

## Senior Secondary Section

### Science Stream

#### ❖ English (Core):

**Curriculum:** Literature reader, Language skills, Hornbill, Snapshots, Flamingo, Vistas, Novels

**Teaching Methodology:** Direct Method, PowerPoint presentation, Discussion method

#### ❖ Physics:

**Curriculum:** Electrical & magnetic effect, Electronic circuit, Modern physics, classical physics.

**Teaching Methodology:** Descriptive method, Deductive, practical, Project method

#### ❖ Chemistry:

**Curriculum:** Chemistry of carbon & carbon compound, Chemical & physical properties of carbon compound, study of states of matter, study of periodic table Many new areas like synthetic materials, bio -molecules, natural resources, industrial chemistry are coming in a big way and deserve to be an integral part of chemistry syllabus at senior secondary stage. At international level, new formulations and nomenclature of elements and compounds, symbols and units of physical quantities floated by scientific bodies like IUPAC and CGPM are of immense importance and need to be incorporated in the updated syllabus. The revised syllabus takes care of all these aspects. Greater emphasis has been laid on use of new nomenclature, symbols and formulations, teaching of fundamental concepts, application of concepts in chemistry to industry/ technology, logical sequencing of units, removal of obsolete content and repetition etc

**Teaching Methodology:** Descriptive method, Deductive, practical, Project method

#### ❖ Mathematics:

**Curriculum:** As per NCF and NPE, generating new knowledge, perception of new ideas based on child psychology.

The curriculum intends to help the learner:

- To acquire knowledge and critical understanding, particularly by way of motivation and visualization of basic concepts, terms, principles, symbols and mastery of underlying processes and skills.
- To feel the flow of reasons while proving result or solving a problem.
- To apply the knowledge and skill acquired to solve problems and wherever possible, by more than one method.
- To develop positive attitude to think, analyze and articulate logically.
- To develop an interest in the subject by participating in related competitions. To acquaint students with different aspects of mathematics used in daily life. To develop an interest in students to study mathematics as a discipline.
- To develop awareness of the need for national integration, protection of environment, observance of small family norms, removal of social barriers, elimination of sex biases.
- To develop reverence and respect towards great mathematicians for their contributions to the field of mathematics.
- **Teaching Methodology:** Descriptive method, Deductive, practical, Project method.

### ❖ **Biology:**

**Curriculum:** Human physiology, plant physiology, genetics, reproduction in humans and plants, Bio-Technology, Environmental study.

It provides the students with new concepts along with an extended exposure to contemporary areas of the subject. The syllabus also aims at emphasizing on the underlying principles that are common to both animals and plants as well as highlighting the relationship of biology with other areas of knowledge. The format of the syllabus allows a simple, clear, sequential flow of concepts without any jarring jumps. The syllabus also stresses on making better connections among biological concepts. It relates the study of biology to real life through the use of technology. It links the discoveries and innovations in biology to everyday life such as environment, industry, health and agriculture. The updated syllabus also focuses on reducing the curriculum load while ensuring that ample opportunities and scope for learning and appreciating basic concepts of the subject continue to be available within its framework.

**Teaching Methodology:** Descriptive method, Deductive, practical, Project method

### ❖ **Physical Education:**

**Curriculum:** Rules and regulation of different games

**Teaching Methodology:** Practical method

