# FILE NUMBERS AND LIST OF FILES TO BE MAINTAINED IN HARD AND SOFT COPY OF EACH FILE BY EACH DEPARTMENT

## **SELF STUDY REPORT**

- 1. Name of the Department: SCHOOL OF FUTURE STUDIES AND PLANNING Faculty of MANAGEMENT SCIENCE
- 2. Year of establishment: 1990
  - A.1 Academic programmes offered by the department at present, under the following categories and sanctions pertaining to each of the courses:

Programmes	Number	Course/Subjects
UG	-	
PG	02	<ul> <li>M.Tech. in Future Studies and Planning</li> <li>M.Tech. in Systems Management</li> </ul>
Integrated Masters	-	
M.Phil.	-	
Ph.D.	1	Future Studies and Planning
Integrated Ph.D.	-	
Certificate	-	
Diploma	-	
PG Diploma	-	
Any other (please specify)	-	
Total	03	

A.1.1 Details approval/recognition and recommendations issued by the statutory body (for example, (UGC, AICTE, NCTE, PCI, MCI, DCI) governing the programme in case of Professional Programmes letters for the <u>first time</u> and <u>Last Academic Year</u> recognitions

Programme	Approved	First Approval	Last Academic Year
	by		Approval
M.Tech. in	AICTE	F. No. 441/MP-	F.No. Central/1-
Future		7/BOS(PG)/90	822637731/2012/EOA
Studies and		dt. 24/08/1995	dated 06/05/2013
Planning			
M.Tech. in	AICTE	F. No. 441/MP-	F.No. Central/1-
Systems		7/BOS(PG)/90	822637731/2012/EOA
Management		dt. 24/05/1995	dated 06/05/2013

(Copies of approval letters are available in File-A.1.1)

If the department offers Distance Education Programmes (DEP) then

Number of programmes offered. Nil

Name of Each Programmed: Not Applicable

Letters for approvals by the Distance Education Council: Not Applicable

## A. 2 Copy of Ordinances related to the courses in the department

Programme	Ordinance No.	Status
M.Tech. in Future Studies and Planning	55	Copy Enclosed (File-A.2)
M.Tech. in Systems Management	56	Copy Enclosed (File-A.2)
Ph.D.	18	Copy Enclosed (File-A.2)

## A. 3 Number of working days during the last academic year:

290

Number of teaching days during the past four academic years:

2008-09	2009-10	2010-11	2011-12
182	184	189	183

(Teaching days means days on which classes were engaged. Examination days are not to be included)

# A.4 Number of positions in the Department, their appointment letters, joining reports and sanctions of each

Positions	Т	Teaching faculty			Technic
	Professor	Associate	Assistant	teaching	al staff
		Professor	Professor	staff	
Sanctioned by the	0	2	1	0	0
UGC / University					
/ State					
Government					
Recruited		2	1		
Yet to recruit		0	0		
Number of	0	0	1*	3	0
persons working					
on contract basis					

<sup>\*</sup> Mr. Avinash Navlani has been appointed as contract teacher against leave vacancy of Dr. R.C.Sharma.

# A.4.1 Qualifications of the teaching staff

Highest	Pro	fessor	Asso	ociate	Ass	istant	Total
qualification			Prof	fessor	Pro	fessor	
	Male	Female	Male	Female	Male	Female	
Permanent teacher	S						
D.Sc./D.Litt.							
Ph.D.			2				2
M.Phil.							
PG-M.Tech.					1		1
Temporary teacher	s:						
Ph.D.							
M.Phil.							
PG					1		1
Part-time teachers	(Visitin	g Faculty)					
Ph.D.					4	2	6
M.Phil.					0	0	0
PG					4	0	4

Emeritus, Adjunct and Visiting Professors and their sanctions:

	•		
	Emeritus	Adjunct	Visiting
Number	0	0	0

Semester-wise Record of Courses Visiting Faculty and their Sanctions:

S.	Academic	Semest	Course	Name of Visiting	Qualificati
No.	session	er		Faculty	ons
1.	2012-14	First	M.Tech. (FSP)	Dr. Shakti	Ph.D.
				Banerjee	
	2012-14	First	M.Tech. (FSP)	Dr. Kapil Jain	Ph.D.
	2012-14	First	M.Tech. (FSP)	Dr. Deepshikha	Ph.D.
				Agrawal	
	2012-14	First	M.Tech. (FSP)	Mr. Pradyumna	P.G.
				Yadav	
2.	2012-14	First	M.Tech. (SM)	Mr. Alok	P.G.
				Malviya	
	2012-14	First	M.Tech. (SM)	Mr. Nand	P.G.
				Kishore Buwade	
	2012-14	First	M.Tech. (SM)	Dr. Priyesh	Ph.D.
				Kanungo	
	2012-14	First	M.Tech. (SM)	Dr. D.S. Bhilare	Ph.D.
3.	2012-14	Second	M.Tech. (FSP)	Dr. Deepshikha	Ph.D.
				Agrawal	
	2012-14	Second	M.Tech. (FSP)	Dr. Shakti	Ph.D.
				Banerjee	

	2012-14	Second	M.Tech. (FSP)	Dr. Meenu	Ph.D.
				Kumar	
	2012-14	Second	M.Tech. (FSP)	Dr. Meenu	Ph.D.
				Kumar	
4.	2012-14	Second	M.Tech. (SM)	Dr. Shakti	Ph.D.
				Banerjee	
	2012-14	Second	M.Tech. (SM)	Mr. Ashok	P.G.
				Holani	
	2012-14	Second	M.Tech. (SM)	Mr. Alok	P.G.
				Malviya	
	2012-14	Second	M.Tech. (SM)	Mr. Nand	P.G.
				Kishore Buwade	

(Sanction letters of visiting faculty are enclosed in file A.4.1)

A.6 Copies of latest biodata of faculty in positions in the department

Biodata of regular faculty are attached in file A.6.

A.7 1. Copies of Yearly Performa Based Assessment Records of Faculty in positions in the Department

Copies of yearly Performance Based Assessment Records are enclosed in File A.7.1.

2. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors):

Teaching Posts	Sanctioned	Filled
Professor	0	0
Associate Professors	2	2
Asst. Professors	1	1
TOTAL	3	3

3. Faculty profile with name, qualification, designation and specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.):

Name	Qualification	Designation	Specialization	No. of	No. of
				Years of	Ph.D.
				Experience	students
				_	guided
					for the
					last 4
					years

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4
					years
Dr. R.C. Sharma*	Ph.D.	Professor (CAS)	Econometrics	33	07
Dr. V.B. Gupta	Ph.D.	Associate Professor	Modelling and Simulation	23	11
Mr. Vandit Hedau	M.Tech.	Assistant Professor	Industrial Engg. & Systems	6	0

<sup>\*</sup> On leave

- 4. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors Nil
- 5. Percentage of classes taken by temporary faculty programme-wise information each semester wise information
  - 1. Programme: M.Tech. in Future Studies and Planning

Academic Year	2012-13		
Semester	First Second		
Percentage of classes taken by temporary faculty	0%	0%	

No temporary faculty in the school.

## 2. Programme: M.Tech. in Systems Management

Academic Year	2012-13		
Semester	First Second		
Percentage of classes taken by temporary faculty	0%	0%	

No temporary faculty in the school.

Percentage of classes taken by visiting faculty – programme-wise each semester wise information

1. Programme: M.Tech. in Future Studies and Planning

Academic Year	nic Year 2012-13		
Semester	First Second		
Percentage of classes taken by visiting faculty	50%	50%	

# 2. Programme: M.Tech. in Systems Management

Academic Year	2012-13	
Semester	First Second	
Percentage of classes taken by visiting faculty	75%	62%

# 6. Programme-wise Student Teacher Ratio:

No.	Programme	Student Teacher Ratio
1.	M.Tech. in Future Studies and Planning	12:1
2.	M.Tech. in Systems Management	12:1
3.	Ph.D.	8:1

7. Number of academic support staff (technical) and administrative staff: sanctioned and filled

There is no sanctioned staff-technical & administrative. However, following administrative staff is working on daily wages:

- 1. LDC (one)
- 2. Peon (two)

One Junior Computer Officer is attached from Computer Centre.

A.8 Students enrolled in the department during the current academic year, with the following details:

10	wing actains.						
	Students	UG	PG	Integrated	M.Phil.	Ph.D.	D.Litt./
			(M.Tech.)	Masters			D.Sc.
		*M *F	*M *F	*M *F	*M *F	*M *F	*M *F
	From the state where the university	0	35M+14F	0	0	14M+12F	0
	is located						
	From other states of India	0	4M+2F	0	0	6M+2F	0
	NRI students	0	0	0	0	0	0

Students	UG	PG	Integrated	M.Phil.	Ph.D.	D.Litt./
		(M.Tech.) Masters				D.Sc.
	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F
Foreign students	0	0	0	0	0	0
Total	0	39M+16F	0	0	20M+14F	0

<sup>\*</sup>M-Male \*F-Female

Exteri	nally regis	stered st	udents?
Yes [		No	$\sqrt{}$
If yes,	how man	y studer	nts avail of this provision annually?

### A.7 Calculation of 'Unit cost' of education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

Total no. of students enrolled in 2012-13: 89

Annual recurring expenditure (without salary component) in 2012-13: Rs. 1158000

Annual recurring expenditure (with salary component) in 2012-13: Rs. 3218100

- (a) including the salary component = Rs. 3218100/89 = Rs. 36158
- (b) excluding the salary component = Rs. 1158000 / 89 = Rs. 13011

#### A.8 A. Faculty recharging strategies:

The faculty members are encouraged for participating in recharge programmes like faculty development programmes, refresher courses, capacity building programmes, etc. The faculty members have participated in the following seminars/ workshops:

- 1. National Seminar on Industrial Facet of Biotechnology at School of Biotechnology, DAVV, Indore, Jan. 24-25, 2012.
- 2. National Seminar on Relevance of link in 21<sup>st</sup> century at School of Comparative languages and Culture, DAVV, Indore, Jan. 27-28, 2012.
- 3. A National Workshop on E-Governance: Issues and Challenges at School of Computer Science, DAVV, Indore, Dec. 15, 2012.

Lectures have been arranged as follows:

Pt. Madan Mohan Malviya Lecture Series-2012

Seminar on Fostering Excellence in Research on 15/01/2013

B. Number and list of faculty with course details of faculty development programmes, academic staff college programs or other faculty recharge programs:

No.	Name of the Faculty Member	Recharge Programme
1.	Dr. V.B.Gupta	Environmental Economics, organized by IIT, Mumbai, during 10/02/2003 to 07/03/2003.
2.	Mr. Vandit Hedau	Refresher course, organized by ASC, Indore, during 20/08/2010 to 09/09/2010.

The faculty members also participated in lecture series organized by DAVV on followings:

Pt. Madan Mohan Malviya Lecture Series-2012

Swami Vivekanand

## A.9 Student projects

 percentage of students who have done in-house projects including interdepartmental projects

Year	2009	2010	2011	2012
Percentage of in-house projects	42%	77%	64%	69%

• percentage of students doing projects in collaboration with other universities / industry / institute

Year	2009	2010	2011	2012
Percentage of projects in collaboration with outside agencies	58%	23%	36%	31%

A.10 Awards / recognitions received at the national and international level by

• Faculty: Dr. R.C.Sharma, Joint Secretary, TIES, Year 2011-12

• Doctoral / post doctoral fellows: Nil

• Students: Nil

A.11 Record of each of Seminar/ Conference/Workshop organized and the source of funding (national / international) with details of outstanding participants, if any.

Organized 47<sup>th</sup> Annual Conference of the Indian Econometric Society at School of Future Studies and Planning , Devi Ahilya Vishwavidyalaya, Indore

January 6-8, 2011, Funded by Indian Econometric Society and UGC.

Outstanding participants: Dr. Y.V.Reddy, Dr. K.L.Krishna, Dr. Arvind Panagariya,

Dr. N.R.Bhanumurthy





# A.12 Write up of Code of ethics for research followed by the departments

- Respect for Intellectual property rights of individual and institutions
- Explicitly acknowledge the work of others when referring to them in any shape, form or manner in the research work.
- Follow principles of ethical and social responsibility
- Selection of research topics directly related to the society or nation.

# A.12 Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications Received		Selected Students			percentage ving exam.
	Male	Female	Male	Female	Male	Female
M. Tech. (Future Studies and Planning)	19	2	19	01	62.13% - 74.97%	65.14% - 77.56%
M. Tech. (Systems Management)	22	11	12	08	60.44% - 71.94%	64.69% - 64.69%

Ph.D.	5	6	3	3	59.09% -	68% -
					84.75%	84.71%

# A.13 Diversity of students

Name of the	% of	% of students	% of students	% of students
Course	students	from other	from	from other
	from the	universities	universities	countries
	same	within the State	outside the	
	university		State	
M. Tech.	5%	95%	0%	0%
(Future Studies				
and Planning)				
M. Tech.	10%	75%	15%	0%
(Systems				
Management)				

A.14 Record of how many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

GATE qualified students take admission in M.Tech. programmes.

Ms. Seema Gupta has cleared NET in the year 2009.

## A.15 Record of Student progression

Student progression	Percentage against
	enrolled
UG to PG	Not Applicable
PG to M.Phil.	0%
PG to Ph.D.	10%
Ph.D. to Post-Doctoral	0%
Employed	
Campus selection	10%
Other than campus recruitment	70%
Entrepreneurs	10%

# A.16 Record of Diversity of staff

Percentage of faculty who are graduates	
of the same university	33%

from other universities within the State	0%
from universities from other States	67%
from universities outside the country	0%

A.17 Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the last four years:

Nil

A.18 Present details of infrastructural facilities in the department with regard to

a) Library: Printed books-titles (633) volumes (1210), e-books-25.

b) Internet facilities for staff and students: Available on 40 computers

c) Total number of class rooms 4

d) Class rooms with ICT facility 4

e) Students' laboratories 2

f) Research laboratories 2

A.19 List of doctoral, post-doctoral students and Research Associates:

No post-doctoral and Research Associates are working at present.

(A) Doctoral Students from the host university:

No.	Name of the Student		Name of the Student
1.	AKSHAY JOSHI	14.	NAMRATA SHARMA
2.	ALKA RANJAN-RAGHUNATH	15.	MANOJ KUMAR JHAWAR
3.	ARPAN SHRIVASTAVA	16.	PARUL SAXENA
4.	ARPIT JAIN	17.	PAYAL SHARMA
5.	ASHIMA JOSHI	18.	PRADYUMNA YADAV
6.	ATUL BHARAT	19.	REVA PRASAD MISHRA
7.	CHHAVI RANI SAXENA	20.	SEEMA GUPTA
8.	DEVENDRA PUNTAMBEKAR	21.	SWATI JAIN
9.	HEMANT PAL	22.	TIMSY KAPOOR
10.	ISHA CHHAJED	23.	VANDIT HEDAU
11.	JAWAHARLAL GARG	24.	VIKAS SHARMA
12.	JENA PRANIT JOSHI	25.	VIVEK SHARMA
13.	KIRAN V. PANCHAL	26.	VIVEK SINGH

(B) Doctoral Students from other universities:

No.	Name of the student	No.	Name of the Student
1.	ALOK KUMAR SINGH	5.	KAVITA NAGPAL
2.	ANIL GORE	6.	K.VENKAT RAMAN
3.	ARPIT NEEMA	7.	PURVA DALKE
4.	J. N. MALPANI	8.	S.C.JOSHI

A.19 Records of financial assistance and Number of post graduate students getting financial assistance from the university, UGC, State, AICTE.

- 10 AICTE Scholarships for GATE Qualified M.Tech. students in each M.Tech. program
- State Govt. provides financial support to SC/ST students and sub-income level OBC students generously
- Ph.D scholarships from research projects (if available)

Scholarships	2007-	2008-	2009-	2010-	2011-	2012-
	08	09	10	11	12	13
AICTE	12	9	1	1	3	14
Scholarships						
SC/ST	0	0	1	1	1	4
Scholarships						
OBC Scholarships	0	0	3	0	0	7
Others (Indian Oil)	0	0	2	0	1	1

A.20 Methodology of need assessment exercise undertaken before the development of new programme(s):

No new programme was development during 2008-12.

