

# Faculty Members and Rankings of the University: A study of Aligarh Muslim University (AMU)

Mohammad Allam

S. T. S. School (Minto Circle) AMU Aligarh

mohammad\_allam@rediffmail.com

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## ABSTRACT

The role of faculty members is important in the quality teaching of an institution of higher education. Many studies show that the quality faculty members bring quality changes in teaching, research and innovation etc. The faculty members of Aligarh Muslim University (AMU) play an important role in the educational advancement of the university. In various rankings of national and international repute, the faculty members of AMU have proved their worth in the ranking of the university. In many rankings, the weightage given to the performance of faculty members is much higher than other areas. How important is the role of faculty members of AMU in determining the rankings? What is their position in comparison to faculty members of other institutions of higher learning of the country? What should be done to improve their performance? These questions have been studied in the present paper. The present paper has taken three areas e.g. teaching, research, and innovation to assess the performance of the faculty members of AMU in various rankings. The present paper is important to understand the performance of faculty members of AMU particularly in academic through rankings. This study will be helpful to the university administration, higher education bodies and governments. So, in future, effective educational planning can be chalked out to bring the qualitative changes in the education of the university.

**Key Words: Higher Education; Faculty Member; Ranking; Quality Education; Innovation**

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## INTRODUCTION

International rankings are bringing drastic changes in the higher education both at national and international levels. Rankings have changed the notion of the quality of higher education. It has given a shift in the trends of higher education. All the stake holders of higher education are affecting by the rankings. In the light of coming changes there is need to measure the qualitative and quantitative changes coming in the higher education and its institutions. To measure the changes, indicators applied in the rankings are one such tool. The adoption of various indicators has brought unprecedented changes in the quality of education at higher level.

In most of the rankings of the world, the role of faculty members is important. It fetches around 30 percent or more of the total score of rankings. A faculty member, generally, refers to the educator of a college or university. According to oxford dictionary “The teaching or research staff of a group of university departments viewed as a body.”<sup>1</sup> Here, the faculty members of AMU means all the teachers associated with a faculty .There are 13 faculties in AMU in which hundreds of the teachers are teachings. As per the data from NIRF-2016, there are 740 faculty members in AMU, in which there are 175 female. <sup>2</sup>

There is need to study the ranking of AMU and the various indicators/parameters to analysis the performance of it as an institution of importance. Among the parameters of rankings, the important one is faculty members. Being a residential university, and a university which has 75% compulsory attendance, there is need to evaluate and analysis the performance of the faculty members not at institutional level but at ranking level too.

The researcher has gone through the research literature and found that no study has been conducted on the role of the faculty members of AMU in ranking either at institutional level or at any other level. The review of the literature has found that there is strong relationship between higher education and rankings and the role of faculty and rankings. The study of Hazelkorn, E. (2013) 3 shows the impact of the rankings on the higher education and the government policy. The study of Lim, et al. (2016) 4 shows that how rankings succeeded to change the discourse around knowledge, society and economy. In another study Hazelkorn (2011) 5 shows that rankings make an institution more favourable for strategic partnership and collaboration with other institutions. In study of Levin (2002) 6 rankings brings the improvement in the faculty, students ratio and infrastructure which further strengthened by the study of Hazelkorn (2011). In study of Ehrenburg (2003) "applicant behavior is very much conditioned by the rankings" 7. Hazelkorn (2012) 8 further advancing her study finds that ranking impacts the academic of the institutions of the higher education. The study of Altbach (2012) 9 shows the impact of the rankings on the drawing of the large number of the international students.

The study of Keupp et al. (2012) 10 shows the issues of the quality at the institutional level and argued for the meaningful research and the report of the outcome. He further states that current innovation management is characterized by the conflicting prediction, theoretical inconsistencies and knowledge gap.

