



## **NIRF RANKING AND A CASE STUDY OF NIRF RANKING IN INDIAN INSTITUTE OF TECHNOLOGY (IITS): AN OVERVIEW**

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### **Abstract:**

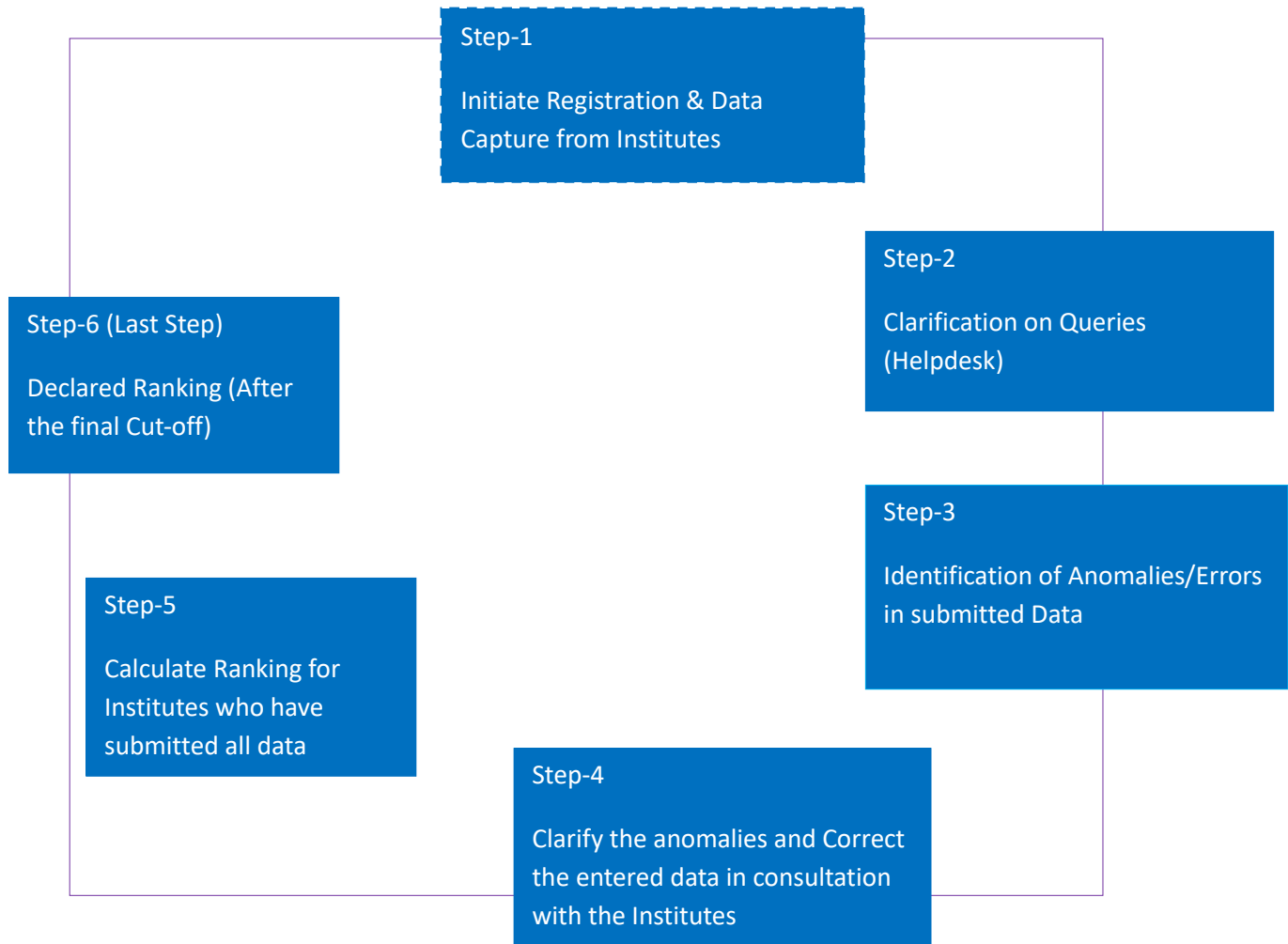
*The main objective of any Ranking is to select the quality in that field and Ranking is the one tangible factor to decide the market strategic for any Industry, Like Institutional rankings are key factor for any country's educational Institutions for seeking of admission, joining to Service, Research, Collaboration or funding by any agency and to provide quality education to the citizens. Our country main objective is to provide quality education to our younger generations and India to be a center of excellence in best education system throughout the world. To achieve this goal Govt. of India, Min. of HRD was launched National Institutional Ranking Framework (NIRF) on 29<sup>th</sup> Sep 2015 to rank higher educational institutions in the country based on objective criteria to promote competitive excellence in the higher educational institutions. In this research article the Ph.D Scholar explained in detail about NIRF, ranking parameters, ranking category like Overall, Engineering, Research, Management etc. And had done research on India's Prestigious Higher Educational Institution (HEI) in Engineering i.e. Indian Institute of Technology (IITs) Ranking, 2023.*

