Regulations to Prevent Plagiarism in Higher Education in India: A Critical Appraisal

Ramesh Pandita\(^*\) and Shivendra Singh\(^*\)

\(^*\)BGSB University, Rajouri- 185 234, India
\(^*\)All India Institute of Medical Sciences, Patna - 801 507, India
\(^*\)E-mail: rameshpandita90@gmail.com

ABSTRACT

The undergoing discussion presents a critical view about the various measures taken by the different governing bodies, especially by the UGC to prevent the practice of plagiarism in Higher Education Institutions in India. The discussion highlights the grey areas of the measures taken by these governing bodies to curb the practice of plagiarism and also focuses on the reasons, which more or less can be seen as a reason for triggering the practice of plagiarism across the academic and the research circles of the country, along with some other undesirable practices of publishing. The study deliberates threadbare about the misunderstandings and the mal-understandings about the plagiarism, whereby academicians and researchers are not yet able to draw a fine line to understand as what amounts to plagiarism and what not and the ways and means to overcome this practice. These and many other aspects have been touched, whereby measures taken lack rationality and how actually the forced researchers are vitiating the otherwise healthy research atmosphere of the country.

Keywords: Higher education; Research ethics; Academic integrity; Plagiarism; Similarity measures; Similarity detection

1. INTRODUCTION

The prevalence of instances of plagiarism among the academic, research and scientific community across the world is not new. The practice is prevalent since ages, but, of late, with the introduction of similarity detection tools (softwares etc.) the instances of plagiarism have started surfacing in numbers, even so, the number of plagiarism cases has also surged\(^1\). However, the similarity detection tools have helped to make the prevalence of plagiarism across research and academic community more visible. In the absence of mechanisms to detect the prevalence of plagiarism, researchers used to copy the content from other sources and used to publish it as their own, freely and fearlessly. But, with the introduction of information technology (IT) in plagiarism detection, noose has been tightened around all such researchers who were used to steal the content from other sources and to project it as their own and used to get away scot-free.

It has been observed that many a time government and its agencies impose decisions of the public interest without consulting the different stakeholders, with the result, such decisions prove contrary to the interests of the public and fail to serve the real purpose, the real purpose. Given the fact, University Grant Commission, (UGC), New Delhi imposed a decision on the academic community in the country to indulge in research activity and earn academic performance indicator (API) score for getting promoted under career advancement scheme (CAS) and for direct recruitment as Associate Professor\(^2\). This decision of the UGC was received as publish or perish dictate by the academic community of the country, with the result, those who were less interested in the research activity were somewhat forced to indulge in research activities. One can understand what type of research results a forced researcher can produce, and thereon, if all this inflates the practice of plagiarism, then somewhere UGC has to give thought to it and should revisit its decision, which instead of promoting research activities in the country has demeaned the same.

UGC in its regulations pertaining to prevention of plagiarism has suggested some noteworthy measures, be they about fixing duties on the individual institutions or drawing awareness among the scholars and the faculty members about plagiarism to various other measures to be taken both at the department and the institutional level. But, the whole purpose of this exercise gets defeated; the moment real issues are not identified and addressed.

2. NEED, PURPOSE AND IMPORTANCE OF THIS CRITICAL REVIEW

The present critique has been produced with the view to let academia understand the need and importance of participating in opinion mobilisation, whenever initiated by any government or its agency, the outcome of which is bound to influence the society in general and the stakeholders in particular. It is not always necessary that the people at the helm, occupying important positions of decision making may always be right in their decision making. Given the fact, the
government and its agencies from time to time seek opinion from different stakeholders in the decision making over the issues of public interest. Accordingly, participating in such opinion seeking surveys/polls is both social and professional obligation of every individual to raise the valid argument in support or against a particular move, which may have long and lasting repercussions. The review is also important to let the authorities at the helm understand that they should always seek the opinion of different stakeholders before going ahead with any such decision of public interest.

