Abstract
Before the advent of Information and Communication Technology (ICT), copyright laws were seen as a dull and almost irrelevant area of law relating to information provision. But with the use of ICT the copyright laws now have become central point and one of the most dynamic and fast moving areas of law. In the present scenario, IPR awareness is the key to technological innovations and in the emerging knowledge-based economy, the importance of IPR is likely to grow further. The need for creating awareness among the creators of information and knowledge about IPR has become imperative because in the digital environment it becomes difficult to prove rights violation. The paper deals with the issues pertaining to the copyright law and library

Introduction
Copyright is related with a creative artistic or literary expression. The copyrighted material can be a book, a picture, a sculpture, a painting, jewelry designs, a motion picture, music, or any thing that is the result of a person’s creative mind that take a physical shape and has no function other than the beauty and creativity of the thing itself. Unlike a patent, the thing being copy righted must be functionless or useless. Copyright is protection on the expression of an artistic idea that is “Fixed in any tangible medium of expression”. The term “Fixed” means that the artistic expression is written on paper or painted on canvas or shaped in stone. Copyright laws prohibit other people from making copies of the “Fixed” tangible medium of expression. However, copyright only protects the expressive elements of a broad range of works—including books, graphical works, dramatic works, choreography, musical compositions, sound recordings, films, sculpture, architectural works, and computer programmes. It does not extend to facts, ideas, or utilitarian aspects of such works in the form of an article, paper or a book, not the idea as such. For example, an idea of making an instrument which saves the use of electricity is expressed in the form of an article and published in a journal. The reproduction of the article comes under the copyright and to be registered at the Office of the Registrar Copyright, whereas, to protect the invention of the gadget that saves the electricity, the patent application should be filed at the Patent Office. Copyright law promotes creativity in literature and the arts by affording authors and artists lengthy terms of protection against copying. The concept of copyright is essentially a byproduct of modern civilization. In the ancient times, the works of art and literature were created to satisfy one’s curiosity in leisure time and as a consequence thereof to build up one’s image in the society with the objective of achieving fame. The law relating to protection of copyright was developed after the invention of the printing. The printing press has made it possible to produce a large number of copies of any work. In order to protect the labour of an author for getting legitimate monetary gain, an exclusive right for limited period is granted to the authors, composers, artists and designers of the original work.

Definition
The UK Copyright, Design and Patents Act, 1988 states that “the copyright is the legal protection extended to the owner of the rights in an original work that he/she has created. The owner can control the destiny of work. Since law protects the work from the movement it comes into being, there is no formality to be complied with, such as registration or deposit, as condition of that protection”. Copyright comprises of two main sets of rights: the economic rights and moral rights. Economic rights are the rights of reproduction, broadcasting, public performance, adaptation, translation, public recitation, public display, distribution and so on. The moral rights include the author’s right to object to any distortion, mutilation, or other modification of his work that might be prejudicial to his honor or reputation. Both sets of rights
belong to the creator who can exercise them, i.e. he can use the work himself, can give permission to someone else to use the work or prohibit someone else from using the work. With the advent of Information and Communication Technology (ICT), the use of information from various sources and various formats has become extremely easy. The ICT has also turned the present day society into a knowledge-based society. Therefore, the shift toward knowledge-based economies has meant that the law and economics of intellectual property rights have changed more in the last five years than in the last two centuries.

