The International Council of Museums, in the year 1989 defined museum as, "A non-profit making permanent institution in the service of the society and its development and open to the public which acquires, conserves, researches, communicates and administers in general interest exhibits for purpose of study, education and enjoyment, material evidence of people and their environment". With this aim in view today museums are organizing and exhibiting groups of objects and specimens to the public by various means for delectation and instruction. These objects include artistic, scientific, historical and technological materials of educational and cultural value, irrespective of whether they are animate or inanimate.

Museums are the mirrors of past culture and traditions of man and his environment. Recently the responsibility towards education is under rapid transformation, making education a vital item of museums. The museum is a source of knowledge undoubtedly, but the pertinent factor lies in rendering its contents to the citizens of different socio-economic conditions and educational level. Thus, the relevance of the museum today is judged by its users as a powerful instrument of visual education, if its contents are arranged skilfully and logically. The museum, therefore, has deviated from merely being a collecting and conserving store-house to resource centres of immense and precious collections aiming to amuse visitors, provide pleasure and enlightenment. For fulfilling the desired aim, the museum has to make its possessions available to its visitors through various forms of coherent exhibitions and formulate interesting educational programmes to satisfy the needs and curiosities of visitors. But in a country like ours it is virtually impossible to attract children and their parents to the museums in the name of education. If museums start harping on education only then children will be dissuaded from museums. So education has to be complemented with entertainment.
to be capable of invoking some interest among children.

A museum makes itself functionally useful by involving its resources in interaction and participation, thereby catering to education in the true sense.

Children constitute a considerable portion of the total population of India, having their predominance in rural areas in particular. Irrespective of habitation, each child needs to come in contact with the ambient world through education, which enables children to cultivate their qualities and to develop their latent potentials, thus equip themselves to be the worthy members of the society in future. Hence, there is need to impart education through museum educational activities, to promote the self-expression of children, since informal learning and self-directed learning are very strong foundations for a child's learning. Museums have to be transformed into places of extra-ordinary learning resource and potential, places of energy and imagination providing multi-dimensional and multi-disciplinary knowledge, where the value of museum education vests in contact with real objects.

In India generally rural children enjoy little privileges of education as villages have less number of educational institutions in rural setting for formal education.

Childhood being the most precious and valuable years in the life of an individual it is proper to utilize this portion of life in the best possible way for future development of children as worthy citizens of the nation.

For achieving this, the seeds of education are to be sown in children right from the early impressionable years of childhood. Education implies the intrinsic development of children leading to natural unfolding of their innate powers. Education is responsible for giving impetus to the dormant abilities of children, to bring about their all round
integrated and harmonious development.

In our country, it is necessary for museums to join hands with schools and with other philanthropic organizations to impart education to children particularly those of pre-school and primary stages in an informal way. The term pre-school encompasses the age group from 3 years to 5 years. Primary stage begins from 5 or 6 years as per specification and extends till 10 years of age. Early childhood care and education is viewed as the first and essential stage of the basic education process. Scientific research on the biopsychology of children shows that the period from 1 to 8 years of age is a critical developmental period of children. It has also been observed that integral development of children is multi-dimensional and includes physical, motor, cognitive, emotional and growth of social dimension, therefore its delay in any one form profoundly influences other aspects.

Museums as resource centres with relevant educational materials, are generally situated in convenient localities particularly of the cities and towns. Museums are considered as an effective tool only when they extend their hands in helping to impart education among the masses. Earlier museums were seen exclusively as repositories of the authentic and the best sacred spaces with collection as their primary function, but now that idea has undergone a transformation whereby education has become its most dominant function. With the advent of the concept of new-museology, based on the belief that human activity education and natural elements should be encompassed within a defined geographical area. Eco-museums are a combination of culture environment and education. All these are set out to prove the fact that education is now the priority of museums, though in India a few big museums have already ventured in this direction but they are only capable of catering to a specific strata of society and not the masses of children of pre-school and primary stages in particular.
This discourse aims to seek the potential of museums as places of alternative educational centres combined with entertainment, particularly for the children of pre-school and primary stages. Some museums have certain programmes and activities, for the high school children but children of pre-school and primary stages are more conspicuously and perennially neglected. This treatise deals with the group of children, who are lying at the foundation-base of education.