3. OBJECTIVE OF THE DISCUSSION

To undertake the critical appraisal of the UGC Regulations 2018 pertaining to promotion of academic integrity and prevention of plagiarism in higher education institutions and the reasons, which lead to the inflation of practice of plagiarism across academia in India?

4. UGC’S PERSPECTIVE

UGC is working as an intermediary between the Govt., of India and the Higher Education Institutions (HEIs) of the country. The agency is actively engaged in framing rules and issuing guidelines from time to time, so as to develop mechanisms to ensure sustainable growth and development of the higher education sector of the country along with proportionate distribution of funds to universities and colleges. UGC, New Delhi issued a circular to all HEIs across the country, whereby some institutional mechanisms were recommended by the commission to prevent the growing menace of plagiarism across the academic and research community of the country. UGC vide its Demi Official letter, circulated the UGC Regulations pertaining to (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Education) to all HEIs across the country. The regulations were notified in the Govt., of India Gazette on July 31, 2018 and can also be downloaded from the UGC website.

5. SIMILARITY VS PLAGIARISM

There is a need to understand that in a similarity report, everything detected as similar to other sources may not necessarily amount to plagiarism, and to assess and validate the same human intervention is always required to corroborate as whether the content detected as similar amounts to plagiarism or not. Like, UGC in its regulations has excluded all quoted work with the necessary permission, references, bibliography, table of content, preface, acknowledgement, generic terms, laws, standard symbols and standard equations form similarity check. This means, if the content detected as similar in a manuscript falling under the purview of any of these will not amount to plagiarism, provided the same is properly acknowledged. Now this is something which cannot be evaluated by the machine itself in its report and it is the subject expert or the research supervisor who can take call on it. Given the fact, an institution or organisation by no means should accept or reject the document on the grounds of similarity reflected in a machine generated report, unless the same is corroborated by the subject expert or by the institutional committee duly constituted for the purpose.

6. QUANTIFICATION OF PLAGIARISM

Quantification of plagiarism somewhere reflects the limited understanding of the people at helm about the plagiarism and its practices. As per UGC regulations, plagiarism means the practice of taking someone else’s work or an idea and passing those as one’s own. In simplest terms, plagiarism can be defined as theft, whereby a researcher steals others content and claims it to be his/her own. But, when one takes into consideration the UGC’s quantification of plagiarism, then it can be inferred that UGC has allowed this theft to a certain degree, while, as increases the severity of this theft so has UGC proposed penalty in each case. There is a need to understand that a theft is a theft, be it of one ounce or more, so one can’t have two different yardsticks for punishing two persons accused of the same crime on similar grounds. Here the severity of the offence is same but the degree of offence committed varies. For the purpose of giving some benefit of the doubt, relaxation up to 10 per cent plagiarism as maintained by the UGC in its regulations should be considered as an exception for the budding scholars and students, but there should be zero tolerance for plagiarism at the seniority level among the senior and seasoned academicians.

The different levels of plagiarism earmarked by the UGC in its regulations are itself questionable. Suppose, in one document 10 per cent content is found as similar to other sources belonging to non-excluded areas of text and on the other hand 25 per cent text or so is found in another document, but similar to excluded areas. So here the former case amounts to plagiarism, while as lateral does not, but this can be ascertained only by the experts. Similarly, one may come across numerous instances, whereby a report showing lesser percentage of similarity may actually amount to plagiarism, while as a document with a higher percentage of similarity may not necessarily amount to plagiarism. Given the fact there is always need for expert human intervention to assess the true nature of similarity and not to decide things arbitrarily. Although, the UGC in its notification has advocated the establishment of the Departmental Academic Integrity Panel (DAIP) and Institutional Academic Integrity Panel (IAIP), but their role has been kept limited to the extent of hearing only the alleged cases of plagiarism against the students, faculty members, researchers and staff members. Here the role of any such institutional or departmental committee needs to be broadened to assess each and every similarity report. Still more, submitting a manuscript after scanning it with similarity detection software means that researchers can improve their manuscripts to the extent of ensuring 0 per cent similarity, this way, neither the intuition will face ignominy nor will be individuals penalised and so won’t be there cases for IAIP to hear. Accordingly, the role of IAIP instead of being curative to address the cases of plagiarism, should be preventive to ensure zero similarity/plagiarism before submitting a manuscript to a research journal or uploading thesis on Intuitional Repository or Central Repository like Shodhganga etc. in case of India.

