Indian Research Information Network System (IRINS): Analysis of Colleges Faculty Profiles in Karnataka

Netravati Yallappa Annigeri
Library Trainee,
University Library, Bangalore University,
Jnana Bharathi, Bangalore,60056.
annigeri.netra97@gmail.com

Shivaraja O
Assistant Librarian,
University Library, Bangalore University,
Jnana Bharathi, Bangalore, 560056
shivarajnayaka08@gmail.com

Abstract

The present study sought to analyse the Indian Research Information Network System (IRINS) instances with particular reference to Colleges in Karnataka. The study explores the resource impact from scholarly resources, the contributions of top of individual Colleges, the h-index, the top faculty of respective Colleges, and the h-index. The study is confined to 21 Colleges in India. The collected data were confidential, analysed, and tabulated by using statistical methods. The study finding shows that theMalnad College of Engineering holds the highest faculties, 191 (9.17%) Devaraj Urs Academy of Higher Education and Research has the highest scholarly publications among the Colleges in Karnataka 1720 (21%), with Scopus citation (2431) and Cross-reference citation 1907.. . RV College of Engineering, Bangalore also has the highest 101 h-index among the Colleges in India. Dr. ParutagoudaPatil has the top individual faculty from S.B Arts and K.C.P Science College, Vijayapur contributions of scholarly publications (179) *and 27 h-index among the Colleges in Karnataka.*
.

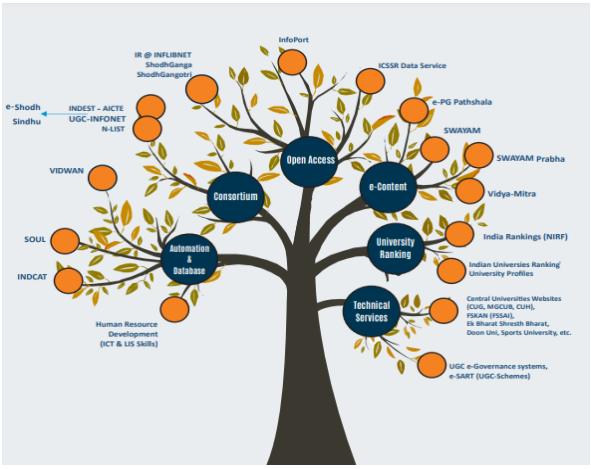
Keywords
IRINS; Colleges;Karnataka; INFLIBNET; India.

Electronic access
The journal is available at www.jalis.in

Journal of Advances in Library and Information Science
ISSN: 2277-2219 Vol. 11. No.1. 2022. pp.29-36

1. Introduction

IRINS is web-based Research Information Management (RIM) service provided by the Information and Library Network (INFLIBNET) Centre, An Inter-University Centre of University Grants Commission, Gandhinagar, Gujarat developed a database called "VIDWAN: Expert database and National Research Network" which is a premier database of research profiles of scientist/ researchers and faculty members working in leading academic institutions and research & Development organizations involved in teaching and research across in India. Nowadays, the Maximum number of research Publications is accessible in Open Access through various routes. However, due to lack of interoperability and standard format, several persuasive available data such as personal information, expertise publications, Projects, grants, and accomplishments, etc. are still not easily accessible and utilized.



(Source: https://www.inflibnet.ac.in/)

IRINS could effectively be used as a platform to make the data visible and it helps to measure the research output of Colleges in Karnataka. Many initiatives are taken by the INFLIBNET centre. One among them is the expert database and National Researcher Network called VIDWAN, in 2002, which is the root cause for developing the IRINS in 2017 through the National Mission on Education through ICT. It is now available as "software as service". IRINS serves as a tool to know the various research projects of faculty members or scientists with information on various bibliometric parameters. The portal facilitates the academic, R&D organizations and faculty members, scientists to collect, precise, and showcase the scholarly communication activities and provide an opportunity to create the scholarly network. It has integrated with academic identities such as ORCID ID, Scopus, Research ID, Microsoft Academic ID, and Google Scholar ID for

ingesting scholarly publications from various sources. It provides scholarly metadata related to the research interests of faculty members and the research focus of the departments and Colleges. It provides more significant exposure for their research contributions to the international community, brings funding opportunities from national and international agencies, improves the research metadata quality, and reduces repetitive data entry for various assessment systems. It provides enormous support to find mentors or advisors for their research in the respective domain. It helps the scholars locate courses in their subject interests and research focus of the department and organization. It enables the administrator to build research reports, performance assessments, and research impact analysis. Strategically analyses the research progress for better decision-making on funding, faculty assessment, and resource allocation. Help the Internal Quality Assurance Cell (IQAC) and National Institutional Ranking Framework Coordinator to generate a report for various research assessments.

