INTRODUCTION

The emerging Information and Communication Technology (ICT) has become a strategic alternative for schools all over the world to enhance learning and deliver both quantity and quality programs for mass education. With globalization of Economy and information, as well as technological innovations, knowledge based economy and society, escalating demand for education the implementation of ICT helps in effective learning for all anytime anywhere.

ICT has great potentials such as expanding educational opportunities, increasing efficiency, enhancing quality of teaching and learning as well as facilitating skill formation, sustaining lifelong learning and advance community linkage.

OBJECTIVES
1. Introduction to ICT and its necessity.
2. Study of ICT tools.
3. Effective use of ICT in continuous learning
4. Prepare students to make effective use of information and communication technology.
5. Make student familiar with ICT packages in science, mathematics and other areas.

Structure
- ICT will be introduced as a subject at Std. IX and X as a compulsory independent subject of 50 marks.
- The medium of instruction will be Marathi and English.
- ICT has to be taught for 60 periods yearly (40 periods theory and 20 periods for practicals) 2 periods per week.
- The subject will be taught by any subject teacher who has undergone a short training in ICT subject.

List of Practicals (Std. IX)

Effective use of ICT in continuous learning
1. Familiarisation with basic operational parts of PC based desktop computer.
2. Identification of Computer Systems and understanding LAB setup.
4. Creation of a spreadsheet using a spreadsheet program.
5. Creation of Charts from spreadsheet data
6. Creation of simple presentation
7. Introduction to Web Browser and browsing web sites.
8. Introduction to web search.
9. Introduction to locating places using Free mapping services available over the internet.
10. Studying the use of Translation software available online such as Google Translate to convert Simple English to Hindi/Marathi.
11. Downloading and saving Web page content and images as files.
12. Introduction to Web Based e-mail
### Potential of ICT

1. **Internet Applications**
   - a. Blogs, Forums
   - b. VOIP
   - c. E-Commerce
   - d. E-Governance
   - e. E-maps – Maps and navigation

2. **ICT in Science, Mathematics, Modeling**

3. **ICT in day-to-day life**
   - a. World Wide Web
   - b. e-mail
   - c. Instant Messaging and Chat

4. **Information in Indian Languages**
   - a. Unicode
   - b. Generating information in Indian Languages
   - c. Translation/Transliteration

5. **Use of Geogebra in understanding Mathematics**

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### Standard IX

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<thead>
<tr>
<th>Topic No.</th>
<th>Topic</th>
<th>Periods</th>
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<tbody>
<tr>
<td>1</td>
<td>Concepts of ICT, Necessity of ICT</td>
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<td>2</td>
<td>ICT Tools</td>
<td>4</td>
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<tr>
<td></td>
<td>a. Computer</td>
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<td>b. Cellular phones</td>
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<td>c. Radio and TV</td>
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<td>d. Internet</td>
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<td>3</td>
<td>ICT Soft Tools word processing</td>
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<td>4</td>
<td>ICT Soft Tools Spreadsheet</td>
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<td>6</td>
<td>Introduction to Internet</td>
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<td>a. World Wide Web</td>
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<td>b. e-mail</td>
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<td>c. Instant Messaging and Chat</td>
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<td>7</td>
<td>ICT in Languages, Social Sciences and Arts</td>
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<td>Morals and Ethics</td>
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access opening new e-mail account and web-based access to the same.
6. Introduction to Chat.
7. Introduction to video conferencing using Skype.
8. Creation of short audiovisual content (not exceeding 2 minutes; using webcam or digital camera with video recording facility. Copying and viewing the same on a PC.
9. Uploading a short video to a free online streaming video service such as YouTube.
10. Practical 1 on Geogebra.
11. Practical 2 on Geogebra.
12. Practical 3 on Geogebra.