7. REPERCUSSION OF UGC’S REGULATIONS

Before discussing the UGC regulations pertaining to prevention of plagiarism in academic institutions, it is
imperative to discuss about some key decisions of the UGC, which went wrong and triggered the practice of plagiarism among academicians.

In an attempt to boost the research environment in the country, UGC in its 2016 regulations, made it mandatory for academicians all across the country to indulge in research activities\(^1\). Knowing very well that a good chunk of academicians across the country lacks research interest, as such, it may be difficult to involve them in research activities. Given the fact, UGC linked career advancement of an academician to his/her research contribution, whereby an academician has to show his/her research contribution before moving an application for the next grade or scale. All this somewhere resulted in turning all such academicians into non-serious researchers, who were supposed to show the evidence of their research contribution in the form research articles published in research journals. Most of these forced researchers produced substandard, bogus and manipulated research results by these forced researchers that too in substandard research journals.

It is an established fact that research is not only about the individual ability of a person to undertake research activities, but is more about the research interest of an individual, which results or turns an individual into a researcher. If a person is not interested in research, he/she can never become a good researcher. In the same way, an individual may prove to be a good teacher, but may not necessarily prove to be a good researcher. Similarly, we may have a good researcher, but that does not mean he or she will also prove to be a good teacher. However, exceptions are always there and the same holds true about teaching and research community. On the contrary, if a teacher is forced to be a researcher or vice-versa, one can understand what type of results can be produced by a forced researcher or a teacher. This is what and why the research community of India is in the line of fire, whereby questions are being raised over the quality of research results produced by the Indian academicians.

It is a very well known fact that research journals in any subject discipline, indexed by Web of Science or Scopus, enjoy prestige and reputation among the research and scientific community across the world. All such research journals are known for maintaining a very high standard in publishing research results. The manuscripts are evaluated through a peer review process and after ensuring the standard and quality on various parameters, with no compromises with quality. This is for sure that any substandard research article is never going to find space in any such reputed and prestigious research journal. Given the fact, all such researchers, who are hell bent to produce substandard research results, seek alternate means for publishing their research results, which ultimately offers breeding ground to predatory research journals and results in the widespread growth of predatory research journal.

India is known as one of the largest predatory research journal publishing country, offering safe haven for predatory journal publishers. As on date around 20000 research journals are being published in India and needless to mention that majority of these journals are of predatory nature, while as others have maintained a very poor standard, which gets corroborated by the fact that as on date less than 500 research journals from India are indexed by the popular indexes like SCOPUS and Web of Science\(^6\). The researchers also observed that over 1500 new research journals are introduced each year in India at an average annual growth of 31.44\%. These predatory research journals are doing a very brisk business in India, as their ultimate aim is to make money, which they are easily making in the name of manuscript handling charges. On average, each predatory research journal in India is charging anything between Rs. 2000 to Rs. 5000 from the authors for publishing a research article. Most of these predatory journals are published online and accept research articles within two to three days of their submission and publish the same within a week’s period of the submission of article. A good number of such journals have maintained rolling publishing board, whereby they continually publish the research articles the moment they accept it. A good number of such predatory journals also claim to have a double blind peer review process, but the fact remains they don’t even check the spelling, grammar, references, citations and other basic aspects before going ahead with the publishing of articles.