**Genesis of Copyright Laws**

The history of copyright laws can be traced back to 18th century England when Queen Anne, around 1710, set a pattern for formal copyright statutes. England was followed by the United States in 1790 when the first U.S. copyright law was enacted by Congress and by France in 1793. Since then, the copyright laws have spread worldwide and several international bodies came into existence to look into the copyright laws and their enactment. For example, international bodies like Berne Convention in 1886, the Universal copyright convention, 1952 and the Berne and Paris conventions in 1971. To make sure that conventions stay current and signatory countries observe them, a number of world bodies have been created mainly to administer the conventions. The World Intellectual Property Organization (WIPO) created in 1967, the U.N. Educational Scientific and Cultural Organization (UNESCO) and the World Trade Organization (WTO) are now charged with administrating the Trade-Related Aspects of Intellectual Property Rights (TRIPPS). These organizations, together with national legislatures, keep these conventions and national copyright acts current through amendments. As stated earlier, USA, UK and several countries world over have made the provision of copyright in order to protect the legacy of human creation. India is not the exception to it. India do have copyright law but Indian Copyright Act provides certain exceptions, generally referred to as “fair Use” or “fair deal” it includes reproduction of literary, artistic, or dramatic work for private use, research use, criticism, reviews, training and educational purposes. A few exemptions are also provided under the copyright acts of USA and UK under the term “Fair Use” though the copyright holders have become unhappy with the concept. For example, in 1992, the Association of American Publishers asserted that, “the copyright law provided the copyright holder with the exclusive right to control the making of copies of a copyrighted work. Exceptions to the exclusive right are intended to permit limited, occasional copying for individuals in particular circumstances which will not impair the rights of the copyright holder, nor generate regular business-like activities based upon usurpation of copyright owners’ rights, markets, or materials”. On the above statement of the Association of American Publishers, Richard Schockmeit commented in a 1996 article on fair use and use fees: “This 1992 AAP statement... in effect nullifies fair use: Copyright holders have exclusive rights to control all copying and no exceptions are allowed which would impair these right. It is difficult to imagine any copying made without permission and/or fee which would not impair the exclusive right to control making copies.”

**Copyright Law: International Scenario**

Copyright law is one of the segments of the Intellectual Property Rights. Intellectual property can be divided into two groups: (i) Intellectual Property which includes inventions, trademarks, industrial design and geographical indications; (ii) Copyright which includes: writings, paintings, musical works, dramatics works, audiovisual works, sound recordings, photographic works, broadcast, sculpture, drawings, architectural works etc. In UK, the Patents Act 1977, Copyright, Designs and Patents Act 1988 and Trade Marks Act 1994 are the principal statutes protecting intellectual property. However, the World Trade Organisation (WTO) is the body, which envisages a single institutional framework for IPR issues. The WTO encompasses General Agreement on Tariffs and Trade (GATT) as modified by the Uruguay Round and all agreements and arrangements concluded under GATT auspices and the complete results of the Uruguay Round. The Uruguay Round of Multilateral Trade Negotiations concluded on 15th April, 1994 with final signature of 123 ministers. The eighth round of trade negotiations undertaken by GATT originally covered international trade rules with jurisdiction only at international border. In Uruguay Round, however, GATT extended to three new areas in its scope i.e. investment, intellectual property rights, and services. In addition, it now also covers agriculture and textiles, which were outside GATT purview. The Intellectual Property Rights (IPR) comes under the ambit of GATT. The object of TRIPS is to reduce distortions and impediments to international trade, by taking into account the need to promote effective and adequate protection of IPR’s and to ensure that measures and procedures to enforce intellectual property rights do not become barrier to the legitimate trade. The World Intellectual Property Organisation (WIPO) is a specialized U.N. agency to deal with IPR. The term IPR refers to the following categories of intellectual properties covered under sections 1 to 7 of Part II GATT, 1994 Section 1 deals with copyright and other related rights. Section 2 is on Trademarks. Section, Section 3 has the provisions for Geographical indications. Section 4 deals with Industrial Design. Section 5 has laws related to Patents (including micro organisms and plant varieties). Laws for Layout design (Topographies) are given in Section 6, and Section 7 deals with Protection of undisclosed information. As per the Section 1 of Part II GATT copyright law covers the following:

1. Rights for reproduction, i.e. exclusive rights to make copies of the work. For the purposes of
this right, a copy of any work can be in any form in which the work is fixed and from which it can be perceived, reproduced or communicated either directly or with the help of a machine.

2. Rights for modification/adaptation, i.e. exclusive rights to modify and make adaptations and create derivative works. A work in a different medium such as, say, a film as compared to a book, is an adaptation or a derivative.

