

## **An Outline of Protection and Preservation Technique of Manuscripts in the Libraries & Information Centre**

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***Abstract.*** The paper accentuation on composition protection originates from the reasonable issue of upkeep, care and conservation of the important legacy of India. The information on conservation isn't new to Indians. Care of original copies was a main issue previously and endeavors were made to safeguard them from the various specialists of decay. An outline of protection and preservation technique of manuscripts in the libraries & information centre, One of the most significant of these decay specialists was natural development. The strategies used to save the original copies depended on experience and information on spices and other regular materials and these practices were passed down from one age to another. For a really long time caretakers of assortments in India have involved different normal materials for the conservation of their original copies. With the approach of this paper, advancements in the field of protection, and furthermore with the progressions in friendly and living frameworks the conventional practices and frameworks of preservation have tumbled to neglect. Mixed methods research is used to combines elements of quantitative research and qualitative research in order to research objectives and questions. The sources of relevant data can be optimized through the tools of data collection. The most frequently used data collection tools are observation, interview, questionnaire, case study, schedule etc. Simultaneously, notwithstanding the approach of reasonable synthetic compounds for protection, customary techniques for preservation are practically speaking in a portion of the libraries and composition stores in India.

***Keywords:*** 1. Preservation Technique 2. Manuscripts 3. Libraries & Information Centre 4. repair & Conservation 5. Parasites Organisms.

### **Introduction**

Book is the record of thought and experience, thoughts and application, feeling and scholarly commitment as well as vehicle of correspondence during contemporary time and for the successors. Brought into the world during the fifteenth 100 years after the development of printing by moveable kinds the books has turned into the vehicle of all intelligent exercises of the humanity. Albeit the eventual fate of the books has been undermined by more current electronic innovation the book has been playing out its job across topographical limits and timeframes. During the early period the printed book assumed its part and turned into the observer of an entire scope of essential changes which were occurring at that point. The aggregate impacts of such changes prompted huge effect over the human culture and were answerable for development and improvement of a wide range of human information as well as essential sciences and their applications.

The consistently changing need and prerequisites cause the developing interest for archives and data. From one perspective such requests and then again the expansion of distributions in different actual organizations made the remarkable development of writing. The records of such writing are accessible in both traditional and nonconventional structures, for example, books, monographs, diaries, gathering papers, course reports, cutting edge reports, reviews, propositions, licenses, principles, determinations, field reports, factual information, government warnings, official handouts, test overview, realistic materials, varying media materials, chronicled archives, original copies and other extraordinary sort of materials. This large number of materials are the records of scholarly undertakings on one hand and then again these are the vehicles of correspondence for transmission of ideas and data.

### **Significant of study**

In this manner, the course of protection might be partitioned into two sections (1) 'Conservation' in which endeavors are made to oppose or defer the breaking down impacts of the climate and so forth; and (2) 'Reclamation' in which moves are initiated to work on state of being, with the goal that the impacts of the decay can be altogether or somewhat eliminated and its unique or close to unique condition reestablished.

Safeguarding deliberately any material from being harmed by conditions both inward and outer through disintegration as an impact of circumstances winning in the climate, conditions imbedded in the materials or because of abrupt regular catastrophe or mishaps and so forth, is known as 'Protection'.

### **Scope of the study**

Innovation of contents led to another issue, that is - where to compose? Most likely the primary thing on what man composed, was stone-which was accessible a lot of environmental factors where he resided, as he was cave-occupant around then. Before the disclosure of contents men used to draw pictures of different plants and creatures to which they run over during their everyday life. However drawings are harmed by sun and downpour, this experience constrained them to pay special attention to fresher strategies by which the drawings or works might be more sturdy. At last they found the strategy of etching on stone or on comparable other hard surfaces. This strategy of etching on stone was begun in the Stone age, yet kept on being used till later times. Ruler Ashok's engravings are one of the best instances of use of this procedure in our country. However this etching give a long-lasting or close to long-lasting type of record, it is simultaneously a tedious difficult interaction. This lead them to look for other medium on the outer layer of which it is more helpful to compose with less work.

### **Objectives of study**

1. To know the method of preventative conservation and storage of manuscripts in the libraries & information centre
2. To know the techniques of active conservation and repair of manuscripts in the libraries & information centre

### **Research questions of study**

1. What is the method of preventative conservation and storage of manuscripts in the libraries & information centre ?
2. What is the techniques of active conservation and repair of manuscripts in the libraries & information centre ?

