology	50147	Learn in depth enzyme biotechnology	70.7
Applied Biotechnology	50156	Specify in depth biosensors	28.15
Applied Biotechnology	50185	Write down the details of microbial pesticides and biofertilizers	79.84
Plant Biotechnology	50543	Understand the characteristics of cell and tissue culture technology	62.71
Plant Biotechnology	50549	Write down the classification and characteristics of micropropagation	5
Plant Biotechnology	50555	Write down the details of protoplast technology	32.34
Plant Biotechnology	50557	Understand in details with application, if applicable, seed health technology	36.25
Plant Biotechnology	50588	Specify in details with application, if applicable, transgenics	28.55
Plant Biotechnology	50590	Write down the characteristics of intellectual property rights	56.41
Plant Biotechnology	50595	Learn the details of molecular farming	49.11
Animal Biotechnology	50635	Understand in depth culture of animal cells	36.6
Animal Biotechnology	50745	Deliberate the characteristics of culturing of specialized cells	26.27
Animal Biotechnology	50776	Write down the characteristics of invitro fertilization and embryo transfer	80.07
Molecular Genetics	57868	Learn the characteristics of human genetics	51.8
Molecular Genetics	57870	Specify the characteristics of Development of organism	35.91
Molecular Genetics	61876	Specify in details with application, if applicable, microbial growth and physiology	34.38
Molecular Genetics	61879	Learn the characteristics of human genetics	50.52
Molecular Genetics	61880	Specify the characteristics of Development of organism	41.03
Immunology and Immunotechnology	61881	Understand the characteristics of immune system	36.81
Immunology and Immunotechnology	61884	Specify in depth immune responses and translation	64.53
Immunology and Immunotechnology	61886	Understand in depth lymphokines	37.13

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Immunology and Immunotechnology	61887	Understand the classification and characteristics of vaccines	0
Microbiology	62146	Write down the characteristics of Microbial classification	29.28
Microbiology	62147	Specify in depth Microbial growth	54.12
Microbiology	62148	Deliberate the characteristics of Microbial infection	20.46
Microbiology	62149	Specify the classification and characteristics of Microbes and environment	13.76

### **MSc in Botany**

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Algae, Bryophytes, Pteridophytes and Gymnosperms	50136	Understand the details of diversity, distribution, pigmentation and life cycle of algae	35.26
Algae, Bryophytes, Pteridophytes and Gymnosperms	50222	Deliberate in depth of Bryophytes life cycle, classification, phylogeny and Economic importance	30.79
Algae, Bryophytes, Pteridophytes and Gymnosperms	50282	Understand the details of Pteridophytes life cycle, classification, economic importance and anatomy	50.06
Algae, Bryophytes, Pteridophytes and Gymnosperms	50338	Write down in details with examples Gymnosperms history, reproduction and interrelationship	15
Economic Botany	50725	Specify the details of cereals, millets, pulses, oil yielding plants and study of horticultural plants and floriculture	47.92
Economic Botany	50752	Deliberate the characteristics of study of sugar yielding plants, spices and condiments	34.5
Economic Botany	50815	Understand the importance of medicinal plant	47.94
Evolutionary Biology	50953	Learn in depth Nature of evolution and history	30.23
Evolutionary Biology	50971	Identify the development of evolutionary thoughts and its theory	43.97
Evolutionary Biology	51004	Specify the characteristics of variations, speciation and details of polyploidy	28.34
Major Project	51156	Learn the details of literature survey and methodology in research	74
Microbiology and Plant Pathology	51307	Learn the classification and characteristics of viruses, viroids, prions and diseases of it	71.14
Microbiology and Plant Pathology	51378	Deliberate in details with examples of Bacteria, archeabacteria, actinomycetes and mycoplasma and its economic importance	70.1

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Microbiology and Plant Pathology	51411	Specify the Fungal diversity, life cycle and economic importance of fungi	75.71
Microbiology and Plant Pathology	51471	Understand in details of etiology, epidemiology and management of plant disease	78.47
Molecular Biology	51554	Identify the characteristics of Genetic materials and its replication	39.58
Molecular Biology	51569	Learn the details of Molecular basis of Mutation, repair and recombination	42.41
Molecular Biology	51580	Deliberate the details of RNA formation, processing of RNA and post-RNA	23
Molecular Biology	51602	Understand in depth of Gene regulation in prokaryotes and eukaryotes	36.59
Phycology	51723	Specify in depth of thallus organization and pigmentation in algae	79.91
Phycology	51730	Understand the details of life cycles and mass cultivation of algae	81.05
Phycology	51733	Deliberate in depth about bloom forming algae and diatomaceous earth	81.25
Phycology	51767	Specify the details of Algal community and diverse environment	76.43
Plant Anatomy and Histochemistry	51774	Learn in details of primary vegetative body of the plants	86.4
Plant Anatomy and Histochemistry	51778	Deliberate in details of differentiation in vascular tissues and study of apical meristems in shoot and root	86.43
Plant Anatomy and Histochemistry	51787	Deliberate the characteristics of secondary growth	84.52
Plant Anatomy and Histochemistry	51789	Understand the details of Plant histochemistry	93.61
Plant Biotechnology	51802	Understand in depth about plant tissue culture and its techniques	83.2
Plant Biotechnology	51812	Specify in details about haploid production and its significance	90.49
Plant Biotechnology	51815	Understand the details of Suspension culture and its techniques	89.58
Plant Biotechnology	51822	Learn the details of Biofertilizers, extraction of biofuels and bioremediation	62
Plant Breeding and Evolutionary Biology	51829	Learn in depth about plant breeding methods and techniques	65.88
Plant Breeding and Evolutionary Biology	51839	Understand the details of breeding for specific purposes	80.97
Plant Breeding and Evolutionary Biology	51842	Learn the details of Nature of evolution	74.78