**Key words:** NIRF, IITs, HEI, Teaching, Learning and Resources (TLR), Research and Professional Practice (RP)

### **1. Introduction:**

Every year in the month of December last week Ministry of Education announce for seeking applications from all registered institutes and are invited to submit the data through online Data Capturing System (DCS). Login credentials are required to login the page (<https://login.nirfindia.org/>) by entering Institute category, Id and password. NIRF Rankings depends mainly 5 parameters and the parameters broadly cover "Teaching, Learning and Resources," "Research and Professional Practices," "Graduation Outcomes," "Outreach and Inclusivity," and "Perception". The Rankings released mainly 13 categories in the NIRF, 2023. The scholar tried to explain what is NIRF and its importance, IITs Ranking in Overall, Engineering, Research and Management.

## 2. NIRF Life Cycle (Step1-6):



## 3. NIRF Ranking Categories, 2023:

- i. Overall
- ii. Universities
- iii. Colleges
- iv. Research Institutions
- v. Engineering
- vi. Management
- vii. Pharmacy
- viii. Dental
- ix. Medical
- x. Law
- xi. Architecture & Planning
- xii. Agriculture and allied Sciences
- xiii. Innovation

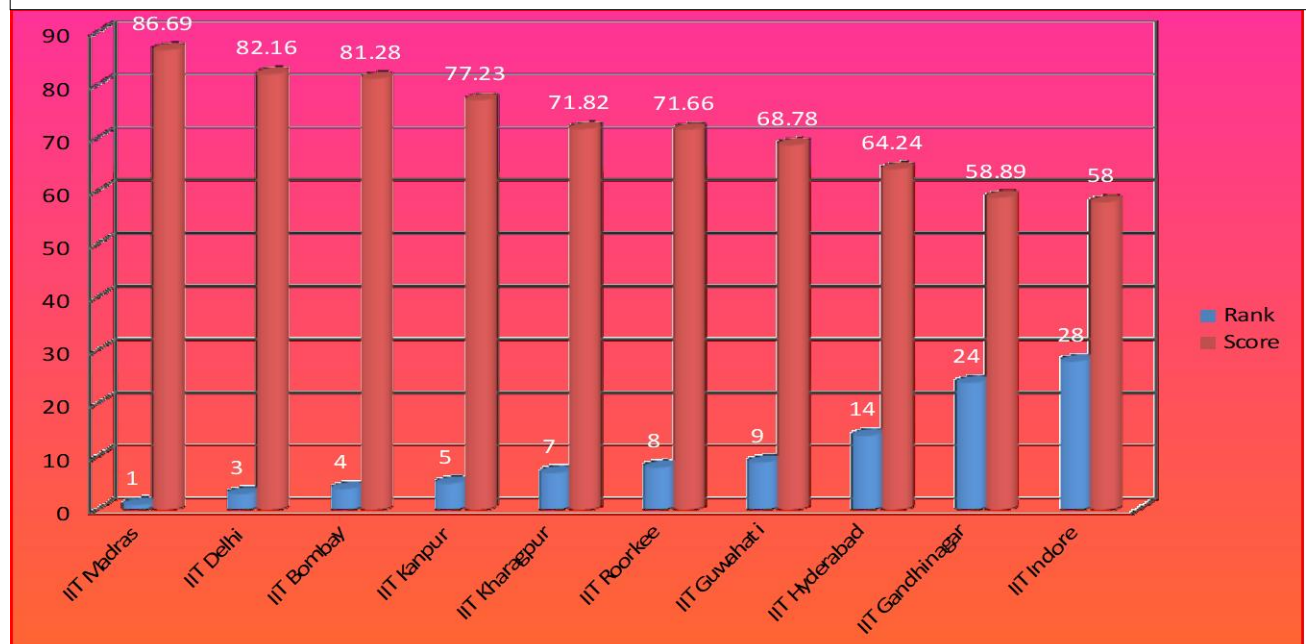
## 4. Data Analysis, NIRF Rankings of IITs-2023:

#### 4.1 Summary of OVERALL Ranking Parameters and Weightages- 2023:

S No	Parameter	Marks	Weightage
1	Teaching, Learning & Resources	100	0.30
2	Research and Professional Practice	100	0.30
3	Graduation Outcomes (GO) Ranking weight	100	0.20
4	Outreach and Inclusivity (OI) Ranking weight	100	0.10
5	Perception (PR) Ranking weight	100	0.10

Bar Chart 5.1 NIRF, 2023 Overall category of top 10 IITs, IIT Madras secured 1<sup>st</sup> Rank (IIT Wise also 1<sup>st</sup> Rank) with Score 86.69 and IIT Indore secured 28 rank (IITs wise Top 10) with score 58.

**Bar Chart 4.1 Overall Category Rankings of IITs-2023**

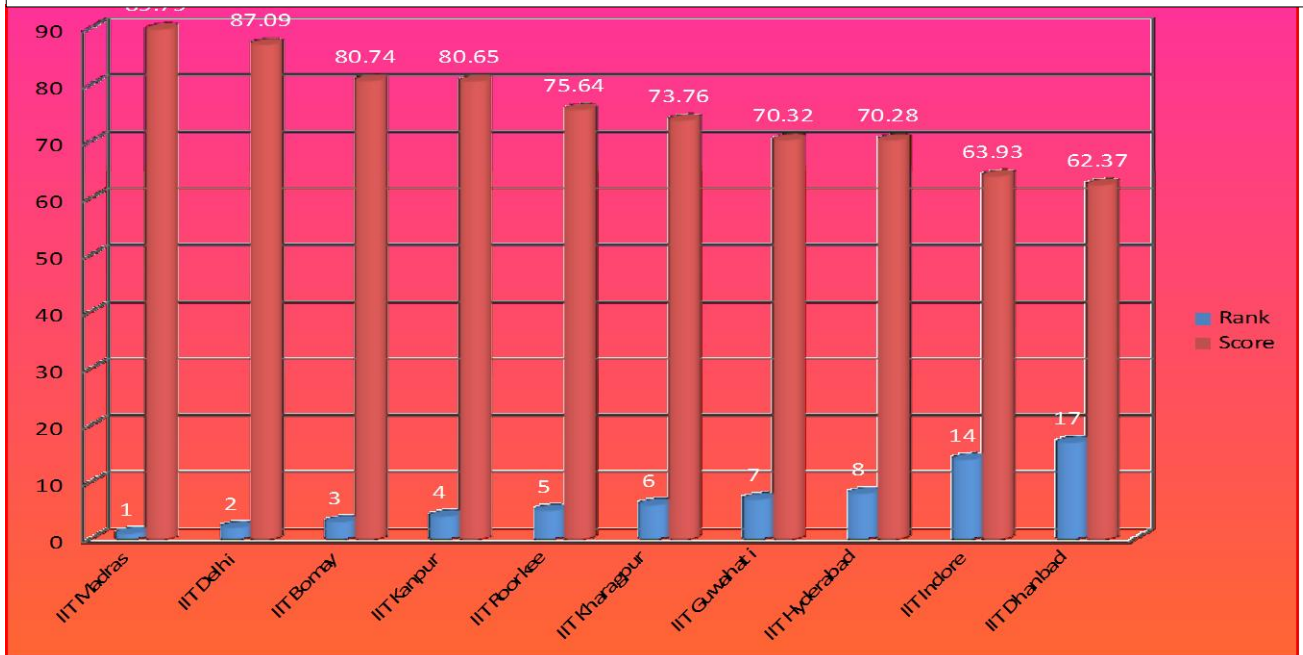


#### 4.2 Summary of ENGINEERING Ranking Parameters and Weightages- 2023

S.N o.	Parameter	Marks	Weightage
1	Teaching, Learning & Resources	100	0.30
2	Research and Professional Practice	10	0.30
3	Graduation Outcomes	100	0.20
