M. G. Science Institute, Ahmedabad

Autonomous | Affiliated to Gujarat University, Ahmedabad

(Managed by The Ahmedabad Education Society)

Department of Statistics

Bachelor of Science (Hons.) in Statistics B.Sc. (Hons.) Statistics 4 Year, 8 Semester Full-Time Programme Choice Based Credit System (CBCS) & Grading System Outcome-Based Education Pattern (Effective from Academic Year 2024-25)



Semester: III	Course Title: Statistics Practical (Based on STM231	Credit: 4
	and STM232	
Course No.: STM233(P)		Hours: 8/week

Part A (Manual)

Sr.	Title of the Practical	No. of Hours
No.		of Teaching
1	Drawing of random number from Binomial Distribution. Fitting of	4
	binomial, distributions.	
2	Fitting of truncated binomial distributions.	4
3	Drawing of random number from Poisson Distribution. Fitting of	4
	Poisson, distributions.	
4	Fitting of truncated Poisson distributions.	4
5	Fitting of normal distribution.	4
6	Calculation of indices using Laspeyer's, Paasche, Fisher's and	4
	Marshal Edgeworth formula.	
7	Time reversal and Factor reversal test for Laspeyer's, Paasche and	4
	Marshal Edgeworth formulae.	
8	Time reversal and Factor reversal test for Fisher's formulae. Show	4
	that Fisher's index number is an ideal index number.	
9	Calculation of cost-of-living index number.	4
10	Time series - calculation of trend using least square and moving	4
	average methods.	
11	Calculation of seasonal indices using ratio to trend and link relative	4
	methods.	
12	Calculation of mortality rates: CDR, ASDR and STDR.	4
13	Calculation of fertility rates: GFR and TFR.	4
14	Calculation of fertility rates: GRR and NRR.	4
15	Problems based on Life Table.	4

Part B (Using MS Excel)

Sr.	Title of the Practical	No. of Hours
No.		of Teaching
1	Drawing of random number from Binomial Distribution. Fitting of	4
	binomial distributions.	
2	Fitting of truncated binomial distributions.	4
3	Drawing of random number from Poisson Distribution. Fitting of	4
	Poisson, distributions.	
4	Fitting of truncated Poisson distributions.	4
5	Fitting of normal distribution.	4
6	Calculation of indices using Laspeyer's, Paasche, Fisher's and	4
	Marshal Edgeworth formula.	
7	Time reversal and Factor reversal test for Laspeyer's, Paasche and	4
	Marshal Edgeworth formulae.	

8	Time reversal and Factor reversal test for Fisher's formulae. Show	4
	that Fisher's index number is an ideal index number.	
9	Calculation of cost-of-living index number.	4
10	Time series - calculation of trend using least square and moving	4
	average methods.	
11	Calculation of seasonal indices using ratio to trend and link relative	4
	methods.	
12	Calculation of mortality rates: CDR, ASDR and STDR.	4
13	Calculation of fertility rates: GFR and TFR.	4
14	Calculation of fertility rates: GRR and NRR.	4
15	Problems based on Life Table	4