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Analysis
of
Peer Team Reports of Accredited Institutions
of Rajasthan- Issues and Strategies for
Quality Enhancement



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PREFACE

Institutions striving to achieve and maintain the goal of quality have to identify ways of providing quality learning by fostering Institutional excellence. For this to happen all concerned have to work together effectively by sharing information, ideas, good practices and common issues for meeting various challenges. Further Governments, Policy Makers, Funding Agencies, Institutions and Stakeholders must understand the linkages and interdependence of the various factors and their roles in creating a quality education system.


The possibilities for the system, both in terms of vantage points and directions emerge from the existing system. We cannot afford to ignore the ground realities in considering the ways to focus on long term improvement. While most of the criteria of National Assessment and Accreditation Council (NAAC) are compatible with the national values it is expected that institutions need to change in various aspects to suit their definite and distinctive requirements. NAAC, through its Quality Assurance and Accreditation mechanism has been constantly attempting to support quality improvement, make higher education institutions more effective and efficient and to create a quality culture.

As a self introspection and in order to achieve the core objectives of NAAC i.e facilitating Quality and Excellence in higher education, NAAC has been analyzing the Assessment and Accreditation reports (qualitative and quantitative) of those states in which at-least 35% of the HEIs are accredited by NAAC. So far we could publish ten such State wise Assessment and Accreditation Reports – Andhra Pradesh, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, North East, Punjab and West Bengal. The state wise analysis of Assessment and Accreditation reports of Rajasthan is the 11th in this series.

Institutions have learnt to view the activity of preparing Self Study Reports (a part of the NAAC process) as a tool for bringing in positive change and cherish it. We hope that this publication will help Governments, Institutions and the stakeholders of higher education in leading them to enhance the quality

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of our educational institutions individually and collectively. While I appreciate the efforts of the authors who took pain in collecting , collating and interpreting information and data in terms of quality improvement , I hope it will help one and all involved in the system to understand the challenges and needs of the present era and contribute to creating a culture of Quality and Academic Excellence.



H. A. Ranganath
Director

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Higher Education In Rajasthan – An Overview

Introduction

The present state of Rajasthan came into existence when the Government of India passed the State Reorganization Act of India in 1956. It was formed with the amalgamation / integration of 22 princely states in several stages after independence.

Rajasthan, is geographically the largest state of Indian union and is situated between 23⁰3' and 30⁰12' north latitude and 29⁰30' and 78⁰17' east longitude. The state has an area of 3,42,739 sq kms and is bound by Punjab, Haryana, Delhi and Uttar Pradesh in the north and north-east, by Gujarat in the South west , by Madhya Pradesh in the East and by Pakistan in the West. The state is sub-divided into 32 districts with population of 5.65 crores (2001 census). The literacy rate of the State at 60.41 percent is marginally lower than the national average of 64.21 percent.

From the education point of view, Rajasthan, along with Arunachal Pradesh, Bihar and Jammu and Kashmir, is among the most backward states of the country. The difficult terrain of the state has been largely responsible for the backwardness in general and education in particular.

1.1 Growth and Status

1.1.1 Growth

During the pre-independence era, there were some efforts to establish institutions for higher education by rulers of princely states and nurtured by religious and social organizations. By the time India became independent (15th August, 1947) this region (Rajputana) of the country had only one university; 24 liberal education colleges, one engineering college, one Medical college, three Teachers' training colleges, one Agriculture college and one Research institute (Annexure1). All these institutions put together enrolled around 12000 students. However the professional and technical education was in its infancy stage. Until the establishment of the Rajputana University on 8th June, 1947, the colleges as

and when established were affiliated in succession to Calcutta, Allahabad and Agra Universities.

Since 1947 the growth of higher educational institutions in the state of Rajasthan has been phenomenal (Table 1.1). To meet the demands of a vibrant democracy it has undergone a remarkable transition from an elite system to a mass system. The number of university level institutions increased from one in 1947 to twenty two in 2006, registering a twenty two fold increase which is nearly at par with the national increase (Table 1.2).

TABLE 1.1
Number of Tertiary Educational Institutes in the State of Rajasthan

	Institutions	Upto 15 th Aug., 1947	As on 1 Jan. 2006	Increase
1	Universities	1	22#	21
2	General education colleges	24 (including intermediate colleges)	752*	728
3	Tertiary Engineering Institutes	1	48**	47
4	T.T. Colleges	3	Around 260	Around 257
5	Medical College	1	8	7
6	Dental College	-	9	9
7	Nursing and Pharmacy College	-	51	51
8	Agriculture and Veterinary	1	Around 6	Around 5
9	Management (MBA Institutes)	-	55***	55
10	MCA Colleges	-	16	16
11	Enrolment	12000	Around 4 lakh regular and 2 lakh private students	

including eight Deemed Universities (Four general and four technical)

* 272 colleges are exclusively for women.

** including BITS Pilani, MNIT Jaipur, LNMIIT, Jaipur and MIT Laxmangarh Deemed Universities (technical).

*** Affiliated to Rajasthan Technical University (RTU), admissions are made through Rajasthan Management Aptitude Test (RMAT)

TABLE 1.2
Quantitative Growth of universities (including Deemed Universities) in Rajasthan and India

Year	India		Rajasthan	
	Number of universities	Increase	Number of universities	Increase
1857-1947	20	0	1	0
1951	27	7	1	0
1961	45	18	1	0
1971	82	37	4	3 (1 Deemed)
1981	110	28	4	0
1991	184	74	9	5
1997	229	45	10	1
2006	342	113	22	21

1.1.2.1 The Present Status

The State of Rajasthan has a network of higher education institutions spread over its 32 districts. Currently there are 14 universities (Six Conventional, Two Agricultural, One Technical, One Medical, One Sanskrit, One Ayurveda, One Law and One Open University-see Table 1.3) and eight Deemed Universities (Four general and Four technical – see Table 4) catering to the educational needs of the state by imparting higher education under different categories (Table 1.4). Letter of intent to 16 private universities out of 25 proposals received has been issued in the year 2006. There are 752 colleges of liberal education (nearly One college per lakh population as compared to national average of 0.77 colleges per lakh population) of which 272 are exclusively for women (Table 1.5). As compared to only one at the time of independence, at present, in the tertiary technical education sector there are 48 institutes (including BITS, Pilani, MNIT, Jaipur, Modi Institute of Technology, Laxmangarh and LNMIIT,

Jaipur), 16 MCA Colleges, 51 Nursing and Pharmacy institutes, three HMCT Institutes, 55 Management colleges (RTU, Kota) and around 260 Teacher Training and Physical Education colleges. There are six government and two private Medical colleges, one government Dental College, eight private Dental colleges and around six Agriculture and Veterinary colleges. The enrolment in all these institutions put together is around four lakh students.

TABLE 1.3
Universities (Excluding Deemed Universities) of Rajasthan

Category	No.
General Education	6
Agriculture Universities	2
Open University	1
Ayurved University	1
Sanskrit University	1
Law University	1
Technical University	1
Medical University	1
Total	14

Table 1.4
Deemed Universities In Rajasthan

Name	Category
Bansasthali Vidyapith, Banasthali	General
J.R.N., Udaipur	General
Rajasthan Vidyapeeth, Udaipur	General
Jain Vishva Bharti Institute, Ladnu	General
Institute of Advanced Studies in Education, Sardarshahar	General
B.I.T.S., Pilani	Technical
Malviya National Institute of Technology, Jaipur	Technical
Modi Institute of Technology, Laxmangarh (Sikar)	Technical
LN Mittal Institute of Information Technology, Jaipur	Technical

TABLE 1.5
Status of Affiliated Liberal Education Colleges

SN	Type	Post graduate			Graduate			Total		
		Co-education	Women	Total	Co-education	Women	Total	Co-education	Women	Total
1	Govt. colleges	50	15	65	31	18	49	81	33	114
2	Private colleges	74	45	119	325	194	519	399	239	638
	(a) Aided	33	22	55	9	7	16	42	29	71
	(b) Un-Aided	41	23	64	309	186	495	350	209	559
	(c) SFI	-	-	-	7	1	8	7	1	8
Total colleges								752		

The decadal growth of liberal education and engineering colleges is shown in Table 1.6.

TABLE 1.6
Decadal Growth of Colleges (Liberal and Engineering)

Year	No. of colleges (Liberal)	No. of Engineering institutes
1955-56	23	1
1965-66	66	3
1975-76	103	-
1985-86	139	-
1995-96	198	8 (1997-98)
2003-04	509	-
2004-05	737	45
2005-06	752	48

Table 1.7 indicates the status of affiliation of liberal education colleges with different universities of General Education in the State. Of the six traditional universities, one J.N.V. University, Jodhpur is largely of unitary character with limited jurisdiction in comparison to other universities (Table 1.7).

TABLE 1.7
Present Status of Higher Education Institutions

Name of University	Year of Establishment	No. of Colleges Affiliated (2006-07)	Enrollment (2006-07)
University of Rajasthan, Jaipur	1947	377	130835
M.L.S. University, Udaipur	1962	71	40410
J.N.V. University, Jodhpur	1962	19	3514
M.D.S. University, Ajmer	1987	123	57149
Bikaner University, Bikaner	2002	90	51348
Kota University, Kota	2002	72	44604
Total :		752	327860

Prior to the year 2006, all Medical , Pharmacy and Engineering colleges ,except BITS Pilani, MNIT, Jaipur, MIT, Laxmangarh, College of Technology and Agriculture Engineering, Udaipur and MBM Engineering College, Jodhpur were affiliated to University of Rajasthan, Jaipur. From the year 2006 the affiliation of all Medical and Pharmacy colleges has been transferred to Medical University, Jaipur and that of the colleges of Engineering and Technology to Rajasthan Technical University, Kota.

1.2 Salient Features of Higher Education in Rajasthan

1.2.1 Lopsided Expansion and Accessibility :

Despite all the efforts of the State in the direction of the growth and development of educational facilities , it has been observed that there has not been an even distribution of colleges throughout the state . The uneven distribution of the colleges in the Rajasthan is visible from the following:

- Ø Most of the institutions are located in and around the districts of Sikar, Kota, Ajmer, Dausa, Sriganganagar, Jaipur and Jhunjhunu. 64% of the colleges are located in 10 districts. Whereas Jaipur alone has 140 institutions which correspond to 18% of total institutions. Nine out of the 32 districts, have only 3-6 colleges. Banswara, Barmer, Baran, Dungarpur, Jaisalmer, Jalore, Jhalawar, Rajsamand and Sirohi are the most lagging districts.
- Ø 20 Sub divisional HQ's have no college. 19 Sub divisions have no college in their jurisdiction.
- Ø Out of 272 women colleges, 226 are situated in 14 districts (each of 14 districts has more than 5 girls' colleges in their jurisdiction) and remaining 18 districts have only 46 colleges.
- Ø In all sectors of tertiary education, there has been a phenomenal increase in the number of institutions and students after 1995 due to private participation. Change of policy have resulted in mushrooming growth of private, aided as well as self financing institutions particularly in big cities and at district headquarters. This commendable growth has taken place mostly in the eastern Rajasthan, comparatively a more developed terrain to the east of Aravalli's. Around 50% of the private engineering colleges (21 out of 44) are located in Jaipur.
- Ø Although providing cost effective education is the prime concern of the government , scarcity of the government resources has made government to encourage self financing courses and the establishment of private colleges . In the recent times the increased fees charged by the private colleges is making higher education specifically Professional and courses in upcoming areas like Biotechnology are becoming unaffordable for many sections of the society .
- Ø As compared to the national average of 0.77 colleges per lakh population, Rajasthan on an average has one college per lakh population and as such is

reasonably better placed in comparison to national average. However if the situation has to be improved uniformly throughout the state providing one college for every one lakh population and with Tehsil as a unit, 70 more colleges are required to be set up. This would certainly reduce the constraints of accessibility.

1.2.2 Education for Equity: Education of Disadvantaged Population

Government of Rajasthan is committed to provide equal opportunities and access to education to all sections of society without any discrimination on the basis of caste, creed, sex, region and religion. For this the state Government has laid special emphasis on furtherance of women education despite social and cultural inhibitions in the state (Table 1.8). As a result, the enrolment of girls has increased from 7.8% in 1950 to 36% in 2004-05 in comparison to the national growth from 10% to 39.9%. A good number of women are inducted as teachers. The percentage of women teachers went up by more than five percent within 1994-95 to 1997-98 and male teacher decreased by four and half percent. There is also a marked increase in the number of SC, ST and OBC students. Tables 1.8 and 1.9 show the present status.

TABLE 1.8

S.N.	Equity	Enrolment SC,ST, Female and Rural	Enrolment Non SC, ST, Male and Urban	Ratio
1	Between SC and Non SC	33707	228357	15:100
2	Between ST and Non ST	26573	235491	11:100
3	Between female and male	95987	166077	58:100
4	Between rural and urban	17652	244412	7:100

TABLE 1.9

		Population (2001)	Enrolment (2004-05)	%
% of SC Enrolment in Relation to their population.	MALE	5067679	32994	0.65
	FEMALE	4626783	9728	0.21
	TOTAL	9694462	42722	0.44
% of ST Enrolment in Relation to their population.	MALE	3650986	27072	0.74
	FEMALE	3446724	6856	0.20
	TOTAL	7097710	33928	0.48
% of Total Enrolment in Relation to their population.	MALE	29420011	198637	0.68
	FEMALE	27087177	113611	0.42
	TOTAL	56507188	32248	0.55

1.2.3 Uneven Enrolment in Faculties and Relevance

The enrolment pattern in different faculties in Rajasthan vis-à-vis National Pattern is shown in table 1.10 where we find that arts faculty continues to have dominant share in total enrolments.

TABLE 1.10
Enrolment Pattern in Different Faculties

Sl.No.	Stream	National Average	Rajasthan
1	Arts	60.15%	64.7%
2	Science	23.77%	14.3%
3	Commerce	16.8%	13.5%
4	Others	-	7.5%

Others include Home Science, Law, and Diploma and Agriculture faculty

The liberal education has low employability and reorientation of the present system is imperative. Enrolment in faculties directly linked to the production stream is about 5% and a low enrolment trend for pure sciences. There is extremely low growth rate and enrolment in Veterinary Sciences and Agriculture (0.46%).

1.2.4 Lack of Adequate Infrastructure and Staff (Quality of Education)

Most of the government and private colleges do not have adequate infrastructure and staff as required by the University/UGC. Around 20% teaching posts are vacant in government colleges alone. Both in private and government colleges large numbers of teachers are employed on hourly basis, which has been adversely affecting teaching quality and management of colleges.

1.3 Policies and Initiatives in Higher Education in Rajasthan

1.3.1 Private Participation

To meet the growing pressure of providing access to higher education in Rajasthan, private participation in higher education was encouraged. As a consequence the number of private engineering and general education colleges in Rajasthan have increased manifold.

1.3.2 Removal of Uneven Distribution of Colleges

State Government will continue to encourage private investors to participate in strengthening higher education with a mission to establish one college at every tehsil by year 2020 and establish technical institutions in every hook and corner of the state.

1.3.3 Upgradation of Infrastructure and Faculty

The state government directed all colleges which are registered under section 12(b) of UGC act 1956 to obtain maximum possible financial assistance for the development of infrastructure and faculty improvement programmes under various scheme of UGC and other agencies.

1.3.4 Upgradation of Faculty

- Ø Faculty is encouraged for major and minor research projects. Around two hundred and forty seven minor research projects and eight major research projects have been sanctioned by UGC during the Xth plan period.

- ∅ The government encouraged teachers to avail Teachers Research Fellowship (TRF). One hundred and sixty five faculty members have been sanctioned academic leave to avail TRF during the Xth plan period .
- ∅ The government is committed to continue career advancement scheme (CAS) for teachers.

1.4 Strategies and Policy Intervention

The government would like to undertake few important strategies and policy intervention with suggestive initiative in the immediate future which can be described under – Access, Relevance, Quality, Resource Crunch, etc.

1.4.1 Access

Removal of Regional Disparities

Special efforts are being made to provide facilities and higher education in lagging, remote and inaccessible areas. New colleges through Government /private participation in lagging areas are being established. Incentives such as free land and grant for initial five years are being provided, efforts are being made to popularize distant learning programmes in remote and inaccessible areas through open learning systems. All universities are being requested to launch/enhance correspondence courses.

Removal of Impediments of SC, ST, Women and Poor Students to Access Higher Education

Special emphasis is being laid by the State Govt., on increasing the enrollment of SC, ST, Women and poor students, by providing scholarships, freeships, clothes, hospital facilities, book bank, etc. Further, following proactive steps are to be taken to achieve the above goals:

- ∅ Subsidized higher education for non income tax payees, SC, ST and free education to SC/ST girls.
- ∅ Subsidized education to girls in rural areas.
- ∅ Encourage donor participation in Girls' SC and ST education.

Public Private Participation (PPP)

Vidyalaya Vikas Samiti

The State Govt. is considering to privatize some existing colleges and handover to Vidyalaya Vikas Samiti as well as to have a PPP in higher education system.

L.N. Mittal Institute of Information Technology, a new deemed university is an example of a PPP in professional education sector.

Private Universities

The State Government encourage setting up of private universities through reputed organizations for inter state competition about the standard of education and increasing access to higher education.

1.4.2 Relevance

The following steps are being taken to make education relevant to the needs of society and increasing employability of pass outs.

- Ø Strengthen vocational education at school and college level.
- Ø More and more students to be attracted to skill based courses at polytechnics (opening more polytechnics also) through aggressive marketing and counseling.
- Ø Universities must launch diploma courses in relevant skills for job market (carrier) oriented courses and make the regular courses more flexible and skill oriented. Identify and start subjects in high demand with active interaction with the industry.
- Ø Students will be allowed to take skill oriented courses while doing degree education.
- Ø Steps are being taken to create awareness among students for professional courses and help them to pass the entrance tests, particularly for students from remote areas/poor/disadvantaged population.

1.4.3 Quality

Enhancing Teachers Competency

Teaching staff is encouraged to participate in national/international seminars/conferences to avail TRF to attend orientation and refresher courses, conducted by UGC, ASCS. The State Govt. has established in house training and research centre – HART (Higher Education Academy for Research and Training.)

- Ø Upgradation of infrastructure as per UGC norms by utilizing college development fund, MP/MLA and UGC grants and Government of India funds

- Ø New recruitment is being made through RPSC to fill the vacant positions. Steps are also taken to correct the adverse teacher-pupil ratio by redeployment of faculty.
- Ø A procedure is worked out for institutional annual review system.