4	Outreach and Inclusivity	100	0.10
5	Perception	100	0.10

Bar Chart 4.2 NIRF, 2023 Engineering category of top 10 IITs, IIT Madras secured 1<sup>st</sup> Rank (IITs wise also 1<sup>st</sup> rank) with Score 89.79 and IIT Dhanbad secured 17 rank (IIT Wise Top 10) with score 62.37

### Bar Chart 4.2 Engineering Category Rankings of IITs-2023

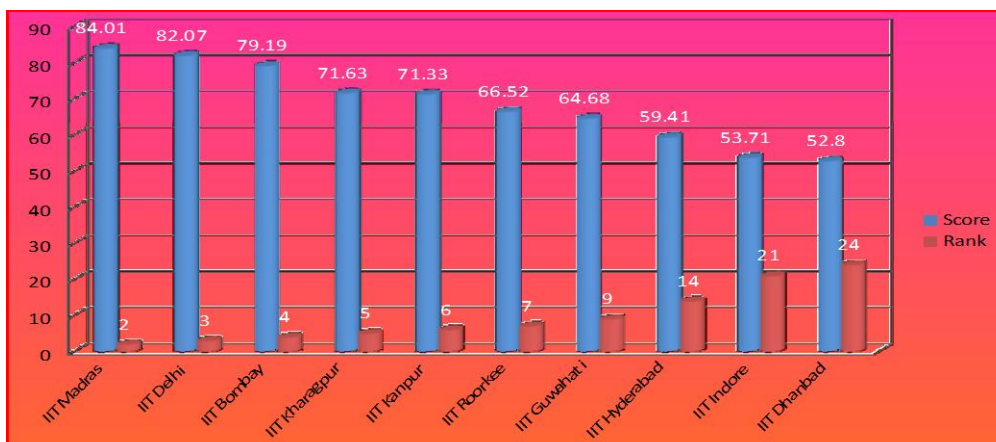


### 4.3 Summary of RESEARCH Ranking Parameters and Weightages- 2023

S.No.	Parameter	Marks	Weightage
1	Metric for Quantitative Research	100	0.30
2	Metric for Qualitative Research	10	0.30
3	Metric for Students and Faculty Contribution	100	0.20
4	Outreach and Inclusivity	100	0.10
5	Perception	100	0.10

Bar Chart 4.3 NIRF, 2023 Research category of top 10 IITs, IIT Madras secured 2<sup>nd</sup> Rank (IITs Wise 1st) with Score 84.01 and IIT Dhanbad secured 24 rank with Score 52.80 (IIT Wise TOP 10)

