REVIEW OF LITERATURE ON PRESERVATION AND CONSERVATION OF LIBRARY MATERIAL

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Abstract :

Preservation and conservation of library materials is an integral part of library and information centre management. This study is to review the related literature in the concerned field. Literature was reviewed under four heads, viz.: Need of Preservation and Conservation; Strategies in Preservation and Conservation; Types of Preservation and Conservation Techniques and Ethics in Conservation. The data is collected by reviewing the various research papers on the subject and a consolidated review has been presented in the current research paper.

Keywords : Conservation, library materials, preservation, ethics, strategies

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Introduction :

A library is a database of knowledge of great scientists of the past, present and the future. Thus it becomes the responsibility of libraries to preserve, conserve, and save libraries print and non print materials. The main aim of libraries is to classify and preserve the study material. As librarians are the head of libraries, so it is the duty of librarian to acquire, process, disseminate information to users. Libraries procure materials to meet the informational or recreational needs of its users. When materials under one's care are let to decay unchecked or suffer any kind of harm, it can be challenging to make the information they contain usable. To ensure that these resources are always accessible to patrons, it is the duty of the library staff to maintain them in good physical shape. Libraries follow the preservation principles outlined and believe they are appropriate for the care of their holdings. These days, a lot of big libraries are working to maintain and preserve their collections, but smaller libraries around the globe need to do more. Because library legacy may have social, economic, political, historical, legal, or religious significance and may be used in the future, preservation and protection are crucial. They play a crucial role in ensuring that future generations can benefit from it. The institution's head and management are responsible for creating an appropriate policy that will maintain or conserve rare or old material in various ways.

(a) Need of Preservation and Conservation :

Thomas H. Teper (2005) asserts that the rapid pace of technological advancements, coupled with ongoing economic challenges, presents numerous obstacles for libraries in the coming years, which are already influencing their operational frameworks. The author argues that the

obligation to effectively preserve our collections is a responsibility that remains only partially addressed. Furthermore, Teper highlights that various developments aimed at enhancing access complicate preservation efforts by intensifying competition for limited resources, broadening the array of available options, and fundamentally challenging established concepts such as permanence. The author examines the implications of these trends on the library's function as a memory institution and raises critical questions regarding the future of preservation within research libraries.

Asha Narang (2003) asserts that a library's purpose is to preserve, disseminate, and provide timely access to high-quality information at a reasonable cost. The author emphasizes the value of preservation, outlines the causes of the books' and manuscripts' degradation, and details the corrective actions done from antiquity to the digital age. She also talks about how to preserve the rare books' intellectual value and looks ahead to digital preservation and restoration.

John P Baker and Marguerite (1978) discusses the importance of preserving research library materials, the reasons for their deterioration, and the collaborative efforts required among different professionals to achieve conservation objectives. It covers topics such as the nature of library materials, causes of deterioration, the responsibilities of librarians, conservators, and scientists, as well as methods for binding, preserving, and copying materials, and disaster management..

Lauren Jackson Beck and L. Jackson Beck (1985) states that the preservation of library materials is a pressing concern for librarians who are facing budget constraints that limit their ability to purchase, process, and maintain their collections. Librarians and publishers have differing views on how to address these new preservation challenges. The authors suggest that librarians and publishers must collaborate to set standards for the quality of book bindings and paper used in library books. By understanding each other's roles and responsibilities, these preservation issues can be resolved.

Agarwal, O.P. (1977) stated that documents housed in the library may occasionally become stained for a variety of reasons. The methods for removing these stains vary according to their specific nature. For instance, stains resulting from water, fingerprints, creases, and tar can be effectively treated with calcium hypochlorite and carbon tetrachloride, respectively. In contrast, insect stains, as well as those from tea and coffee, can be eliminated using a combination of hydrogen peroxide and alcohol, or a 2% solution of potassium perborate, respectively. Ink stains can be readily removed by applying citric acid diluted in water. Prior to the application of any of these chemicals, it is essential to test them on a small, inconspicuous area of the affected document.

Agarwal, O.P. and Barkeshli Mandana (1997) claimed that a prevalent challenge faced by many developing nations in Asia, Africa, and Latin America is the warm and humid climate. This shared trait of tropical and subtropical regions significantly accelerates the deterioration of library materials compared to the temperate climates of Europe and North America. Factors such as heat, humidity, dust, and other environmental pollutants contribute to the fragility of

paper, hasten the aging of library resources, and create favorable conditions for the rapid proliferation of molds and various insect pests that are harmful to these materials.

b) Strategies in Preservation and Conservation :

Olatokun (2008) conducted a survey on the various preservation and conservation techniques used in selected university libraries in Nigeria. The findings showed that while the university libraries had preservation policies, the techniques were not being effectively implemented. The most commonly used technique was cleaning and dusting of library materials. The study also found that there were instances of deterioration, such as torn books, cracked books, and scratched digital materials. Although some libraries used digital preservation techniques, they were not being used effectively. The study further revealed that inadequate funding was the most significant obstacle to effective preservation and conservation activities in the university libraries.