Assessment and Accreditation of colleges by NAAC

The colleges in the state are encouraged to under go Assessment and Accreditation by NAAC. Till March, 2008, 8 universities and 100 colleges have been accredited

(Table 1.11 and 1.12).

- Ø Setting up a professional body to provide
 - I Regular forecast for manpower requirement by different sections of education.
 - I Monitor the quality of education and performance of institution and advice the state government.
- Ø The State Government is taking proactive steps for setting up centres of excellence particularly in the areas of IT, Medicine, Horticulture, Management Education, Bio-Technology and Pharmaceutical research, etc.
- Ø The State Govt. is encouraging setting up of private universities through reputed organizations for handling intra-state competition and the standards of education.
- Ø Encouraging special coaching classes in colleges located in far-flung areas to facilitate upgradation of knowledge.
- Ø Extensive use of Open Learning System through Distance Learning Mode (EDUSAT of ISRO).
- Ø Introducing classes for enhancement of proficiency in English language .
- Ø Online video conferencing, Internet connectivity to colleges, networking libraries, universities and the commissionerate of collegiate education.

1.4.4 Resource Crunch

The State Govt. proposed following solutions for overcoming the resource crunch:-

- Ø Subsidy should be targeted more on remote and inaccessible regions. Institutions should become self reliant in next two years. The subsidy should be done away in urban areas (concentrate on giving in the backward areas only.)
- Ø PPP Model for existing institutions –Vidyalaya Samiti to be authorized to raise resources and recruit deficient staff as per their terms and conditions and run the institute.
- Ø More assistance from UGC schemes- Targets set for each institution.
- Ø Use of Boys Fund and other fees by the colleges.
- Ø Public donations should be encouraged.
- Ø MP LAD and MLA LAD schemes – Proposal to productive approach.
- Ø Costs should be brought down.
- Ø Encourage taking up of projects- for self financing.

1.5 Status of Accredited Institutions as on February , 2008

In past, the efforts of educational planner/administrator were centered round the quantitative expansion of higher educational facilities. As the access to education started bringing results, it was realized that the issues of quality also needed to be seriously addressed to. Responding to the changing scenario of the higher education system, the state of Rajasthan, made quality assurance as one of the major policy objective to improve the quality of Higher Education Institutions (HEI). Keeping this in view, the state responded to the NAAC's call for assessment and accreditation of HEI's. As on March, 2008, eight universities including four Deemed universities and 100 colleges have been accredited. University wise numbers of accredited colleges is given in Table 1.11. Grade wise distribution of accredited institutions is given in Table 1.12

TABLE 1.11
University wise number of affiliated colleges accredited

University Name	Total
Institute of Advanced Studies in Education	01
Jai Narain Vyas University	03
Janardan Rai Nagar Rajasthan Vidyapeeth	01
Kota University	12
Maharshi Dayanand Saraswati University	26
Mohanlal Sukhadia University	15
University of Bikaner	12
University of Rajasthan	29
Rajasthan Technical University	01
Total	100

TABLE -1.12
Grade wise distribution of Accredited institutions of Rajasthan

	Five star	A +	A	B + +	B +	B	C + +	C +	C	Total
Universities	1	1	2	3	1	-	-	-	-	8
Colleges	0	1	4+2	13	20	25	10	17	8	98+2
Total	1	2	8	16	21	25	10	17	08	108

(+1 Under New Methodology)

1.6 Process of Assessment and Accreditation NAAC

The NAAC has, after much deliberation, critical evaluation of feedback from various stakeholders as well as rectification, arrived at a seven criteria framework for assessment and accreditation (A&A) of higher Education Institutions. These, seven criteria are - Curricular Aspects, Teaching Learning and Evaluation, Research Consultancy and Extension, Infrastructure and Learning Resources,

Student Support and Progression, Organization and Management and Healthy Practices. From 1st April 2007, there has been some modifications in the seven criteria and the grading pattern. The seven criteria details of the new methodology are available on NAAC website – www.naacindia.org.

The outcome of the A&A , is a qualitative and quantitative reports. The confidential score sheets form the quantitative reports and the Peer Team Reports (PTR) also popular as Accreditation reports form the qualitative reports. PTRs usually consist of three sections: - Introduction- giving the scope of work, brief history and profile of the institution, Criteria Wise Analysis- detailing the criterion specific achievements and strengths and weaknesses in the institution under assessment; and Overall Analysis as the concluding section with the recommendations of the PT.

The PTR attempts to illustrate an institution its strengths, weaknesses and suggestions or directions for improvement and to move ahead in its quest for quality. They try to map both the short term and the long term goals for the institutions and show the broad national and global arena in which it has to compete with others in its pursuit of excellence. The new reporting format though comprises of the same major headings of reporting , it is more specific and focused with more stress on reporting the strengths and weaknesses. The NAAC is also working actively towards formulating the corpus of Best practices that are being evolved nationally in the working of many institutions, and a target framework of these will be immensely useful to individual institutions and higher education management as a whole.

The details of the various criteria and the differential weightage allocated to these criteria for various categories of institutions are summarized in Table – 1.13(a) and 1.13(b).

TABLE 1.13(a)
The seven criteria evaluation matrix adopted upto March 2007

	Criteria	University	Autonomous college	Affiliated college
C-I	Curricular Aspects	15	15	10
C-II	Teaching Learning and Evaluation	25	30	40
C-III	Research, Consultancy and Extension	15	10	5
C-IV	Infrastructure and Learning Resources	15	15	15
C-V	Student support and progression	10	10	10
C-VI	Organization and Management	10	10	10
C-VII	Healthy Practices	10	10	10

TABLE 1.13(b)
The seven criteria evaluation matrix adopted from April 2007

	Criteria	University	Autonomous college	Affiliated college
C-I	Curricular Aspects	150	100	50
C-II	Teaching Learning and Evaluation	250	350	450
C-III	Research, Consultancy and Extension	200	150	100
C-IV	Infrastructure and Learning Resources	100	100	100
C-V	Student support and progression	100	100	100
C-VI	Governance and Leadership	150	150	150
C-VII	Innovative Practices	50	50	50

As Rajasthan is yet to have an autonomous college, it would suffice to note the difference of weightage between universities and affiliated colleges. The colleges in the affiliating system have little freedom to make or effect changes in the curriculum and the universities therefore get a greater weightage (150) in Curricular Aspects. In the universities again, Teaching Learning is backed by Research Consultancy, and Extension while in colleges there is not much scope so far for these activities; colleges, therefore have a larger score for Teaching Learning and Evaluation (450), while less for Research, consultancy and Extension (100), for which the universities have weightage of 250 and 200 respectively. The weightage in the rest of the criteria are the same for both. The second and third criteria are the most important ones for colleges and these are the areas where they need to work the hardest. Student support and progression reflect the success of both academic and administrative support services extended by the institution to ensure wholesome campus life for student community. Infrastructure and learning resources need long term planning, and organization and Management take long to evolve. There are statutes and other regulatory constraints beyond which the colleges can seldom go, for them to improvise or innovate. However, there is still some scope where they can add, invent, innovate and enrich and these are appropriately considered while deciding the weightages and also under criteria Innovative Practices. The key aspects under each criteria are listed in Annexure 1.2 .

Since its beginning in 1995 when the grading was limited to Accredited and Not Accredited system it has undergone changes at least twice before the current 3 point grading system (1.14 (A) , 1.14 (B) , 1.14 (C)). While the overall weightages in the new methodology and grading system remains the same, inclusion of microaspects and assigning weightage to these aspects has been the new introduction. Key Aspect based assessment is expected to reduce subjectivity in the process of Assessment and Accreditation. The different grading systems followed by NAAC over years are given below (1.14 (A, B,C)) :

TABLE 1.14 (A)
Grading According to the Star System

Grade	Instructions Weighted Score in % (upper limit exclusive)
A*****	> = 75
A****	70-75
A***	65-70
A**	60-65
A*	55-60

TABLE 1.14 (B)
Grading According to Nine- Point Scale

Grade	Instructions Weighted Score in % (upper limit exclusive)
A ⁺⁺	95-100
A ⁺	90-95
A	85-90
B ⁺⁺	80-85
B ⁺	75-80
B	70-75
C ⁺⁺	65-70
C ⁺	60-75
C	55-60

TABLE 1.14(C)
Three Point Grading According to the Cumulative
Grade Point Average (CGPA) Grading System

Letter Grade	Range of CGPA	Performance Descriptor
A	3.01-4.00	Very Good (Accredited)
B	2.01-3.00	Good (Accredited)
C	1.51-2.00	Satisfactory (Accredited)

98 colleges and 04 universities were graded according to nine-point scale (Table 1.14 (B)), BITS, Pilani was graded as four star grading system (Table 1.14(A)) and Two colleges Vidyabhavan G.S. Teachers College, Udaipur and Global Institute of Technology, Jaipur were graded under the New methodology (1.14 (C)).

1.7. Motivation, Rational and Objectives of the Analysis

The whole process of NAAC has been designed to enable HEI to re-discover themselves, their strengths as well as their deficiencies and areas for improvement. The process also facilitates stakeholders to know and realize their latent potential. The NAAC has so far accredited 141 universities and 3514 colleges as on February, 2007. In order to put the performance of accredited institutions in perspective, NAAC decided to analyze, quantitatively and qualitatively, the peer team reports state wise. So far state wise analysis of 10 states – Tamil Nadu, Kerala, Karnataka, Haryana, North Eastern region, Maharashtra, West Bengal, Andhra Pradesh, Madhya Pradesh and Punjab have been carried out and published. Since significant numbers of universities (8) and colleges (100) in Rajasthan have been accredited, it gives sufficient data for the critical analysis of the accredited institutions. The present analysis is eleventh in the series of analysis and is being carried out with a view to identify the strengths, weakness and common issues of the accredited institutions in Rajasthan and suggest possible solutions/recommendation for their further qualitative development. The main objectives of the analysis are:-

- Ø To help management and staff to evolve practices for improved institutional performance.
- Ø To provide inputs to the policy makers to evolve appropriate policies for quality enhancement and quality sustenance of the higher education system.

- ∅ To provide feedback to the stakeholders.
- ∅ To provide inputs to the funding and regulatory councils, to arrive at more informed planning and policy decisions.
- ∅ To provide inputs to the NAAC, further improvement of the process and developing benchmarks.

1.8. Procedure / Methodology of Analysis and Format of the Report

As mentioned in section 1.6, both quantitative techniques (based on the overall scores and criterion wise scores) and qualitative techniques (based on the recommendation, commendation, etc. as mentioned in each peer team report) have been applied during this analysis. The criterion wise scores and overall weighted scores are taken as comparable data for quantitative analysis. For the convenience of analysis and to get a comparable picture, the accredited institutions are grouped in clusters as follows:

1. Universities including Deemed universities
2. Grade wise colleges
3. Types of colleges (Government and Private colleges)
4. Gender (co-educational colleges and women colleges)
5. Affiliations i.e. the colleges affiliated to a particular university are grouped together.

Comparison of the accredited institutions as per the profiles was also attempted. The data both quantitative and qualitative reflected in the PTRs has been collected from PTRs and some missing links obtained from the institutional websites, SSRs, Annual Quality Assurance Reports and other materials available from NAAC and the HEIs. While carrying out the qualitative analysis, under each criterion key/core indicators identified as noted in Section 1.6, will be the focus of study/analysis.

It is presumed that the inter-peer team variation in the scores and the PTRs is minimal and that the commendations, recommendations and concerns mentioned in the PTRs truly reflect the overall institutional situations and of the duly validated self-study reports (SSR).

Format of this Report:

The report is organized in 4 chapters.

Chapter 1 is an introductory chapter, which gives growth, status, salient features, policies and initiatives in higher education in the State of Rajasthan. It also briefly explains the process of assessment and accreditation by NAAC, its objectives and methodology adopted for assessment and accreditation.

Chapter 2 presents quantitative analysis of the accreditation reports of HEIs of Rajasthan

Chapter 3 describes qualitative analysis of peer team reports of accredited institutions of Rajasthan.

Chapter 4 is an attempt at consolidation of the general observations of the peer teams on academic and administrative aspects of the HEIs of Rajasthan. It also provides recommendations to various stakeholders and futuristic plan for development of HEI in Rajasthan based on the inferences from the various observations made by the Peer Teams in their A&A reports submitted to NAAC

Quantitative Analysis

Introduction

This chapter is an attempt to arrive at inferences from the analysis of quantitative data i.e. the scores assigned by the Peer teams to the institutions under various criteria and some of the data drawn from the Self Study Reports submitted by the institutions. The statistical analysis is mainly based on the criterion wise scores and overall weighted scores allotted to individual institutions by respective peer teams. The comparison of criterion-wise and overall performance between government and private colleges as well as between girls colleges and co-educational colleges was done. Further influences of types of college, gender of college and their interaction on criterions were also studied and presented at appropriate places for comparisons on the performance of the colleges. All the accredited colleges were clubbed for analysis into two types of colleges i.e. as Government and Private Colleges. With reference to gender of college, it was either girls college or co-education college. The data were analysed with the help 2 x 2 Factorial Design ANOVA and results are presented in Section 2.5 to 2.12.

2.1 Distribution of Accredited Institutions in Rajasthan

Table 2.1 presents the data on distribution of different types of institutions assessed and accredited in the State of Rajasthan, up to February 2008. Out of the 108 institutions assessed, 8 are universities (4 traditional + 4 Deemed) and 100 are affiliated colleges. Out of 100 colleges, 68 are Government colleges, 29 are Private aided colleges and 03 unaided college. Further, out of 100 colleges, 77 are Co-educational colleges and 23 are Women's colleges. Of the total institutions, five are professional (04 Teacher education and 01 Engineering College) colleges - one affiliated to JRNRV, Udaipur, one to JNV University, Jodhpur, One to Rajasthan Technical University, Kota and other (Department of Education) belongs to IASE, Sardarshahar. Most of the colleges are PG multi-faculty colleges and are urban colleges. As such, no separate cluster / classification is made for these categories. We also note that of the total, 29 colleges are affiliated to University of Rajasthan, Jaipur,

16 are affiliated to Mohan Lal Sukhadia University, Udaipur, 03 are affiliated to Jai Narayan Vyas University, Jodhpur, 26 colleges are affiliated to MDS University, Ajmer, 12 are affiliated to Bikaner University , One to Rajasthan Technical University and 12 are affiliated to Kota University. Bikaner University , Rajasthan Technical University and Kota University are not eligible for assessment as they do not fulfill the eligibility criteria of NAAC with reference to the age of the University. The three Deemed Universities i.e. Institute of Advanced Studies in Education, Modi Institute of Technology and LN Mittal Institute of Information Technology are also not eligible for assessment .

TABLE 2.1
Distribution of accredited institutions in Rajasthan

Sl. No.	Universities	Traditional Universities						Deemed Universities					
		UoR, Jaipur	RTU, Kota	MLS, Udaipur	JNVU, Jodhpur	MDSU, Ajmer	B.U., Bikaner	K.U., Kota	BV, Banasthali	JNRV, Udaipur	JVB, Ladnu	BITS, Pilani	
	Year of Establishment	1947	2002	1962	1962	1982	2002	2002	1983	1987	1991	1964	
	Accreditation status of Universities	A ⁺	-	B ⁺⁺	A	B ⁺⁺	-	-	A	B ⁺⁺	B ⁺	A ^{*****} -	
	Affiliating Universities	UoR, Jaipur	RTU, Kota	MLS, Udaipur	JNVU, Jodhpur	MDSU, Ajmer	B.U., Bikaner	K.U., Kota	IASE	JNRV, Udaipur	Total		
1.	Colleges	29	01	16	03	26	12	12	1	1	Total	100	
	Government	18		12	-	21	7	11			Total	69	
	Private	9		3	1+1*	3	5	1			Total	23	
	Unaided	1	01**	1	1*	-	2	-	1*	1*	Total	08 (* 3 Teacher Education Colleges, **01 Engineering College)	
	Total	29	01**	16	03	26	12	12	1*	1*	Total	100	
2.	Co-education Colleges	23	01**	12	2*	20	9	9	1*	1*	Total	78 (4* Teacher Education Colleges, ** 01 Engineering College)	
	Women Colleges	6		4	1	6	3	3	-	-	Total	23	
	Total	29	01**	16	03	26	12	12	1*	1*	Total	100	
3.	Professional College	-	01**	-	2*	-	-	-	1*	1*	Total	05	

2.2 Distribution of Institutions in Relation to the Accreditation Status

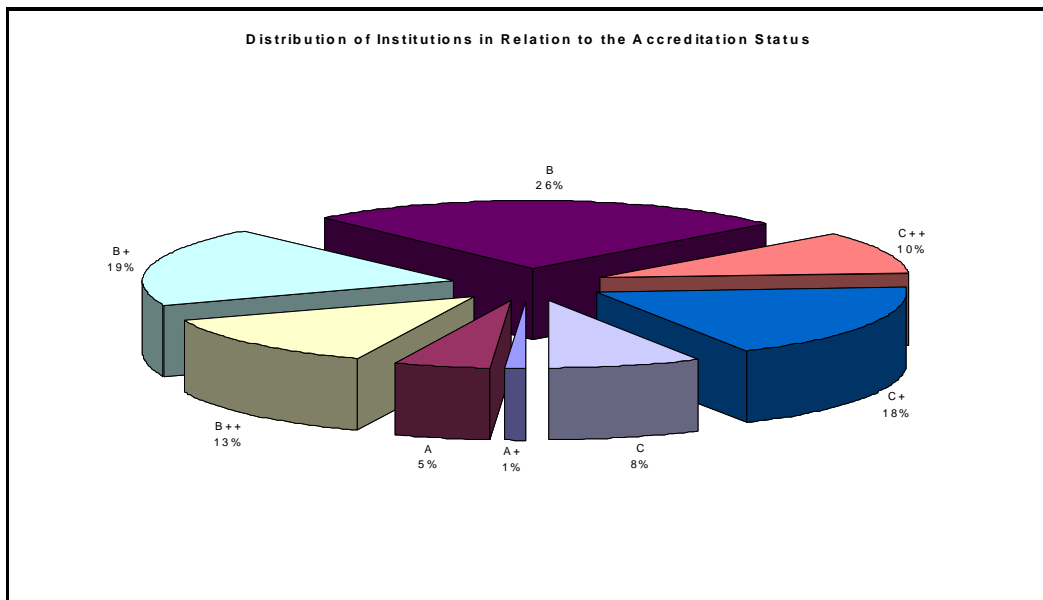
From the distribution of the Universities and colleges as for the grade (Table 2.2) and the analysis of the subsidiary data available with NAAC we find that :

- a) Out of the four traditional universities accredited by NAAC one university, namely University of Rajasthan, Jaipur (University established prior to independence) scored highest grade A+, JNV University, Jodhpur (non affiliating university) scored A grade and MLS University, Udaipur and MD University, Ajmer could score only B⁺⁺. Out of the four Deemed universities, Bansathali Vidhyapith which is a womens University scored highest with A grade, Janardan Rai Nagar Rajasthan Vidhyapith could score B⁺⁺ and Jain Vishva Bharti Institute could score only B⁺ grade. The BITS, Pilani was graded at A^{*****} level.
- b) Out of 99 colleges assessed, the highest overall A⁺ grade was secured by an unaided Women's college at Jaipur. Incidentally it is also affiliated to University of Rajasthan , Jaipur which is also accredited with A+ Grade. While 06 institutions were placed in A grade, three of them are aided private multifaculty colleges, one is a unaided Private Science and Technology College , One an Engineering College and two are colleges of education (Department of a Deemed university). Only 13 colleges out of 100 colleges scored B⁺⁺ grade. One of these 13 is located in predominantly tribal area Banswara City and four of them are Women colleges.
- c) The accredited status of colleges affiliated to University of Rajasthan, Jaipur which has been accredited as A+, is more encouraging than colleges affiliated to other universities.
- d) Out of 23 private colleges including one Self Financing (SF) College none scored C grade while out of 69 Government colleges, 8 secured C grade. All these 8 colleges are in small towns. None of the women's college scored C grade.

