

# EM Estimation for the Bivariate Mixed Gamma Regression

## Model

### Project Report

submitted in partial fulfillment of the requirements for the award of degree of

## Master of Sciences

in

## Statistics



Submitted By:

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Supervisor:

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## *Certificate*

This is to certify that the work embodied in the accompanying project report entitled **"EM Estimation for the Bivariate Mixed Gamma Regression Model"** has been successfully completed by ***Shashank Kumar***, a IV Semester student, of the Department of Statistics, Central University of Rajasthan, under my guidance and supervision.

He worked satisfactory for whole IV semester for this project.

Place: Badarsindri

Date:

Dr. Deepesh Bhati  
(Assistant Professor)

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that ***Shashank Kumar***, Enroll. No 2020MSTA015, M.Sc. Statistics student of Department of Statistics has done project work "***EM Estimation for the Bivariate Mixed Gamma Regression Model***" under the guidance of ***Dr. Deepesh Bhati***, Department of Statistics, Central University of Rajasthan towards the partial fulfillment of the award of "Master of Science in Statistics" during the period February 2022 to May 2022.

Head

Department of Statistics

Central University of Rajasthan

## Declaration

I ***Shashank Kumar***, hereby declare that the project work entitled "***EM Estimation for the Bivariate Mixed Gamma Regression Model***" submitted to Department of Statistics, Central University of Rajasthan as a partial fulfilment of requirements of IV-Semester examination, is a bonafide record of work under taken by me, under the supervision of ***Dr. Deepesh Bhati***, Assistant Professor, Department of Statistics, Central University of Rajasthan and it is not formed the basis for the award of any other Degree/Associateship/Fellowship by any University.

Signature of Candidate

Shashank Kumar

Enroll. No.:2020MSTA015

Place: .....

Date: .....

## Acknowledgement

I am highly thankful to ***Dr. Deepesh Bhati***, project supervisor for his superb guidance. He helped me a lot to overcome all the difficulties, that I faced while writing the project. It was a pleasure to work with him and learn from him. He was always available and willing to help me.

I am also thankful to Department of Statistics, CURAJ for providing me all infrastructures facilities, to Ph.D. Scholars who helped me, during project work.

Finally, I would like to thank my loved ones, who have supported me throughout the project.

Signature of Candidate

Shashank Kumar

Enroll.No.:2020MSTA015