



Sri Dharmasthala Manjunatheshwara College
(Autonomous), Ujire-574 240, Dakshina Kannada, Karnataka State

(Re-accredited by NAAC at "A" grade with CGPA 3.61 out of 4)

PG Studies in Statistics BOS Meeting Minutes 2018-19



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Meeting Notice

30 08 2018

Venue : AV-10 , SDM PG Centre, Ujire.

Time : 10:30 am

Notice is hereby given to the members, subject experts & alumnus to meet in AV-10 to discuss and transact the following agenda on Thursday, 30th August 2018.

Agenda :-

<u>Agenda No.</u>	<u>Particulars</u>
SDMPG/STAT-BOS/2018-30/08/01	Reading the minutes of the previous BOS meeting.
SDMPG/STAT-BOS/2018-30/08/02	Review of the Syllabus- Incorporating Skill Components.
SDMPG/STAT-BOS/2018-30/08/03	Review of the question paper pattern.
SDMPG/STAT-BOS/2018-30/08/04	Review of the Results 2017-18.
SDMPG/STAT-BOS/2018-30/08/05	Finalizing the list of Examiners.
SDMPG/STAT-BOS/2018-30/08/06	CBCS regarding
SDMPG/STAT-BOS/2018-30/08/07	Introduction of new subjects/components/ units regarding



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SDMPG/SAT-BOS/2018-30/08/08. Any other matter.

	Members present	Signature
1	Prof. Shanthiprakash	Shanthi.prakash
2	Dr. Shambhu Sharma	Keshu
3	Dr. R. N. Rattihalli	R
4	Prof. K. Nagabhushan	Absent
5	Dr. Susham M. Bendre	Bendre
6	Dr. D. N. Kashid	Absent
7	Dr. B. Ismail	Absent
8	Dr. N. Balakrishna	Absent
9	Mr. Vasantha Nayak	Absent
10	Dr. Saritha Rao	SR
11	Dr. Babitha	B
12	Ms. Ankitha M. K.	AK
13	Ms. Supriya S. P.	SP
14	Mr. Pradeep K.	P

✓ Agenda-1:- Reading the minutes of the previous BOS meeting.

* BOS chairman Prof. Shanthiprakash welcomed the members & read the minutes of the previous meeting, which was held on 16th September 2017. Members noted the minutes of the last meeting & the agenda was approved.

✓ Agenda-2:- Review of the syllabus - incorporating skill components.



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Members suggested to include the paper code along with the paper name in the detailed syllabus with respect to each paper.

An elaborate discussion was made regarding incorporating skill component with the syllabus. It was decided to include mini projects in the course as skill component, worth of about three practicals in every semester. Students will be asked to prepare & submit a brief report on description of data, analysis, interpretations & conclusions & a session on mini project presentation will be conducted at the end of every semester in the presence of the entire department. Evaluation made on mini projects will be included under internal assessment component.

Semester

Skill component

I

Mini project on exploratory data analysis

II

Mini project on regression analysis

III

Mini project on multivariate analysis & stochastic processes

IV

Elective courses on Data Mining, and Reliability & Survival Analysis

Members suggested that practicals should be listed for each paper separately in the syllabus.



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* It was recommended to include the paper 'Elements of Statistical Computing' as a software elective in the II semester. Also it was recommended that a hardware paper of IV semester 'Design & Analysis of Experiments' be shifted to III semester as software elective by deleting certain very specialized topics such as split-plot, split-split-plot designs, strip-plot designs from Unit 3 & fractional replication for symmetric factorials in $1/2$ response surface experiments from Unit 4 & complete & partial confounding of Unit 4 to be shifted to Unit 3. Accordingly, practicals on 'Design & Analysis of Experiments' be shifted to II semester.

* Two new papers were proposed & it was suggested to offer these papers in the IV semester.

* Paper - Reliability and Survival Analysis (100% change)
Unit 1:- Unit 1 of 'Statistical methods ^{were incorporated} for reliability'. Lifetime distribution of k out of n system of Unit 2 of 'Statistical methods for reliability' is included.

Unit 2:- Concepts such as survival / failure rate, hazard function, cumulative hazard function, lack of memory property was included. From Unit 2 of 'Statistical methods for reliability', concepts such as measures of reliability, graphs of the system reliability functions, notion of aging, life distributions of coherent systems was included. From Unit 3 of 'Statistical methods for reliability', concepts such as classes of life distributions - parametric & nonparametric



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models, mean residual lifetime with survival function, NBU, NBUE, NWU, NWUE classes of life distributions & their implications was included.