#### A.21 Records of feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Faculty feedback on curriculum is used in upgrading the syllabi.

Faculty feedback on teaching-learning-evaluation is used for further improvement or using new methods.

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Students' feedback on staff is not taken.

Students' feedback on curriculum is used in upgrading the syllabi.

Students' feedback on teaching-learning-evaluation is used for further improvement.

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

The feedback from alumni and employers is used to upgrade the syllabi and designing of the new programmes.

## A.22 List the distinguished alumni of the department (maximum 10):

No.	Name of Alumni	Batch	Organization where working
1.	Mr. Yashovardhan Phatak	1990-92	Mirash Infotech, Indore
2.	Mr. Ashutosh Saxena	1990-92	RBI, Chennai
3.	Dr. Shirish Sangle	1992-94	NITIE, Mumbai
4.	Dr. Rakesh Paliwal	1992-94	SAC, Jodhpur
5.	Mr. M.Srinivas Rao	1993-95	APITCO, Hyderabad
6.	Mr. Yashwant Panwar	1995-97	TIFAC, DST, New Delhi
7.	Dr. Kumar Saurabh	2002-04	Tech Mahindra, Hyderabad
8.	Mr. Abhay S.D.Rajput	2003-05	IITM, Pune
9.	Mr. Sandeep Varshney	2005-07	Wipro, Bangalore
10.	Mr. C.P.Bhatt	2006-08	IT Power, New Delhi

A.23 Details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

The following external experts delivered special lectures:

No.	Date	External Expert	Affiliation	Topic
1.	24/01/2008	Dr. B.B.Bhattacharya	JNU, New Delhi	India: A global     emerging economic     power

				2. Technology & Tomorrow
2.	05/05/2008	Dr. Narain Sinha	University of Botswana, Botswana	Frontier Model Analysis
3.	05/07/2008	Dr. P.Ram Babu	Cantor CO2, Mumbai	Global warming
4.	22/07/2008	Dr. C.L.Jain	St. Johns University, New York	<ol> <li>Importance of         Business Forecasting         in Planning and         Decision Making</li> <li>Models of Business         Forecasting</li> </ol>
5.	04/09/2008	Dr. H.N.Dutta	NPL, New Delhi	Katabatic winds in Antarctica
6.	16/07/2009	Dr. B.M.Jani	Aurobindo Institute of Manageme nt Studies, Rajkot	Knowledge Management
7.	10/09/2009	Dr. P.K.Choubey	IIPA, New Delhi	Policy Design and Analysis
8.	14/02/2010	Dr. S.N.Chaturvedi	Kashi Vidyapeeth , Varanasi	Engineering Economics
9.	18/03/2010	Dr. S.L.Lodha	MDS University, Ajmer	Macroeconomic Policy Analysis
10.	08/04/2010	Dr. H.N.Dutta	NPL, New Delhi	Antarctica
11.	24/05/2010	Dr. Narain Sinha	University of Botswana, Botswana	Econometrics and Forecasting
12.	24/10/2010	Dr. V.K.Jain	JNU, New Delhi	Kyoto Protocol and global warming
13.	16/01/2011	Dr. R.N.Yadava	RRL, Bhopal	Watershed Management
14.	04/05/2012	Dr. V.K.Jain	JNU, New Delhi	Climate change
15.	01/10/2012	Dr. C.S.Barla	University of Rajasthan, Jaipur	<ol> <li>Sustainable         Development     </li> <li>Project Management</li> </ol>

The following special lectures were arranged at the University Level:

Lectures by awardees of Shanti Swarup Bhatnagar award.

Lecture by Bharat Ratna Dr. A.P.J.Abdul Kalam

A.24 Record and List of the teaching methods adopted by the faculty for different programmes:

Traditional as well as modern teaching methods, like-LCD projectors, video, group discussions, are used in all the programmes.

A.25 Record of Monitoring by the department ensure that programme objectives are constantly met and learning outcomes are monitored:

Programme Objectives and Learning Outcomes:

Programme	M.Tech. (Future Studies and	M.Tech. (Systems		
	Planning)	Management)		
Objectives	The programme is designed to	Systems management is		
	educate foresight experts who	an interdisciplinary field		
	help organisations to harness	of engineering that focuses on		
	future opportunities and avoid	how to design and manage		
	unnecessary risks. The	complex engineering projects		
	programme trains students to	over their life cycles. The		
	become professionals who are	objective of the programme is to		
	competent to choose from	produce and manage systems		
	various methods when facing	that satisfy the customers'		
	a particular development	needs, increase the probability		
	challenge.	of system success, reduce risk		
		and reduce total-life-cycle cost.		
Learning	(i) Fundamental	(i) Fundamental knowledge		
Outcomes	knowledge in –	in –		
	Forecasting, statistical	Systems engineering, project		
	methods, mathematical	management, statistical		
	modeling, simulation, decision	methods, mathematical		
	analysis, and system	modeling, and simulation.		
	dynamics.			
		(ii) Advanced knowledge in		

(ii) Advanced knowledge	
in	Database management, artificial
	intelligence, information
Data analysis, supply chain	security, and ERP.
	security, and ERI.
management, knowledge	
management, and market	
research.	(iii) Ability for employment
	in
	Software companies as system
(iii) Ability for	engineer, system manager,
` '	
employment in	analyst.
Consultancy as Business	
analyst, market researcher,	Consultancy in ERP,
technology analyst, and	information security, data
futurist.	analysis.
	3
Higher education as teacher,	Higher education as teacher, and
and scientist.	scientist.
and scientist.	Scientist.
$C \rightarrow 1$	C 1
Govt. jobs.	Govt. jobs.
	(iv) Ability for higher
	education and research
(iv) Ability for higher	in the areas of
education and research	
in the areas of	System engineering, Modelling,
in the areas or	
F 4: M 1 11:	Simulation, system dynamics,
Forecasting, Modelling,	project management.
Simulation, scenario	
development and analysis.	

The school has constituted following monitoring committee to ensure that objectives of the programmes are met:

1.	Dr. V.B.Gupta	Head & Chairman		
2.	Mr. Vandit Hedau	Faculty member		
3.	Mr. Deepak Mittal	Student	Representative-M.Tech.	
	(FSP)			
4.	Ms. Usha Jain	Student	Representative-M.Tech.	
	(SM)			

A.26 Details and Highlight of the participation of students and faculty in extension

activities in the department:

The faculty members and students participated in the following extension activities of department:

- 1. MDP for officers of Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited during Nov. 1-2, 2009
- 2. DPR Writing Workshop for SMEs during, Aug. 8-9, 2009
- 3. Industrial visits:

Maral Overseas Ltd. on 06/02/2008

Tata International Ltd. On 26/03/2009

Indo-German Tool Room on 08/09/2009.

A.27 Details of "beyond syllabus scholarly activities" of the department.

Participation in the conferences/ seminars/ workshops.

Students work on advanced topics and publish their research papers. The students have published two research papers in the year 2012-13 in the areas of e-governance and information security.

Industrial visits:

Maral Overseas Ltd. on 06/02/2008

Tata International Ltd. On 26/03/2009

Indo-German Tool Room on 08/09/2009.

A.28 Information about programme/ department accreditation/grading by other agencies? If yes, give details.

No accreditation / grading by any other agency.

AICTE approval for the M.Tech. programmes being run.

A.29 Write up of highlight the contributions of the department in generating new knowledge, basic or applied.

The contributions of the department in generating new knowledge, basic or applied can be described with the followings:

# Research Publications:

S.No.	Title of the published research paper, Year of	Impact factor
0.110	Publishing, Name of the Authors, Journal	(Print 0.0 if no
	Name, Volume, and Page number	impact factor is
	Trame, rounte, and rage nameer	documented by
		Journal.
		ISSN/ISBN
1.	Indore Air Quality - An Evaluation, 2008,	ISSN : 0253 -
	H.K.Gupta and R.C.Sharma, Indian Journal of	7141
	Environmental Protection, 28(10), 926-934.	/171
2.	Heteroscedastic Frontier Model and Efficiency:	ISSN : 0975 -
	A Financial Analysis of State Level Public	9050
	Enterprises in India, 2008, Sharma R.C., Narian	7030
	Sinha & R.K. Mishra, Rajasthan Economic	
	Journal, Vol.32(1), 19-37.	
3.	Enrollment and Dropout Rates of Male &	ISBN: 0972-9992
	Female Students in School of Education in	
	India: A Comparative Analysis, 2008, Sharma	
	Namrata, Meenu Kumar & R.C. Sharma, Gyan	
	- The Journal of Education, 28-33.	
4.	An Analysis of Public Opinion on Science	ISSN: 0972 -
	Television Channels, 2008, V.B.Gupta, Meenu	429X
	Kumar and Chandrika Chaurasia, Indian Journal	
	of Science Communication, 7 (1), 10-14.	
5.	Observations of Carbon Monoxide in Antarctic	ISBN: 978-81-
	Troposphere at Maitri, Antarctica, 2008,	906526-2-9
	S.L.Jain, B.C.Arya, Ashok Kumar, Sachin	
	D.Ghude, and V.B.Gupta, Scientific Report of	
	Twenty Second Indian Antarctic Expedition,	
	Technical Publication No. 20, 95-102,	
	Published by National Centre for Antarctic &	
	Ocean Research, Goa.	IGDNI 070 01
6.	_	ISBN: 978-81-
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10.	Food Consumption in Asian Countries: A Residual Analysis for Examining Convergence, 2009, Sharma, R.C. and Shubhangi Jore, AIM Explore (A Journal of Management Awareness), 6,8-16.	ISSN: 0973-0001
11.	The Relationship between Capital Ratio and Port-Folio Risk of Scheduled Commercial Breaks in India, 2009, Singh Manmeet, R.K. Vyas and R.C. Sharma, International Journal of Business Insights and Transformation, 2, 89-103.	ISSN: 0974-5874
12.	Mathematical Models for Diffusion of Dry Technology in Indian Cement Industry, 2010, V.B.Gupta, Ashok Kumar, S.T.Venkatesan, and Arvind Kumar Gupta, Global Journal of Flexible Systems Management, 4, 324-26. www.indianjournals.com	ISSN: 0972-2696
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17.	Forecasting Exchange Rate for Euro, GBP and USD with respect to INR using Dynamic Adaptive Neuron – Fuzzy Logic System, 2011, Abhinav K. Shrivastava, Usha Shrivastava & R. C. Sharma, 47 <sup>th</sup> Annual Conference of The Indian Econometric Society, Devi Ahilya University, Indore (School of Future Studies and Planning), 6-8 Jan. 2011.	National Conference
18.	Asymptotic Limit of Consumption and Threshold Level of Income: A Macroeconometric Analysis of Asian Countries, Global conference on Economics Finance and Management, 2011, Sharma R C and Shubhangi Jore, International Conference organized by World Academy of Social Science-Australia, at Toronto; Canada, 9-10 June 2011.	International Conference
19.	Corporate Governance and Firm Performance: An Empirical Analysis of Finance & Pharmaceutical Sectors, 2012, Kapooria Pallavi, Sharma R C and Kaul Deepak), Management Research Journal "Prabandhan & Taqniki", Vol.6, pp. 19-22.	ISSN: 0974-8563
20.	Land Use Pattern and Forecasting of Carbon Sequestration in Madhya Pradesh Forests, 2012, A.K.Singh, R.K.Jha, and V.B.Gupta, International Journal of Multidisciplinary Research, 2, 5, 29-39.	ISSN: 2231-5780
21.	Impact of Corporate Governance on Firm Performance: A Comparative Analysis of IT and Finance Sector, 2012, Kapooria Pallavi,	ISBN: 978-93- 5062-002-1

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23.	Urbanisation and Economic Development in Madhya Pradesh: Policy Implications for Sustainable Forest Management, 2013, A.K.Singh, V.B.Gupta, and Ram Kumar Jha, Journal of Energy, Environment, and Carbon Credits, 3, 1, 22-30.	ISSN: 2249-8621

# Conference

47<sup>th</sup> Annual Conference of The Indian Econometric Society, School of Future Studies and Planning, Devi Ahilya University, Indore, 6-8 Jan. 2011.

# Research Projects:

No.	Title of the Project	Funding	Sanctioned	Starting
		Agency	Grant (Rs.)	Date
1.	Major Research Project-	DST, New	29,98,970/-	01/07/2008
	"GIS Based Forest Decision	Delhi	(3.50 years)	
	Support System for			
	Sustainable Biomass			
	Production and Carbon			
	Sequestration in Forests of			
	Malwa Region of Madhya			
	Pradesh"			
	Dr. V.B.Gupta (PI)			
2.	Major Academic Project-	NCSTC,	25,00,000/-	01/07/2006
	"P.G. Diploma Course in	DST, New	(5 batches)	
	Science Journalism through	Delhi		
	Distance Education"			
	Dr. V.B.Gupta (Co-ordinator)			

The school has produced following students since 1990 who are serving the nation:

M.Tech. (Future Studies and Planning)	207
M.Tech. (Systems Management)	93
M.Sc. (Science Communication)	103
M.B.A. (Business Forecasting)	78
Ph.D.	19

## A.30 Write up of Future plans of the department:

- 1. Plans to start following PG programmes:
- (i) M.Tech. in Mathematical Modelling and Simulation
- (ii) M.Sc. in Analytics
- 2. Collaborations with the reputed research organizations, and industries.
- 3. Research projects from funding agencies.
- 4. Development of Infrastructure:
- (i) Virtual Laboratories
- (ii) Infrastructure-building and labs.
- A.31 Record of any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:
  - 1. Strengths:
  - (i) Interdisciplinary nature of the academic programmes
  - (ii) Innovative academic programmes
  - (iii) Interdisciplinary & Funded research
  - (iv) ICT facilities
  - (v) Team work
  - 2. Weaknesses:
  - (i) Inadequate permanent faculty and therefore reliance on contractual full time and part-time visiting faculty

- (ii) Need of sanctioned non-teaching staff
- (iii) Requirement of additional application softwares
- (iv) Need of sanctioned technical staff
- (v) Need of enhancing the e-learning and mobile based learning
- 3. Opportunities:
- (i) Consultancy
- (ii) Research
- (iii) Student ex-change programmes
- (iv) Developing scientific temper
- (v) Industry-institute linkages
- 4. Challenges:
- (i) Development of national level research laboratories
- (ii) Collaboration with leading national / international institutes/ universities/ R & D organizations
- (iii) Virtual laboratory
- (iv) Virtual class room
- (v) On-line tests and mobile learning
- A.32 Write up of efforts for Quality Sustenance and Assurance in the department The following efforts are helpful:

The action plan was prepared by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year. For quality assurance, self analysis and feedback through discussion with academic peers and students was practiced.

Students played a role in quality improvement by giving suggestions. Department worked with a goal to provide best possible knowledge in the field and for the overall development of the students through regular teaching, seminars and discussion with them.

Regular updating of the course contents for advanced knowledge of various topics was done by the concerned teachers.

Research activities were always encouraged and available facilities were provided to the students and other researchers of the university.

Feedback from students, alumni and academicians was routinely taken, analysed and implicated for updating and development through such a practice the course paper.

Participated in following IQAC lectures:

- (i) Quality issues in Paper Setting and Evaluation, Sept. 28, 2012
- (ii) Fostering Excellence in Research, Jan. 15, 2013
- (iii) Quality issues in Teaching Learning Processes, May 10, 2013
- (iv) CBCS and Design of Academic programs for student centric learning, Lecture by Prof. Rege, College of Engineering, Pune, May 15, 2013.

## CRITERION I: Curriculum Design and Development

1.1.1 Academic Year of Revision, Curriculum of Each Course, Objective and Course plans of each paper taught in the course

The departmental committee/ Board of Studies revise the curriculum, objectives, and course plan of the each paper taught every year as per feedback received.