The study of Salmi (2008) 11 regarding the world class university and 'knowledge economy' is another milestone in exploring the relationship between 'knowledge economy' and 'world class research university'. The study of Yusuf, et al. (2007) 12 shows the positive relationship between qualitative higher education and economy in the context of the formation of human capital and work force. In another studies done by Altbach, et al. (2011) 13 and Kaba (2012) 14 find the close relation between the 'world class university' and 'international ranking'. They argue that the quality education of world class university has strong relation with the indicators used by the international rankings. The study of Nirmala et al. (2014) 15 shows that "In overall, institute as a whole can perform better by improving its faculty" which is confirmed by the study of Dudhe et al. (2018) 16 that there is positive relationship between performance of the teacher and quality improvement in teaching in the context of 'teacher ranking'. The study of Asanbe, et al. (2016) 17 finds that the "instructors with good working experience and higher academic rank might likely perform better".

In the background of all the above studies, there is no study which exclusively deals with the role of the faculty in various forms. One study deals with one role of the teacher or another role. So, the present study has taken comprehensive role of the faculty in ranking of an institution. The researcher believes that with this study at micro level, new area of research would be started at macro level.

The present paper has considered only two important Rankings to examine the performance of the faculty members in the rankings of AMU. One ranking is from national level like ranking of National Institution of Ranking Framework (NIRF) which has been brought by the Ministry of Human Resource and Development, the Government of India and second is the Times Higher Education (THE) which brings the World University rankings of institutions of higher education at international level. Both these rankings are reputed and based on rational methodology and accepted by a large numbers of academicians and analysts.

### **Objective of Study**

There are following objectives of this study:

- I. To study the Rankings of AMU at National and International Levels
- II. To study the role of AMU faculty members in rankings of AMU
- III. To study the ranking of AMU and faculty members in comparison to other top universities of India

### **Question and Relevance of Study**

In the light of objectives, some questions have been raised to understand the problems in better ways. These questions are:

1. What are the rankings of AMU at national international levels
2. What is the role of Faculty Members in overall scores in national and international rankings of AMU?
3. What is the position of AMU in comparative study with other Universities in rankings?

The present study is important for various stakeholders of AMU like the government, University administration, faculty members, students' parents etc. This study will promote the study of different institutions of higher education to analysis their performance at micro level which will provide an opportunity to find out the weakness and strength of the institution.

### METHODOLOGY

The present study has adopted Qualitative Analytical Method based on secondary resources derived from the various rankings and institutions of higher learning. The data of various rankings have been used in the context of the demand of the study. This has been done not to manipulate the result or uses it in a particular context but to understand the problems clearly and minutely.

#### Discussion of Questions of the Study

To know the role of faculty members, there is need to understand the rankings of AMU at national and international levels. The better a university has rankings; the better would be the performance of the various parameters/ performance indicators. What is the performance of various indicators, the rankings of AMU at national and international levels will show? The Table-1 gives the information about the rankings of AMU.

**Table-1 Ranking of AMU in National and International Rankings**

S. No.	National Rankings	Ranking of AMU	International Rankings	Ranking of AMU
1	NIRF-2016	10th	Times Higher Education(THE) World University Rankings	601-800(THE World University Rankings 2015-16,2016-17 ); 90(2015-16-THE Asia University Rankings) and 80(2014-15)THE Asia University Rankings)

Source: NIRF-2016 and THE World University Rankings

The Table-1 gives information of rankings of AMU .Two rankings NIRF-16(2017 will be release in April) and THE World University Rankings have been taken into account for the present study. As per the Table-1, AMU stands on 10<sup>th</sup> rank in NIRF-2016 rankings and in the group of 601 to 800 in THE world University Rankings 2017.18 In BRICS, AMU stands on 157<sup>th</sup> rank among the nations.19

What are the parameters (in another rankings it is performance indicators) of rankings of these two NIRF-2016 and THE World University rankings? As parameters give information and provide deep insight into the methodology of the rankings. The Table-2 gives information about the parameters of the two rankings. The parameters of QS Ranking have also been taken into consideration to give wider view about the performance of faculty members.