2. Review of literature.

The literature review is not comprehensive but is instead limited to IRINS analysis in various instances. **Kannan, Kimidi, and Arora** (2018) in a study elaborated that IRINS can be used as a common platform across all educational and research institutes in the Indian higher education sector. The IRINS could be used effectively for efficiently measuring and benchmarking the research output of individual institutes as well as a cross institutions. **Kimidi, S.S. & Kannan, P.**(2020) reported that the Research Information management(RIM)system plays an important role in showcasing the research output of the academic and research institutions to the world. The Indian academic and research institutions are creating and generating huge research information in various formats which are getting published in different channels. The research information from individual researchers to an institute can be made visible through an effective and efficient RIM system only. Further describes the growth and the penetration of the RIM concept across the country and it should reach by an indigenously built platform, the Indian Research Information Network System(IRINS).
Tyagi, Sunil (2021) in a study provides an overview of Indian Research Information Network (IRINS) an analysis of academic institutions in India by addressing the resource impact from scholarly resources, the contributions of the top department of individual universities, and H-index, the top faculty of Individual University and H - index. The finding indicates that the Banaras Hindu University (BHU) holds the highest number of faculties 1022 (15.40%) which is followed by Jawaharlal Nehru University (JNU) with 714 (10.76%) and Visva Bharathi University with 557 (8.39%) respectively. The Central University of Odisha holds the lowest faculty49(0.74%).

3. Objectives of the study

The main objective of the present study is to evaluate
the IRINS implemented by Colleges Faculty Profiles in Karnataka. The primary aims are:

- To find out the department wise publications, citations, and ranking of Colleges faculties profiles.
- To examine the top of the contributions of individual Colleges and H-index.
- To discover the top faculty of respective Colleges and H-index.

4. Research Methodology

The data for this study were collected from the website (https://irins.org/irins/) of the Indian Research Information Network System (IRINS). The study has considered College wise publications, Citations, faculty publications, and various types. The collected data were classified, scrutinized, and tabulated by using statistical methods.

5. Data Analysis and Interpretation

The data collected from the website https://irins.org/irins/index.php has been analysed with simple percentages, average per publication, ranking, and average per publication.

5.1 Demographic Representation

The demographic representation of IRINS implemented Colleges in Karnataka is shown in Table-1. An analysis, it has been found that Malnad College of Engineering holds the highest number of faculties, 191 (9.17%), which Institute of Technology, Bangalore follows 181 (8.69 %), Devaraj Urs Academy of Higher Education and Research with 174 (8.36 %). The Institute for Management Development holds the lowest faculty 22 (1.05%).

Table 1: Demographic Representation

SL No	Name of College	Demographic Representation	(%)	No of Dept.
1	Malnad College of Engineering	191	9.17	12
2	Institute of Technology, Bangalore	181	8.69	11
3	Devaraj Urs Academy of Higher Education and Research	174	8.36	25
4	Global Academy of Technology	170	8.16	10
5	RV College of Engineering, Bangalore	170	8.16	14
6	Bapuji Institute of Engineering and Technology, Devanagari	148	7.11	15
7	Sapthagiri College of Engineering, Bangalore	139	6.67	09
8	Don Bosco Institute of Technology	124	5.95	13
9	Jawaharlal Nehru National College of Engineering, Shivamogga	124	5.95	12
10	Sri Venkateshwara College of Engineering, Bangalore	106	5.09	07
11	Maharani Lakshmi Ammanni College for Women	94	4.51	15
12	S.B Arts and K.C.P Science College, Vijayapur	88	4.22	10
13	College of Engineering	87	4.18	02
14	Commerce BHS Arts and TGP Science College, Jamkhandi	52	2.49	02
15	A S Patil College of Commerce, Bijapur	43	2.06	06
16	College of Architecture, Bengaluru	42	2.01	02
17	B M Patil Institute of Nursing Sciences	37	1.77	06
18	Ayurveda Mahavidyalaya	33	1.58	11
19	Shri Sanganabasava Mahaswamiji College of Pharmacy and Research Centre.	30	1.44	06
20	Institute of Technology and Management	26	1.24	06
21	Institute for Management Development	22	1.05	06
	Total	**2081**	**100**	**200**