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Plant Breeding and Evolutionary Biology	51847	Identify the characteristics of variation and speciation	68.46
Plant Pathology	52499	Learn the details of the Concept, causative agents and disease cycle of plant pathogens	82.42
Plant Pathology	52549	Deliberate the details of Management of plant diseases	83
Plant Pathology	52569	Identify in details with examples of diseases in crop plants	69.97
Plant Physiology and Biochemistry	55075	Learn in details with application of Chromatography, Spectroscopy, Electrophoresis and Centrifugation	73.04
Plant Physiology and Biochemistry	55092	Understand in depth Solute transport and photosynthesis in plants	65.33
Plant Physiology and Biochemistry	55103	Specify the details of Nitrogen metabolism, proteins and enzymes	81
Plant Physiology and Biochemistry	55130	Understand in depth Stress physiology	83.09
Plant Propagation Techniques	55233	Learn the details of importance of plant propagation	72.81
Plant Propagation Techniques	55239	Understand in depth about types of vegetative propagation	83.13
Plant Propagation Techniques	55253	Learn the techniques of budding and layering	85.23
Plant Propagation Techniques	55266	Deliberate in details with examples of micropropagation in forestry and horticulture plants	80.91
Reproductive Biology of Angiosperms and Plant Morphogenesis	55305	Learn the details of reproductive biology of angiosperms	90.83
Reproductive Biology of Angiosperms and Plant Morphogenesis	55335	Specify in details with examples about Megasporogenesis, fertilization, endosperm and embryo	94.66
Reproductive Biology of Angiosperms and Plant Morphogenesis	55358	Specify the details of Models and concepts of plant morphogenesis	72.36
Reproductive Biology of Angiosperms and Plant Morphogenesis	55378	Understand in details with examples of plant growth and development, photomorphogenesis	86.11
Taxonomy of Angiosperms and Economic Botany	56029	Understand the principles and applications of Taxonomy of angiosperms	47.11
Taxonomy of Angiosperms and Economic Botany	56052	Specify the details of major system of classification of angiosperms	61.97

Course	COID	CO	Attainment
Taxonomy of Angiosperms and Economic Botany	56064	Deliberate in details with examples Dicot and monocot family features	55.15
Taxonomy of Angiosperms and Economic Botany	56069	Specify in details with examples about significance of economic products	73.99
Economic Botany	62601	Deliberate the classification and characteristics of fibre and timber yielding plants	25.45

### MSc in Chemistry

Course	COID	CO	Attainment
Advanced Coordination Chemistry	47143	Learn in depth Preparation of coordination compounds, Stability of coordination compounds, Geometries of metal complexes, Determination of stability constants, Crystal field theory	55.38
Advanced Coordination Chemistry	47150	Understand in details with examples Molecular Orbital Theory, Electronic spectra, Magnetic properties	30.19
Advanced Coordination Chemistry	47159	Learn in details with examples Reaction and Mechanisms, Substitution reactions	57.2
Advanced Coordination Chemistry	47165	Identify in details with examples Inner-sphere mechanism and outer-sphere mechanism	53.98
Advanced Physical Chemistry	47184	Learn in depth Photochemistry, Mechanism of absorption and emission of radiation, Photophysical kinetics	48
Bioinorganic Chemistry	47414	Understand in details with examples Structural and molecular biology, Bioenergetics, Sodium and potassium-channels and pumps, Biochemistry of calcium, Vitamin B12 and Coenzymes	30
Bioinorganic Chemistry	47426	Understand the characteristics of Electron transport proteins and redox enzymes, Non-redox metalloenzymes	42.65
Bioinorganic Chemistry	47438	Specify the classification and characteristics of Identify the details of Metal ion transport and storage, Oxygen transport and oxygen uptake proteins	15.3
Bioinorganic Chemistry	47447	Learn the details of Metals in medicine, Disease due to metal deficiency and treatment, Metal complexes as drugs and therapeutic agents, Treatment of toxicity	32.09
Fundamentals of Chemical	47457	Learn in depth Language of analytical chemistry, Errors and treatment of analytical data	39.87

Course	COID	CO	Attainment
Analysis			
Fundamentals of Chemical Analysis	47470	Specify in depth Titrimetric analysis, Acid-base titrations in non-aqueous media, Precipitation titrations	21.73
Fundamentals of Chemical Analysis	47494	Learn in depth Complexometric titrations, Redox titrations, Obtaining and preparing samples for analysis	29.02
Inorganic Chemistry-I	48345	Understand the details of Molecular symmetry and group theory and applications, Representation of groups	38.16
Inorganic Chemistry-I	48356	Learn in details with examples VSEPR model , Non-aqueous solvents, Electron deficient compounds, Lanthanides & Actinides	41.63
Inorganic Chemistry-I	48360	Understand the classification and characteristics of Organometallics of transition metals	20.79
Inorganic Chemistry-I	48367	Specify in depth Ferrocene and ruthenocene, Complexes containing alkene, alkyne, arene and allyl ligands	13.13
Instrumental Methods of Analysis	48402	Learn the details of Electro analytical methods, Electrogravimetric analysis, Coulometric and Amperometric, Voltammetry	29.65
Instrumental Methods of Analysis	48415	Understand in details with examples Thermal method of analysis, Thermogravimetric analysis, Differential thermal analysis , Differential scanning calorimetry	29.64
Instrumental Methods of Analysis	48422	Learn in details with examples Enthalpimetric analysis, Microscopic analysis	38.49
Organic Chemistry-I	49763	Learn in details with examples Stereoisomerism, Stereoselectivity, Optical, Geometrical, isomerism and Conformational isomerism	34.54
Organic Chemistry-I	49791	Understand in details with examples Molecular rearrangements, Carbon to carbon migration, Carbon to nitrogen migration	27.42
Organic Chemistry-I	49796	Learn in details with examples Miscellaneous rearrangements	33.24
Organic Chemistry-I	49802	Learn the classification and characteristics of Heterocyclic chemistry	30.84
Organic Chemistry-II	50609	Understand in depth Reductions and Oxidations	30.38
Organic Chemistry-II	50614	Learn in depth Reagents in organic synthesis, Green Synthesis	32.02
Organic Chemistry-II	50628	Understand in details with examples Photochemistry and concerted reactions,Electrocyclic reactions	37.99
Organic Chemistry-II	50648	Learn the details of Cycloaddition reactions, dipolar cycloadditions, cycloaddition reactions, Sigmatropic	56.06

Course	COID	CO	Attainment
		reactions	
Physical Chemistry - II	50689	Learn in depth Quantum Chemistry	45.92
Physical Chemistry - II	50698	Learn in details with examples Microwave and Vibration spectroscopy	23.23
Physical Chemistry - II	50709	Understand in depth Raman and UV-Visible spectroscopy	23.6
Physical Chemistry - II	50728	Learn the classification and characteristics of NQR, Mössbauer, ESR spectroscopy	20
Physical Chemistry-I	51245	Learn in depth Concepts of entropy and free energy, Partial molar properties	33.89
Physical Chemistry-I	51250	Learn the details of Fugacity, Statistical thermodynamics	22.92
Physical Chemistry-I	51272	Learn the details of Chemical Kinetics, Kinetics of reactions in solution, Linear free energy, Enzyme kinetics	24.58
Physical Chemistry-I	51303	Learn the characteristics of Electrochemistry, Energetics of cell reactions, Corrosion	38.15
Separation Techniques	51645	Learn the details of Solvent extraction, Extraction systems, Solid Phase Extraction , Chromatography	35.22
Separation Techniques	51652	Learn the classification and characteristics of Gas chromatography, HPLC, Ion exchange, Size-exclusion chromatography	33.38
Separation Techniques	51670	Learn in details with examples Thin layer, Affinity chromatography	11.11
Separation Techniques	51682	Understand the details of Supercritical fluid extraction and Electrophoretic methods	26.95
Spectroscopy	51691	Understand in details with examples UV-Visible and IR spectroscopy	20.7
Spectroscopy	51705	Understand in depth Nuclear magnetic resonance spectroscopy, Chemical shift	26.64
Spectroscopy	51710	Learn the characteristics of <sup>13</sup> C-NMR spectroscopy	22.22
Spectroscopy	51714	Understand the details of Mass spectroscopy and problems	11.86