TABLE 2.2
Distribution of Institutions in Relation to the Accreditation Status

	Name of University	Grade of the University	A ⁺	A	B ⁺⁺	B ⁺	B	C ⁺⁺	C ⁺	C	Total
1.	University of Rajasthan	A ⁺	1	1	4	7	8	2	5	1	29
2.	MLS University, Udaipur	B ⁺⁺	-	1	3	1	2	2	6	1	16
3.	JNV University, Jodhpur	A	-	1	1	1	-	-	-	-	03
4.	MDS University, Ajmer	B ⁺⁺	-	-	3	4	8	-	7	4	26
5.	Bikaner University, Bikaner	-	-	1	2	2	5	2	-	-	12
6.	Kota University, Kota	-	-	-	-	4	2	4	-	2	12
7.	Rajasthan Technical University, Kota	-	-	1	-	-	-	-	-	-	-
8.	Banasthali Vidhyapith (Deemed University)	A	-	-	-	-	-	-	-	-	-
9.	Janardan Rai Nagar Rajasthan Vidhyapith (Deemed University)	B ⁺⁺	-	1	-	-	-	-	-	-	1
10.	Jain Vishwa Bharti Institute (Deemed University)	B ⁺	-	-	-	-	-	-	-	-	-

11.	BITS, Pilani (Deemed University)	A+++++	-	-	-	-	-	-	-	-	-
12.	IASE, Sardarsahar (Deemed University)	-	-	-	-	1	-	-	-	-	1
			1	6	13	19	25	10	18	8	100



2.3 Analysis of Criterion-Wise Scores and Overall Scores

From the criterion-wise and overall scores of accredited Universities it is evident that four Universities are accredited in the range of A grade (one A+ and one five star) and four Universities are accredited in the range of B grade (three B++ and one B+). The mean score of the Universities is between 74.85 and 91.17. One of the significant finding is that in research, consultancy and extension (criterion-III) all the four traditional Universities scores above 85 where as the Deemed Universities scored much lesser. On the whole very few colleges have scored below 60 and above 90 which means very few colleges are graded C

and A . Only one self financing women's college scored above 90 and placed in A+ grade.

2.4 Comparison of Criterion Wise Mean Scores of Colleges of Rajasthan

Of the 99 colleges, assessed and accredited 4 were colleges of Education, which except one were assessed on the six criteria framework, 69 Government colleges and 23 Private aided colleges and 08 private unaided colleges were assessed on the seven criteria framework. For analysis the 100 colleges were also grouped as Girls colleges (23) and Co-education Colleges (77). These were assessed on the seven criteria framework. In this Section comparison of criterion wise mean scores of these two clusters, i.e. Government and Private, and Girls and Co-education colleges were analysed and performance compared. It is observed that private colleges performed better than Government and Government aided colleges, whereas there was no significant difference between co-education and Girls colleges.

2.4.1 Comparison of Criterion-wise and Overall Performance of Government and Private Colleges

The comparison of criterion-wise and overall Performance of Government and Private Colleges were analyzed with the help of t- test. The results are given in Table 2.3.

TABLE 2.3:
Types of College-wise M, SD and t-values of criterion -wise and overall Performance

Criteria	Types of College	M	SD	N	t-test	Remark
Curricular Aspect	Government Colleges	70.10	08.56	68	1.41	Insignificant
	Private Colleges	73.62	10.54	16		
Teaching Learning & Evaluation	Government Colleges	71.18	08.33	68	2.48	p< 0.05
	Private Colleges	77.28	10.85	16		
Research, Consultancy & Extension	Government College	65.23	13.81	68	0.86	Insignificant
	Private Colleges	68.50	12.54	16		
Infrastructure & Learning Resources	Government College	69.80	09.59	68	2.84	p<0.01
	Private Colleges	77.69	10.96	16		
Student Support & Progression	Government College	66.69	09.03	68	3.46	p<0.01
	Private Colleges	75.50	09.67	16		
Organization & Management	Government College	68.06	10.10	68	1.71	Insignificant
	Private Colleges	72.87	10.42	16		
Healthy Practices	Government College	66.44	10.82	68	1.74	Insignificant
	Private Colleges	71.87	12.83	16		
Overall	Government College	69.35	07.63	68	2.72	p<0.01
	Private Colleges	75.38	09.42	16		

From Table 2.3, it can be seen that the t-values of 1.41, 0.86, 1.71 and 1.74 are not significant. It reflects that the mean performance on Curricular Aspect, Research, Consultancy and Extension, Organization and Management and Healthy Practices separately of Government and Private Colleges do not differ significantly. It may therefore be concluded that both the Government Colleges and the Private Colleges were found to have performed equally well with respect

to Curricular Aspect, Research, Consultancy and Extension, Organization and Management and Healthy Practices.

Further the t-values of 2.48 is significant at 0.05 level while 2.84, 3.46 and 2.72 are significant at 0.01 level with $df=82$. It indicates the Performance on Teaching Learning and Evaluation, Infrastructure and Learning Resources, Student Support and Progression and Overall Performance of Government Colleges and Private Colleges differ significantly. From the mean performance on these criteria it is also evident that Private Colleges are superior on Teaching, Learning and Evaluation, Infrastructure and Learning Resources, Student Support and Progression than Government Colleges. Not only this even the Overall Performance of Private Colleges was found to be significantly better than Government Colleges.

2.4.2 Comparison of Criterion-Wise and Overall Performance of Girls and Coeducation Colleges

The data pertaining to criterion-wise and overall performance of Girls and Co-education Colleges were analyzed with the help of t- test. The results giving the comparative performance of the Girls and co-education colleges are given in Table 2.4

TABLE 2.4:
Gender -wise college M, SD and t-values of criteria-wise and overall Performance

Criteria	Gender of College	M	SD	N	t-test
Curricular Aspect	Girls Colleges	69.00	09.79	19	0.97
	Coeducation Colleges	71.29	08.78	65	
Teaching Learning & Evaluation	Girls Colleges	74.79	08.69	19	1.33
	Coeducation Colleges	71.63	09.18	65	
Research, Consultancy & Extension	Girls Colleges	64.58	12.64	19	0.46
	Coeducation Colleges	66.23	13.89	65	

Criteria	Gender of College	M	SD	N	t-test
Infrastructure & Learning Resources	Girls Colleges	71.42	11.64	19	0.02
	Coeducation Colleges	71.37	09.93	65	
Student Support & Progression	Girls Colleges	68.68	08.60	19	0.16
	Coeducation Colleges	68.28	10.10	65	
Organization & Management	Girls Colleges	69.32	09.91	19	0.16
	Coeducation Colleges	68.87	10.45	65	
Healthy Practices	Girls Colleges	69.10	10.09	19	0.71
	Coeducation Colleges	67.00	11.72	65	
Overall	Girls Colleges	71.47	08.02	19	0.45
	Coeducation Colleges	70.21	08.40	65	

From Table 2.4, it can be seen that all the t-values are not significant. It reflects that the mean Performance on Curricular Aspect, Teaching -Learning and Evaluation, Research, Consultancy and Extension, Infrastructure and Learning Resources, Student Support and Progression, Organization and Management and Healthy Practices separately of Girls and Coeducation Colleges do not differ significantly. It may therefore inferred that both Girls Colleges and Coeducation Colleges are performing equally well with respect to Curricular Aspect, Teaching Learning and Evaluation, Research, Consultancy and Extension, Infrastructure and Learning Resources, Student Support and Progression, Organization and Management and Healthy Practices aspects of quality. Even the Overall Quality of Girls Colleges and Coeducation Colleges did not differ significantly.

2.5 Influence of Types of College, Gender of College and Their Interaction on Curricular Aspects Performance

The influence of Types of College, Gender of College and their interaction on Curricular Aspects on the Performance of the colleges was studied. Government

College and Private College were the two types of Colleges considered as the base. As per the Gender of College, it was either a Girls College or Coeducation College which were considered. The data was analyzed with the help 2 x 2 Factorial Design ANOVA. The results are given in Table 2.5.

TABLE 2.5:
Summary of 2 x 2 Factorial Design ANOVA of Curricular Aspects Performance

Source of Variance	df	SS	MSS	F- value
Types of College (A)	1	235.17	235.17	2.95
Gender of College (B)	1	185.73	185.73	2.33
A x B	1	9.45	9.45	0.12
Total	83			

From Table 2.5, it is evident that the F- value 2.95 is not significant. It shows that the performance in Curricular Aspects of Government and Private Colleges did not differ significantly. Thus, both Government and Private Colleges were found to have performed equally well on Curricular Aspects.

The F- value of 2.33 is not significant. It shows that the Performance of Girls Colleges and Co-education Colleges in Curricular Aspects did not differ significantly. Thus, both Girls Colleges and Co-education Colleges were found to have performed equally well on Curricular Aspects.

The F-value for the interaction between Types of College and Gender of College stood at 0.12, which is insignificant. So there was also no significant influence of interaction between Types of College and Gender of College on Curricular Aspects. Though statistically the interaction between types of college i.e. Government and Private and Gender of College i.e. Girls college and co-education college the estimated marginal

means when plotted on the graph (Fig 2.1), showed that irrespective of Type of College, the Coeducation Colleges performance on Curricular Aspects is marginally better . However there has been no significant difference in the performance with reference to curricular aspects among the types of colleges and Gender of the college.

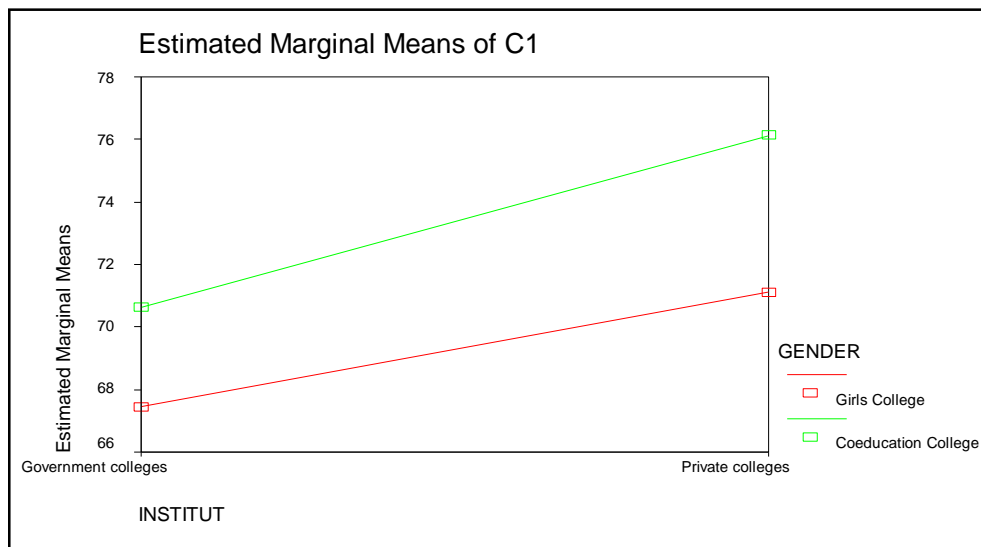


Figure 2.1: Effect of interaction between Types of College and gender of College on Curricular Aspects

2.6 Influence of Types of College, Gender of College and Their Interaction on Teaching, Learning and Evaluation performance

The influence of Types of College, Gender of College and their interaction on Teaching, Learning and Evaluation Performance was studied. Government College and Private College were the two types of Colleges analysed. As per the Gender of College, it was either a Girls College or Coeducation College. The results of the data analyzed with the help 2 x 2 Factorial Design ANOVA are given in Table 2.6.

TABLE 2.6:
**Summary of 2 x 2 Factorial Design ANOVA of Teaching,
 Learning and Evaluation Performance**

Source of Variance	df	SS	MSS	F- value	Remark
Types of College	1	327.77	327.77	4.11	p<0.05
(A)	1	14.97	14.73	0.19	Insignificant
Gender of College					
(B)					
A x B	1	7.98	7.98	0.10	Insignificant
Total	83				

From Table 2.6, it is evident that the F- value of 4.11 is significant at 0.05 level with $df = 1 / 80$. It shows that the performance in Teaching, Learning and Evaluation of Government and Private Colleges differ significantly. The mean Performance on Teaching, Learning and Evaluation of Private Colleges was found to be significantly superior to Government Colleges. Thus, Private Colleges were found to have performed significantly better on Teaching, Learning and Evaluation.

The F- value of 0.19 is not significant. It shows that the Teaching, Learning and Evaluation Performance of Girls Colleges and Co-education Colleges did not differ significantly. Thus, both Girls Colleges and Co-education Colleges were found to have performed equally well on Teaching, Learning and Evaluation.

The F-value for the interaction between Types of College and Gender of College is 0.10 that is not significant. So there was no significant influence of interaction between Types of College and Gender of College on Teaching, Learning and Evaluation. From the following graph (Fig.2.2), it is evident that Government Girls Colleges were found to be doing marginally better in Teaching, Learning and Evaluation than Coeducation Government Colleges. On the other hand there was no difference in the performance of both Girls as well as Coeducation Private Colleges in aspects relating to Teaching, Learning and Evaluation.

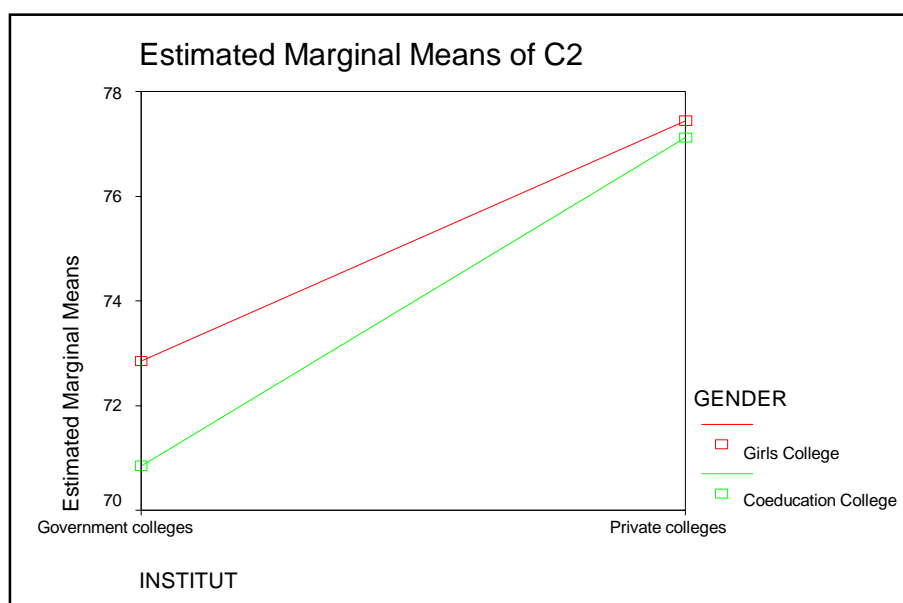


Fig. 2.2: Effect of interaction between Types of College and Gender of College on Teaching, Learning and Evaluation

2.7 Influence of Types of College, Gender of College and Their Interaction on Research, Consultancy and Extension

The influence of Types of College, Gender of College and their interaction on Research, Consultancy and Extension Performance was studied. Government College and Private College were the two types of College. As per the Gender of College, it was either a Girl College or Coeducation College. Thus, the data were analyzed with the help 2 x 2 Factorial Design ANOVA. The results are given in Table 2.7.

TABLE 2.7:
**Summary of 2 x 2 Factorial Design ANOVA of Research, Consultancy
 and Extension Performance**

Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	190.34	190.34	1.01	Insignificant
Gender of College (B)	1	111.01	111.01	0.59	Insignificant
A x B	1	3.96	3.96	0.02	Insignificant
Total	83				

From Table 2.7, it is evident that the F- value of 1.01 is not significant. It shows that the Research, Consultancy and Extension Performance of Government and Private Colleges did not differ significantly. Thus, both Government Colleges and Private Colleges were found to have performed equally well on Research, Consultancy and Extension.

The F- value of 0.59 is not significant. It shows that the Performance of Girls Colleges and Co-education Colleges with reference to Research, Consultancy and Extension did not differ significantly . It can therefore be said that the Gender of the college did not influence the quality of Research, Consultancy and Extension .

The F-value for the interaction between Types of College and Gender of College at 0.02 is insignificant , showing that there no significant influence of interaction between Types of College and Gender of College on Research, Consultancy and Extension. The same is also evident from the following graph (Fig. 2.3).