**Table-2 Various Parameters of Rankings of NIRF-2016 and THE World University Rankings**

Name of Rankings	Various Parameters and Weight age						Total (100)	
NIRF-India's Rankings 2017	Teaching, Learning & Resources(0.30)	Research and Professional Practice (0.30)	Graduation Outcomes(0.20)	Outreach and Inclusivity(0.10)	Perception(0.10)		<a href="https://www.nirfindia.org/parameter">https://www.nirfindia.org/parameter</a> <a href="https://www.nirfindia.org/Docs/Ranking_Methodology_And_Metrics_2017.pdf">https://www.nirfindia.org/Docs/Ranking_Methodology_And_Metrics_2017.pdf</a>	
T H E World University rankings 2016-17	Teaching (30%)	Research(30%)	Citation (research Influence)30%	International Outlook (7.5%)	Industry Income(Knowledge Transfer)(2.5%)		<a href="https://www.timeshighereducation.com/world-university-rankings/methodology-world-university-rankings-2016-2017">https://www.timeshighereducation.com/world-university-rankings/methodology-world-university-rankings-2016-2017</a>	

QS World University Rankings-2017	Academic Reputation(40%)	Employer Reputation(10%)	Student to Faculty Ratio(20%)	Citations per Faculty (20%)	International Faculty Ratio(5%) and International Students Ratio(5%)		<a href="https://www.topuniversities.com/qs-world-university-rankings/methodology">https://www.topuniversities.com/qs-world-university-rankings/methodology</a>
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Source: NIRF-2017, THE World University Rankings 2017 and QS World University Rankings

The Table-2 gives detail about the various parameters/performance indicators use by the three national and international reputed rankings. These three are using five performance indicators to analysis the performance. And in all these three rankings, Teaching or performance of faculty members fetches about 30% or more than 30% of overall score. There are differences in the selection of performance indicators but all rankings have given due weight age to the performance of faculty members particularly research and innovation.

To know the performance of faculty members, there is needed to see constitutes of teaching or academics or learning as uses by the ranking. The Table-3 gives information about constitutes of teaching/academics used by rankings.

**Table-3 Constitute of the Parameter Teaching/Faculty Member**

Name of the Parameter	Constitute of the parameter of Teaching/Faculty							
NIRF-2017-Teaching, Learning & Resources	A. Student Strength including Doctoral Students(SS): 20 Marks	B. Faculty-student ratio with emphasis on permanent faculty (FSR): 30 marks	C. Combined metric for Faculty with PhD (or equivalent) and Experience (FQE): 20 marks	D. Financial Resources and their Utilization (FRU): 30 Marks				
THE World University Rankings-Teaching-2017	Reputation survey: 15%	Staff-to-student ratio: 4.5%	Doctorate-to-bachelor's ratio: 2.25%	Doctorates-awarded- to-academic-staff ratio: 6%	Institutional income: 2.25%			

Source: NIRF-2016 and THE World University Rankings

The Table-3 shows that there are four constitutes of teaching of NIRF-2017 and five constitutes of THE world university rankings. Both these rankings have assigned different weight age to different constitutes of rankings. There are differences in constitutes of rankings. The important is the students and researches pursue by the faculty members. After seeing the various constitutes of teaching, there is needed to see the detail of the faculty members of AMU. This will give more insight into the performance of the faculty members. The Table-4 gives the detail of AMU faculty members based on the NIRF-2016.

**Table-4 Details of the Faculty of Aligarh Muslim University**

Name of the University	No. of Regular Faculty	No. of Visiting Faculty For 1 Semester	No. of Visiting Faculty For 2 Semester	No. of PhD Faculty	No. of Faculty with Phd And Master Qualification	Teaching Experience of Regular Faculty(in Yr)	Industry Experience of Regular Faculty	No. of Women Faculty	
								NO.	Per%
AMU	740	0	0	730	737	14180.14	12.00	175	23.6

Source: NIRF-2016

The Table-4 shows the detail of AMU faculty members'. There is 740 regular faculty members in whom 730 members are with PhD qualification and 07 members with Master Degree. The total teaching experience of the faculty members is 14180.14 in yr. There are 175 female faculty members which is equivalent to 23.6 percent of the total faculty member. The number of male members is 565.

What is the role of faculty members of Aligarh Muslim University in overall score of the university in various national and international rankings? The faculty members play very important role in various areas of the university. There is no clear cut role assign to them. So, here the study has taken three areas for performance evaluation of the faculty members. These areas are Teaching, Research and Intellectual Property Right (IPR). As most of the performance of the faculty members are expected to fall in this category. The Table-5 gives the detail of the performance of the faculty members.

