



पंडित रविशंकर शुक्ल विश्वविद्यालय, रायपुर छत्तीसगढ़ भारत  
Pt. Ravishankar Shukla University, Raipur Chhattisgarh, India  
Estd-1964 – recognized by UGC U/s 2(f) and 12 (B)  
NAAC “A” Grade

**CRITERION-VI**  
EVIDENCE(S), AS PER SOP

<b>METRIC No. 6.2.1</b>	The institutional Strategic plan is effectively deployed.
	<ul style="list-style-type: none"><li>• Institutional Development Plan</li></ul>



# Institutional Development Plan

**Pt. Ravishankar Shukla University**  
**Raipur, Chhattisgarh**

*Education is the manifestation  
of the perfection already in man.*

*Swami Vivekananda*

Submitted to

**Department of Higher Education, Raipur**

**April 2014**

## Golden Jubilee Year (1964-2014)





The pinnacle of the famous Rajivlochan temple at Rajim in Raipur district (C.G.) is there in the middle of the monogram of Pt. Ravishankar Shukla University. It symbolizes the glorious cultural heritage of the ancient South Koshal now known as Chhattisgarh.

The rising sun is the symbol of Prajapati knowledge and material knowledge in the Vedantic thought. It stands for the supreme knowledge.

On both sides of the pinnacle wavy lines are drawn that indicate the Ganga of Chhattisgarh, the great river Mahanadi symbolized as the ancient name of the river Chitrotpala.

On the lower part of the crest the saplings of wheat and paddy spread on the left and right sides of the crest in a semicircular way prove the economic source of Chhattisgarh's inhabitants. They reveal the rural nature of the local culture.

All these symbols are surrounded by a big sphere that signifies the earth. The name of the University is written in this circle both in Nagari and Roman scripts, which moving from the left to right encircles the central circle.

The big circle like the ears of a fan is based on a hemispherical pedestal. Its shape suggests the symbolic expression of the swan, which is used in Indian thought as the knowledge. The motto of the university inscribed in Nagari script is selected from the Agni Sukta of the Rigveda "*Agne Nai Supatha Rae*" which means that "O Fire ! take us to prosperity through good path".



**Pt. Ravishankar Shukla**  
1st Chief Minister of Madhya Pradesh

# *Institutional Development Plan*

---



## **Pt. Ravishankar Shukla University - Institutional Development Plan**

### **Preface**

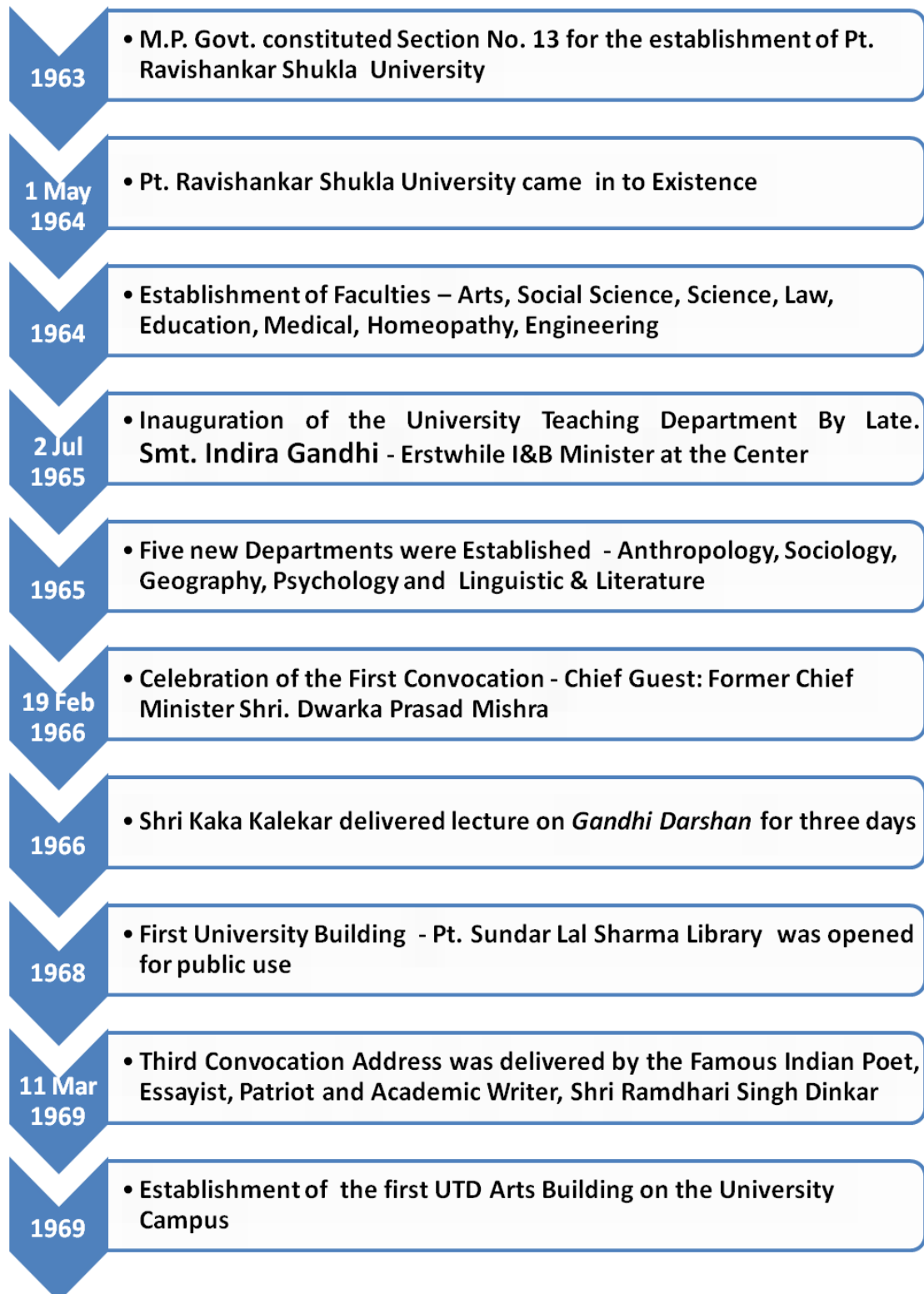
The Pt. Ravishankar Shukla University (hereafter, PRSU) is one of the oldest and the largest Universities of Chhattisgarh, was established in 1964. It is named after Pt. Ravishankar Shukla (1877 - 1956), the first Chief Minister of Madhya Pradesh. The university came into being on **1 MAY 1964** and started functioning from June 1, 1964 with 46 affiliated colleges. Late Mrs. Indira Gandhi, the then Minister of Information & Broadcasting, inaugurated the university teaching department (UTD) in five PG subjects on July 2, 1965.

The PRSU is one of the premier centers of higher education & learning in Chhattisgarh. It caters to the needs of the youths of Chhattisgarh and adjoining States, namely Madhya Pradesh, Maharashtra, Orissa, Jharkhand, Andhra Pradesh, as well as from West Bengal and Andaman & Nicobar Island in the realm of higher education and research. Chhattisgarh was carved out of Madhya Pradesh on 1<sup>st</sup> November, 2000 as a new political entity. Pt. Ravishankar Shukla University, being the oldest university, is leaving no stone unturned to cater to the needs of the society. The university has grown enormously over the last 50 years in terms of number of students (approx. 1.95 Lac) and disciplines, viz., humanities, natural science, law, education, pharmacy, management, physical education, library science and computer science etc. in 27 Schools of Studies (SoS) and 237 affiliated colleges spread over ten districts of the Chhattisgarh State. Currently the University is celebrating its golden jubilee year and the formal culmination of the celebration will take place on **1 MAY 2014**.

A telegraphic illustration of the milestones and achievements of the PRSU is depicted below.