Estimated Marginal Means of C3

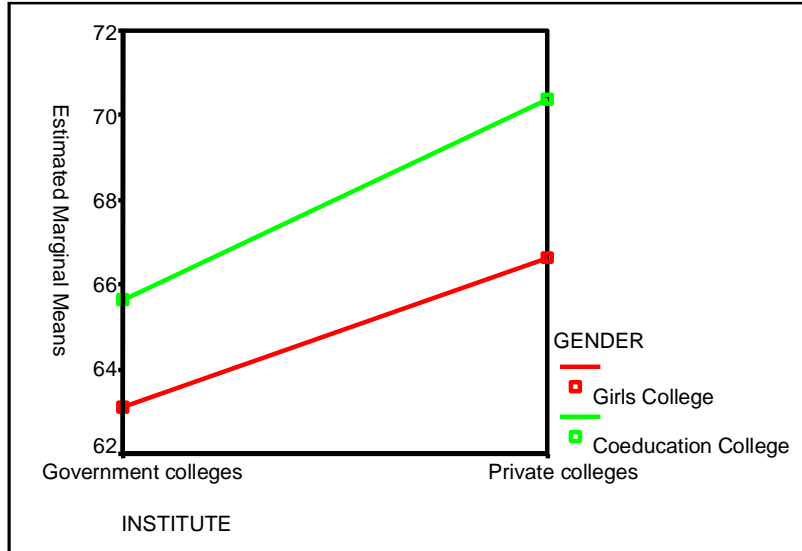


Fig. 2.3: Effect of interaction between Types of College and gender of College on Research, Consultancy and Extension

2.8 Influence of Types of College, Gender of College and Their Interaction on Infrastructure and Learning Resources

The influence of Types of College, Gender of College and their interaction on Infrastructure and Learning Resources Performance was analysed. Government College and Private College were the two types of College and as per the Gender of College, it was either a Girl College or Coeducation College. The data was analyzed with the help 2 x 2 Factorial Design ANOVA and the results are given in Table 2.8.

TABLE 2.8:
Summary of 2 x 2 Factorial Design ANOVA of Infrastructure and Learning Resources Performance

Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	845.14	845.14	8.58	$p < 0.01$
Gender of College (B)	1	64.87	64.87	0.66	Insignificant
A x B	1	0.91	0.91	0.01	Insignificant
Total	83				

From Table 2.8, it is evident that the F- value of 8.58 for Types of college is significant at 0.01 level with $df = 1 / 80$. It shows that the Infrastructure and Learning Resources Performance of Government and Private Colleges differ significantly. The mean performance with reference to Infrastructure and Learning Resources of Private Colleges was found to be significantly superior to Government Colleges. This, shows that Private Colleges have better Infrastructure and Learning Resources in comparison to Government Colleges.

The F- value of 0.66 is not significant for Gender of college. It shows that the Infrastructure and Learning Resources facilities of Girls Colleges and Co-education Colleges did not differ significantly. Thus, both Girls Colleges and Co-education Colleges were having more or less similar levels of Infrastructure and Learning Resources.

The F-value for the interaction between Types of College and Gender of College is insignificant at 0.01, showing that there is no notable influence of interaction between Types of College and Gender of College on the Infrastructure and Learning Resources provisions. However graphical representation of the data (Fig 2.4), show a marginally better Infrastructure and Learning Resources in the Coeducation Colleges.

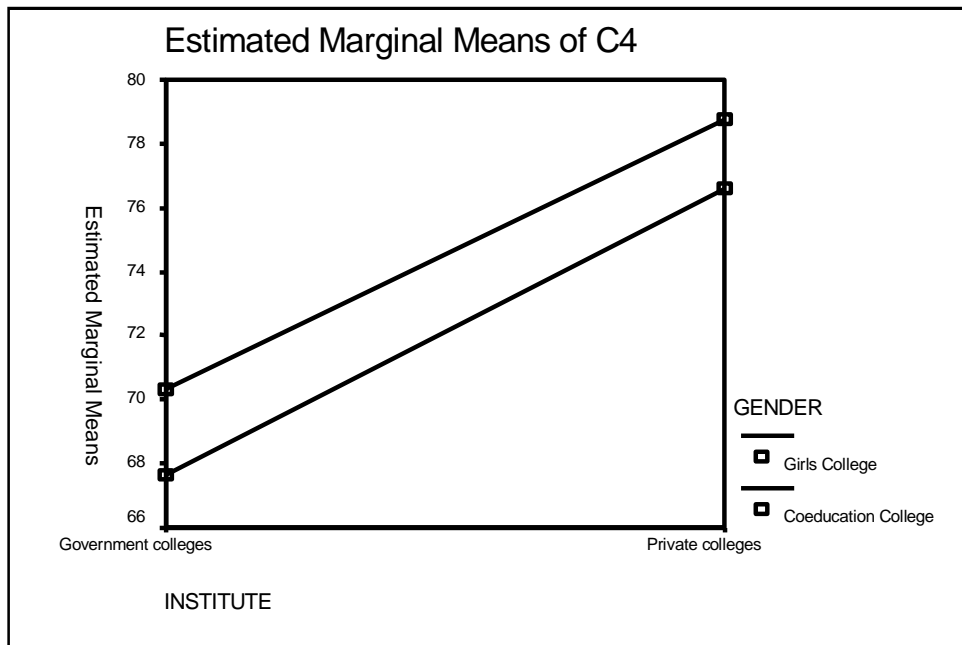


Fig. 2.4: Effect of interaction between Types of College and Gender of College on Infrastructure and Learning Resources

2.9 Influence of Types of College, Gender of College and Their Interaction on Student Support and Progression

The influence of Types of College, Gender of College and their interaction on Student Support and Progression Performance was studied. Government College and Private College were the two types of College. As per the Gender of College, it was either a Girl College or Coeducation College. The outcome of the data analyzed with the help 2 x 2 Factorial Design ANOVA is presented in Table 2.9.

TABLE 2.9:

Summary of 2 x 2 Factorial Design ANOVA of Student Support and Progression Performance

Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	914.16	914.16	10.93	p<0.01
Gender of College (B)	1	145.27	64.87	1.74	Insignificant
A x B	1	93.33	0.91	1.12	Insignificant
Total	83				

From Table 2.9, it is evident that the F- value of 10.93 is significant at 0.01 level with $df = 1 / 80$. It shows that there is a subtle difference between Government and Private Colleges with reference to facilities provided for Student Support and Progression. The mean performance on Student Support and Progression of Private Colleges was found to be significantly superior to Government Colleges. Private Colleges were found to have been providing better facilities for Student Support and Progression in comparison to Government Colleges.

The F- value of 1.74 is not significant with reference to the Gender of the college. It shows that the Student Support and Progression of Girls Colleges and Co-education Colleges did not differ significantly. Thus, both Girls Colleges and Co-education Colleges were found to be providing more or less similar levels of facilities for Student Support and Progression.

The F-value for the interaction between Types of College and Gender of College at 1.12 is insignificant. So there was no significant influence of interaction between Types of College and Gender of College on Student Support and Progression. The following graph (Fig.2.5), also shows that that Government Girls Colleges and Government Coeducation Colleges were found to be equally well in respect of Student Support and Progression. But Private Coeducation Colleges were found to have better facilities for Student Support and Progression than Private Girls Colleges.

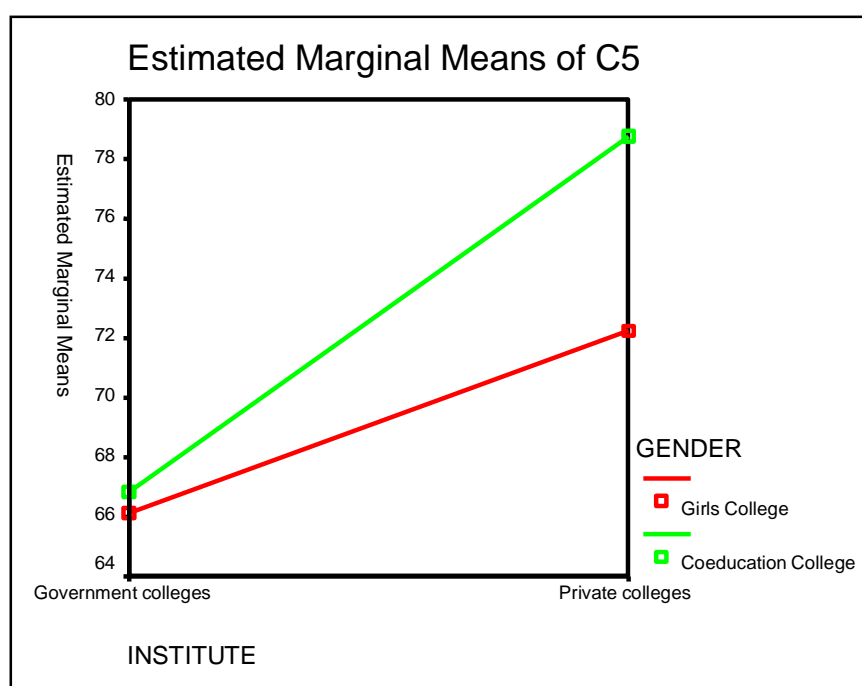


Fig. 2.5: Effect of interaction between Types of College and Gender of College on Student Support and Progression

2.10 Influence of Types of College, Gender of College and Their Interaction on Organization and Management

The influence of Types of College, Gender of College and their interaction on Organization and Management was studied. Government College and Private College were the two types of College. As per the Gender of College, it was either a Girl College or Coeducation College. Thus, the data were analyzed with the help 2 x 2 Factorial Design ANOVA. The results are given in Table 2.10.

TABLE 2.10:
Summary of 2 x 2 Factorial Design ANOVA of
Organization and Management

Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	302.52	302.52	10.93	Insignificant
Gender of College (B)	1	12.95	12.95	0.12	Insignificant
A x B	1	0.06	0.06	0.001	Insignificant
Total	83				

From Table 2.10, it is evident that the F- value of 2.86 is insignificant and therefore Organization and Management of Government and Private Colleges are more or less similar. The quality of , Organization and Management Private and Government Colleges were found to be at the same level , may be due to the similarity in the structural arrangements and the statutory norms and standards of the state governments and the affiliating universities.

The F- value of 0.12 for Girls Colleges and Co-education Colleges is also insignificant . This shows that the Organization and Management of Girls Colleges and Co-education Colleges do not have a significant difference. Thus, we can infer that Organization and Management aspect of quality of both Girls Colleges and Co-education Colleges is more or less at the same level. This again may be due to the prescribed norms and standards which the institutions have to adhere to.

The F-value for the interaction between Types of College and Gender of College at 0.001 is insignificant and therefore do not have significant influence on interaction between Types of College and Gender of College on the quality of Organization and Management. Similar inferences can be drwn from the graph at Fig. 2.6, show that Government Coeducation Colleges as well as Private Coeducation Colleges were found to be having better Organization and Management than Government Girl Colleges and Private Girl Colleges.

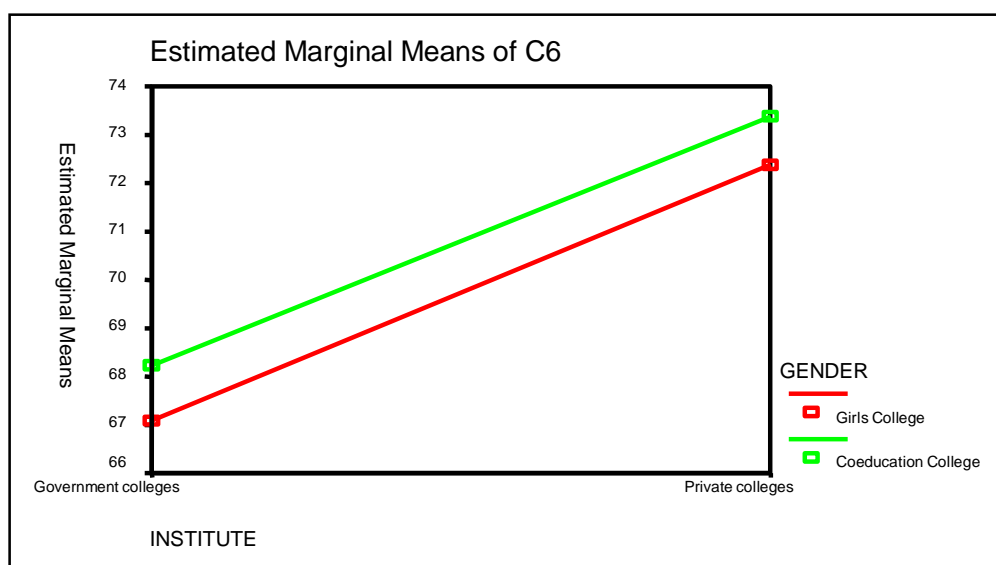


Fig. 2.6: Effect of interaction between Types of College and Gender of College on Student Support and Progression

2.11 Influence of Types of College, Gender of College and Their Interaction on Healthy Practices

The influence of Types of College, Gender of College and their interaction on Healthy Practices was studied. Government College and Private College were the two types of College. As per the Gender of College, it was either a Girl College or Coeducation College. Thus, the data were analyzed with the help of 2 x 2 Factorial Design ANOVA. The results are given in Table 2.11.

TABLE 2.11:
Summary of 2 x 2 Factorial Design ANOVA of
Healthy Practices

Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	261.57	261.57	2.04	Insignificant
Gender of College (B)	1	0.69	0.69	0.005	Insignificant
A x B	1	44.66	44.66	0.35	Insignificant
Total	83				

From Table 2.11, it is evident that the F- value of 2.04 is not significant. It shows that the Healthy Practices in Government and Private Colleges did not differ significantly. Thus, Private and Government Colleges were found to be following equally well Healthy Practices.

The F- value of 0.005 is not significant. It shows that the Healthy Practices Girls Colleges and Co-education Colleges did not differ significantly. Thus, both Girls Colleges and Co-education Colleges were found to be equally well in Healthy Practices.

The F-value for the interaction between Types of College and Gender of College is 0.35 that is not significant. So there was no significant influence of interaction between Types of College and Gender of College on Healthy Practices. But from the fig. 2.7, it is evident that Government Girls Colleges were found to have Healthy Practices with better impact than Government Coeducation Colleges. Whereas among the private colleges the Coeducation Colleges were found to be following better Healthy Practices as compared to Private Girl Colleges.

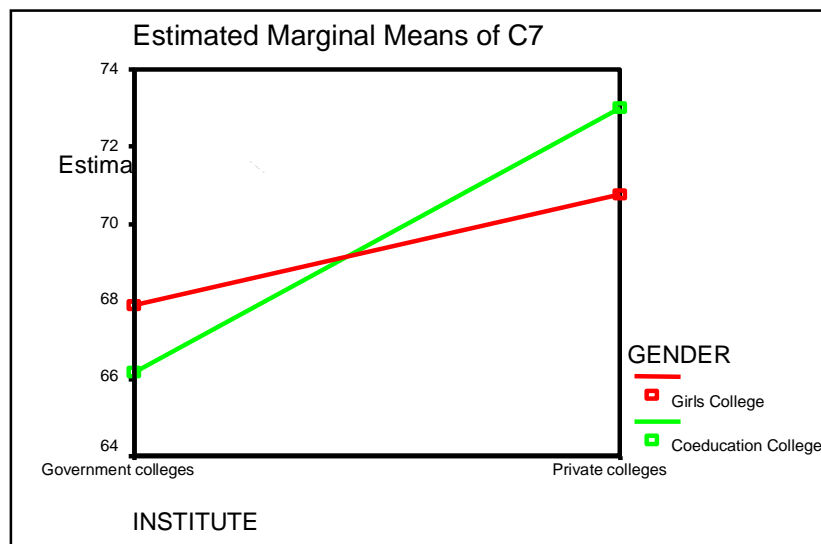


Fig. 2.7: Effect of interaction between Types of College and gender of College on Healthy Practices

2.12 Influence of Types of College, Gender of College and Their Interaction on Overall Performance

The influence of Types of College, Gender of College and their interaction on Overall Performance was studied. Government College and Private College were the two types of College. As per the Gender of College, it was either a Girl College or Coeducation College. Thus, the data were analyzed with the help of 2 x 2 Factorial Design ANOVA. The results are given in Table 2.12.

TABLE 2.12:
Summary of 2 x 2 Factorial Design ANOVA of Overall Performance

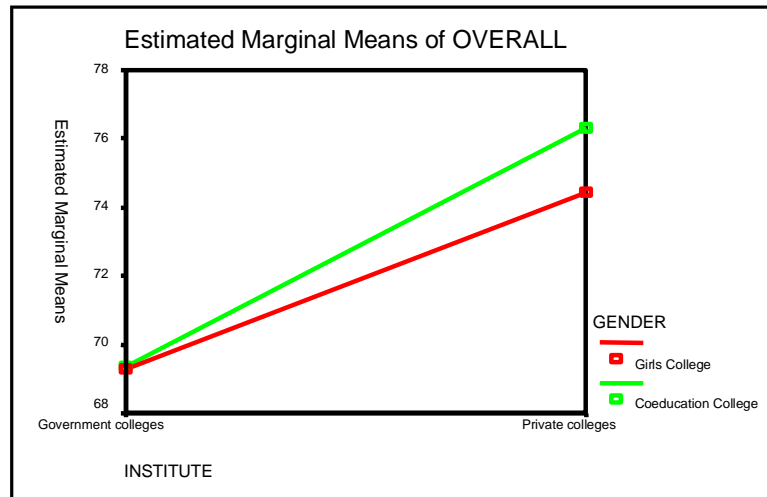
Source of Variance	df	SS	MSS	F- value	Remark
Types of College (A)	1	408.64	408.64	6.26	$p < 0.01$
Gender of College (B)	1	10.23	10.23	0.16	Insignificant
A x B	1	9.01	9.01	0.14	Insignificant
Total	83				

From Table 2.12, it is evident that the F- value of 6.26 is significant at 0.01 level with $df = 1 / 80$. It shows that Overall Performance of Government and Private Colleges did differ significantly. The mean score of Overall Performance of Private Colleges was found to be significantly higher than Government Colleges. Thus, Private Colleges were found to be significantly superior to Government Colleges.

The F- value of 0.16 is not significant. It shows that the Overall Performance of Girls Colleges and Co-education Colleges did not differ significantly. Thus, on the whole both Girls Colleges and Co-education Colleges were found to be equally well.

The F-value for the interaction between Types of College and Gender of College is 0.14 that is not significant. So there was no significant influence of interaction between Types of College and Gender of College on Overall Performance. But from the following Fig. 2.8, it is evident that Overall Performance of Government Girls Colleges as well as Government Coeducation Colleges was found to be

more or less similar. On the other hand Overall Performance of Private Coeducation Colleges was found to be better than Private Girl Colleges.



