

**Syllabus (Revised) for M.Sc (Statistics) Semester Pattern in Affiliated Colleges**

**2015 Admission onwards**

**M.Sc Statistics course Structure and Marks distribution**

Semester No:	Paper code	Title of papers	Distribution of Hours per semester (Theory + Practical)	Instructional hours per week		Duration of ESE hours	Maximum marks		
				L	P		CA	ESE	Total
1	ST211	Analytical tools for Statistics - 1	108	6	-	3	25	75	100
	ST212	Analytical tools for Statistics - 2	90+18	5	1	3	25	75	100
	ST213	Probability Theory - 1	108	6	-	3	25	75	100
	ST214	Distribution Theory	90+18	5	1	3	25	75	100
		R Programming*	18	-	1*	-	-	-	-
2	ST221	Probability Theory - 2	126	7	-	3	25	75	100
	ST222	Sampling Techniques	126+36	7	2	3	25	75	100
	ST223	Estimation	144+18	8	1	3	25	75	100
	ST224	Practical 1(covering topics of ST212,214,222 and 223)	-		3	3	25	75	100
3	ST231	Testing of Hypotheses	90+18	5	1	3	25	75	100
	ST232	Multivariate Analysis	90+18	5	1	3	25	75	100
	ST233	Applied Statistics Elective - 1	108+18	6	1	3	25	75	100
	ST234		108	6	-	3	25	75	100

4	ST241	Design and Analysis of Experiments	144+36	8	2	3	25	75	100
	ST242	Stochastic Processes	126	7	-	3	25	75	100
	ST243	Elective - 2	136+18	7	1	3	25	75	100
	ST244	Practical - 2 (Covering topics of ST231,232,241, and 243)	-	-	-	3	25	75	100
		Viva-voce Dissertation/Project work	-	-	-	-	-	100	100**

Abbreviations- L: Lecture, P: Practical, CA: Continuous Assessment, ESE: End Semester Examination,

\*R programming will be introduced in the I Semester itself for purpose of doing practical problems in II and IV semesters and there is no examination for it.

\*\*80 marks for project/dissertation and 20 marks for viva voce examination based on it.

### **Pattern of Question Papers for the End Semester Examination**

#### **Theory Papers:**

For each paper the duration of the examination is 3 hours and maximum mark is 75. The question paper will have 3 parts: Part A, Part B and Part C. Part A will consist of 10 short answer questions (two questions from each of the 5 units), each carrying 3 marks and a candidate has to answer any 5 of them. Part B will consist of 6 questions (2 questions each from unit 1, unit 2 and unit 3 respectively), each carrying 12 marks and the candidate has to answer 3 questions from this part. Part C will consist of 4 questions (2 questions each from unit 4 and unit 5 respectively) each carrying 12 marks and the candidate has to answer 2 questions from this part.

#### **Practical Papers:**

The practical paper will be conducted using R programme. For each practical paper, a record of work done by the student should be prepared and submitted for internal evaluation. The components of CA mark for the practical paper are Attendance (5 marks), Record book (10 marks) and class test (10 marks). The Board of examiners will prepare the question paper for the practical examination (ESE) covering the papers specified in the syllabus. An external examiner along with an internal examiner, appointed by the University will conduct the practical examination and its evaluation.

For each practical paper, the duration of the examination is 3 hours and maximum mark is 75.

The question paper of Practical - I examination will consist of 4 parts: Part A, Part B, Part C and Part D. There will be 2 questions from Unit 1 in Part A and 2 questions from Unit 2 in Part B. There will be 3 questions from Unit 4 in Part C and 3 questions from Unit 5 in Part D. A candidate has to answer 5 questions without omitting any Part. Each question carries 15 marks.

For practical - II there will be 5 questions, each question having 2 parts A and B. Each question shall be from each of the units Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5 respectively. A candidate has to answer either Part A or Part B of all the 5 questions. Each part of a question carries 15 marks.