### MSc in Computer Science

Course	COID	CO	Attainment
Data Mining	43841	Identify in details with examples Frequent pattern generation	60.66
Graph Theory	45295	Identify the characteristics of Graph Isomorphism	67.14
Graph Theory	45360	Understand in details with examples Planar Graph	59.29

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Graph Theory	45367	Write down the classification and characteristics of Euler's graph	57.78
Graph Theory	45373	Write down in depth Hamiltonian path	65.69
Graph Theory	45579	Write down the details of weighted trees	59.42
System Software	46371	Specify the classification and characteristics of assembler	76.26
System Software	46423	Write down in depth pass1,pass2 assemblers	76.92
System Software	46430	Understand the characteristics of loaders	75.89
System Software	46442	Deliberate the classification and characteristics of linkers	75
System Software	46463	Identify in details with examples lex and yacc	79.03
DBMS	46598	Learn the classification and characteristics of entity sets	56.92
DBMS	46611	Identify in details with examples enhanced entity relationship model	62.52
DBMS	46628	Understand the classification and characteristics of data model	67.83
DBMS	46649	Learn in depth normalisation	68.92
Computer Fundamentals	46805	Identify the classification and characteristics of introduction to computers	82.73
Computer Fundamentals	46810	Identify in details with examples input devices	76.44
Computer Fundamentals	46814	Learn in details with examples application software	73.48
Computer Fundamentals	46828	Deliberate in depth peripheral devices	61.71
Computer Fundamentals	46831	Identify the details of programming languages	73.03
Computer Fundamentals	46835	Learn the characteristics of nudi	62.35
Computer Fundamentals	46840	Deliberate in details with examples word document	61.89
.Net Technologies	46887	Write down the details of architecture of .net	72.73
.Net Technologies	46893	Deliberate the classification and characteristics of c# preprocessors directives	80.48
.Net Technologies	46895	Write down in details with application, if applicable, scope resolution	74.66
.Net Technologies	46899	Identify in depth jagged arrays	66.28
.Net Technologies	46906	Identify the details of encapsulation	81.37
.Net Technologies	46911	Deliberate the characteristics of polymorphism	71.01
Analysis and Design of Algorithms	48261	Learn in details with examples space complexity	66.33
Analysis and Design of Algorithms	48262	Identify the classification and characteristics of recursive algorithms	83.42
Analysis and Design of Algorithms	48263	Write down the details of nonrecursive algorithms	69.27



<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Analysis and Design of Algorithms	48272	Write down the details of divide and conquer	71.11
Analysis and Design of Algorithms	48300	Write down the characteristics of 8 queens problem using backtracking	42.14
Computer Networks	48332	Learn the classification and characteristics of network hardware	68.62
Computer Networks	48357	Understand the details of service primitives	80.65
Computer Networks	48372	Specify the characteristics of wireless transmission	75.45
Computer Networks	48382	Learn the classification and characteristics of medium access control sublayer	73.97
Computer Networks	48426	Understand in depth domain name system	61
Java Programming	48449	Deliberate the characteristics of data types	79.06
Java Programming	48462	Specify the details of packages	78.81
Java Programming	48463	Write down the details of exception handling	75.56
Java Programming	48473	Specify in depth event handling	69.37
Java Programming	48491	Understand in details with examples java servlet	72.28
Java Programming	48497	Understand in details with examples JDBC objects	61.93
Software Engineering	48501	Deliberate the details of software	58.97
Software Engineering	48517	Deliberate in depth software development process models	73.93
Software Engineering	48544	Deliberate the characteristics of problem analysis	71.16
Software Engineering	48550	Learn the details of risk management	72.17
Software Engineering	48562	Understand in details with examples software metrics	56.67
Software Engineering	48565	Write down the details of testing fundamentals	69.38
Discrete Mathematics	48577	Deliberate in details with examples set theory	73.75
Discrete Mathematics	48580	Specify the details of concept of probability	53.45
Discrete Mathematics	48592	Write down the details of propositions	59.3
Discrete Mathematics	48597	Learn in depth duality	61.67
Discrete Mathematics	48613	Specify the classification and characteristics of relations	70.18
Discrete Mathematics	48676	Learn in details with examples principles of inclusion and exclusion	73.54
Discrete Mathematics	48681	Write down in depth pigeonhole principle	77.6
Data Mining	48689	Learn the details of data objects and attributes	56.58
Data Mining	48697	Identify the characteristics of data visualisation	71.11
Data Structures and Algorithms	49019	Learn the details of storage structure	84

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Data Structures and Algorithms	49021	Specify the classification and characteristics of primitive data structure	58.11
Data Structures and Algorithms	49027	Specify in details with examples sparse matrix representation	50
Data Structures and Algorithms	49039	Specify in details with examples queue data structure	62.22
Data Structures and Algorithms	49062	Specify the classification and characteristics of binary tree representation	68.81
Data Structures and Algorithms	49068	Learn the details of hash tables	84.38
Theory of Languages	49077	Understand the details of finite automata	72.5
Theory of Languages	49170	Identify the details of regular languages	60.69
Theory of Languages	49175	Learn in depth context free grammars	59.38
Theory of Languages	49179	Learn the details of parse trees	57.79
Theory of Languages	49181	Write down in details with examples pushdown automata	47.78
Theory of Languages	49184	Understand the characteristics of deterministic pushdown automata	68.4
Theory of Languages	49332	Write down the classification and characteristics of turing machines	85.9
Computer Graphics	49922	Learn the characteristics of computer graphics	73.12
Computer Graphics	49929	Understand the classification and characteristics of computer graphics	50.9
Computer Graphics	49949	Write down the characteristics of 3D transformations	61.05
Computer Graphics	49951	Specify in depth 3D transformations	68.62
Data Mining	56362	Specify the details of Clustering of Data	55.59
Data Mining	56370	Specify in depth KDD process	59.38

### **MSc in Mathematics**

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Algebra I	57412	Write down the characteristics of congruence	72.54
Commutative Algebra	57467	Understand in depth commutative ring	58.7
Commutative Algebra	57470	Deliberate in details with examples local rings	82.32
Commutative Algebra	57471	Understand the characteristics of nil radical and Jacobson radical	84.41
Commutative Algebra	57473	Learn the details of The prime spectrum of a ring	76.18
Commutative Algebra	57475	Specify the characteristics of Noetherian and Artinian module	78.77