Unit 3:- Unit 1 of 'Survival analysis'.

Unit 4:- From Unit 2 of 'Survival analysis', concepts such as estimation of survival function - Kaplan-Meier estimator, Greenwood's formula, other life table estimators, actuarial method of estimation of survival function was included.

Concept of Nelson-Aalen estimator was also included. (For Unit 3 of 'Survival analysis', concepts such as semi-parametric regression for failure rate, Cox's proportional hazards model with one & more number of covariates, log likelihood function, log linear hazards, test for regression coefficients with & without ties was included.)

Accordingly, appropriate reference list was proposed.

Paper - Statistical Modelling - I / Data Analytics - I /

Statistical Analytics - I (100% changes were incorporated)

Unit 1:- Introduction to Bayesian theory & philosophy - loss function & risk, foundations of optimal decision making, Bayes rule, minimax rule, admissibility. Prior & posterior distributions, conjugate families, non-informative priors - uniform & Jeffreys's prior. Bayesian estimation. Introduction to credible sets, Bayesian hypothesis testing, Bayesian prediction.

Unit 2:- Nonparametric density estimation (kernel based), nonparametric regression techniques - kernel, nearest neighbour, local polynomial (LOESS regression) & spline



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based methods. Concept of Resampling techniques - bootstrap & jackknife methods. Bootstrap procedure - hypothesis testing & bootstrap interval estimation.

Unit 3:- Introduction to generalized linear model (GLM), logistic regression, multi-logit regression, count data regression, log linear regression.

Accordingly, appropriate reference list was proposed.

- * The above two new papers were proposed to enhance the job opportunities for the students.

Agenda-3:- Review of the question paper pattern.

- * The question paper pattern which was proposed in the last BOS meeting was retained.

Agenda-4:- Review of the results 2017-18.

- * Sem end results of 2017-18 were read before the board & the members expressed their satisfactions regarding the results. A member suggested that in the result analysis, number of students failed along with the paper name be also shown. The agenda was approved.

Agenda-5:- Finalizing the list of examiners.

- * The list of examiners (external & internal) was modified by deleting some of the names & addition of some new names. The agenda was approved.

Agenda-6:- CBCS regarding.

Nil.



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Agenda-7 :- Introduction of new subjects / components / units regarding.

- * Two new papers were proposed as stated under Agenda-2.

Agenda-8 :- Any other matter.

- * To enhance the employability, names of some new courses were proposed, which will be incorporated with the syllabus in the future.

The names of the new courses proposed were as follows:

- i) Biostatistics
- ii) Bioinformatics
- iii) Big Data Analytics
- iv) HR & Business Analytics

- * Details of various activities conducted during the academic year 2017-18 were presented before the board.

- * Members suggested to prepare a departmental brochure highlighting the skills acquired by the students after the completion of M.Sc. Statistics programme & also to contact various companies to enhance campus placements.

- * Members also suggested to contact the statistics department of other colleges / universities, so that the students of our department can be made to attend the campus recruitments organized in other colleges.



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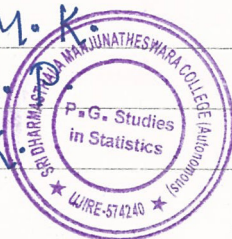
* Vote of thanks has been proposed by Dr. Babitha & the meeting was concluded at 1:30 pm.



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17	Prof. Shanthiprakash	Shanthiprakash
27	Dr. Shambhu Sharma	Sharma
37	Dr. R. N. Rattihalli	R
47	Prof. K. Nagabhushan	Absent
57	Dr. Susham M. Bendre	Bendre
67	Dr. D. N. Kashid	Absent
77	Dr. B. Ismail	Absent
87	Dr. N. Balakrishna	Absent
97	Mr. Vasantha Nayak	Absent
107	Dr. Saritha Rao	SRK
117	Dr. Babitha	B
127	Ms. Ankitha M. K.	Amk
137	Ms. Supriya S.	Supriya
147	Mr. Poadeep K.	Poadeep



Head of the Department
P.G. Studies in Statistics
SDM College (Autonomous)
Ujire - 574240, D.K. Karnataka