

## CHAPTER 31

### MATHEMATICAL SCIENCES STATISTICS

#### Doctoral Theses

409. VARSHNEY (Manoj Kumar)  
**On the Modeling and Estimation of HIV/Aids Population under Various Conditions**  
Supervisor : Dr. Gurprit Grover  
Th 19079

#### *Abstract*

The study reveals that global burden of AIDS has risen dramatically in the past two decade worldwide. ART centre is playing an important role and has significantly reduces mortality and improved life expectancy. Some more covariates are needed for more extensive analysis and there is need to explore the effect of CD4 counts, common opportunistic infections etc on the AIDS patients

#### *Contents*

1. Introduction. 2. A method of construction of a multiple increment decrement life table of HIV population. 3. On an empirical bayes for the estimation for the BLUE of HIV population based on CD-4 cell count. 4. On the estimation of probability of death of AIDS patients in the presence of competing risks. 5. A follow-up study on survival trend of AIDS patients at an ART center in Delhi city and variation according to age, sex, stage and mode of transmission. Bibliography.

#### M.Phil Dissertations

410. BHATIA (Richa)  
**Review of the Inferential Procedures for Some Reliability Models Based on Consored Observations.**  
Supervisor : Dr. Ajit Chaturvedi

411. CHATTERJEE (Riniti)  
**Accelerated Failure Time Model in Survival Analysis : A Review.**  
Supervisor : Dr. Gurprit Grover
412. CHAUHAN (Divya)  
**Illness-Death Models for Survival Time Studies - A Review.**  
Supervisor : Dr. Gurprit Grover
413. KAPOOR (Kunal)  
**Review of Bayesian Estimation Procedures for Some Reliability Models.**  
Supervisor : Dr. Ajit Chaturvedi
414. GAURAV (Subodh Prakash)  
**Review of Classical and Bayesian Inferences for Some Distributions Useful in Reliability Theory.**  
Supervisor : Dr. Ajit Chaturvedi
415. TARUNA KUMARI  
**Relationships for Moments of Record Values : A Review.**  
Supervisor : Prof. Jagdish Saran