Dolls and toys collected in the museums of India are cited as examples in this paper, which also aims to focus their related problems with probable solutions of the educational and recreational problems of the Indian children of pre-school and primary stages. So, examples from Indian sources are stated in general. Though it is a problem of Indian children, yet occasionally some examples from Bangladesh, a neighbouring counterpart of India are mentioned as passing examples, considering it as a common issue.

Childhood is the threshold of learning when values and concepts are in their formative stages. During this phase, children are curious, imaginative and ever-energetic. They like to indulge in absorbing activities. Childhood is considered as a dynamic stage aiming at growth and harmonious development of their knowledge, leading to eventual accomplishment of their personality. The aesthetic, creative and intellectual aspects of children need to be stressed upon for their integrated and harmonious development.

Environment plays a profound role in influencing children's development to a great extent. Value-oriented practical education of children makes them essentially dynamic and enables them to face any challenge of life in later years.
Leisure refreshes the mind and enriches the memory of children. If education is imparted in an enjoyable way, in the form of leisure then certainly learning would be more effective.

Play-way method is a recreational form of learning, which would be very much ideal for educating children through museums. Children are very fond of playing in their tender ages and play profoundly manifests their inherent qualities, spontaneous creativity, freedom and pleasure. Knowing fully well these qualities, yet in India, formal education of children is a ever-growing problem even today.

Education has a wide connotation and it is not possible to attribute a precise definition to it. Education is said to have derived from the Latin word 'Educatum', which means to lead, or awaken. Thus, we can consider that education is a process of awakening of innate powers possessed in an individual.

Learning actually implies change brought about by reinforcement, motivation, curiosity and imitation. But learning can only take place if the learner is physically and mentally ready and attains maturity; while motivation is to be synchronised with learning readiness, to attain the true effect of learning.

This paper proposes easy devices to conduct recreational and educational programmes, which may be profitably implemented in museums to serve the purpose of educating children of pre-school and primary stages, for their all round development. The scope of this thesis is to aim at exploring and restructuring museum resources and at chalking out programmes to be carried out in the form of activities designed exclusively for children.
The system of formal education in our country is such that it is not easily accessible to children particularly of the rural areas. Factors may be many, of them weak economy is probably the prime one. Conceptual learning is not much emphasized even today, thus making education a stereo-typed and cumbersome process leading to a large number of drop outs at the primary level itself. Such a system fails to give impetus to creativity and innovativeness, which are essential as pre-requisites for future life activities.

Early childhood being the crucial and formative period of learning, their interests and instincts are to be ignited from the very beginning. Since the dissertation deals with children of pre-school and primary stages, direct contact with materials is essential for their mental and creative development. They have a short attention span with little sense of historical perspective and theoretical framework. They like to move around and engage most of their time in play. Yet, some children are seen to be inveterate collectors, collecting things ranging from toy vehicles, stickers, dolls, marbles, stamps, books, cards and the like. They like to touch and feel objects and obtain a feeling of reality. The psychological factors, intellectual and emotional development of children are to be given prominence for their harmonious development.