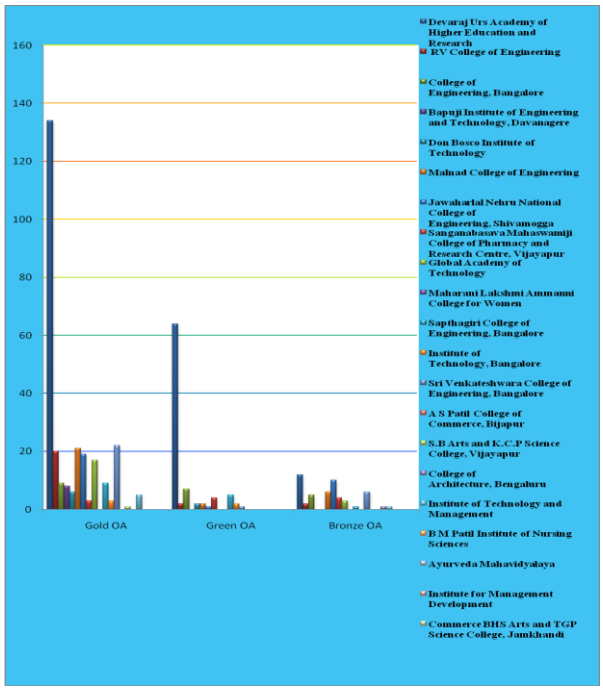


Figure 1: Scholarly Resources

5.2 Scholarly Resources

IRINS enables the research community to quickly understand and indicate the publication grouping bound to the different open access such as green, gold, and bronze open access. Table-2: indicates the scholarly resources of individual Indian Research Information Network System implemented Colleges in Karnataka. The analysis shows that Devaraj Urs Academy of Higher Education and Research has the highest scholarly publications, 1720 (21.00%) among the Colleges in Karnataka followed by College of Engineering 1091 (13.32%) at rank second. The Institute for Management Development has only 22 (1.05%).

Table 2: Scholarly resources of individual Colleges Faculty profiles in IRINS

Name of the college	Scholarly Resources	(%)	Gold OA	Green OA	Bronze OA
Devaraj Urs Academy of Higher Education and Research	1720	21.00	134	64	12
RV College of Engineering	1091	13.32	20	02	02
College of Engineering, Bangalore	1012	12.35	09	07	05
Bapuji Institute of Engineering and Technology, Davanagere	646	7.88	08	0	0
Don Bosco Institute of Technology	546	6.66	06	02	0
Malnad College of Engineering	477	5.82	21	02	06
Jawaharlal Nehru National College of Engineering, Shivamogga	475	5.80	19	01	10
Sanganabasava Mahaswamiji College of Pharmacy and Research Centre	341	4.16	03	04	04
Global Academy of Technology	307	3.74	17	0	03
Maharani Lakshmi Ammanni College for Women	298	3.63	0	0	0
Sapthagiri College of Engineering, Bangalore	279	3.40	09	05	01
Institute of Technology, Bangalore	265	3.23	03	02	0
Sri Venkateshwara College of Engineering, Bangalore	191	2.33	22	01	06
A S Patil College of Commerce, Bijapur	123	1.50	0	0	0
S.B Arts and K.C.P Science College, Vijayapur	120	1.46	01	0	0
College of Architecture, Bengaluru	76	0.92	0	0	01
Institute of Technology and Management	68	0.83	05	0	01
B M Patil Institute of Nursing Sciences	58	0.70	0	0	0
Ayurveda Mahavidyalaya	55	0.67	0	0	0
Institute for Management Development	30	0.36	0	0	0
Commerce BHS Arts and TGP Science College, Jamkhandi	11	0.13	0	0	0
Total	**8189**	**100**	**277**	**90**	**51**

5.3 Types of Scholarly Resources.

The types of scholarly resources, containing journal articles, conference proceedings, books/chapters, or other resources of Various IRINS implemented Colleges in Karnataka.Table-3 shows Devaraj Urs Academy of Higher Education and Research has the highest scholarly resources with 1720 with 1613 journal articles, 27 conference Proceedings, 09 Books Chapters, and 71 Other Resources. Among the colleges in Karnataka followed by College of Engineering 1091 scholarly resources including 639 journal articles, 436 Conference Proceedings, 14 Books Chapters and 02 Other Resources. The Commerce BHS Arts and TGP Science College, Jamkhandi has only 11 scholarly resources with 08 journal articles, 03 Conference Proceedings.