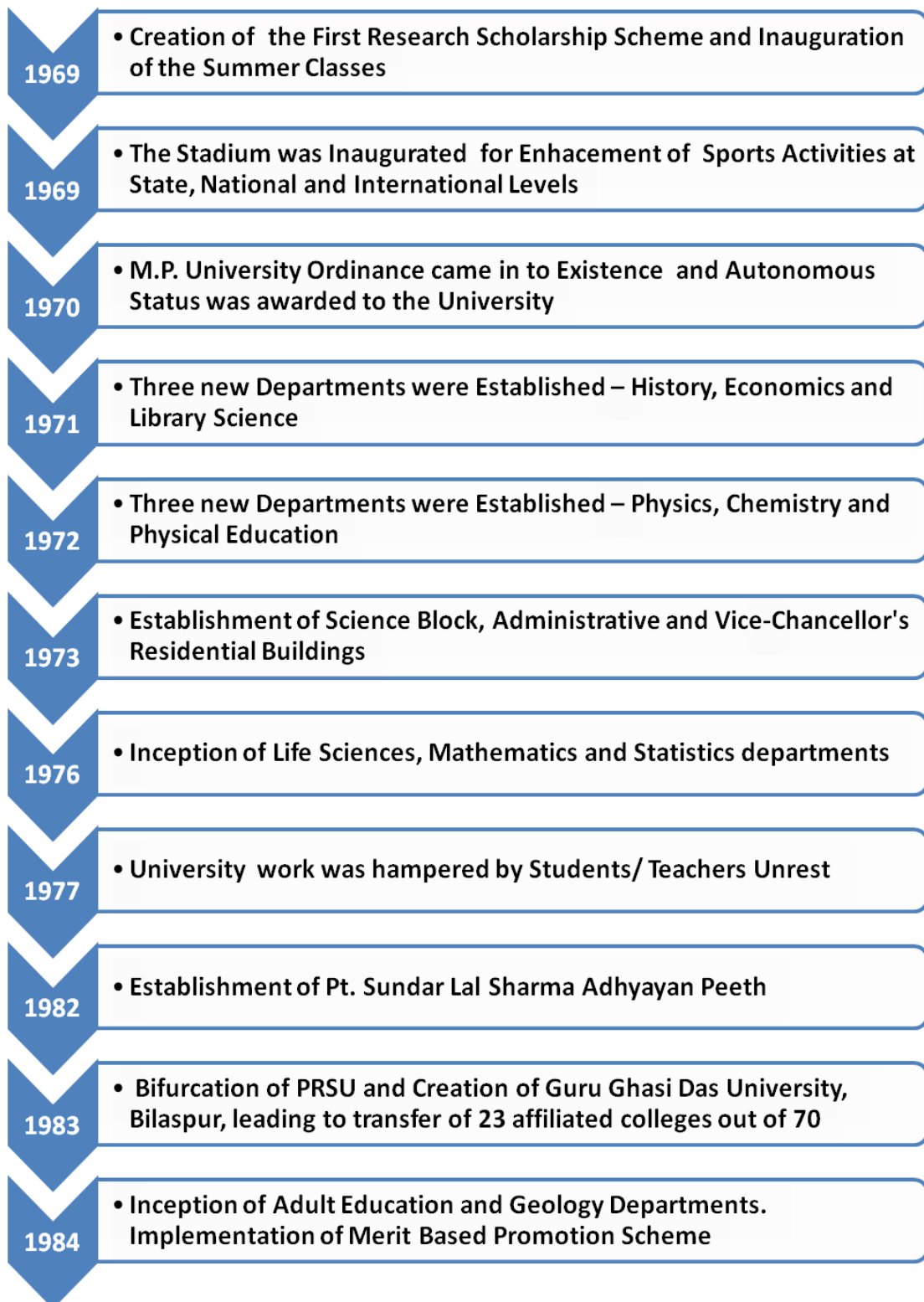
# *Institutional Development Plan*

## **Milestones and Achievements – PRSU, Raipur, Chhattisgarh**



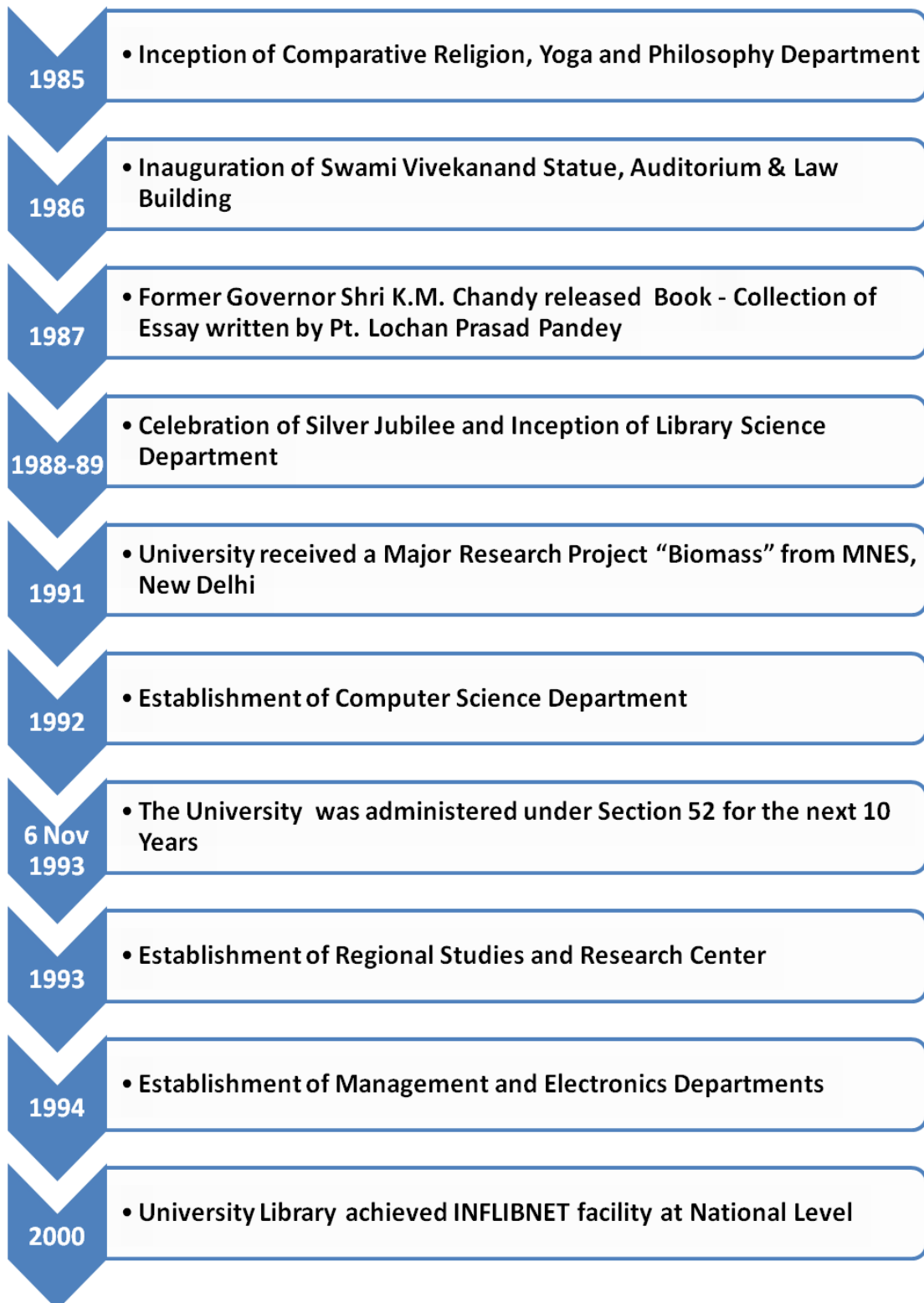
# *Institutional Development Plan*

---



# *Institutional Development Plan*

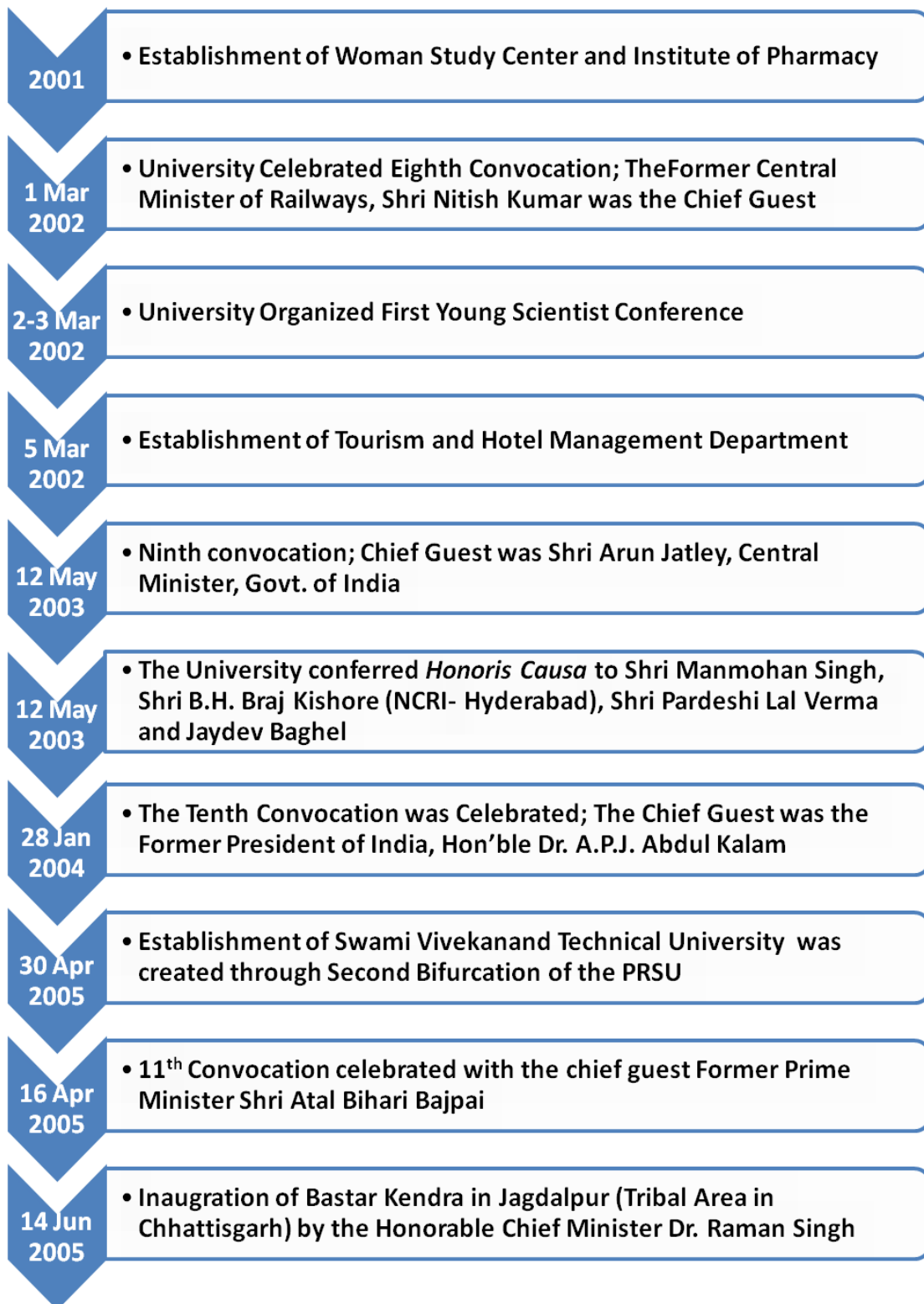
---



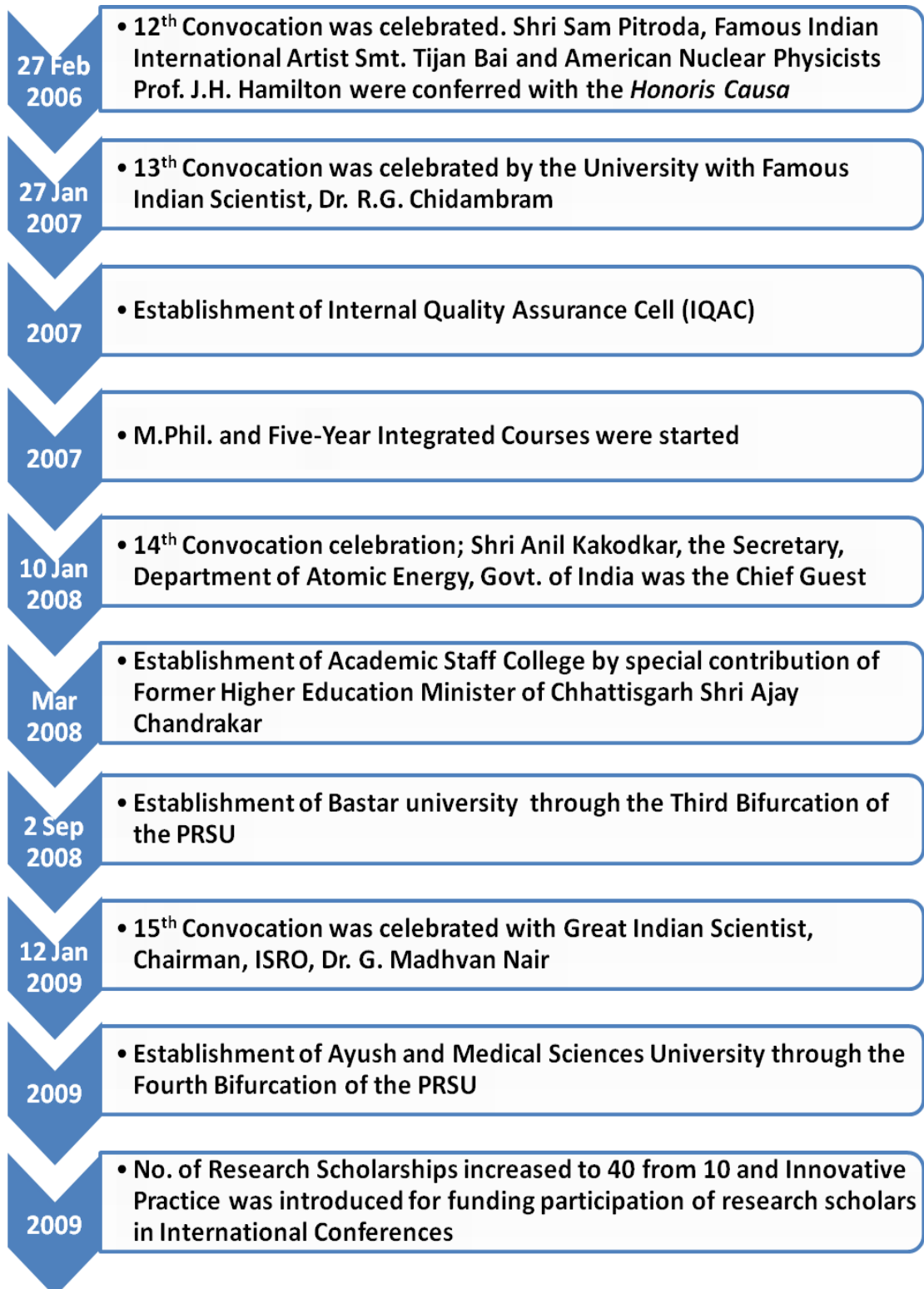


# *Institutional Development Plan*

---

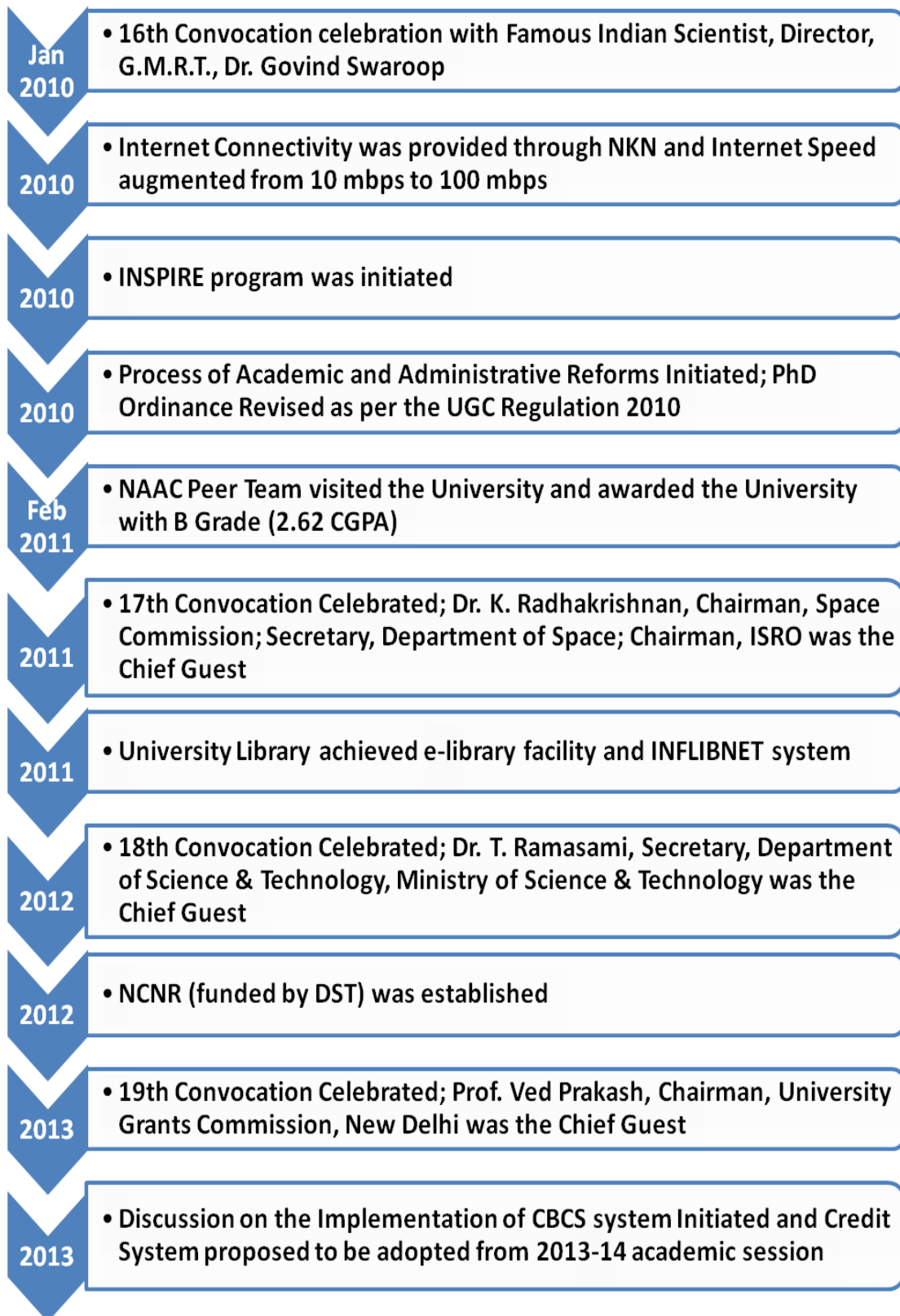


# *Institutional Development Plan*



# *Institutional Development Plan*

---



# Institutional Development Plan

## 1. INSTITUTIONAL BASIC INFORMATION

1.1	Institutional Identity:	<b>PRSU – Accredited by NAAC in 2011</b>
	Name of the Institution:	<b>Pt. Ravishankar Shukla University</b>
	Is the Institution approved by Regulatory body?	Yes
	Furnish approval no.:	Since 1964
	Type of Institution:	State University
	Status of Institution:	Autonomous/ Govt. aided through BMG

### Name of Head of Institution and Project Nodal Officers:

Head and Nodal Officer	Name	Phone Number	Mobile Number	Fax Number	E-mail Address
Head of the Institution (Full time appointee)	Dr. S.K. Pandey	+91-771-2262857	+919424200857	+91-771-2263439	vc_raipur@prsu.org.in; proskp@gmail.com
RUSA Institutional Coordinator	Mr. K.K. Chandrakar	+91-771-2262540	+919425522023	+91-771-2262818	registrarprsu@gmail.com
<b>Nodal Officers for:</b>					
Academic Activities	Dr. R.K. Agrawal	+91-771-2262540	+91-99938-04106	+91-771-2262818	academicprsu@gmail.com
Civil Works including Environment Management	Mr. K.K. Chandrakar	+91-771-2262540	+919425522023	+91-771-2262818	registrarprsu@gmail.com
Procurement	Dr. R.K. Agarwal	+91-771-2262540	+91-99938-04106	+91-771-2262818	academicprsu@gmail.com
Financial aspects	Mr. B.C. Biswas	+91-771-2262540	+91-9329112313	+91-771-2262818	bbarunbiswas@gmail.com
Equity Assurance Plan Implementation	Dr. S.K. Jadhav	+91-771-2262540	+91-9827114218	+91-771-2262818	shailesh_07@sify.com

# *Institutional Development Plan*

## 1.2 Academic Information:

- UG/PG/PhD programs offered in Academic year 2011-12

Faculty Name (like Arts, Science, etc.)	Name of the Department	Level of course offered (Graduate-1/ PostGraduate-2/ M.Phil.-3/ Ph.D./ D.Lit./ D.Sc.-4/ Diploma-5/ Certificate-6)	Name/ Title of the Programs/ Courses with Year of Starting	Course Duration	Sanctioned Students Intake (2011-12)	Students Admitted against intake (2011-12)
<b>Courses offered in University Teaching Departments:</b>						
Arts	Linguistics & Language	2	M.A. Linguistics (1965)	2 yr	30	03
		3	M.Phil. Linguistics (1984)	1 yr	10	10
		4	Ph.D. Linguistics (1965)	4 yr	24	04
		6	P.G. Certificate (1990)	1 yr	30	08
		2	M.A. English (1992)	2 yr	30	28
		3	M.Phil. English (1992)	1 yr	10	10
		4	Ph.D. English (1984)	4 yr	06	05
		5	P.G. Diploma (1976)	1 yr	30	18
		2	M.A. Hindi (1998)	2 yr	30	05
		3	M.Phil. Hindi (1998)	1 yr	10	10
4	Ph.D. Hindi (1998)	4 yr	-	-		
5	Diploma in French (1982)	1 yr	30	22		
	Philosophy & Yoga	2	M.A. (1985)	2 yr	10	08
		3	M.Phil. (1985)	1 yr	10	04
		4	Ph.D. (1985)	4 yr	07	03
		5	P.G. Diploma (2001)	1 yr	30	05
	Library Science	1	B.Lib.I.Sc. (1971)	1 yr	35	35
		2	M.Lib.I.Sc. (1971)	2 yr	20	07
		3	M.Phil. (1993)	1 yr	10	05
		4	Ph.D. (1989)	4 yr	09	09
Social Science	History	2	M.A. (1971)	2 yr	25	07
		3	M.Phil. (1985)	1 yr	05	05
		4	Ph.D. (1975)	4 yr	15	11
	Ancient Indian History, Culture & Archeology	2	M.A. (2001)	2 yr	25	02
		3	M.Phil. (2006)	1 yr	10	02
		4	Ph.D. (2001)	4 yr	06	02
	Tourism & Hotel Management	5	PGDTHM (2002)	1 yr	25	09
	Economics	2	M.A. (1971)	2 yr	30	16
		3	M.Phil. (1985)	1 yr	10	10
		4	Ph.D. (1972)	4 yr	06	04

# *Institutional Development Plan*

	Sociology	2 3 4 2	M.A. (1965) M.Phil. (1971) Ph.D. (1969) MSW (2011)	2 yr 1 yr 4 yr 2 yr	30 10 06 20	14 10 02 16
	Geography	2 3 4	M.A. (1965) M.Phil. (1976) Ph.D. (1966)	2 yr 1 yr 4 yr	60 10 30	57 10 20
	Psychology	2 2 3 5 4	M.A. Psychology (1965) M.A. Clinical Psy (2009) M.Phil. (1985) PG Certificate (1991) Ph.D. (1973)	2 yr 2 yr 1 yr 1 yr 4 yr	20 20 10 20 28	12 - 10 05 17
	Regional Studies	4 5 6 6	Ph.D. (1993) P.G. Diploma (1993) Certificate course I (2011) Certificate course II (2011)	4 yr 1 yr 3 Mo 3 Mo	06 30  36	02 07 36 36
Science	Physics & Astrophysics	2 3 4	M.Sc. (1972) M.Phil. (1985-1988 ; 2007) Ph.D. (1972)	2 yr 1 yr 4 yr	32 10 15	32 10 13
	Chemistry	2 3 4 2	M.Sc. (1972) M.Phil. (2007) Ph.D. (1972) M.Sc.Env.Sc. (2011)	2 yr 1 yr 4 yr 2 yr	40 10 12 20	40 10 09 17
	Mathematics	2 3 4	M.Sc. (1991) M.Phil. (2007) Ph.D. (1997)	2 yr 1 yr 4 yr	25 10 10	25 10 10
	Geology	2 3 4 5 2	M.Sc. (1984) M.Phil. (1987) Ph.D. (1986) P.G. Diploma WRM (1994) M.Sc. Geophysics (2011)	2 yr 1 yr 4 yr 1 yr 2 yr	16 10 07 10 10	16 03 04 07 -
	Statistics	2 3 4	M.Sc. (1977) M.Phil. (2007) Ph.D. (1977)	2 yr 1 yr 4 yr	15 10 08	05 01 -
	Electronics	2 3 4 2	M.Sc. (1994) M.Phil. (2007) Ph.D. (1994) M.Tech. (2008)	2 yr 1 yr 4 yr 2 yr	20 03 02 22	03 02 01 19
Life-Science	Anthropology	2 3 4 5	M.Sc. (1965) M.Phil. (2007) Ph.D. (1965) PGFSc (2006)	2 yr 1 yr 4 yr 1 yr	25 10 04 10	07 03 02 02

# *Institutional Development Plan*

	Bioscience	2	M.Sc. Bioscience (1977)	2 yr	16	12
		2	M.Sc. Biochemistry (2004)	2 yr	12	12
		2	M.Sc. Microbiology (1991)	2 yr	14	14
		3	M.Phil. Bioscience (1987-96, 2007)	1 yr	10	10
		4	Ph.D. Bioscience (1977)	4 yr	20	17
			Ph.D. Biochemistry (2004)			
			Ph.D. Microbiology (1993)			
	Biotechnology	2	M.Sc. (2004)	2 yr	20	20
		3	M.Phil. (2008)	1 yr	10	10
		4	Ph.D. (2005)	4 yr	06	05
Law	Law	1	5-Year BA LLB (2003)	5 yr	06	-
		2	LLM (1982)	2 yr	45	44
		3	M.Phil. (2007)	1 yr	10	-
		4	Ph.D. (1991)	4 yr	06	02
Education	Education	1	B.Ed. (2005)	1 yr	100	100
		2	M.Ed. (2006)	1 yr	40	40
Physical Education	Physical Education	1	B.P.Ed. (1971)	1 yr	50	43
		2	M.P.Ed. (1971)	2 yr	40	40
		3	M.Phil. (2007)	1 yr	06	06
		4	Ph.D. (1986)	4 yr	03	03
Technology	Pharmacy	1	B.Pharm. (2001)	4 yr	60	52
		2	M.Pharm. (2006)	2 yr	12	12
		4	Ph.D. (2004)	4 yr	05	04
Management	Management	2	MBA (1995)	2 yr	60	60
		3	M.Phil. (2007)	1 yr	10	06
		4	Ph.D. (2003)	4 yr	12	09
Information Technology	Computer Science	2	MCA (1993)	3 yr	60	56
		2	M.Sc. (I.T.) (2003)	2 yr	20	20
		3	M.Phil. (C.Sc.) (2007)	1 yr	10	09
		4	Ph.D. (2002)	4 yr	03	03

- Whether Institution is accredited? Yes

If yes, Grade: B (CGPA – 2.62) When? 2011

Accreditation Status of UG programs: General Accreditation of all UG Programs

Title UG programs being offered	Whether eligible for accreditation or not?	Whether accredited as on 31 <sup>st</sup> March 2012?	Whether “Applied for” as on 31 <sup>st</sup> March 2012?
Please refer 1.2	Yes	Yes	Not Applicable

Accreditation Status of PG programs: General Accreditation of all PG Programs

Title PG programs being offered	Whether eligible for accreditation or not?	Whether accredited as on 31 <sup>st</sup> March 2012?	Whether “Applied for” as on 31 <sup>st</sup> March 2012?
Please refer 1.2	Yes	Yes	Not Applicable

# *Institutional Development Plan*

## 1.3 Faculty Status (Regular/On-Contract Faculty as on March 31<sup>st</sup>, 2012)

Faculty Rank	No. of Sanctioned Regular Posts	Present Status : Number in position by Highest Qualification																Total Number of regular faculty	Total Vacancies	Total Number of contract faculty	
		Doctoral Degree								Masters Degree											
		Art Discipline		Science Discipline		Commerce Discipline		Other Disciplines		Art Disciplines		Science Disciplines		Commerce Discipline		Other Disciplines					
		R	C	R	C	R	C	R	C	R	C	R	C	R	C	R	C				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 = (3+5+7+9+11+13+15+17)	20 = (2-19)	21 = (4+6+8+10+12+14)	
Professor	25	5	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	12	0
Associate Professor	52	7	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	28	0
Assistant Professor	89	18	15	40	6	0	0	0	0	4	19	2	18	0	0	0	0	0	64	25	58

## 1.4 Baseline Data (all data given for the following parameters to all disciplines)

S. No.	Parameters	11-12	12-13
1	Total strength of students in all programs and all years of study in the year	1955	2047
2	Total women students in all programs all years of study in the year	985	1061
3	Total SC students in all programs and all years of study in the year	204	255
4	Total ST students in all programs and all years of study in the year	165	181
5	Total OBC students in all programs and all years of study in the year	641	722
6	Number of fully functional P-4 and above level computers available for students in the year	271	312
7	Total number of text books and reference books available in library for UG and PG students in the year	174369	180507
	Student-teacher ratio	12.29:1	11.56:1
8	% of UG students placed through campus interviews in the year	dd	dd
9	% of PG students placed through campus interviews in the year	dd	dd
10	% of high quality undergraduates (>75% marks) passed out in the year	15	13
11	% of high quality postgraduates (>75% marks) passed out in the year	6	8
12	Number of research publications in Indian refereed journals in the year	113	150
13	Number of research publications in International refereed journals in the year	143	134



# *Institutional Development Plan*

14	Number of patents obtained in the year	0	0
15	Number of patents filed in the year	6	9
16	Number of sponsored research projects completed in the year	10	8
17	The transition rate of students in percentage from 1 <sup>st</sup> year to 2 <sup>nd</sup> year in the year		
	(i) All Students	85	86
	(ii) SC	53	55
	(iii) ST	39	55
	(iv) OBC	71	76
18	IRG from students' fee and other charges in the year (Rs. in lakh)	382.48	321.25
19	IRG from externally funded R&D projects, consultancies in the year (Rs. in lakh)	136.31	200.09
20	Total IRG in the year (Rs. in lakh)	518.79	521.34
21	Total annual recurring expenditure (Rs. in Lac) of the institution in the year	3439.92	4121.02

<sup>oo</sup>Data Deficient

## **2. INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)**

### **2.1 Give the Executive Summary of the IDP**

The Pt. Ravishankar Shukla University (PRSU) is one of the oldest and the largest higher education institutions of Chhattisgarh. It has been accredited by the NAAC (Grade 'B' with 2.62 CGPA) and the IAO (International Accreditation Organization, USA). The University is currently celebrating its golden jubilee year (1964-2014). It has well-qualified teaching faculty on its roll, most of them with PhD degree (86%); they publish research papers at the rate of 2.5 papers per faculty per academic session and produces PhD at the rate of one PhD every two years per faculty. The PRSU offers multi-faculty programs especially at the PG level. The Central library possesses large number of books, e-books, journals and online free journals. Pt. Ravishankar Shukla University is now powered with Knimbus to make it easy for faculties and students to access the e-resources subscribed by the library. The library opens round the year and offers reading facility. Recently, the University has introduced credit system of examination in all PG & UG programs on the campus and PG programs in its affiliated colleges. It has envisaged introducing CBCS pattern in its academic programs from the next academic session. The h-index of the PRSU is 28 that make it eligible for obtaining 60 million INR from the DST under its most ambitious PURSE scheme. In a nut shell, the PRSU is a leading HEI in the south-eastern regions of the country and has potentiality to ascend up and up in the hierarchy of HEIs in the country.

### **The IDP that Resonates with the Objectives of the RUSA**

The major objectives of the RUSA are based on three most important issues, namely access, equity and excellence in higher education arena. The IDP proposed by the PRSU coherently resonates with the main objectives of the RUSA. It is a document (this one) that depicts its strength and shortages and includes ways and means to overcome its insufficiencies. Through this IDP the PRSU vies for unique niche in the higher education scenario of the nation. It has created benchmarks for

# *Institutional Development Plan*

---

various indicators in respect of excellence in higher education domain.

## **The Seven Parameters**

The RUSA has certain riders as far as disbursement of grants to existing State Universities is concerned. The PRSU has drafted the plan addressing different components under the following seven parameters, namely (a) Infrastructure management & up-gradation; (b) Research & development support; (c) Faculty development strategies; (d) Institutional reforms; (e) Academic support; (f) Innovative path-breaking research centers; and (g) Establishment of model constituent colleges.

## **Refurbishment & Augmentation of Infrastructure**

The PRSU has proposed to create new and modern laboratories that will provide access to students of both UG and PG programs. The proposed VC studios will provide opportunity for the students to participate in lectures delivered at remote places elsewhere in the globe. The construction of ramps and escalators will help differently-abled students. Through this plan the PRSU proposes to avail dedicated software and additional e-resources for the benefit of the students. The IDP also envisages providing the students with the better physical ambience on its campus.

## **Support for R&D Activities**

The PRSU in its IDP has proposes to institute both learning and research assistantship with the hope it will attract higher enrollment in PG and Research programs. It has earmarked provisions for up-gradation and modernization of research facilities, especially through procuring state-of-the-art equipment and scaling up both R&D and consultancy activities.

## **Faculty Development Program**

The teaching faculty will be encouraged to enhance their qualifications. Currently, about 14% teachers are yet to obtain their PhD degree. The IDP includes organization of didactic training programs. It has planned to encourage and support both research scholars and faculty to participate in various national & international meetings, workshops, symposia and conferences.