Course	COID	CO	Attainment
Commutative Algebra	57476	Identify in details with examples Free modules, Finitely generated modules, Simple modules, Exact sequences of modules	88.81
Linear Algebra	57767	Learn in depth Vector Spaces	55.74
Algebra I	57815	Write down the details of reciprocity law	64.07
Algebra I	57822	Specify in details with examples groups	90.69
Algebra I	57835	Specify in depth Isomorphism	67.12
Algebra I	57840	Learn in depth Sylows theorems	79.55
Algebra I	57847	Deliberate in details with application, if applicable, Permutation groups	83.5
Linear Algebra	57867	Understand the classification and characteristics of Determinants	63.64
Algebra II	57872	Write down the classification and characteristics of Rings	80.77
Algebra II	57873	Understand the characteristics of Rings	75.74
Real Analysis II	57878	Deliberate in depth Finite, countable and uncountable sets	64.69
Algebra II	57884	Learn the details of Euclidean and Principal Ideal rings	66.29
Real Analysis II	57889	Understand in details with examples Continuity	61.46
Algebra II	57891	Understand in details with examples Fields	78.23
Real Analysis II	57895	Deliberate the details of Differentiability, mean value theorems	81.33
Algebra II	57905	Specify the classification and characteristics of Separable and Perfect fields	73.92
Algebra II	57906	Understand the characteristics of Separable and Perfect fields	58.44
Real Analysis II	57913	Learn the details of The Riemann-Stieltje's integral	68.5
Ordinary and Partial Differential Equations	57943	Deliberate the details of Linear second order equations	82.34
Ordinary and Partial Differential Equations	57947	Learn the characteristics of separations and comparison theorems	80.8
Ordinary and Partial Differential Equations	57956	Specify in details with application, if applicable, Power series solutions	70.82
Ordinary and Partial Differential Equations	57958	Learn in depth Partial differential equations	95.24
Real Analysis III	57968	Deliberate in details with examples Sequences and series of functions	72.55
Ordinary and Partial	57974	Learn in details with application, if applicable,	66.9

Course	COID	CO	Attainment
Differential Equations		separations of variables	
Ordinary and Partial Differential Equations	57990	Deliberate the characteristics of Sturm Liouville system, Greens functions method	82.56
Real Analysis III	58024	Understand the characteristics of Uniform convergence and differentiation	86.62
Elements of Functional Analysis	58026	Write down in details with examples Banach's contraction mapping theorem and applications	78.05
Elements of Functional Analysis	58036	Specify in details with examples Baire' category theorem, Ascoli - Arzela theorem.	73.68
Elements of Functional Analysis	58039	Understand the characteristics of The Hahn – Banach extension theorem	76.4
Elements of Functional Analysis	58056	Deliberate in details with application, if applicable, Open mapping and Closed Graph theorems	79.05
Elements of Functional Analysis	58057	Learn in details with application, if applicable, Hilbert spaces-	83.39
Theory of Numbers	58074	Write down in details with examples Fermat and Mersenne numbers. Farey series	76.16
Theory of Numbers	58077	Deliberate the classification and characteristics of Irrational numbers-Irrationality of mth root of N, e and $\pi$ .	64.71
Theory of Numbers	58080	Understand in details with application, if applicable, Arithmetical Functions	96.89
Theory of Numbers	58085	Learn the details of , Representation of a number by two or four squares, Definition $g(k)$ and $G(k)$ ,	92.15
Theory of Numbers	58088	Deliberate in details with application, if applicable, Continued fractions	88.65
Theory of Partitions	58108	Learn the characteristics of Partitions	89.45
Theory of Partitions	58112	Learn in details with application, if applicable, , Jacobi's triple product identity and its applications.	85.2
Theory of Partitions	58117	Understand the characteristics of $1\psi 1$ - summation formula and its applications	75
Theory of Partitions	58121	Write down in details with application, if applicable, , Euler's pentagonal number theorem,	82.23
Theory of Partitions	58123	Understand the details of Congruence properties of partition function, the Rogers - Ramanujan Identities	83.33
Theory of Partitions	58128	Identify in details with application, if applicable, Elementary series	76.33
Real Analysis I	58195	Understand the characteristics of extended real number system, the n-dimensional Euclidean space	60.11
Real Analysis I	58199	Identify the details of the binomial inequality	54.29
Real Analysis I	58209	Specify in details with application, if applicable,	59.3

Course	COID	CO	Attainment
		Cauchy's, Holder's inequality and Minkowski's inequality	
Real Analysis I	58212	Learn the characteristics of sequences, convergent sequences	59.49
Real Analysis I	58217	Write down the details of Series of real numbers, series of non-negative terms	61.11
Real Analysis I	58223	Understand in details with examples Multiplications of series	71.17
Real Analysis I	58233	Learn in details with examples re-arrangements. Double series, infinite products.	65.46
Complex Analysis I	58256	Understand the characteristics of Represent complex numbers algebraically and geometrically	46.15
Complex Analysis I	58284	Deliberate the details of Riemann sphere and Stereographic projection	41.35
Complex Analysis I	58286	Understand the classification and characteristics of Lines, Circles	55.56
Linear Algebra	58287	Learn in details with examples Inner Products and Norms	73.51
Complex Analysis I	58288	Learn the characteristics of Cauchy-Riemann equations	60.37
Complex Analysis I	58291	Identify the characteristics of Harmonic functions	50
Linear Algebra	58292	Deliberate the details of normal and Self-Adjoint Operators	74.53
Complex Analysis I	58294	Learn in depth sequences, series, uniform convergence of power series, Abel's limit theorem	50
Complex Analysis I	58297	Understand the classification and characteristics of The elementary functions	69.09
Complex Analysis I	58299	Learn in details with examples Linear fractional transformations, Cross-ratio, Symmetry	82.58
Complex Analysis I	58314	Identify the details of Line integrals, Rectifiable arcs	76.19
Complex Analysis I	58316	Understand in details with application, if applicable, Cauchy's theorems	57.14
Complex Analysis I	58317	Identify the classification and characteristics of Local properties of analytic functions	55
Measure and Integration	58322	Understand in details with examples Lebesgue measure, outer measure	82.88
Measure and Integration	58328	Learn the characteristics of measurable sets	88
Measure and Integration	58337	Identify the characteristics of measurable functions	77.59
Measure and Integration	58339	Deliberate in details with examples Integration of measurable functions	81.72
Measure and	58343	Learn in details with examples , functions of	77.96

