Course Code EDEC 227 SEMESTER-II

SCIENCE & TECHNOLOGY CONTENT & METHOD

Objectives: Student Teachers...

- 1 Develop an understanding of the nature and place of Science
 - a. Formulates instructional objectives in term of behavioral out comes.
- 2 Construct suitable tool of evaluation, understand, continuous and comprehensive evaluation and employ it for feedback and remediation.
- 3 Understand the teaching methods, approaches and techniques for teaching material.
- 4 Use appropriate educational technology and develops low cost teaching material.
- 5 Analyze and evaluate science syllabus and science textbooks.
- 6 Develop skills in organizing curriculum activities such as science club, science fair, science exhibition and field trips.

Unit:1 Content

Std-9, Chapter no : All chapters from Std 9th Textbook of

Semester 2

Std-10 Chapter no : 10, 11,12,13,14, 16,17,18

Unit:2 Assessment, Evaluation and Teaching aids and Non-formal Approaches

- 2. 1. Text book: Internal and external characteristics. Evaluation of text book.
- 2. 2. Concept Needs and characteristics of diagnostic test and remedial work.
- 2. 3. Concept and Needs of Blue print and construction of good Question paper.
- 2. 4. Teaching aids: Needs, Importance, types
- 2. 5. Development and preparation of self maid teaching aids.
- 2. 6. Selection and use of teaching aids.
- 2. 7. Non formal approaches of Science and technology teaching
 - (1) Aquarium
 - (2) Herbarium
 - (3) Observation of sky
 - (4) Planetarium

Unit:3 Co-Curricular activities for Science and Technology

- 1.1 Co. curricular activates:
 - (1) Science club
 - (2) Science fair
 - (3) Science exhibition
 - (4) School botanical garden.
- 1.2 Science Laboratory:
 - (1) Management and Safety
 - (2) Designing a Science laboratory
 - (3) Laboratory equipment.
- **1.3** References and Journals in Science and technology teaching.

Unit:4 Field Work (Any one of the following)

- 1. Construction and Planning of Science Club.
- **2.** Participation in Science Fair or Visit and report of Science fair organized at taluka, district and State level
- 3. Evaluation (External and Internal) of Text Book.
- 4. Visit and evaluation of School Science Laboratory.
- 5. Collection and exhibition of Scientific information from Science periodical
- **6.** Visit to place of Scientific interest like (Science city, Community Science Center, Dairy, Industrial Unit, agriculture university, petroleum university)
- 7. Collection of latest information on Science from internet.
- **8.** Any other science and technology related activities