	Whether	uploaded o	n website
Yes	$\sqrt{}$	No	
	1.1.1.A	Eligibility	for admission to each course

#### M.Tech. in Future Studies and Planning:

## Eligibility:

At least 55% aggregate marks in B.E./B.Tech. in any branch of Engineering or Masters degree in Physics / Mathematics/ Statistics / Computer Science or any other equivalent degree. Relaxation of 5% marks in eligibility for sponsored/ SC/ ST candidates. Maximum age limit is 27 years as on July 1 of the admission year. No age limit for female / sponsored candidates. Relaxation in age for SC/ST/OBC/PH candidates is 3 years.

For sponsored candidates minimum two years working experience after qualifying degree is required. The sponsored candidates have to submit a certificate from the employer on the prescribed Performa.

#### M.Tech. in Systems Management:

#### Eligibility:

At least 55% aggregate marks in B.E./B.Tech. in any branch of Engineering or Masters degree in Physics / Mathematics/ Statistics / Computer Science or M.C.A. or any other equivalent degree. Relaxation of

5% marks in eligibility for sponsored/ SC/ ST candidates. Maximum age limit is 27 years as on July 1 of the admission year. No age limit for female / sponsored candidates. Relaxation in age for SC/ST/OBC/PH candidates is 3 years.

For sponsored candidates minimum two years working experience after qualifying degree is required. The sponsored candidates have to submit a certificate from the employer on the prescribed Performa.

#### 1.1.1.B Whether reflects Vision and mission reflection

Yes \[ \sqrt{\sqrt{}} \] No

#### Vision Statement:

School of Future Studies and Planning strives to become a globally reputed academic and research centre in the areas of futures studies by offering excellent interdisciplinary academic programmes and research activities applicable to diverse systems.

#### Mission Statement:

The mission of the School of Future Studies and Planning is to support the organizations in designing policies, strategic planning, and development of quality products/ services. To realize the mission, the school:

- enriches the students with a set of skills, knowledge and attitudes that permits them to succeed and thrive as futurists and systems engineers.
- prepares its students to pursue life-long learning, serve the profession and meet the challenges.
- conducts interdisciplinary research studies, develops scenarios and policies.
- provides consultancy services.

### 1.1.1C Write on reflection of vision and mission

The courses reflect the vision and mission of the school.

1.1.2 Details of process followed in last revision of Curriculum

A. Need Assessment:

The feedback from students, faculty members, industrial consultants, employers, and alumni was used for assessing the need to change the curriculum.

B. Faculty involved in curriculum design (List of members):

Dr. R.C.Sharma

Dr. V.B.Gupta

Dr. Shakti Banerjee

Dr. D.S.Bhilare

Dr. Priyesh Kanungo

Dr. Kapil Sharma

Mr. Vandit Hedau

C. Records of Departmental Committees/Board approvals of the designed curriculum

The new curriculum was approved by the Board of Studies of Future Studies and Planning. Minutes of Board of Studies are available with Academic Section of the University.

D. Records of External Experts Opinion of the designed curriculum: An external expert is invited in each semester for conducting the comprehensive viva voce of each programme being offered. After conducting the viva voce the expert gives his/her opinion and recommendation on the course and its syllabus.

E. Records of External Experts Feedback of the designed curriculum Records are available in the form of report of comprehensive viva voce for each semester and each programme.

- F. Records of Student Feedback opinion on the existing curriculum The students' feedback is taken at the end of each semester. Records of students' feedback are available.
- G. Records of Syllabi of National tests, Eligibility Tests and

Examinations for example, GATE, NET, Service Commissions, National Councils, for the each curriculum, if any.

The school offers M.Tech. courses. The curriculum of these M.Tech. courses is not asked in GATE/ NET, etc.

## 1.1.3 Detailed write up out each course in reference to

Programme: M.Tech. (Future Studies and Planning)

Employability: The program has following types of the job opportunities:

Strategic planners

**Technology Managers** 

**Business Analysts** 

Patent Consultants

**Education-Technology Management** 

Innovation: UGC and DST started Futures Studies program in several universities in the year 1989-90 as an innovative program. The program includes subjects from the disciplines of management, engineering, and sciences.

Research: The program involves several quantitative and qualitative methods useful for conducting research studies especially with the vision of future. The program is research oriented.

Programme: M.Tech. (Systems Management)

Employability: The program has following types of the job opportunities:

System Engineers Business Analysts

IT System Developers

E-commerce

**Education-IT systems** 

Innovation: The program includes subjects from the disciplines of management, computer science, engineering, and mathematical sciences. Main component is use of systems approach to solve the societal/industrial problems.

Research: The program involves several quantitative and qualitative methods useful for conducting research studies especially using systems approach.

## 1.1.4 Records of UGC/AICTE/National Council, Regulating bodies Guidelines

for the development and restructuring the curriculum, if any:

Not Applicable

Department Faculty members, if any, involved in leading any curricular reform which has created a national impact?

Dr. V.B.Gupta was involved in developing curriculum for M.Sc. program in Science Communication for NCSTC, DST, New Delhi during 1998 to 2005.

1.1.5 A. Record of Interactions, Opinions and Feedbacks for the designed curriculum with External Research Bodies

The syllabi of similar M.Tech./ M.E. courses being run in the leading institutions including IITs is consulted for designing the curriculum.

B. Records of Interactions, Opinions and Feedbacks for the designed curriculum with Industrial Experts, particularly in case of Professional Courses:

The opinions and feedbacks from industrial experts and consultants are taken in designing the curriculum of the M.Tech. programmes.

C. Records of Interactions, Opinions and Feedbacks for the designed curriculum with Stake Holders, such as eminent personalities, Visitors to the departments, parents

The syllabus is discussed with the eminent personalities who visit department. It is also discussed with the students and parents at the time of admission. Their suggestions are incorporated in the next revision.

D. Records of Alumni opinion on the existing curriculum (may be taken in an Alumni Register)

The alumni who are in contact always provide their views on the syllabus through emails. Their suggestions are also incorporated in the revision of the curriculum.

1.1.6 List of Department Courses which are also introduced in University affiliated colleges also. List of colleges who introduced those courses

No course of the school is introduced in the affiliated colleges.

1.1.7 Details of additional skill-oriented programmes designed for the colleges, Employees, Faculty relevant to regional needs

Computer skills and language communication skills are designed for the Employees, Research scholars, and Faculty.

- 1.2 Academic Flexibility
- 1.2.1 List of Courses taught in Department on campus
  - \* Overseas programmes offered on campus No overseas programme is offered.
  - \* Programmes available for colleges to choose from

    The affiliating colleges can start the programmes of the school after
    getting approvals from the statutory bodies like AICTE.
- 1.2.2 Records on the following provisions with reference to academic flexibility
  - a. List of Core/ Elective options

The syllabi of each semester is divided into three parts-Core papers, Elective-I papers, and Elective-II papers. Details are available in the syllabus of each program and also available on the website

b. List of Enrichment courses

Nil

c. List of Courses offered in modular form

Nil

d. List of courses/papers with Credit accumulation and transfer facility

Nil

e. Details of Lateral and vertical mobility within and across programmes, courses and disciplines

- 1.2.3 Records of International students

  No international student has taken admission during last four years.
- 1.2.4 Records of Courses developed targeting international students, if any Both M.Tech. programmes are developed for international students also. However, only one foreign student took admission in M.Tech. (Future Studies and Planning) in the year 1996.
- 1.2.5 Record of dual degree and twinning programmes Nil
- 1.2.6 A. List of students, Admission Process, Fee structure of each programme

List of the students taken admission in 2012 in M.Tech. (Future Studies and Planning):

Roll No.	Name of the Student
FS/MT-FSP/1201	AMBRISH NIGAM
FS/MT-FSP/1202	ANUPAMA DWIVEDI
FS/MT-FSP/1203	DEEPAK KUMAR GUPTA
FS/MT-FSP/1204	DEEPAK MITTAL
FS/MT-FSP/1205	DEEPAK YADAV
FS/MT-FSP/1206	HARSH VARDHAN SHARMA
FS/MT-FSP/1207	JITENDRA VERMA
FS/MT-FSP/1208	NEERAJ KUMAR VANI
FS/MT-FSP/1209	RAGHVENDRA SINGH PATEL
FS/MT-FSP/1210	RAHUL CHOUHAN
FS/MT-FSP/1211	RAJAT VERMA
FS/MT-FSP/1212	RAJENDRA MOURYA
FS/MT-FSP/1213	RAVINDRA BORWAL
FS/MT-FSP/1214	RAVINDRA PATEL
FS/MT-FSP/1215	RAVI SHANKAR UPADHYAY
FS/MT-FSP/1216	RUPESH SOLANKI
FS/MT-FSP/1217	SANDEEP BURA
FS/MT-FSP/1218	SHIVAM PATIDAR
FS/MT-FSP/1219	VIJAY SINGH CHOUHAN
FS/MT-FSP/1220	VIPUL SHARMA

List of the students taken admission in 2012 in M.Tech. (Systems Management):

Roll No.	Name of the Student
FS/MT-SM/1201	AVINASH AHIRWAR
FS/MT-SM/1202	CHETAN PATIDAR
FS/MT-SM/1203	JAYESH UMRE
FS/MT-SM/1204	KAPIL SHARMA
FS/MT-SM/1205	KIRTI RATHOD
FS/MT-SM/1206	MANISH CHOUDHARY
FS/MT-SM/1207	NAMITA SHARMA
FS/MT-SM/1208	NILOTPAL CHAKRABORTY
FS/MT-SM/1209	NISHIT KUMAR MISHRA
FS/MT-SM/1210	PRAGHYA TRIVEDI
FS/MT-SM/1211	PRAGYA SISODIA
FS/MT-SM/1212	RAHUL KUMAR GUPTA
FS/MT-SM/1213	RAMESH MAIDA
FS/MT-SM/1214	REENA ARYA
FS/MT-SM/1215	SANJAY KUMAR JOHARAM
FS/MT-SM/1216	SAYYED AAMIR HUSSAIN
FS/MT-SM/1217	SHRADHA HARIT
FS/MT-SM/1218	SUMEGHA JAGDALE
FS/MT-SM/1219	UDITA PHANSE
FS/MT-SM/1220	USHA JAIN

## **Admission Procedure:**

GATE qualified candidates are preferred for admission. Admissions are given as per Rank in the GATE. However, if seats are vacant due to non-availability of the GATE qualified / sponsored candidates, then NON-GATE candidates are also admitted as per the merit developed on the basis of % of marks obtained in the qualifying examination of the eligibility and interview (100 + 50 marks).

The sponsored candidates are admitted as per the merit developed on the basis of % of marks obtained in the qualifying examination of the eligibility (max. 100 marks), interview (max. 50 marks), and experience (5 marks per year limited to max. 50 marks).

## Scholarships:

The scholarships are provided to GATE qualified candidates subject to approval from AICTE.

M.Tech. (Future Studies and Planning): Fee Structure:

Semester	Acade	Development &	Students'		Examinati	Total (F	Rs.)
	mic Fee	Maintenance	Services Fee		on Fee		
		Fee	Boys	Girls		Boys	Girls
First	7140	1050	2260	2071	1050	11500	11311
Second	7140	1050	1472	1283	1050	10712	10523
Third	7140	1050	2260	2071	1050	11500	11311
Fourth	7140	1050	1472	1283	1050	10712	10523

Caution money (Refundable) of Rs. 3000/- is charged additionally in the first semester.

An additional fee of Rs. 3150/- per semester is charged from sponsored candidates.

Fee Concession to SC/ST/OBC candidates as per M.P.State Govt. rules.

M.Tech. (Systems Management):

Fee Structure:

Semester	Acade	Development &	Students'		Examinati	Total (Rs.)	
	mic Fee	Maintenance	Services Fee		on Fee		
		Fee	Boys	Girls		Boys	Girls
First	10500	2100	2260	2071	1050	15910	15721
Second	10500	2100	1472	1283	1050	15122	14933
Third	10500	2100	2260	2071	1050	15910	15721
Fourth	10500	2100	1472	1283	1050	15122	14933

Caution money (Refundable) of Rs. 3000/- is charged additionally in the first semester.

An additional fee of Rs. 3150/- per semester is charged from sponsored candidates.

Fee Concession to SC/ST/OBC candidates as per M.P.State Govt. rules.

B. Record of Teacher qualification and salary parity and differences (if any) at par with the aided programmes

The programmes of the school are aided programmes. The faculty

appointed in these programmes has the qualifications as per UGC guidelines and the salary is being paid as UGC scales including grade pay and as per State Govt. order applicable to all Govt. institutions and universities of M.P.

1.2.7 Operational details of distance Education Course in the department (if applicable)

Not applicable.

1.2.8 Details of Choice Based Credit System (CBCS)

Choice Based Credit System is in operation as per the university norms.

1.2.9 Records of Departmental Academic Calendars of each semester

First Semester	(July-Dec. 2012)	Second Semester (JanMay 2013)			
Event	Date	Event	Date		
Induction	08/08/2012	Class Start	07/01/2013		
Program					
Class Start	09/08/2012	Cultural	Feb. 16-18, 2013		
		program			
First Test	Sept.17-20, 2012	UTD Sports	Feb. 28-March 02,		
			2013		
Second Test	Oct. 17-20, 2012	First Test	March 6-9, 2013		
Third Test	Nov.22-26, 2012	Second Test	April 13-16, 2013		
End Sem.	Dec. 1-20, 2012	Third Test	April 12-26, 2013		
Exam					
Semester	21/12/2012 to	End Sem.	April 29 – May 18,		
Break	05/01/2013	Exam	2013		
		Semester	May 19-June 30,		
		Break	2013		

1.2.10 Records of Inter-disciplinary programmes, Name of interdisciplinary program and details of students undertaken those programmes.

The school offers inter-disciplinary programmes. Both M.Tech. programmes are of this nature.

#### 1.3 Curriculum Enrichment

1.3.1 A. Record of academic years in which each of the courses was revised:

Record is available with Academic section as minutes of the meeting of Board of Studies. Latest revisions have been done in the years 2008, 2009, 2010, 2012.

B. Records of review, up-gradation,

Records are available as minutes of the meetings of departmental committee/ Board of studies. Minor revisions are carried out in each semester.

C. Records of social relevancy,

The curriculum is developed keeping social relevance under consideration.

D. Records of job orientation

Both M.Tech. programs are job oriented as reflected in placements.

E. Records of knowledge intensive nature of each course

Latest topics are added in the curriculum to make the program more knowledge intensive.

F. Records of meeting the emerging need of students Emails and discussions with the students.

G. Records of meeting the emerging need of stakeholders
Emails

- 1.3.2 Details of the last four years during which how many new programmes at UG and PG levels were introduced
  - \* Inter-disciplinary
  - \* programmes in emerging areas

No new program was introduced during last four years.

1.3.3 A. Details of strategies adopted for the revision of the existing programmes

The feedbacks from the students, alumni, employers are considered for possible revision in the programme.

- B. Percentage of courses underwent a syllabus revision in last four years 100%
- 1.3.4 A. Details of Value-added courses offered

A paper on soft skills is offered in both M.Tech. programmes.

B. Details of these courses access to students

All students have to pass in these courses even credits are not counted for the award of the degree.

1.3.5 Details of higher order skill development programmes in consonance with the national requirements (for example, innovative M. Tech. /M.E. courses, CCNA, CCSP, ....)

Both M.Tech. programmes are innovative in nature.

- 1.4 Feedback System
- 1.4.1 A. Copy of Feedback form to obtain feedback from students/student class representatives regarding the curriculum

A copy of feedback form is available as attachment.

B. Details of action and use of on feedback from students
The students' feedback is useful for ugrading the faculty, laboratories and curriculum.

1.4.2 A. Method used for eliciting feedback on the curriculum from national and international faculty

The curriculum is discussed with the external faculty during their visit.

B. Conducting webinars

Planned to conduct webinars in the year 2013-14.

C. Curriculum development Workshops

Planned to conduct curriculum development workshop in the year 2013-14

D. Curriculum development online discussions

Yes, discussed with employers and alumni.

E. Impact of Workshop and discussions

Enrichment of the curriculum and lab. Experiments.

1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.

No feedback is taken from the affiliated colleges on curriculum enrichment of this school, as none is offering the similar courses.

1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the Department in ensuring the effective development of the curricula?