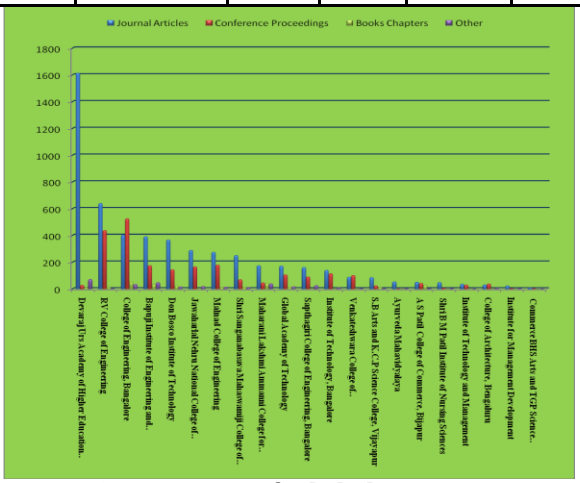


Figure 2:Types of scholarly Resources

Table 3: Types of Scholarly Resources

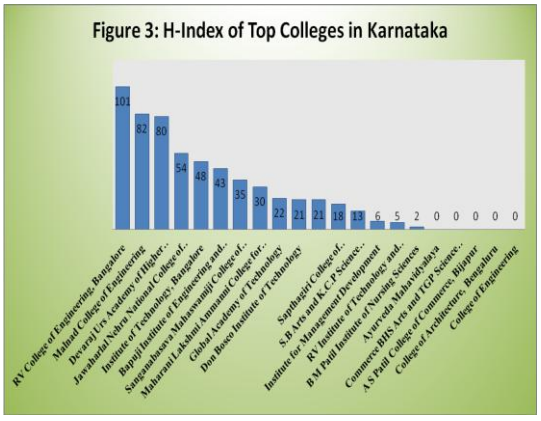
Name of the College	Total Scholarly Resources	Journal Articles	Conference Proceedings	Books Chapters	Other	Rank
Devaraj Urs Academy of Higher Education and Research	1720	1613	27	09	71	1
RV College of Engineering	1091	639	436	14	02	2
College of Engineering, Bangalore	1012	403	524	52	33	3
Bapuji Institute of Engineering and Technology, Devanagari	646	391	174	34	47	4
Don Bosco Institute of Technology	546	366	143	22	15	5
Jawaharlal Nehru National College of Engineering, Shivamogga	475	288	165	04	18	6
Malnad College of Engineering	477	274	178	12	13	7
Shri Sanganabasava Mahaswamiji College of Pharmacy and Research Centre, Vijayapur	341	250	69	11	11	8
Maharani Lakshmi Ammanni College for Women	298	174	45	41	38	9
Global Academy of Technology	307	171	105	12	16	10
Sapthagiri College of Engineering, Bangalore	279	161	89	04	25	11
Institute of Technology, Bangalore	265	139	114	03	09	12
Venkateshwara College of Engineering, Bangalore	191	88	100	01	02	13
S.B Arts and K.C.P Science College, Vijayapur	120	85	23	10	02	14
Ayurveda Mahavidyalaya	55	53	00	00	02	15
A S Patil College of Commerce, Bijapur	123	50	41	28	04	16
Shri B M Patil Institute of Nursing Sciences	58	48	06	01	03	17
Institute of Technology and Management	68	36	29	03	00	18
College of Architecture, Bengaluru	76	31	37	01	07	19
Institute for Management Development	30	23	03	01	03	20
Commerce BHS Arts and TGP Science College, Jamkhandi	11	08	03	00	00	21
Total	**2081**	**5291**	**2311**	**263**	**321**	

5.4 H-Index of top Colleges in Karnataka

The h-index to the contribution of top individual Colleges of Indian Research InformationNetwork System implemented in Karnataka. The table-4: indicates College of Engineering, Bangalore has the highest H- index 101 with 1012 scholarly resources, followed by Malanda College of Engineering H-index 82 with 477 scholarly resources. The B. M Institute of Nursing Sciences has the lowest H-index 02 and some other Colleges are not having any H- Index.