Adekannbi, J. O., & Wahab, F. W. (2015) suggested mass conservation helps preserve many books and documents with similar issues, reducing the cost of individual treatment. Due to the diverse materials found in archives, mass conservation is more commonly used for library materials. The only mass conservation approach suitable for archives is preventive conservation through temperature and humidity-controlled environments.

Pilette, R. (2006) says that rebinding books involves renewing or replacing the cover, often requiring reattaching or regluing the pages. Libraries may rebind books to make them more durable, preserve them for the long term, or improve their appearance by using a more fashionable color or adding a stamped insignia to assert ownership.

Feather, J., & Matthews, G. (1996) presents that the preservation and restoration of cultural items focuses on protecting and caring for cultural property, including artworks, buildings, archaeological finds, and museum collections. Conservation work involves preventive measures, examination, documentation, research, treatment, and education. This field is closely connected with conservation science, curators, and registrars.

Jeyraj, V.(1995) presented that in contrast to paper and various other materials, where the librarian has limited influence over their production, binding is predominantly a process under the librarian's control, with few exceptions. The librarian must guarantee that the binding is executed using standard materials and that the binder follows established procedures. The Indian Standard IS: 3050-1962, which serves as a code of practice for reinforced binding of library books and periodicals, offers comprehensive guidance on this matter.

Bokhare, Narendra. (1997) was of the view that the conventional method of preserving manuscripts involves gathering multiple sheets and binding them between two slender wooden boards. This collection is then encased in cloth to safeguard it from dust and other surface pests. However, this traditional approach may lead to uneven pressure on the sheets during the binding process. If the sheets have become fragile, there is a heightened risk of them cracking. Consequently, meticulous care is essential when binding and unbinding these

bundles.

(c) Types of Preservation and Conservation Techniques :

Sawant (2014) provides an overview of the conservation and preservation methods used in Mumbai's university libraries. The study found that almost all libraries lacked written policies regarding conservation and preservation. The primary obstacles to preservation and conservation practices, aside from the absence of a documented policy, were a shortage of trained personnel and insufficient financial resources. It is imperative to persuade higher authorities and policy makers to allocate funds and staff for libraries, not only for their preservation but also for their apparent long-term survival.

Rachman, Y. B. (2017) has written that paper is naturally attractive to insects and rodents because it contains cellulose, starch, and protein, which are sources of food. The most prevalent pests are different kinds of beetles, silverfish, and roaches. Although book lice do not directly cause damage, their decomposition and excretions can stain paper and may serve as food for other pests, thus perpetuating the cycle of damage. Book lice feed on mold spores that are present on paper and cardboard. Items for collections can be frozen to reduce pests. But some materials shouldn't be frozen, like leather books, as the low temperatures might cause the fat to rise to the surface and leave a bloom—a white or yellow patch—on the leather. It is generally not advised to apply pesticides directly to collection materials. The afflicted items should be kept apart from the rest of the collection for treatment if the infestation is severe and fumigation is the best course of action.

Lakshmi, S., & Rajavel, V. (2016) presents that in order for average-sized books to support one another, they should be arranged vertically, side by side. Shelves should be placed far from external walls and not be overly crowded. Books that are large or delicate can be kept flat and horizontally stored, but stacking should be avoided whenever possible. To give structural support and shield them from abrasion and soiling, books can be stored in sturdy boxes. Book boxes come in a variety of forms, from straightforward cardboard or archival paper four-flap enclosures to intricate drop-spine or clamshell boxes covered in book cloth.

Drewer, J. (1997) claims that the bare minimum of care required to halt deterioration is stabilization. This can involve doing some minor structural repairs as well as enclosing the item in an archival box or creating a custom one. Because different materials are used to make books, conservators may also need to use methods and have experience with leather, parchment, papyrus, or fabric conservation.