The faculty compares the contents of each paper with the latest available contents of similar papers at same level in nationally reputed institutions like IITs for quality sustenance. Feedbacks from external experts and employers are used for quality enhancement of the curriculum.

1.4.5 Any other information regarding Curricular Aspects which the UTD would like to include.

No.

#### CRITERION II: TEACHING-LEARNING AND EVALUATION

- 2.1 Student Enrolment and Profile
- 2.1.1 Copy of Advertisements and website info for ensuring publicity and transparency in the admission process

A common advertisement for admission in M.E./ M.Tech./ M.Pharm. programmes of DAVV is published in local and national newspapers including Employment News and also published on website each year.

Copy of advertisement is available in File 2.1.1.

2.1.2 A. Write up details of the process of admission put in place by the department

#### M.Tech. Admission Procedure:

GATE qualified candidates are preferred for admission. Admissions are given as per Rank in the GATE. However, if seats are vacant due to non-availability of the GATE qualified / sponsored candidates, then NON-GATE candidates are admitted as per the merit developed on the basis of % of marks obtained in the qualifying examination of the eligibility and interview (100 + 50 marks).

The sponsored candidates are admitted as per the merit developed on the basis of % of marks obtained in the qualifying examination of the eligibility (max. 100 marks), interview (max. 50 marks), and experience (5 marks per year limited to max. 50 marks).

#### Ph.D. Admission Procedure:

As per Ordinance 18 and UGC Regulations, 2009.

. B. List of the criteria for admission:

For M. Tech. Admissions:

- (i) GATE candidates:
  - Merit as per Rank in the GATE conducted by IITs.
- (ii) Non-GATE candidates:

  Merit developed on the basis of % of marks obtained in the qualifying examination of the eligibility and interview (100 + 50 marks).
- (iii) Sponsored candidates:

Merit developed on the basis of % of marks obtained in the

qualifying examination of the eligibility (max. 100 marks), interview (max. 50 marks), and experience (5 marks per year limited to max. 50 marks).

### For Ph.D. Admissions:

As per Ordinance 18 and UGC Regulations, 2009. An entrance test is conducted. Admissions are done on the basis of merit developed as per marks in the entrance test plus marks in the interview conducted by RDC.

2.1.3 Details of admission process in the affiliated colleges if department is monitoring the same.

Not applicable as the school is not monitoring any affiliated college for any activity including admissions.

### 2.1.4 Student profile analysis

Admitting	Programme	GATE	% of	
Year		Admitted S	tudents	
		Min.	Max.	
2011	M.Tech. (Future Studies and	23.67	27.00	
	Planning)			
	M.Tech. (Systems Management)	No student with		
		GATE scor	e	
2012	M.Tech. (Future Studies and	31.33	31.33	
	Planning)			
	M.Tech. (Systems Management)	19.67 41.00		

Programme	M.Tech. (Future	M.Tech. (Systems
	Studies and Planning)	Management)
Gender:		
Male	22 (92%)	17 (55%)
Female	2 (8%)	14 (45%)
Category:		
General	14 (58%)	21 (68%)
SC/ST	2 (8%)	6 (19%)
OBC	8 (34%)	4 (13%)

Persons with varied	0 (0%)	0 (0%)
disabilities (PD)		
State:		
M.P.	22 (92%)	27 (87%)
Other states	2 (8%)	4 (13%)
Age:		
20-25 Years	21 (88%)	5 (16%)
25-30 Years	3 (12%)	24 (77%)
30+ Years	0 (0%)	2 (7%)

- 2.1.5 Strategies adopted to increase/improve access for students belonging to the following categories:
  - \* SC/ST
  - \* OBC
  - \* Women
  - \* Persons with varied disabilities (PD)
  - \* Economically weaker sections
  - \* Outstanding achievers in sports and other extracurricular activities

Reservations in admissions are provided as per AICTE/ M.P. state guidelines for different categories of the students.

2.1.6 Number of students admitted in department in the last four academic years:

Categories	Year	2009	Year	r 2010	Year	r 2011	Year	2012
	Male	Femal	Mal	Femal	Mal	Femal	Mal	Femal
		e	e	e	e	e	e	e
SC	2	0	0	1	0	1	5	1
ST	0	0	0	1	0	0	1	0
OBC	1	0	2	1	2	1	10	2
General	11	4	8	4	9	5	15	6
Others	0	0	0	0	0	0	0	0
Total	14	4	10	7	11	7	31	9

# 2.1.7 A. Record of demand ratio for the various programmes of the university departments:

Programmes	Number of	Number of	Demand	
	applications	students admitted	Ratio	
UG		Not Applicable		
PG (M.Tech.)-FSP	21	20	1.05	
PG (M.Tech.)-SM	33	20	1.65	
Integrated Masters	Not Applicable			
M.Phil.	Not Applicable			
Ph.D.	11	6	1.83	
Integrated Ph.D.		Not Applicable		
Certificate		Not Applicable		
Diploma	Not Applicable			
PG Diploma	Not Applicable			
Any other (please specify)	Not Applicable			

B. If yes then highlight the significant trends explaining the reasons for increase/decrease.

No trend is established in Ph.D. admissions as admissions were made first time in Ph.D. as per revised Ordinance.

The demand ratio of M.Tech. programmes increased during admissions-2012 This is due to the revision of the syllabi of both the programmes.

2.1.8 A. Record of any programme discontinued/staggered in the last four years?

M.Sc. (Science Communication) has been discontinued since 2011 M.B.A. (Business Forecasting) has been discontinued from 2013.

B. If yes, write-up of the reasons.

M.Sc. (Science Communication) programme was being supported by NCSTC, DST, New Delhi. NCSTC funding became unavailable from the

year 2010 and then after the running of the programme became financially unviable.

M.B.A. (Business Forecasting) was started in the year 2008 under self finance scheme. The number of admitted students started declining from the year 2008 and in the year 2012 it was just 6 out of sanctioned intake of 60. As the programme was being run under self-finance so with 10% of the students it is financially unviable.

However, efforts are being made to start a new PG programme with different name and syllabi.

#### 2.1.9 Record of Admissions

Programmes	Total	Number of	Number of	Entrance
	Number of	first	second	test
	admissions	division	division	marks %
		pass	pass	(Min)
		students in	students in	
		qualifying	qualifying	
		exam	exam.	
UG	Not Applicable			
PG (M.Tech.)	40	31	9	NA
Integrated Masters	Not Applicable			
M.Phil.		Not Appli	cable	
Ph.D.	6	6	0	40%
Integrated Ph.D.		Not Appli	cable	
Certificate		Not Appli	cable	
Diploma	Not Applicable			
PG Diploma	Not Applicable			
Any other (please specify)		Not Appli	cable	

# 2.2 Catering to Diverse Needs of Students

2.2.1 A. Record of organization of orientation/ induction programme for freshers:

Orientation / induction programme is organized every year for freshers of each programme.

The university has also organized a common induction programme on 15/09/2012 for the students who were admitted in the year 2012.

B. Details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Duration: One day

Issues covered: Syllabi, pattern of exams. as per ordinance 31, marking scheme, result preparation, etc.

Experts involved: Faculty of the school including HOD.

Use of Feedback: No feedback is taken for orientation programme.

2.2.2 A. Record of analysis of the "differential requirements of the student population" after admission and before the commencement of classes

The faculty discuss with the students during initial periods regarding their background and any differential requirement for the program.

B. Record of key issues identified and addressed

Most of the time it was found that communication skills was the main problem. The school started classes on soft skills for enhancing the communication skills.

2.2.3 A. Record of bridge/remedial/ add-on courses

Remedial classes are planned in the year 2013-14 for the students who will fail in the tests.

B. Time table and details of the courses offered in the department-wise for all courses

Time table is hosted on the school's web page.

2.2.4 A. Record of the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.

Batch	Programme	% of Pas	s-outs o	ut of	% of Pass-
Year		admitted	student	outs with	
		SC	ST	OBC	First Division
2008-10	M.Tech. (FSP)	NA	NA	NA	NA
	M.Tech. (SM)	NA	NA	33%	100%
	M.B.A. (BF)	NA	NA	100%	100%
	M.Sc. (SC)	NA	NA	0%	0%
2009-11	M.Tech. (FSP)	0%	NA	100%	100%
	M.Tech. (SM)	0%	NA	NA	0%
	M.B.A. (BF)	0%	NA	80%	100%
	M.Sc. (SC)	0%	NA	80%	100%
2010-12	M.Tech. (FSP)	NA	100	100%	100%
			%		
	M.Tech. (SM)	0%	NA	100%	100%
	M.B.A. (BF)	NA	NA	50%	100%
	M.Sc. (SC)	0%	NA	100%	100%
2011-13	M.Tech. (FSP)	NA	NA	50%	100%
	M.Tech. (SM)	100%	NA	50%	100%
	M.B.A. (BF)	100%	NA	100%	100%
	M.Sc. (SC)		No	Admissio	on

NA: No Admission in the category.

## B. Main findings?

More attention is given to students who are slow learners and students from disadvantaged sections. It was observed that these students gained more confidence during the course and their performance also improved.

# 2.2.5 Record of identification and responses to the learning needs of advanced learners

Advanced learners are identified among the other students in class as per their response / performance in the class. An opportunity is provided to the advanced learners to study advanced topics and conduct research on related projects.

- 2.3 Teaching-Learning Process
- 2.3.1 Records of Plan and organisation of the teaching, learning and evaluation schedules (teaching plan, evaluation schedules and methods, etc.)

Each faculty member develops the teaching plan before starting the semester. Test copies / assignments are evaluated within seven days from the date of examination/ submission of the assignment.

2.3.2 A. Record and website info of providing course outlines and course schedules prior to the commencement of the academic session

Course outlines and course schedules are made available on the website prior to the commencement of the academic session.

B. Methods used for effective implementation

Activities are scheduled prior to the commencement of the academic session. The faculty members are asked to follow the academic schedule as announced.

2.3.3 A. Record of difficulties in completing the curriculum within the stipulated time frame and calendar

The curriculum is completed within the stipulated time frame and calendar most of the time. If some portions are left then extra classes are conducted.

B. Write up of the challenges encountered and the departmental measures to overcome these.

The school takes it as a challenge to complete the syllabus in time. For this the school tries its best to organize the classes regularly. If any class is left then that is organized in the free period or on holidays including Sundays.

2.3.4 A. Record of student-centric learning activities

A variety of hands-on activities are administered in order to promote successful student-centric learning. After theory classes problems are identified by the students to develop strategies or models to resolve them.

B. List of participatory learning activities which are adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

The faculty assigns minor projects / assignments related with the problems identified by the students. The students define the problem, collect data, develop the model or do the data analysis to come out with results. List of such activities is available.

2.3.5 List, record with photographs of activities such as invited experts/people of eminence to deliver lectures and/or organize seminars for students

The following external experts delivered lectures/ seminars for the students:

No.	Date	External Expert	Affiliation	Topic
1.	24/01/2008	Dr.	JNU, New	1. India: A global
		B.B.Bhattacharya	Delhi	emerging
				economic
				power
				2. Technology &
				Tomorrow
2.	05/05/2008	Dr. Narain Sinha	University of	Frontier Model
			Botswana,	Analysis
			Botswana	
3.	05/07/2008	Dr. P.Ram Babu	Cantor CO2,	Global warming
			Mumbai	
4.	22/07/2008	Dr. C.L.Jain	St. Johns	1. Importance of
			University,	Business
			New York	Forecasting in
				Planning and
				Decision
				Making
				2. Models of
				Business
				Forecasting
5.	04/09/2008	Dr. H.N.Dutta	NPL, New	Katabatic winds in
			Delhi	Antarctica
6.	16/07/2009	Dr. B.M.Jani	Aurobindo	Knowledge

			Institute of	Management
			Management	_
			Studies, Rajkot	
7.	10/09/2009	Dr. P.K.Choubey	IIPA, New	Policy Design and
			Delhi	Analysis
8.	14/02/2010	Dr.	Kashi	Engineering
		S.N.Chaturvedi	Vidyapeeth,	Economics
			Varanasi	
9.	18/03/2010	Dr. S.L.Lodha	MDS	Macroeconomic
			University,	Policy Analysis
			Ajmer	
10.	08/04/2010	Dr. H.N.Dutta	NPL, New	Antarctica
			Delhi	
11.	24/05/2010	Dr. Narain Sinha	University of	Econometrics and
			Botswana,	Forecasting
			Botswana	
12.	24/10/2010	Dr. V.K.Jain	JNU, New	Kyoto Protocol and
			Delhi	global warming
13.	16/01/2011	Dr. R.N.Yadava	RRL, Bhopal	Watershed
				Management
14.	04/05/2012	Dr. V.K.Jain	JNU, New	Climate change
			Delhi	
15.	01/10/2012	Dr. C.S.Barla	University of	1. Sustainable
			Rajasthan,	Development
			Jaipur	2. Project
				Management

The photographs are available in the file no. 2.3.5

2.3.6 Record of Encouragement to blended learning by using e-learning resources

Some e-books are available in the school. The students are asked to use e-books.

2.3.7 Record of facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching

The faculty develops and administers the group of each batch of the students on social media sites and mobiles. The assignments, notices and some e-teaching material are tagged for the students.

- 2.3.8 Record of activities of designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes.
  - Mr. Vandit Hedau monitors the trends and issues regarding developments in open source community.
- 2.3.9 Record of steps taken to convert traditional classrooms into 24x7 learning places

The classrooms have been equipped with projectors, computers, and Wi-Fi facility.

- 2.3.10 A. Record of actions taken to avail the services of counsellors/mentors/advisors for each class or group of students for academic, personal and psycho-social guidance
  - Dr. V.B.Gupta also acts as counselor / mentor/ advisor for all the students of M.Tech. (Systems Management).
  - Mr. Vandit Hedau also acts as counselor / mentor/ advisor for all the students of M.Tech. (Future Studies and Planning).
  - B. Details of the process and the number of students who have benefitted

The students of the program keep in touch for their academic, personal and psycho-social problems with the concerned counselor / mentor. The students get benefitted with such type of discussions.

2.3.11 A. Record of innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years?

The faculty members use ICT based teaching. The student-centric teaching is also being practiced.

#### B. Write up of improvement in learning by innovative methods

The innovative methods are useful to the students to learn and explore. In fact, numbers of advance topics added in the curriculum in recent past were unavailable in the text books which certainly enhanced their innovative skills such as searching and referring the research articles and also the use of animation to understand. Besides, number of aspects including report writing, conducting survey, concept notes, research proposals being explained using advanced innovative methods.

C. Record of recognition to the faculty due recognition for innovation in teaching:

No record is available.

2.3.12 Record of actions for creating a culture of instilling and nurturing creativity and scientific temper among the learners

The curriculum includes papers for example system dynamics, simulation, etc. where students' creativity and scientific thinking is useful. The faculty members develop such problems where involvement of the students is increased that is helpful in developing creativity and scientific temper among the students.

# 2.3.13 A. Record of student projects (if mandatory in each of the learning programme)

Year	No. of the projects	No. of the	Total no. of
	with external	projects within	the projects
	institutions	the university	
2008-10	3	10	13
2009-11	5	9	14
2010-12	3	9	12
2011-13	7	8	15
Total	18	36	54

#### B. Number of projects executed within the university

Year	No. of the projects within the university
2008-10	10
2009-11	9
2010-12	9
2011-13	8
Total	36

C. Names of external institutions associated with the University for Student Project Work

National Physical Laboratory, New Delhi

CSIR Centre for Mathematical Modelling and Computer Simulation, Bangalore

IIM, Indore

IIM, Kolkata

IIT, Delhi

NISTADS, New Delhi

#### D. Role of faculty in facilitating such projects

The faculty members write the letters to the concerned persons for engaging the students for their projects. The institutions select some of the students for projects as per their criteria. There is provision of keeping external and internal supervisors for each of such project work. Internal supervisor is one of the faculty members. The internal supervisor keeps continuous watch on the progress of the project.

# 2.3.14 A. Record of shortfall in qualified faculty to meet the requirements of the curriculum

There is shortage of qualified faculty to meet the requirements of the curriculum. Visiting faculty is engaged in every semester to cover this shortage.