**Table-5 Performance of the faculty Members of AMU in various constitute of the Teaching/Faculty Member**

Constitute of parameter Teaching/Faculty Member	Performance of Teaching/Faculty Member of AMU on various Constitute				
Teaching	Teaching experience of regular faculty 14180.14 in a yr			Industry Experience of Regular Faculty 12.00	
Research	Paper Publication	As per NIRF-2016 from 2012-14 the total number of publication of AMU were on Indian Citation Index (352-2012-14), Scopus (910,810 and 808 for 2012,2013 and 2014)and Web of Science (654,579 and599 for 2012,2013 and 2014 )  Glimpses of Research Productivity of Indian Universities and Research Institutions: A report A Report based on "Indian Citation Index" Database 2016 "AMU is at 1st rank in terms of publishing its 1287 research papers in 329 Indian journals, followed by BHU with 314 journals of India."(p-07)			
	Citation	Total No. of Citations reported were on Indian Citation Index(60 for 2012-14), Scopus(6377 , 3992 and 1915 for2012,2013 and 2014) and Web Science(5328, 3499 and 1675 for 2012,2013 and 2014)			
Intellectual Property Right	Financial Year	No. of Patent filed	No. of Patents Granted	No. of Patents Licensed	Earnings from patent (Rs. in Lakhs)
	2012-13	4	0	0	64.51
	2013-14	18	2	0	70.31
	2014-15	13	3	0	52.77

Source: NIRF-2016

The Table-5 shows that the faculty members' of AMU performed well in teaching, research and IPR. The quality of research is a matter for concern for the faculty members as citation per paper is lower than other universities.

If one sees the CII – ICI Report 2016 for research, citation etc picture becomes clearer and the performance of the faculty members of AMU becomes appreciable. The Table-6 gives the comparative details of various universities in research and citation provided by CII-ICI Report 2016.

**Table-6 Rank Order of Central Universities Research Performance: Based on Articles Published, Citations and Citations/Paper**

S. No	Institute Name	Article	Rank-A	Citation	Rank-C	C/P	Rank C/P
1	University of	1523	1	802	3	0.527	14

	Delhi(DU)						
2	Banaras Hindu University(BHU)	1363	2	869	1	0.638	8
3	Aligarh Muslim University(AMU)	1287	3	701	4	0.545	13
4	Jawaharlal Nehru University(JNU)	1023	4	597	7	0.584	10
5	University Of Allahabad(AU)	891	5	598	6	0.671	6
6	Hemwati Nandan Bahuguna Garhwal University (HNBGU)	746	6	647	5	0.867	3
7	Dr. Harisingh Gour University (HGU)	717	7	852	2	1.1881	1
8	Jamia Millia Islamia (JMI)	609	8	288	11	0.473	16
9	Manipur University (MU)	584	9	363	10	0.622	9
10	University of Hyderabad (UH)	583	10	199	16	0.341	26
11	Assam University (AU)	566	11	365	9	0.645	7
12	Pondicherry University (PU)	556	12	252	12	0.453	18
13	North Eastern Hill University (NEHU)	507	13	399	8	0.787	4
14	Visva Bharati University (VBU)	482	14	218	15	0.452	19
15	Nagaland University (NU)	426	15	239	13	0.561	11

Source: CII – ICI Report 2016

The Table-6 shows the detail about the research and citation of the fifteen central universities of India. The performance of the faculty members of AMU in research and citation is on rank 03 and 04 respectively. While in area of citation per paper, the rank assigned to AMU is 13. The best university in area of citation per paper is Dr. Harisingh Gour University (HGU) followed by Hemwati Nandan Bahuguna Garhwal University and North Eastern Hill University (NEHU). What is the performance of AMU faculty members in comparison to other parameters /performance indicators in the ranking? This comparison will give clear picture of the performance of the faculty members where they stand as compare to the faculty members of other universities. The Table-7 gives the information regarding this.