Graph 2.8: Effect of interaction between Types of College and Gender of College on Overall Performance

2.13 Conclusions

The above quantitative analysis of overall weighted scores and criterion-wise scores of accredited institutions indicates the following.

- ∅ In general the overall quality of Universities was found to be good with an average overall score of 83 percent.
- ∅ The general quality of performance of accredited colleges is fairly good (only 9.3 percent of the accredited colleges graded at C level).
- ∅ On the whole Private colleges were found to be significantly superior to Government Colleges.
- ∅ The overall performance of Private Co-education colleges was found to be better than Private Girls Colleges.
- ∅ Both Government Colleges and Private Colleges were found to have performed equally well with respect to Curricular Aspects, Research, Consultancy and Extension, Organization and Management and Healthy Practices.
- ∅ Private Colleges were found to be superior on Teaching, Learning and Evaluation, Infrastructure and Learning Resources, Student Support and Progression than Government colleges.

Qualitative Analysis of Peer Team Reports of Accredited Institutes

Introduction

As on February, 2008 eight Universities (4 traditional and 4 deemed) have been assessed and accredited. All the four traditional universities (out of six) that have been accredited are state universities. Of the four one, namely, J.N.V. University, Jodhpur, is largely of a unitary character with limited jurisdiction in comparison to other universities. Out of four accredited deemed universities, one, namely Birla Institute of Science and Technology was assessed under star system of grading. It was graded as five star university and possesses a very strong technical component (as it grew out of a technical institute). Out of 8 Universities (traditional and deemed) Jain Vishva Bharti Institute, Ladnu was graded the lowest at B.

In Section 3.1 the common features of traditional universities and distinctive features of individual traditional universities that their PTR's show are described. Features of deemed universities as shown in their PTR's are discussed in Section 3.2. In section 3.3, the focus will be on the major suggestions and recommendations made by the Peer Teams, criterion-wise, to catalyze further development of Universities.

Accreditation status of Universities

Sl.No.	University	Year of Establishment	Accreditation status
1.	University of Rajasthan, Jaipur	1947	A+
2.	Mohanlal Sukhadia University (MLS), Udaipur	1962	B++
3.	Jai Narain Vyas University (JNV) , Jodhpur	1962	A
4.	Maharshi Dayanand Saraswati University (MDU), Ajmer	1982	B++

5.	Banasthali Vidhyapith (Deemed University) Banasthali	1983	A
6.	Janardan Rai Nagar Rajasthan Vidhyapith (JNRV) (Deemed University)	1987	B ⁺⁺
7.	Jain Vishwa Bharti Institute (JV) (Deemed University), Ladnu	1991	B ⁺
8.	BITS, (Deemed University) Pilani	1964	A ^{*****} (Five Star)

3.1 Traditional Universities

The common features and distinct features of individual traditional Universities as denoted in peer team reports are classified under University profile and the seven criteria against which institutional performance is assessed for accreditation.

3.1.1 Profile

State Universities - Urban Location, Sprawling Campuses and Constituent Colleges

All the four traditional University are State universities and established at different times as and when need was felt 'to cater' higher educational needs of particular region of the state. For example MLS University, Udaipur was established to cater the tribal belt of South Rajasthan. Jai Narain Vyas University, Jodhpur (largely a unitary university) was established to protect and promote the unique geography, geology, history, culture, heritage and flora and fauna of the region through various curricula for the sustainable development of the society. All the four universities are recognized by the UGC under 2 f and under 12 B.

All the Universities are located in urban surroundings and have sprawling campuses and ample land available for future expansion. Except MD University, which has only one campus, the remaining three universities have more than one campus. The MLS University, Udaipur has one old and one new campuses. Both PG and UG courses are offered under the College of Sciences, College of Commerce at old campus and College of Social Science and Humanities at new

campus. The University of Rajasthan has UG campuses in form of constituent colleges- Maharani College (multi-faculty girls college), Maharaja College (UG science), University Law College, Commerce College and Rajasthan College (Arts and Humanities). Similarly JNV University, Jodhpur has two constituent colleges. In both universities (Rajasthan and Jodhpur) constituent colleges form the integral part of the university wherein the teachers from the university departments teach both in the constituent colleges and in the university departments.

Programmes of Study and Research Centres

The MD University is largely an affiliating university and has comparatively fewer departments (14). With a concentration at PG level, many of these departments have a focus on applied subjects. Other three universities have both UG and PG programmes of study and also research centres (University of Rajasthan has more than 10 centres). The JNV university also offers PG and UG courses in Engineering and Technology, where as others have no such facilities.

Staff

Almost all the permanent teachers in these universities have Ph.D degrees and rest have M.Phil. degrees. Though the workload is distributed among the teachers as per UGC norms most of them take-up extra load in view of the existing shortfall of teachers. All the four universities are under staffed due to increasing vacant teaching positions - due to freezing recruitments for more than a decade, introduction of additional courses, and ofcourse increased student places. To meet the needs of increasing teaching load, and maintain the quality of teaching the universities depend on guest faculty, a system where retired and/ or fresh qualified teachers external to the university system are appointed on temporary basis and assigned teaching. The payment to these staff is either consolidated or on hourly basis and is extremely low in comparison to the full time staff. This system though to some extent has reduced the workload of permanent staff and helped to sustain the quality of teaching it has adversely impacted the overall quality of teaching, reduced the Research and extension activities in the university departments and naturally hampered the progress and productivity of the university. For example in University of Rajasthan, Jaipur alone more than 50% of the sanctioned teaching and non-teaching posts are vacant, which has been not only impacting the performance of the existing staff but more so the research and extension activities.

Private study

None of the universities offers distance education programme, however all the universities provide opportunities to those, who can not avail formal educational facilities, to earn degrees through private study particularly in Social Sciences, Humanities and Languages.

Unit cost

The unit cost varies from university to university which is between 10,000/ to 15,000/ per Annum.

3.1.2 Criterion I : Curricular Aspects

Diversification of Programmes of Study (Programme options)

In all the accredited traditional universities the peer teams have noted the introduction of multidisciplinary, self-financing, need based and job oriented courses. All the universities have a plan to launch more new courses in new emerging areas of study. For example, Rajasthan University has proposed to start Centre for Disaster Management, Environmental Science and Technology etc. The suggestion of the Peer teams to the Universities on this aspect was – “It could be worthwhile if universities carry need assessment survey before launching of any job oriented course”.

Computer and Environment Studies at UG level

Introduction of Computer Science as a compulsory subject at UG level by all the universities and the decision to introduce Environmental Studies as a compulsory subject at UG level was noted with appreciation by the Peer Teams.

Goal Orientation

Peer Teams have noted that all the faculties of accredited universities have taken adequate care to integrate knowledge on Rajasthani Culture, Art and History in the respective disciplines. Where ever feasible and appropriate adequate emphasis was given to the local issues and problems of pedagogic and research relevance. Keeping the purpose of its establishment in mind (tribal belt) some of the departments of MLS university have introduced local specific thrust areas in their PG programmes, namely, Ethnobotany dealing with tribal medicine in Botany, Tribal Banking in Banking and Business Economics and so on. Similarly the visiting team to JNV University noted that “care is being taken to implement several women related academic programmes”. The Universities thus had

focused and specific goals and objectives and are attempting to achieve the same.

Revising and Updating Syllabi

While revising syllabi by the statutory bodies (Board of Studies/ Committee of Courses) feedback from teachers, principals etc. is given due consideration. Board of Studies/Committee of courses is represented by sufficient number of teachers and external experts. It has been observed that the process of revising the syllabi is slow and takes around two-to-three years. In most of the cases universities take one to two years to introduce a new programme. However V.C. could allow introduction of new programme by evoking his special powers.

The UGC proposed modular curricula have been adopted in several departments particularly in science faculty, with modification; the process of adoption is under way in other departments.

Academic Flexibility and Feedback Mechanism

The two major observations with reference to Academic Flexibility and Feedback Mechanism are:

1. There is hardly any flexibility in the curriculum introduced both with reference to the offering and transaction issues.
2. There is no mechanism in vogue to obtain feedback or comments from academic peers and employers for review and design of the curriculum and the programmes.

3.1.3 Criteria II- Teaching –Learning and Evaluation

Admission process

Admission to UG/PG courses is mostly on the basis of marks obtained by the students in the qualifying examination. However, in some of the PG courses admission is made on the basis of ranking obtained in the entrance test conducted either by the respective University or the state government authorities. All universities follow and strictly adhere to the Government rules pertaining to reservation for admission to various courses and ensure transparency in admissions.

Catering to Diverse Needs

There are no formal programmes and strategies adopted to satisfy the needs of students from diverse backgrounds in any of these four universities. The Peer Team report of University of Rajasthan had recorded that in some departments of the University, the teachers have an informal mechanism to gear their teaching practices at an individual teacher level to address the learning disabilities of different students. The JNV University, Jodhpur conducts special remedial/training of students belonging to weaker section of the society. Overall the Universities are yet to have inbuilt formal mechanisms for dealing with issues of diversity.

Teaching – Learning Process

Respective peer teams have noted that majority of faculty members follow traditional talk and chalk teaching methodology. However, faculty member of science and applied subjects use ICTs and other teaching aids. University of Rajasthan, Jaipur has provided audio-visual aids and LCD projector facilities and around 240 computers to its science departments. There has also been no shift in teaching-learning process as it is predominantly teacher centred. The student centered learning including life long learning skills are yet to be included in these universities.

The teaching learning practices are geared to effective adherence to 180 number of teaching days in a session. The teaching workload is in conformity with UGC guidelines.

Sporadic efforts are made by teachers in developing teaching materials and practical manuals to guide the students.

Teacher Quality

As mentioned earlier, most of the permanent faculty members hold Ph.D. degree as their highest qualification. The Peer Team that visited M.D. university reported that " about 33 percent of the teachers have at least one step higher qualification than the mandatory requirement". The faculty are recruited as per procedure laid down in respective acts of the universities. Universities in general follow the UGC norms and schemes for Career Advancement. However the teams opined that, the CAS implementation is not regular and needs streamlining. Peer Teams observed, as mentioned earlier, that large number of sanctioned posts are vacant. There is continuous increase in workload due to introduction

of new programmes, increased intake, etc. The shortage of teaching faculty in the universities resulted in decrease of the Research and extension activities. In order to overcome the shortage of teachers, all the universities have resorted to guest faculty schemes, appointment of part time faculty, etc. to sustain the quality of teaching – learning.

The faculty members are encouraged to attend / organise seminars, conferences, workshops, refresher courses etc. to keep themselves abreast with the latest developments in the field. The University of Rajasthan, Jaipur, JNV University, Jodhpur and MDS University, Ajmer have UGC Academic Staff Colleges, which regularly conducts refresher courses in various discipline and orientation courses for the benefit of college and university teachers of the state and to some extent other states also (15% seats).

Evaluation Reforms

All the accredited universities follow the annual system in almost all UG programmes and PG programmes. However in some of the departments like Engineering, IT, Computer Applications, etc. the semester system has been introduced and there is provision for internal assessment. Universities have a moderately good record of conducting examinations and announcing results in time. Paper setters are chosen at the state level for UG classes and at national level for PG classes. The pattern of question papers is not in conformity with proposed examination reform planned by UGC. As noted by the Peer teams the University of Rajasthan Jaipur, follows an effective evaluation practice is carried out with a scientific rigour in question paper setting process to test the knowledge acquisition ability of the students.

Teachers have annual self-appraisal, which is taken into consideration as internal feedback especially for career advancement. Students appraisal of teachers is yet to begin in all the accredited universities. The PT of University of Rajasthan has urged that the teachers and university management sit together to evolve transparent evaluation mechanism of the teachers both for looking into the teaching and research potential and also to assess the work commitment and satisfaction.

3.1.4 Criterion III: Research, Consultancy and Extension

In all four Universities, majority of the faculty members are actively engaged in guiding research scholars in their respective departments, undertaking research

projects and publishing books and articles, thereby reflecting an endeavor to promote and sustain a research culture. Science departments are leading in all the four universities. Among the universities, Rajasthan University has a distinct edge over other three. The peer team visiting Rajasthan University, Jaipur noted that there is an academic eminence and rich potential of research culture. Around 12 crores of funds have been generated through 60 research projects secured from different R&D organization such as UGC, DBT, DST, CSI and ICAR departments. Other three universities also have been noted to have large number of on going research projects financed by funding agencies like DST, DAE, ICAR, UGC etc.

Department of Botany, Chemistry, Geology, Physics and Zoology have received sufficient funds under SAP/ COSIST / FIST programmes recognized and selected by UGC / DST. The departments of Zoology, Chemistry and Philosophy have been recognized as Centre of Advanced Studies (CAS) by UGC at the University of Rajasthan, Jaipur. Department of Geography at the University of Rajasthan has been recognized by Ministry of Environmental, UGC, ICSSR, SAC as an important Centre for Remote Sensing. National and International linkages are impressive, particularly in University of Rajasthan, Jaipur. An impressive number of teachers have received National and other awards during last 5 years as per the information provided in various documents including the Peer Team reports.

The faculty members of accredited universities have published large number of research papers in peer-reviewed journal of National and International reputation with good impact factor. A good number of textbooks, reference books are being authored by the faculty members. In all the four universities there seems to be no formal mechanism to provide consultancy services. However, individuals of some departments are providing consultancy service. Consultancy is provided in the field of Geo-Technical Engineering, Highvoltage Engineering, Computer Aided Design, Structural Engineering, etc. by the faculty members of Engineering faculty of JNV University, Jodhpur.

From the Peer Team Report of JNV University, Jodhpur it is observed that the University takes advantage of the existence of several pioneering research institutes in the fields of defence, wild life, oil exploration, mining, remote sensing etc. in the city of Jodhpur and has developed linkages and collaborations with some of these .

All the four universities undertake extension activities in the broad areas of community development, social work, health and hygiene, adult education, AIDS and environmental awareness. The University of Rajasthan, Jaipur through establishment of ten extension centres has innovated some of the substantive issues of society like Adult and Continuing Education, Non Conventional Energy resources, Environment, Human Ecology, Population and women studies, Local Governance, Gandhian and Jain Studies, Area Studies like Rajasthan Studies, South Asia and Social Science Research Centre and provided field experiences and examples of translating theory into practice. NSS and NCC are actively operational in all the four universities and have good record of achievements and ongoing activities.

3.1.5 Infrastructure and Learning Resources

Physical Facilities

The infrastructure facilities in respect of buildings, class rooms, laboratories, faculty, accommodation, library, computer centre, health centre, sports facilities and internet centre are quite adequate. Similarly the administrative buildings and space are also sufficient and over the years the infrastructure has been considerably improved. The peer team report of M.D. University specifically noted that over the years of its existence, the University has been able to build basic infrastructure, including hostels for girls and a boys .

The University of Rajasthan has created maintenance strengthening and renovation funds (MSR) to the tune of Rs. 2.0 crore which ensures the university to sustain the expenditure required for maintenance without any hurdle. Almost all the four universities have in house maintenance staff to take care of physical facilities and minor repairs but for other specialized equipment and computers they have the AMCs or other technical support agreements.

Library as Learning Resources

In addition to University central library most of the departments in the universities have their departmental libraries. 13 science departments of University of Rajasthan have a total of 40,000 books and subscribe to large number of Journals and periodicals. The Central library of University of Rajasthan has also got LIBSYS software, printout facility for document delivery service access catalogue services etc. The libraries of the faculty of Engineering and Commerce of J.N.V. University, Jodhpur are well equipped to cater to the needs of U.G./PG. / research scholars.

INFLIBNET facilities exist in all four universities. The University of Rajasthan, Jaipur is among the five universities selected for point of presence of 'ERNET back bone' at par with IIT's and few other institutions. All libraries have reprographic facilities made available to students and staff at reasonable rates.

All the four universities are in various stages of computerization of various administrative and student support services. None of them have attempted at having an MIS in place. There are large number of computers, distributed in all the departments. At University of Rajasthan, Jaipur there is a UGC INFONET Centre which has 2 Mbps leased line connectivity provided by the UGC (under ERNET). Audio-visual facilities are available in most of departments and as and when needed are shared by other departments.

Other facilities

All the four universities have on campus banking and post office facilities, guest house, canteen and other essential facilities. The welfare schemes are as per the prescribed state and central government regulations. The grievance redressal is through an established mechanism which is available for both staff and students. However it appears that not many approach the cell for redressal. All universities have their own Proctoral Board and Dean Student Welfare.

The University of Rajasthan, Jaipur and JNV University, Jodhpur are having printing press and USIC which maintains the instruments of Science and allied departments. The University of Rajasthan has established Informatics and Instrumentation Centre. It has around 150 computers, with internet facility, to cater to the needs of students, research scholars and faculty members.

In brief, all the four accredited universities have a strong base of physical infrastructure, it is time to concentrate on optimum use of the same for further strengthening of the academics.

3.1.6 Student Support and Progression

Students Profile and Progression

The peer teams noted that large percentage (90%) of students belong to the state of Rajasthan. In MLS University, Udaipur the students strength has remained more or less constant over the years. However, in other Universities it has shown an increasing trend. The success rate is quite high (>85%) in University of Rajasthan, Jaipur, JNV University, Jodhpur and MDS University, Ajmer but it is

only around 50% at MLS University. The dropout rate varies from University to University. Around 25-35 percent of the total enrolled students are from weaker sections of the society. Good number of pass-outs qualify for NET / SLET / BARC / JEST examinations. Some of the students have been selected for various R&D organizations, National Banks, IAS, RAS and other jobs. At the University of Rajasthan, Jaipur there is a Students Advisory Bureau with a standing of 30 years which provides consultancy regarding employment and career prospects and academic progression. Almost all the Universities have an illustrious list of Alumni to its credit. The Universities are yet to tap the potential of the Alumni.

Student Support

All the four universities publish their respective prospectus which gives pertinent information regarding the admission procedure, different academic programmes offered by the University, the fee structure, scholarships, applicable reservations, disciplinary provisions and hostel facility. There is a provision for university scholarships both at departmental and university levels, JRF, Project fellowships, SC/ST/OBC scholarships, etc. Placement Cells are available at professional departments which help the students from across the campus and coordinates campus interviews. The department of Psychology gives personal and vocational counseling and guidance support to students of various faculties.

Students Activities

In all the four universities there are recreational and leisure time facilities such as Indoor and outdoor sports facilities, sports fields, common rooms, reading rooms, facilities for cultural activities. NSS and NCC facilities etc.. Students are encouraged to take part in sports, games and other co-curricular and extra curricular activities. Several students of these accredited universities won awards at National and Inter-university competitions.