Records of visiting faculty invited is available in File 2.3.14.

B. Record of actions for shortfall supplementation

Visiting faculty is invited to take classes of such papers for which regular faculty is not available at the School. Record of such visiting faculty is available in the school for each program and semester in File 2.3.14.

2.3.15 Number of percentage of faculty enabled to prepare computer-aided teaching/ learning materials

100%

2.3.16 A. Record of Student feedback for evaluation of teachers by the students

Record of students' feedback is available in File 2.3.16.

B. Record of Alumni feedback for evaluation of teachers by the students

Emails from the alumni are available as record in File 2.3.16.

C. Methods used and Impact of the evaluation feedback used to improve the quality of the teaching-learning process

The feedback received from the students is analyzed in each semester. Outcome of the analysis is conveyed to the concerned faculty for further improvement.

The feedback is also available at IQAC website link of the school.

- 2.4 Teacher Quality
- 2.4.1 Record of how the plan and management of human resources was done to meet the changing requirements of the curriculum

An assessment of the faculty required for completing the curriculum of each program in each semester is carried out at departmental level. If it is found that there is requirement of additional manpower then visiting faculty is searched to teach that course.

### 2.4.3 Diversity in its faculty recruitment:

Department /	% of	% of faculty	% of faculty	% of faculty
School	faculty	from other	from	from other
	from the	universities	universities	countries
	same	within the	outside the	
	university	State	State	
School of	33%	0%	67%	0%
Future Studies				
and Planning				

2.4.4 A. List of qualified faculty appointed for new programmes/emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Information Technology, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)?

Faculty appointed: Dr. V.B.Gupta, Dr. R.C.Sharma, and Mr. Vandit Hedau

B. Number of faculty members appointed to teach new programmes during the last four years

Nil

- 2.4.5 List of academic recharge and rejuvenation of teachers:
  - A. List of faculty availed and provided research grants by the University Nil
  - B. List of faculty availed and on study leave Nil
  - C. List of faculty nominated to national/international conferences/seminars, in-service training, organizing national/international conferences etc.

Dr. R.C.Sharma, International Conference, Organized by World Academy of Social Science-Australia, at Toronto; Canada.

Dr. V.B.Gupta, National Workshop on Environmental Economics, IIT, Mumbai

- 2.4.7 List of faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years Nil
- 2.4.8 List of faculty underwent staff development programmes during the last four years (add any other programme if necessary)?

Academic Staff Development Programmes	Number of faculty
Refresher courses	1
HRD programmes	0
Orientation programmes	1
Staff training conducted by the university	0
Staff training conducted by other institutions	0
Summer / Winter schools, workshops, etc.	0

- 2.4.9 Percentage of the faculty have
  - \* been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies = 67%
  - \* participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies = 67%
  - \* presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies = 33%
  - \* teaching experience in other universities / national institutions and other institutions = 33%
  - \* industrial engagement = 33%
  - \* international experience in teaching = 33%
- 2.4.10 List and details of organization of academic development programmes (*e.g.*: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process

Board of Studies of Futures Studies

#### 2.4.11 A. List of faculty encouraged

- \* Mobility of faculty between universities for teaching Nil
- \* Faculty exchange programmes with national and international bodies

Nil

B. Record of schemes helping in enriching the quality of the faculty by such mobility and faculty exchanges

Nil

- 2.5 Evaluation Process and Reforms
- 2.5.3 A. Record of time taken by the department for declaration of examination results each semester

The school declares results within 15 days from the date of examination. Test papers/ main exam copies are shown to the students within week of the examination.

- B. Record of means adopted for the mode / media adopted for the publication of examination results (Website, SMS, email, etc.).
- 1. On Notice Board
- 2. Website
- 3. On social sites.
- 2.5.4 A. Record of ensuring transparency in the evaluation process

Evaluated answer sheets are shown to the students and answers are discussed in the class.

B. Measures taken to ensure confidentiality

Questions papers are developed at most one day before the examination. The envelop containing the question papers is sealed and opened by the exam superintendent in presence of the invigilators just before the starting of the exam.

C. Record of the Pre-examination processes – Examination Time table generation, student list generation, Invigilators, Attendance sheet,

Exam schedule is declared in the starting of the semester.

The list of the students is generated as per admissions.

Attendance sheet is developed as per the list of the students.

Duties of the invigilators are decided before starting the semester-end examinations.

D. Results of students course wise and its analysis The results of the students are declared course wise. Cumulative result is also declared to show overall performance.

- 2.6. Student Performance and Learning Outcomes
- 2.6.1 A. Write up of articulation of its Graduate Attributes of the department

The students are engaged with theoretical lectures and hand-on exercises. They apply their theoretical knowledge to address the real life problems. The students also carry out studies in which data collection and analysis are important.

B. Record of facilitation of monitor the implementation and outcome

The class monitor takes care of classes conducted, remedial classes, assignments, etc.

2.6.2 A. Record of learning outcomes for its academic programmes

Good placements.

Students' research publications

Students' project reports.

- B. Record of making students and staff are made aware of these Displayed on the notice board and web site.
- 2.6.3 Write up of department teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes

The syllabus of each paper incorporates theoretical, practical, and applicability aspects. They apply their theoretical understanding in

solving designed industrial / societal problems. The assessment is done in form of examination, discussions and presentations by students (especially on advance topics preferably not part of syllabus). To access scientific temperament, practical and theoretical skills, third and fourth semesters are dedicated to project / research work followed by dissertation, presentation and viva-voce. These criteria provide overall personality and intellectual assessment of the students.

2.6.4 Record of collection and analysis of data on student learning outcomes and use it to overcome the barriers to learning

The project reports are assessed by the internal and external examiners. An evaluation report is developed for each project by the concerned examiners. The report contains suggestions for improvement. These suggestions are conveyed to the student and concerned internal supervisor for improvement.

2.6.5 Write up of new technologies deployed by the department in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges

Each class room is equipped with LCD projectors. Teaching through ICT methods enhance students learning. Similarly presentations by the students on the given topics help to evaluate learning.

2.6.6 Any other information regarding Teaching, Learning and Evaluation which the department would like to include.

Nil

# CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

III.1 Year-wises Publications in the department:

Year	2008	2009	2010	2011	2012	2013
Publications	8	3	2	5	3	2

S.No.	Title of the published research paper, Year of Publishing, Name of the Authors, Journal Name, Volume, and Page number	Impact factor (Print 0.0 if no impact factor is documented by Journal. ISSN/ISBN
1.	Indore Air Quality – An Evaluation, 2008, H.K.Gupta and R.C.Sharma, Indian Journal of Environmental Protection, 28(10), 926-934.	ISSN : 0253 - 7141
2.	Heteroscedastic Frontier Model and Efficiency: A Financial Analysis of State Level Public Enterprises in India, 2008, Sharma R.C., Narian Sinha & R.K. Mishra, Rajasthan Economic Journal, Vol.32(1), 19-37.	ISSN : 0975 - 9050
3.	Enrollment and Dropout Rates of Male & Female Students in School of Education in India: A Comparative Analysis, 2008, Sharma Namrata, Meenu Kumar & R.C. Sharma, Gyan – The Journal of Education, 28-33.	ISBN: 0972-9992
4.	An Analysis of Public Opinion on Science Television Channels, 2008, V.B.Gupta, Meenu Kumar and Chandrika Chaurasia, Indian Journal of Science Communication, 7 (1), 10-14.	ISSN: 0972 – 429X
5.	Observations of Carbon Monoxide in Antarctic Troposphere at Maitri, Antarctica, 2008, S.L.Jain, B.C.Arya, Ashok Kumar, Sachin D.Ghude, and V.B.Gupta, Scientific Report of Twenty Second Indian Antarctic Expedition, Technical Publication No. 20, 95-102, Published by National Centre for Antarctic & Ocean Research, Goa.	ISBN: 978-81- 906526-2-9
6.	·	ISBN: 978-81- 906526-2-9

		10DM 070 01
7.	Online Measurement of Surface Air Concentration of CH <sub>4</sub> and CO <sub>2</sub> at Maitri, Antarctica, 2008, S.L.Jain, B.C.Arya, Ashok Kumar, V.B.Gupta, and Sachin D.Ghude, Scientific Report of Twenty Second Indian Antarctic Expedition, Technical Publication No. 20, 117-124, Published by National Centre for	ISBN: 978-81- 906526-2-9
	Antarctic & Ocean Research, Goa.	
8.	Mathematical Modelling of Katabatic Winds over Schirmacher Region, East Antarctica, 2008, Ashok Kumar, V.B.Gupta, H.N.Dutta and Sachin D.Ghude Indian Journal of Radio and Space Physics, 36, 204-2012.	Impact Factor: 0.075 ISSN: 0367 - 8393
9.	Examining Convergence of Food Consumption in Asian Countries: An Application of Sale-i-Martin Measures, 2009, Sharma R.C. and Shubhangi Jore, 91 <sup>st</sup> Conference Volume of the Indian Economic Association, The Indian Economic Journal, 1101-08.	ISSN: 0019-4662
10.	Food Consumption in Asian Countries: A Residual Analysis for Examining Convergence, 2009, Sharma, R.C. and Shubhangi Jore, AIM Explore (A Journal of Management Awareness), 6,8-16.	ISSN: 0973-0001
11.	The Relationship between Capital Ratio and Port-Folio Risk of Scheduled Commercial Breaks in India, 2009, Singh Manmeet, R.K. Vyas and R.C. Sharma, International Journal of Business Insights and Transformation, 2, 89-103.	ISSN: 0974-5874
12.	Mathematical Models for Diffusion of Dry Technology in Indian Cement Industry, 2010, V.B.Gupta, Ashok Kumar, S.T.Venkatesan, and Arvind Kumar Gupta, Global Journal of Flexible Systems Management, 4, 324-26. www.indianjournals.com	
13.	Carbon Sequestration Assessment and Sustainable Policy for Madhya Pradesh, 2010, A.K.Singh, V.B.Gupta, and R.K.Jha, International Conference on Climate Change and Developing Countries, Organized by CEET and M.G.University, Kottyam, Kerala, Feb. 19-22, 2010.	International Conference
14.	Examining Convergence of Food Consumption in Asian Countries: A Naïve Residual Analysis,	National

	2011 C1 D C 1 C1 1 : 1 45 <sup>th</sup>	
	2011, Sharma, R.C. and Shubangi Jore, 47 <sup>th</sup>	Conference
	Annual Conference of The Indian Econometric	
	Society, Devi Ahilya University, Indore (School	
	of Future Studies and Planning), 6-8 Jan. 2011.	
15.	Factors Affecting Consumer Involvement in	National
	Purchase of Garments: A Quantitative Analysis	Conference
	for Marketing Strategies, 2011, Sapna Solanki	
	& R. C. Sharma, 47 <sup>th</sup> Annual Conference of	
	The Indian Econometric Society, Devi Ahilya	
	University, Indore (School of Future Studies	
	and Planning), 6-8 Jan. 2011.	
1.6		N-4:1
16.	Food Consumption Pattern in West and East	National
	Asian Countries: A Comparative Analysis using	Conference
	Barro and Sala-I-Martin Measures, 2011,	
	Shubhangi Jore and R. C. Sharma, 47 <sup>th</sup> Annual	
	Conference of The Indian Econometric Society,	
	Devi Ahilya University, Indore (School of	
	Future Studies and Planning), 6-8 Jan. 2011.	
17.	Forecasting Exchange Rate for Euro, GBP and	National
	USD with respect to INR using Dynamic	Conference
	Adaptive Neuron – Fuzzy Logic System, 2011,	
	Abhinav K. Shrivastava, Usha Shrivastava & R.	
	C. Sharma, 47 <sup>th</sup> Annual Conference of The	
	Indian Econometric Society, Devi Ahilya	
	University, Indore (School of Future Studies	
	· · · · · · · · · · · · · · · · · · ·	
18.	and Planning), 6-8 Jan. 2011.	Intomotional
18.	Asymptotic Limit of Consumption and	International
	Threshold Level of Income: A	Conference
	Macroeconometric Analysis of Asian Countries,	
	Global conference on Economics Finance and	
	Management, 2011, Sharma R C and Shubhangi	
	Jore, International Conference organized by	
	World Academy of Social Science-Australia, at	
	Toronto; Canada, 9-10 June 2011.	
19.	Corporate Governance and Firm Performance:	ISSN: 0974-8563
	An Empirical Analysis of Finance &	
	Pharmaceutical Sectors, 2012, Kapooria Pallavi,	
	Sharma R C and Kaul Deepak), Management	
	Research Journal "Prabandhan & Taqniki",	
	Vol.6, pp. 19-22.	
20.	Land Use Pattern and Forecasting of Carbon	ISSN: 2231-5780
20.	Sequestration in Madhya Pradesh Forests, 2012,	10011. 4451-5/00
	=	
	A.K.Singh, R.K.Jha, and V.B.Gupta,	
	International Journal of Multidisciplinary	
	Research, 2, 5, 29-39.	

21.	Impact of Corporate Governance on Firm	ISBN: 978-93-
	Performance: A Comparative Analysis of IT	5062-002-1
	and Finance Sector, 2012, Kapooria Pallavi,	
	Sharma R C and Kaul Deepak), Ch. 7, pp.53-	
	57 in Ed. Rajendra Jain, Sanjay Dubey and	
	Amitabh Joshi, "Developing Strategies for	
	Organizations in Global Economies: Prospects,	
	Issues & Challenge", Excel Books, New Delhi.	
22.	Some Challenges of Corporate Governance on	ISBN No. 978-93-
	Performance: An Innovative Econometric	82563
	Analysis for Sustainability of Firms, 2013,	
	KapooriaPallavi, Sharma R C, Kaul Deepak,	
	Sharma Nivedita, Ch. 13, pp. 176 – 185 in Ed.	
	R.K.Mishra, ShitalJhunjhunwala& J.Kiranmai,	
	"Corporate Governance in Emerging Markets",	
	Bloomsbury Publishers, New Delhi.	
		7007 40 005
23.	Urbanisation and Economic Development in	ISSN: 2249-8621
	Madhya Pradesh: Policy Implications for	
	Sustainable Forest Management, 2013,	
	A.K.Singh, V.B.Gupta, and Ram Kumar Jha,	
	Journal of Energy, Environment, and Carbon	
	Credits, 3, 1, 22-30.	

III.2 Number of papers published in peer reviewed journals (national /

international) 12 National: 9 International: 3

Monographs 0
Chapters in Books 5

Edited Books 0

Books with ISBN with details of publishers 0

Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Citation Index – range / average

**SNIP** 

SJR

Impact Factor – range / average

h-index

III.3 List and Records and Details of patents and income generated

No patent.

III.4 List and Record of Areas of consultancy and income generated Nil

III.6 List and Record of Faculty selected nationally/internationally to visit other laboratories in India and abroad

Nil

III.6 List and Record of Faculty serving in

National committees b) International committees c) Editorial Boards d) any other (please specify)

Dr. R.C. Sharma is the member of Editorial Board / Editorial Advisor of the following journals:

- 1. Journal of Economic Policy and Research
- 2. Journal of Institute of Public Enterprise
- 3. Indian Journal of Quantitative Economics
- 4. PACE A Jorunal of Prestige Institute of Management, Dewas (MP) ISSN 0976-0938
- III.7 Research thrust area recognized by funding agencies for the department Carbon sequestration, Environmental Management, Modeling and Simulation, Econometrics.

III.8 Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

Name of the	Project Title	Funding	Grant
Faculty		Agency	Received
			(Rs.)
Dr. V.B. Gupta	GIS Based Forest Decision	DST, New	29,98,970
	Support System for	Delhi	
	Sustainable Biomass		

	Production and Carbon Sequestration in Forests of Malwa Region of Madhya Pradesh		
Dr. V.B.Gupta	P.G. Diploma Course in Science Journalism through Distance Education	DST, New	25,00,000

III.9 List and details of Inter-institutional collaborative projects and grants received

All India collaboration b) International

Nil

III.10 List and details of Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received.