Table 4: H-Index of Top Colleges in Karnataka

Name of the College	Scholarly Resources	H-Index	Rank
RV College of Engineering, Bangalore	1012	101	1
Malnad College of Engineering	477	82	2
Devaraj Urs Academy of Higher Education and Research	1720	80	3
Jawaharlal Nehru National College of Engineering, Shivamogga	475	54	4
Institute of Technology, Bangalore	265	48	5
Bapuji Institute of Engineering and Technology, Devanagari	646	43	6
Sanganabasava Mahaswamiji College of Pharmacy and Research Centre.	341	35	7
Maharani Lakshmi Ammanni College for Women	298	30	8
Global Academy of Technology	307	22	9
Don Bosco Institute of Technology	546	21	10
Venkateshwara College of Engineering, Bangalore	191	21	11
Sapthagiri College of Engineering, Bangalore	279	18	12
S.B Arts and K.C.P Science College, Vijayapur	120	13	13
Institute for Management Development	30	06	14
RV Institute of Technology and Management	68	05	15
B M Patil Institute of Nursing Sciences	58	02	16
Ayurveda Mahavidyalaya	55	00	17
Commerce BHS Arts and TGP Science College, Jamkhandi	11	00	18
A S Patil College of Commerce, Bijapur	123	00	19
College of Architecture, Bengaluru	76	00	20
College of Engineering	1091	00	21
Total	**8189**	**581**	



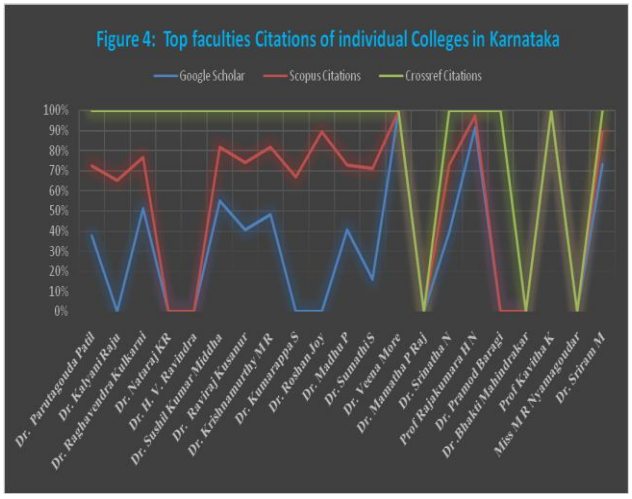
IRINS provides the greater revelation of their research assistances to the international community and helps to collaborate with the interdisciplinary research activities. The contribution of top individual College faculties of the Indian Research InformationNetwork System implemented Colleges in Karnataka. The table-5 specifies Dr. Parutagouda Patil, S B Arts and KCP Science College, Vijayapur has the highest 179 scholarly resources with 2431 Scopus citations, 2634 Google Scholar and 1907 cross-reference citations with Placed at 1st Rank. Dr. Kalyani Raju, Devaraj Urs Academy of Higher Education and Research, is placed at second rank, having 152 scholarly publications with 312 Scopus citations and 166 crossref citations. Dr. Sriram M, SDM Institute for Management Development has the lowest Rank with 05 scholarly resources, 41 Google Scholar, 09 Scopus and only 06 Crossref citations.

5.5 Contribution of top faculties of individual Colleges in Karnataka.

Table 5: Contribution of Top faculties of individual Colleges Faculty Profiles in Karnataka.

Name of the faculty Name	Scholarly resources	Google Scholar	H index	Scopus Citations	H index	Crossref Citations	Rank

Dr. Parutagouda Patil	179	2634	27	2431	26	1907	1
Dr. Kalyani Raju	152	00	16	312	11	166	2
Dr. Raghavendra Kulkarni	128	2856	30	1427	22	1295	3
Dr. Nataraj KR	70	00	00	00	00	22	4
Dr. H. V. Ravindra	69	00	00	00	00	227	5
Dr. Sushil Kumar Middha	63	1027	20	502	14	343	6
Dr. RavirajKusanur	55	862	15	703	14	551	7
Dr. Krishnamurthy M R	44	805	15	564	11	301	8
Dr. Kumarappa S	40	00	00	150	05	74	9
Dr. Roshan Joy	39	00	00	3512	27	416	10
Dr. Madhu P	37	1373	12	1096	12	913	11
Dr. Sumathi S	36	29	03	99	06	52	12
Dr. Veena More	27	704	10	0	000	04	13
Dr. Mamatha P Raj	26	00	00	00	00	00	14
Dr. Srinatha N	17	430	10	362	10	298	15
Prof Rajakumara H N	15	819	00	53	02	24	16
Dr. PramodBaragi	13	00	00	00	00	03	17
Dr .Bhakti Mahindrakar	12	00	00	00	00	00	18
Prof Kavitha K	10	05	02	00	00	00	19
Miss M R Nyamagoudar	06	00	00	00	00	00	20
Dr. Sriram M	05	41	05	09	02	06	21
Total	**8189**	**11585**	**165**	**11220**	**162**	**6602**	