3.1.7: Organization and Management

The organization and management structure of the universities is guided by their respective Act and Statutes, however the administrative set up is more or less similar to that of any other traditional state university in the country. The Universities have the Regulatory Authority in the Chancellor, the Governor of Rajasthan, Vice Chancellor, Registrar and Deans of the Faculties. All policy decisions are taken by Syndicate (University of Rajasthan, Jaipur and JNV

University, Jodhpur) / The Board of Management (MLS University, Udaipur and MDS University, Ajmer). The other statutory bodies are Academic Council, the Faculties, Board of Studies / Committee of courses, Financial Committee and Department Council. All these Bodies have representation of teachers from University and affiliated colleges but only isolated representation of student bodies. All faculty positions are filled by persons selected by statutory selection committee and subsequently approved by the Syndicate / Board of Management.

In general, universities do not have sufficient administrative and financial autonomy. They are dependent on State Government as it is the State Government which provides the salary component and development funds. Budgeting and auditing procedure adopted by the Universities are as per State Government norms.

The administration is decentralized, with delegation of powers to various committees like Disciplinary Committee, Admission Committee, Grievance Committee, House Allotment Committee, Examination Monitoring Committee welfare committee etc. These committees and other bodies ensure proper implementation of the various decisions and are governed by the principle of participation and transparency. The universities have worked out specification for work disposal to ensure accountability. Except for certain sporadic efforts there is no training of the academic and administrative staff at various levels on modern management concepts.

Peer Teams have observed that all universities serve the cause of education of students coming from weaker section of the society / tribal areas / backward areas, by providing extremely subsidized education with tuition fees and other fees much below the actual unit cost of education. The Universities may need to think in the Direction of differential fee structures if they have to overcome the resource crunch and reduced funding from the governments. From the financial plans it appears that all the four universities have realized the need for resource generation and are taking various steps to ensure increased income generation in the coming years.

3.1.8 Criterion VII : Healthy Practices

Some of the good practices observed and recorded by the Peer Teams in their Reports submitted to NAAC are summarized below:

- 0 All the four universities have introduced self financing need based and job oriented courses in the frontier areas,.
- 0 Introduction of Computer Science and Environmental sciences as compulsory subjects at UG level for all students.
- 0 Reaching out to the un-reached with extremely subsidized education (low fee structure) and extension and outreach activities.
- 0 Universities have exhibited transparency in the admission process. Adoption of pre and post examination processing system through OMR technology.
- 0 Reliability and validity to examination process by permitting Re-evaluation in some subjects.
- 0 All the Universities have established R&D linkages with National and International agencies and Institutes.
- 0 Infrastructure facilities and student support facilities range from satisfactory to excellent and all have taken up the challenge of global exposure and have shown various levels of intent to compete with others globally.
- 0 Efforts are being made in all the four universities to computerize university administration and establish administrative networking.
- 0 UGC INFONET centre have been established at the University of Rajasthan, Jaipur to provide internet access to teachers, students, and staff.
- 0 The University of Rajasthan, Jaipur and JNV University have a unique pattern of the constituent college system. Teachers from the university departments teach both in the constituent colleges and in the university departments. There is no separate teaching cadre for constituent colleges.
- 0 Universities takes adequate care to give emphasis to the local issues and problems of pedagogic relevance.
- 0 Inter-disciplinary approach is being adopted in the academic programmes, particularly at the University of Rajasthan, Jaipur and JNV University, Jodhpur.
- 0 Establishment of advanced study centres to work on substantive issues of society at the University of Rajasthan, Jaipur.

All the above practices show that the Universities are mainly concentrating on teaching and learning and not much of innovation in the management of the

Universities and teaching learning has happened. However the Universities are attempting at using more and more ICTs and Internet and has done considerable work with relation to the upliftment of the local populations and in providing a knowledge base.

3.2 Deemed Universities

Of the eight deemed universities, 4 were assessed and accredited. The BITS, Pilani was assessed under star grading system and other three on nine point scale. All these deemed universities are diverse in vision and objectives; however they are unitary in character.

Accreditation Status of Deemed Universities of Rajasthan

Sl.No.	University	Year of Establishment	Accreditation status
1.	Banasthali Vidhyapith (Deemed University) Banasthali	1983	A
2.	Janardan Rai Nagar Rajasthan Vidhyapith (JNRV) (Deemed University)	1987	B ⁺⁺
3.	Jain Vishwa Bharti Institute (JV) (Deemed University), Ladnu	1991	B ⁺
4.	BITS, (Deemed University) Pilani	1964	A ^{*****} (Five Star)

3.2.1 Banasthali Vidhyapith (Grade-A)

The Banasthali Vidhyapith was established originally in 1935 and become a deemed university in 1983. It is a special university dedicated to women. It is a unitary university with a school , certificate, diploma UG and PG degree programmes and M.Phil and Ph.D programmes offered under its umbrella. Spread over 610 acres of land. it has 19 departments with 23 post graduate courses, 19 Ph.D., 2 M. Phil., 3 Postgraduate Diploma, 7 Diploma, and 10 Certificate courses. There are 196 permanent faculty members, of whom, 125 have only the Master's Degree, while 57 have Ph.D. and 14 have M. Phil. In

addition, there are 20 temporary teachers, of whom, one is part time and 17 of those 20 have a Master's Degree. Two-thirds of the Faculty are women.

The total number of students in the undergraduate programme is 1, 159, of whom, 723 are from other states, 60 are NRI's and 3 are from overseas (presumably foreign students), while 373 are from the same state. Similarly, in the post graduate programme, there are 913 students, of whom, 467 students are from other States, 133 are NRI's, and one student is from overseas, while students from the same state are 312. The total enrolment in the UG/PG degree programmes is 2,072. There are 53 Ph. D. scholars from the same state and 28 from other states, and 9 M. Phil. scholars from the same state. There are no post doctoral fellows. Among the self financing courses, there are 689 students, of whom, 374 students are from other states, 190 from the same state and 134 NRI students (almost 24%). Interestingly, as some of the departments offer certificate and diploma courses, there are 1,199 students enrolled which is practically one third of the total student enrolment. Here again, students from other states are in a majority of 803, while students from the same state are 382 and 14 are NRI students.

Note: All figures indicated are as on the date of Assessment and not current.

The fact that students are attracted from other parts of the country in substantial numbers, speaks well of the curriculum and programme of the university. The largest enrolments are in programmes, which have an employment potential, while the traditional humanities and social sciences draw fewer students. The university proposes to develop some more employment-oriented courses in frontier areas. However, research projects and consultancy assignments are few. It has shown adherence to the academic Calendar and the number of working days are more than those stipulated by the UGC. It also has proposed the need for some infrastructure development. It has an auditorium, gymnasium, swimming pool, various play fields (hockey, volley ball, basket ball, tennis), indoor games, facilities for tennis and badminton, horse riding, and an airstrip for courses in flying and gliding. It has 11 hostels for the university students and 5 for the school, while it has 220 staff quarters for all levels of staff. There is one hostel for working women. The Campus is self sufficient with a market, and a post office. Local buses pave to it along with their own to the local Station. It has a Central Library with a few departmental libraries. There is Campus Networking and connection with INFLIBNET (UGC).

The Vidyapeeth has General Council, Executive Council, Finance Committee and Academic Council to oversee the various activities and functioning of the University. The Executive Council is the executive body and takes all policy decisions.

Some salient features are listed below

- ∅ The institution has widened opportunity for higher education of women even in cases where they may not otherwise have had access.
- ∅ The institution has been developing and offering new courses in frontier areas to women and seeks to do so also in the future.
- ∅ It offers dual honors and facility to take a vocational course along with the degree enrolled for. It also has three foundation courses.
- ∅ Its statutory procedures facilitate changes to be implemented in the curriculum in the following year in which these are initiated.
- ∅ There is full utilization of the infrastructure with a number of course offerings by the department. A unique feature is the offer of certificate and diploma programmes which a student can take parallel to the degree and learn skills in an area of interest such as music, dance, computers, textile designing and flying.
- ∅ Being residential, it gives full scope for student participation in curricular and extra/co-curricular activities, and attracts students from all over the country, who are proportionately greater than the students from the same state.
- ∅ The institution offers many opportunities for games and creative activities and attempts to make up for its remoteness from the city of Jaipur by offering programmes on campus, including films.
- ∅ It has campus-wide events that make for togetherness, development of institutional identity and teamwork.
- ∅ It acknowledges that, while it is unable to include all its objectives (physical, practical, aesthetic, moral and intellectual) in the curriculum, it attempts to do so through its extra/co-curricular activities in which a majority of students participate.
- ∅ In the last two years the success rate in all courses is almost 100% and dropout rate is negligible.

- ∅ There is considerable infrastructure development.
- ∅ There is adherence to the academic Calendar in terms of the number of working days and examination schedule.
- ∅ There is a conscious attempt to provide opportunities usually reserved for men such as through swimming, horse riding and flying/gliding.
- ∅ The outcome reported is that is a change in the personality of the students from the time they enter to the time that they leave the institution as a result of the campus living and the opportunities to which they are exposed.
- ∅ The Vidyapeeth has both annual and semester system, the latter has been introduced in PG science courses and programmes.
- ∅ The evaluation system has 20 % internal or continuous evaluation. It is a positive step.
- ∅ The institution has a very conducive atmosphere for the all round development including a warm and nurturing human environment.

3.2.2. Janardan Rai Nagar Rajasthan Vidyapeeth (Grade B++)

The Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed) University (JRNRVU), founded on August 21st 1937 by late Pundit Janardan Rai Nagar, was granted the status of Deemed University by the Government of India and UGC in 1987. It was one of the institutions that came into existence to realize the great dream of Gandhiji and other leaders of a national education that will spearhead the birth of a free, vibrant, literate, egalitarian India.

The institution was initially established with the broad objective of promoting education through its adult and continuing education programmes with special focus on the rural and tribal under-privileged, besides preserving and promoting Hindi, local arts, culture and literature, including those of the many tribal communities of Rajasthan. The University developed a network of more than 50 institutes all over Rajasthan particularly in Udaipur city and its surroundings like Jadol, Dabok and Hatundi of Ajmer.

The University is located in Udaipur. It is spread over 26.50 acres of land. Satellite campuses are located in three different places. The city campus has an area of 4.41 acres and the Dabok Campus has 64.31 acres. The University has 113 permanent teachers, and 16 on contract and 3 on part time basis. 71 percent of the teachers have Ph. D. degree and 3 percent of the teachers have M. Phil

degree and 27 percent of them have postgraduate degrees. The University has 229 employees on its pay roll as administrative staff along with 30 technical staff.

The total number of students enrolled at the UG level is 2347 with 35 of them belonging to other states and 29 of them are overseas students. 412 students are pursuing PG courses in different disciplines. 204 students are engaged in doctoral research programmes. The University has also initiated various certificate and diploma programmes. There are 240 students pursuing self-financing PG courses.

In the traditional courses the percentage of women's enrollment is low as they go to women's college in Udaipur. The ratio is better in self-financing, diploma and certificate courses. The total number of students in the University is 3388. The unit cost of education is Rs. 4701. The University follow the annual system for under graduate programmes and semester system for some post graduate programmes. The other postgraduate departments are preparing to switch over to the semester pattern in the near future. Very few students have qualified in NET, CSIR, SLET and JRF. The University functions for 245 days of which teaching days are 190. The library remains open for 6 days a week. The library houses 1.3 lac titles. It subscribes to 88 national journals, 10 foreign journals, 25 national and 2 international periodicals. There are 140 computers available for the faculty and the students. It has also Internet facility. The University is yet to computerize the library, administration and examinations office.

The Rajasthan Vidyapeeth, established its presence as a powerful institutions of effectively social intervention in the entire vast regions of southern. Rajasthan before it transformed itself into a deemed University. In such an unusual process, it has had very few models to emulate. It has been experimenting with integrating its rich experiential fieldwork with curricular content, with varying degrees of success. It is a groping that is still going on.

Note: All figures indicated are as on the date of Assessment and not current.

Some salient features are listed below:-

- Ø The University administration has four major bodies to carry out its academic and administrative functions namely, Ritvika (Board of Management), Vidhya Parishad (Academic Council) Arth Niyamika (Finance Committee) and Pranayan (Board of Studies) with independent powers and responsibilities.

- 0 The University practices participatory management and adopts transparent academic and administrative plans. Transparency is ensured at every level as the decisions are taken after a thorough discussion at the various units of the University. As per the suggestions received in the meetings, the plans are implemented or modified.
- 0 The Peer Team feels that the University has made attempts to update itself in both curricular aspects and administrative functioning.
- 0 The University has stabilized the outreach programme through adequate infrastructure and organization measures. It has been able to improve the socio, cultural, educational and economic aspects of the tribal communities. The University has been able to mobilize resources from various governmental organizations on behalf of the tribals.
- 0 Certain Post Graduate departments like Sociology, Economics and Geography have made a mark in the field of research. They have also moved towards the semester system in education. In these departments, the staff is committed towards the development of the students. The number of Research Scholars in the University is commendable. The Institute of Rajasthan Studies has contributed towards the development of Rajasthan Culture through its excavations and publications.
- 0 The University has introduced a number of self financing degree, diploma and certificate courses. These courses, apart from making the University relevant, have given a certain financial stability to the University. Several new courses are also introduced by the departments.
- 0 The infrastructural facilities like building and sports facilities have improved. The teaching and non-teaching staffs have several welfare measures/schemes.
- 0 The participative management has introduced transparency to administration. This gives a sense of belonging to the staff. The various academic bodies help to improve the academic standard and update the curricula.
- 0 The University encourages sports persons by offering them scholarships and other incentives. Deserving students are given scholarships. It has a tie-up with national and international institutions.

- Ø The University has the potential to develop further as a deemed University of repute with its own unique character.

3.2.3 Jain Vishva Bharati, Ladnu (Grade-B)

Jain Vishva Bharati Institute (JVBI) was established in 1991 with the inspiration of Late Acharya Tulsi, a great saint and preceptor of Anuvrat for bringing about the moral transformation of the society. It was built on the ideals of Lord Mahavir saying "Nanassa Saram Ayaro". (The essence of Knowledge is right conduct) and this is also the spiritual motto of the Institute.

Jain Vishva Bharati Institute is aimed to integrate academic knowledge and its application for evolving a new social pattern based on non-violence and peace.

The primary objective of the Institute is to carry out research, teaching, training and extensive knowledge in the field of oriental learning, culture and other related subjects. It also conducts research on ethics of Preksha Meditation and on diseases caused by emotion and tension in collaboration with All India Institute of Medical Science (AIIMS) under Jeevan Vigyan Academy, Delhi. Anushasta (Preceptor) is the statutory position of the Institute who is empowered to discipline the institute spiritually and morally. Acharya Tulsi was the first Anushasta of Jain Vishva Bharati Institute and at present Acharya Mahaprajna is patronizing this status.

The institute is located at Ladnun, a small rural town of Nagaur district of Rajasthan, 220 Kms. North-West of Jaipur and 380 Kms. West of Delhi. This institute is a reflection of cherished aspiration of Jain Vidya. To realize the vast and profound body of philosophic and scientific knowledge of Jain Agams, the institute is engaged in academic teaching as well as in character building through inculcation of ethics and spiritual values. The institute has a treasure of rare manuscripts.

The institute strives to synthesize spiritual orientation with scientific outlook, propogating yoga and meditation through its extension services and organizes training camps, courses in Non-violence & Peace and Science of Living; Preksha Meditation.

The Institute receives development assistance from University Grants Commission. The remaining expenditure is met through generous donations and fee earned from conduct of various courses. No tuition fee is charged in non conventional departments like Jainology, Prakrit, Non-violence and Science

of living. However, a tuition fee of Rs. 600 per month is charged for conventional courses. The Institute tries to make up the inadequacies from time to time and undertakes innovative practices to rectify the situation. The activities of the Jain Vishva Bharati Institute are carried out through 5 independent departments:

1. Department of Jainology and Comparative Religion & Philosophy
2. Department of Prakrit and Jain Agama
3. Department of Science of Living; Preksha Meditation and Yoga
4. Department of Non-violence and Peace
5. Department of Social Work

Knowledge is imparted through classroom learning and practical training in both graduate and post graduate programmes. Research is carried out with reference to original texts in Prakrit and Sanskrit. A Research body Mahadeolal Saraogi Anekant Shodhpeeth also functions in the University. The Distance Education Programme of the University attracts students from all over the country. The University's Acharya Kalu Kanya Mahavidyala offers graduate programmes. Besides faculty members, monks, nuns, laynuns have dedicated their life to the pursuit of knowledge. This is an additional strength of the institute.

The Organizational structure of Jain Vishva Bharati Institute comprises of Prabandh Mandal (Board of Management), Vitta Samiti (Finance Committee), Vidya Parishad (Academic Council), Planning and Steering Committee, and Shist Parishad (Senate).

Some other Distinct Features:-

- Ø Despite being located in a rural area, the institute is making efforts to bring Jainology and related studies into focus for the understanding of common man.
- Ø The institute is closely connected with local communities through social work and extension programmes.
- Ø The institute's faculty members are doing an appreciable quality of research in the areas of Jainology and Inological comparative studies, multi-disciplinary research in science of living with medicine, physiology and psychology.
- Ø The distance education division has been effectively conducting UG, PG and Certificate programmes since 1998-99. The number of students

progressively increased from 301 to 1657 and the examination centre from 12 to 132 all over India.

- 0 The Institute has a very peaceful Gurukul atmosphere and infrastructure facilities. Facilities are good and sufficient enough for further extension and consolidation of academic programmes.
- 0 There is a sense of belongingness and satisfaction of mutual trust among teachers, students and staff.
- 0 The institute has developed rain-water harvesting to cope with the water scarcity and potable water.
- 0 A very good number of students are regularly qualifying the UGC JRF examination.
- 0 The Delhi centre of Jain Vishva Bharati Institute has been actively functioning and collaborating in conducting several training programmes on non-violence and peace, preksha meditation and yoga and Scientific research in preksha meditation.
- 0 The institutions efforts to improve the functioning and management of the organization includes restructuring of correspondence courses with effect from 1997, computerized management of accounts, intercom facility, establishment of V-SAT, library automation and organization of sectional/ departmental meetings.

Note: All figures indicated are as on the date of Assessment and not current.