### **The Review of related literature**

**Chakrabarty, B. furthermore, Mahapatra, P.K. (2015)**, While cleaning and alkalization alone are not adequate to balance out the antique, conservators might select to fix and reestablish the materials. **Clarkson, Christopher (2015)**, Patching and filling methods for paper incorporate restricted

portions of torn Japanese tissue stuck with a reversible non-staining glue, for example, starch glue or methyl cellulose. **Cloonan, Michele Valerie, ed. (2015)**, Paper can likewise be patched with heat-set tissue fix. Openings or paper misfortunes are filled separately with Japanese paper, with paper mash, or with a paper painstakingly decided to match the first in weight, surface, and variety. **Etherington, Wear (2007)**, Books with broken sewing, free or separated loads up or leaves require unique consideration. A few methods are utilized in preservation restricting. The first sewing in a volume is held in the event that this is conceivable yet is some of the time built up utilizing new material string and sewing upholds. **Oddy, Andrew (2015)**, In the event that the first restricting is too decayed, the book might be bounce back with new chronicled safe materials. **Ritzenhauer, Mary Lynn (2015)**, Entire leaves or sheets of frail or fragile paper are supported by sponsorship each sheet with one more piece of paper. Japanese paper is now and then utilized as a sponsorship, stuck with a starch glue. **Shelley, Marjorie (1992)**, Mass preservation jam many books and archives with similar issues, which diminishes the expense of treatment and individual taking care of. Given the extraordinary assortment of material found in authentic material that would require arranging and separate medicines, mass protection is more frequently applied to library material than documented material. **Sarkar, Narendra Nath. (1998)**, The main mass protection treatment that can practically be applied to recorded material is preventive preservation through temperature and moistness controlled conditions. **Ward, Phillip R. (1986)**, Be that as it may, assuming that authentic material is arranged by material sort, bunch treatment can be applied to low to direct esteem things. Group treatment might incorporate humidification, deacidification, or repairing. **Waters, Shelia (2016)**, Single-thing treatment is expected for high-worth or complex books or archives that require point by point, individual documentation.

### Methodology of study

**Mixed methods research** is used to combines elements of quantitative research and qualitative research in order to research objectives and questions. The sources of relevant data can be optimized through the tools of data collection. The most frequently used data collection tools are observation, interview, questionnaire, case study, schedule etc. Interview method can be performed in three ways-face to face conversation, over telephone & postal interview. Descriptive statistical analysis methods is involved for collecting, interpreting, analyzing, and summarizing data to present them in the form of charts, graphs, and tables. Rather than drawing conclusions for trouble-free understanding.

### Delimitation of study

The work is delimitated by 3 public library in west Bengal.

Name Of The Library	Maximum Age Of Manuscripts	No. Of Manuscripts
Nadia District Library	1500	5000
Nabadwip Sadharan Granthagar	1700	2500
Krishnagar Public Library	1300	272

### Analysis and interpretation

Natural foes are the most disastrous adversaries and they make greatest harm library materials, everything being equal. They can obliterate the materials totally or can place in a condition of condition when the reports can't be taken care of or utilized. The warm sticky air of our nation is amicable to the development of natural specialists.

Fungi, Parasites Organisms are the most various of living things. The microbiological specialists incorporate parasites and microorganisms. They shouldn't be visible to unaided eye, just seem like a mass. They are conceived, they breed and remain alive on any natural matter. They get sugar food from other natural matter consequently. Another significant trademark is that they develop much preferred in haziness over in light. Bookworm, a conventional term incorporates various creepy crawlies tracked down in libraries. These are the hatchlings of more than hundred and sixty species saw as the world over. These hatchlings and the bugs are unnoticeable and are for the most part not seen except if their concealing spots are upset.

The fume of whatever unstable synthetic substances are harmful to the bug, organisms and so on those can be utilized for security against such adversaries of the library assortments. This strategy is known as fumigation. Vaporous toxins used to kill bugs and so on are called fumigants. The synthetics which are typically utilized for this object are either fluid or strong in ordinary condition. In those libraries where the issues of growths and bugs assault are moderate to high, or where there are sufficient chance of such issues, fumigation will end up being a very compelling measure.

### **Preservation of Manuscripts**

The quantities of old composed reports are nearly very few. The vast majority of the reports of that period are presently terminated because of maturing and other normal causes, however those not many which are as yet accessible, can give us thoughts regarding improvements of that antiquated period in the area of science, culture, religion and so on. Hence, it is crucial for take each conceivable consideration to safeguard them in as best condition as could be expected. These materials are for the most part known an old original copies. The occupation of saving these are not extremely basic, a the majority of these are in an exceptionally frail state of being because of their age.