### Bar Chart 4.3 Research Category Rankings of IITs-2023

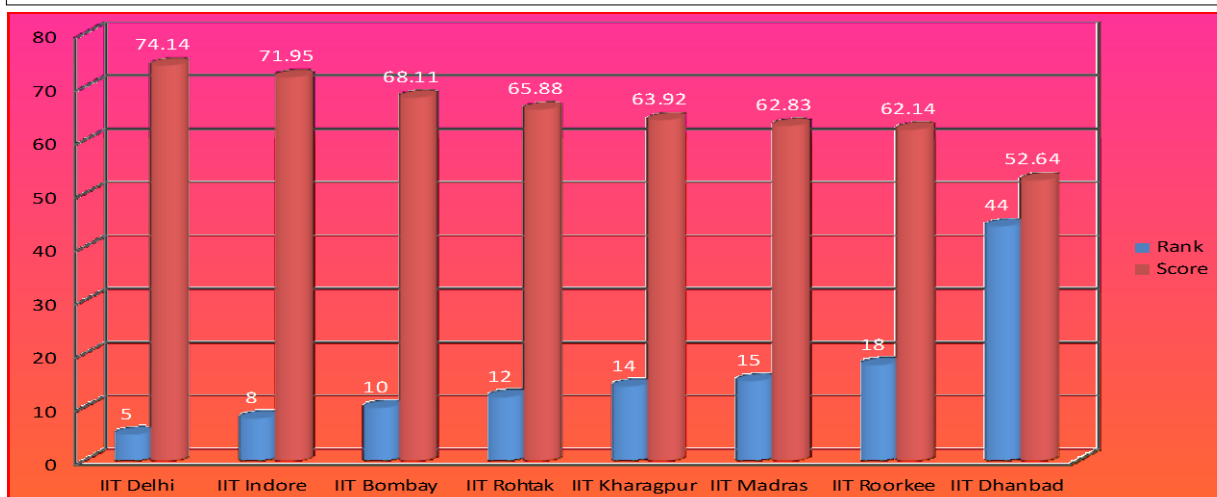


#### 4.4 Summary of MANAGEMENT Ranking Parameters and Weightages- 2023

S No	Parameter	Marks	Weightage
1	Teaching, Learning & Resources	100	0.30
2	Research and Professional Practice	100	0.30
3	Graduation Outcomes (GO) Ranking weight	100	0.20
4	Outreach and Inclusivity (OI) Ranking weight	100	0.10
5	Perception (PR) Ranking weight	100	0.10

Bar Chart 4.4 NIRF, 2023 Management category of top 10 IITs, IIT Delhi secured 5<sup>th</sup> Rank (IITs Wise 1st) with Score 74.14 and IIT Dhanbad secured 44 rank with Score 52.64 (IIT Wise TOP 8)

**Bar Chart 4.4 Management Category Rankings of IITs-2023**



#### 5. Fact Findings by research Scholar:

NIRF 2023 rankings, IIT Madras secured 1<sup>st</sup> Rank in Overall and Engineering Category (IIT Wise also 1<sup>st</sup> Rank) and IIT Dhanbad secured IITs wise 10<sup>th</sup> Rank in the Engineering and Research, Management category 44<sup>th</sup> Rank (IIT wise 8<sup>th</sup> rank). In Management Category IITs were improved their ranks and this year in Management category 3 IITs were secured in top 10 list, these are, IIT Delhi Secured 5<sup>th</sup> Rank, IIT Indore 8<sup>th</sup> Rank and IIT Bombay Secured 10<sup>th</sup> Rank. In Engineering Category first 8<sup>th</sup> Ranks are IITs only, IIT Indore secured 14<sup>th</sup> Rank (IIT Wise 9<sup>th</sup> Rank) and IIT Dhanbad Secured 17<sup>th</sup> Rank (IIT Wise 10<sup>th</sup> Rank). In Research Category IIT Madras secured 2<sup>nd</sup> Rank and 7 IITs were top 10.

#### 6. Result and observation:

The scholar observed in this article Overall, Engineering and Research category, IITs were top list and in Management category also the IITs were Top 20 list (7 IITs), it shows IITs were best for Choosing Research, Seeking admissions in Engineering as well as Management study.



## Conclusion:

Now-a-days Institutional Ranking is used extensively in higher education institutions to highlight their teaching and research efforts, graduation productivity, and other professional activities. Many higher education institutions are currently dealing with the difficulty in collecting research activities and faculty biographies for ranking and accreditation purposes. The Research Scholar tried to explain in easy way to further researchers who do the research on Scientometric analysis on IITs, it helps how to improve the rank of the institute, Parameters weightage, how to send the data to Ministry of Education, declaration of the Ranking results etc. The Researcher further analyzed the NIRF data 2023 and had done a case study of IITs rankings in various categories mainly Overall, Engineering, Research and Management Category. And further the researcher may utilize this data for further study of Scientometric analysis of IITs as a part of P.hD study. This article helps for students, Teachers funding agencies for choosing the right institute for seeking admission, Research, Investments and Return on Investments etc.

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