3. Rights for distribution, i.e. the rights distribute the work to the public.

4. Rights for public performance, i.e. the right to recite, play, dance, or act with or without the aid of a machine.

Copyright protection automatically subsists in all works of authorship from the movement of creation. The TRIPS Agreement provides a minimum standard for the duration of copyright protection. In the case of a person, the term is the life of the author plus 50 years. In the case of a corporate entity, it is 50 years from the end of the calendar year of authorized publication or, in the absence of publications, from the end of the calendar year of making. (TRIPS Article 12). The term of protection for live performances that are recorded is 50 years for the performer and producer, and 20 years for the broadcaster of the work. The United States recently upgraded its protection for copyrighted works as part of the Digital Millennium Copyright Act, or DMCA. For instance, in the United States, the copyright for the work of an individual author created on or after January 1, 1978, lasts for his or her lifetime plus 70 years after the author's death. However, if the work is made for hire, the copyright lasts for 120 years form the time of creation of 95 years from the first publication, whichever is shorter. However, there are a few exceptions to the Copyright laws. They are:

1. Libraries and archives are permitted to make up to three copies of unpublished copyrighted works for the purposes of preservation, security or for deposit for research use in another library or archive. Libraries can also make up to three copies of a published work to replace a work in their collection if it is damaged, deteriorated or lost, or the format of which has become obsolete.

2. For Fair Use. The definition of the term ‘Fair Use’ need to be explained in the light of the following facts:
   - It should be used for non-profit educational purpose not for commercial purpose.
   - Nature of the copyright work
   - Whether the whole work has been copied or small part of the work is copied

3. The matter of disposition of a particular copy of a copyright is limited by the first sale doctrine, according to which the owner of that particular copy of the work may sell or transfer that copy. Libraries lending and marketing of used books are governed by the first sale doctrine.

Copyright Law: Indian Scenario

Indian copyright act 1957 was amended in 1983, 1984, 1994 and 1999 respectively in order to accommodate the new developments taking place with regard to the implication of the Copyright Act. In 1999 some of the amendments, which were made, are:

1. Increased term of copyright of performers from 25 years to life time of author plus 60 years in case of single author and in case of joint author last surviving author plus 50 years to 60 years

2. Amendment definition of literary works

3. Meaning of copyright in respect of computer programmes

4. New provisions pertaining to power of Government of India to apply the provision relating to broadcasting organization and performers of broadcasting organization.

The infringement of copyright is punishable with imprisonment for 6 months to 3 years with a fine of rupees fifty thousand to two lakhs if it is committed first time and in case of second time and more if the infringement is committed, the person shall be punishable with imprisonment for a term not less than 1 year up to 3 years and fine of rupees one lakh to two lakhs. The law permits any police officer with the rank of sub-inspector or above to arrest responsible person without any warrant and produce him before the court of a Metropolitan Magistrate or a first class Judicial Magistrate provided he/she is satisfied that offence has been or is being or is likely to be or committed.

In addition, the Government of India has taken various steps to bring about changes in the administration of copyright law in the light of the provisions made in the Agreement on Trade-related Aspects of Intellectual Property Rights. India has participated in many bilateral arrangements or multilateral international treaties and conventions concerning intellectual property rights, which have a bearing upon the nature of amendments in her national laws. In order to get implemented the copyright law and the IPR regulations, India has the membership of number of international bodies.

Government of India has also established several organizations in order to create awareness about the Intellectual Property Rights among the research scholars, scientists, industrial communities and policy makers. For example, a Patent Facilitating Cell, now called as Patent Facilitating Centre (PFC) was set up by the Department of Science and Technology under the Technology Information Forecasting and Assessment Council (TIFAC) in 1995 which publishes a monthly bulletin to provide information on
IPR and the same bulletin is circulated free of cost to more than ten thousand persons in the country. Similarly, the CSIR enunciated a formal policy on IPR on 5 October 1995. The CSIR publishes a journal, Journal of Intellectual Property Rights to create awareness about the IPR and its need in the changing scenario. The Department of Biotechnology (DBT) created a single window Biotechnology Patent Facilitation Cell in July 1999 for scientists handling R&D projects relating to biotechnology. Similar efforts have also been initiated by CSIR and the Department of Atomic Energy and Indian Council of Agricultural Research. IPR issues in the IT sector assumed significance due to emergence of digital economy. In order to build up greater awareness on such issues, the Ministry of Information Technology has set up an IPR Cell. The Cell has launched awareness programmes in public sector undertakings in the industry, and scientific societies under the Ministry. Likewise, country’s institutions of higher learning especially in the field of science and technology have also set up a policy for the protection of the Intellectual Property Rights. For example, Indian Institute of Technology, Delhi declared its policy on Intellectual Property Right and the document is published by the Institute in 1994, and the Indian Institute of Chemical Technology, Hyderabad too, has such a policy for the protection of Intellectual Property of their scholars and scientists.