Course	COID	CO	Attainment
Integration		bounded variation, differentiation of an integral, absolute continuity	
Measure and Integration	58348	Understand in depth measure theory	77.78
Real Analysis III	58363	Identify in details with examples Improper integrals and their convergence	82.43
Complex Analysis II	58366	Understand in details with application, if applicable, The residue theorem, argument principle	69.67
Complex Analysis II	58375	Learn in depth Evaluation of definite integrals	36.25
Complex Analysis II	58384	Specify in details with application, if applicable, Harmonic functions – Definition and basic properties, mean value property	54.69
Real Analysis III	58387	Understand in depth Functions of several variables	80.45
Complex Analysis II	58388	Learn the details of Poisson's formula, Schwarz's theorem, reflection principle.	71.13
Complex Analysis II	58391	Understand the classification and characteristics of Power series expansions	75
Complex Analysis II	58394	Write down in depth The Weierstrass theorem	58.66
Real Analysis III	58395	Specify the details of Taylor's theorem, the Maxima and Minima	87.5
Complex Analysis II	58396	Learn in details with examples Partial fractions, Mittag - Leffer's theorem	83.93
Complex Analysis II	58397	Specify the classification and characteristics of Infinite products, Canonical products	93.75
Complex Analysis II	58400	Understand the characteristics of The Gamma and Beta functions, Sterling's formula	62.5
Complex Analysis II	58408	Learn the characteristics of Jensen's formula, Hadamard's theorem	69.32
Graph Theory	58445	Learn in depth Types of Graphs, Walk and connectedness	81.59
Graph Theory	58450	Learn the classification and characteristics of degrees, Extremal graphs	80.44
Graph Theory	58459	Specify in depth Cutpoints, Bridges	80.07
Graph Theory	58460	Write down in details with examples Blocks, Block graphs and cutpoints	63.49
Graph Theory	58463	Specify the characteristics of Characterization of trees, Centers and Centroids, Spanning Tree.	75
Graph Theory	58466	Identify the details of Connectivity and line connectivity	87.52
Topology I	58518	Deliberate in details with application, if applicable, topological spaces, basis for a topology, the order topology	73.41
Topology I	58522	Write down in depth the product topology on $X \times X$ , the subspace topology	86.36

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Topology I	58523	Deliberate the characteristics of Closed sets and limit points	36.25
Topology I	58524	Learn in depth continuous functions	75
Topology I	58525	Learn in details with examples the product topology, the metric topology, the quotient topology	37.5
Topology I	58531	Specify the details of connected spaces, connected sets on the real line	76.7
Topology I	58540	Deliberate the classification and characteristics of compact spaces, compact sets on the line	78.66
Topology I	58549	Learn the characteristics of limit point compactness, local compactness.	73.34
Topology-II	58556	Deliberate the classification and characteristics of the countability axioms, the separation axioms	57.53
Topology-II	58558	Specify in depth normality of a compact Hausdorff space	70.74
Topology-II	58561	Understand in details with application, if applicable, Urysohn's lemma, Tietze's extension theorem, Urysohn's metrization theorem	70.83
Topology-II	58564	Deliberate the details of Partitions of unity	76.92
Topology-II	58570	Learn the classification and characteristics of Tychonoff's theorem on the product of compact spaces	60.77
Topology-II	58571	Understand in details with examples Local finiteness, Paracompactness	70.37
Topology-II	58572	Learn in depth Normality of a paracompact space	88.89
Topology-II	58573	Deliberate the characteristics of The Fundamental group and the Fundamental group of a circle	75.17
Topology-II	58575	Understand in details with examples , The Fundamental group of the punctured plane, Essential and Inessential Maps, The Fundamental Theorem of Algebra	73.33
Basic Mathematics	58584	Specify the characteristics of Mathematical Logic: Connection – Normal Forms	81.35
Basic Mathematics	58590	Deliberate the classification and characteristics of Operations on Sets – Basic Set Identities	88.77
Basic Mathematics	58594	Understand the classification and characteristics of Relations and Orderings, Functions	41.86
Basic Mathematics	58596	Understand the classification and characteristics of formulation of LP problems, Graphical solution of LP problems	75.26
Basic Mathematics	58597	Specify the characteristics of Simplex, revised simplex methods and Dual simplex, Game theory	52.63
Basic Mathematics	58598	Deliberate the characteristics of Basic Concepts of	51.39

Course	COID	CO	Attainment
		Graph Theory- Paths – Connectedness	
Advanced Graph Theory	62714	Deliberate the details of Traversability - Eulerian graphs, Hamiltonian graph	82.95
Advanced Graph Theory	62715	Learn in details with examples Line Graphs	87.27
Advanced Graph Theory	62717	Understand in details with examples Factorization	73
Advanced Graph Theory	62718	Learn the classification and characteristics of Plane and planar graphs	84.28
Advanced Graph Theory	62720	Learn in details with examples Nonplanar graphs, Outerplanar graphs	89.13
Advanced Graph Theory	62721	Deliberate the details of Colorability	80.55
Advanced Graph Theory	62722	Write down the characteristics of Matrices	65.08
Advanced Graph Theory	62728	Deliberate the details of Domination Theory	70.1

### MSc in Physics

Course	COID	CO	Attainment
Classical Mechanics	43539	After completing this course, the student will be able to: Solve the Newton equations for simple configurations.	52.38
Classical Mechanics	43540	Use conservation to solve dynamics problems.	56.84
Classical Mechanics	43542	Derive and solve the equations of motions for systems subject to the Principle of Least Action.	61.46
Mathematical Methods of Physics-1	43547	Familiar with Tensors, algebra of tensors and Tensor Calculus and its applications in applied sciences and engineering;	46.75
Mathematical Methods of Physics-1	43548	Able to solve abstract mathematical problems, recognize real-world problems and to formulate mathematical models for such problems.	48.26
Mathematical Methods of Physics-1	43550	Familiar with generating function of the polynomials	40.56
Mathematical Methods of Physics-1	43551	Able to Use Legendre polynomials, associated Legendre polynomials in Physics	83.77
Mathematical Methods of Physics-1	43552	Able to Use Bessel functions, Spherical harmonics in Physics	73.94
Mathematical Methods of Physics-2	43554	After completing this course, the student will be able to: Explain the concepts of Linear vector space.	73.38