Play has an impressionable role in child development. Play being children's work satisfies their needs. It helps them to discover what they are capable of doing, develops their imagination, thinking capacity, as well as senses. It also enables children to develop muscular co-ordination, fine skill and acts as an outlet for their surplus energy and abilities. More so, it side by side enhances self-expression, creativity and self-confidence. Playway is hence justified as the ideal form of learning of children of pre-school and primary stages.
Every experience brings a new lesson for children, they are indeed the best teachers. True education implies the flowering of a complete personality bringing out the best aspect in a child. This is possible for museums for they are perhaps the only institutions which have the potential and capability of using all their resources to provide the necessary learning experience. The 'Cone of Experience' which explains the inter-relationships of various audio-visual experiences and their individual positions in the learning process. The Cone of Experience has the following divisions:

1. Direct, purposeful experiences
2. Contrived experiences
   (Models, Mockups, Objects, Specimens)
3. Dramatized experiences
   (Plays, Puppetry, Socio-drama, Role playing)
4. Demonstrations (apparatus, blackboard)
5. Field trips
6. Exhibits
7. Motion pictures
8. Radio Recordings, Still pictures
9. Visual symbols
10. Verbal symbols
(Fig.1)

Each of these divisions represent a stage between the two extremes, between direct experience and abstraction. From the base upwards, the directness of the experience is on the decrease, whereas as we go downwards from the pinnacle of the cone, we find an increase in the directness of an experience. All these experiences can be fruitfully used in a museum to provide rich learning experiences along with non-conventional media like dance, drama, mimicry, story telling, quiz, games, music, puppetry etc.

Interest among children is directly proportional to their age and sex and on their span of attention. Attention is a form of adjustment of sense organs to facilitate the
response to a particular stimulus or to a situation and to inhibit response to any extraneous stimuli or situations.

Attention is grouped into two types - (1) Voluntary attention, which keeps attention fully concentrated upon a distasteful subject inspite of more attractive objects (2) Non-voluntary attention, which is drawn against their will from what they are doing. Since children can concentrate for a limited time on a particular subject, child-oriented museum programmes, which are appealing, arouse interest, relieve monotony, need to be arranged, but not proposing any programme devoiding education through amusement. Visual perception plays a vital role in learning. It may in turn be assigned into two sub-categories, viz. (i) those which emphasize perception as product, and (ii) those which achieve perception as process. The term perception is limited to sensory experience, which originates in the external environment and impinges on sensory receptors.

Though physical perception is initiated by optical stimulation, it is not determined by optical stimulation alone. The human ocular system is a co-ordinated binocular system which has moving components and is distinguished by selector and comparator mechanisms at various levels. These mechanisms are to select certain aspects of incoming stimulation by blocking other aspects.

Imagery, imagination and thinking are co-related to learning. Imagery implies recalling of mental pictures of the past. Imagery may be visual, auditory or factual. It demands that while imparting education to children, knowledge has to be presented through as many senses as possible, thereby making learning useful, lively and vivid to children. Imagination plays a profound role in education of children. Reproductive imagination includes putting together various visual, auditory and taste images of things seen, heard, tasted and done. Constructive imagination builds up new images by combining old experiences to form new patterns of thinking and behaviour.
Since the aim of children's education is not merely restricted to attainment of some specific knowledge, it stands for the fullest possible development of the different phases of children's personality. True education implies the unrestricted growth of varied characteristics of children by granting them full freedom and liberty, such as freedom of movement, activity, etc. If restrictions are imposed on children, their personality and self-expression will be jeopardised.

Education is said to be a very good means to unfold oneself by self-activity through play, thus enabling the unfolding of inner potentialities.

Play has certain characteristics, which satisfy the basic urge of activity, creativity, spontaneity, novelty, self-discipline, freedom, purposiveness and experience.

According to Jean Piaget's principle of learning process, children's perception is shaped and limited by experiences. From about two to seven years the child's thoughts are mainly controlled by immediate and perceptual thinking. The child is concerned with the sensory exploration of the world. From eleven years of age, thought is no longer dominated by perception. Therefore Piaget insists upon the meaningful learning which requires something constructive by themselves and not by only imitating others.

The aids used for teaching and playing must be 'hands on', 'touch and feel', to enable meaningful conception.