The academicians forced to undertake the research are somewhat compelled to indulge in undesirable practices to write research papers and the path of plagiarism being the easiest, is preferred by most of them. So in the process of promoting more and more research activities in the country by forcing non-researchers to be researchers, somewhere the process has ended up in promoting plagiarism, an outcome contrary to what was expected.

The University Grants Commission upon realizing its folly that everything that is published in the journals is not research and every journal is not a research journal. All this forced the UGC to approve only a selected lot of research journals and recognise only that content as research which is published in such journals. Given the fact, UGC initially compiled a list of research journals indexed by the Scopus and Web of Science. This was followed by including the research journals indexed by the Indian Citation Index (ICI). So a comprehensive list of 32659 research journals were compiled by the UGC in the first go\(^7\).

It is a very well known fact that a good lot of academicians and the researchers in Indian, especially in the field of Social Sciences, Humanities and Arts generally publish their research results in the non-indexed research journals. Even it may not be inappropriate to say that researchers and academicians in India from diverse subject disciplines are unaware about the indexes like Scopus and WoS, with the result most of these researchers fail to recognise the quality research journals to publish with. This lack of awareness among the researchers in India is equally contributing towards the widespread growth of predatory research journals. Realizing the same and after facing the pressure from different quarters, especially from the academicians who had mostly published their research articles in the non-indexed research journals, the University Grants Commission was again forced to expand the list of approved journals by seeking recommendations from the universities across the country to submit a list of journals other than those indexed by Scopus, WoS and ICI. All this resulted in expanding the list of UGC approved journals around 48000, but this too
did not help in settling the scores right, as UGC found itself in the line of fire from different quarters, especially by the well known researchers and academicians of the country, who criticised the governing body openly for including the predatory and other sub-standard research journals in the list of its approved journals.

The country wide criticism for including the predatory and substandard research journals in the UGC list of approved journals forced the governing body to re-invite recommendations from different stakeholders on the format specially designed for the purpose by the UGC. Accordingly, on receipt of revised recommendations, nearly 4 to 5 thousand research journals were declared substandard, hence were removed from the list. It is a well known fact that even the journals indexed by Scopus and WoS are not static and every year an updated list is presented by these leading indexes, mostly reflecting the newly indexed journals, which also means that all the new research journals indexed by WoS, Scopus and ICI will be automatically treated as approved in the UGC list of journals, hence the UGC list of journals is inherently dynamic. Thereon, if UGC is saying that by inviting recommendations from different stakeholders from time to time about the inclusion and exclusion of journals will turn the list more dynamic is simply an attempt by the highest governing body to save its skin and to avoid further embarrassment. One just fails to understand, instead of inviting recommendations from the different stakeholders every year, why UGC is not sticking only to Scopus, WoS and ICI indexed journals and ask the rest of the journal publishers across the country to improve their publishing standard, get indexed and be the recognised partners of global research community. This will save the time of the academicians, who unnecessarily every year wastes time in compiling their own list of journals and then submit it to the UGC for approval by its standing committee.

The murky business of compiling the list of research journals at the institutional level remains every time limited to those research journals in which research scholars and faculty members of that particular institution may have published the research articles during that particular year. The fact remains, that this exercise has got nothing to do with the quality of the research journal, but is simply an attempt by the institutions to protect the interest of their research scholars and faculty members. The harsh reality is, institutions recommend a research journal for inclusion in the UGC approved list of journals in one year and exclude the same journal from the list next year, only because they don’t have to protect interest of any of their faculty members or research scholar in the subsequent year. One just wonders, how a research journal can be a quality journal in one year and turn sub-standard next year or vice-versa, only because at one point of time the institution has to protect their interest and at others they have nothing to protect.