Course	COID	CO	Attainment
Mathematical Methods of Physics-2	43558	Explain concepts of eigenvalues and eigenvectors of a matrix.	60.47
Mathematical Methods of Physics-2	43559	Use matrices and determinants to solve sets of simultaneous linear equations	61.57
Mathematical Methods of Physics-2	43560	Understand the concepts of inner product, orthogonality and orthonormality	52.34
Mathematical Methods of Physics-2	43562	Recognize real-world problems and formulation of mathematical models of such problems.	37.94
Classical Electrodynamics, Plasma Physics & Optics	43570	Formulate and solve electromagnetic problems with the help of electrodynamic potentials and super potentials	53.89
Classical Electrodynamics, Plasma Physics & Optics	43572	Make a detailed account for gauge transformations and their use	64.09
Classical Electrodynamics, Plasma Physics & Optics	43577	Formulate self-consistent models for the interaction between matter and Electromagnetic fields.	55.61
Classical Electrodynamics, Plasma Physics & Optics	43578	Covariant formulation of electrodynamics, Lagrange formalism	25.76
Classical Electrodynamics, Plasma Physics & Optics	43579	Apply the concept of Special theory of relativity for relativistic electrodynamics.	41.82
Continuum Mechanics and Relativity	43684	After completing this course, the student will be able to learn: Internal response of materials to external loading	87.66
Continuum Mechanics and Relativity	43686	Unique connections between solid and fluid mechanics.	92.74
Continuum Mechanics and Relativity	43689	Minkowski space-time	53.44
Continuum Mechanics and Relativity	43690	The true nature of Newtonian mechanics and Lorentz Transformations	59.03
Continuum Mechanics and Relativity	43691	The concept of constant relative motion of different bodies in different frames	46.94
Thermal Physics	43697	After the completion of the course, Student will be: Familiar with Basic concepts of Thermodynamics	81.13
Thermal Physics	43699	Mode of heat transfer, the amount of heat energy transferred and conservation of mass and energy equations.	81.95
Thermal Physics	43700	Second law of thermodynamics; thermal efficiency and coefficient of performance.	57.27
Thermal Physics	43701	concept of ensemble, phase space and the conservation of phase-space density	85.44

Course	COID	CO	Attainment
		(Liouville's theorem)	
Quantum Mechanics - I	43707	After the completion of the course Student will be familiar with: The Basic concepts and mathematical foundations of quantum mechanics	69.12
Quantum Mechanics - I	43708	Solutions to the Schrödinger equation for simple potentials.	85.06
Quantum Mechanics - I	43709	The effect of symmetries in quantum mechanics	44.71
Quantum Mechanics - I	43710	The significance of wave function, normalization, uncertainty Principle	66.84
Quantum Mechanics - I	43711	The Physical significance of eigen functions and eigen vectors	66.76
Spectroscopy and Fourier Optics	43718	Compare and contrast atomic and molecular spectra.	83.69
Spectroscopy and Fourier Optics	43720	Understand the molecular absorption and scatter from particulate matter in atomic absorption spectroscopy	167.87
Quantum Mechanics-II	43753	Understand the significance of wave function, normalization, uncertainty principle, Physical significance of eigen functions and eigenvectors	71.53
Quantum Mechanics-II	43757	The time-independent perturbation theory: Non degenerate Perturbation Theory	47.25
Quantum Mechanics-II	43758	Degenerate Perturbation Theory; Fine Structure of Hydrogen, The Zeeman Effect.	83.04
Quantum Mechanics-II	43761	The time-dependent perturbation theory	77.78
Quantum Mechanics-II	43765	Relativistic quantum mechanics using Klein-Gordon equation and Dirac equation	65.08
Condensed Matter Physics	43767	Understand the principles of crystal structure of elements. Instrumentation for crystal studies	66
Condensed Matter Physics	43768	Evaluation of crystals data and their suitability for single crystal structure analysis.	82.46
Condensed Matter Physics	43771	Understand the Structural, Magnetic, Electrical and Semiconducting Properties	42.17
Nuclear and Particle Physics	43776	Quantitatively estimates for nuclear phenomena	64
Nuclear and Particle Physics	43779	Familiarise with theoretical and experiments used in particle physics.	64.25
Solid State Physics - I	43799	Learn Dielectrics; Properties and classification	96.44
Solid State Physics - I	43800	Learn Ferroelectrics; Properties and classification	45.14
Solid State Physics - I	43808	Understand electrical and magnetic properties, transport phenomena	80

Course	COID	CO	Attainment
Nuclear Physics - I	43814	After completing this course the student will: Conceptualise the Nuclear Detectors, Nuclear Pulse techniques and Nuclear models	85.34
Nuclear Physics - I	43816	Learn High-energy nuclear physics, the behaviour of nuclear matter under extreme conditions.	92.22
Solid State Physics - II	43936	Get the understanding about X-ray diffraction (XRD) by Crystals.	79.17
Solid State Physics - II	43938	Understand the Physical phenomena and significance of XRD	71.39
Solid State Physics - II	43940	Be able to make quantitative estimates for structural phenomena of solids.	71.14
Solid State Physics - II	43942	Understand the concepts of Dislocations, Imperfections and Defects in Solids	72.5
Solid State Physics - II	43943	Appreciate the Luminescent effects and colour centres in ionic crystals	42
Solid State Physics - III	43945	Be provided with the understanding about free electron theory of metals	86.3
Solid State Physics - III	43947	Learn Semiconductor phenomena; Hall effect, Magneto-resistance phenomenon	57
Solid State Physics - III	43948	Be able to make quantitative estimates of semiconducting phenomena of solids.	63.06
Solid State Physics - III	43949	Describe the effect of excess carriers in semiconducting solids	16.75
Nuclear Physics - II	43951	After completing this course the student will: Understand the phenomenon of nuclear fission and its application in energy production.	92.31
Nuclear Physics - II	43952	Gain an overview on the neutron physics and nuclear reactor theory.	89.57
Electronics	43975	Solve electronic devices and systems using mathematical concepts.	72.85
Accelerator Physics	44468	Specify in details with application, if applicable, ion Source	62.09
Accelerator Physics	44489	Deliberate the details of Alternating gradient machines	96.91
Accelerator Physics	44496	Understand the working of Betatron	32.18
Thermal Physics	45186	Specify in depth Phase equilibria	72.63
Quantum Mechanics - I	45316	Deliberate the details of Angular Momentum	37.22
Nuclear Physics - II	45349	Specify in depth homogeneous reactor	85.71
Nuclear Physics - II	45369	Identify the characteristics of critical size and critical mass	86.92
Accelerator Physics	45500	Understand the details of Paschen's law for gas breakdown	69.45
Electronics	45616	Understand in details with examples BJT AC	97.41

Course	COID	CO	Attainment
		Analysis	
Electronics	45655	Deliberate the characteristics of Operational amplifiers	67.8
Electronics	45689	Specify in details with application, if applicable, Flip-Flop	55.74
Electronics	45701	Learn in details with application, if applicable, Combinational logic circuits	34.41
Solid State Physics - I	47802	Learn the characteristics of tight-binding approximation	23.06
Solid State Physics - I	47806	Identify in details with application, if applicable, superconductivity	9.71
Condensed Matter Physics	48587	Learn in details with application, if applicable, Magnetic properties of solids	33.28
Condensed Matter Physics	48591	Understand the details of Semiconductors	4.43
Nuclear Physics - I	48608	Understand in depth Nuclear pulse techniques	73.75

