

PAPER- 6 &7

SCIENCE & TECHNOLOGY CONTENT & METHOD

Objectives :

Student Teachers...

1. Develop an understanding of the nature and place of Science
Formulates instructional objectives in term of behavioral out comes.
2. Construct suitable tool of evaluation, understand, continuous and comprehensive evaluation and employ it for feed back 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. Analyse 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-I Std- 8, Chapter no : 8
 Std-9, Chapter no : 1, 7,10,11,12
 Std-10,Chapter no : 1,2,4,8,9,10

Unit-II Std- 8, Chapter no : 12, 15
 Std- 9, Chapter no : 2,3,4,5,6,14,15,16,17,27,

Unit-III Std-8, Chapter no : 10
 Std-10, Chapter no : 3,6,7,12,13,14,11,16,17,18

Unit - IV Modern Science.

1. Concept of Science
2. Nature of mordent Science
3. Growth of Science teaching in India.
4. Science teaching competency, its social and professional responsibility.
5. Values of Science in modern life : Utilitarian value, Disciplinary value and Cultural value
6. Objectives of teaching science and technology at secondary level: Taxonomy of educational, Objectives: General and specific objective and behavioral changes.

Unit-V

1. Modern methods of Science and technology teaching: Lecture method, Demonstration method, experimental method, Project method, Inductive-Deductive method, panel discussion, symposium method.
2. Planning for Science and technology teaching: Lesson plan, Unit planning, Monthly planning, and yearly planning.
3. Text book: Internal and external characteristics, Evaluation of text book.
4. Concept Needs and characteristics of diagnostic test and remedial work.
5. Concept and Needs of Blue print and construction of good Question paper.

Unit-VI Co- curricular activities and non formal approaches in Science and technology teaching.

1. Co. curricular activates: Science club, science fair, science exhibition and school botanical garden.
2. Non formal approaches of Science and technology teaching : Aquarium, Herbarium, Observation of sky, Planetarium
3. Teaching aids : Needs, Importance, types, Development and preparation of self maid teaching aids, selection and use of teaching aids
4. Science Laboratory: management and Safety, Designing a Science laboratory, laboratory equipment.
5. References and Journals in Science and technology teaching.

Unit-VII Practicum

1. Visit to place of Scientific interest like (Science city, Community Science Center, Dairy, Industrial Unit)
2. Biography of eminent Scientists of world and India(Indian and foreign Scientists one each for every Students)
3. Construction and Planning of Science club
4. Visit and report of Science fair organized at taluka, district and State level
5. Collection of latest information on Science through surfing internet.