The bigger question arises, if a research journal is listed as an approved journal by the UGC in its list during a particular year and if the same journal is excluded from the list in the subsequent year, then what about those research articles, which different researchers may have published in that particular journal during that year, owing that the research journal stood approved by the UGC in its list. Even if UGC recognises all such research articles as valid, then again the question arises, is UGC going to maintain a database of approved research journal on an annual basis so as to facilitate all such researchers who may have published their research results in such journals or UGC will simply run away from its responsibility by beating the drum of its dynamism of journal list. The people at the helm in the UGC must understand this basic fact that research journals cannot be recognised and derecognised at an annual basis. Had such been the case, then Indexes like Scopus, WoS, and ICI would have also followed the same rule.

By recognizing and de-recognizing the research journals, the commission is somewhere questioning its own ability and functioning. Of late on May 02, 2018, UGC de-recognised 4305 research journals from its previous list, which one fails to understand, as whether all this reflects the quality dynamism of the UGC, of the journal publishers, of the journals, of the recommending institutions or of the journal list itself. Perhaps, all this may reflect inconsistency on the part of every stakeholder for not being able to uphold and maintain the standard of their respective functioning.

8. SOME OTHER GREY AREAS OF ACADEMIC RESEARCH

Apart from above, the pressure to publish has also encouraged undesirable growth in publishing articles in edited books as book chapters, conference proceeding etc. The irony with publishing research articles through these mediums is that most of these research articles are not scanned for plagiarism, so there is no check to ensure that research articles published through all such mediums are plagiarism free.

8.1 Edited Books

For the want of accumulating healthy API score, mostly required at the time of career advancement and direct recruitment, the academicians all across the country started producing edited books in numbers. It is an open secret that most of these edited books are of substandard quality, both content wise and publishing quality wise. Researchers, whose sole aim is to accumulate API score, seek chapters from budding and unrecognised researchers and publish same without any peer review, without checking the authenticity and reliability of the facts and findings and other parameters. Most of these edited books are published with ISBN number so as to validate the book. However, the ugly face of this sort of publishing is that only a limited number of copies are published by the editors, mostly circulated among the contributors, so that same can be produced as evidence at the time of interview or while submitting the proof to any evaluating agency. This murky business of research writing has not yet been exposed and so don’t authorities and other agencies try to find the facts behind such an unregulated activity. This unsolicited research activity is going for a long under the nose of the most of the governing bodies across the country without any notice. Even most of these editors invite high profile academicians of their respective institutions including Vice- Chancellor’s etc. in their book release function, who too laud their effort without looking at the murky side of such research writing. Researchers,
especially novice and budding ones, who fail to publish their research results in the mainstream research journals, seek alternative routes and publishing research findings in the shape of book chapters serves their purpose.

8.2 Researchers’ Nexus

It would be fair to talk about the researchers’ nexus going around, whereby a group of researchers or authors come together and include each other’s name in the research papers without making any real contribution in the research article. The sole aim of such researchers is to increase the number of their research papers so as to project themselves as accomplished researchers. Under this sort of research nexus, a group of researchers (ten or so odd people) come together and inflate their research publication number within the years by simply adding each other name in research articles. Even, questions are being raised over the citation practices of these researchers, whereby they exchange favours simply by citing each other to inflate their h-index and impact factor.

8.3 Conference Proceedings

Publishing research results in the conference proceedings are as good as inviting chapters for an edited book. Organizing conferences have got reduced to be the ritualistic professional congregations, a-get-together-nothing. Professional integrity of the organisers is doubtful, who take more pride in organizing such gatherings and focus less on the true outcome of such gatherings. All such professional associations across the country should be asked to make the soft copy of their conference proceedings available online for the benefit and access of others. This will in turn push the organisers to do some serious business in the form of publishing quality research results, rather accepting trash arbitrarily and publishing the same by pleasing each other and influencing the decisions. For the sake of increasing the number of research articles, most of the editors of the conference proceedings can be found as coauthors in the scores of research articles, while as, in reality their contribution is nothing in all such research writings, and has become more or less a practice to extend favour for accepting the research article. By making a soft copy of the conference proceeding available online on their association’s website, the practice of plagiarism is bound to come down and improve the research quality.