Not only Government of India, but also many private organizations and corporate bodies do have industrial property cells. For example, the Institute of Intellectual Property Development (IIPD) is an industry initiative and promoted by the Federation of Indian Chambers of Commerce and Industry. This institute aims at promoting the patenting culture amongst the scientific and technical community and use IPR as a strategic tool in forwarding business interests. Likewise, Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) help protect IPR of grassroots innovators. SRISTI has got support from several patent attorneys within the country and abroad to get patent on farmers’ innovations.

Copyright Law in ICT Environment
Trouble is also brewing up in copyright law because of technology. Much of the contention seems to revolve around Google. High-profile cases include Google’s defense of its library print project, its application of thumbnail images, and its caching of copyrighted materials. At issue is the problem of the ownership of images that have been altered or manipulated in some way by technology, which have blurred the line between original copyright ownership and the ownership of digitally manipulated and distributed images. In one case, Field v. Google, Google was suited for caching, or archiving, materials found on the Internet. For example, if a poem is posted on a Usenet bulletin board and a user queries Google, the search results may bring up a hyperlink within Google to the bulletin board that has posed the poem. In effect this is providing a copy of the poem to the searcher. The right to reproduce a work is a right granted only to the copyright holder. So is caching, a violation of copyright? Yes and no. As was stated earlier, very different is definitive in intellectual property. In some cases caching is infringement; in others it is not. This particular case was based on one of the five rights of copyright the one that allows only the copyright holder to make copies.

In this case, Google’s actions closely paralleled the actions of an Internet service provider (ISP) such as AOL. According to the 1998 digital Millennium Copyright Act (DMCA), an ISP is not responsible for the actions of those who may use is service for illegal purposes. This follows the concept first pointed out in the Sony v. Universal City Studios case that providing the technology to allow copying is not the same as making a copy. The law may also work the other way around. In another case, Perfect 10 v. Google, at issue was the right of the copyright holder to display a copyrighted work. In this case Google had thumbnails of copyrighted pictures belonging to Perfect 10. Although Google linked to a thumbnail copy of the picture, it did not actually display a full-sized copy of the picture. A person could print a full-sized copy of the picture but in doing so reverted to the Perfect 10 website. So Google was acting as an ISP in providing the means of copying but did not provide the original picture and thus had safe harbor. At issue in this case was the right of the copyright holder to display a copyrighted work and not the issue of copying the work. Google certainly displayed the thumbnail picture, but adding to the issue in the case is whether Google provided the thumbnail from its cache or if Google merely pointed to the website that contained the copyrighted picture. Google was found liable in district court but has appealed the ruling, and the case will take many years to work, its ways through the courts.

Although Google is not the only company that is legally wrangling with intellectual property issues, its cases are highly visible because of the familiarity of its services to anybody who uses the Internet. Any company that is on the cutting edge of the digital age will sooner or later run into legal issues concerning intellectual property. The Google examples are valuable as illustrations because the issues at stake are ones that are familiar to librarians and to the public that libraries serve. Since publishers track the use of their e-resources in terms of downloads made by subscribing institutions and in the case of any violation the access is stopped not only for journal but for all the journals by the same publisher, therefore, it has become much more challenging for the librarians to prevent the unauthorized use of the digital information especially when a librarian makes a copy on behalf of an individual, the practice of having the individual sign
a form indicating the copy is for research or private study should continue. A digital library can be protected by a password or the IP based authentication. Watermarking may be sought as one solution. There are various watermarking software like Digimarc, SysCoP, Signun technologies etc.