### MSc in Zoology

Course	COID	CO	Attainment
Advanced cell Biology	34721	Understand the process of cellular aging, and apoptosis	65.44
Advanced Genetics	34727	Understand the genomic organization of prokaryotes and eukaryotes.	58.81
Advanced Genetics	34728	understand linkage analysis and constructing the cytogenetic maps.	47.5
Advanced Genetics	34729	Know the applications of various model organisms in genomic research.	50.09
Advanced Genetics	34731	Able to analyse the pedigree, psychosomatic disorders, prenatal diagnosis.	87.5
Biodiversity	34743	Understand biodiversity, species diversity and biomes.	55.59
Biodiversity	34744	Know biodiversity loss, biodiversity conservation and CBD.	61.61
Biodiversity	34745	Explain biodiversity act, bioethics and Dunkel's report.	72.37
Biodiversity	34746	Understand the effect of pollution, global warming and climate change on biodiversity.	65.52
Molecular Biology	34806	Explain molecular mechanism of DNA damage repair.	69.6
Reproductive health	34824	Understand human male and female reproductive system.	74.65
Reproductive health	34825	Explain the process of Gametogenesis and their	63.44

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
		hormonal control.	
Reproductive health	34826	Know reproductive cycles and its hormonal control	61.77
Reproductive health	34828	Understand different assisted reproductive techniques.	52.78
Seminar	34830	Gain knowledge on preparation of dissertation from relevant references.	76.51
Seminar	34832	Understand the importance of group discussion and defending the facts presented.	74.92
Biological Chemistry	50093	Learn the classification and characteristics of Nucleic acids and vitamins	56.34
Histology & Histopathology	50132	Understand the details of Histology	53.76
Histology & Histopathology	50142	Write down the Histological organisation of organs	63.04
Histology & Histopathology	50152	Learn the details of Histochemistry	62.8
Histology & Histopathology	50189	Learn in depth histopathology	73.34
Chordata	50277	Learn in details the Origin of chordates	65.62
Chordata	50298	Understand in details the evolution of circulatory and respiratory system	56.19
Chordata	50334	Write down in details with examples Nervous system and sense organs in vertebrates	65.45
Chordata	50345	Deliberate in depth Urinary system and integuments in vertebrates	90
Reproductive Biology	50358	Specify the details of female reproduction	57.44
Reproductive Biology	50363	Learn in details the reproductive cycles in mammals	71.75
Reproductive Biology	50376	Write down in depth male reproduction	51.68
Reproductive Biology	50379	Learn in detail the Fertility control assisted reproduction	71.27
Advanced cell Biology	50475	Understand the details of Immunobiology	84.2
Advanced cell Biology	50523	Deliberate in depth clinical Immunology	68.37
Advanced cell Biology	50548	Understand the details of cell cycle and its regulation	48.32
Advanced cell Biology	50579	Specify in details with examples cell signalling and signal transduction	51.3
Advanced cell Biology	50591	Specify the details of Biology of Cancer	77.78
Advanced Cytogenetics	50610	Understand in depth the Karyotyping	62.73
Advanced Cytogenetics	50630	Specify in details with examples Mendelian laws	73.64

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Advanced Cytogenetics	50665	Learn the characteristics and behaviour of chromosomes in meiosis	67.27
Ethology and Wildlife Biology	50944	Write down the types of Animal behaviour	74.25
Ethology and Wildlife Biology	50980	Specify in depth Foraging and antipredatory behaviour	72.75
Ethology and Wildlife Biology	51005	Specify the characteristics of Sexual behaviour and social organization	79.25
Ethology and Wildlife Biology	51059	Understand the values of Wildlife and the knowledge of Wildlife Acts.	64
Ethology and Wildlife Biology	51098	Understand the importance of Wild life conservation	73.72
Molecular Biology	51342	Write down the details of DNA replication	55.96
Molecular Biology	51362	Understand in depth Transcription and translation	53.54
Molecular Biology	51442	Understand gene regulation in eukaryotes.	33.33
Applied Zoology	51499	Write down the details of plant insect interaction	47.36
Applied Zoology	51519	Understand the classification and characteristics of vectors and its communicable diseases.	48.74
Applied Zoology	51525	Deliberate the classification and characteristics of Beneficial insects	84.06
Reproductive health	51831	Understand in depth Puberty and hormonal control	69.28
Reproductive health	51836	Deliberate in depth Fertility control	78.03
Biosystematics & Non-Chordata	55097	Learn in details the concepts of animal taxonomy	57.59
Biosystematics & Non-Chordata	55102	Understand in depth Classification, locomotion and nutrition in non Chordates	51.97
Biological Chemistry	55157	Deliberate in details with examples Chemical bonds and carbohydrates	64.19
Biological Chemistry	55167	Specify the details of Proteins and lipids	62.2
Cytogenetics	55188	Deliberate the structure and functions of Cell and cell organelles	54.56
Cytogenetics	55215	Write down the details of Cell cycle and cell signalling	60.84
Cytogenetics	55235	Learn in depth Chromosomal mutations	47.78
Tools and Techniques in Biology	55261	Specify in depth microscopy	68.58
Tools and Techniques in Biology	55270	Learn in details with application, the advanced microscopy	48.46
Tools and Techniques in Biology	55290	Specify in details with application, the separation techniques	46.46
Tools and Techniques in Biology	55334	Understand the details of radio tracer and immunological techniques	41.77

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Tools and Techniques in Biology	55352	Write down the details of cell culture and cytological techniques	39.39

### MSW

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
Social Work – History and Ideologies	44679	Learn the details of Indian History of Social work Profession	18.97
Social Work – History and Ideologies	44689	Understand in depth Values and principles of Social work	26.04
Social Work – History and Ideologies	44714	Deliberate the details of Contemporary Ideologies for Social change	39.75
Social Work – History and Ideologies	44731	Learn the details of Western Ideologies for Social Change and History of Social Work	12.51
Work with Individuals and Families	44748	Learn in details with application of social case work as method of Social Work	28.27
Work with Individuals and Families	44790	Learn in detail the Values and principles of Social Case work	8.33
Work with Individuals and Families	44807	Learn the details of theories and process of Casework	27.71
Work with Individuals and Families	44820	Specify in depth application of Social Case work in different settings	8.04
Work with Groups	44837	Identify in detail the concept of group and group work	23.11
Work with Groups	44859	Learn the process of Group Work	25
Work with Groups	44865	Understand in depth Group dynamics and skills in group work	26.87
Work with Communities	44891	Learn in details with examples concept of Community and Community organization Practice	27.54
Work with Communities	44945	Learn in depth models and strategies of Community Organization	48.28
Work with Communities	44953	Understand the skills of Community organizer	34.29
Work with Communities	44983	Understand in depth Micro and macro policies of community Organizaion	35.48
Human Growth & Development	45022	Learn in detail Human life span and principles of growth and development	72.22
Human Growth & Development	45042	Understand the details of Developmental stages of Human Life span	53.56
Human Growth & Development	45060	Understand the theories of Human Development and learning	49.87
Human Growth & Development	45085	Understand the theories of Basic Human Needs, motivation, Personality and	50.45