## **Institutional Reform**

In the IDP the PRSU has mentioned about administrative, academic and governance reforms it has planned to implement. Such reforms will bring in transparency and ensure equity at all levels of functioning in the University.

## **Academic Support**

The IDP includes proposal to establish new departments and new programs in existing departments. The University also proposes to initiate new programs in consonance with the industrial needs of the region. The PRSU also plans to strengthen and initiate number of student support mechanisms, including Finishing School and International Placement Center that will elevate their learning outcomes and employability.

# Institutional Development Plan

## Innovative Path-breaking Research Centers

The IDP of the PRSU includes proposal to create seven innovative and path-breaking research centers that will carry out research in high priority areas of regional and national importance. These centers will provide the students with excellent opportunities to start their career in the research field.

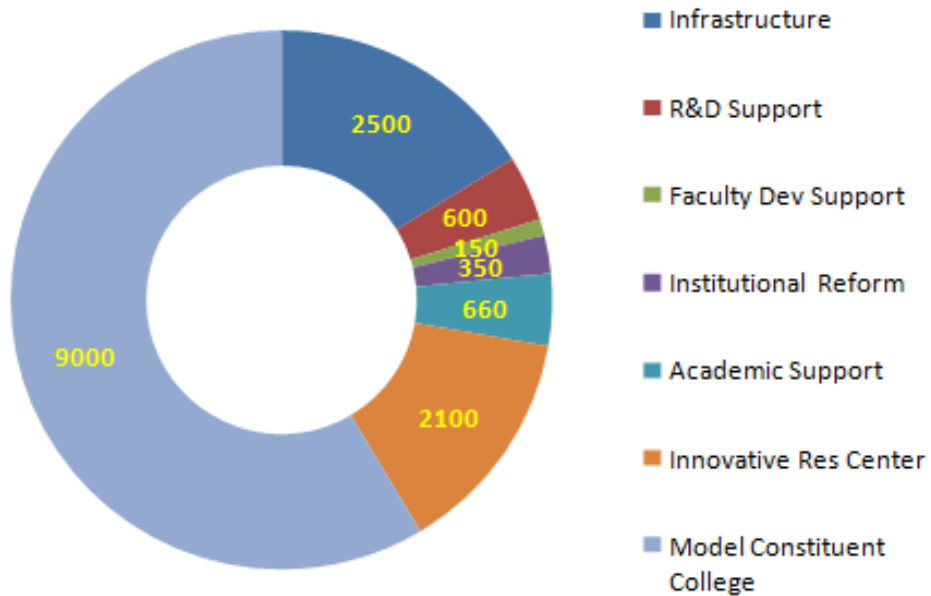


Figure-1: Doughnut picture indicating proposed budgetary requirement (INR in Lac) by parameter

## Model Constituent Colleges

The proposal of establishing model constituent colleges in each district under the jurisdiction of the PRSU fully complies with the objectives of the RUSA. These model colleges will carry out research at the district level with modern facilities and also perform the affiliating responsibilities for other colleges of the district. Eventually the workload on the PRSU will drastically reduce and facilitate its faculty to concentrate on research in high priority areas.

## Budgetary Requirement

The above V depicts the proposed budgetary requirement of the PRSU. Although the budget looks skewed in favor of establishment of constituent colleges at each district and establishment of innovative & path-breaking research centers on its campus, it will be worthwhile as these proposals following successful implementation will enhance the overall image of the University in the world map of higher education.

## Conclusion

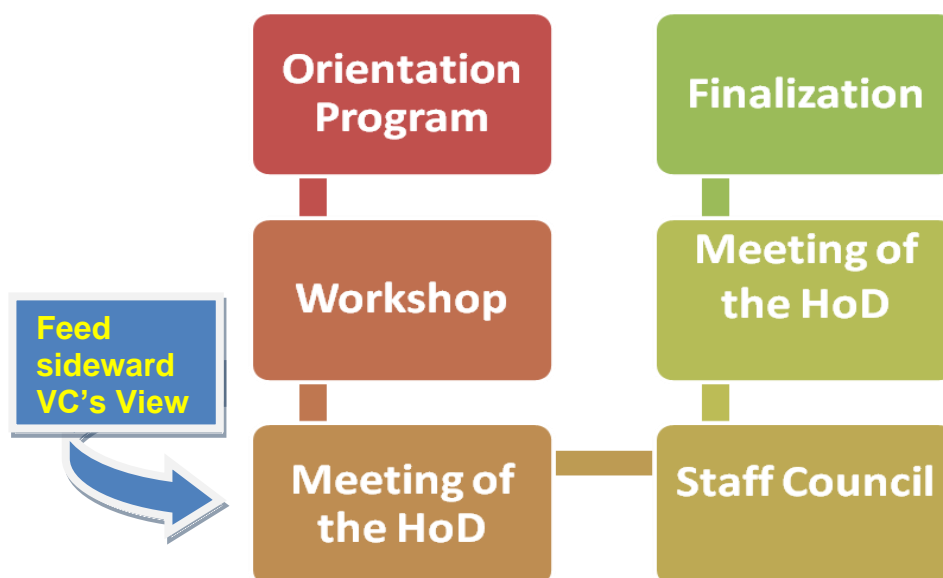
The PRSU has proposed a modest plan (read IDP) emphasizing on all aspects of HEI's agenda as specified and envisioned by the RUSA for an existing institution of higher education. We hope that the IDP complements the objectives of the RUSA.

# Institutional Development Plan

- 2.2 Provide the details of SWOT analysis carried out (in terms of methodology used, analysis and information and data as collected and inferences derived with respect to strengths, weaknesses, opportunities and threats).**
- **Based on SWOT analysis, provide the “strategic plan” developed for institutional development.**
  - **How the key activities proposed in the Institutional Development Proposal are linked with the results of SWOT Analysis.**

**Introduction.** The SWOT/SWOC analysis of an Institution is a dynamic outcome. The SWOT analysis outcomes of the current year will be certainly different from the preceding and the following years. The PRSU performs SWOT analysis on regular basis and furnish the outcome to the NAAC regularly (through online submission since 2011-2012). The process is an obligatory component of the AQAR that is submitted to the NAAC every year. The IQAC is the nodal cell that executes the entire process of submission of the AQAR, including the SWOT analysis. As per the NAAC guidelines the Institution has to construct the SWOT analysis outcomes very concisely using telegraphic phrases and highlighting the important aspects/points under the headings Strength-Weakness-Opportunity-Threat. The NAAC insists that the Institution should provide 3 each in the first two categories and 2 each in the last two categories of attributes. It is unequivocal that it is always difficult to be brief and it is equally likely that many important aspects with reference to the FOUR attributes are masked. While developing the IDP for PRSU we realized that we cannot be brief while carrying out the SWOT analysis with especial reference to the RUSA guidelines.

**Methodology Used.** (a) Conduct of Orientation & Sensitization Programs for the Stakeholders: On 29 NOV 2013 the Director of the IQAC and DCDC attended the Orientation & Sanitization programs organized by the SLQAC, Chhattisgarh. Three people [including Principal, the Coordinator of the IQAC, and One Senior Professor] from each lead college of the State also attended the programs. The Director of the IQAC, PRSU, Raipur, acted as a resource person discussed threadbare how to script the IDP. On 9 DEC 2013 all HoDs of the UTD attended the workshop that focused on how to write the perspective plan/IDP. The Director of the IQAC, PRSU, Raipur, again acted as a resource person. All the HoDs were advised to convene meeting of their respective Staff Council to carry out SWOT analysis at the departmental level. On 8 JAN 2014 the plan document was presented for discussion and on 17 JAN 2014 the IQAC of the PRSU presented the IDP in the meeting organized by the SLQAC (DHE). Schematic diagram illustrating the steps leading to the finalization of the SWOT analysis outcome is given below:



# *Institutional Development Plan*

---

**(b) Performance evaluation of teaching departments by IQAC.** The IQAC of PRSU routinely evaluates the performance of its teaching departments on yearly basis. The performance is gauged on an inventory developed exclusively for this purpose. The evaluation process makes it mandatory on the part of its each teaching department to carry out SWOT analysis and to highlight the outcome of the process. In addition, the IQAC performs Internal Quality Audit and auditors appointed by the IQAC verify number of records listed below.

## **INTERNAL QUALITY AUDIT**

---

Internal Quality Audit will be carried out once in six months in all Academic Departments, Administrative Sections, College Development Council and Central Library. The Auditors will verify the following records and submit NCRs (Non Conformity Report) to the IQAC. The Audit report will be placed before the EC for necessary corrective and preventive actions.

## **Checklist for Internal Quality Audit**

---



### **LIST OF DOCUMENTS TO BE MAINTAINED BY ACADEMIC DEPARTMENTS**

- Activity Dairy
- Time Table
- Attendance Register
  - Students
  - Research Scholar
  - Non-teaching Staff
- Staff Leave Register
- Stock Register
- Cash Register
- Complaints & Suggestion Register
- Extra-Curricular Activities Register
- Minutes of the Departmental Committee
  - Staff Council
  - DRC
  - Grievance & Redress Cell
  - Anti-ragging Cell
  - Alumni Association
  - Faculty-Parents Meet
- Students' Result Register
- Student Feedback Register
- Events Register
- Student Seminar
- Symposia/ Conferences

# Institutional Development Plan

- Distinguished Visitors Register
- Any Other (Specify)

The evaluation inventory is pasted below for better understanding of the process. Each department carried out SWOT analysis based upon their performance and limitations.

## Performance Index for Teaching Departments

Criterion	Max Score	Actual Score	Weightage	Weighted Score
<b>Student</b>	<b>200</b>		<b>30</b>	<b>6000</b>
Results	100			0
Seminars	25			0
Achievements	25			0
Research fellowship/ scholarship	50			0
<b>Faculty</b>	<b>500</b>		<b>30</b>	<b>15000</b>
Research guidance	90			0
Research projects	50			0
Publications	100			0
Seminar/ Symposium etc. attended	30			0
Served as resource person	50			0
Membership in editorial board	30			0
Executive position in professional bodies	30			0
Membership in professional bodies	30			0
Training program attended	20			0
Awards/ honours	20			0
Administrative positions	20			0
Contribution to university examination	30			0
<b>Infrastructure development</b>	<b>100</b>		<b>10</b>	<b>1000</b>
Computers added/ upgraded	40			0
Internet facility	20			0
Lab equipment added	20			0
Expenditure on other infrastructure	20			0
<b>Activity</b>	<b>300</b>		<b>30</b>	<b>9000</b>
Popularity of courses offered	20			0
Seminar/ Symposium etc. organized	20			0
Staff Council Meeting	50			0
DRC meeting	10			0

# *Institutional Development Plan*

BoS meeting/ Syllabus revision	20		0
Visit of expert faculty	20		0
Grants received from funding agency, other than research project of individual faculty	30		0
Department journal/ magazine/ newsletter	10		0
Consultancy offered	10		0
Alumni registration	10		0
Alumni meeting	10		0
Contributions from alumni	10		0
Parent-teacher meeting	10		0
Collaboration with other institutions	30		0
Outreach activity	20		0
MoUs/ Joint program signed	20		0
		<b>Maximum Possible Score</b>	<b>31000</b>
		<b>Total Weighted Score</b>	<b>To compute</b>
		<b>Performance Index</b>	<b>To compute</b>

The SWOT analysis for the University as a unitary unit was performed in large scale based on the SWOT analysis of each department. The data are collated to obtain an unequivocal SWOT analysis and its outcome [see below].

## SWOT Analysis Outcome

### Strengths

- a) One of the largest public universities in the State of Chhattisgarh with low tuition fees that offers higher education.
- b) One of the oldest Universities of the State; established in 1 MAY 1964 and currently celebrating its golden jubilee year.
- c) The University possesses about 277 acres (112 hectares) land area and offers unlimited scope for future expansion.
- d) Well-qualified teaching faculty (86% with PhD) that publishes research papers @ 2.5 papers per faculty per session.
- e) Research-enabled faculty that guides on an average one Ph.D. biennially.
- f) The Central library possesses large number of books, e-books, journals and online free journals. The library opens round the year and offers reading facility.
- g) The University offers multi-faculty programs mainly at PG levels.
- h) The University has introduced credit system of examination in all PG & UG programs on the campus and PG programs in its affiliated colleges.
- i) The University has one of the best practices under which it provides grants to the research scholars to attend international professional meetings
- j) The University hardly encounter student and teacher unrest.

### Weaknesses

- a) Yet to offer CBCS pattern of education to the students
- b) Weak University-Industry Linkages
- c) Weak alumni consciousness
- d) Weak public outreach initiative

# *Institutional Development Plan*

---

- e) Weak consultancy output
- f) Increased drop-out rate in few programs
- g) Old buildings, class rooms, hostels warrant urgent renovation
- h) Old furniture and fixtures need to be replaced
- i) Lack of state-of-the-art new labs
- j) The supporting departments, such as computer center, engineering section, and USIC, health center etc. require urgent attention for up-gradation and strengthening
- k) The existing auditorium does not support large programs
- l) Faculty development activities need to be more effective
- m) The University is yet to introduce new innovative PG programs commensurate with need of the time
- n) The University does not possess innovative research centers
- o) Augmentation in the quality of teaching and research is essential
- p) Lack of satisfactory supplies and resources for the sustenance of quality laboratory training and research activities
- q) Lack of modern utility center for students, teachers and non-teaching employees
- r) Buildings are not equipped with escalators, ramps and special lavatories for differently-abled pupils and employees
- s) Campus lacks WiFi connectivity
- t) Adequate scholarships are not available for students pursuing research degrees
- u) Software, such as SCOPUS, TURNITIN, ITHENTICATE, SPSS are not provided to students and teachers for their use
- v) Inadequate computer coverage
- w) The University is yet to expand and supplement existing skill development programs
- x) The PTR is low in few teaching departments
- y) The teaching faculty are not capable to cope with 21<sup>st</sup> Century technologies related to pedagogy.
- z) MIS is not in place.
- aa) Teaching departments are not provided with administrative and financial autonomy
- bb) The University does not organize programs to enhance research aptitude among a section of the teaching faculty lacking interest in research
- cc) Incentive mechanisms on performance not in place
- dd) Does not attract International Students

## **Opportunities**

- a) The State with surplus power and higher economic growth rate is increasingly becoming an industrial hub of the country.
- b) Of late, the growth rate in the population of pupil seeking admission in HEIs exhibits upward trend leading to very high demand for UG, PG and PhD programs
- c) Scope for implementation of e-teaching and e-learning technologies
- d) The State has been endowed with rich biological and mineral resources.
- e) Research initiative for sustainable usage of herbal and medicinal plant resources of the State
- f) Research initiative in the field of mineral resources
- g) Research initiative in the area of endemic diseases, such as sickle cell anemia, filaria, and malaria
- h) External faculty are willing to serve in the Faculty exchange programs, Adjunct Faculty recruitment program
- i) Ample opportunities for signing MoUs with leading national and international HEIs & Research Centers
- j) Tapping of extra-mural research funding through submitting low-, medium- and large-budget grant application to state, national and international funding agencies
- k) Augmentation of IRG through RUSA, UGC and other Grant-giving Governing Bodies

## **Threats**

- a) Large scale exodus of bright students towards professional courses
- b) Proliferation of private universities/ institutions offering university level higher education
- c) Lack of communication skills among large populace of students
- d) Few traditional programs result in low employability of the graduates
- e) Redundancy of course curricula



# Institutional Development Plan

## SWOT Matrix

S-O Strategy	W-O Strategy
<ul style="list-style-type: none"> <li>• Introduction of new UG/PG programs in new departments</li> <li>• Introduction of new UG/PG programs in existing departments</li> <li>• Introduction of mechanisms for learning and research assistantships</li> <li>• Enhancement of R&amp;D and consultancy activities</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure up-gradation, such as modern class rooms with LCD facility, construction of ramps, installation of escalators etc.</li> <li>• Creation of state-of-the art laboratories, including language laboratory</li> <li>• Equipping the library with knowledge resources including e-resources</li> <li>• Fortification of faculty development programs</li> </ul>
S-T Strategy	W-T Strategy
<ul style="list-style-type: none"> <li>• Establishment of innovative &amp; path-breaking research centers</li> <li>• Creation of model constituent colleges in each district under the jurisdiction of the PRSU</li> <li>• Introduction of Credit system CBCS pattern in course curricula</li> <li>• Introduction of programs based on contemporary global needs</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment of finishing school and placement center</li> <li>• Activation of MIS based governance</li> <li>• Closing down of courses/ programs with low employability</li> <li>• Commissioning both administrative and academic reforms</li> </ul>

## SWOT analysis-based “strategic plan” for institutional development

### Strategic Plan – Link to SWOT Matrix

The Pandit Ravishankar Shukla University has made an all out efforts to formulate a strategic plan for institutional development. The plan includes diverse aspects aimed at achieving complete development of the institution.

The first and foremost, the PRSU has constructed a roadmap to achieve excellence in higher education offered not only by this University, but also by other HEIs of the State. In addition, the University also prepared a roadmap for Innovations in Education, Research & Skills for the University that will work efficiently for all HEIs of the State of Chhattisgarh.

The Strategic Plan also includes the following aspects:

- a) **Infrastructure Modernization Planning**
- b) **Augmentation of support to Research & Development**
- c) **Faculty Development Support**
- d) **Institutional Reforms**
- e) **Academic Support**
- f) **Establishment of Innovative & Path-breaking Research Centers**
- g) **Establishment of Model Constituent Colleges in each District within the Jurisdiction of the University**

# Institutional Development Plan

## A Roadmap to Achieve Excellence in Higher Education Institutions in Chhattisgarh

### A Prelude

The higher education institutions (HEIs) do not exist in isolation. The society has lots of expectations from the HEIs and the latter have tremendous responsibilities and role in the socio-economic development of the region at the first place and also of the Country consequently. India is a huge country and its higher education system is fairly large consisting of about 480 universities and more than 20000 colleges. Notwithstanding this large set up, the enrollment ratio in higher education is abysmally small (about 13%). **To achieve 30% enrolment ratio, the country needs about 500 more Universities and 35000 colleges to become competitive in the sphere of higher education** (UGC Guidelines for Training and Development of Academic Administrators in HEIs, 2010). Such projections have not yet been made for Chhattisgarh separately.

### Global Status of HEIs of India

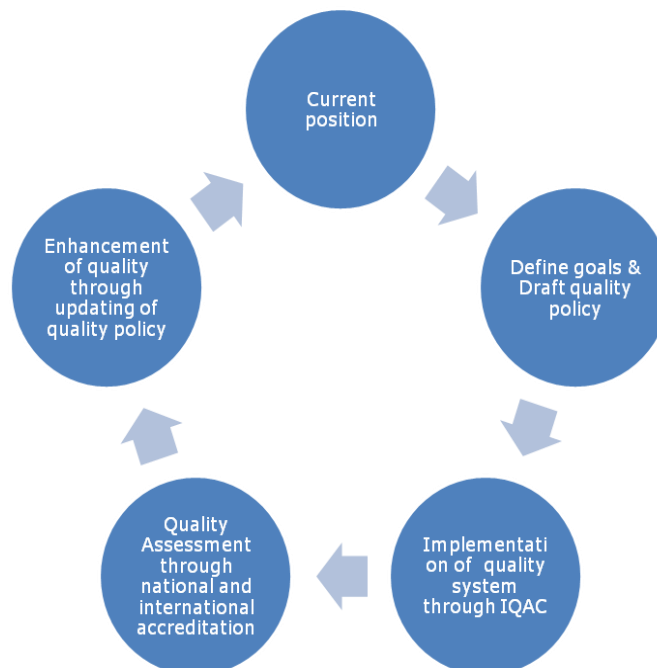
None of the Indian Universities figure in the QS (Quacquarelli Symonds Ltd) World University Rankings 2010; however, 15 universities from Asia, notably five from Japan, three from Hong Kong, two from China, two from South Korea, two from Singapore, and one from Taiwan, are listed among top 100 universities of the world. The University of Hong Kong (HKU), Hong Kong; The University of Tokyo, Japan; and Kyoto University, Japan, respectively are in the 23<sup>rd</sup>, 24<sup>th</sup>, and 25<sup>th</sup> positions of the rankings. The IITB of India has the best ranking at the position 187. Even **India-Today's** exclusive survey did not list any HEIs of Chhattisgarh among India's top 50 Universities. Looking at this scenario we can well imagine about the status of HEIs of Chhattisgarh at the global domain.

### Better late than never

We must try our level best to ensure that the HEIs of Chhattisgarh achieve excellence in the realm of higher education. It is extremely urgent to develop a workable roadmap for quality sustenance and excellence in the field of higher education. We have to progress by leaps and bounds to achieve our goals and objectives. A roadmap is presented below with a five-year cycle of growth that will continue incessantly thereafter with modifications and revisions through learning and experiences gained during this process.

### The Basic Cycle

The basic cycle proposed here encompasses the current status of HEIs of Chhattisgarh. It includes setting up of goals, drafting of quality policy, implementation of quality system, quality assessment & accreditation, and enhancement of quality through updating of quality policy.

