

**MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR**  
**DEPARTMENT OF MATHEMATICS AND STATISTICS**

**Master of Science/ Arts (M.Sc./M.A.) 2023-24**

**FACULTY : SCIENCE**

**SUBJECT : STATISTICS**

Level	Semester	Course Type	Course Code	Title	Delivery Type			Total Hours	Credit	Total Credit	Internal Assessment	EoS Exam	M. M.	Remarks
					L	T	P							
8	I	DCC	STA8000T	Measure and Integration	L	-	-	60	4	4	20	80	100	---
			STA8001T	Matrices and Linear Algebra	L	-	-	60	4	4	20	80	100	---
			STA8002T	Probability Theory	L	-	-	60	4	4	20	80	100	---
			STA8003T	Theoretical Distributions	L	-	-	60	4	4	20	80	100	---
			STA8000P	Statistics Lab-I: Statistical Methods	-	-	P	120	4	4	20	80	100	---
			STA8001P	Statistics Lab-II: Practical based on STA8002T and STA8003T	-	-	P	120	4	4	20	80	100	---
8	II	DCC	STA8004T	Sampling Distributions	L	-	-	60	4	4	20	80	100	---
			STA8005T	Statistical Inference	L	-	-	60	4	4	20	80	100	---
			STA8006T	Design of Experiments	L	-	-	60	4	4	20	80	100	---
			STA8002P	Statistics Lab-III: Statistical Computing with R	-	-	P	120	4	4	20	80	100	---
			STA8003P	Statistics Lab-IV: Practical based on STA8004T, STA8005T and STA8006T	-	-	P	120	4	4	20	80	100	---

Level	Semester	Select any One of the following Generic Elective Course (GEC) Course in II semester, May be opted from other Departments.													
		Course Type	Course Code	Title	Delivery Type			Total Hours	Credit	Total Credit	Internal Assessment	EoS Exam	M. M.	Remarks	
					L	T	P								
9	III	GEC	STA8100T	Official Statistics	L	-	-	60	4	4	20	80	100	---	
			STA 8101T	Statistical Methods	L	-	-	60	4	4	20	80	100	---	
			STA 8102T	Investments Under Uncertainty	L	-	-	60	4	4	20	80	100	---	
			STA 8103T	Actuarial statistics	L	-	-	60	4	4	20	80	100	---	
	9	III	DCC	STA 9000T	Multivariate Analysis	L	-	-	60	4	4	20	80	100	---
				STA 9001T	Theory of Sampling Techniques	L	-	-	60	4	4	20	80	100	---
			Select any Three Discipline specific Elective (DSE) Courses from selected DSE groups in III semester.												
			DSE I	STA 9100T	Statistical Quality Control	L	-	-	60	4	4	20	80	100	---
				STA 9101T	Stochastic Process	L	-	-	60	4	4	20	80	100	---
			DSE II	STA 9102T	Operation Research	L	-	-	60	4	4	20	80	100	---
STA 9103T				Non-Parametric Inference & Sequential Analysis	L	-	-	60	4	4	20	80	100	---	
DSE III			STA 9100P	Elective Statistics Lab-I: Practical based STA9000T & STA9001T	-	-	P	120	4	4	20	80	100	---	
			STA 9101P	Elective Statistics Lab-II: Practical based STA91001T or STA9101T	-	-	P	120	4	4	20	80	100	---	
			STA 9102P	Elective Statistics Lab-III: Practical based STA9102T or STA9103T	-	-	P	120	4	4	20	80	100	---	