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
		intelligence	
Social Work Research and Statistics	45174	Understand the meaning, objectives and scope of Social Work Research	39.82
Social Work Research and Statistics	45213	Understand in detail the Process of Social Work Research	22.5
Management of Developmental and Welfare Services	45334	Deliberate in depth need for social welfare organization	20.32
Management of Developmental and Welfare Services	45355	Learn the procedure of establishment of Human Service Organizations	3.43
Management of Developmental and Welfare Services	45378	Understand the process of Management	47.31
Management of Developmental and Welfare Services	45402	Learn in detail the concepts of Programme Development and Public Relations	19.23
Communication and Counselling	45444	Understand the meaning, importance, purpose and process of communication	47.9
Communication and Counselling	45459	Learn the use of Visual aids in communication	11.61
Communication and Counselling	45527	Understand the counselling situations and approaches	21.47
Personal and Professional Growth	45605	Understand self and developing self awareness	39.04
Personal and Professional Growth	45661	Understand the details of emotions and emotional expressions	20.92
Personal and Professional Growth	45704	Understand in depth life skills	37.76
Personal and Professional Growth	45715	Identify in depth Values, attitudes and professional ethics	22.05
Human Resource Management	45966	Learn the concept and philosophy of Human Resource Management	72.47
Human Resource Management	45983	understand the policies, sources and methods of talent acquisition	71.41
Human Resource Management	46039	Deliberate in details with examples Compensation Management	69.51
Human Resource Management	46057	Deliberate the changing scenario of strategic Human Resource Management	70.37
Organizational Behaviour and Organizational Development	46090	Specify the significance of transactional analysis and theories of motivation	82.6
Organizational Behaviour and Organizational	46124	Understand group dynamics and organization development	66.31



Course	COID	CO	Attainment
Development			
Organizational Behaviour and Organizational Development	46144	Deliberate in depth on organizational change, stress and burnout	73.86
Preventive and Social Medicine and Medical Social Work	46153	Learn in depth concept of health and health care	40.48
Preventive and Social Medicine and Medical Social Work	46179	Learn in details with application Medical Social Work and Rehabilitation of Patients	0
Social Policy, Planning and Development	46236	Understand in detail concept and purpose of social policies and values underlying social policy	35.55
Social Policy, Planning and Development	46255	Learn in detail sectoral policies in India	26.53
Social Policy, Planning and Development	46288	Learn the social planning process	30.79
Social Policy, Planning and Development	46309	Learn in detail the concept of social development and Indicators of development	35.28
Legal System in India	46337	Learn in depth concept of social justice and understanding of Rights	24.43
Legal System in India	46365	Understand the divisions of law and chapters under IPC and CRPC	36.61
Legal System in India	46421	Understand the details of structure and functions of District Court, High Court and Supreme Court	40.18
Employee Relations and Legislations	46589	Identify in details with application concept, philosophy and principles of employee relations	79.33
Employee Relations and Legislations	46599	Deliberate on functioning of trade unions in India	71.38
Employee Relations and Legislations	46619	Learn the employee legislations	74.82
Employee Relations and Legislations	46641	Understand in depth process of collective bargaining	67.06
Mental Health and Psychiatric Social Work	46656	Learn the details of concept of Mental Health, Mental Illness and its classification	34.22
Mental Health and Psychiatric Social Work	46696	Understand the concept of psychiatric Social Work and Multidisciplinary approach and team work	13.37
Mental Health and Psychiatric Social Work	46710	Learn about the institutional care of mentally ill and role of social workers	20.5
Mental Health and	46737	Understand the psycho social rehabilitation	25

Course	COID	CO	Attainment
Psychiatric Social Work Human Resource Development and Employee Wellness	46743	and legislations related to mental Health Understand concept, approaches and dimensions of Human resource development	74.03
Human Resource Development and Employee Wellness	46747	Deliberate in depth on HRD Interventions	88.72
Human Resource Development and Employee Wellness	46755	Learn in details with examples concept and importance of talent development	79.89
Human Resource Development and Employee Wellness	46760	Deliberate on employee wellness and standardization of systems	92.47
Society and Social Work	53286	Understand in depth on society and its institutions	39.68
Society and Social Work	53304	Understand in details on the different concepts of psychology	47.88
Society and Social Work	53341	Specify the characteristics of mental health and mental disorders	36.22
Social Science Perspectives for Social Work Practice	62739	Deliberate the characteristics of sociology and its relationship with other social sciences	30.55
Social Science Perspectives for Social Work Practice	62741	Specify the characteristics of social movements in India	37.04

#### MVoc in Food Processing and Engineering

Course	COID	CO	Attainment
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60776	Specify the need for EDP, Entrepreneurship characteristics in Food industry	53.13
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60778	Entrepreneurship development - Objectives, functions and classification, soft skills	122.92
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60779	Women entrepreneurship - scope, short comings and remedial measures	110.63
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60780	Role of Institutions like NIESBUD, KVIC, National financial Institutions in promotion of entrepreneurship	81.25
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60783	Identifying products, services and enterprise establishment and SWOT analysis	102.19
ENTREPRENEURSHIP	60784	Learn Project report preparation and	113.88

<b>Course</b>	<b>COID</b>	<b>CO</b>	<b>Attainment</b>
DEVELOPMENT PROGRAMME		presentation skills. CBA, Risk and viability assessment of project	
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME	60788	SME suitability to potential areas of food processing, globalisation of emerging business	110.42
INFORMATION AND COMMUNICATION TECHNOLOGY	60793	Humanitarian supply chain - definition, technology, activities, information and resources involved in moving aid to disaster affected areas	38.13
INFORMATION AND COMMUNICATION TECHNOLOGY	60803	Deliberate the details of Technology framework and explain Front end, middleware and infrastructure services	74.22
INFORMATION AND COMMUNICATION TECHNOLOGY	60805	Identify the Role of Mobile technologies, handheld and wireless technologies in disaster management	72.92
INFORMATION AND COMMUNICATION TECHNOLOGY	60808	Challenges in beneficiary identification and to ensure, how food assistance reaches right people	71.25
INFORMATION AND COMMUNICATION TECHNOLOGY	60813	Role of ICT in emergencies, relief management and tracking routes	74.13
INFORMATION AND COMMUNICATION TECHNOLOGY	60815	World food program and its role in strategising and providing food assistance in development and emergencies	43.75