6. Findings

The major findings of the study areas given below:-

- Malanda College of Engineering holds the highest number of faculties, 191 (9.17%)
- Devaraj Urs Academy of Higher Education and Research has the highest scholarly publications, 1720 (21.00 %) in which 1613 journal articles, 27 conference Proceedings, 09 Books Chapters, and 71 Other Resources among the colleges of Karnataka state.
- The College of Engineering, Bangalore has the highest H- index 101 with 1012 scholarly resources among the colleges of Karnataka state.
- Dr. Parutagouda Patil, S B from Arts, and KCP Science College, Vijayapur has the highest 179 scholarly resources with 2431 Scopus citations, 2634 Google Scholar, and 1907 cross-reference citations with Placed at 1st Rank.

7.Conclusion

The National or International level ranking system and the assessment systems have been forcing the academic institutions to implement the research information management systems towards showcase the research contribution to the scholarly communities. The Indian Research Information Network System(IRINS) in India has made a

tremendous impact to promote and bring more awareness towards the research information management system for the higher education system and its benefits. The IRINS is now displaying the figures and metrics of institutions, R&D organizations and representing a deep insight and picture of the academic institution's competency in respect of the core faculty and the research strength through it research collaboration cross the world. The IRINS has strong existence in the higher education system in India and increasing the service to the academic community outside India. IRINS is being now crossing its boundaries through its active association and presentations at various international field such as the Scholarly Communication Institute (FSCI), etc. implementation of the IRINS in Indian higher educational institutions, and R&D organizations have made a presence in CRIS systems across the globe. The Department of Collegiate Education Established in 1960, its aims at making quality Higher Education accessible to students of all sections of society. This Department with holistic development of students as its core concern, Department endeavors to bring quality Higher Education within the reach of the most disempowered classes, women and rural populace. Presently the Department of Collegiate Education manages the planning, administration and funding of 430 Government First Grade Colleges that include 355 co-education colleges, 53 Girls' colleges, 06 law colleges, 14 Residential Colleges, 02 Chitrakala colleges and 02 Model colleges, and 321 Aided First Grade Colleges in the state with the assistance of 06 Regional Offices in Bengaluru, Mysore, Mangalore, Shivamogga, Dharwad and Gulbarga.Still, only a few colleges have created IRINS instances. Many of them have not developed their IRINS instance. We observed that many of the Faculty profiles in this platform are not provide complete information. Thus the intermediation of the Ministry of Education, Department of Collegiate Education Government of Karnataka, and the University Grants Commission (UGC) may require full-fledged implementation across all the colleges concerning greater visibility to research output and impact in all major subject domains and subject expertise.

References

[1.] Kannan, P., Kimidi, S.S., & Arora, J. (2018). Federated research profile management for researchers in India: Indian research information network system. INFLIBNET Newsletter, 25(3), pp.14-21.

[2.] Kimidi, S.S. & Kannan, P. (2020). Indian academic institutions and Indian research information network system (IRINS): A journey. INFLIBNET Newsletter, 27(1), pp.18- 26.

[3.] Tyagi, S. (2021). Indian Research Information Network System (IRINS): Analysis of Academic Institutions in India. *Qualitative and Quantitative Methods in Libraries (QQML)*, *10*, 189–217. https://irins.org/irins/irins_instances.php.

[4.] https://inflibnet.ac.in/ INFLIBNET official site. Retrieved on January 02, 2022.

[5.] https://vidwan.inflibnet.ac.in/ VIDWAN Official Site. Retrieved on January 03, 2022.

[6.] https://irins.inflibnet.ac.in/irins/ IRINS official site. Retrieved on January 03, 2022.

[7.] https://dce.karnataka.gov.in/english Department of Collegiate Education official site: Retrieved on January 03, 2022.