Nil

III.11 List and Details of Research facility / centre with

state recognition

Nil

• national recognition

Nil

• international recognition

Nil

III.12 List and details of Special research laboratories sponsored by / created by industry or corporate bodies
Nil

- 3.1 Promotion of Research
- 3.1.1 A. Composition of Departmental Research Committee, List of members and minutes of its meeting

The following Departmental Research Committee for School of Future Studies and Planning was constituted by the university through its letter no. Academic/11/Interview Board/2012/2356 dated 20/11/2012:

Prof. P.K.Gupta

Chairman

Dean/ Sr. Professor

Dr. V.B.Gupta Member HOD & Chairman BOS

Dr. R.K.Vyas Member IIPS

Dr. Gyan Prakash Member Research Supervisor
Dr. Indu Bhargav Member Research Supervisor
Dr. Mayank Saxena Member Research Supervisor

B. Records of DRC regarding monitoring and addressing issues related to research

The meeting of the Departmental Research Committee was held on 24/12/20102. The committee recommended the selection of the following candidates for Ph.D. course work:

Centre of Course Work: School of Future Studies and Planning, DAVV Indore

S.No.	Name	Father's Name	Category	Name of Supervisor & Co-Supervisor(if any)
1.	Parul	Mr.	General	Dr. Gyan Prakash
	Kanchan	R.K.Kanchan		
2.	Abhilasha	Mr. Padmakar	General	Dr. V.B.Gupta
	R. Bhagwat	A. Phadnis		
3.	Sharda	Mr. Jaipal Das	General	Dr. V.B.Gupta
	Haryani	Chugh		(Supervisor)
				Dr. Mayank Saxena
				(Co-Supervisor)
4.	Abhinav Kr.	Mr.	General	Dr. Gyan Prakash
	Srivastava	J.L.Srivastava		(Supervisor)
				Dr. V.B.Gupta (Co-
				Supervisor)
5.	Vinay	Mr. J.L.Gupta	General	Dr. V.B.Gupta
	Kumar			
6.	Sanjay	Mr. N.C.	General	Dr. Gyan Prakash
	Pramanik	Pramanik		

C. Record of DRC recommendations which have been implemented and their impact.

The candidates recommended by the DRC were allowed to do Ph.D. course work. All recommended students have passed the course work.

3.1.2 Information of research centers in its affiliated / constituent colleges which are monitored by the DRC of the department

DRC is not monitoring any research centre.

#### 3.1.3 Details of the

- \* advanced funds for the sanctioned projects
  NIL
- \* providing seed money NIL
- \* Simplification of procedures related to sanctions / purchases to be made by the investigators

  No simplification for the projects
- \* Autonomy to the principal investigator/coordinator for utilizing overhead charges

  Yes, for 85% of overhead grant
- \* Timely release of grants Always delayed
- \* Timely auditing Always delayed
- \* Submitted utilization certificates to the funding authorities-Always delayed.

# 3.1.4 Record of interdisciplinary research promoted

\* with other departments /schools of the university and

There are some research students registered for Ph.D. degree under supervision of a faculty from the school and another faculty from other schools-Economics/ IMS/ some private business schools.

Record is available

\* collaboration with national/international institutes/industries

There are some research students registered for Ph.D. degree under supervision of a faculty from the school and another faculty from NPL, Delhi/ NCSTC, DST.

Record is available

3.1.5 Details of workshops/ training programmes/ sensitization programmes conducted by the department to promote a research culture on campus

Organized 47<sup>th</sup> Annual Conference of the Indian Econometric Society at School of Future Studies and Planning, Devi Ahilya Vishwavidyalaya, Indore

January 6-8, 2011, Funded by Indian Econometric Society and UGC.

The students are always encouraged to conduct minor research students as their assignments, minor / major projects.

3.1.6 A. Details of visits of researchers of eminence to visit the campus as adjunct professors

Nil

B. Impact of such efforts on the research activities of the university N.A.

3.1.7 A. Percentage of the total budget of the department which is earmarked for research

There is no separate budget head for research. The grant received for research projects is used for conducting the research.

B. Details of heads of expenditure, financial allocation and actual utilization

There is no separate budget head for research.

3.1.8 A. Details of University funded research and awarded Post Doctoral Fellowships/Research Associateships

B. List of students registered with record of source of funding by the university and other sources

Ms. Seema Gupta was registered as JRF under DST funded research project.

3.1.10 A. List and percentage of faculty which have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad

Nil

B. Record of the output of these scholars

Nil

3.1.11 A. Details with photographs of national and international conferences organized

Organized 47<sup>th</sup> Annual Conference of the Indian Econometric Society at School of Future Studies and Planning, Devi Ahilya Vishwavidyalaya, Indore

January 6-8, 2011, Funded by Indian Econometric Society and UGC.

B. List highlighting the names of eminent scientists/scholars who participated in these events.

#### Eminent participants:

- 1. Dr. Y.V.Reddy, Former Governor, Reserve Bank of India
- 2. Dr. K.L.Krishna, Chairman of Board of Governors and Executive Council, Centre for Economic and Social Studies (CESS), Hyderabad
- 3. Dr. Arvind Panagariya, Professor of Economics and Jagdish Bhagwati Professor of Indian Political Economy, Columbia University
- 4. Dr. N.R.Bhanumurthy, Professor at National Institute of Public Finance and Policy, New Delhi

- 3.2 Resource Mobilization for Research
- 3.2.1 Record of Financial provisions made in the university budget for supporting students' research projects

  Nil
- 3.2.2 A. Record of special efforts to encourage its faculty to file for patents Nil
  - B. List of registered and accepted patents. Nil
- 3.2.3 Details of ongoing research projects of faculty:

	Year	Numb	Name of	Name of	Total
	wise	er	the	the	grant
			project	funding	received
				agency	
A. University award	ed projects:	NIL			
Minor projects			NIL		
Major projects			NIL		
B. Other agencies - 1	national and	internati	onal (specif	y)	
Minor projects			NIL		
Major projects	2006-11	1	PGD	NCSTC,	2500000
				DST, New	
				Delhi	
	2008-12	1	GIS	DST, New	2998970
				Delhi	

- 3.2.4 A. Record of projects sponsored by the industry/corporate houses: Nil
  - B. Details such as the name of the project, funding agency and grants received.

Name of the	Project Title	Funding	Grant
Faculty		Agency	Received (Rs.)
Dr. V.B. Gupta	GIS Based Forest	DST, New	29,98,970
	Decision Support System	Delhi	
	for Sustainable Biomass		
	Production and Carbon		
	Sequestration in Forests		

	of Malwa Region of Madhya Pradesh		
Dr. V.B.Gupta	P.G. Diploma Course in	NCSTC,	25,00,000
_	Science Journalism	DST, New	
	through Distance	Delhi	
	Education		

3.2.5 A. Details of Department recognition for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and the quantum of assistance received

Nil

B. Record of any two significant outcomes or breakthroughs achieved by this recognition.

Not Applicable

### 3.2.6 List details of

a. Research projects completed and grants received (funded by National/International agencies):

Name of the	Project Title	Funding	Grant
Faculty		Agency	Received (Rs.)
Dr. V.B. Gupta	Integrated rural energy	Unassigned	5000
	planning-development of	Grant of	
	a mathematical model	UGC	
Dr. V.B.Gupta	Modelling and	UGC	450000
	simulation of technology		
	diffusion and its		
	applications in Indian		
	market		
Dr. V.B.Gupta	Masters programme in	DST	1812000
	S&T communication		
Dr. V.B.Gupta	M.Sc. in science	DST	2520000
	communication		
Dr. R.C.Sharma	ECONOMETRIC	CSIR	485855
	ESTIMATION OF		
	EFFICIENCY THROUGH		
	FRONTIER SYSTEMS:		
	METHODOLOGICAL &		
	EMPIRICAL ISSUES WITH		

	SPECIAL REFERENCE TO		
	FORECASTING &		
	PLANNING IN SELECTED		
	MANUFACTURING		
	INDUSTRIES		
Dr. R.C.Sharma	MACROECONOMIC	UGC	360000
	FORECASTING & POLICY		
	Analysis for Indian		
	ECONOMY USING A		
	CONSISTENCY		
	ACCOUNTING		
	Framework		

- b. Inter-institutional collaborative projects and grants received
  - i) All India collaboration

Market based instruments for regional environment management

Funded by World Bank through IGIDR, Mumbai Grant received: Rs. 789000.

- ii) International: NIL
- 3.3 Research Facilities
- 3.3.1 A. Infrastructure in the department to facilitate research

GIS Lab.

Internet, computers, printers, and scanners.

B. Strategies have been evolved to meet the needs of researchers in emerging disciplines

The needs of the researchers are fulfilled mainly from research projects.

3.3.2 A. Information and Resources catering to the needs of researchers of the department

The needs of the researchers are fulfilled mainly from research projects.

B. Details of the facility.

Internet, computers, GIS, and application softwares

3.3.3 Record of University Science Instrumentation Centre (USIC) facilities been made available to research scholars

USIC facilities are available to the research scholars. But school conducts theoretical / survey based researches and therefore no need of USIC facilities.

3.3.4 Record of provision of residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)

The entire campus including hostels is Wi-fi.

3.3.5 Details of Uses of the Facilities of IUC, CAT, NRCS, IIT Indore and other specialized Research Centers for research

No specialized research facility is needed.

- 3.4 Research Publications and Awards
- 3.4.1 Research journal published, if any, from the department(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

No research journal is published.

- 3.4.2 Details of publications by the faculty:
  - \* Number of papers published in peer reviewed journals (national / international): 12 National: 9; International: 3
  - \* Monographs 0
  - \* Chapters in Books 5
  - \* Books edited 0
  - \* Books with ISBN with details of publishers 0
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)

- \* Citation Index range / average
- \* SNIP
- \* SJR
- \* Impact Factor range / average
- \* h-index

#### 3.4.3 Details of

\* faculty serving on the editorial boards of national and international journals

Dr. R.C. Sharma is the member of Editorial Board / Editorial Advisor of the following journals:

- 1. Journal of Economic Policy and Research
- 2. Journal of Institute of Public Enterprise
- 3. Indian Journal of Quantitative Economics
- 4. PACE A Jorunal of Prestige Institute of Management, Dewas (MP) ISSN 0976-0938
  - \* faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies

Nil

#### 3.4.4 Details of

- \* research awards received by the faculty and students
- \* national and international recognition received by the faculty from reputed professional bodies and agencies
- 3.4.5 A. Number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years

The school does not offer M.Phil. programme.

Name of the Faculty	No. of Ph.D. degrees awarded during last
	four years
Dr. R.C.Sharma	01

Dr. V.B.Gupta	03
---------------	----

B. University participate in *Shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access Yes.

- 3.4.6 A. Record of Promotion e interdisciplinary research.

  The school conducts interdisciplinary research.
  - B. Number of interdepartmental / interdisciplinary research projects undertaken
    - 01 (With Dr. Gyan Prakash, School of Economics)
  - C. Mention the number of departments involved in such endeavours 01
- 3.4.8 List of University instituted research awards to the faculty of the Department

  Nil
- 3.4.9 Details of incentives given to the faculty for receiving state, national and international recognition for research contributions

Nil

- 3.5 Consultancy
- 3.5.1 Important consultancies undertaken by the department during the last four years.

Nil

- 3.5.2 A. Department participation in university-industry cell Yes.
  - B. If yes, what is its scope and range of activities Joint research.

3.5.3 Record of publicizing the expertise of the department for consultancy services

Nil

- 3.6 Extension Activities and Institutional Social Responsibility (ISR)
- 3.6.1 A. Department records of sensitization of faculty and students on its Institutional Social Responsibilities

Faculty and students are involved in institutional social responsibilities like blood donation, tree plantation, cleaning of Khan river, etc.

B. List the social outreach programmes which have created an impact on students' campus experience during the last four years.

Cleaning of Khan river Tree plantation Cleaning of campus Blood donation camps

3.6.2 Promotion of neighborhood network and student engagement and holistic development of students and sustained community development?

The students are encouraged to develop neighborhood network for providing social services for sustainable society development.

3.6.3 Record of participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programmes

The faculty and students participated in different extension activities but no record is available.

3.6.4 Records of tracking the students' involvement in various social movements / activities which promote citizenship roles

The names of the students donated blood are available in the camp registers.

Shramdan in Garden dated 14.02.2013.

Interdepartmental games (from February 28 to March 02, 2013).

3.6.5 Write up of the values inculcated and skills learnt during extension activities.

The extension activities develop the values and skills such as

- work for every small aspect without any hesitation such as cleaning and beautification of the campus
- challenges of climate change,
- our social and cultural values.
- 3.6.6 Department community in its outreach activities Faculty and students
- 3.6.7 Details of awards received by the institution for extension activities and/contributions to social/community development during the last four years

UTD lucky doubles Badminton Teachers Tournament – Mr. Vandit Hedau

IIIrd prize in Lawn Tennis tournament (West zone)- Team manager-Mr. Vandit Hedau

- 3.7 Collaboration
  - A. MOU Copies and Record of collaboration with other agencies impacted the visibility, identity and diversity of activities on campus

No MOU is signed. However, the school is having in-principle collaboration with the following institutions for research and internships:

National Physical Laboratory, New Delhi

CSIR Centre for Mathematical Modelling and Computer Simulation, Bangalore

IIM, Indore

IIM, Kolkata

IIT, Delhi

NISTADS, New Delhi

B. Record of benefits academically and financially because of collaborations

Financial benefits to students in terms of stipend.

Academic benefits in terms of students' projects, research discussions are available.

3.7.2 Records of linkages resulted in

*	Curriculum	development	No

\* Internship Yes, project reports

\* On-the-job training Yes

\* Faculty exchange and development No

\* Research Yes

\* Publication Yes

\* Consultancy No

\* Extension No

\* Student placement Yes

- \* Any other (please specify): Some of the students who worked with private companies were absorbed there. Yes.
- 3.7.3 A. Copy of MoUs with institutions of national/international importance/other universities/ industries/corporate houses etc.

Not available

- B. Record of enhanced the research and development activities Nil
- 3.7.4 Have the university-industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

No

3.7.5 Any other information regarding Research, Consultancy and Extension, which the university would like to include.

Nil

#### CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 Physical Facilities

#### 4.1.1 A. Details of Department physical infrastructure

The school has good infrastructure as follows:

- 1. Seminar Hall (1), equipped with internet and projector, with sitting capacity of 50.
- 2. Faculty rooms, Head's chamber, Meeting room, Office
- 3. Class rooms (2) & Tutorial rooms (2), equipped with projectors
- 4. Boys common room (1), Girls common room (1)
- 5. Systems Laboratory equipped with 10 HP PCs (i-5).
- 6. Forecasting Laboratory equipped with 30 PCs (10 i5, 20-Pentium).
- 7. Research Laboratory and GIS Laboratory
- 8. UPS (online)-2x 5 KVA; 2x 1 KVA, Printers (4)
- 9. Application softwares-GIS ARC INFO, TOTA, etc.
- 10. Library (1)
- 11. Toilets on each floor.
- 12. Internet and wi-fi facility in entire building.

#### B. Maintenance of Laboratories for its optimal utilization

The school has computer laboratories equipped with required application softwares. There is a team consisting of a faculty member and three M.Tech. students to look after maintenance of laboratories and seminar hall. The committee takes maintenance services from the market to keep the systems in working condition.

#### C. Maintenance of Computers for its optimal utilization

There is a team consisting of a faculty member and three M.Tech. students to look after maintenance of computer laboratories. The committee takes maintenance services from the market to keep the systems in working condition.

#### D. Maintenance of UPSs, Power Supplies

The computer maintenance team also takes care of UPSs and call the concerned mechanic if any UPS found not working.

E. Maintenance of support services, sanitation, first aid boxes

Supports services including sanitation are maintained by the staff. Health care centre situated within 100 meters provides services related with health.

F. Maintenance of building, garden, indoor games structure

Supporting staff takes care of maintenance of the building, garden, etc.

4.1.2 Record of new initiatives for Infrastructure for promote a good teachinglearning environment- Internet, Wi-fi, Power Point Projectors, Video Equipment

The school has purchased new PCs (20), projectors (3), UPS-5 kVA (1), water cooler (1) during 2012-13. Wi-fi facility is also installed in the year 2012-13.