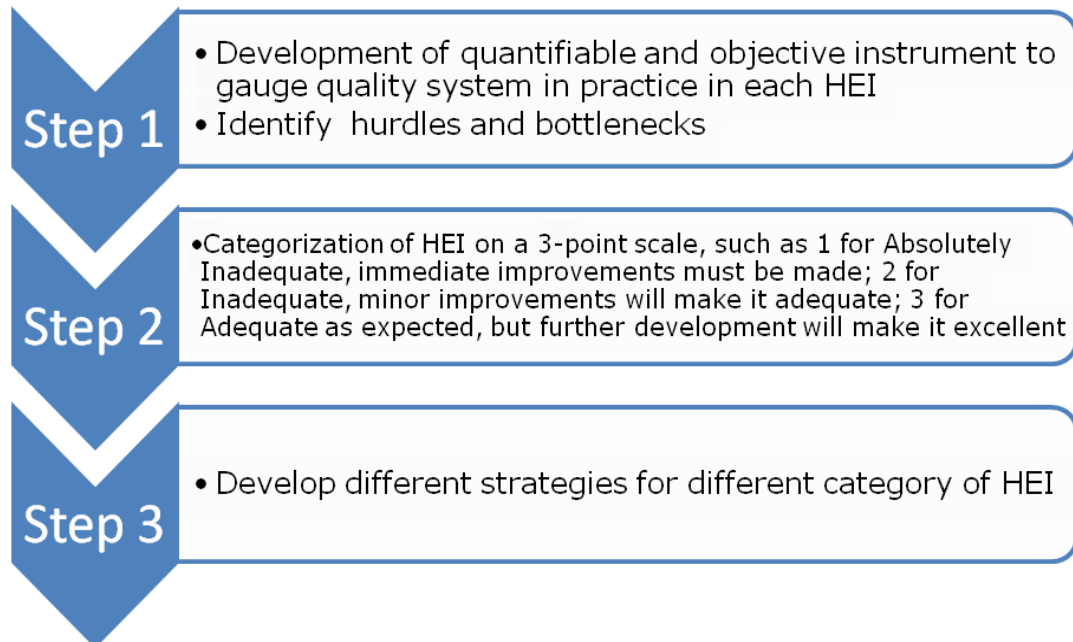


# *Institutional Development Plan*

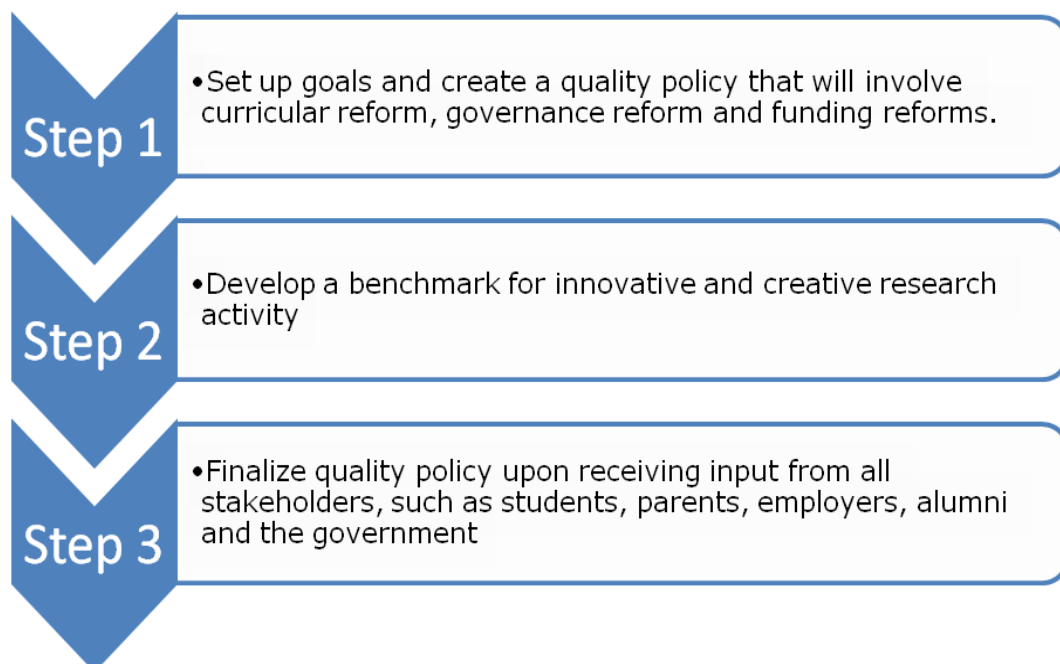
---

## **The First – Current Position**

Be it University Teaching Departments or Affiliated Colleges or Autonomous Colleges, the current status in terms of existing quality system should be reviewed using quantifiable and objective instrument.



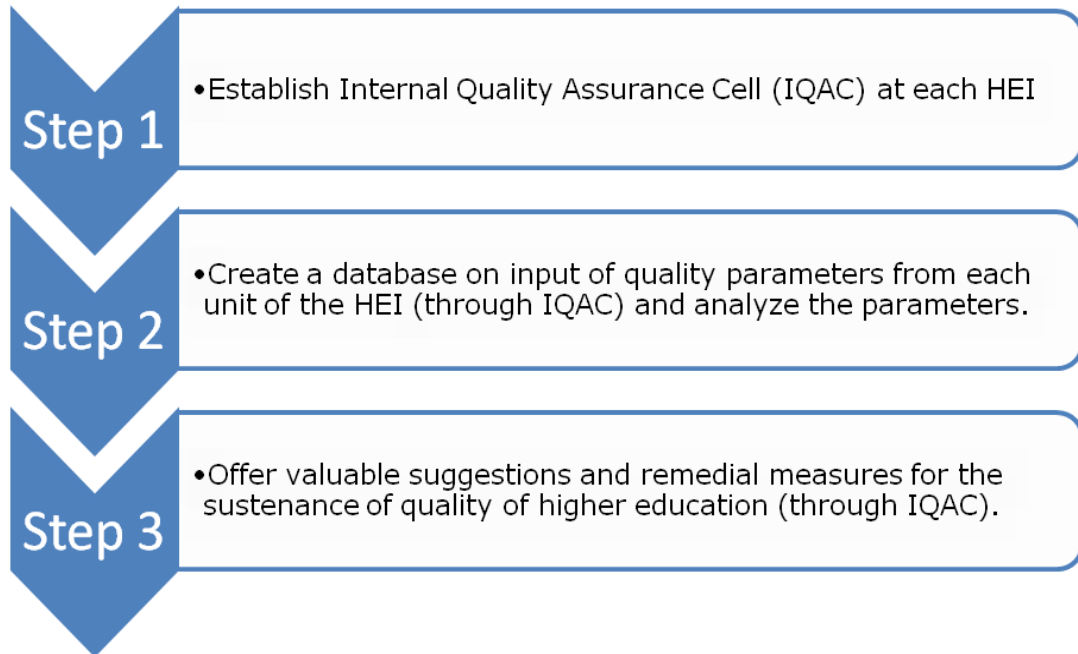
## **The Second - Define goals & Draft quality policy**



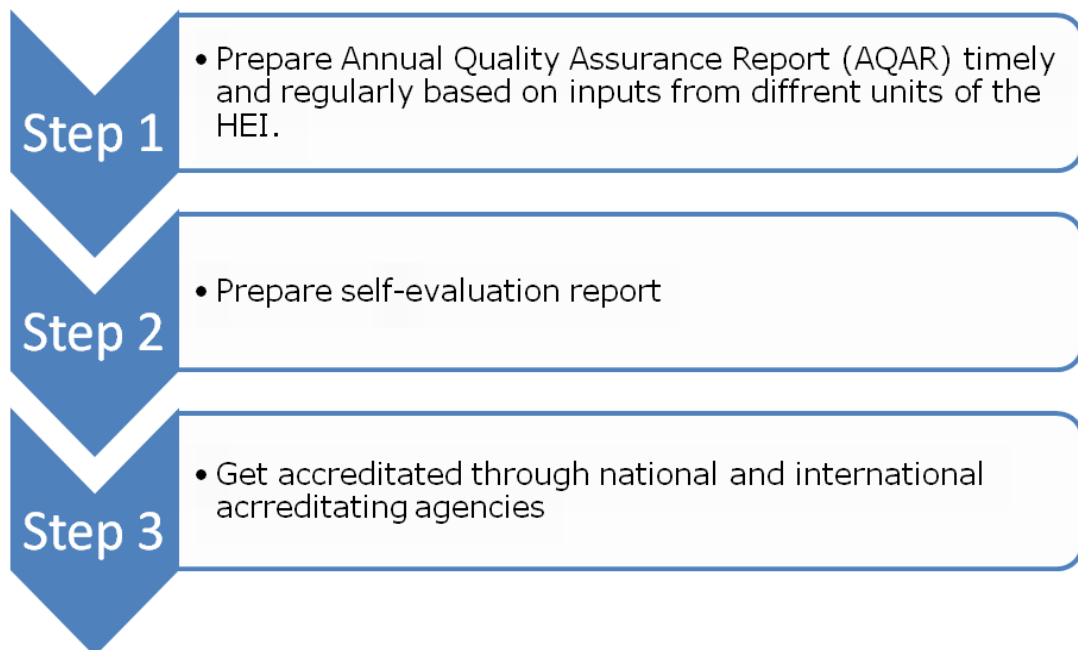
# *Institutional Development Plan*

---

## **The Third - Implementation of quality system through IQAC**

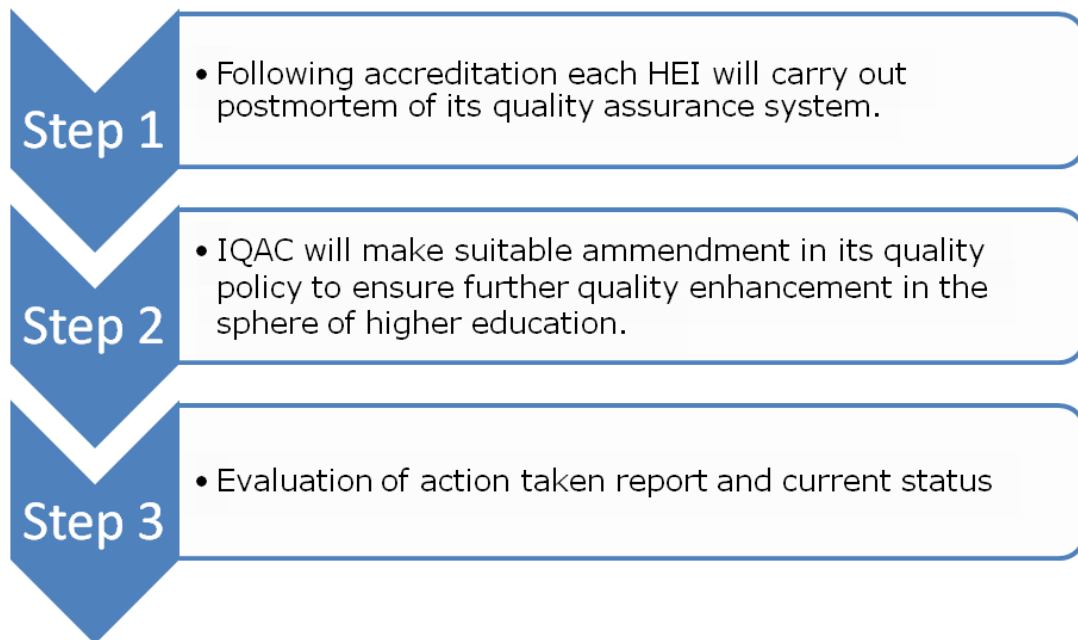


## **The Fourth - Quality Assessment through national and international accreditation**



# Institutional Development Plan

## The Fifth - Enhancement of quality through updating of quality policy



### The sky is the limit for quality

Each HEI, including Pt. Ravishankar Shukla University, should continue in its efforts to augment performance and quality in higher education in the best possible way. It should create newer and newer benchmarks for others to emulate.

## Roadmap for Innovations in Education, Research & Skills

2013

- Creation and constitution of focused innovation clusters, for example State Innovation Council (SInC), University Innovation Council (UInC) and District Innovation Council (DInC)
- Mapping innovations and opportunities for innovations
- Making provisions of incentives for talents
- Development of mechanisms to nurture grass root innovations

2015

- Dissemination of success stories through print and electronic media
- Promotion of learning beyond the walls through social media, like face book and LinkedIn
- Identification of best teachers and sharing of their lectures through 24 X 7 e-learning mechanisms
- Establishment of public outreach center (POC) at HEIs to disseminate knowledge, technologies and other skills among small enterprises, groups, and the society as a whole

# *Institutional Development Plan*

---

2017

- Establishment of Academia-Industry linkage cell in HEIs
- Establishment of linkages with existing Open Universities for offering innovative academic programs
- Evolving mechanisms to promote capacity building and generation of empowered manpower

2020

- Creation of at least one Innovation University at the state level and innovation colleges at least one in each district to foster the four foremost goals, namely (1) Search, (2) Spread, (3) Sense, and (4) Celebrate innovations with especial reference to nature-inspired innovations

## **Infrastructure**

### **Renovation of Existing Buildings**

#### **Staff Quarter**

The university has over 100 staff quarters for the faculty and supporting staff. The quarters are pretty old and have become old-fashioned in the present times. During rainy season they pose several difficulties. They need to be immediately renovated. Although university is repairing them to some extent through its own resources, it needs a major share of the budget for renovation.

#### **Teachers' Hostel**

The existing Teachers' hostel building (1970) is 2-storied consisting of 16 rooms. It is 44-year old. Currently, the building is under dilapidated condition and need to be renovated immediately.

#### **Computer Science Building**

The present structure of the School of Studies in Computer Science neither meets the minimum standard of AICTE nor the minimum requirements for the purpose of study of various courses it offers and research it carries out. The building immediately needed to be renovated.

#### **Literature and Languages – Language Laboratory**

This department is housed in one of the oldest buildings (> 40 years) of the campus and is located on the third floor of the building. Therefore, it requires immediate attention for renovation. Creation of a state-of-the-art language laboratory is long overdue.

#### **Modernization and strengthening of laboratories**

Modernization of existing laboratories in the various schools of studies will be done by upgrading the existing equipments and replacing the old ones. Improved working conditions have a direct relevance on the outcome of research and accuracy of results particularly when working on sophisticated analytical equipments, therefore dust free air-conditioned labs are essential.

#### **Establishment of new laboratories for existing UG and PG programs and for new PG programs**

The University plans establish following labs for existing UG/PG and new PG programs. Mobile Communication Lab & Network Labs are required for the Computer Science

# *Institutional Development Plan*

---

Department. The University has planned to establish new PG programs, namely Atmospheric Science and Space Science. The PG program in Environmental Science has already been initiated. New labs are required for all these new programs.

Presently, common PG and Research Laboratories exist in various departments. For which at times working becomes difficult. Hence separate laboratories for Research equipped with sophisticated equipments is planned to set up. In earth Sciences, much emphasis is given on the field studies, for which mobile logistic support would be developed.

## **Modernization of classrooms**

Class rooms will be modernized to provide proper ambience. Trap doors, cooling equipments (AC) will be installed. The classrooms would be equipped with interactive Boards and laptop computers to make teaching and learning more effective.

## **Updation of Learning Resources**

Learning resources such as 3-D models, charts, maps, biological and geological specimens will be added in class rooms and laboratories.

## **Procurement of furniture**

For the upcoming new laboratories, addition furniture would be required. Laboratory tables and laboratory chairs/stools made of standard firms like Gogrej or Methodex have long life and good ambience. These would improve the ambience of labs. Addition requirement of the furniture for the establishment of offices of supporting departments will also be meet out.

## **Establishment/Up-gradation of Central and Departmental Computer Centers**

Advancement in the software technology and up gradation of computers demands recurring modernization of computer centre of each department and addition of new systems to overcome the mismatch problem. Addition of new operating and application software will be done.

## **Modernization/improvements of supporting departments**

Administrative reforms such as establishment of independent offices of the IQAC, Deans of the Faculties; Proctor Office etc. would be done in order to strengthen the functioning of the University. Moreover continuous evaluation of students and reforms in the examination system requires setting up question banks in each discipline. Improvement in the Hostel facilities will also be carried out.

## **Modernization and strengthening of libraries and increasing access to knowledge resources**

Procurement of new books and online license for the important research Journals will be done. Digitization of the library books, online availability of the knowledge resources through Wi-Fi connectivity to the Faculty and students residing in the campus would be made.

## **Refurbishment (Minor Civil Works)**

Minor civil works will be carried out. Notably the process will include construction of ramps and construction of dedicated refresh rooms in each building for the benefit of differently-abled students and employees.

## **Research and development support**

### **Providing Teaching and Research Assistantships to increase enrolment in existing and new PG/PhD programs**

Currently most of the students have a predilection for professional courses, as a result the enrollment has dramatically declined in the Universities and Colleges that run non-professional courses and focus on basic science and social science subjects. Therefore, it is essential to develop support system so that a sizable number of teaching and research assistantships are available. The proposed step would likely to enhance GER at HEIs.

# *Institutional Development Plan*

---

## **Provision of resources for research support**

The research and development activities require lots of input. It is mandatory to procure & provide both basic and advanced infrastructure to ensure desirable R&D output. The state-of-the-art equipments are absolutely required for carrying out meaningful R&D activities. In certain disciplines chemicals and glassware are indispensable.

## **Enhancement of R&D and institutional consultancy activities**

Consultancy activities are very much important in the part of HEIs that undertake satisfactory R&D activities. It helps in the augmentation of IRG. Both R&D and Institutional consultancy activities open of new avenues for the passing out graduates. The graduates will have opportunity to get placed in suitable industries and institutions.

## **Faculty Development Support**

### **Faculty and Staff Development (including faculty qualification up-gradation, pedagogical training, and organizing/ participation of faculty in workshops, seminars and conferences) for improved competence based on TNA**

The teaching faculties are the backbone of any given HEIs. The quality of the teachers is directly linked to the quality of the passing out graduates. The reputation of any higher education institutions depends upon the quality of its teaching faculties and researchers. It is the foremost responsibility of the HEIs to oversee that all teachers are qualified. If some of the faculties are not well-qualified, then the Institution should provide adequate support for the up-gradation of their qualifications. The teachers need pedagogical training and they need to attend national and international meetings, workshops, symposia and conferences. All these will enhance their competency. As a result the teachers can interact with the students in a better way and communicate about the performance of students to students themselves and their parents. The enhanced competency will also narrow down inter-teacher ratings of students when many of them assess the same students on the same and different occasions. All the proposed efforts, however, should be based on TNA.

## **Institutional reforms**

### **Technical assistance for procurement and academic activities**

This grant will be utilized for development of academic facilities for the student, research scholars and the faculty. The grant will also be used for hiring services and consultancy on technical needs.

### **Institutional management capacity enhancement**

This grant will be utilized primarily for skill development and training program, workshop etc. for capacity building for faculty and non-teaching staff.

## **Academic support**

### **Creation of new departments/courses**

This grant will be used for infrastructural establishment of new department and courses as proposed in the IDP.

### **Enhanced Interaction with Industry**

The course curriculum will be designed as per the requirement of local industry to meet out skilled human recourse demand. This grant will be utilized for developing Institutional industry linkage as per the local need.

### **Student support activities**

This grant will be used for developing student support services in the campus.



# *Institutional Development Plan*

---

## Others

### Establishment of Innovative and Path-breaking Research Centers

#### Center for Cognitive Science

##### Introduction & Justification

Cognitive Science is an interdisciplinary investigation of mind and intelligence, embracing psychology, neuroscience, linguistics and computational intelligence. Theoretical neuroscience has generated new views of the nature of representation and computation that can even be applied to difficult questions concerning emotions, consciousness, and creativity. Progress in cognitive neuroscience also has important implication for traditional philosophical issues such as the mind body, problem, free will and even the meaning of life.

Advances in cognitive neuroscience (both theoretical and experimental) revealed how the brain uses information gathered from the senses and interaction with the world to perform complex tasks. There is an increasing prominence of statistical models based on Bayesian probability theory in cognitive science these models have been applied to many important phenomena in cognitive psychology.

Further, greater appreciation is now being given to the social dimensions of cognitions Psychologists have shown ways in which human thinking is affected by the interaction that people have with others in the culture they share. These interactions depend on biological mechanism such as the generation and transmission of emotions. Cognitive science is thus, an important area of research which will provide answerers to some of the most challenging questions about the mind. In view of the above it is desirable to conduct, innovative, interdisciplinary experimental researches.