		Select any One of the following Generic Elective Course (GEC) Course in III semester, May be opted from other Departments.												
Level	Semester	Course Type	Course Code	Title	Delivery Type			Total Hours	Credit	Total Credit	Internal Assessment	EoS Exam	M. M.	Remarks
					L	T	P							
9	III	GEC	STA 9103P	Hands-on with MS-Excel	-	-	P	120	4	4	20	80	100	---
			STA 9104P	Hands-on with R	-	-	P	120	4	4	20	80	100	---
			STA 9105P	Hands-on with SPSS	-	-	P	120	4	4	20	80	100	---
			STA 9106P	Hands-on with C/C++ Language	-	-	P	120	4	4	20	80	100	---
9	IV	DCC	STA 9002T	Demography	L	-	-	60	4	4	20	80	100	---
		Select any Five Discipline specific Elective (DSE) Courses from selected DSE groups in IV semester.												
		DSE I	STA 9104T	Project work/Dissertation	L	-	P	90	2+2	4	20	80	100	Presentation, submission and viva-voce
			STA 9105T	Theory of Reliability	L	-	-	60	4	4	20	80	100	---
		DSE II	STA 9106T	Linear Models & Regression Analysis	L	-	-	60	4	4	20	80	100	---
			STA 9107T	Econometrics	L	-	-	60	4	4	20	80	100	---
		DSE III	STA 9108T	Economics Statistics	L	-	-	60	4	4	20	80	100	---
			STA 9109T	Survival Analysis	L	-	-	60	4	4	20	80	100	---
		DSE IV	STA 9107P	Elective Statistics Lab-III: Practical based on STA9002T	-	-	P	120	4	4	20	80	100	---
			STA 9108P	Elective Statistics Lab-IV: Practical based on STA9105T	-	-	P	120	4	4	20	80	100	---
		DSE V	STA 9109P	Elective Statistics Lab-V: Practical based on STA9106T or STA9107T	-	-	P	120	4	4	20	80	100	---
			STA 9110P	Elective Statistics Lab-VI: Practical based on STA9108T or STA9109T	-	-	P	120	4	4	20	80	100	---

**DCC- Discipline Centric Compulsory**

**Course (STA8000T to STA 8006T, STA8000P to STA8003P, STA 9000T to STA 9002T)**

**DSE- Discipline Specific Core Course**

**(STA 9100T to STA 9109T, STA 9100P to STA 9102P STA & 9107P to STA 9110P)**

**GEC- Generic Elective Course (STA 8100T to STA 8103T, STA 9103P to STA 9106P)**

# MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

## M.Sc. (Two Years Master Degree Program)

### Subject: STATISTICS

#### **End of Semester (EoS) Examination pattern of Theory Papers:**

As proposed in the academic council held on 26-06-2023.

#### **Internal Examination**

Duration: 1 hour

Max. Marks: 20

Min Marks: 08

1. The maximum marks of each paper shall be 20. The minimum passing marks shall be 8. In all papers except “Project” it will consists of two parts; a test (10 marks) and an internal assessment (10 marks).
2. The format or pattern of the test can be decided by the department.
3. The internal assessment shall be of maximum marks 10. This part shall be based on the performance of students in the assignments/ seminars/quiz etc. In case of assignments, the teacher will give at least five assignments distributed over the entire course contents. These will be submitted by the students to the teacher for evaluation and submit awards. In Laboratory/Practical papers internal assessment shall be done by checking the record of practical or organizing a quiz during classes or may academically rationale method decided by the department.
4. In the paper entitled “Project”, student will submit a report on the progress of the work done during the semester to the Head. The report will be routed through the Mentor with his grading who will also award the internal marks of the “Project”.
5. Students have to independently pass in the internal examination of each paper.
6. The marks awarded in the internal examination shall not be count to calculate and award the final score, the SGPA and the CGPA.

# MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

## M.Sc. (Two Years Master Degree Program)

### Subject: STATISTICS

#### End of Semester (EoS) Examination pattern of Practical Exam.:

Duration: 4 hour

Max. Marks: 80

Min Marks: 32

#### **Syllabus:**

The students have to perform at least 10 practicals from the given list in the entire semester. The faculty may add practicals in the list which should be closely connected and attached with the theme of the course. The format of practical should be in the following form of sequence:

- (i) The practical problem along with all data inputs are written under the theme namely “Objective”.
- (ii) All formulae which are to be used, are identified and written under the theme namely “Formulae used”.
- (iii) The Statistical tabulation and calculation are to be made on the basis of MS –Excel and other statistical software.
- (iv) The results and conclusions are to be made on the basis of tabulations and calculation performed above.

#### **Scheme of EoSE:**

The examination shall be of four hours where in the students have to perform any three practicals. The marks distribution shall be the following.

1. Three Practical : 45 Marks (15+15+15)
2. Viva-Voce: 20 Marks
3. Evaluation of the record book of practicals performed in the semester : 15 Marks