School of Statistics, DAVV, Indore,

IQAC report of last two academic years.1-7- 2008 to 31-12-2010

I. Curricular Aspects

I.1 List of Experts consulted/to be consulted for updating the Syllabi:

Departmental Committee members:

(1) Dr. Shakti Banerjee, Professor (2) Dr. Snigdha Banerjee, Professor and Head

Experts from outside consulted regarding P.G. Syllabus:

- (1) Dr. D.K. Ghosh, Prof. and Head, Dept. of Statistics, Saurashtra University, Rajkot, Gujrat
- ,12 January 2010 (2) Prof. H.P. Singh, School of Studies in Statistics, Vikram University,
- Ujjain.(3) Prof. J.R. Singh, School of Studies in Statistics, Vikram University, Ujjain Dec2010
- (4) Prof. D.T. Shirke, Department of Statistics, Shivaji Univerity, Kolhapur (29 May 2009) (5)
- Prof. A. Mishra, Patna University, Patna (29 May 2009) (6) Prof. M.N. Patel, Gujrat University,

Ahmedabad (29 May 2009) (Report of External IQAC)

- I.2 Admissions to M.Sc. Course was open to students with BCA (Since July 2009) and B. Sc Hons Computer Science (From July 2011) degrees.
- I.3 Feedback is taken from students regularly at theend of each semester. Oral feedback has been taken from alumni. We plan to take written feedback from alumni at the next alumni meet or earlier.
- I.4 M. Phil Course was reintroduced in 2009. Innovative job oriented topics like data mining, survival analysis; stochastic modeling, simulation, reliability etc. were included in the course.
- I.5 Syllabus: The UGC unified syllabus had been implemented and slightly amended in order to cater to the specific local conditions of the department. It includes a major part of the syllabi for competitive exams like NET,ISS etc.

The next evaluation of syllabi of nationally recognized idepartments and new NET syllabus is planned for June 2011.

Preparation of bibliography: Lists of latest book will be added in June 2011.

II. Teaching-Learning and Evaluation:

(a) Use of internet is encouraged in assignments

(b) Since the M.Phil course endeavours to prepare students both for teaching as well as research,. M.Phil students were assigned some practicals of M.Sc Sem II which will be evaluated towards two of their seminars. This was also helpful as the School is short of regular teaching staff.

III. Research, Consultancy and Extension

(Summary: (Research Publications: 9; Total Impact Factor 4.516; Conference papers:

- 5, **Young Scientist award 1**, Workshops organized : 1, Lectures organized : 2, Invited talk delivered by SOS faculty)
- (A) Research papers published:

2008-2009

Publications:

- 1. **Snigdha Banerjee** and Swati Agrawal "A two-warehouse inventory model for items with three-parameter Weibull distribution deterioration, shortages and linear trend in demand", International Transactions in Operational Research, Volume 15 Issue 6, pages 755 775. International Federation of Operational Research Societies, Wiley Interscience publishers, Oxford, U.K.
- 2. **Snigdha Banerjee** and Ashish Sharma "An Inventory Model For Repeated Product Life Cycle Type Demand With Pricing And Partial Backlogging". *Decision Sciences and Technology for Globalisation*, Editors B.S. Sahay, et al, Allied Publishers Pvt. Ltd.(2008) Pp 343-350 ISBN 10:81-8424-290-5.
- 3. **Snigdha Banerjee** and Ashish Sharma. "Optimal Procurement And Pricing Policies For Inventory Models With Repeated Product Life Cycle Type Demand". Acta Ciencia Indica, Vol XXXIV M No.1 (2008), Pp 361- 370.ISSN 0970-0455
- 4. **Snigdha Banerjee** and Swati Agrawal A Two warehouse Inventoey Model For Items withThree Parameter Weiull Distribution Deterioration", Acta Ciencia Indica, Vol XXXIV M. No.4, 2121(2008) ,ISSN 0970-0455

2009-2010(Up to 31-12-2010)

Journal Publications:

- 1. Snigdha Banerjee and Ashish Sharma ,"Inventory Policy for a product with price and time dependent seasonal demand and an alternative market", IAPQR Transactions, 2009, Vol 34, No.1,Pp 71-96, ISSN 0970-0102
- 2. Snigdha Banerjee and N. Sanjib Meitei "Effect of declining selling price: profit analysis for a single period inventory model with stochastic demand and lead time", *Journal of the Operational Research Society* (2010) 61, 696 –704 **Impact factor 1.009**
- 3. Snigdha Banerjee and Ashish Sharma, "Optimal procurement and pricing policies for

inventory models with price and time dependent seasonal demand", *Mathematical and Computer Modelling* Volume 51, Issues 5-6, March 2010, Pages 700-714 doi:10.1016/j.mcm.2009.10.022 ,**Elsevier publishers Impact Factor 1.103**

- 4. Swati Agrawal and Snigdha Banerjee. Two-warehouse inventory model with ramptype demand and partially backlogged shortages , International Journal of Systems Science, **Taylor and Francis Publishers**, **Impact Factor 0.913**, Appeared online, Print version to appear.
- 5. Snigdha Banerjee and Ashish Sharma (2010) Inventory model for seasonal demand with option to change the market Computers & Industrial Engineering Volume 59, Issue 4, November 2010, Pages 807-818, **Impact factor (2009) 1.491**

(B)Participation in Conferences

Prof. Snigdha Banerjee , **selected as a fully supported candidate**, attended **International Congress of Mathematicians(ICM 2010)** held at Hyderabad, India from 19-27 August 2010