##### Objectives

Specific areas of Investigation would include:

- Information processing in the brain
- Neural imaging Studies of human cognition
- Mental and neural disorder
- Dementia
- Autism
- Cognitive, Neural, and Cultural processes

#### Center for Translational Chronobiology

##### What is Chronobiology?

Chronobiology deals with the study of biological rhythms and their underlying mechanisms. In other words chronobiology is an account of biological time structures and their interaction with the environment. It includes living clocks, stopwatches and calendars. The one that has great relevance to human health and welfare is the **CIRCADIAN CLOCK** (popularly **BIOLOGICAL CLOCK**) that ticks at a speed of one cycle per 24 hours. There are several circadian clocks within an organism and the system is organized hierarchically. The significance of these clocks in regulating temporal physiology has been accepted undisputedly. Therefore, the analysis of the mechanisms underlying circadian processes has become one of the most fascinating areas of research in the domain of biology and medicine. This field has attained an enormous growth in recent time. At present, chronobiological research attracts scientists from a broad range of disciplines, such as neuroscience, molecular genetics, photobiology, computational biology, and metabolism, as well as sleep medicine, psychiatry, and oncology. In a nutshell Chronobiology falls in the multidisciplinary and transdisciplinary domains of research.

##### Why Translational Chronobiology?

In the past abundant literature has been produced based on chronobiological studies in

# *Institutional Development Plan*

---

model organisms, reflecting input from a vast diversity of living beings from microbes to mammals. We have a fairly modest knowledge on the working and the molecular basis of biological clocks. **What is the use of this knowledge?** Unless we carry out translation of bench work research to health care, all our efforts in the sphere of chronobiological research are in vain. This process has not been taken up seriously and whatsoever efforts have been made can be described as having a less impressive pace. In plain language efforts regarding the applications of basic chronobiological research in human health care and welfare have not gathered enough momentum. The fragmented approach is not enough to visualize an effective translation of the basic research to human health care. An umbrella approach to hasten the speed of this process would be judicious.

## **Why Center for Translational Chronobiology in PRSU?**

No such center exists in the world. If it is created on the campus of PRSU it would be the maiden attempt to roll on the translation of bench work to human health care. The PRSU would be known worldwide for this unique approach and the center would bring name and fame to the University as it will be the SOLITARY CENTER in the field of TRANSLATIONAL CHRONOBIOLOGICAL RESEARCH.

## **National & International Status of PRSU with reference to Chronobiology Research:**

### **Strength**

1. Pt. Ravishankar Shukla University is already known for chronobiological research at the national and international level.
2. One of the faculties of this school has been a council member in the World Federation of Societies of Chronobiology (2002-2006).
3. One of the faculties has been in the panel of the International Scientific Board of the First (Turkey, 2005), the Second (Tunisia, 2007) and the Third (Israel, 2009) International Congress of Applied Chronobiology and Chronomedicine.
4. PRSU has already organized many national and international symposia in chronobiology.
5. PRSU has organized SERC School in Chronobiology in 2003, National Workshop on Trends & Techniques in 2006, Multinational Graduate Course on Basic Chronobiology with Reference to Chronomedicine in 2008, and XX National Symposium on Chronobiology in 2008.
6. Faculties of PRSU publish original research papers and reviews in the subject in peer-reviewed journals.
7. The thrust area of research in the UGC-sponsored DRS-SAP sanctioned to School of Life Sciences is Chronobiology.
8. The faculties of SoS Life Sciences engaged in Chronobiological research have expertise to carry out translational chronobiology meticulously.
9. The PRSU is promoting Chronobiology in the country.
10. The SoS Life Sciences have initiated collaborative ties with other Departments/ Universities/ Centers at inter-departmental, local, national and international levels to carry out collaborative research in the domain of Chronobiology.
11. School of Life Sciences offers a special paper on Chronobiology for PG students in Bioscience. This is the first such

### **Research Goal**

1. The central objective of this proposal to carry out interdisciplinary research locally (in the beginning) involving the (1) SoS in Physical Education, (2) SoS in Psychology and (3) Regional Cancer Center, Raipur, to demonstrate the approaches of Translational Chronobiology [Note: the interdisciplinary research work is already in practice with the first and the third]. In the beginning following components would be in the focus: (a) Cancer chronotherapy, (b) Shift optimization, (c) Sports chronobiology, (d) Blood pressure variability, and (e) Chrono-psychology and psychiatrics.

# *Institutional Development Plan*

---

2. Interdisciplinary and collaborative research shall be carried out at the national and international levels.
- Training and Extension**
1. Provide training to young students and teachers at both individual and group levels to carry out research in the domain of translational chronobiology.
  2. Popularize chronobiology in the country through lectures and multimedia in Schools and Colleges to attract young students to the field of Chronobiology.
  3. Organize State/ National/ International level workshop/ symposium/ congress periodically to foster interaction between young researchers and top-notched experts in the fields of Chronobiology.
- Reference Resource Center**
1. The center will be developed and designed in such a way that it will act as an important resource center for translational chronobiology.

## Center for Nano-science & Nano-technology

### Introduction

School of Studies in Physics and Astrophysics under the **New Research Activity** proposes to create a Centre for Nano-science and Nano-technology for Research and Post Graduate Teaching at the department. The **objectives** of the proposed centre are aimed at:

- To provide effective education and training to the students in the field of Nano-science and Nano-technology: a highly interdisciplinary/interactive branch of Materials Science
- To develop the fundamental understanding of Nano-particles: their Synthesis, Characterization and Technological advantages
- To train Manpower in this highly interdisciplinary activity involving Physics, Chemistry, Biology, Medicine and Engineering etc.
- To encourage Research and Development activities in this multidisciplinary branch of science
- To establish industry-academia linkages in terms of technology transfer
- To explore inter-institutional collaboration at National and International levels

### Nano-science and Nano-technology: The Need and Justification

Nano-science and Nano-technology has been identified as one of the highest priority area at the National as well as International level. Many of the Universities and Institutions in India are actively engaged in research and teaching programs. This is a rapidly developing field in the recent times. It deals with Physics, Chemistry and Technological aspects of the materials in the nano scale length i.e. the length scale ranging from 1-100 nanometers ( $1 \text{ nm} = 10^{-9} \text{ m}$ ). The materials in the dimensions of nano range exhibit unusual and peculiar properties as compared to their bulk counterparts. Many of the performances during various applications of these nano materials such as optical, microelectronic, thermo electric, magnetic, elastic properties get drastically improved. The nano-particles have tremendous technological applications in various disciplines, such as materials science, chemical and physical sciences, biology, medicine, engineering etc. It is truly a multidisciplinary field, which include almost all the disciplines of the natural sciences and engineering.

The teaching and research in nano-science and nano-technology requires the competences from all the disciplines, as mentioned above. Hence, the proposed Centre for Nano-science and Nano-technology under **New Research Activity** will require the expertise from all departments viz. Physics, Chemistry, Life sciences, Computer and Information Technology, Biotechnology, Biochemistry, Pharmacy etc. to name a few. Pt. Ravishankar Shukla University, Raipur has many of these departments which run strong

# *Institutional Development Plan*

---

research and teaching programs in their respective disciplines. The expertise faculties of these departments would be a great help in terms of interdepartmental interaction and teaching for this proposed centre. Besides taking the help of the expertise available within the campus, external experts in the area of Nano-science and Nano-technology would also be invited.

It is worth mentioning that in the whole central region of India i.e. Chhattisgarh, there are no Centers or Research Organizations which are engaged in Science and Technology of the materials in the nano range. By creating a Centre of Nano-science and Nano-technology at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur, the students of this region will be greatly benefited in terms of exposure to this new exciting and highly interactive area of science and technology. This Centre will attempt to create an atmosphere of a high level of training and research so that the highly skilled and well trained manpower are produced. It is expected that many of the students would opt for the careers in this branch of science and technology and some of them may pursue higher degree in research. There are plenty of jobs available at different academic/ research organizations, various industries at the global/ domestic level for the well trained manpower in the branch of Nano-science and Nano-technology. The infrastructural and the research facilities to be created, after the proposed centre is approved, will be accessible to all the workers in the nearby institutions/ organizations who require these facilities for their research.

## **Proposed Program**

- To start with, Nano-science and Nano-technology will be included as an important component of the existing curriculum at Post Graduate level.
- Basic infrastructural and laboratory facilities will be created.
- Expertise available within and outside the campus will be identified and involved in the academic activity.
- Process of recruiting a few expertise faculties will be initiated.
- Students will be encouraged and motivated to opt for this specialized program and will be exposed to the potential advantages of this branch as regards to future job opportunities.
- Finally, the activity in this branch of science and technology will be extended further to initiate M. Tech./ Ph. D. program.

## **Chhattisgarh Center for Geriatrics and Gerontology (CCGG)**

### **Introduction & Justification**

The contemporary **YOUNG INDIA** will not remain young forever. The 2011 census data suggest that India's elderly population has already crossed 100 million marks and the number would touch a staggering figure of about 324 million in 2050. A sharp decline in immunity and impairment of sensory function among elderly subjects will make them doubly vulnerable to both communicable and non-communicable diseases. The incidence of chronic illnesses, such as hypertension, CHD and cancer will rise dramatically. In addition, the aged are likely to suffer from respiratory, nutritional, metabolic, gastrointestinal, and genito-urinary complications, resulting in a burgeoning administrative and financial burden on the State and the Central Governments. The higher incidence of Alzheimer, dementia, psychosocial and sleep related problems among the aged will make the scenario very grim and complicated. Therefore, it would be mandatory on the part of both Governments to develop strategies to improve QoL of the aged through implementation of relevant and appropriate health care system. The rural aged will require special attention. However, unfortunately there is a great paucity of data on both urban and rural aged in India and more especially information on aged belonging to Chhattisgarh - a tribal dominated State is altogether absent. The proposed center, "Chhattisgarh Center for Geriatrics and Gerontology (CCGG)" will initiate innovative research activity in the domains of Geriatrics and Gerontology.

# *Institutional Development Plan*

---

## **Goals**

1. Enumeration of trends and types of health problems among elderly population of Chhattisgarh
2. Creation of database on health problems of aged and making it amenable to stake holders
3. Organization of dedicated camps especially in rural areas to educate the aged of health issues and complications of old age
4. To evolve mechanisms to ensure acceptable health status among the aged population
5. To work as an interface between the aged and other stake holders, such as government and non-government agencies, to maximize QoL among the elderly population of the State

## **Stakeholders and Issues**

1. Identify interested groups, individuals and others interested in alleviating health, sleep- and psychosocial-problems
2. Identify causes of health complications prevalent among the aged belonging to Chhattisgarh
3. Identify means and measures to handle problems of elderly population.

## **Center for TMT and LIGO-India Projects in Astronomy**

Astronomy & Astrophysics (A&A) has been one of the major areas of teaching as well as research activity of the Physics department since its inception. The department has a couple of small aperture optical telescopes, one 8-inch aperture & one 14-inch aperture (Celestron CGE series CGE 800 & 1400), computer controlled automated GPS Schmidt-Cassegrain, with back-end instrumentation (SSP-3A Photometer, CCD imaging camera and spectrograph) along with other accessories, procured through DST-FIST scheme, primarily for carrying out observational exercises/projects in Astronomy & Astrophysics as a part of postgraduate teaching. Every year ~ 30-40% students complete their project work in Astronomy as a part of their M. Sc. course with specialization in Astronomy & Astrophysics. From time to time the facility is also used for sky-gazing program for the general public in showing them the beautiful rings of the Saturn, Satellites of the Jupiter etc and for special events like comets, solar and lunar eclipses, and thus also serve the purpose of popularizing science, especially, among young students. The University is in the process of building an Observatory and a Dome (15-foot diameter) in the campus for the housing the 14" telescope.

Astronomy and Astrophysics is one of the front-line areas of Research in India. Various Astronomical facilities/Projects are upcoming/being developed in India i.e. **ASTROSAT**, which will be India's first Multi wavelength Astronomical Telescope and **National Large Solar Telescope (NLST)**. These facilities will require trained manpower not only for running these large facilities but also to analyze huge amount of data. Hence, there is always a demand of people to work in this field. Not only this, India is participating in several International projects i.e. **Thirty Meter Telescope (TMT)**, **Gravitational Wave Observatory**. These Projects will require trained and skilled manpower.

The SoS in Physics and Astrophysics, PRSU has played a major role in producing well trained manpower that are holding important positions in various Astronomy Centers at National/ International levels. It is strongly felt that the available facilities should be strengthened further. Especially a state of the art 24 -inch telescope equipped with latest CCD camera, and data acquisition system (high end PC) must be procured.

# *Institutional Development Plan*

## Center for Integrated Tribal Studies

### Preamble

India holds a unique position in the tribal map of the world. It has the distinction of having the second largest population of tribe after Africa. From time immemorial the tribes are an integral part of the Indian population and occupy a unique position in the Indian society. The tribal inhabit diverse ecological niches, experience wide socio-economic disparities, and practice different cultures and religions. The tribal have thus adjusted to the situation according to their own ingenuity. The cultural and biological diversity of tribes in India presents a unique scenario.

The nascent State **Chhattisgarh** (constituted on 1<sup>st</sup> November, 2000) holds unique position in the tribal map of country. The ST constitutes 31.80% (Census 2001) of the State's total population, which is larger than that of many States. There are forty-two tribal communities included in the list of ST in Chhattisgarh. There is bewildering variation in population size of the individual ST in Chhattisgarh. Gond is the principal tribe of Chhattisgarh as well as India too. Gond along with Kwarar and Oraon tribes constitute about 75% of the total tribal population of Chhattisgarh. The Halba and Bhattra tribes follow them with a population more than one and half lakh. Seventy-four primitive tribal communities have been identified by the Government of India in various States/ Union Territories for taking up special socio-economic development programs on the basis of their primitive technology; extremely low level of literacy and small, stagnant diminishing population. Among them five **primitive tribes** namely – *Abujhmaria, Baiga, Birhor, Hill Korwa and Kamar* live in Chhattisgarh.

### Why Need of Center for Integrated Tribal Studies

The relevance of the proposed Center is very much identified as 'Center for Integrated Tribal Studies' to create an integrated knowledge base and evolve strategies for the welfare and development of Scheduled Tribes of Chhattisgarh through research, academic courses and service with a regional, national and global perspective. It would concentrate more on all identified primitive tribal groups (PTG) of Chhattisgarh namely- *Abujhmaria, Baiga, Birhor, Kamar and Pahari Korwa*.

There is an urgent need to start Center for Integrated Tribal Studies in Pt. Ravishankar Shukla University, Raipur for the following reasons:

1. The Chhattisgarh State is tribal dominating state with tribal population constituting more than 31.8% of the state's total population.
2. There are about 40 tribal groups in the state. Among these five tribal groups, viz. *Abujhmaria, Baiga, Birhor, Hill Korwa and Kamar* belong to primitive tribal groups and they need special attention.
3. They have preserved rich heritage in terms of their culture, art and music and biological heritage.
4. They are storehouses of information regarding indigenous knowledge of medicinal applications of herbs.
5. They represent various stages of cultural development at one time.
6. Their documentation and study is crucial as they are likely to lose their identity, biological as well as cultural, in response to accelerated rate of development in newly constituted Chhattisgarh state.
7. The tribes of this state are worst sufferers. Central Government and Government of Chhattisgarh has formulated many development schemes to improve their socio-economic status and quality of life, but unfortunately not much significant results are seen. The four **D's** that is drink, debt, dirt, and disease have become their destiny and they are caught in the web of a complex system which is an outcome of modernization, industrialization and urbanization. On one hand trumpets are blowing for the development of tribals and at another hand nobody can deny the lop-sided development. Therefore, to reach the ultimate goal of reaching out tribes for their development, the proposed Center is needed.
8. Above all, investigators of various disciplines did the study on various dimensions of tribes, but they are not holistic in nature and sporadic too.

# *Institutional Development Plan*

---

There is need to help tribal communities in improving their life, by making them aware about new discoveries, new technologies and imparting employable skills. All these concerns formed the base of proposing to setting up a Center which can act as a hub of research and academic activities thereby fulfilling the informational needs of stakeholders.

## **Specific Objectives**

- Act as a nucleus of inter-disciplinary academic and research activities on tribes of Chhattisgarh by way of creating an enabling environment for sharing resources and skills.
- Build an integrated knowledge base of demographic, socio-cultural, economic, political, physical and biological resource of tribes, especially of primitive tribes and tribal players
- A Survey and Documentation of the Intangible Cultural Heritage (ICH) (Traditional Knowledge and Folklore) of tribes of Chhattisgarh and Trade Related Intellectual Property Rights (TRIPS) in order to Formulate a Proposal for Access to Benefit Sharing (ABS)
- Documentation and Validation of Indigenous Technical knowledge, Indigenous Agricultural knowledge and Indigenous Medical knowledge of Tribes of Chhattisgarh along with biodiversity of the region
- Assessment of the Dietary Pattern, Fermented Foods and Beverages and Nutritional Profile of the Tribes of Chhattisgarh.
- Assessment of nutritional, physiological and health profile, body composition, somatotype and psychological characteristics of tribal players to suggest appropriate intervention for their maximum level of achievement.
- Cater to the informational needs of stakeholders by developing state -of -the-art documentation center, information exchange system, archives and museum and a series of publications on themes relevant to sustainable development of tribes of C.G.
- Organize national, regional and international seminars, workshops, training programs, conferences in the thematic areas identified by the Institute from time to time, specifically on primitive tribes and tribal sports.
- To plan and conduct Bench Mark Surveys right from the village level to build up a strong baseline primary data bank about the socio-cultural, education, health and nutrition, demographic, economic, political and cultural profile of the Scheduled Tribes of Chhattisgarh in inter-disciplinary perspective for the formulation of appropriate policies, programs and strategies for sustainable development of the tribal areas.
- To conduct research studies for documentation of the distinguishing characteristic features, the processes of social, cultural and economic change and development among primitive tribal groups of the State and to serve as a center for providing data and advisory services to Government and others on the problems and development of the ST communities.

## **Public Outreach Center**

### **Introduction**

Pt. Ravishankar Shukla University (PRSU), Raipur, since 2010, established a Public Outreach Center (POC) within the campus. The main objective of POC is to expose the general public and the society at large to the academic/ research activity of individual faculty member of the university with special reference to introduce them about the creation of new knowledge and the dissemination of the knowledge created elsewhere in the World. The motto of POC has been to help the public to know about PRSU in its reality and get exposed to its accountability. In fact, everyone gets benefitted when such information are shared, as every individual in the society is anxious to be informed and wishes to be involved in the process of generation of knowledge in the realms of Science, Social-science

# *Institutional Development Plan*

---

and Humanity.

## **Main goals and functions of POC**

1. To create a platform and facilities that would facilitate and encourage passive and active learning opportunities for the public of Chhattisgarh and of the Country at large.
2. To create a place of ambience and facilities for public meetings, workshops, colloquia for the advancement of public understanding about the activities of the University in the sphere of knowledge generation by the academicians and scientists.
3. To organize open house during specific time of the year.
4. To create and maintain a science park.
5. To maintain a museum dealing with the cultural heritage of Chhattisgarh.
6. To maintain and sustain natural history of Chhattisgarh.
7. To participate in State-sponsored fair and festivals.
8. To educate public in the domain of relevance of principles of science and social science in day-to-day life.

## **Justification**

The POC which has been established within the PRSU Campus would enhance the credibility and the accountability through the exposure of the academic/ scientific activity and dissemination of knowledge to the general public. POC will organize Public Meeting/ Workshop/ Colloquium as well as annual/ biannual Open House Meeting for the general Public and the Stake Holders. This will in turn augment the responsibility of each individual in the society as well as PRSU members. The accountability of each individual component of PRSU would be communicated for public scrutiny to evaluate the work efficiency. This in turn will compel each individual component of PRSU to set a benchmark in their respective areas of activity.

## **Center for Herbal Drug Technology**

### **Introduction:**

Herbal drug technology is used for converting botanical materials into medicines, where standardization and quality control with proper integration of modern scientific techniques and traditional knowledge is important. The world market for herbal medicine, including herbal products and raw materials has been estimated to have an annual growth rate between 5 and 15%. Total global herbal drug market is estimated as US \$62 billion and is expected to grow to US \$5 trillion by the year 2050. India has a great wealth of traditional knowledge and wisdom. Ayurveda contributes Rs 3500 crore (US \$813 million) annually to the internal market. The Indian medicinal plants-based industry is growing at the rate of 7–15% annually. The value of medicinal plants-related trade in India is estimated at Rs 5000 crore per annum. Herbal drug technology includes all the steps that are involved in converting botanical materials into medicines, where standardization and quality control with proper integration of modern scientific techniques and traditional knowledge will remain important. Correct identification and quality assurance of the starting material is, therefore, an essential prerequisite to ensure reproducible quality of herbal medicine, which contributes to its safety and efficacy.

### **Opportunity to establish Herbal Drug Industry in Chhattisgarh Region**

- Area rich in biodiversity, fifth largest supplier of medicinal plant, R&D institutions for support
- Opportunities in research of threatened & commercial species, training of stake holders, community participation, herbal manufacturing industries
- Ample area available for production of medicinal plants



# *Institutional Development Plan*

---

## **Research Goal**

1. To utilize the natural resources of Chhattisgarh region as a best suitable option for the production of herbal drugs.
2. To encourage low cost production of herbal drugs.
3. To create new Employment generation capacity for rural community.
4. To Initiate Better Utilization of fallow cultivable waste land.
5. To strengthen medicinal plant cultivation and collection network.
6. To aware peoples with the economical benefits to enhance the production & export potentials of natural and medicinal resources.

