Exhibition Theme : 'SOCIETY, SCIENCE AND ENVIRONMENT'.

GUIDELINES For the Preparation of Exhibits and Models and Organising Exhibitions

INTRODUCTION:

All children are naturally motivated to learn and are capable of learning. They are natural learners and knowledge is the outcome of their own activity

We confront many crucial issues as a rapidly progressing society, which are directly or indirectly related to society & science. Among these issues, there are a number of daily and real life situations. There are various problems related to arts, agriculture, global warming, resource depletion, pollution, health, nutrition, disaster management, environment etc. Children need to be aware of such situations, issues and problems that the society is facing. It is aimed to empower them to apply their scientific knowledge and their mathematical understanding to solve them in order to sustain well being of people of modern society. Children should understand how human society's unlimited use of natural resources affects the quality of life and environment. Children need to be encouraged to appreciate and participate in the responsible use of science for the benefit of the society and environment. They should also have a scientific vision about different issues and the ability to acquire and process information about scientific developments and their long term implications on society and environment.

OBJECTIVES:

The main objectives of the exhibitions are:

• to provide a forum for children to pursue their natural curiosity and inventiveness to quench their thirst for creativity;

• to make children feel that science is all around us and we can gain knowledge as well as solve many problems also by relating the learning process to the physical and social environment;

• to lay emphasis on the development of science and technology as a major instrument for achieving goals of self reliance and socio-economic and socio ecological development;

• to highlight the role of science and technology for producing good quality and environmental friendly materials for the use of society;

• to encourage children to visualize future of the nation and help them become sensitive and responsible citizens;

• to analyse how science has developed and is affected by many diverse individuals, arts, cultures, societies and environment;

• to develop critical thinking about global issues to maintain healthy and sustainable societies in today's environment;

• to apply mathematics to visualize and solve problems pertaining to everyday life etc.

• to appreciate the role of science in meeting the challenges of life such as climate change,

opening new avenues in the area of agriculture, fertiliser, food processing, biotechnology, green energy, disaster management, information and communication technology, astronomy, transport, games and sports etc.

It is envisaged that children and teachers would try to analyse all aspects of human endeavor with a view to identify where and how the new researches and developments in science and technology can bring and sustain progress of society leading to improvement for the challenges of life. The organisation of science exhibitions would also provide opportunities to all participating students, teachers and visitors to get acquainted with different kind of equipments, devices, techniques to generate scientific ideas for addressing various problems of the society and environment.

OUTLINE / PRINCIPLE OF PROJECTS: Should Exhibit

- → TALENTS : of student & Staff
- → THOUGHT PROCESS: Innovative Thinking; Creativity & Originality
- → **TEAM WORK**: Involvement, Team work and Voluntary Participation
- **COMMUNICATION :** Presentation & Communcation
- → RELEVANCE : Practical application and relevance to syllabus
- + PERFECTION: Completeness

PROCEDURE TO EVALUATE:

Procedure adopted will lay more emphasis on the **quality** of the exhibits rather than quantity. *It should be ensured that the exhibits are not crude and hazardous* and have good finish and are presentable.

The exhibits should be assessed pupils' involvement, imagination and innovations made in designing the exhibit/model. We should also judge whether the model is traditional or an improvement over the traditional model or it is innovative. Various skills involved in constructing the exhibit and model, the degree of neatness and craftsmanship may also be taken into account. Every effort must be made to rule out the tendency of procuring the ready-made exhibits/models. General layout of the exhibit, relevance, clarity of charts accompanying the exhibit and overall attractiveness to the layman and children should also be assessed. **Working models should be encouraged**.

CRITERIA FOR EVALUATION:

the following criteria for judging the exhibits is suggested (the percentage given in bracket are suggestive weightages):

- 1. Involvement of (staff&) children's own creativity and imagination (20 per cent)
- 2. Originality and innovations in the exhibit/ model (15 per cent)
- 3. Scientific thought/ principle/ approach (15 per cent)
- 4. Technical skill, workmanship and craftsmanship (15 per cent)
- 5. Utility/educational value for layman, children, etc.; (15 per cent
- 6. Economic (low cost), portability, durability, etc. (10 per cent) and
- 7. Presentation aspects like demonstration, explanation, and display (10 per cent).

Write-up of the Exhibit/Model: (not more than 1,000 words) in the following format.

Proper submission of the write-up will ensure for publication in a booklet/ magazine.

For convenience an exemplary write-up is also given here.):

I. Introduction

- (i) Rationale behind construction of the exhibit; and
- (ii) The scientific principle involved.
- II. Description
- (i) Materials used for the construction;
- (ii) Construction and working of the exhibit/model; and
- (iii) Applications, if any.
- III. References

Books, journals or magazines referred for preparation of the exhibit/model.

- IV. Illustrations
- (i) Black and white line diagram of the model, illustrating the working of the exhibit.
- (ii) Close-up photographs of the exhibit with description.