4.1.3 Physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services

Required computing and allied facilities are available for conducting

research.

4.1.4 List of Facilities like office room, common room and separate rest rooms for women students and staff

Office room

Boys' common room

Girls' common room

Pantry

4.1.5 List of the infrastructure facilities are disabled-friendly

Ramp

Internet for blind students at IT Centre

4.1.6 Departmental special facilities are available on campus to promote students' interest in sports and cultural events/activities

The school organizes sports and cultural events every year. Required facilities like carom boards, chess boards, badminton kits, cricket kit, TT kit, volleyball, football, etc.

- 4.2 Library as a Learning Resource
- 4.2.1 Details of departmental library facilities:

Printed books-titles (633), volumes (1210), e-books-25

Reading facilities

CDs

**Newspapers** 

- 4.2.2 Provide details of the departmental library:
  - \* Total area of the library (in Sq. Mts.) 30
  - \* Total seating capacity 25
  - \* Working hours (on working days, on holidays, before examination, during examination, during vacation) 2 hours daily
  - \* Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources): separate tables are available.
  - \* Clear and prominent display of floor plan Yes
  - \* Adequate sign boards; Yes
  - \* Fire alarm; Yes
  - \* Access to differently-abled users and No
  - \* Mode of access to collection Physical searching
- 4.2.3 Departmental library holdings:
  - a) Print (books, back volumes and theses) Titles: 633;

Volumes: 1210

- b) Average number of books added during the last three years 300
- c) Non Print (Audio Video, CDs, Downloaded Articles) 50
- d) Electronic (e-books, e-journals)

25

- e) Special collections (e.g. text books, reference books, standards, patents) 350
- 4.2.4 Records of tools the library deploys to provide access to the collection

	* OPAC	No
	* Electronic Resource Management package for e-journ	nals No
	* Federated searching tools to search articles in mul	tiple databases
	No	
	* Library Website	No
	* In-house/remote access to e-publications	No
	The facilities are available in central library near to the school	ol.
4.2.5	Use of ICT deployed in the library	
	* Library automation	Yes
	* Total number of computers for public access	1
	* Total numbers of printers for public access	Nil
	* Internet band width speed $\Box$ 2mbps $\Box$ 10 mbps $\Box$	1 GBPS
	* Institutional Repository	No
	* Content management system for e-learning	No
	* Participation in resource sharing networks/control INFLIBNET) Yes.	onsortia (like
4.2.6	Details (per year) with regard to	
	* Ratio of library books to students enrolled	13:1
	* Average number of books added during the last four	years 360
	* Assistance in searching Databases	Available
	* INFLIBNET/IUC facilities	Available
4.2.8	Annual departmental library budget and the amount spent new books and journals.  Annual budget: Rs. 2 Lacs  Amount spent: Rs. 2 Lacs	for purchasing
4.3	IT Infrastructure	
4.3.1	Details of Department IT and ICT Infrastructure	
	1. LCD projectors-5	
	2. HP PCs (i-5)-20.	
	2 Pantium PCs 20	

- 4. Internet switches-3
- 5. UPS (online)-2x 5 KVA; 2x 1 KVA, Printers (4)
- 6. Application softwares-GIS ARC INFO, TOTA, etc.
- 7. Internet and wi-fi facility in entire building.
- 4.3.2 Details of the computing facilities i.e., hardware and software.
  - Number of systems with individual configurations 40
  - Computer-student ratio 1:1
  - Dedicated computing facilities 40
  - LAN facility Yes
  - Proprietary software Yes
  - Number of nodes/ computers with internet facility 40
  - Any other (please specify) Printers, scanners, sound systems
- 4.3.3 Plans and strategies for deploying and upgrading the IT infrastructure and associated facilities

The school has planned to develop virtual class room, purchasing of softwares, installation of library software, etc.

- 4.3.4 Details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research.
  - On-line resources can be accessed from classrooms, tutorial rooms, faculty room, and laboratories as all computers and projectors are connected with internet.
- 4.3.5 IT facilities available to individual teachers for effective teaching and quality research

Every faculty has computer with internet facility, printer, scanner.

- 4.3.8 A. Details of ICT-enabled classrooms/learning spaces available

  Two class rooms, one tutorial room, laboratories are ICT enabled.
  - B. Record of utilization for enhancing the quality of teaching and learning

#### e-books, PPTs, students' feedback

- 4.3.9 Records of Faculty and computer- aided teaching-learning materials PPTs, research articles
- 4.3.10 Department availing of the National Knowledge Network connectivity Yes.
- 4.3.12 Record of Availing of web resources such as Wikipedia, dictionary and other education enhancing resources

Such resources are used in developing PPTs.

- 4.3.13 Department budget for the update, deployment and maintenance of computers

  Rs. 75000
- 4.3.14 Details of plans envisioned for the gradual transfer of teaching and learning from closed university information network to open environment

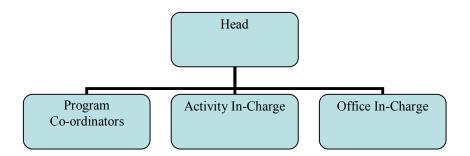
The schools plans to increase use of ICT that will gradually transfer of teaching and learning from closed university information network to open environment.

4.4 Any other information regarding Infrastructure and Learning Resources which the university would like to include.

#### **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

- 5.1 Student Mentoring and Support
- 5.1.1 Department system, structural and functional characteristics for student support and mentoring

The school structure is as follows:



Besides this the school has following functional Committees:

- Departmental Committee
- Placement Cell
- Anti Ragging Committee
- Anti Ragging Squad
- Students' Grievance Cell
- Purchase Committee

Functional characteristics for student support and mentoring:

Faculty members encourage the students to clear their doubts.

There is a strong student-mentor relationship, and students are free to discuss about their problems with the faculty member.

Anti-Ragging committee monitors the welfare of the students.

Orientation programme helps the new students to get familiar with the department and the University.

Mentors are allotted for a group of 18 students each.

- 5.1.2 Record of 'apart from classroom interaction', the provisions available for academic mentoring:
  - Tutorials are delivered to the slow learners.
  - Advanced problems are given and discussed with the advanced learners.
  - The students can clear their doubts with the faculty members outside the class room.
  - Students have to present a seminar on published research work, for which they are given marks.
  - Students have to complete a project work in different labs/ institutes during final year.
  - Students are given a real problem to work on during a project, so that they can use theoretical knowledge in solving the problem.
  - The students have to submit the dissertation and present their project work upon its completion.
  - Experts are invited to deliver talks in various seminars.
- 5.1.3 Record of department students utilization of personal enhancement and development schemes such as career counseling, soft skill development, career-path-identification, and orientation to well-being for its students.
  - University Career Counseling Cell organizes the lectures time to time.
  - A language laboratory is setup for all students from UGC grant at School of Computer Science and Information technology.
  - The classes are arranged for soft skills at school.
  - Students get advice from the faculty members from time to time to enhance their learning, thinking, and presentation skills.
  - Faculty and alumni also suggest the current students about various academic, research and industry based job opportunities.
  - Students get chance to interact with experts when seminars are organized.

5.1.4 Department publish its updated prospectus and handbook info annually on website and online access of course plans, syllabi and result

Yes, the school publishes its prospectus and handbook on website. The course plans, syllabi, and result are also published in print and soft form and available on the website.

- 5.1.5 A. Records of the Timely dissipation of financial aid

  Records are available for timely dissipation of financial aid to the students. Refer to File 5.1.5
  - C. Tables for type and number of scholarships/free-ships given to the students during the last four years the following categories: UG/PG/M.Phil/Ph.D./Diploma/others

Details of the scholarships given to M.Tech. students:

Scholarships	2009-10	2010-11	2011-12	2012-13
AICTE Scholarships	1	1	3	14
SC/ST Scholarships	1	1	1	4
OBC Scholarships	3	0	0	7
Others (Indian Oil)	2	0	1	1

Details of the scholarships/ free-ships given to Ph.D. students:

Scholarships/ Free-ships	2009-10	2010-11	2011-12	2012-13
JRF under DST project	1	1	0	0
Free-ships	9	9	10	10

5.1.6 Table of percentages of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)

Program	Percentages of Students Receive Financial Assistance from				
	State Govt.	Central Govt.	Other Agencies		

M.Tech.	22%	25%	2%
Ph.D.	0%	0%	35% (Free ship)

## 5.1.7 Department use of International Student Cell, number and list of foreign students

No foreign student has been registered in the school during the assessment period.

## 5.1.8 Department support services available for

- \* Students participating in various competitions/conferences in India and abroad
- Students avail railway fare concessions certificates to the students for participating in various competitions/conferences in India.
- School provides leave for participating in various competitions/conferences in India/ abroad.
- Tutorials are conducted for such students who participate in competitions/ conferences.
- \* Physically challenged / differently-abled students
- o Internet facility for blind students is available at I.T. Centre.
- Ramp will be constructed in the year 2013-14 to help physically challenged / differently-abled students.
- \* SC/ST, OBC and economically weaker sections
- Fellowship from M.P. Government is provided to SC, ST and OBC candidates.
- o There is a separate coaching cell for minorities and SC/ST/OBC.
- Tutorials along with classes are conducted for weak students.
- Counseling sessions are conducted.
- \* Health centre, health insurance etc.
  - 1. University Health Centre provides necessary medical care to the students.

- 2. Health file of each student is maintained from 2013-14.
- \* Skill development (spoken English, computer literacy, etc.)
- The classes are conducted for students to upgrade their language skills, confidence level, and mass appearance etc.
- Student presentations are conducted in each course for concept presentation ability, handling queries, realization of self worth, confidence generation etc.
- Language laboratory facilities are available to improve spoken English.
- \* performance enhancement for slow learners
- o Remedial classes are conducted for slow learners.
- \* exposure of students to other institutions of higher learning/corporate/business houses, etc.
- The school organizes industrial visits for students for corporate exposure.
- The students undergo training-cum-project work during third and fourth semesters in different industrial / academic / research organizations.
- \* publication of student magazines:
- Student magazine "Sci-Tech Talk" is published in which students contribute S&T articles for general public.
- \* Record of student participation in sports and extracurricular activities
  - Students participate in annual UTD sports competitions.

#### 5.1.9 Placement Records

The students have been placed in different organizations. Examples are as follows: SAC, NITIE, ABB, Reliance Energy, CantorCO2e, Green Business Solutions, Ecolutions, Jindal Steel & Power, IT Power, Hindustan Unilever, Wipro, Tech Mahindra, TCS, GE, and Surtel Technologies.

5.1.10 Number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).

Year		of	( )	of	the			companies
	Students		employers			visite	ed th	e campus
	Selected							
2008-09	2		Neon I	Neon Infotech				1
2009-10	4		CantorCO2e				1	
2010-11	2		Diaspark Infotech Pvt.				1	
			ltd.					
2011-12	1		L&T Infrastructure				1	

## 5.1.11 A. Record of registered Alumni Association

Alumni association is registered at University level.

Department level alumni interact through group email IDs.

B. Record of activities and contributions to the development of the department

Alumni members send their suggestions, and job openings through emails.

#### C. Record of alumni meets

Alumni meet is planned in the year 2013-14.

5.1.12 A. Committee members and record of student grievance redressal Students' grievances cell consists the following members:

Prof. Gyan Prakash

Dr. Laxman Shinde

Mr. Vandit Hedau

B. Details of the nature of grievances reported and the redressal Only one case is reported. Ms. Malabika Biswas complained against her classmate Mr. Piyush Agrawal for harassment. The case was discussed and resolved with mutual consent.

# 5.1.13 A. Record of anti-ragging committee Anti-ragging Committee:

No.	Name	Committee Member	Contact No.
1.	Dr. V.B.Gupta	Chairman	+91 99933
			50547
2.	Mr. Vandit Hedau	Member, Faculty	+91 98277
			41918
3.	Dr. Deepshikha Agrawal	Member, Visiting	+91 98260
		Faculty	13868
4.	Mr. P.Awale	Member, Non-Teaching	+91 98272
		Staff	70743
5.	Ms. Ankita Singhal	Member, Sr. Student	+91 99772
			80834
6.	Mr. Rajat Verma	Member, Jr. Student	+91 90743
			97343
7.	Mr. Kamal Bhan Singh	Member, Parents	+91 98269
			26201
8.	Mr. Guru Bhajan Singh	Member, Parents	+91 99264
	Chhabra		13381

## Anti-ragging Squad:

No.	Name	Squad Member	Contact No.
1.	Mr. Vandit Hedau	Member, Faculty	+91 98277
		_	41918
2.	Dr. Deepshikha Agrawal	Member, Visiting	+91 98260
		Faculty	13868

B. List of instances reported during the last four years and what action has been taken in these cases

Only one case is reported. Ms. Malabika Biswas complained against her classmate Mr. Piyush Agrawal for harassment. The case was discussed and resolved with mutual consent.

- 5.1.14 Details of the cooperation rendered by parents, industry and its stakeholders to ensure the overall development of its students
  - Industries permit the students for industrial visit.
  - Training and jobs are provided to students with the cooperation of Stakeholders.

- Industrial experts and Stakeholders cooperate also in modifications in curriculum by providing their suggestions and expert opinion.
- 5.1.18 A. List of participation of women students in intra- and inter-institutional sports competitions and cultural activities:

Women students also participate in the annual sports activity, intra- and inter-institutional sports competitions, and cultural activities. List of the participants (2012-13) is as follows:

- 1. Jyotsana Pandey
- 2. Renuka Girhare
- 3. Usha Jain
- 4. Reena Arya
- 5. Anupama Dwivedi
- 6. Udita Phanse
- 7. Pragya Trivedi
- B. List of participation of women students in intra- and inter-institutional sports competitions and cultural activities: Same as 5.1.18 A.

## 5.2 Student Progression

5.2.1 Analysis of progression and trends for the last four years.

Student Progression	2008-09	2009-10	2010-11	2011-12
UG to PG*		Not A	pplicable	
PG to M.Phil.*		Not A	pplicable	
PG to Ph.D.	20%	15%	10%	10%
Ph.D. to Post-Doctoral	-	-	-	-
Employed				
• Campus selection	15%	27%	15%	25%
• Other than campus	80%	60%	80%	65%
recruitment				

## 5.2.2 Programme-wise pass percentage during the time span stipulated

1 togramme	Programme	Pass Percentage
------------	-----------	-----------------

	2008-10	2009-11	2010-12	2011-13
M.Tech. (FSP)	100%	71%	100%	100%
M.Tech. (SM)	63%	82%	57%	79%
M.B.A. (BF)	83%	87%	92%	76%
M.Sc. (SC)	100%	84%	80%	No
				Admission

5.2.3 Records of Number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.

GATE qualified students take admission.

One student has appeared and qualified in GRE in the year 2012.

5.2.4 List category-wise with details regarding the number of Ph.D./D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years

No D.Litt./ D.Sc. thesis is submitted during last four years.

Category-wise details of Ph.D. Theses submitted during last four years:

Category	Submitted	Accepted	Re-	Rejected
			submitted	
S.C.	0	0	0	0
S.T.	0	0	0	0
O.B.C.	0	0	0	0
General	8	5	0	0
Total	8	5	0	0

- 5.3 Student Participation and Activities
- 5.3.1 A. List the range of sports, cultural and extracurricular activities available to students

Sports: Badminton, Football, Volleyball, Cricket, Table Tennis, Chess.

The school organizes annual cultural event "Punkhudi" in the second half of the calendar year. The event includes several activities such as rangoli, painting, menhdi completion, singing, dance, antakshadi and debate.

- B. Sports and extracurricular calendar and details of students' participation Records are available in File No. 5.3.1 B.
- 5.3.2 Details of the achievements of department students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years. Records are available in File No. 5.3.2
- 5.3.3 A. Gathered data and feedback from pass-out graduates

  The feedback from pass-outs was taken and data were analyzed.
  - B. Gathered data and feedback from employers Feedback from some employers was taken.
  - C. Use of the data for the growth and development of the department Feedback is used in revising the syllabi.
- 5.3.4 Department special drives / campaigns for its faculty and students to promote heritage consciousness
  - 1. The school organized visits of faculty members and students to promote heritage consciousness. The following places were visited:

    Onkareshwar, Mandu, Lalbagh Palace, Ralamandal, and Central Museum.
  - 2. Videos or CDs on heritage places are shown to the students to create heritage awareness.
- 5.3.5 A. Records of Department involvement and encourage its students to publish materials like catalogues, wall magazines, departmental magazine, and other material

The school publishes its annual magazine-Sci-Tech Talk on scientific issues.