Palm leaf manuscript, Because of maturing and long putting away in a condition where both temperature and mugginess varies habitually inside a wide reach, the palm leaves lose its normal oil. The presence of this oil keep it adaptable and appropriate for use, yet in its nonattendance, the leaves become dry and fragile and the surface beginnings chipping of. Hence dry and warm weather conditions is its most noteworthy foe. One more extraordinary obstacle in legitimate conservation of palm leaves is the corrosiveness of climate. Litmus paper can be utilized to decide sharpness of palm leaves.

Parchment and Vellum manuscripts, Material more frequently get harmed by parasites than vellum. A steady and consistent climate is required for its legitimate conservation. As both vellum and material are essentially of creature beginning, these are inclined to go after by bugs, rodents and so on solid boxes or steel almirah ought to be utilized to shield these from this kind of assaults. Normally different stains are found on the outer layer of the medium because of parasites assault; water ought to never be utilized to eliminate these, as it might harm the material.

### **To know the method of preventative conservation and storage of manuscripts in the libraries & information centre**

Capacity in a cool, dry, clean, and stable area can expand the existence of a thing. Original copies and paper records are in many cases put away in defensive authentic quality boxes and envelopes, made of corrosive free and sans lignin materials. Reports with weighty use might be put away or epitomized in an unmistakable polyester (Mylar) film sleeve or envelope. As added security against corrosive development, paper-based capacity materials might have a support, for example, calcium carbonate, which can kill acids as they structure in the capacity materials. Boxes ought not be overloaded. Things might be interleaved with corrosive/sans lignin paper. Assuming boxes are just to some extent full, spacers might be utilized, or the case might be put away on a level plane. Enormous organization material is best put away in an arrangement bureau with shallow drawers. The moving of enormous things (for example maps) ought to be stayed away from where conceivable; yet in the event that there could be no other choice, the thing ought to be moved around an enormous breadth documented quality cylinder.

### **To know the techniques of active conservation and repair of manuscripts in the libraries & information centre**

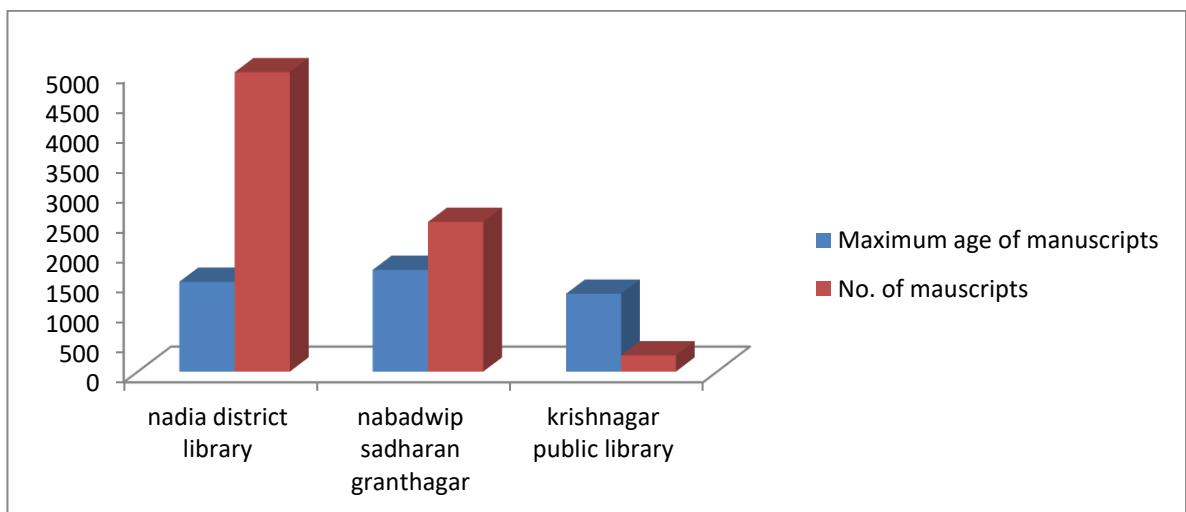
The essential objective of cleaning is to achieve clarity of surface detail. Books and reports may be presented to different sorts of cleaning. Conservators could clean buildup from paper and calfskin with a sensitive brush or textures, a specific vacuum cleaner, nonchemical vulcanized flexible wipes, or nonabrasive destroying materials like vinyl erasers. To kill structure and bugs, conservators utilize careful cutting edges, pull instruments, or thought vacuum cleaners. Significant freezing is used to kill the bugs. Since a couple of tacky materials are acidic and stain paper, conservators have made