## **Training & Expansion Program Related to:**

- Identification of global drivers for the development of these new technologies and their impact on emerging economies.
- Assessing the potential that quality control parameters could have for the production of generation of plant based drugs and what contribution they could make to the future medication.
- Analyzing whether these parameters can contribute in improving the quality of medicinal plant products and can further create additional income opportunities and drive rural development in a sustainable way.

## **National & International status of PRSU with reference to Herbal drug technology Research**

Various conferences and seminars have been organized by the institute at national and international level. Some of them are-

1. National Seminar on Current trends in phytopharmaceutical
2. National Seminar on Recent advances in novel and cosmetic technology
3. National Seminar on Quality perspective of herbal cosmetics
4. National Seminar on Recent advances in pharmaceutical research
5. Workshop on Analytical Instrumentation for research work on plant extracts and actives
6. Workshop on Chromatographic techniques
7. Workshop on Analytical instrumentation supports for research work in natural and herbal products analysis and extraction
8. National Seminar on Advancements and avenues in the development of cargoes for plant actives
9. National Workshop on Chromatographic and Spectrophotometric analysis for Phytoconstituents.

The thrust area of research in the UGC Sponsored DRS-SAP sanctioned to University Institute of Pharmacy is herbal drug technology and novel drug delivery technology.

Faculties of institute have published various original research and review papers in peered national and international journal of high impact factor.

## **Scientific Justification:**

The rapid advancement in the field of herbal technology the world over, are taking place in an atmosphere that allows a larger participation of the industry and greatly driven by commercial interest. Indian communities have full of knowledge about the herbal use and their functions. The project will enlighten natural flora, in terms of herbal formulation designing. This will emerge and explore the scientific knowledge and develop strengthen mechanism within the overall international scenario to ensure custodial rights to local communities of Chhattisgarh. By this way, Chhattisgarh can enjoy a unique position in the field of herbal technology. This research will explore the herbs for its cosmetic potential, that would be not only be helpful for the state of Chhattisgarh which is known as hub of herb but our will be beneficial for our traditional heritage. Developed parameters may be utilized by

# Institutional Development Plan

industry personnel as a quality tools that provide the scientific claims for the efficacy and safety of herbals in international market.

## Economical Justification & Patentability:

Our state Chhattisgarh is an herbal state practicing traditional knowledge to treat different diseases. The herbs found in our state have been used in curing different pathological problems from ancient time. The involvement of the traditional knowledge with the scientific assessment will reveal new findings in the array of designing of novel herbal formulation and treatment thereof and hence can be patentable.

## How the key activities proposed in the Institutional Development Proposal are linked with the results of SWOT Analysis

S. No.	Proposed Key Activities	Link to SWOT	Link to Budget
1	<b>Infrastructure</b>		
	1. Modernization and strengthening of laboratories	W-O	2.12 (1.1)
	2. Establishment of new laboratories for existing UG and PG programs and for new PG programs Language lab Video Conferencing Studios	W-O	2.12 (1.2)
	3. Modernization of classrooms	W-O	2.12 (1.3)
	4. Updation of Learning Resources	W-O	2.12 (1.4)
	5. Procurement of furniture	W-O	2.12 (1.5)
	6. Establishment/Upgradation of Central and Departmental Computer Centers	W-O	2.12 (1.6)
	7. Modernization/improvements of supporting departments	W-O	2.12 (1.7)
	8. Modernization and strengthening of libraries and increasing access to knowledge resources	W-O	2.12 (1.8)
9. Refurbishment (Minor Civil Works)	W-O	2.12 (1.9)	
2	<b>Research and development support</b>		
	1. Providing Teaching and Research Assistantships to increase enrolment in existing and new PG/PhD programs.	S-O	2.12 (2.1)
	2. Provision of resources for research support	S-O	2.12 (2.2)
	3. Enhancement of R&D and institutional consultancy activities	W-S	2.12 (2.3)
3	<b>Faculty Development Support</b>		
1. Faculty and Staff Development (including faculty qualification up-gradation, pedagogical training, and organizing/participation of faculty in workshops, seminars and conferences) for improved competence based on TNA	S-O	2.12 (3.1)	

# *Institutional Development Plan*

<b>4</b>	<b>Institutional reforms</b>		
	1. Technical assistance for procurement and academic activities	<b>S-T</b>	<b>2.12 (4.1)</b>
	2. Institutional management capacity enhancement	<b>S-T</b>	<b>2.12 (4.2)</b>
<b>5</b>	<b>Academic support</b>		
	1. Creation of new departments/courses	<b>S-O</b>	<b>2.12 (5.1)</b>
	2. Enhanced Interaction with Industry	<b>S-O</b>	<b>2.12 (5.2)</b>
	3. Student support activities	<b>S-O</b>	<b>2.12 (5.3)</b>
<b>6</b>	<b>Others</b>		
	<b>Establishment of Innovative, Path-breaking Research Centers (7)</b>		<b>2.12 (6.i-vii)</b>
	(i) Center for Cognitive Science	<b>S-T</b>	
	(ii) Center for Translational Chronobiology	<b>S-T</b>	
	(iii) Center for Nano-science and Nano-technology	<b>S-T</b>	
	(iv) Center for Geriatrics and Gerontology	<b>S-T</b>	
	(v) Center for Thirty Meter Telescope (TMT) and LIGO India Projects in Astronomy	<b>S-T</b>	
	(vi) Center for Integrated Tribal Studies	<b>S-T</b>	
	(vii) Center for Herbal Drug Technology	<b>S-T</b>	
<b>7</b>	<b>Establishment of Model Constituent Colleges (10) in each District with Facilities for Research and Innovation</b>	<b>W-T</b>	<b>2.12 (7.0)</b>
<sup>S</sup> Strength; <sup>W</sup> Weakness; <sup>O</sup> Opportunity; <sup>T</sup> Threat			

**2.3 State the specific objectives and expected results of your proposal (in terms of, “Institutional strengthening and improvements in employability and learning outcomes of graduates”. These objective and results should be linked to the SWOT analysis.**

Objectives	Expected Results	Link to SWOT analysis
To refurbish and augment infrastructure facility for the smooth conduct of quality teaching & research activities	<ul style="list-style-type: none"> <li>The students of UG and PG programs will have an access to new and modern laboratories.</li> </ul>	W (g), W (h), W (i), W (p)
	<ul style="list-style-type: none"> <li>The students of the Language School will avail the facilities of a language laboratory.</li> </ul>	W (o), W (p)
	<ul style="list-style-type: none"> <li>The video conferencing studios will be available.</li> </ul>	W (q)
	<ul style="list-style-type: none"> <li>The ramps and escalators</li> </ul>	W (r)

# *Institutional Development Plan*

	will be built/fitted at appropriate locations.	
	<ul style="list-style-type: none"> <li>Dedicated software will be available.</li> </ul>	W (u)
	<ul style="list-style-type: none"> <li>The library will be equipped with knowledge resources, including e-resources.</li> </ul>	W (o), W (p)
	<ul style="list-style-type: none"> <li>Better physical ambience will be available.</li> </ul>	W (j), W (k), W (r)
To make provisions of support for R&D activities	<ul style="list-style-type: none"> <li>The students will get motivated to take admission in programs linked with learning assistantships.</li> </ul>	S (a), O (b), T (a), T (b)
	<ul style="list-style-type: none"> <li>The students will get encouraged to enroll themselves in research programs, such as M.Phil. and Ph.D. with the offer of fellowships/ research grants.</li> </ul>	S (a), O (b), T (a), T (b)
	<ul style="list-style-type: none"> <li>The research facilities will be improved.</li> </ul>	W (i), T (a), T (b)
	<ul style="list-style-type: none"> <li>The R&amp;D and consultancy activities will be enhanced.</li> </ul>	W (e), W (n), W (o)
To plan and carry out faculty development programs	<ul style="list-style-type: none"> <li>Faculty will avail chances to upgrade their qualifications.</li> </ul>	S (e), W (bb)
	<ul style="list-style-type: none"> <li>Didactic training programs will be organized.</li> </ul>	W (i), W (o), W (y), W (bb)
	The faculty and research scholars will be provided with the opportunities to attend professional meetings, workshops and seminars.	S (i), W (y)
To plan and implement institutional reforms	<ul style="list-style-type: none"> <li>Administrative, Academic and governance reforms will bring in transparency and ensure equity at all levels of functioning in the University</li> </ul>	W (aa)
	<ul style="list-style-type: none"> <li>Institutional management capacity will be enhanced</li> </ul>	W (z)
To provide academic support	<ul style="list-style-type: none"> <li>New departments will be erected</li> </ul>	W (m)
	<ul style="list-style-type: none"> <li>New academic programs will be initiated in the</li> </ul>	W (m)

# *Institutional Development Plan*

	existing departments	
	<ul style="list-style-type: none"> <li>Will lead to interaction with industries leading to creation of programs in consonance with the industrial needs</li> </ul>	W (b), O (i)
	<ul style="list-style-type: none"> <li>Availability of student support mechanisms and systems</li> </ul>	W (j), W (t)
To establish innovative and path-breaking research centers	<ul style="list-style-type: none"> <li>The PRSU has proposed establishment of SEVEN (7) innovative research centers.</li> </ul>	W (n), O (e), O (f), O (g)
	<ul style="list-style-type: none"> <li>These centers will carry out research in high priority areas of national and regional importance.</li> </ul>	W (n), O (e), O (f), O (g)
	<ul style="list-style-type: none"> <li>These centers will attract bright and talented youth to pursue research &amp; development work in the high priority areas.</li> </ul>	W (n), O (e), O (f), O (g)
To establish model constituent colleges in each district under the jurisdiction of the Pandit Ravishankar Shukla University	<ul style="list-style-type: none"> <li>Such an action will reduce the workload on the PRSU.</li> </ul>	T (a), T (b), S (h)
	<ul style="list-style-type: none"> <li>This will comply with the objectives of the RUSA, for example each University in the country should not have more than 100 affiliated colleges.</li> </ul>	T (a), T (b), S (h)
	<ul style="list-style-type: none"> <li>It will augment quality of both teaching &amp; research initiatives.</li> </ul>	W (o)
	<ul style="list-style-type: none"> <li>This will be one of the most distinguished and envisioned proposals ever made by any Indian Universities.</li> </ul>	W (n)
<sup>S</sup> Strength; <sup>W</sup> Weakness; <sup>O</sup> Opportunity; <sup>T</sup> Threat		

# Institutional Development Plan

## 2.4 Provide an action plan for: (maximum 1 page each)

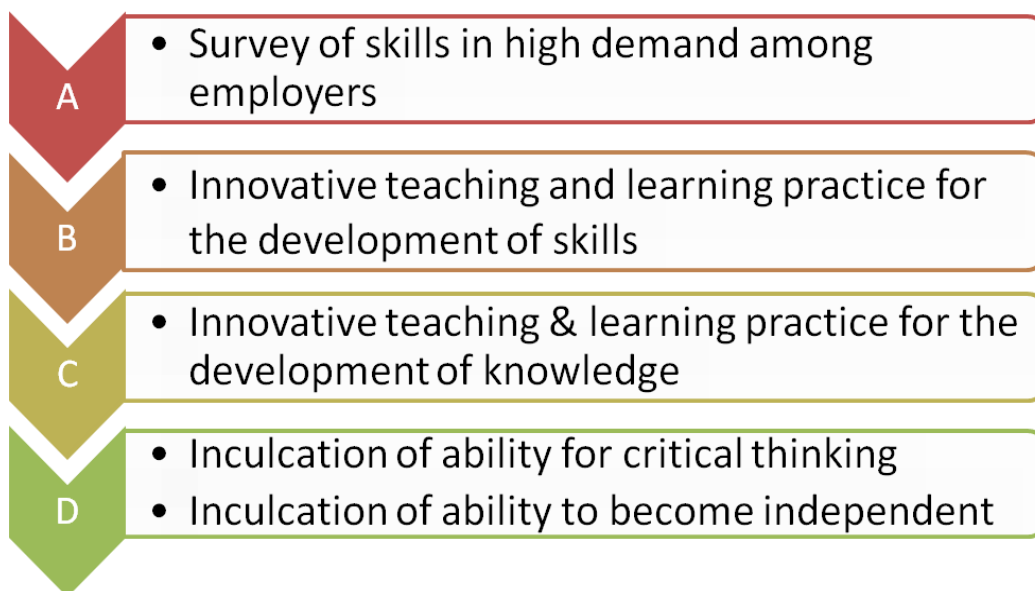
### a) Improving employability of graduates

In order to improve the employability of graduates the University made elaborate deliberations and concluded to take care of number of essential steps to achieve the goals.

The steps are outlined below:

- Survey of skills in high demand among employers
- Innovative teaching and learning practice for the development of skills
- Innovative teaching & learning practice for the development of knowledge
- Inculcation of ability for critical thinking
- Inculcation of ability to become independent

### ABCD Plans for Augmentation of Employability



- In the Step-A a large scale survey of skills that are in high demand among the perspective employers will be carried out.
- In Steps-B and –C the University will make innovative synchronization between the teaching and learning practices so that the graduates will have adequate knowledge and skills which will empower them to obtain employment easily.

In Step-D, the University will conduct number of seminars and workshops to popularize the importance of critical thinking and power of independence among the graduate job seekers.

### b) Increased learning outcomes of the students

The University has envisaged plans to carry out the following:

Measurement of accomplishment in respect of

- Curriculum;
- Experience gained;
- Ideas pertaining to relationship between curriculum and real-world problems

Perception on relationship between academic and co-curricular experiences

Measurement of knowledge gained

Measurement of skills developed

# *Institutional Development Plan*

---

Measurement of competency in interpersonal skills, such as

- (a) Problem solving;
- (b) Ability to become a good listener;
- (c) Leadership;
- (d) Communication skills;
- (e) Motivational skills

## **c) Obtaining autonomous institution status within 2 years**

Pt. Ravishankar Shukla University is an autonomous institution from the day of its inception way back in 1 MAY 1964.

## **d) Achieving the targets of 60% of the eligible UG and PG programs accredited within two years of joining the Project and 100% accreditation obtained and applied for by the end of the Project of the eligible UG and PG programs**

Currently, Pt. Ravishankar Shukla University is the only University of Chhattisgarh that has been accredited by NAAC in 2011 and will enter into the THIRD cycle of accreditation in early 2016. All UG and PG programs offered by the University have been accredited through this general accreditation. However, the Academic Staff College has been accredited separately.

## **e) Implementation of academic and non-academic reforms (details given in RUSA Document)**

The PRSU has initiated number of academic reforms, prominent among those, is the introduction of Semester System. The PRSU introduced semester system firstly for the programs run by its campus teaching department. Thereafter, it has introduced semester system for the PG programs run by its affiliated colleges. It has contemplated to introduce semester system for all UG programs run by its teaching departments and thereafter for all UG programs run by its affiliated colleges. The PRSU has also envisaged introducing CBCS system phase wise firstly for the courses run by its teaching departments and later for the courses run by its affiliated colleges.

**One of the major objectives outlined in the project implementation plan is the implementation of academic and non-academic reforms such that the administration becomes transparent, efficient and accountable.**

The PRSU has initiated number of academic reforms, prominent among those, is the introduction of Semester System. The PRSU introduced semester system firstly for the programs run by its campus teaching department. Thereafter, it has introduced semester system for the PG programs run by its affiliated colleges. It has contemplated to introduce semester system for all UG programs run by its teaching departments and thereafter for all UG programs run by its affiliated colleges. The PRSU has also envisaged introducing CBCS system phase wise firstly for the courses run by its teaching departments and later for the courses run by its affiliated colleges.

Evaluation of Teachers by students and teacher's training & counseling; encouraging departments to develop synergic networking with Universities of repute through sharing of physical and human resources have been introduced.

Some of the major reforms envisaged are outlined below.

### **Academic reforms:**

- Credit based semester system with reforms like credit transfer, credit exemption
- Evolve a system of grading that is in consonance with international practices so that grant of equivalence could be facilitated.
- Examination reforms

# *Institutional Development Plan*

---

- Innovations in teaching and student evaluation methodologies
- Curriculum Development: Outcome based up-gradation of curriculum to suit the global needs
- Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills
- Promote E-learning and m-learning: Set up state of the art resources and facility for e-Learning. Extensive use of media
- Web based Content generation and hosting
- Web based course management (content, examinations, evaluations, submission of assignments, etc.)
- Offering value addition courses as per market demand
- Examination Question Bank for all subjects
- Development of visual and virtual lab for all laboratories
- Live and deferred streaming of expert lectures
- Invited expert lectures from industry and field

## **Non-Academic Reforms**

- Incentives for faculty for obtaining research projects, publications in journals, patents etc.
  - Financial autonomy to some extent to departments. Generation, retention and utilization of revenue generated by the departments for the department.
  - Joint consultancy with Institution through Centre for Industrial Consultancy and sponsored research
  - Offering more skill development courses through Academic Staff College
  - Creation of Innovation Centre
- Filling-up all existing teaching and staff vacancies

## **f) Improving interaction with industry**

**UNIVERSITY INDUSTRY PARTNERSHIP COUNCIL (UIPC)** came into existence in 6 JULY 2012 with the organization of the first meeting chaired by the Hon'ble VC of PRSU. It was attended by 12 members consisting of eminent academicians, industrialist and executives working in the vicinity of PRSU. In this meeting the objectives of the UIPC are drafted and finalized (outlined below).

### **Objectives**

- To suggest launching of new degree, diploma and certificate courses looking at the emerging and prospective demand of the industry under the present and changing global scenario from time to time
- To review and reshape syllabus of professional courses looking at the needs of industry and society for approval of respective Board of Studies
- To plan special training programs and refresher courses for the executives
- To suggest improvement in examination system and performance evaluation
- To prepare an inventory of entrepreneurs and executives from industry willing to act as guest and part-time faculty members in professional courses and training programs
- To facilitate internship and practical training to the students of professional courses in the industry premises
- To facilitate guidance of project reports
- To facilitate industry-sponsored studies and research projects of the students of the University
- To arrange joint seminars and workshops
- To arrange holding of joint awareness programs on burning social issues

In the first meeting the following issues were discussed: (a) Starting Job oriented courses, (b) Collaboration with local industries for consultancy and Research, (c) Starting Courses



# *Institutional Development Plan*

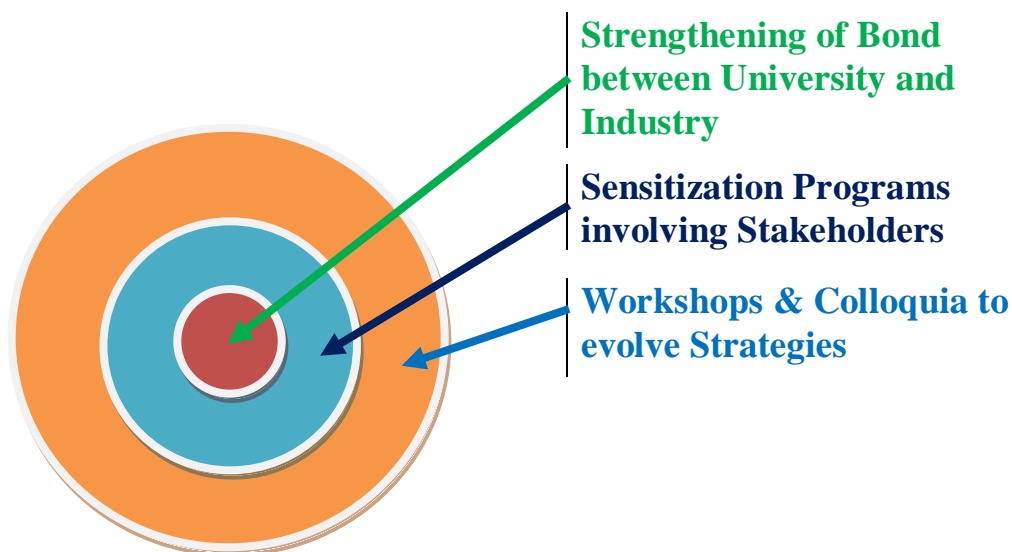
related with entrepreneurship development, (d) Starting Courses on Actuarial Sciences, (e) Workshop on Soft skill development of students, and (f) Providing Vocational Training to students.

The second meeting was held on 22 SEPT 2012 at the meeting hall of the Hotel Sagar International, Bhilai. FOUR UIPC members and SEVEN members of the Bhilai Industries Association attended meeting hosted by the president of the Bhilai Industries Association. The business was transacted on the following: (a) Preparing need based Courses in University with the participation of Industry People to facilitate placements of students in the industry, (b) Starting Internship Programs for University Students to expose them to the real life situations, (c) Developing business skills for all students, (d) Teacher should frequently visit industry to understand industry requirements, (e) Preparing the university students to work in small industries in remote areas, and (f) University should prepare more specialized and customized courses to meet industry requirement.

A three member team led by Hon'ble VC of the PRSU met the ED of the BSP, Bhilai, in October 2013. The discussion was positive and everyone felt that another meeting may be convened soon to discuss various plausible programs that can be supported by the BSP. In very next month another team led by the Hon'ble VC, PRSU met the senior officials of the NTPC and discussed about the objectives of the UIPC of the PRSU.