The accelerated changes of the modern society, keeping in pace with the advancement of scientific and technological knowledge, demand development of skills in children, to make best use of their available opportunities in the form of education. Our rural children are even deprived of the latest information on science and technology, history, geography due to lack of proper communication and interaction. Hence
schools without walls would be very much appreciated for their direct purposeful experiences, which modern systems fail to fulfil. But it is thought that if formal schools and museums combine together with the common purpose to furnish audio-visual education, which forms the base of the cone of experience, it would be prolific.

Teaching aids are to be vividly illustrative and conceptual, so as to appeal to children. Pictures, sketches and drawings are more meaningful to children. Audio-visual aids are different types of tools that appeal to the senses of vision and hearing. These have a profound effect in museums as well, to interpret objects to their context. These materials are ideal as they can convey meaning without much dependence on language, thus being accessible to children from all strata of society.

Motivation is defined as the process in arousing and sustaining behaviour, comprising of learning. Motivation may be extrinsic or intrinsic. If children are intrinsically motivated, they pursue activities for their own satisfaction, enjoyment, curiosity, interest, independently. Therefore we can contemplate of non-formal educational media, which will conscientiously augment education of children on a firm footing.

Museums can resolve these problems by precisely promoting and supporting creative and constructive approach for children through programmes comprising of activities for children.

The Montessori method of pre-school instruction is prevalent even today, and is known to accelerate the development of spontaneous learning and thinking in pre-school children by 'touch and feel' activities.
Similarly the Kindergarten method of education lays emphasis on development of children through self-activity in the form of 'learning by doing'.

Stimulations, such as colour, light and sound arouse and incite greater vitality among children in various activities, which help to foster learning in a conducive environment to a considerable extent.

Learning, here, does not imply enforced formal or informal learning, but self-learning, arousing curiosity and interest, aiming to supplement formal learning. According to psychologists children learn only when they are eager to learn and interested to learn. So learning readiness and focussing of attention depends entirely on children's interest to learn. Today there is marked need for balanced mental development of children along with manipulation of skills and development of dexterity combined with pleasure. In India in the present social circumstances children are vulnerable to various distractions which may degrade their moral values. Museums have a prominent role in this regard. They can instill values of national and international integration, fraternity, brotherhood, equality, peace, harmony, right from the impressive years of early childhood through their exhibitions and programmes.

Environmental consciousness is a vital issue of concern today which cannot be overlooked. The need to preserve and conserve our national environment, reduce pollution, promote afforestation, combat over-exploitation of natural depletional sources is essential. To achieve this the children must be made conscious right from the precious years of early childhood to propagate the message of environmental conservation in the near future.

Museum educational activities can be restructured in the form of play-way to suit the children's interests in the museum by teaching devices, which are perceptible, attractive, joyous and educative.
Museum games develop the manipulative capacities of children and promote their readiness to learn.

Exhibits alone are insufficient to inspire children's learning. Some other fascinating co-related activities such as story-hour, dramatics, quiz, help in merging education with amusement.

Education can be rejuvenated and refreshed by using leisure and made entertaining as well as informative. Pre-school and primary education, through museum is a new idea and will generate a power of observation, a spirit of enquiry and a desire for investigation in the minds of children. If the desires are transformed into a zeal to know minutely the sources and processes then it would lead India to progress. The primary function of all museums, large and small, at present is to educate its onlookers. Presently museums are no longer the prerogative of the rich and elite, but expected to be accessible to all.

The impact of the immense museum resources on the minds of children of pre-school and primary stages is profound. They may be interested but at the same time they are confused, puzzled and lost. If they are allowed to handle objects, children would be overjoyed, and this experience would take them closer to their own tradition and culture.

The children with special needs cannot be ignored by museums. The visually impaired and hearing impaired children would be excited to have handling materials at their disposal. This would stimulate their senses and creativity. Museums have to keep up their spirit of wonder and excitement for children, utilising secondary materials or unbreakable non-fragile duplicates as handling materials for enhancing their educational value. Children need to be encouraged to bring out the best within themselves.