techniques to wipe out stick. Prior fixes made with water-based concretes, for instance, animal stick are taken out in a water shower, by neighborhood use of soddenness, or with poultices or steam. Designed concretes and strain sensitive (self-staying) tapes are for the most part broken down or mellowed with a characteristic dissolvable before removal. Washing not simply kills soil and assists in stain with diminishing; it moreover wipes out acidic blends and other debasement things that have created in the paper. Washing in like manner relaxes frail or twisted paper and helps in fixing. While washing alone doesn't fight causticity, conservators use an essential pad applied by immersion or by sprinkling. Evening out follows liquid treatment; paper is set between blotching surfaces or felts under moderate strain.

### Findings of research

As a district library of nadia, it has tremendous amount of assortment. There are dirt tablets, original copies and so forth. The vast majority of the original copies are Birch bark and rest of the part Palm leaf compositions. Here the original copies are 1500-1000 years of age. They have partition conservation unit. Fumigation is likewise finished here. One individual is here accountable for this interesting and antiquated assortment. For protection of original copy they follow digitalization process. Nabadwip Sadharan Granthagar is One of the most seasoned and great assortment of original copy store is Nabadwip Sadharan Granthagar. There are around 2500 original copies of Bengali culture. The vast majority of them are Palm leaf and Birch bark original copies. Library staffs know about the protection and preservation process.

Name Of The Library	Maximum Age Of Manuscripts	No. Of Manuscripts
Nadia District Library	1500	5000
Nabadwip Sadharan Granthagar	1700	2500
Krishnagar Public Library	1300	272

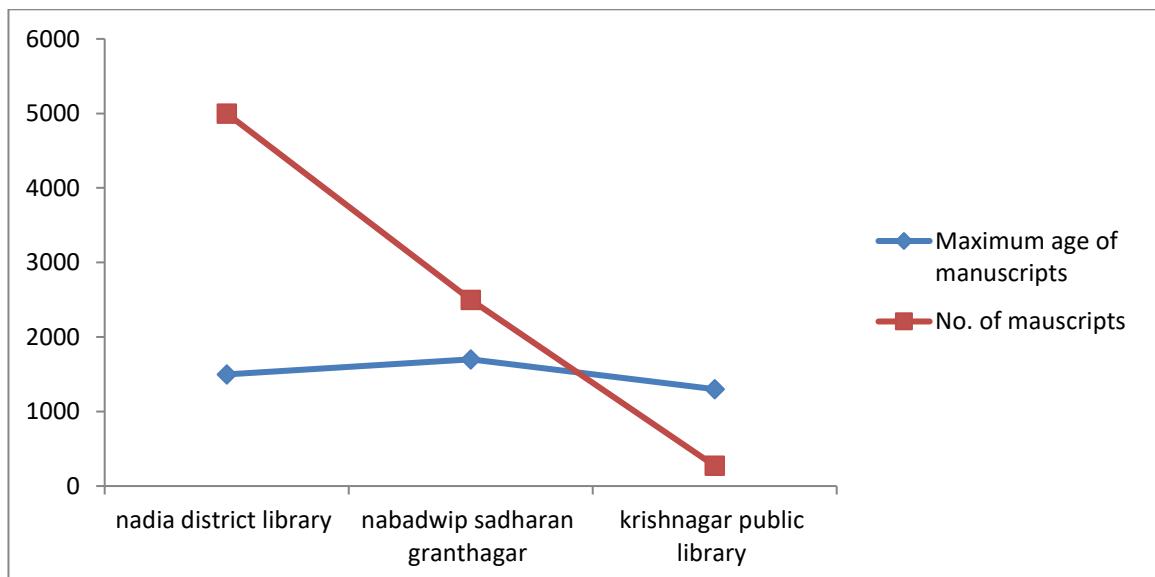


Maximum age of manuscripts		No. of manuscripts	
Mean	1500	Mean	2590.667
Standard Error	115.4701	Standard Error	1365.609
Median	1500	Median	2500
Mode	#N/A	Mode	#N/A
Standard Deviation	200	Standard Deviation	2365.304
Sample Variance	40000	Sample Variance	5594661
Kurtosis	#DIV/0!	Kurtosis	#DIV/0!
Skewness	0	Skewness	0.17224
Range	400	Range	4728
Minimum	1300	Minimum	272