**Table-7 Performance of AMU in various parameter or Performance Indicators**

NIRF-2016	Teaching, Learning & Resources(0.30)	Research and Professional Practice(0.30)	Graduation Outcomes(0.20)	Outreach and Inclusivity(0.10)	Perception(0.10)	Total
AMU	66.73	84.81	84.96	65.23	86	76.62 (10 <sup>th</sup> )
THE World Uni.Rankings	Teaching (30%)	Research (30%)	Citation(research Influence)30%	International Outlook (7.5%)	Industry Income (Knowledge Transfer)(2.5%)	
AMU	25.7	9.5	30.5	21.9	36.2	18.6(601)



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Source: NIRF-2016 and THE World University Rankings 2017

The Table-7 shows that the performance of AMU in teaching (faculty members) is less than all other performance indicators in NIRF-2016 while in the THE World University Rankings, AMU performance in teaching is the third best one against all other performance indicators. This may be due to difference in use of methodology.

What is the performance of the faculty members of AMU in comparison to other top universities of India? On the basis of NIRF-2016, the Table-8 gives comparative performance of the faculty members of AMU with other universities of India.

**Table-8 Comparative performance of AMU faculty members with other top Universities of India**

Name of the University	Comparative Performance								
	Teaching		Visiting Faculty		IPR				
	Teaching Experience of Regular Faculty(in Yrs)	Industry Experience of Regular Faculty	No. of Visiting Faculty For 1 Semester	No. of Visiting Faculty For 2 Semester	Academic year	No. of Patents filed	No. of Patents Granted	No. of Patent licensed	Earnings from Patents(Rs in Lakhs)
Aligarh Muslim University(AMU) (10 <sup>th</sup> )	14180.17	12.00	0	0	2012-13	4	0	0	64.51
					2013-14	18	2	0	70.31
					2014-15	13	3	0	52.77
National Institute of Science Bangalore	6417	00	0	0	2012-13	24	7	6	57.67
					2013-14	30	15	0	10.28
					2014-15	32	0	1	20.99
Institute of Chemical Technology	1410.50	53.08	0	0	2012-13	33	10	2	8.00
					2013-14	59	5	0	3.50
					2014-15	69	10	0	3.50
Jawaharlal Nehru University(JNU)	7178	595.67	0	0	2012-13	4	1	0	0.00
					2013-14	4	0	0	0.00
					2014-15	1	0	0	0.00
University of Hyderabad-	0.00	10.00	0	0	2012-13	1	1	0	0.00
					2013-14	3	3	0	0.00
					2014-15	3	3	0	0.00
Tezpur University	2854.58	385.67	0	0	2012-13	0	1	0	0.00
					2013-14	2	1	0	0.00
					2014-15	3	0	0	0.00
University of Delhi(DU)	14660.08	268.50	0	1	2012-13	4	3	0	0.00
					2013-14	17	2	1	0.00
					2014-15	8	2	0	0.00
Banaras Hindu University(BHU)	22047.75	0.00	0	0	2012-13	9	2	0	0.00
					2013-14	6	6	0	0.00
					2014-15	0	5	0	0.00
Indian Institute of Space and Technology	459.17	404.75	0	0	2012-13	0	0	0	0.00
					2013-14	6	0	0	0.00
					2014-15	1	0	0	0.00
Birla Institute of Technology & Science-Pilani	5400.17	10.00	0	3	2012-13	3	0	0	0.00
					2013-14	5	0	0	0.00
					2014-15	10	1	0	0.00

Source: NIRF-2016

The Table-8 shows the performance of the faculty members in the Teaching, Visiting faculty and IPR. The performance of AMU is better in Teaching and IPR .Most of universities in India, lack in visiting faculty.

What is the score of the faculty members in Teaching with other top universities of India in various rankings? The Table-9 gives detail about the score of the faculty members in Teaching in various rankings.