Experts on education are not unanimous in interpreting it. Some think it is the contents, others, think of it as a
process. Education is considered as a life-long process, but it is most crucial in the formative years of early childhood to develop innate capacities as the foundation of future development.

The first task in imparting education lies in the appetite for learning, keeping in mind the individual differences in them. The growth of individual capacities and potentialities can be fostered in an interactive environment.

Museum education does not merely imply academic knowledge. It proposes to attain a balance of moral ideas, attitudes, feelings and the courage to face difficulties and challenges in all situations.

Undue emphasis on intellectual attainment leads to disproportionate development of personality. Education, in brief, means an all round development of the individual personality in all aspects, mental, intellectual, emotional, social, aesthetic, moral and spiritual. Modern education is equipped with social psychology which have significant bearings on education. A child is born into a social group with a biological heredity. The biological and psychological properties in children contribute to their educational growth and adjustment, whereas the social group makes education a necessity; since society and an individual are inseparable from each other. Each depends on the other for its existence and well being. A child is born with infinite possibility, and society acts as a selective agent to determine the cultivation of abilities.

Museums are responsible for acting as selective agents and media to embellish the original innate tendencies of children.

In very early childhood the abilities are indefinite, but with gradual interaction and social situations, these potentials are modified, co-ordinated and shaped into a
definite pattern of human behaviour. Since society gives purpose and direction to an individual's life, so early education has tremendous importance. If the concept of individual development is harmonized with social enrichment then life and learning would be fruitful.

Historical survey reveals that education was informal and cosmic in the ancient time. Gurus acted as interpreters and moderators of environmental situations. Trial and error was the method of learning, self-preservation was the aim of education. Gradually, life became complicated and the concept of education varied.

Education at that point of time was need based and practical, dealing with life situations, such as making and using tools for getting food and self-defence for subsistence and survival.

By and by, conscious instruction replaced informal education and this was imparted by the parents. Home, functioned as school. The method of learning was self-activity. Soon life became more complex. Knowledge grew in bulk, hunting stage passed into agricultural and customs and traditions developed. Thus a more formal and organised system of education came into existence. Gradual social needs demanded the organization of educational institutions for inculcating common thoughts in the younger generations.

Today we are in an organized society, which possesses a rich social heritage with moral codes, thereby enabling citizens to lead an organized disciplined life, helping to overcome social problems owing to religious or cultural factors. We owe all this to education which helps to minimize stratification based on economic, religious, social, political factors emphasizing on peace and harmony. Regarding this problem also ethnic identity and ethnicity programmes can be taken up to imbibe secularism and integrity among the different racial groups inhabiting India. Tribals and so called backward communities in India need to feel the impact of modernization.
and advancement of knowledge in the form of education through museums. based on socio-cultural aspects and scientific advancement. From the sociological point of view, education may be regarded as a process of continuous adjustment of the individuals to the rapidly changing complex societies and at the same time conditions for full realisation of potentials acquiring social efficiency that would enable them to participate actively in the dynamic progress of society at large.

The impact of cultural anthropology on education has been significant. The formal curriculum for children of pre-school and primary stages, need to be modified by anthropologists and sociologists. It has to deviate from abstract studies and include concrete activities. Various project methods, workshop methods, demonstration methods, discussions and group studies may be useful in imparting education to children. But it is indeed troublesome to implement these activities in most of the schools. So, joint venture of schools and museums can only impart fruitful education in the right direction to enable children to become worthy citizens of the country. Schools may be considered as the purified tools for shaping a society in a better way.

In this discourse the age group that I have taken up is from 3 years to 10 years since in India the Nursery class of a child usually begins at 3 years of age. termed as pre-school stage. while the primary school going stage begins at 6 years when a child is eligible for admission in Class I in formal institutions. A child usually enters into Class-V of the secondary school at the age of above 10 years. So, this paper encompasses strictly the children of age group 3+ to 10 years only.