Maximum	1700	Maximum	5000
Sum	4500	Sum	7772
Count	3	Count	3
Confidence Level(95.0%)	496.8275	Confidence Level(95.0%)	5875.74

Regression Statistics	
Multiple R	0.470975
R Square	0.221818
Adjusted R Square	-0.55636
Standard Error	2950.819
Observations	3

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	2481992	2481992	0.285046	0.687804
Residual	1	8707331	8707331		
Total	2	11189323			



	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-5764.33	15741.54	-0.36619	0.776533	-205780	194250.9	-205780	194250.9
Maximum age of manuscripts	5.57	10.43272	0.533897	0.687804	-126.99	138.1303	-126.99	138.1303

They finish this work by their own. Digitalization of these compositions likewise finished by the assistance of West Bengal government. Basanta Smriti Pathagar is the town library of Chakdaha District. There are not many paper compositions. In any case, authority doesn't know about the number. For protection they follow the fundamental insect poison process. Krishnagar public library- This is the third biggest vault of original copy in Nadia area. There are 272 compositions. The majority of them are Birch bark original copies. Paper compositions likewise accessible here. Be that as it may, because of lost of the key of almirah they couldn't give me the register subtleties of those original copies. Conservation work was conveyed by Public Mission for Composition in 2017. Staffs don't know about the safeguarding system. Digitalization of those compositions additionally not accessible. Dwijendra pathagar-This is the town library of Krishnagar. Be that as it may, more often than not these library is shut because of staff issue. Very much like Basanta Smriti Pathagar of

Chakdaha the library authority doesn't know about number of compositions. They follow the essential safeguarding process.

Protection of uncommon library material is particularly significant for future reference. Be that as it may, absence of legitimate direction, preparing of the staffs is the obstruction to give this. For a model conservation work is still there in Nadia area library and Nabadwip Sadharan Granthagar. Be that as it may, other than these two rest of the libraries are dealing with issue. Indeed, even the little libraries like Basata Smriti Pathagar and Dwijendra Pathagar, they don't have the foggiest idea the number of compositions that are there in their library. Reason might be that those staffs are new or moved from another library. Keeping up with increase register for interesting assortment means quite a bit to save those compositions. But Locale library, there is no fumigation chamber. Rests of the libraries are following essential pesticide process like utilizing naphthalene blocks, Baygon splash and different synthetics. However one great sign is that there is no rat assault that might make a serious danger library materials. Cognizance of the library staff is the best step for this positive sign.

### **Conclusion & Recommendations**

While cleaning and alkalization alone are not adequate to settle the relic, conservators might pick to fix and reestablish the materials. Repairing and filling strategies for paper incorporate thin segments of torn Japanese tissue stuck with a reversible non-staining glue, for example, starch glue or methyl cellulose. Paper can likewise be patched with heat-set tissue fix. Openings or paper misfortunes are filled separately with Japanese paper, with paper mash, or with a paper painstakingly decided to match the first in weight, surface, and variety. Books with broken sewing, free or segregated loads up or leaves require extraordinary consideration. A few strategies are utilized in protection restricting. The first sewing in a volume is held in the event that this is conceivable yet is in some cases built up utilizing new material string and sewing upholds. Assuming that the first restricting is too crumbled, the book might be bounce back with new documented safe materials. Entire leaves or sheets of feeble or fragile paper are supported by sponsorship each sheet with one more piece of paper. Japanese paper is some of the time utilized as a sponsorship, stuck with a starch glue. Library assortment is a significant public property which can't be isolated for our social and public legacy. We need to take satisfactory consideration to see that these materials are protected in ideal condition for the people in the future. In our country we have various libraries which have truly significant and uncommon assortments that are bit by bit getting disintegrated because of ill-advised and lacking protection course of action accessible.

- In this regard my sincere solicitation to our state government, Library Affiliation, all expert bodies associated with libraries and data sciences:
- Ceaseless endeavors ought to be made to make individuals cognizant about protection of library assortments.
- In every one of the libraries ought to have full-fledge protection unit which have calculable number of compositions or comparable reports in their assortment.
- Reasonable preparation program ought to be started by state government to prepare up individuals working in various libraries.
- Enrollment of satisfactory library staff for appropriate library the board is the most significant and important stage to improve library administration.

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