3.2.4 Birla Institute of Technology, Pilani (Grade-Five Star)

The Birla Institute of Technology and Science, Pilani, is an all India Institute for higher education deemed to be a University. It is privately supported, fully residential and admits both men and women students. The BITS Campus is very well planned and spread over 328 acres of land. It is about 200 kilometers away from New Delhi. The Institute is headed by the Director assisted by two Deputy Directors and 12 Deans and 7 unit chiefs, coordinating all the functional activities of the University.

The Institute offers educational programmes at 3-tiers viz. Ph. D., Master degree Programmes and first degree programmes in 17 disciplines mostly in Engineering & Technology on campus and also programmes relevant to industry needs in

off campus as distance learning and collaborative programmes. Areas like Power Engineering, Software Engineering, Nautical Sciences, Optometry, Project Engineering, Chemical Technology, Medical Laboratory Technology, Microelectronics are unique and first of their kind, imparted through this mode of education. There are 3187 students, 284 teaching staff and 353 non-teaching staff in the campus. The Institute also has 193 adjunct faculty and 3684 students' off-campus courses.

Some Distinct Features

- Ø BITS has a very strong teaching organization. Students, after they are admitted, are attached to a counselor who evaluates the students' needs and recommends courses. These courses will include remedial courses, if needed, as well as new courses. The highlight of BITS teaching is that a student is allowed a wide choice of courses as well as a choice of instructor.
- Ø A variety of teaching aids are available to the faculty, like audio visual instruments (overhead projectors, movies film projectors, video tape recorders, some of which are computer driven). The faculty develops the material for these audio-visual aids.
- Ø Computer based instruction programmes for some courses are also available to students. The Institute has introduced modern ways of engineering design and manufacturing (CAD-CAM).
- Ø A highlight at BITS is the Practice School. Through this programme students get hands-on training in real life situations. Many students find employment through this process.
- Ø The Industry-Institute interaction, the success achieved in Practice School is commendable.
- Ø The peer team observed that on the whole industry-institution interaction has been impressive.
- Ø The students have periodic tests, quizzes and seminars. Letter grades are given on the basis of performance. A cumulative grade point average (CGPA) for all the courses is worked out based on the grades of all the tests and quizzed.
- Ø The performance of teachers is evaluated by feedback from students (which is obtained by marking by students on sheets given), and by getting self

evaluation reports. This material is examined and suggestions are made to the teacher, apart from using it for promotion and renewal of the contract.

- 0 The Institute encourages technical staff to get advanced training by offering various Diploma/Certificate courses. These include programmes in Computer Applications, Instrument Servicing and Maintenance and Workshop Technology.
- 0 Research work at BITS, Pilani is through the Master's and Ph. D. programmes and through the sponsored projects funded by outside agencies. The output is reported through publications in national and international conferences and journal publications.
- 0 Faculty development of the Institute is facilitated by allowing the Master's degree holders to do Ph. D. opportunities also are given to faculty members to carry our research at a centre outside BITS in India or abroad. Currently institutional arrangements exist with CDRI, Lucknow, ITRC, Lucknow, USUHS, Bethesda, Maryland.
- 0 Off-campus Ph. D. under Ph. D. aspirants' scheme has been popular. Organizations like NPL, New Delhi, CEERI, Pilani, SPIC, Chennai, INSDOC, New Dehli, Institute of Pathology, ICMR, New Delhi and ITRC, Lucknow are providing such opportunities.
- 0 The main library has over 2,00,000 volumes and subscribes 500 periodicals. The library is interconnected with other libraries for information at the national level. Other facilities include INFLIBNET, satellite library facilities to the students and faculty at practice school station and INSDOC document supply etc. are available at the library. Library provides email facility to all faculty and students. Internet facility is also available at the library.
- 0 The Institute has gone in a major way for updating their computer facilities. The computer centre is built around two servers one is Proliant 5000 with two Pentium Pro 166 MHz CPU, 10 GB Hard disk, 256 MB RAM and 4/8 GB DAT and other Infinity super server with 4 Pentium pro 200 MHz CPU, 256 MB RAM, 10 GB Hard disk, 4/8 GB DAT. More than 170 Pentium machines are connected to the two serves which can be operated both on the UNIX as well as NT Windows platforms. The Institute has provided adequate computing facilities to all the students, faculty and the staff in a cost effective manner. The entire administration, accounts and academic activities and the admission process are all computerized. Maintenance of

computers is effectively carried out by in house staff. Lot of software packages are developed by the students and faculty of the Institute.

- 0 The Institute has fairly adequate laboratory facilities. Additionally, the Practice School provides excellent opportunities for the students to carryout work at various industries and R & D laboratories.
- 0 The Institute provides excellent health services at its medical centre, where a doctor is available on 24 hours basis for any emergency. Health checkup is compulsory for students at the time of admission. Health club provides all modern amenities.
- 0 Institute also has gymnasium with facilities of football, hockey, cricket, basketball, volleyball, tennis, badminton, table tennis, athletics, gymnastics, etc.
- 0 The peer team noted that infrastructure and learning resources are fairly satisfactory.
- 0 Institute published prospectus every year during the month of May. The admission process is highly streamlined and admissions are given only on the basis of merit. The Institute admits students from all over the country and cut-off percentage is minimum 96% (normalized) for the students who have passed 10+2 examination. The entire process is transparent.
- 0 Dropout rate is around 1.5% and this too within the first two months only. There is no dropout thereafter.
- 0 The Institute offers merit scholarships (100% tuition fee) to top 10 students each semester, additionally merit-cum-need (50% and 25% tuition fee) for 10% students in each category.
- 0 Institute Placement Officer arranges for campus interviews. Last year nearly 300 to 400 students got employment through placement services.
- 0 The Institute has a fairly active alumni association with its chapters located at different cities in India and abroad.
- 0 Students while studying at the Institute are provided with career counseling.
- 0 The organizational structure of the Institute is based on the functional activities rather than the departmental structures.
- 0 The ratio of faculty to supporting staff is close to 1:1, which speaks for the efficiency of the administrative system.

- Ø The Institute is generating and augmenting its resources through off-campus academic programmes.
- Ø The students are motivated and faculty and staff are dedicated to their work. Together the faculty, staff and students are working to bring excellence in their chosen activities and creating a congenial academic atmosphere on the campus.

Out standing Qualitative Features

- Ø Modular curricula and flexibility.
- Ø Integrated Science and Technology programmes. Integrated master degree and dual degree in Science and Engineering.
- Ø Continuous Evaluation and Counselling
- Ø The linkage of BITS to Industry is very strong. This is provided by Practice School Programme, Consultancy, Carrying out Projects financed by companies.
- Ø The distance learning (off-campus) Programme is an innovation.
- Ø Computer usage is extensive in all activities of the campus. Students and faculty have access to email and internet.
- Ø Established centre in new emerging areas and creates programmes to suit the needs of society.

Note: All figures indicated are as on the date of Assessment and not current.

3.3 Accredited Colleges

As on February 2008 , 99 colleges have been assessed and accredited. Four among these were Teacher's Training /Education Colleges. Almost all the Colleges are PG Colleges and they are affiliated to different Universities (Table 1.11) in the State. As noted in Table 1.12, only 07 colleges are in the range of A grade, 58 colleges are in the range of B grade, 35 colleges are in the range of C grade. 68 accredited colleges are government colleges receiving 100% funding from the government, 15 colleges are private colleges receiving partial funding from the government and only one college is self financed college, which is women's college located in Jaipur and accredited with A+ grade. None of the accredited colleges is autonomous. It is hoped that a qualitative analysis of the

PTR's of these accredited colleges, would throw light on broad features of the college sector in the state.

Some common distinct feature of Liberal Education Colleges

Criterion I: Curricular Aspect

- ∅ Most of the accredited colleges offer both UG and PG Courses and are affiliated to different universities (Table 1.11).
- ∅ All colleges are catering to local higher education needs
- ∅ To a great extent Colleges follow syllabi prescribed by the affiliating universities, and they have neither the freedom to restructure them nor to review them at chosen intervals. However the colleges have the freedom to integrate the modern and most recent trends and developments in their transaction.
- ∅ Senior teachers of the colleges are invited / nominated as the members of Board of Studies in their respective universities enabling their individual contribution and that of their colleagues for review of curriculum.
- ∅ The temporal pattern of the academic work in colleges is mostly annual, however in professional courses like MCA, BCA, etc. it is semester pattern.
- ∅ At UG level options are most limited in UG programmes in commerce stream, but in general fairly wide options are available in other two streams (Arts & Science), which of course again vary from college to college. Some like International College for Girls, which in newly set up self financing women's college, has large array of options (vocational 08 subjects and academic 20 subjects) at UG level and a few others have extremely limited options.
- ∅ Apart from conventional course pattern, the last decade has witnessed quite some initiative on the part of colleges in introducing self-financing courses such as BBA, BCA, MCA, M.Sc. (Computer Science), etc.. The institutes also actively took initiative in introducing UGC sponsored first degree vocational courses like Garment Production and Export Management and Advertising, Bio-technology, B.com. Computer application, Taxation etc.,. Some have introduced short term self-financing certificate courses with a vocational component which student can pursue along with their regular programme and other add on programmes.

- ∅ At undergraduate level, in the first year, a compulsory course of Computer Science and Environment studies have been introduced matching the National needs and policies of the governments.
- ∅ There is no mechanism evolved to have responses from academic peers and employers for review and re-designing of programmes

Criteria II: Teaching Learning and Evaluation

- ∅ Admissions to various courses of studies in the colleges are through a transparent admission process based on the qualifying examination record and in accordance with the Rules and Regulation of the State Government and the concerned University.
- ∅ Lecture method is the popular mode of teaching in colleges. The Peer Teams felt that modern audio-visual tools need to be used more in the colleges, in order to make teaching more effective to the students. Some colleges, have a provision for experiential learning to a limited extent which the teams felt need to be extended to all disciplines and colleges.
- ∅ The stipulated minimum number of working and teaching days is adhered to in all the colleges and no major breakdown or dislocation has been observed in the recent decade. Some colleges have reported fewer teaching days (M.S. college, Bikaner 160-171 days, Govt. college, Suratgrah 150 days, for example), but this is not a general phenomenon.
- ∅ The over all attendance of the students in classes is not satisfactory particularly in co-education colleges. Colleges need to look at innovative practices and evolve ways and means to attract and retain students in the classrooms.
- ∅ Teachers are recruited according to UGC and State Govt. norms, in private colleges, but it is through Rajasthan Public Service Commission for Government colleges. Several posts have been found to be vacant in many colleges. Colleges not only suffer from dearth of sanctioned posts and availability of staff but also of financial resources. The private colleges could appoint part-time or full-time teachers on their own but adopting approved procedures. No such powers are given to Govt. colleges to appoint part-time or ad-hoc teaching staff.
- ∅ Almost all the teachers are qualified and have Ph. D / M. Phil. degree. Teacher are encouraged and allowed to attend Orientation and Refresher courses

conducted by UGC Academic Staff Colleges for their knowledge up-gradation and for eligibility to earn selection grades.

- ∅ There is a system of self-appraisal method to evaluate the performance of the faculty. The examination results of students are also considerate for teachers evaluation. In Govt. Colleges, Principal writes ACRs of the teachers.
- ∅ Some colleges (Women colleges and small colleges) follow continuous evaluation of learning through periodic class tests and pre-university examination system. At ICG, Jaipur continuous evaluation is followed by constant information flow to parents on progress/ short comings of their wards.

Criterion III: Research, Consultancy and Extension

- ∅ As noted earlier majority of the teachers hold Ph.D. degree and they have research background. Very few teachers are involved in active research due to lack of research facilities.
- ∅ The colleges provide the study leave as per norms of UGC under Faculty Improvement Programmes and Teacher Fellowship Schemes.
- ∅ The research publications / book publications, etc. varies from college to college. In some colleges the faculty gets management support in their efforts towards publication and in some no such facility exists. Fairly good number of teachers undertake(n) the minor research projects with the assistance of the UGC. Some have major research projects either from the UGC or from other funding agencies. Research culture seems to be spreading in even the new emerging colleges.
- ∅ Some of the colleges are proactive in obtaining research grants/projects . For example S.S. Jain Subodh College has 13 ongoing research projects with an outlay of Rs. 49.84 lacs. At SGK Khalsa P.G. College, Sriganganar, more than 25 Ph.D. have been awarded to the students during last 5 years. At BSR Govt. Arts College, Alwar, many teachers are approved to act as supervisors at Ph.D. level.
- ∅ The colleges in general do not publicises the expertise available for consultancy service and hardly in any college consultancy work have been undertaken by any of the teachers.
- ∅ A few colleges have linkages with National and International institutions

- Ø Most of the colleges are providing extension service (quantum vary from college to college) like adult education and literacy, outreach activities, health and hygiene awareness, environmental awareness, AIDS awareness, etc. through NSS and NCC programmes. Blood donation and Pulse Polio Camps have also been organized. Many of the colleges have temporary tie-up with various NGO's and Government organizations as a part of their outreach efforts. In some colleges regular extension lectures are also arranged.

Criterion IV : Infrastructure and Learning Resources

- Ø There is a range of land area (5-100 acres) and built up space available in the colleges.
- Ø Most of the colleges in grade range of A and B are having fairly good number of classrooms, laboratories, central library, computer centre / room, etc. At ICG there are as many as 50 class rooms and 25 laboratories.
- Ø The building and other civil infrastructure facilities of Govt. Colleges are maintained by the state PWD. In aided colleges management looks after the maintenance of the infrastructure. The Peer Teams have noted that in most cases, the college buildings are well maintained.
- Ø Libraries also vary in size. Most of the colleges have build up a sizable stock, older the college, more the number of books. There are colleges which have reprographic, internet and computers facilities in library and other are trying best to have them. Computerization of the library seems to be gaining momentum and extent of computerization varied from partial to total automation. Most of the colleges have a book-bank facility for the disadvantaged students.
- Ø Peer Teams have noted that only few colleges have a central computer centre/ facility with internet facilities . However most of the colleges are in the process of doing so.
- Ø Some of the colleges optimize the utilization of their infrastructure by accommodating IGNOU and VMOLU, Kota centres.
- Ø In most of the colleges facilities like hostel, guest house, canteen, recreation club, seminar hall, etc. are not available. There are few colleges which have their own auditorium and swimming pool facilities.
- Ø The colleges have facilities for outdoor and indoor games, but they vary largely from college to college.

Criterion V : Student Support and Progression

- Ø Almost all colleges bring out an updated prospectus every year. It provides clear information to students about admission and completion requirements for all programmes, the fee structure, and financial aid and student support services. Some of the colleges also, have their own website.
- Ø In most of the colleges students are from nearby region, but by and large the student profiles reflects diversity with students population from all economic, social strata and geographies i.e. urban and rural areas.
- Ø The dropout rate varies from college to college. It is on the higher side in women and semi-urban colleges. The pass percentages also vary from college to college and year to year in colleges, but it is usually better than average university pass percentage (as it include private students). For upward mobility of the students some of the colleges have started self-financing PG courses.
- Ø Extra curricular activities are enthusiastically pursued in all colleges, but vary in quantity and quality from college to college.
- Ø All colleges regularly organise sports and cultural competitions both intercollegiate and inter University events. These events include debates, essay writing, music, painting and variety of sports and games, which contribute to the overall personality development of the students. NSS and NCC activities are geared towards community development and understanding the rural masses.
- Ø Academic counseling has been existence for a long time in an unstructured way in almost all the colleges, but career and employment guidance was seldom available. At present most of the colleges have established Career counseling and Guidance cells/ Placement cells.
- Ø Health care facilities are minimal in most of the colleges, but are being enhanced.
- Ø The concept of an alumni association and its role and partnership in the development plans of the college is gradually beginning to be accepted. Therefore, most of the colleges have recently formed alumni association. There are examples where individual alumni has donated large amounts for the development of the college.

Criterion VI: Organization and Management

- 0 All the government colleges are controlled and administered by the Directorate of Higher Education, Government of Rajasthan. The Principal works within the framework/parameters laid down by the Government.
- 0 All the private (aided-colleges) have the flexibility to form their governing bodies (GB) according to the provisions in the statues of the affiliating university. The governing body has members from various walks of life, including teachers, parents, persons interested in education, etc. There is also a representative of non-teaching staff, while there is no students representation prescribed in any of the administrative bodies.
- 0 The Principals, (Both Government & Private colleges) constitute various committees to assist the Principal in day-to-day administration of the college. Admission Committee, Examination Committees College Development Committee, Disciplinary Committee, Purchase Committee, etc. are found in almost all colleges. This forms the additional administrative duties of the Teachers as prescribed by the UGC and the affiliating University.
- 0 Colleges follow the academic calendar prepared by the Directorate of Higher Education/affiliating University.
- 0 The fees and funds are charged as per the directions of the Government.
- 0 The Government colleges are fully funded by the Government. The Government provides the budget and also takes care of any deficit. In private colleges management takes the care of the deficit.
- 0 In all colleges there is an internal and external audit mechanism to keep check on financial spending. Some colleges have taken initiative for resources generation.
- 0 Some private colleges have a Grievance Redressal Committee for the staff and students. The Grievance of the staff of Government Colleges are addressed as per the Government rules.
- 0 The welfare measures for the staff employed in Government colleges are as per the welfare measures prescribed by the Government. In case of private colleges the welfare measures are governed by those prescribed by the Managements which mainly consist of soft loans for housing, vehicle purchase etc.

Quality Enhancement – Critical Issues and Action Points

From the qualitative and quantitative analysis, irrespective of the type of the institution which has undergone assessment and accreditation, the following critical issues under each criterion have emerged. These need to be addressed in due course of time by the stakeholders of higher education and it is imperative to all institutions to design a time-bound perspective action plan and its implementation. A suggestive framework is discussed which could serve as a model.

4.1 Criterion-wise Critical Issues & Action Points

4.1.1 Criterion I : Curricular Aspects :

- ∅ Mission and goal statement need to be updated / reformulated, reflecting the core values (outlined below) in the changing context.
 - | Contributing to National Development
 - | Fostering Global Competencies among students
 - | Inculcating a value system in students
 - | Promoting the Use of Technology and
 - | Quest for Excellence.
- ∅ There is a need for planned periodic review of curriculum / developing appropriate curriculum, through a need assessment process and consultation with expert groups and teachers based on the feedback from the stakeholders.
- ∅ Institutions of liberal education may be encouraged to introduce short term courses-which encourage entrepreneurship and employability which the students may take up along with their main streams of study. At present only few institutions are providing (mostly self financing) such a facility.
- ∅ Academic flexibility is lacking. It is to be introduced in curriculum offering and curriculum transaction in form of modular curricula / semester system / choice-based credit system / increased range of programme options, etc.
- ∅ Autonomy may be provided to selected colleges.