**Table-9 Score fetched by AMU Faculty in Various Rankings with Other Top Universities of India**

S. No	Name of the University	Rankings	Score
1	Aligarh Muslim University (10 <sup>th</sup> )	NIRF-2016	66.73
		THE WU Rankings	25.7
2	National Institute of Science Bangalore	NIRF-2016	94.45
		THE WU Rankings	50.1
3	Institute of Chemical Technology	NIRF-2016	84.53
		THE WU Rankings	NA
4	Jawaharlal Nehru University(JNU)	NIRF-2016	89.45
		THE WU Rankings	39.4
5	University of Hyderabad-	NIRF-2016	74.49
		THE WU Rankings	NA
6	Tezpur University	NIRF-2016	83.81
		THE WU Rankings	22.4
7	University of Delhi(DU)	NIRF-2016	68.54
		THE WU Rankings	39
8	Banaras Hindu University(BHU)	NIRF-2016	70.28
		THE WU Rankings	NA
9	Indian Institute of Space and Technology	NIRF-2016	94.28
		THE WU Rankings	
10	Birla Institute of Technology & Science-Pilani	NIRF-2016	86.74
		THE WU Rankings	16.9

THE World University Ranking 2017 and NIRF-2016

The Table-9 shows that the score of AMU is less than all the top rankers of NIRF-2016 while better than many universities in the THE World University Rankings. But when compare to the world best universities of the world, AMU or any other universities are not near to any like Oxford, Cambridge, Harvard, MIT etc .20

What are the rankings of AMU in NIRF-2016 and THE world University Rankings 2017 with other top universities of India?

**Table-10 Comparative Rankings of AMU with other top University of the country**

S.No	Name of the University	National ranking(NIRF-2016) Over All Score and Rank	International Rankings(Times Higher Education(THE) Over All Score and Rank
1	National Institute of Science Bangalore	98.81-1	46.3-50.4 201-250
2	Institute of Chemical Technology	87.58-2	NA
3	Jawaharlal Nehru University(JNU)	86.45-3	25.9
4	University of Hyderabad-	85.45-4	NA
5	Tezpur University	84-31-5	18.6 601-800



			140th BRICS & Emerging Economies 2017
6	University of Delhi(DU)	83.19-6	18.6 601-800 =109th BRICS & Emerging Economies 2017
7	Banaras Hindu University(BHU)	81.22-7	NA
8	Indian Institute of Space and Technology	78.82-8	NA
9	Birla Institute of Technology & Science- Pilani	76.85-9	18.6 601-800 =196th BRICS & Emerging Economies 2017
10	Aligarh Muslim University	76.62-10	18.6- 601-800 =157th BRICS & Emerging Economies 2017

Source: THE World University Rankings and NIRF-2016

As per the rankings of NIRF-2016 and THE World University Rankings 2017, the rank of AMU is among the top ten universities of India. In NIRF-2016 rankings, AMU stands on 10<sup>th</sup> rank while in THE World University Rankings it ranks under 601 to 800 of rankings. And with Indian Institutions of higher education it is second after Jadhavpur University among universities. Most of the institutions of higher learning in the THE World University Rankings 2017 from India are specialized institutions like IITs etc.

### CONCLUSION

The present study is about the role of the faculty members in the rankings of AMU at national and international levels. The study finds that the faculty members of AMU play an important role in the rankings of AMU yet, it's contribution in the rankings needs to be enhanced particularly in the quality of research.

### SUGGESTIONS

How the performance of faculty members can be improved? The following suggestions can be put forwarded in the light of the present study to enhance the performance of the faculty members of AMU in national and international rankings. These are:

1. Application of Educational Technology in teaching and learning on large scale
2. Regular up gradation of Curriculum in the light of the demand of the society, market and Industry
3. Encouraging faculty members to be visiting faculty in other universities of India and abroad which can enhance their teaching learning skills
4. Pursuing of high quality research and publishing papers/articles in the well reputed Journals of national and international levels
5. Promoting strong relationship between faculty and Industry for the benefit of the institution and the country
6. Strong close collaboration with the qualitative education imparting institutions of the country and the world
7. Encouraging international students and faculty members to take part in the teaching-learning of the university by providing the best facilities particularly by providing the best possible hostel facilities for the international students

8. Appointing more and more multi-lingual faculty members to enrich the culture of the university
9. Promoting bright and brilliant students to pursue research and be faculty members
10. Make Alumni of the university to establish more and more laborites for fundamental research and libraries particularly digital libraries connecting the world best universities

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