**University Libraries and Copyright Law**

Authors create the thought contents of the documents while the publishers create a market and distribute and sell the works and the libraries select, collect, preserve, organize and disseminate the works of intellectual and artistic content in order to facilitate their use. Due to several reasons, the present day libraries are facing at least three major paradigm shifts, which are the result of global competition, new computing and communications technologies, and the perceived need to measure the productivity of knowledge and service workers. They are:

- The first shift is the transition from paper to electronic media as the dominant form of information storage and retrieval. Linked to this transition is the convergence of text, graphics, and sound, into multimedia resources.
- The second shift relates to the shrinking financial resources and increasing demand for accountability, including a focus on customers, performance measurement, bench marking and continuous improvement.
- The third shift comes from new forms of work organization such as end-user, work teams, job sharing, tale-work, outsourcing, staff downsizing and re-engineering.

In the light of the above mentioned paradigm shifts reflected from the global competition, there is an inevitable need to apprise the users about three major issues namely electronic reserves, fair use, and author rights.

Electronic reserves means authorization to users to make use of information for educational purposes and this facility is being extended by the commercial vendors to the non-profit institutions (such as colleges, universities, and secondary schools) having license to access the information by using the electronic reserves. This is permitted to the currently enrolled students (including distance education students), affiliated and visiting researchers, full and part-time staff, and on-site users physically present on the institutional licensee’s premises. Thus the users are permitted to use the electronic reserve for search, view, reproduce, display, download, print, perform, and distribute content in the archive for the following purposes:

1. research activities;
2. classroom or organizational instruction and related classroom or organizational activities;
3. student assignments;
4. as part of a scholarly, cultural, educational or organizational presentation or workshop, if such use conforms to the customary and usual practice in the field;
5. on an ad hoc basis and without commercial gain, sharing discrete Textual Content or Specimens with an individual who is not an Authorized User for purposes of collaboration, comment, or the scholarly exchange of ideas;
6. in research papers or dissertations, including reproductions of the dissertations, provided such reproductions are only for personal use, library deposit, and/or use solely within the institution(s) with which the authorized user and/or his or her faculty readers are affiliated.

The libraries, therefore, are required to negotiate comprehensive access by minimising the need for permission, integrate reserves with electronic holdings. As stated above, if the users are using information of the electronic reserves for the above mentioned activities it shall fall under the definition of the term ‘Fair Use’. In addition to this, libraries should give easy-to-understand basic knowledge about copyright and IPR laws to the users by creating and providing access to the copyright handbooks. Impart training to make users more aware about the implications of the copyright laws and IPR. Some orientation programmes can also be organised by the libraries so that the users become more conscious about the use of electronic resources much more carefully and lawfully. However, libraries, being the social and cultural institution, have the responsibility to make available all types of information resources in order to satisfy the information hunger of the users.

Libraries acquire, process, organize, preserve, disseminate and provide access to works, including those that have lost market viability or are out of print. But due to several reasons, the present day libraries are passing through several constraints resulting into the non-compliance of the role for which they have been established as the integral part of the institutions. Some of the reasons for such a hurdle are: information explosion, hike in the cost of publications, devaluation of rupees on account of increase in the conversion rates of foreign currency, shrinking of library budgets due to the financial cuts on the allocation of funds especially to the higher education institutions, etc.

On the other side, the awareness of the users about the information explosion and availability of information in different formats at different places is increasing which is being resulted in the form of rising expectation for the pin-pointedly exhaustive information and other types of library services including the access to e-resources both in public domain and in commercial domain. Needless to say that the research and development activities can not take place without the proper and adequate library and information services which are having a big threat on their acquisition
capacity due to the factors mentioned above. However, the role of the libraries continues to be the same irrespective of the problems and challenges they may be facing on account of the several factors discussed above. Libraries were using the facility of inter-library loan for meeting the information requirements of the users, now, are adopting the system of document delivery, electronic network services, and also supplying of photocopies of the documents in place of books/journals. Surveys reveals that, it is becoming almost a routine in the demands of the users that they must be supplied the photocopy of the articles which may be turned into the demand of supplying the information at their terminals. Since the libraries are functioning in order to fulfill their obligatory duty of satisfying the information needs of the users by making available each and every information being sought by the users in the best possible way, they are joining the resource sharing and networking programmes. These developments are being seen by the publishers as suspicion and are not happy to accept these changes in the attitude and perception of libraries.