8.4 Ghost Writers/Researchers

The pressure to publish has helped to flourish a new market of ‘Ghost Writers’. In the simplest sense ghost writers are those who write research articles for others against a fixed amount of money. When an academician, not interested in research activities is told that his/her next promotion cannot materialise unless a minimum number or research articles are not produced as an evidence of your research activity, he/she is bound to look for a ghost writer to write a research article or a book for him/her. So this way somewhere directly or indirectly a wrong decision taken by the authorities at the helm instead of promoting the research integrity has demeaned the same.

9. LIMITATIONS OF SIMILARITY DETECTION TOOLS

Similarity detection tools have their own set of limitations and inherently their scanning activity is limited to, online sources, which means any person copying or stealing content from offline sources and projecting it as his/her own can go scot-free. Still more, these similarity detection tools scan only a small number of online e-documents, which are mostly freely accessible and exclude most of the proprietary documents as the same are not freely available for access. There is a need to understand, that as per google, it takes anything between four days to four weeks for its search engine google, to index any new website, the strongest and the fastest search engine as on date. This should clearly give us an idea that how many databases and servers a similarity detection tool would be scanning a document, which sometimes generates report even in less than 2 min. So, it is always imperative that before hiring the services of any service provider, one must ensure the online resources, which the service provider has access to scan, especially the leading publishers across the world in the shape of digital archives they maintain on their web servers rather the proprietary documents.

At times, situation arises, when upon scanning a document, the report generated reflects similarity to a certain degree and upon resubmitting the document after making necessary changes, the document instead of showing the lowest levels of similarity shows higher levels of similarity. This kind of situation can arise on different counts.

- All the web servers hosting certain kind of documents in their digital archives do not remain every time switched on; with the result similarity detection tools fail to scan all such digital archives, which are not accessible at a certain point of time. So any document scanned at two different times is bound to reflect the variance in similarity.
- Every digital archive may not be accessible for the scan, as there may be any number of issues ranging from server down, maintenance, heavy traffic, and more. Thereon the document scanned at two different points of time may reflect variations in similarity.
- Service providers always keep on exploring the possibilities to widen and broaden the base of their scan, so that more and more online documents may be scanned for better results. So every time a new database is added by the service providers to their existing document base, the similarity reports generated at two different points of time are bound to reflect variations.

10. SUGGESTIONS

The following few suggestions are aimed to ameliorate the UGC regulations pertaining to prevention of plagiarism.

- Foremost, the people at the helm in UGC should understand that there exists nothing like ‘anti-plagiarism tool’; the appropriate terminology is ‘similarity detection tool’. Even though one cannot use the term plagiarism detection tool for the fact that the content reflected as similar to other sources in the machine generated report may not necessarily amount to plagiarism always. Hence, to avoid the confusion and use of offensive terminology, the term
‘anti-plagiarism tool’ should be forthwith replaced with ‘similarity detection tool’.

- UGC in its regulations has directed the higher education institutions to form a Departmental Academic Integrity Panel (DAIP) and Institutional Academic Integrity Panel (IAIP), which is undesirable and may unnecessarily delay the process between the two panels. This may only result into engaging senior academicians from other departments on understanding basis. Besides, practically it would be very difficult to engage a person well versed with the use of similarity detection tools in each individual department. So of the two Academic Integrity Panels, only Institutional Academic Integrity Panel (IAIP) should be established. However, the number of members of IAIP can be increased from those notified by the UGC and can be rotated after every two to three years or as may be deemed appropriate, along with co-opting a subject expert, in each individual case under purview.

- By and large library professionals all across the country are handling all such tools, so there should be no second thought in it that library professionals should be engaged as experts to handle these tools. Even so, the IAIP should function from the institutional library or the Central Library.

