M.Sc. Program in Life Sciences (Specialization: Animal Sciences)

(Academic Session 2016-17)

Semester – I

Course Code	Course Title	L (hr)	T (hr)	P (hr)	Cr
	Foundation Courses*				
LAS.500	Introduction to Animal Sciences	1			NC
LSS.501	Biostatistics	2			2
LSS.502	Research Methodology	2			2
	Core Courses*				
LSS.503	Biochemistry	2	1		3
LSS.504	Microbiology	2	1		3
LSS.505	Cell Biology	2	1		3
LSS.506	Essentials of Genetics	2	1		3
LAS.525	Lab Course (Practicals) - I			8	4
	Elective Courses (Opt any one)				
LAS.551	Animal Systematics & Biodiversity	2			2
XXX.xxx	Opt any course across Life Sciences	2			2
	Inter-Disciplinary (ID) Course				
LAS.401	Fundamentals of Cell Biology	2			2
	Seminar				
LAS.595	Seminar-I	1			1
	Total Credits				25

NC: Non-credit; L: Lectures; T: Tutorial; P: Practical; Cr: Credits; * Compulsory courses

Examination Pattern

- A: <u>Continuous Assessment:</u> Based on Objective Type Tests (10 Marks), Term paper (10 Marks), and Assignemnets(s) (5 Marks)
- B: <u>Pre-Scheduled Mid Semester Test-1:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25 Marks)
- C: <u>Pre-Scheduled Mid Semester Test-2:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25Marks)
- D: End-Term Exam (Final): Based on Objective Type Tests (25 Marks)

Semester – II

Course Code	Course Title	L (hr)	T (hr)	P (hr)	Cr
	Core Courses*				
LSS.507	Immunology	2	1		3
LSS.508	Molecular Biology	2	1		3
LSS.509	Animal Physiology	3	1		4
LAS.510	Nutrition & Metabolism	2	1		3
LAS.526	Lab Course (Practicals) - II			8	4
	Elective Courses (Opt any one)				
LAS.552	Animal Cell Culture & Applications	2			2
LPS.514	Techniques in Life Sciences	2			2
	Inter-Disciplinary (ID) Course				
LAS.451	Basics in Neuroscience	2			2
	Seminar				
LAS.596	Seminar-II	1			1
	Total Credits				24

L: Lectures; T: Tutorial; P: Practical; Cr: Credits; * Compulsory courses

Examination Pattern

- A: <u>Continuous Assessment:</u> Based on Objective Type Tests (10 Marks), Term paper (10 Marks), and Assignemnets(s) (5 Marks)
- B: <u>Pre-Scheduled Mid Semester Test-1:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25 Marks)
- C: <u>Pre-Scheduled Mid Semester Test-2:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25Marks)
- D: End-Term Exam (Final): Based on Objective Type Tests (25 Marks)

Semester – III

Course Code	Course Title	L (hr)	T (hr)	P (hr)	Cr
	Core Courses*				
ENV.504	Ecological Principles	3	1		4
LAS.511	Animal Evolution and Development	3	1		4
LAS.527	Lab Course (Practicals) - III			8	4
	Elective Courses (Opt any one)				
LSS.551	Genetic Engineering	2			2
LAS.553	Cancer Biology	2			2
	Research				
LAS.599	Research Project (Part – I)			16	8
	Total Credits				22

L: Lectures; T: Tutorial; P: Practical; Cr: Credits; * Compulsory courses

Examination Pattern

A <u>Continuous Assessment:</u> Based on Objective Type Tests (10 Marks), Term paper (10 Marks), and Assignemnets(s) (5 Marks)

B: <u>Pre-Scheduled Mid Semester Test-1:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25 Marks)

C: <u>Pre-Scheduled Mid Semester Test-2:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25Marks)

D: End-Term Exam (Final): Based on Objective Type Tests (25 Marks)

Semester - IV

Course Code	Course Title	L (hr)	T (hr)	P (hr)	Cr
	Core Courses*				
LAS.514	Stem Cell Biology & Regenerative Medicine	2	1		3
LAS.515	Animal Models of Disease & Research	2			2
	Research				
LAS.599	Research Project (Part – II)			32	16
	Total Credits				21

L: Lectures; T: Tutorial; P: Practical; Cr: Credits; * Compulsory courses

Examination Pattern

<u>Continuous Assessment:</u> Based on Objective Type Tests (10 Marks), Term paper (10 Marks), and Assignemnets(s) (5 Marks)

B: <u>Pre-Scheduled Mid Semester Test-1:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25 Marks)

C: <u>Pre-Scheduled Mid Semester Test-2:</u> Based on Objective Type & Subjective Type Test (By Enlarged Subjective Type) (25Marks)

D: End-Term Exam (Final): Based on Objective Type Tests (25 Marks)

Semester	Total Credits
Semester I	25
Semester II	24
Semester III	22
Semester IV	21
T	otal: 90