B. List the major publications/ materials brought out by the students during the last four academic sessions.

Advanced learners of M.Tech. programmes have published two research papers in the year 2012-13.

Ph.D. students published no. of research papers with their supervisors.

5.3.6 A. Departmental Student and Alumni association or any other similar body

Online group of alumni is available on facebook and yahoo.

B. Details on its constitution, activities and funding.

Information sharing regarding project placements, job positions, etc.

5.3.7 Details of student representatives in Board of Studies, various academic and administrative bodies:

The students' representatives are members in Board of Studies, Antiragging committee, placement cell, sports and cultural cell.

5.3.8 Any other information regarding Student Support and Progression which the university would like to include.

Nil

## CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

- 6.1 Institutional Vision and Leadership
- 6.1.1 State the vision and the mission of the department in line with the University

#### Vision Statement:

School of Future Studies and Planning strives to become a globally reputed academic and research centre in the areas of futures studies by offering excellent interdisciplinary academic programmes and research activities applicable to diverse systems.

6.1.2 Mission statement definition for the department's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future,

#### Mission Statement:

The mission of the School of Future Studies and Planning is to support the organizations in designing policies, strategic planning, and development of quality products/ services. To realize the mission, the school:

- enriches the students with a set of skills, knowledge and attitudes that permits them to succeed and thrive as futurists and systems engineers.
- prepares its students to pursue life-long learning, serve the profession and meet the challenges.
- conducts interdisciplinary research studies, develops scenarios and policies.
- provides consultancy services.

#### Values:

The School of Future Studies and Planning is committed to maintain:

- Quality teaching and research
- Scholarship and creativity
- Academic freedom
- Interdisciplinary nature
- Collegiality and open-mindedness
- Student satisfaction
- Accountability
- Diversity in student, faculty, and staff.

#### 6.1.3 Write-up of

\* ensuring the organization's management system development, implementation and continuous improvement

School as an organizational unit undertakes management of academic affairs, administrative affairs and other support affairs.

The academic management is led by the Head of the Department. School endeavor is to gradually streamline the operational processes involved in academic management with the objective of bringing in more consistency, transparency and tractability. We plan to increasingly take the help of computerized system. A central database for students' results and other records pertaining to academic activities of the students will be maintained. We have already started capturing the relevant information in spreadsheets. For correctness and consistency we have developed spreadsheet models for grading which is used by all faculty members.

\* interacting with its stakeholders

The course content, results and other major developments are updated on the university website, as that forms the main means for us to reach the larger stakeholders community. SFS maintains an open environment and encourages direct formal and informal interaction with faculty members, students and staff members.

- \* Reinforcing a culture of excellence

  To reinforce culture of excellence, the school does the following;

  Pays individual attention to slow learners by organizing tutorials

  For advanced learners opportunity to work on complex real life

  problems is given
- \* identifying organizational needs and striving to fulfill them Identification happens through feedback and discussions with sudent, staff and faculty members.

The Head of the Department after screening the list of requirements draws up a priority list and fulfills them subject to availability of funds and other resources. [Short term].

The Head of the Department pursues with the University for Increased Fund Allocation or work towards mobilization of resources for fulfilling needs. [Long Term]

#### 6.1.4 Records of Departmental and other committees meetings

Meetings of Departmental Committee are held monthly and record is maintained with the office.

Records of meetings of Purchase Committee, Board of Studies, Anti Ragging Committee, Sports and Cultural Committee are maintained.

## 6.1.6 Write-up of a culture of participative decisions in the department

The school functions through highly participative decision making process. Daily informal meetings between faculty members and staff members allow free exchange of ideas and thoughts leading to decisions. Monthly formal meetings of the Departmental Committee are held to take decisions.

## 6.1.7 Record of grooming leadership at various levels

The responsibilities are assigned at different levels and guidance is provided.

## 6.1.10 Record of knowledge management strategy:

Project reports and dissertations are main repositories of knowledge created in the department. These are maintained in the departmental library for ready reference.

## 6.1.11 Write up on

\* Contributing to national development

The curriculum offers scientific and technological principles which are of direct relevance in systems development and planning. A good number of the students trained from this department are engaged in providing services leading to national development e.g. municipal systems planning, rural energy planning, sustainable development, climate change initiatives etc.

The school has produced following students since 1990 who are serving the nation:

M.Tech. (Future Studies and Planning)	207
M.Tech. (Systems Management)	93
M.Sc. (Science Communication)	103
M.B.A. (Business Forecasting)	78
Ph.D.	19

## \* Fostering global competencies among students

Exposure to new world mechanisms like Clean Development Mechanism (CDM) of United Nations given to students in the department have resulted in students acquiring competencies which have been valued at global level.

\* Inculcating a sound value system among students
Fairness and transparency are the corner stones of the department's
functioning. The students are groomed in this atmosphere which
helps them inculcate these values.

## \* Promoting use of technology

Use of computer based systems including internet are widely used in teaching. The students are required to use such tools in their assignments. Further, there are social groups created for sharing of knowledge among students and faculty members. These promotes the use of technology among students.

#### \* Quest for excellence

The curriculum of the courses are evaluated annually and benchmarked with those offered in reputed national and international institutes. Appropriate updates to the curriculum are carried out. This helps the department strive for excellence.

#### 6.2 Strategy Development and Deployment

6.2.1 Perspective plan for development and write-up of policies and strategies to

## \* work for Vision and for achieving the mission

#### Work for Vision:

As human societies strive for growth, preparedness to deal with the future in the face of changes which come with time (in diverse aspects of national/corporate/other systems), becomes an important determinant in sustainable development (of nations/corporate/societies). School strives to become a pioneer in teaching, research and development of scientific principles, technological capabilities and systems principles to efficiently and effectively plan as well as manage in the face of such changes.

#### Work for Achieving Mission:

School functions and strives for excellence in teaching by methodical course and curriculum development, continuous improvement in course delivery and setting appropriate learning outcomes.

School targets increased impact from research outcomes. School developed new system insights, new scientific techniques and new framework needed for innovative policies. These actions enable futurists and planners to perform with increased effectiveness.

School strives for active collaboration with world renowned institutes, industries and government planning bodies thereby giving faculty and students opportunity to work on contemporary challenges.

School creates and maintain an environment of participatory involvement wherein staff members continually support the School in its striving for continual improvement.

#### \* Enhancing Teaching and learning

School strives to bring in excellence in teaching by methodical course and curriculum development, continuous improvement in course delivery and setting appropriate learning outcomes. School enriches students with a set of skills, knowledge and attitudes that permits them to succeed and thrive as futurists and systems engineers. School takes care to connect research activities to teaching and thereby enlarge domain of students understanding and applicability of knowledge.

#### \* Enhancing Research and development

<u>Research</u>: School engages students in knowledge search, develop new system insights, develop new scientific techniques and policies

which enable futurists and planners to perform with increased effectiveness. School targets increased impact from research outcomes. School strives to improve quality of research work undertaken by students. We will publish well researched reports on contemporary issues in future studies and planning. We will strive to demonstrate thought leadership to lead the way for futurists and planners.

<u>Consultancy</u>: School strives to provide consultancy services to industry and government in the area of the School's expertise. School strives to increase the demand for the School's consultancy services by promoting excellence.

- \* Enhancing Community engagement School would like to start activities to develop scientific temper in the society.
- \* Enhancing Human resource planning and development

  Faculty development: School designs programs for continuous development of knowledge of faculty members by encouraging them to undertake collaborative research work with world renowned institutes, planning department of governments and reputed corporations.

<u>Staff development:</u> School maintains an environment of participatory involvement wherein staff members continually support the School in its striving for continual improvement. School explores ways and means to align staff's growth with the growth of the School.

- \* Enhancing Industry interaction

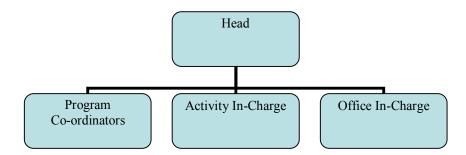
  The school has a Forum for Quality Consciousness (FQC). The lectures are delivered monthly / bi-monthly in the school by industry persons and in the industry by the faculty members.

  Industry visits for students are also organized. Faculty members provide consultancy to industries from time to time.
- \* Enhancing Internationalisation

  The school intends to collaborate with reputed international institutes for research.

6.2.2 Departmental organizational structure and decision making processes and their effectiveness.

The organizational structure is as follows:



Decisions are taken through Departmental Committee. Decisions are thereafter implemented by the relevant persons like-program coordinators, activity in-charge, office in-charge, etc. Progress is monitored by the Head of the school and corrective actions, wherever required, are taken.

6.2.3 Write up of functioning independently and autonomously and ensure accountability

The School takes its decisions, including preparation of time table, conduct of examination and purchases up to a limited amount, in the meetings of the Departmental committee. The departmental committee consists of all regular faculty members of the school. The decisions are implemented at different levels and accountability is fixed with the implementing persons.

6.2.5 Record of last four years, have there been any instances of court cases filed by and against the department, What were the critical issues and verdicts of the courts on these issues

No court case has been filed against the school during last four years.

- 6.2.6 Performance audit of the department by external experts
  - 1. IQAC cell does yearly quality audit of annual report of the school.

- 2. Performance audit of the school is planned to conduct in the year 2013-2014.
- 6.3 Faculty Empowerment Strategies
- 6.3.1 Outcome of the reviews of self appraisal and PBAS and important decisions taken on that

All regular faculty members fill self appraisal and PBAS annually. Filled self appraisal and PBAS reports are sent to the university. The decisions on these reports are taken by the University.

6.3.3 List of teachers availing welfare schemes available for teaching and non-teaching staff.

Available Welfare scheme	Name of the availing teachers
University Quarters	All teachers
Community Centre	Nil
Health Centre	All teachers
University Society-Pedi	Nil
Admissions of employee's wards	Dr. R.C.Sharma
in university's programs	Dr. V.B.Gupta
Day care centre	Nil
Vehicle loan	Dr. V.B.Gupta

- 6.3.4 List and number of attracted and retained eminent faculty in last 4 years Nil
- 6.3.5 Gender audit during the last four years of the department achievements and pass percentages and its salient findings.

	В	Program	Percentage of Percentage		Percentage of		age of	
atch		me	students passed students passed		students passed		students	s failed
Year			with GGPA $\geq 8$		with 6.20 ≤			
					GGPA < 8			
			Male	Female	Male	Female	Male	Female
2008-1	10	M.Tech.	100%	67%	0%	33%	0%	0%
		(FSP)						

	M.Tech.	22%	50%	22%	25%	56%	25%
	(SM)						
	M.B.A.	53%	67%	29%	16%	18%	17%
	(BF)						
	M.Sc.	100%	100%	0%	0%	0%	0%
	(SC)						
2009-11	M.Tech.	25%	33%	25%	67%	50%	0%
	(FSP)						
	M.Tech.	40%	100%	40%	0%	20%	0%
	(SM)						
	M.B.A.	48%	55%	14%	36%	38%	9%
	(BF)						
	M.Sc.	31%	60%	62%	20%	7%	20%
	(SC)						
2010-12	M.Tech.	0%	0%	0%	100%	0%	0%
	(FSP)						
	M.Tech.	10%	25%	40%	50%	50%	25%
	(SM)						
	M.B.A.	22%	0%	78%	67%	0%	33%
	(BF)						
	M.Sc.	50%	100%	0%	0%	50%	0%
	(SC)						
2011-13	M.Tech.	33%	0%	67%	100%	0%	0%
	(FSP)						
	M.Tech.	14%	29%	57%	57%	29%	14%
	(SM)						
	M.B.A.	0%	50%	73%	33%	27%	17%
	(BF)						
	M.Sc.	No Admission					
	(SC)						

Year	Ph.D. Awarded				
	Male Female				
2009	0	0			
2010	1 0				

2011	0	1
2012	0	2

## Salient Findings:

It is clear from the above mentioned tables that female candidates have performed better than male candidates during last four years.

- 6.4 Financial Management and Resource Mobilization
- 6.4.1 Statements of audited income and expenditure of academic and administrative activities of the last four years.

The university does not provide statement of audited income and expenditure at school level for its academic and administrative activities. However, income and expenditure details of last four years are provided below as per budget of the school:

(Figures in Rupees)

Financial Year	Income	Expenditure	Remarks
2009-10	3165380	1869645	
2010-11	1787660	3343530	
2011-12	1896385	2829163	
2012-13	1395738	3218100	

6.4.5 Efforts taken by the department for resource mobilization.

The school approached different funding agencies for resource mobilization. The following resources were mobilized during last four years:

Name of the	Project Title	Funding	Grant
Faculty		Agency	Received
			(Rs.)
Dr. V.B. Gupta	GIS Based Forest	DST, New	29,98,970
	Decision Support System	Delhi	
	for Sustainable Biomass		
	Production and Carbon		
	Sequestration in Forests		
	of Malwa Region of		
	Madhya Pradesh		
Dr. V.B.Gupta	P.G. Diploma Course in	NCSTC,	25,00,000

	Science Journalism through Distance Education	DST, New Delhi	
Dr. V.B.Gupta	M.Sc. in science communication	NCSTC, DST, New Delhi	25,20,000

#### Fees Collected from Students:

Year	Fees c	Total			
	M.Tech. M.B.A. M.Sc.				
	(FSP)	(SM)	(BF)	(SC)	
2009-10	181540	573480	2172640	237720	3165380
2010-11	272940	571320	854360	89040	1787660
2011-12	184625	700120	1011640	0	1896385
2012-13	503862	643584	248292	0	1395738

#### 6.4.6 Record of endowment funds created

Endowment funds are created at the University level and records are maintained by the University.

#### 6.5 Internal Quality Assurance System

6.5.1 Details of department internal quality assurance and sustenance system, give details.

The school has an Internal IQAC cell that is responsible for Internal Quality assessment. Feedback from the students and stakeholders are taken on regular basis. The feedbacks are analysed and follow-ups for quality sustenance and assurance are taken. Students are shown the evaluated examination answer books and correct answers are discussed in the class.

- 6.5.2 Internal workshops to improve teaching, learning and evaluation

  Seminars and workshops on internal quality assurance are held at the
  University level.
- 6.5.3 Record of continuously review the teaching learning process

All the issues related to teaching learning process are discussed during meetings of the departmental committee.

6.5.4 Any other information regarding Governance, Leadership and Management which the university would like to include.

Nil

#### CRITERIA VII: INNOVATIONS AND BEST PRACTICES

- 7.1 Environment Consciousness
- 7.1.1 Department Area Green Audit details

Large green area is available in eastern side of the school. No. of trees including almonds are available in the area.

- 7.1.2 Departmental initiative to make the campus eco-friendly?
  - \* Energy conservation:

Faculty members, students, and staff switch off computers, tube lights, fan, when not in use.

Use of energy efficient devices.

- \* Use of renewable energy:
  - No use of lighting devices when sufficient sun light is available.
- \* Water harvesting: Not available
- \* Check dam construction: Not applicable
- \* Efforts for Carbon neutrality: Trees plantation
- \* Plantation: Trees are planted in each year. Green University Policy is in force since 12/06/2013.
- \* Hazardous waste management: No hazardous waste is generated.
- \* e-waste management: e-waste is disposed off as per IMC/ state policy each year.
- \* any other (please specify): Nil

#### 7.2 Innovations

- 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the department
  - 1. Maintaining the records in e-form.
  - 2. Availability of the results, notices, assignments, syllabi, course material on-line.
  - 3. Use of Tally software to maintain the accounts.
  - 4. Use of ICT in teaching.

#### 7.3 Best Practices

- 7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the department.
  - 1. Suggestions from senior alumni on job requirements
  - 2. Keeping the records in e-form.