- The University Grants Commission, through its autonomous Inter University Centre (IUC) INFLIBNET is already providing similarity detection tool services to all the HEI’s across the country recognised by the UGC under 2(f) and 12 (B). However, with the view to standardise the research integrity across the country and to enforce healthy competition among different service providers, UGC can short list three to four similarity detection tools, from different service providers as valid and should strictly ask the HEI’s across the country to subscribe one of them for similarity detection and the similarity report generated with tool other than those recommended by the UGC shall not be accepted. Before selecting and recommending any similarity detection tool, there is a need to understand that service providers do not have their own digital archive of all the global documents, as such, they rely heavily on the publishers of all sorts for their support and cooperation, and no publisher of whatsoever nature would ever give free access to such service providers to access and scan their databases, unless both the publisher and the service provider may not enter into any sort of agreement with each other to have access to scan their digital archive. So there is a need to ensure that a service provider should have access to all the major databases of the world, especially of those subscribed the INFLIBNET under eSS (eShodhSindhu).

- UGC through its IUC, INFLIBNET should organise regular workshops and training programmes towards the use of similarity detection tools, especially for those engaged as experts with IAIP to use the similarity detection tools.

- Although there is no need for the whistle blowers to come forward to bring fore the instances of plagiarism, as same can be easily done by maintaining the complete anonymity, but still there may be instances, whereby anonymity of the whistleblowers could not be maintained.

11. CONCLUSIONS

From the above discussion, it is evident that as of now, there is no foolproof mechanism, whereby the practice of plagiarism can be curbed to its entirety. There are numerous loopholes in the prevailing practice of plagiarism detection and the foremost being the limitations of similarity detection tools. Still more, some of the limitations, which this software have, can be overcome over a period of time, but nothing can be done with regard to detection of content stolen from the offline sources, the problem which can’t be overcome. The only way to overcome the problem of scanning offline sources is, first scan all the offline sources and put them online in digital archives, which literally is an impossible task, as everything offline or in print mode cannot be scanned and made available online. There is a word of caution for the different governing bodies of HEI’s as well, whereby the people at the helm need to understand that researchers cannot be produced batches and by force or even by luring them with money, which is no way less than bribing. Instead of indulging in all such undesirable practices, the government and its agencies should create the necessary infrastructure and facilitate the researchers by all possible means to produce good research results. By asking academicians, who are good in teaching activities to prove their acumen by indulge in research activities is something which is least required. In all, as of now it seems to be very difficult to cut the practices of plagiarism to the level zero, because there are numerous loopholes, which provide safe haven to all those who believe in the practice of plagiarism. But, as is said, something is better than nothing so holds true about the similarity detection tools.

REFERENCES


2. University Grant Commission. UGC (Minimum qualifications for appointment of teachers and other academic staff in universities and colleges and measures for the maintenance of standards in higher education) Regulations, 2010 New Delhi: University Grant Commission; 2010 (Accessed on 2018 December 5).


4. University Grant Commission. UGC Letter Reg.: UGC (Promotion of academic integrity and prevention of plagiarism in higher educational institutions) regulations, 2018 New Delhi: University Grant Commission; 2018.


CONTRIBUTORS

Mr Ramesh Pandita, presently working as Sr. Assistant Librarian at BGSB University, Rajouri, Jammu and Kashmir, India. He has more than 80 research paper and over 100 popular article to his credit. His areas of expertise include Biblometrics, open access, e-documents, automation and networking, library administration and management.

Contribution in the current study is the conception of the idea, writing and compiling the entire study.

Dr Shivendra Singh is working as Senior Librarian in AIIMS, Patna. He has published more than 50 research papers in both national and international journals. Received doctoral degree from Berhampur University, Orissa. His areas of expertise include, Library automation and networking, e-content, scientometrics.

Contribution in the current study is in compiling and reviewing the entire study.