International Conferences- Papers

- 1. N. Sanjib Meitei and Snigdha Banerjee. "New Perspectives of Approaching Known and New Problems for Newsvendor Problem in the Presence of Price Dependent Demand Potential" 2009 INTERNATIONAL CONFERENCE ON Global Issues in Business & Technology (December 22 December 24, 2009), Indore. Conference jointly organized by Institute of Management Studies, Devi Ahilya University , Indore with Department of Business, Management and Accounting (University of Maryland Eastern Shore), Frostburg State University, USA at Indore, Madhya Pradesh, India
- 2 Vaishali Maheshwari and Snigdha Banerjee "Analysis and Forecast for demand of Electronic Goods Targeted at Lower and Middle Income Group" presented at 2009 INTERNATIONAL CONFERENCE ON Global Issues in Business & Technology (December 22 December 24, 2009), Indore. Conference jointly organized with Department of Business, Management and Accounting (University of Maryland Eastern Shore), Frostburg State University, USA at Indore, Madhya Pradesh, India from December 22 -24, 2009.
- **3.** Swati Agrawal and Snigdha Banerjee "Two-warehouse inventory model for deterioting items with ramp-type demand" Accepted for oral presentation at International Conference on Probability, Statistics, Operations Research, Computer Science and allied areas in Conjunction with 8th IISA-JSM and 29th annual Convention of ISPS held from 4th to 8th January 2010 at Andhra University, Visakhapattanam

National Conference (Indian science Congress)

4."Cement Retailer's Optimal Ordering and Pricing Policy under Price Fluctuations, Snigdha Banerjee & Ashish Sharma Paper", accepted for oral presentation at 97th Indian science congress, Engineering section:, Jan 2010, Thiruanantapuram

5. "Inventory Model for Deteriorating items with Optimal Control of Deterioration", Swati Agrawal and Snigdha Banerjee Paper accepted for oral presentation at 97th Indian science congress, Engineering section Jan 2010, Thiruanantapuram:

(C) Research Award

25th(Silver Jubilee) M.P. Young Scientist AWARD 2010

Mr. N. Sanjib Meitei, research scholar (under guidance of Dr. Snigdha Banerjee) of School of Statistics, DAVV has been awarded M.P. Young Scientist award in the section "**Mathematics, Statistics and Computer Science**" section at the Silver jubilee young scientists conference held at Bhopal on 22,23 Feb ruary 2010.

(D) Lectures organized

2009-2010: Lectures organized (Phoographs available)

Two lectures were delivered by Prof. D.K. Ghosh of Saurashtra Univerity, Rajkot, Gujrat on 11 and 12 January 2010 on the topics

- 1. Efficiency and BIBD
- 2. Test of hypothesis ...With single degree of freedom

(E) Workshop organized:

Workshop on "Risk Management and Statistical Software" was organized from 8-10 October 2010 in conjunction with Senior Managers — Risk Management Practices, Fullerton India Credit Co. Ltd, Mumbai,

- (F) Invited Talks by teachers of School of Statistics:
- (A) Invitation for (i) Talks at
 - (a) Natinal conference (b) National Workshop
 - (ii) Chairing Session at National Statistical Day and Workshop

Dr,(Ms) Snigdha Banerjee was invited to deliver lectures at National Workshop on "Recent Advances in Decision Support Models and Their applications" held at Tirupati from 10-14 December 2008.

Dr,(Ms) Snigdha Banerjee was invited to deliver invited talk and chair a session at Third National Statistics day and National Workshop on the Role of Statistical Thinking & Systems in Expanding the Horizons of Science.28-29 June 2009 to be held at S,V. University, Tirupati.

Dr. Snigdha Banerjee was invited to deliver a talk at National Conference on "Industrial Statistics and Computational Mathematics" held at Jalgaon, Maharashtra during January 21-23, 2010.

(B) Prof. Snigdha Banerjee delivered invited talk on "Poisson Queues and Computers" at Shri Vaishnav Institute of Technology(SVITS) on 28th May 2010.

IV. Infrastructure and Learning Resource:

- (a) Software purchased:
 - Statistical Software packages SPSS and SYSTAT have been purchased and being used by students and teachers in 2009.
- (b) Wooden tables were renovated
- (c) 10 fans were installed in various class rooms, teachers' rooms, library and office

V Student Support and Progression

Out of the 5 students who were registered for Ph. D. degree in 2007-2008, 1 student submitted his Ph.D. thesis in 2010. One student submitted summary in 2010

8 students completed M.Phil in 2010.

VI. Governance and Leadership

- (A) Dr,(Ms) Snigdha Banerjee was
- (i) Member of Executive Committee of "Indian Society for Probability and Statistics" (ISPS).
- (ii) Member of Organising committee for the Third National Statistics day and National Workshop on the Role of Statistical Thinking & Systems in Expanding the Horizons of Science.28-29 June 2009 held at S,V. University, Tirupati.

(B)Alumni Association meets:

 \mathbf{H}^{nd} Alumni Association meet of the School of Statistics was held on 29^{th} March 2008.

 $\mathrm{III}^{\mathrm{rd}}$ Alumni association meet of the School of Statistics was held on 10^{th} August 2010

VII. Innovative Practices:

Earn while you learn:

Students of M.Sc. Sem I and Sem III 2010 helped in statistical data collection and data entry in a Ph.D, project of another department and thereby, earned in proportion of their contribution.

This was co-ordinated by an alumnus of the School of Statistics.

Prof. Shakti Banerjee (Chairman, Dept IQAC Committee, School of Statistics, DAVV, Indore) Prof..Snigdha Banerjee (Head, School of Statistocs , DAVV, Indore Member,Dept IQAC Committee School of Statistics, DAVV,Indoe}