On 2 FEB 2014, the Hon'ble VC of PRSU addressed the gathering of officials and entrepreneurs of Chhattisgarh during their Corporate Social Responsibility (CSR) Meet and apprised them about the need for carrying out CSR activities under the banner of the UIPC, PRSU.

In summary, the UIPC of the University is incessantly active to strengthen the bond between the PRSU and the local Industries. Taking a leaf from the phrase, "*out of sight out of mind*" the UIPC of PRSU has envisaged the following plan in the next two to three years depicted using a cartoon diagram:



Our target is to strengthen the bond between the University and Industry. We propose to organize sensitization programs involving all stakeholders. Further, we have to organize workshops and seminars at regular intervals with the idea that the concepts and objectives of the UIPC are not easily forgotten or dismissed as unimportant if it is not in the direct view of the Industrial Conglomerates.

## **g) Enhancement of research and consultancy activities**

The University has international collaborations and several research projects funded by the DST, DRDO, UGC, CCOST, USIEF and UK-India Consortium British Council. One of the

# *Institutional Development Plan*

---

main objectives is to increase the research output of the University and involve majority of faculty into research related activities. It is proposed to quantitatively increase and qualitatively improve research by faculty individually, jointly and collaboratively. The following action will be taken.

- Encourage faculty to take up socially and locally relevant research
- Encourage faculty to take up inter-disciplinary research
- Encouraging faculty to publish research papers in refereed journals through provision of proper incentives.
- Starting up of collaborative research plans with other R & D institutions
- Take up industry and Government sponsored plans
- Providing opportunity for faculty for short research visits to renowned academic and research centers.
- Quality improvement may be measured and maintained by developing suitable quality metrics.
- Enhance the activities of IPR cell and promote patents from the institution
- Faculty exchange programs may be introduced with other educational institutions around the world
- Wide exposure to faculty to frontline research within India and abroad.
- Initiate steps to sign Memoranda of Understanding (MOUs) with reputed international/national universities
- Developing research interest among students
- Provide research fellowship/scholarship to students to take up research
- Provide financial support for taking up innovative plans.
- Provide financial assistance to all students for paper presentations

## **2.5 Provide an action plan for organizing a Finishing School and for improving the academic performance of SC/ST/OBC/academically weak students through innovative methods, such as remedial and skill development classes for increasing the transition rate and pass rate with the objective of improving their employability.**

Finishing school is a supplementary training school popular in India that attempts to compensate for the deficiencies of low-tier colleges by providing specialized vocational training in technical fields such as computer programming and information technology. These IT finishing schools cover technical skills as well as communication and problem solving skills. Finishing schools can also make up for deficiencies in the Indian secondary education system with regards to math and science education by helping to bring students to a level necessary for gaining admission to University.

The PRSU proposes to strengthen various coaching schemes [outlined below] including NET/SET coaching, and skill development programs. The University also proposes to establish Career Guidance and Counseling Cell.

### **Coaching Schemes for SC, ST, OBC (non-creamy layer) & Minorities**

The coaching program would run under following categories.

- (A) Remedial Coaching
- (B) Coaching for Entry into Services
- (C) Coaching for NET

**Remedial Coaching** will be organized at Undergraduate and/or Postgraduate level with the following objectives:

- a. To improve the academic skills and linguistic proficiency of the students in various subjects
- b. To raise their level Comprehension of basic subjects to provide a stronger foundation for further academic work
- c. To strengthen their knowledge, skills and attitudes in such subjects, where

# *Institutional Development Plan*

---

quantitative and qualitative techniques and laboratory activities are involved, so that the necessary guidance and training provided under the program may enable the students to come up to the level necessary for pursuing higher studies efficiently and to reduce their failure and dropout rate

- d. To provide them, those who are in need, with career guidance and psychological counseling for capacity building

Under the scheme there are two parts, such as Part-A and Part-B as mentioned below:

Part-A:

- (i) Communication Skill
- (ii) Coaching of Basic Subjects
- (iii) Personality Development
- (iv) Career Guidance and Psychological Counseling

Part-B:

- (ii) Computer and SPSS training
- (iii) Guidance and Training for New Technologies
- (iii) Any other coaching as per the need and demand of the students

**Coaching scheme for entry into services** will be organized with the following objectives:

- (a) To prepare students to gain useful employment in Group 'A' 'B' and 'C' in Central services, State services and equivalent positions in private sectors
- (b) To orient students for particular examination conducted for selection to services, such as IAS, State Public Services, Bank recruitment etc.
- (c) To focus on the specific requirements of a particular competitive examination

Under this scheme following Coaching Classes are proposed to be organized:

- (i) Union Public Service Commission (IAS, etc.)
- (ii) Various Examinations of Chhattisgarh State Public Services
- (iii) Bank Recruitment
- (iv) Railway Recruitment
- (v) Staff Selection Commission Recruitment
- (vi) Other employment in Group A, B, and C in Central /State/Private Sector Services
- (vii) Any other competitive examination as per the need and demand of the students/people of this region

**NET/SET Coaching** would be given with the objectives to prepare Scheduled Castes, Scheduled Tribes, OBC (non-creamy layer) and Minority Communities candidates for appearing in (NET) or (SET) so that sufficient number of candidates becomes available for selection as Lecturers in the university system.

Under this scheme following Coaching Classes are proposed to be organized:

- (i) NET examination being conducted by UGC and CSIR every year in the month of June and December.
- (ii) SET examination proposed by Chhattisgarh Government
- (iii) The students coming from outside the University and from other parts of the State will be provided with accommodation facility on the campus. The University has plans to build hostels for students through private funding.

## **Establishment of Career Guidance and Counseling Cell in University**

The identification of human potentialities, abilities, energies, characteristics attributes and their channelization in proper or suitable direction is one of the most important needs of the present or modern era. In order to maintain pace with the fast changing world of work acquisition of the skills and their proper utilization is must. Not only acquisition of skills but continuous striving for their proper enhancement is also necessary condition for development. It has been now unequivocally accepted that identification, channelization and

# *Institutional Development Plan*

---

utilization of human resources is the prerequisite to the growth and overall development of society. With this intention in mind the Pt. Ravishankar Shukla University is planning to establish a **Career Guidance and Counseling Cell** which will be helpful to the students in particular and masses in general to know their specific abilities, talents, personality characteristics, capacities and capabilities, shortcomings and specific plans for their future.

## **Career Guidance and Counseling Services**

In the changing scenario of the world of work, especially in the new era of globalization, the need of career guidance and counseling is increasingly felt by adolescent students and their parents or guardians. The prolonged indecisiveness about the choice of a suitable career in adolescents generates a variety of psychological and social problems, such as depression, drug/alcohol addiction, temper outburst etc. Career indecisiveness can be effectively removed through *Career Guidance and Counseling*. Apart from it through Career Guidance and Counseling quality of career choice can also be improved.

Through Career Guidance and Counseling services the university can help the students in enhancing their:

1. Ability to learn about themselves
2. Learn about career opportunities
3. Clarify job values
4. Make plans
5. See oneself in control
6. Engage in exploratory processes with satisfaction

The Guidance service will help the students in developing the following competencies required in career decision making:

1. Self-appraisal or knowing one self
2. Occupational information or knowing about job
3. Goal selection or choosing a job
4. Planning or looking ahead
5. Problem solving or what one should do?

## **Development of Personal Skills**

The Career Guidance and Counseling Cell of the University will also help the students in developing personal skills, such as communication skills, interpersonal relationships, enhancing decision making skills, assertiveness training, personal appearance and effectiveness etc through its expert counselors.

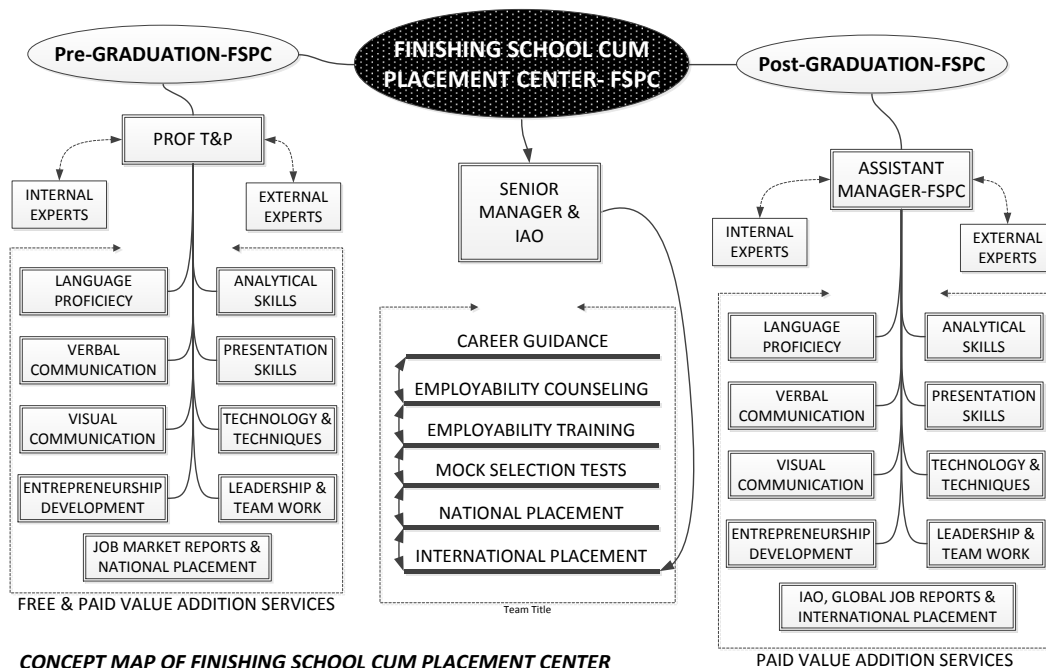
## **Finishing School & International Placement Cell [FSPC]**

The University has already established a placement cell on its campus. A professor has been appointed on special duty to coordinate the activities of the placement cell. Two more teaching faculties have been appointed to assist the Professor-in-Charge of the Placement Cell.

Recently (March 2014) the International Accreditation Organization (IAO) of the USA has granted the PRSU with the full accreditation for three years. The IAO will provide following privileges: (a) One Update on every Social Media Channel; (b) IAO Seal and Certificate; (c) Preferred Listing on IAO website; (d) One IAO blog Entry; (e) One News Release in the IAO Newsletter. Apart from this the IAO will also help the PRSU in strengthening of the Finishing School and in the establishment of an International Placement Center.

# Institutional Development Plan

Concept Map [Submitted to PRSU: Courtesy – Prof. S.K. Soni, Evaluation Commission Member, IAO, USA]



## 2.6 Provide an action plan for strengthening of PG programs and starting of new PG programs.

The PRSU has proposed establishment of two new departments and 10 new PG programs in existing departments. The program, "M.Sc. in Environmental Science" has already been initiated. The proposed programs will attract bright students of this region and from elsewhere in the country to the campus of the PRSU.

S. No.	Department	Name of the program(s) proposed	Proposed Intake	Remarks
<b>New Teaching Departments</b>				
1.	Environmental Science	M. Sc. Environmental Science*	20	The course has already been initiated.
2.	Atmospheric and Space Science	M.Sc. in Atmospheric Science*	10	The course will be initiated following approval.
		M.Sc. in Space Science*	10	
<b>New Programs in Existing Departments</b>				
1.	Sociology	MSW	30	The course will be initiated following approval.
2.	Geology	Geophysics*	10	
3.	Mathematics	M.Sc. in Cryptography	25	
4.	Statistics	M.Sc. Biostatistics*	15	
5.	Management	MBA in TM	30	

# *Institutional Development Plan*

6.	Regional Studies	M.A. Rural Planning and Development	20	
7.	Management	MBA in RM	30	
8.	Pharmacy	M.Pharm. in Pharmacognosy and Phytochemistry	18	

\* Interdisciplinary

## **2.7 Attach a summary of Training Needs Analysis carried out. Also, provide Faculty Development Plan for the first 18 months for improving their teaching, subject area and research competence based on Training Needs Analysis in the following areas.**

- **Basic and advanced pedagogy**
- **Subject/ domain knowledge enhancement**
- **Attendance in activities, such as workshops, seminars**
- **Improvement in faculty qualifications**
- **Improving research capabilities**

### **Training Needs Analysis (TNA) Synopsis**

Training is a transformation process which helps acquire required skills to perform a job better. Training must be an ongoing process in any modern organization which will help Staff to update their knowledge and skill levels. This has become inevitable in an era where proliferation of knowledge is taking place at extraordinary pace due to the presence of the Internet. Attaining calendar is to be prepared to impart the same regularly based on need. There is always a difference between expected level of performance and actual level of performance which can be mainly attributed to knowledge gaps or skill gaps. The training need analysis addresses the identification of training needs at the organizational level, group level or individual level resulting in curriculum development.

In order to establish University as a world class Centre of Excellence to attract national and international students and faculty of high quality as well as to conduct research of international standard, SWOT Analysis & Training Need Analysis (TNA) will be done more rigorously to determine the parameters, against which the training needs of the technical staff and faculty are to be identified. Based on the institutional requirements and gap areas identified a detailed training plan is prepared. The type of training and topics are identified based on the individual requirement, departmental requirement and Institutional requirements. The type of training programs includes Basic and Advanced pedagogy, Subject/domain knowledge enhancement, Attendance in activities, such as workshops, seminars, Improvement in faculty qualifications, Improving research capabilities.

Based on preliminary SWOT (Strength, Weakness, Opportunity and Threat) analysis carried out and considering the required training domains, following components will be considered to be the criterion for designing the training needs. The criterions, which will be taken into consideration during identification of training needs in the areas specified in the following:

1. Teaching methodology
2. Competencies and Professional Development
3. Assessment of learning outcomes
4. Training Methods
5. Communication Excellence
6. Practical skill development Training
7. Special Skill Orientation Training
8. Trade skill training intended for lab staff.
9. Faculty training mainly for teachers in corresponding areas and others on the basis of need aspect approval.

# Institutional Development Plan

10. Life skill training for all to improve soft skills.

11. Managerial Training for administrators and senior faculty members/heads of department.

## Schedule of training

The schedule for training will be arrived at considering the semester schedule and availability of courses. The schedule is so prepared such that the regular functioning of the institution is not affected by the absence of the participants attending the course.

Area	Participant	Time period (month)					
		0-6	7-12	13-18	19-24	25-30	31-36
Basic and advanced pedagogy	All Departments						
Subject/ domain knowledge enhancement	All Departments						
Attendance in activities, such as workshops, seminars	All Departments						
Improvement in faculty qualifications	All Departments						
Improving research capabilities	All Departments						

## 2.8 Provide an action plan for training technical and other staff in functional areas.

Short term training programs will be arranged (up to 3 days to seven days) for Technical staff, UDC, LDC, Office Superintendents, Store keeper, Record keeper and Class-IV staff as per the schedule depicted in the table below:

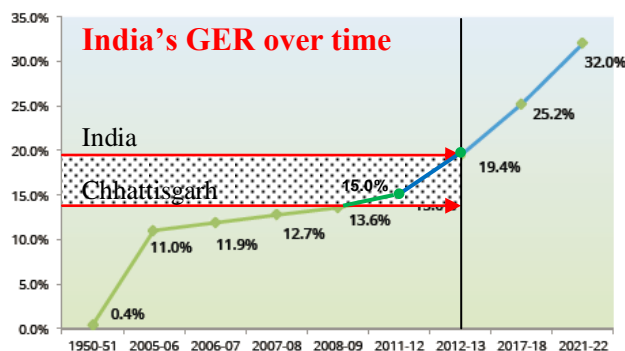
Staff	Time period					
	0-6	7-12	13-18	19-24	25-30	31-36
<b>Technical Staff</b>						
a) Core course on instrumentation						
b) Dedicated training program for handling sophisticated instruments like HPLC, FTIR, LC-MS, and NMR						
<b>UDC</b>						
a) Training to make computer savvy						
b) Secretarial course						
c) Training – How to write note sheet						
<b>LDC</b>						
a) Training to make computer savvy						
b) Secretarial course						

# Institutional Development Plan

c) Training – How to write note sheet						
<b>Superintendent</b>						
a) Training to make computer savvy						
b) Training – How to become a good communicator						
<b>Class IV employee</b>						
a) Training – On day-to-day working nuances						
b) Training on personality development						
<b>Store keeper</b>						
a) Training to make computer savvy						
b) Store management skill						
c) Training – Management of Stock Book						
<b>Record keeper</b>						
a) Training to make computer savvy						
b) Training – On MS Excel/ MS Access						

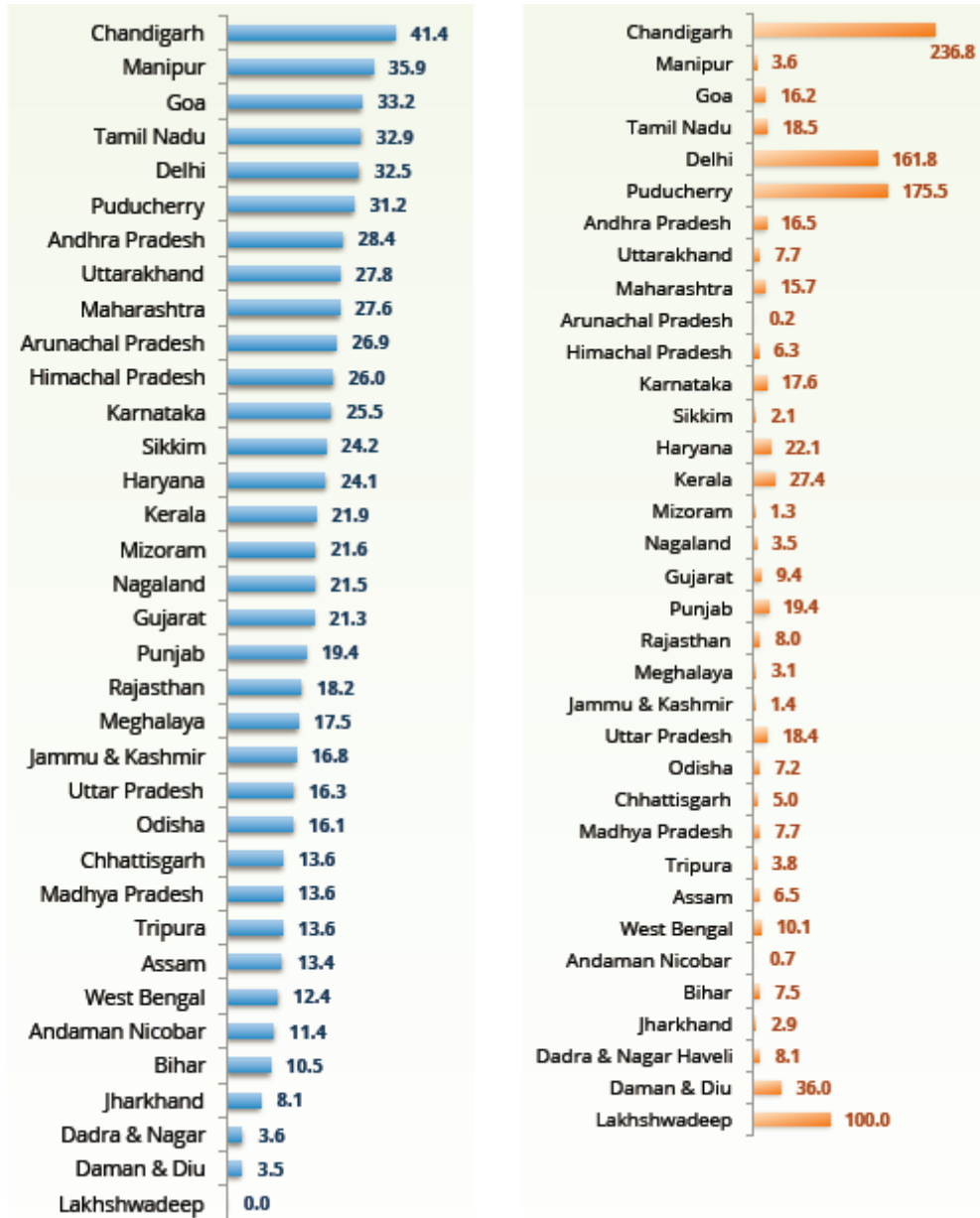
## 2.9 Describe the relevance and coherence of Institutional Development Proposal with State's/National (in Case of CFIs) Industrial/Economic Development Plan

The Chhattisgarh was established as a new political entity in 2000 and prior to this it was an integral part of the Madhya Pradesh. Ever since the economic growth rate of the State is increasing steadily. To sustain and to augment this growth rate the State needs skilled technical manpower. However, the current state of affair of Chhattisgarh, in terms of certain indicators of educational health scenario is appreciably weak. The figure (Source: National Higher Education Mission, MHRD in association with TISS, September 2013) depicted below vividly indicates the real situation of Chhattisgarh vis-à-vis the national average and the southern states. The left panel of the figure illustrates GER by State and the right panel indicates institutional density by Sate. In both the counts Chhattisgarh's performance is not satisfactory.