It may be observed that many museums have activities for high school children with no or less activities for the age group of pre-school and primary school children. So difficulties were faced in collecting data on the topic
entitled. "Museum Educational and Recreational Programmes for the Indian Children of Pre-School and Primary Stages" for want of less programmes on the concerned field of study. Though a few museums in big cities like New Delhi, Calcutta, Bombay have a few museum programmes for children, but children of the remote areas are more or less deprived of such advantages. Now-a-days it is a pity that Indian children are burdened with formal learning and get very little time to pursue their hobbies according to their interests. Their over-ambitious parents would like to see them as successes in every field whether their children are interested or not. So they are keen to indulge their children in all sorts of activities but not according to their children's choice. Therefore, if museum programmes and activities are attractive then children may get some satisfaction in interacting in these programmes. Toys and games are considered too expensive for the children of middle and lower income groups in our country. Amusement parks, which provide entertainment and enjoyment to people are also too costly for the average lower income groups in India.

Dolls and toys are useful materials for educating and enlightening children of all backgrounds along with making them feel enchanted and excited.

Children as visitors to museums come escorted with parents, guardians, teachers or school groups. The number of children visitors vary seasonally. So there may not be a near-about fixed number of children visitors in a day. It is essential to attract these children and fulfil their curiosity. Proper publicity regarding museum activities, exhibitions can enhance the number of visitors particularly children, since today's parents are to be made conscious about the education and enjoyment of their children.

No museum can expect homogeneous visitors either children or adult. There may be children of various types such as physically impaired, mentally imbalanced, visually impaired and learning impaired. These children are fond of different kinds of activities according to their interest and
sensitivity. Museums are the most accessible places for education and enjoyment of such children.

In our country we have to keep the financial constraints in mind before conceiving of the most modern technology such as video sets, compact discs, or computers in each and every museum, but at least try to make museums educationally useful for the public, especially for children. whose learning is directly proportional to their visual stimulation. We have to remodel and restructure our museum resources for maximum utilisation for education. Museums need to be promoted and marketed to attract public especially children and their parents.

During the museum survey it was found that among children boys and girls, in India. have totally different gender roles. Even their likes and dislikes, aptitudes, talents are more or less different right from early childhood. So, we cannot generalize museum programmes for all children. Boys are found to be more interested in active toys which are noisy and movable, whereas girls prefer to play with passive and cuddly toys played by stroking and caressing them. Boys like banging and beating toys and games involving thrill, such as climbing, jumping. throwing etc. Girls on the other hand prefer to sit in one place and play with dolls. kitchen sets etc. But both the genders are unanimous in liking activity, involvement and participation.

Methodology of Work

For collecting data the undermentioned methods were followed to make the thesis as complete as possible. These were -

1. Survey of some museums having educational programmes for children of pre-school and primary stages, distribution of questionnaires along with personal interviews keeping in view the scope and limitation of the topic,

2. Correspondence with museums in India at large and outside at occasions,
3. Survey of children visitors in different museums,

4. Observation.

5. Collection of relevant data on museums in-door and out-door activities for children.

6. Discussions and interviews with parents, teachers and school authorities on museum educational programmes.

7. Consultation of published annual reports of museum journals and reference books.

8. Correspondence with Non Formal Educational Centres. Non-Governmental Organisations such as the National Council of Educational Research and Training (N C E R T). Institute of Psychological and Educational Research (I P E R), Spastic Society, etc. concerned with children's education and

9. Attending special programmes carried out by different museums for children on special occasions like National Science Day etc.

The thesis has been divided into the following chapters namely -

I. Museum as an aid to early childhood education in India.

II. Early Education in ancient India and its relevance to museums.

III. Role of dolls and toys in museum education,


V. Existing programmes in a few museums in India for education and recreation of children of pre-school and primary stages,
VI. Suggestive programmes for children within the museums,

VII. Suggestive programmes for children beyond the museums,

VIII. Suggestive programmes for children with special needs,

IX. Conclusion.