4.1.2 Criterion II : Teaching –Learning and Evaluation

- Ø Admissions to various courses /Programmes in the institutions are based on qualifying examination marks / entrance examination marks and in accordance with the rules and regulations based on the State Government and the University. In spite of this admitted students are from diverse back grounds and differ in standards. Therefore, it becomes imperative for the institutions to provide additional academic support to educationally disadvantaged students and encourage advanced learning to use the internet, project work etc. Tutorial system may be introduced to develop a healthy teacher taught relationship in the institutions.
- Ø Curriculum transaction is mainly by the lecture method (teacher centered). Teaching-learning processes must be made more student centered and interactive with the use of modern teaching aids and ICTs. The entire process should shed its passivity and become more learner-centered.
- Ø Majority of institutions have to develop and implement formal student feedback mechanisms covering feedback on course, faculty, infrastructure, learning facilities etc. and output utilized to augment the quality of teaching-learning experiences.
- Ø Necessary initiatives may be taken by the universities to introduce semester system in all UG and PG courses. It will ensure to some extent continuous evaluation and remedial process to weaker students.
- Ø Timely recruitment of qualified teachers to be ensured, which is not at present. There is urgent need to fill vacant posts and reduce guest faculty dependence.

4.1.3 Criterion III : Research, Consultancy and Extension

- Ø Though a high percentage of teachers have the research degree as the highest qualification, the research culture is not prevalent, leaving few colleges of long standing. Research Committees may be setup and more efforts be made to get minor and major research projects from various agencies like UGC, DBT, DST, SCIR, CSIR, etc., to establish linkages with national and international agencies and for resource generation. The PT's have suggested for allocation of seed money and creation of corpus thereby creating research ambience.

- Ø Consultancy is hardly evident and industry academia linkage is yet to be initiated. This should be given its due attention immediately.
- Ø Good number of teachers in universities and colleges are publishing text books / other books.
- Ø Extension and socially meaningful outreach activities are very much on the agenda of most of the institutions. It is however limited to NSS / NCC activities. It is suggested that attempt be made where ever possible in relating subject matters to current and locally relevant issues benefiting the local community developmental needs. For extension activities linkages with the NGO's both local and National is desirable.
- Ø Very few faculty members are members of professional bodies. Faculty should be encouraged to be active members of the respective professional and academic bodies and contribute to the profession.

4.1.4 Criterion IV : Infrastructure and Learning Resources

- Ø The general infrastructural facilities in most of the institutions are satisfactory, however considering the changing need of upcoming career oriented / vocational / new emerging frontline courses and changing student's needs it is imperative for continuous upgrading of the facilities.
- Ø Central library facilities (resources / space / repography / internet) in most of the colleges need to be augmented. Computer and internet facility be made available and accessible to both staff and students. It would be desirable of weeding of the old and unused textbooks and inclusion of latest books/ editions and subscribe for more standard journals. Computerisation of library and other services must be on the agenda of all the institution, which is at present only sporadic and limited to some institutions.
- Ø Hostel facilities for students, particularly for girls need expansion / provision made. UGC and other agencies support may be sought for the same.
- Ø Sports facilities are to be increased and strengthened in many colleges.

4.1.5 Criterion V : Student Support and Progression

- Ø A functional career guidance / placement cell and counseling services are to be established with trained faculty wherever required.

- Ø Campus interviews are to be organized wherever possible.
- Ø Linkages with local industries are to be established for hands-on-training and also for facilitating future employment/self-employment/entrepreneurship.
- Ø In the wake of globalization and the changing requirements of the knowledge society there is a need to organize soft-skills and communication skills development programmes for students.
- Ø Parent-teachers associations and Alumni associations are to be established in institutions not having them, where ever they exist, their contribution towards the growth of the institution need to be increased.
- Ø The academic support to academically weaker students should be augmented. More innovations need to be made with reference to teaching.
- Ø Access to Computing and Internet facilities needs improvement.

4.1.6 Criterion VI: Organization and Management

- Ø The higher education institutions in Rajasthan are largely controlled by the state Government rules and regulation. Many of the powers controlled centrally may be delegated to the college Principals. Overall autonomy to certain extent is needed for more effective governance for encouraging participation of all the institutional members and for ensuring transparency.
- Ø Peer Teams' have noted the immediate need for recruitment of teaching staff both as a measure to fill vacant posts as well as new posts to be sanctioned.
- Ø Greater need to mobilise resources and create corpus funds.
- Ø There is need of rethinking at all levels to rationalise existing fee structure.
- Ø Quality management may be existing as an informal mechanism on many campuses but in the present context, and as advised by NAAC it is required to have a formal Internal Quality Assurance cell/ mechanism.

Criterion VII : Healthy Practices

- Ø Through limited, extension and co-curricular activities, organized mostly through NSS and NCC units of the colleges are focused towards community needs and student orientation to contribute to the society. The activities

had a certain impact on inculcating civil responsibilities and in creating enthusiasm and zeal among student populations.

- ∅ In most of the institutions principal and faculty are actively involved in various committees, which are formed in the beginning of every academic year, and play major role in smooth functioning and development of the institutions.
- ∅ In view of the success stories of Vidhyalaya Vikas Samities formed in some of the government colleges, Government of Rajasthan is considering to handover the college administration to the Vidhyalaya Vikas Samities.
- ∅ Computer Science and environment studies have been introduced as compulsory subjects in all streams of education at UG level.
- ∅ In many of the colleges teachers are encouraged to participate in Seminars/ Conferences/ Workshops, etc.
- ∅ The process of students admission is transparent and follows a time bound schedule.
- ∅ Reaching out to the un-reached has been the objective of the colleges specifically Government and Aided for which the colleges have a low fee structure and ensures equity by implementing the reservation policies.
- ∅ Value education is emphasized through teacher-interaction. Few colleges which are graded at a good level have taken steps to promote an ambience of creativity and innovation. S.S. Jain Subodh College, Jaipur, Sohia College, Ajmer, Lachoo Memorial College of Science and Technology Jodhpur are some examples. Most of the accredited college in Rajasthan are proactive in providing quality higher education to masses and strive for quality enhancement on a continual basis.

4.2 Recommendations to Various Stakeholders

In this section an attempt is made to arrive at some recommendations for various stake holders based on criterion-wise critical issues and action points discussed in Section 4.1.

4.2.1 Universities and Colleges

A Establishment of Internal Quality Assurance Cell (IQAC)

All the institutions may establish IQAC as per guidelines of NAAC for constant monitoring of the Quality Initiatives and ensuring their sustainability. For quality enhancement, special programmes should be conducted by institutions and co-ordinators of IQAC Cells of the institutions. The cell at University may develop a model Act for affiliating colleges and regulations for co-ordinating the activities. Overall capacity building for staff in quality assurance should be taken up immediately and all the institutions networked for sharing their experiences. A platform should be provided for sharing the Best Practices.

B Centre for Higher Education Management and Research (CHEMR)

All the universities may establish Centre for Higher Education Management and Research (CHEMR) with following objectives.

- (i) This centre may periodically revise or restructure curricula and design new courses more relevant to the needs and opportunities of a knowledge society / economy by organizing workshops, brainstorming sessions, interacting with peer groups, teacher and feedback from the stakeholders. For feedback the centre may develop the necessary tools and techniques.
- (ii) It develops a different working model for academic flexibility in curricular offering and curriculum transaction in form of modular curricula / semester system / choice base credit system / range of programme options / flexible duration allowing free movement on and off campus.
- (iii) The centre should work towards developing a working model of continuous internal assessment which becomes a part of final assessment. It could have mid-term and end-term assessment while introducing semester system / credit system. The model should be based on past experience and present needs, taking all the factors into consideration.
- (iv) It develops a model in the present context to equip universities and colleges with greater autonomy in both financial and academic matters, which is lacking at present as observed by Peer Teams.
- (v) It should provide a strong R&D base for innovative quality higher education in universities / colleges of Rajasthan.

C Recruitment of Qualified Staff

Enabling measure towards appointing regular teachers in required numbers who fulfill eligibility criteria need to be considered. Reducing dependence on guest faculty system. Peers could be invited for extension lectures for widening of mental horizon of teachers and students.

D Resource Generation and Management

- ∅ There is a need for more responsive structure of management which could provide decision making process faster, preserve autonomy and promote accountability.
- ∅ Institutions have recognized the need of resource generation and better asset management to preserve autonomy in both financial and academic matters. A critical minimum is needed to ensure standards and strategic performance to promote excellence. The following steps may be taken by institutions:
 - | Enlist the active support of their alumni, the local community and the industry.
 - | To draw up norms and parameters to use their available land as a source of finance and optimum use of present physical infrastructure.
 - | To enhance fee structure to meet at least 20 percent of the total expenditure as suggested by NKC with a condition that needy students would be provided with a fee waiver plus scholarships and low cost educational loans.
 - | To develop Universities / Institutions Private Partnership (UPP / IPP) in launching new areas of study and research which need huge capital investment and managing them effectively.
 - | Consultancy services could be a source of finance and it should be explored by the Universities and Colleges.
- ∅ In light of affiliating character of colleges, the universities may strengthen mechanism for more effective monitoring of the performance of affiliated colleges which must be transparent.
- ∅ Create two way linkage between the universities and affiliated colleges through faculty exchange programme and participatory research activities.

- ∅ Inter-disciplinary teaching and research need to be encouraged. It will mostly depend upon the restructuring of curricula by the universities as mentioned earlier.
- ∅ The elements of infrastructure that support the teaching-learning process such as libraries, laboratories and connectivity need to be monitored and upgraded on a regular basis.
- ∅ Universities in consultation with UGC and State Government can provide autonomy in terms of academics self governance (i.e. in setting of curricular and evaluation of students) to high grade accredited college or as a cluster of colleges.

4.2.2 State Government

The following recommendations / suggestions are made for consideration by the State Government as its policies and practices that essentially create a conducive environment for planned and orderly growth of the higher education sector in the state as a whole.

- ∅ Frequent transfer and inadequate faculty strength affect the quality of teaching badly. Urgent steps should therefore be taken by the Government to recruit teachers in various subjects as per the need.
- ∅ State Government should provide additional funds to enhance the ICT infrastructure in Government and aided colleges. Website and web-based services would improve transparency and accountability. A knowledge network would connect all universities and colleges of the state for online open resources.
- ∅ The criteria for resource allocation should seek to strike a much better balance between providing for salaries / pension and providing for maintenance / development / research / investment. These criteria should recognize the importance of a critical minimum to ensure standards and strategic performances to promote excellence. In sense it will provide much needed functional autonomy to the institutions.
- ∅ Principals of all affiliated colleges in the State need to be trained in educational administration by HART to provide professional and scientific direction to the leadership. A principal may held the office in particular college at least for a period of 5 years.

- Ø At state level establish state level Quality Assurance Coordination Committee for the development of Assessment and Accreditation action plan for unaccredited colleges and monitor post accreditation quality enhancement activities in colleges. The State Government may issue appropriate direction to make the functioning of IQAC more efficient and effective where exist and establish where not.
- Ø It will be step in the right direction for Government of Rajasthan to draw up a time-bound action plan for assessment and accreditation of all the colleges in the state.
- Ø The Government should accelerate the process of granting functional autonomy to selected colleges in a phased manner.
- Ø A proper mechanism may be developed by the State Government in consultation with University, NAAC and UGC for students and peer feed back on various aspects of teaching-learning, evaluation, curricular, etc..
- Ø The Government may consider measures to activate the Parent Association and Alumni Association in all colleges and issue general directives in the matter to make them more effective in all round development of the colleges. The concept of College Vikas Samiti is in correct direction.
- Ø In Government colleges, by and large, there are good number of teachers with Ph.D. degree, yet research culture is lacking. The Government may adopt the ways and means to activate these teachers to have major / minor research projects. Seed mony may be provided for preparing research proposals for funding agencies, etc..
- Ø State Government / Universities may encourage public involvement in the educational institutions to make institutions more accountable and progressive.
- Ø State Government must exploit the potential of philanthropic contributions for development of institutions by providing incentives to donors. State Government has taken some steps already as mentioned in chapter 1.
- Ø Faculty development programmes be strengthened. The establishment of HART is in right direction.

- Ø Establish a state council of Higher Education to co-ordinate and disseminate policies and best practices.
- Ø The Government may think of using the outcome of accreditation to strengthen select colleges to colleges of excellence and model colleges.

4.3 Concluding Remarks

- Ø From the quantitative and qualitative analysis of PTR's of accredited institutions of the state of Rajasthan, one could conclude that general quality index of higher education of the state is fairly good as only 9.3 percent institutions (8) are awarded C grade.
- Ø The quantitative analysis and qualitative analysis is in unison with each other. It shows the reliability and validity of NAACs' Assessment and Accreditation process.
- Ø The Government has taken appreciable proactive initiatives in higher education sector like encouraging private participation, removal of uneven distribution of colleges, upgradation of infrastructure and faculty, institutional annual review, establishing Higher Education Academy for Research and Training (HART), etc.. We hope, these initiatives coupled with outcome of accreditation by NAAC, will go a long way in enhancing quality of higher education in the state and transforming higher education system into a dynamic, flexible and diversified one for meeting the needs of the global knowledge society. However, we hope that the state of Rajasthan would maintain its own and the Nation's essential character and identity.

Annexure-1
List of Institutions of Higher Education in Rajasthan
Established before Independence

Name		Establishment year	Grade
A.	Universities		
1.	University of Rajasthan	1947	A+
B.	Colleges		
1.	Government College, Ajmer	1868	B ⁺⁺
2.	Maharaja's College, Jaipur	1873	-
3.	Jaswant College, Jodhpur	1893	-
4.	Maharana Bhupal College, Udaipur	1922	-
5.	Herbert College, Kota	1924	C ⁺⁺
6.	Dunger College, Bikener	1928	-
7.	SDP (later Govt.) College, Beawar	1929x	B ⁺⁺
8.	Birla College, Pilani (now Deemed University)	1929x	A ^{*****}
9.	Raja Rishi College, Alwar	1930	B
10.	Maharani Shri Jaya College, Bharatpur	1941	B ⁺
11.	G.B. Podar College, Nawalgarh	1941x	-
12.	Maharani's College, (Women), Jaipur	1944	-
13.	SKN Rajput College, Jobner	1944	-
14.	SSG Pareek College, Jaipur	1945x	-
15.	Hadenra College, Bundi	1945	B ⁺
16.	Lohia College, Churu	1945	B ⁺
17.	Rampurja Jain College, Bikaner	1945x	-
18.	Rajendra College, Jalawar	1946	-
19.	MS Colleges for Women, Bikener	1946	B ⁺⁺
20.	Government College, Ganganagar	1946	B ⁺⁺

Name	Establishment year	Grade
21. SMK College, Jodhpur	1947	-
22. Raj Mahal Girl's Intermediate College, Jodhpur	1947	-
23. Chamaria College, Fataehpur	1947x	-
24. Shri Kalyan College, Sikar	1947	B+
C. Teacher's Training College, Udaipur		
1. VBGR Seksaria T.T. College, Udaipur	1941x	-
2. T.T. College, Ajmer	1941	-
3. T.T. College, Bikaner	1946	-
D. Engineering College		
1. Birla Engineering College, Pilani (now Deemed University)	1946x	A*****
E. Medical College		
1. Sawai Mansingh Medical College, Jaipur	1947	-
F. Agriculture College		
1. S.K.N. Agriculture College, Jobner	1947x	-

* Private Colleges

Out of 24 colleges established before independence, only 10 colleges were accredited, four of them as B⁺⁺ grade, four as B⁺, one as B grade and one as C⁺⁺ grade. Birla Engineering College, Pilani now a deemed university, (Birla Institute of Technology and Science) accredited as A*****.

Annexure -2
Core Indicators

S.No.	C-I	C-II	C-III	C-IV	C-V	C-VI	C-VII
1.	Goal Orientation	Admission Process	Promotion of Research	Physical Facilities	Student Profile	Leadership, Goal Orientation and Decision Making	Total Quality Management
2.	Curriculum Development	Catering to Diverse Needs	Research Outputs	Maintenance of Infrastructure	Student Progression	Organization Structure, Powers and Functions of the Functionaries	Innovations
3.	Programme Options	Teaching-Learning Process	Publication Output	Library as a Learning Resources	Student Support	Perspective Planning	Value-Based Education
4.	Academic Flexibility	Teacher Quality	Consultancy	Computers as Learning Resources	Student Activities	Manpower Planning and Recruitment	Social Responsibilities and Citizenship Roles
5.	Feedback Mechanism	Evaluation of Teaching	Extension Activities	Other Facilities		Performance Appraisal	Overall Development
6.		Evaluation of Learning	Participation in Extension			Staff Development Programmes	Institutional Ambience and Initiatives
7.		Evaluation Reforms	Linkages			Resources Mobilization	
8.						Financial Management	

C-I : Curricular Aspects; C-II : Teaching-Learning and Evaluation; C-III : Research, Consultancy & Extensions ; C-IV : Infrastructure & Learning Resources; C-V : Student Support & Progression; C-VI : Orientation & Management; C-BVII : Healthy Practices.

Annexure -3
Grade, Overall Weighted Scores and Criterion-wise Scores of
Accredited Universities in Rajasthan

S. No.	Institution	Grade	Over all weighted score	C I	C II	C III	C IV	C V	C VI	C VII	Mean
1.	Mohanlal Sukhadia University Udaipur	B++	81.10	80	80	87	87	80	80	70	80.57
2.	Janaradan Rai Nagar Rajasthan Vidyapeeth (Deemed University), Udaipur	B++	81.95	75	76	90	88	82	88	80	82.71
3.	Maharshi Dayanand Saraswati University, Ajmer	B++	80.25	80	80	85	80	75	75	85	80.00
4.	Jain Vishva Bharati Institute (Deemed to be University), Ladnu	B+	75.45	78	76	75	80	68	77	70	74.85
5.	University of Rajasthan	A+	91.50	91	90	95	90	92	92	92	91.17
6.	Banasthali Vidyapith (Deemed University), Banasthali	A	85.75	85	85	70	95	95	85	90	86.43
7.	Jai Narain Vyas University, Jodhpur	A	85.10	85	86	88	85	85	80	84	84.71
8.	Birla Institute of Technology & Science (Deemed University), Pilani	A*****	82.55	85	85	72	85	85	85	80	82.43