# Institutional Development Plan



The State government has elaborate industrial/development plan with the following objectives (excerpted from Chhattisgarh Industrial Development Plan):

- To encourage development of allied sectors parallel to core industrial sector.
- To generate self employment as well as additional employment opportunities in industries to the local residents of the State.
- To promote private sector participation for the development of basic and industrial infrastructure.
- To create an enabling environment and infrastructure for encouraging export from the state.
- To create competitive platform amongst the states for domestic as well as foreign direct investment and attract NRI as well as 100% FDI investment so as to accelerate industrial investment.
- To extend more economical aids in backward areas of the state for balanced industrial development
- To make special efforts towards bringing the poor, backward class people such as SC/ST, females, handicaps, retired soldiers, insurgent affected families in the common stream line of economical and industrial development

# *Institutional Development Plan*

---

Further at the National level the MHRD through RUSA (Rashtriya Uchchatar Shiksha Abhiyan) attempts to focus on three important issues, namely (a) Access, (b) Equity and (c) Quality with reference to higher education. In fact these three points are part of the National Policy on Education (1992 revised).

- Access: Greater access requires an enhancement of the education institutional capacity of the higher education sector to provide opportunities to all those who deserve and desire higher education.
- Equity: Equity involves fair access of the poor and the socially disadvantaged groups to higher education.
- Quality and Excellence: involve provision of education in accordance with accepted standards so that students receive available knowledge of the highest standard that helps them to enhance their human resource capabilities.
- Relevance: involves promotion of education so as to develop human resources keeping pace with the changing economic, social and cultural development of the country; and
- Value Based Education: involves inculcating basic moral values among the youth.

The PRSU in its IDP has included the following issues:

- ❖ Infrastructure up-gradation and creation
- ❖ Steps to augment support for faculty development
- ❖ Initiation and implementation of reforms
- ❖ Support to sustain academic excellence
- ❖ Establishment of innovative and path-breaking research centers
- ❖ Establishment of model constituent colleges in each districts under the University's jurisdiction

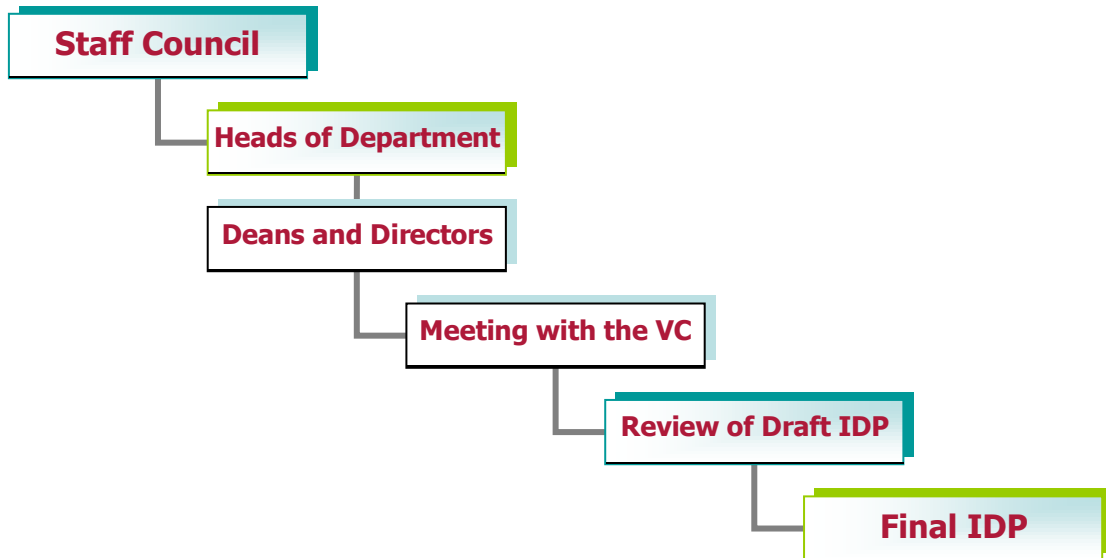
In a nutshell, the IDP of the PRSU is relevant and coherent with the policies of both the State and the Central Governments.

## **2.10 Describe briefly the participation of departments/faculty in the IDP preparation.**

The faculty members of all the departments actively participated and deeply involved in the preparation of Institutional development plan. Since university has a democratic setup through a provision of staff council in each and every department, it is mandatory that every department has to conduct staff council meeting at least once in a month for the development of departmental activities. On the same pattern every department has prepared its own departmental development proposal with mutual discussion and consent of faculty members. After obtaining the departmental development proposals of each department, a consolidated Institutional development proposal was prepared in the meeting under the chairmanship of honorable Vice-Chancellor with the heads, deans, and directors of all the departments/ institutes and stakeholders. In that meeting the merits and demerits of departmental development proposals were further discussed through brainstorming sessions and with mutual consent of all the heads, deans, directors and honorable vice-chancellor the present form of Institutional development plan was finally prepared.

# *Institutional Development Plan*

---



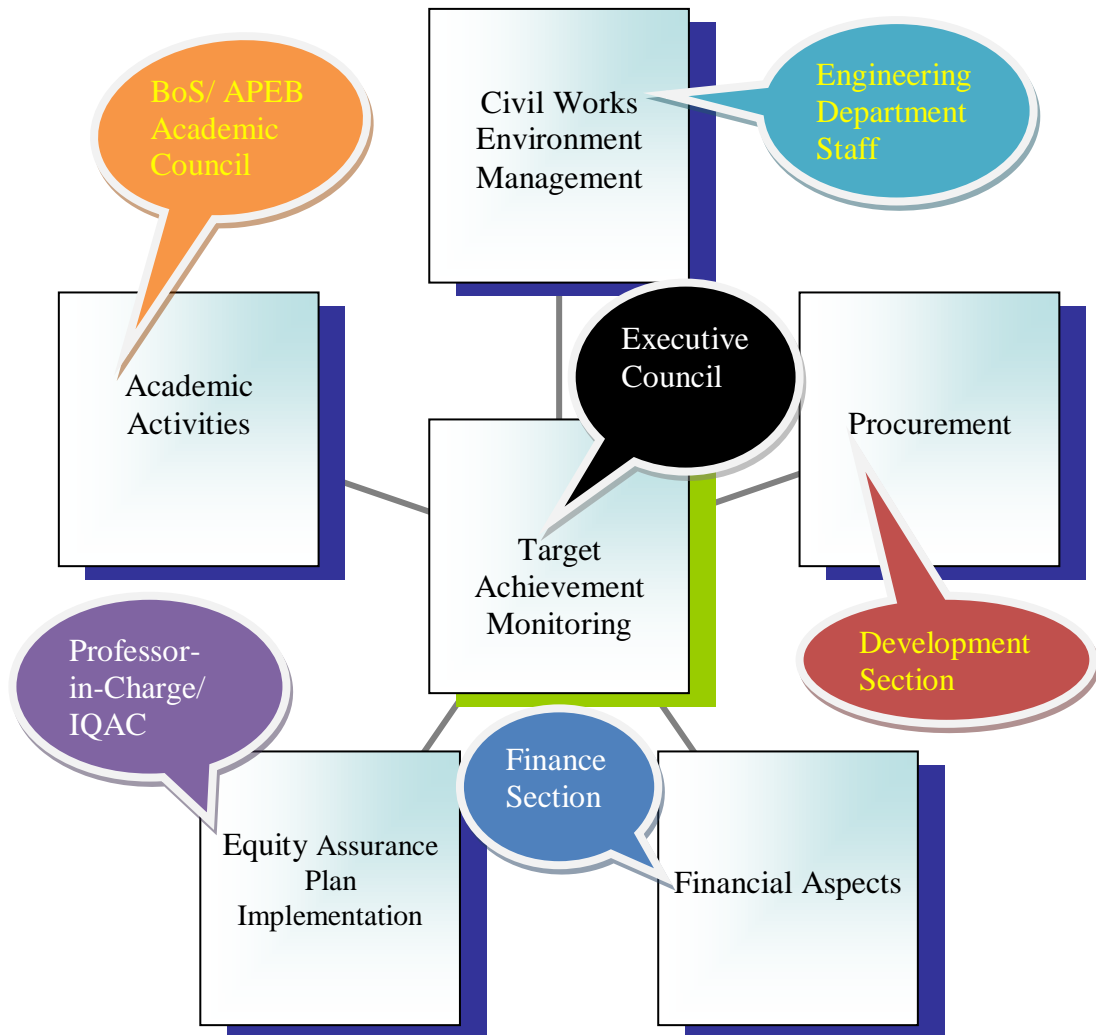
**Flowchart illustrating participation of stake holders in the preparation of the IDP**

## **2.11 Describe the Institutional project implementation arrangements with participation of faculty and staff.**

Since the prepared Institutional development proposal is a joint effort of all the heads, deans and honorable Vice-Chancellor. They all are well aware about the merits of the Institutional proposal which is a sum of the entire departmental development proposals. The faculty members and staff had already discussed their respective proposals in their staff council meeting and they are mentally prepared for implementation of these proposals. As soon as they got the approval and fulfill the limitations in the said proposals, the faculty and staff of the various departments and university will become instrumental for effective implementation of the Institutional project in the university.

The cartoon picture given below depicts the institutional project implementation arrangements involving various statutory bodies, faculty and staff along with their responsibilities.

# Institutional Development Plan



**BoS** – Board of Studies; **APEB** – Academic Planning & Evaluation Board; **IQAC** – Internal Quality Assurance Cell

## 2.12 Provide an Institutional project budget as per table below:

**Institutional Project Budget (this is meant for existing institutions)**

**INR in Lac**

S. No.	Activities	Project Life Allocation	Financial year				
			2012-13	2013-14	2014-15	2015-16	2016-17
1	<b>Infrastructure</b>						
	1. Modernization and strengthening of laboratories	600			200	200	200
	2. Establishment of new laboratories for existing UG and PG programs and for new PG programs	300			100	100	100

# *Institutional Development Plan*

	Language lab Video Conferencing Studios					
	3. Modernization of classrooms	300		100	100	100
	4. Updation of Learning Resources	150		50	50	50
	5. Procurement of furniture	150		50	50	50
	6. Establishment/Upgradation of Central and Departmental Computer Centers	250		100	75	75
	7. Modernization/improvements of supporting departments	150		50	50	50
	8. Modernization and strengthening of libraries and increasing access to knowledge resources	300		100	100	100
	9. Refurbishment (Minor Civil Works)	300		100	100	100
	<b>Total:</b>	<b>2500</b>		<b>850</b>	<b>825</b>	<b>825</b>
<b>2</b>	<b>Research and development support</b>					
	1. Providing Teaching and Research Assistantships to increase enrolment in existing and new PG/PhD programs.	150		50	50	50
	2. Provision of resources for research support	300		100	100	100
	3. Enhancement of R&D and institutional consultancy activities	150		50	50	50
	<b>Total:</b>	<b>600</b>		<b>200</b>	<b>200</b>	<b>200</b>
<b>3</b>	<b>Faculty Development Support</b>					
	1. Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organising/ participation of faculty in workshops, seminars and conferences) for improved competence based on TNA	150		50	50	50
<b>4</b>	<b>Institutional reforms</b>					
	1. Technical assistance for procurement and academic activities	200		80	60	60
	2. Institutional management capacity enhancement	150		50	50	50
	<b>Total:</b>	<b>350</b>		<b>130</b>	<b>110</b>	<b>110</b>
<b>5</b>	<b>Academic support</b>					
	1. Creation of new departments/courses	300		100	100	100
	2. Enhanced Interaction with Industry	60		20	20	20
	3. Student support activities	300		100	100	100
	<b>Total:</b>	<b>660</b>		<b>220</b>	<b>220</b>	<b>220</b>
<b>6</b>	<b>Others</b>					
	<b>Establishment of Innovative, Path-breaking Research Centers (7)</b>					
	(i) Center for Cognitive Science	300		200	50	50

# *Institutional Development Plan*

	(ii) Center for Translational Chronobiology	300			200	50	50
	(iii) Center for Nano-science and Nano-technology	300			200	50	50
	(iv) Center for Geriatrics and Gerontology	300			200	50	50
	(v) Center for Thirty Meter Telescope (TMT) and LIGO India Projects in Astronomy	300			200	50	50
	(vi) Center for Integrated Tribal Studies	300			200	50	50
	(vii) Center for Herbal Drug Technology	300			200	50	50
	<b>Total:</b>	<b>2100</b>			<b>1400</b>	<b>350</b>	<b>350</b>
	<b>Establishment of Model Constituent Colleges in each District with Facilities for Research and Innovation (10)</b>	<b>9000</b>			<b>6000</b>	<b>1500</b>	<b>1500</b>
	<b>GRAND TOTAL:</b>	15360			8850	3255	3255

## 2.13 Provide the targets against the deliverables as listed below

Indicator	Weightage	Present status	Target status	Present Rating	Target Rating	Present Score	Target Score
<b>(a) GOVERNANCE QUALITY INDEX -16%</b>							
% of Faculty Positions vacant	2.0%	39.15	0				
% of Non-permanent faculty	4.0%	34.93	0				
% of Non-teaching staff to teaching Staff	3.0%	3.82x10 <sup>2</sup>	3.46x10 <sup>2</sup>				
Total no of under graduation programs	1.0%	24	26				
Total no of post graduation programs	1.0%	20	25				
Total no of doctoral programs	1.0%	36	40				
Faculty appointment - <b>turn around / cycle time</b> in months	2.0%	12	8				
Delay in payment of monthly salary payment of faculty	2.0%	0	0				
<b>(b) ACADEMIC EXCELLENCE INDEX- 21.5%</b>							
Delay in exam conduction and declaration of results	3.5%	1	0				
<b>Plagiarism Check</b>	1.0%	No	Yes				
Accreditation	4.0%	Yes	Yes				
Teacher Student ratio	4.0%	1:11	1:10				
% of Visiting professors	1.0%	6.0	10.0				
% of graduates employed by convocation	0.5%	dd	20.0				
% Number of students receiving	0.5%	0.73	2.0				

# *Institutional Development Plan*

awards at National and International level						
% of expenditure on Library, cyber library and laboratories per years	1.0%	1.0	3.0			
Ratio of expenditure on teaching staff Salaries to non-teaching staff salaries	1.0%	2:1	2:1			
% of faculty covered under pedagogical training	1.0%	10	20			
% of faculty involved in 'further education'	0.5%	6	10			
Dropout rate	1.5%	9.68	0			
No of foreign collaborations	1.5%	13	20			
Subscription to INFLIBNET	0.5%	Yes	Yes			
<b>(c) EQUITY INITIATIVE INDEX- 12.5%</b>						
SC Student%	3.0%	12.5	15.0			
ST Student%	3.0%	8.5	32.0			
Gender Parity	3.0%	52.0 F	50.0 F			
Urban to Rural Student population	2.0%	1.38	1.0			
Existence of <b>CASH</b>	0.5%	Yes	Yes			
Existence of Social Protection Cell	0.5%	Yes	Yes			
Language assistance programs for weak students	0.5%	Yes	Yes			
<b>(d) REASERCH AND INNOVATION INDEX-24%</b>						
Per-faculty publications	2.0%	2.8	3.0			
<b>Cumulative Impact Factor</b> of publication	3.0%	170	300			
<b>h-Index</b> of the University Scholars [SCOPUS accessed on April 10, 2014]	2.0%	28	30			
% of staff involved as principal researcher	1.0%	94	100			
% of research projects fully or more than 50% funded by external agencies, industries etc	2.0%	100	100			
Total no of patents granted	1.0%	0	5			
% of faculty receiving national/international awards	1.0%	10	20			
% of research income	1.0%	4.5	7.5			
Doctoral degrees awarded per academic staff	1.0%	0.5	1.0			
% doctoral degrees in total number of degrees awarded	3.0%	0.34	0.5			
% expenditure on research and related facilities	1.0%	7.0	10.0			
Digitization of Master's and Doctoral thesis	0.5%	Yes	Yes			
UPE	3.5%	No	Yes			
% of Income generated from non-grant Sources	2.0%	57.7	60.0			
<b>(e) STUDENT FACILITIES - 15%</b>						
No of new professional development programs	1.0%	2	3			
Existence of Placement Cells and	1.0%	No	Yes			

# Institutional Development Plan

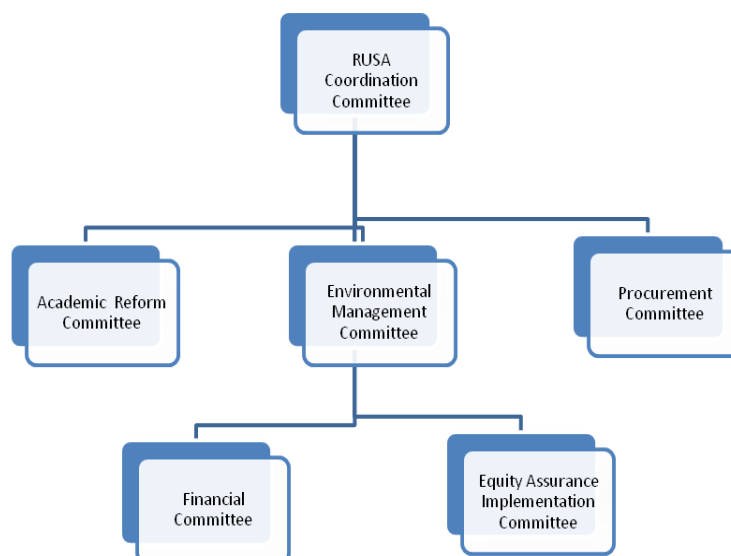
Placement Policy							
% of expenditure on infrastructure maintenance and addition	3.0%	40.0	50.0				
Availability of hostel per out-station female student	3.0%	1:3	1:1				
Availability of hostel per out-station male student	2.0%	1:2	1:1				
% of students on scholarship	2.0%	30.0	50.0				
Average scholarship amount per student (per month)	1.0%	2K	5K				
<b>Student Experience Surveys</b>	1.0%	No	Yes				
<b>Graduate Destination Surveys</b>	1.0%	No	Yes				
<b>(f) Infrastructure and Others- 11%</b>							
% income generated from training courses [Through ASC]	1.0%	7.7	19.2				
% Income generated from consulting	1.0%	No	1.0				
Infrastructural sufficiency	3.0%	No	Yes				
Computer coverage	3.0%	15.0	25.0				
Internet connectivity of Campus	3.0%	Yes	WiFi				
	100.0%						

<sup>dd</sup>data deficient

## Project Targets for Institutions

### 2.14 Give an action plan for ensuring that the project activities would be sustained after the end of the Project.

The University has made an elaborate plan to ensure that the project activities as outlined in this IDP will be sustained even after the end of the plan period. The University has a plan to constitute five committees that will work under the supervision of the RUSA Institutional Coordination Committee. Those committees are shown in the cartoon diagram depicted below. All these five committees will meet periodically and work in tandem with each other so as to have a coordinated approach to ensure that the project activities continue to function unhindered.





# *Institutional Development Plan*

## Evaluation of Institutional Development Proposals (IDP)

S. No.	Evaluation Parameters	Total	Marks Obtained
1	<b>Institutional Preparedness and Implementation Feasibility</b>		
	<b>A</b> Clarity of institutional basic information including baseline data	5	
	<b>B</b> Overall proposal implementation feasibility		
	1 Clarity in the identification of general development objectives, related specific objectives, their expected results, and its coherence with SWOT analysis	5	
	2 Have the key activities been identified clearly and adequately for each specific-objective	5	
	3 Adequacy of the Institutional Project Implementation arrangements	5	
	<b>C</b> Quality of SWOT analysis		
	1 Appropriateness for the procedure adopted for the conduct of SWOT analysis and adequacy of participation of stakeholders	5	
	2 Clarity in the identification of strengths, weaknesses, opportunities and threats	5	
	<b>D</b> Coherence of proposal with State's/regional development plan	5	
	<b>E</b> Reasonability of proposed budget	5	
	<b>Sub-total (1)</b>	<b>40</b>	

S. No.	Evaluation Parameters	Total	Marks Obtained
2	<b>Clarity and Quality of the Action Plans for:</b>		
	<b>A</b> Scaling-up research and innovation		
	1 Quality of action plan for quantitatively increasing qualitatively	5	
	2 Quality of action plan to transfer technology and for commercialization of	5	
	3 Scaling up Ph D enrollment through existing and new programs	10	
	4 Scaling-up enrollment in to UG/Masters Programs in existing and new ones.	10	
	<b>B</b> Research Collaborative activities with institution at National and International level		
	1 Identification of options to improve and increase research collaborations at National and International level	5	
	2 Clarity in identification of expected quality enhancement in Masters and	5	
	3 Potential impact and depth of proposed Industry collaboration	5	
	<b>C</b> Faculty Development including pedagogical training to:		
	1 Develop faculty/technical staff in subject domain	5	
	2 Improve pedagogical skills of faculty for better student learning.	5	
	<b>D</b> Identification of weak students and for improvement in their learning.	5	
	<b>Sub-total (2)</b>	<b>60</b>	
	<b>Total (1)+(2)</b>	<b>100</b>	



Pt. Ravishankar Shukla University, Raipur, Chhattisgarh  
[www.prsu.ac.in](http://www.prsu.ac.in)