Now-a-days, the information is increasingly being produced in digital format. New communication technologies bring unprecedented opportunities for mass publication in less time, improved access to information. The Technology has the potential to improve communication and access for all irrespective of their location and other character. If reasonable access to copyright works is not maintained in the digital environment, a further barrier will be erected which will deny access to those who cannot afford to pay. It is undisputedly accepted fact that the libraries and documentation centres will continue to play a critical role in ensuring access for all in the information society. Traditionally, libraries have been able to provide reasonable access to the purchased copies of copyright works held in their collections. However, if in future all access and use of information in digital format becomes subject of payment, a library’s ability to provide access to its users will be severely restricted.

It is also a established fact that the librarians and information professionals recognize, and are committed to support the needs of their users to gain access to copyright works and the information and ideas they contain. Simultaneously, librarians and information professionals are also intended to support the needs of authors and copyright owners to obtain a fair economic return on their intellectual property. Library and information professionals should be facilitated to make use of the provisions of ‘Fair Use’ in order to satisfy the information requirements of their users. Though the institution like IFLA supports balanced copyright law that promotes the advancement of society as a whole by giving strong and effective protection for the interests of rights-holders as well as reasonable access in order to encourage creativity, innovation, research, education and learning. Even the balanced act that seems to ensure and promote use of the intellectual property act disallows the less privileged users in the developing countries as most of the databases are too expensive. IFLA, on the one side, supports the effective enforcement of copyright and recognizes that libraries have a crucial role to play in controlling as well as facilitating access to the increasing number of local and remote electronic information resources, and on the other side, maintains that overprotection of copyright could threaten democratic traditions and impact on social justice principles by unreasonably restricting access to information and knowledge. Therefore, IFLA opined that unless libraries and citizens are granted exceptions which allow access and use without payment for purposes which are in the public interest and in line with fair practice such as education and research, there is a danger that only those who can afford to pay will be able to take advantage of the benefits of the information society. In the light of the above discussion, it is recommended that:

1. Library and information centres are legally permitted to browse, taking notes or print the copyrighted material for self-study, research and education purpose.
2. Licensing agreements for digital products and services should ensure that libraries are allowed to share the products for fair use and should also be allowed to downloading a part of the information in electronic format.
3. Libraries and information centres should also be permitted to print electronic copyrighted work even in full measures for preservation purposes.
4. Time period for copyright protection for digital work should be minimized say for example 5 years. Then after, the same should be allowed to be used by public free of cost.

Conclusion

Before the advent of Information and Communication Technology (ICT), copyright law was seen as a dull and almost irrelevant area of law relating to information provision. But with the use of ICT the copyright laws now have become central point and one of the most dynamic and fast moving areas of law. In the present scenario, IPR awareness is the key to technological innovations and in the emerging knowledge-based economy; the importance of IPR is likely to go further. The awareness among the creators of information and knowledge about IPR has become essential in the digital environment because in the digital environment it is becoming difficult to prove rights violation whenever they occur. For legal experts, gathering evidence of digital crimes and to maintain its usefulness in a court of law are the greatest challenges. Even browsing in a digital environment is a violation of ‘Fair Use’ as it is
applicable only to printed works, and thus, amount to infringement. Of course, there is a need for upholding intellectual property rights and the laws should be made to protect the interest of the owner of creations, yet there is also a need that the librarians should have the same kind of fair dealing arrangement as in the case of printed books. They should be able to read or browse electronic information without having to pay for it, preserve in digital format copyright material held in their collections, and fulfill inter-library loan and inter-library document requests electronically. Thus, the role of library and information scientists has become significant in the technological environment and they have to meet the challenge by sharpening their skills and should negotiate the same type of privileges as in the case of printed documents for accessing digital information.

Bibliography