Gupta, C.B. & Haider, S.H. (1995) stated that in situations where air conditioning is not available, it is advisable to employ effective dehydrating agents to reduce humidity and dampness, particularly during the rainy season. Anhydrous calcium chloride and silica gel are suitable options for this purpose. For a room with a capacity of 20-25 cubic meters, an appropriate amount of silica gel (2-3 kilograms) should be distributed in small dishes placed in various locations throughout the room. Once the silica gel becomes saturated with moisture, it must be replaced. Additionally, commercial dehumidifiers can be utilized, especially in larger

stack areas.

Prasad, Lalan Kumar. (1995) opined that if it is not economically viable or practical to preserve the artefact in its entirety, the next best approach is to maintain its image through the use of suitable modern technologies, such as facsimile reproduction or microfilming. The most basic form of preservation focuses solely on retaining the information contained within the book. This level of preservation is deemed sufficient for the majority of users who regard books merely as means of conveying information. For these individuals, having the information available in a machine-readable format—where both the artefact and its image are no longer present—is considered the optimal level of preservation.

(d) Ethics in Conservation :

Mahapatra (2003) claimed that pressure-sensitive tapes, indiscriminate use of polyvinyl acetate and other synthetic adhesives, highly acidic paper used as protective wrappers, the use of wood backing in print, picture, and map frames, amateur lamination, and improper storage are just a few of the preventable harms done to books by well-meaning but uniformed librarians. Additionally, he believes that one or more of the following chemical and physical conditions are to blame for the deterioration of documents. Paper ages naturally because its main ingredients are organic. An important way to reduce this inevitable deterioration is through good housekeeping.

According to Kaur (2017), the goal of this study is to identify the challenges encountered in the Indian context when preserving and conserving literary works. The purpose of this study is to determine whether or not Indian libraries have preserved or conserved old literature, as well as the various approaches that can be used to do so. It also aims to identify the primary issues that contribute to print material deterioration and the obstacles that stand in the way of the preservation or conservation of library materials.

Hazen (1980) claims that the term "preservation" refers to three different kinds of activities: 1. actions intended to regulate the library's surroundings in order to satisfy the standards for the preservation of the materials kept there; 2. A range of initiatives pertaining to attempts to prolong the life of library materials, such as rebinding, restoration, or deacidification; and 3. All tasks associated with attempting to convert information from one matrix or format to another. Of course, each activity in that category can still be expanded into a variety of additional, more specialized, and in-depth activities.

Harvey, Ross. (1994) written that disasters are typically unforeseen incidents that can have devastating effects on a collection. Consequently, it is crucial for every library to implement all possible measures to avert the occurrence of an inevitable disaster. Disaster planning constitutes a fundamental aspect of preventive conservation. Additionally, it is important to recognize both external and internal threats that may jeopardize the collection, along with strategies to address these threats. In the absence of a disaster preparedness or crisis management plan, librarians may find themselves unable to respond swiftly to coordinate salvage operations. It is essential for every library to maintain a documented disaster

preparedness and response plan, which should include a description of emergency procedures, a list of emergency supplies, a disaster response framework, contact information for conservation experts, a roster of staff volunteers, and a directory of external contacts, including names, addresses, and both home and work telephone numbers of personnel assigned emergency responsibilities. Furthermore, libraries should be equipped with fire and smoke detection systems, as well as automatic fire suppression systems.

Johnson, Arthur W. (1983) said that sunlight should be obstructed from directly illuminating papers, as it is a significant source of ultraviolet radiation. Windows ought to be equipped with tinted curtains to block direct light and absorb ultraviolet rays. Installing lemon yellow or green glass panes is recommended, as these colors are particularly effective in reducing ultraviolet exposure. Additionally, incorporating acrylic plastic sheets into window frames is highly beneficial, as they provide superior filtration of UV rays compared to colored glass. To mitigate the ultraviolet emissions from fluorescent tubes, it is advisable to cover these tubes. Given that high humidity and elevated temperatures pose greater risks to library materials, it is essential to maintain an optimal room temperature of 20-25°C and a relative humidity level of 45-55% to ensure the preservation of documents.

Conclusion :

The real goal of preserving library materials is to guarantee that data saved on digital platforms remains accessible to those who require it, both now and in the future. As such, consideration for document preservation ought to have been given due consideration during the preservation process. Library materials can be harmed by dust, mold, chemicals, animals, and the universe in addition to people and animals.

Every librarian needs to understand how to take care of library materials in order to prevent them from becoming damaged too soon. There are many different things that can harm library materials, including rats, insects, and people. To prevent damage to library materials, try using a feeding system, book poisoning, filling termite pits with poison solution, covering the floor with plastic, and putting camphor on a shelf. Book boxes are constructed from library materials that are too fragile to be bound. There are various methods for repairing books, including binding, using patching paper, whitening paper, and other techniques.

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