

***DIPLOMA (PRIMARY TEACHER TRAINING) – PART TWO***

**Optional Early Certificate: - N/A**

**Syllabus:-**

Sr. No.	Module Code	Name of Module	Credits	Total Marks
1	ADPT121	Material Development and Evaluation	5	100
2	ADPT122	Teaching of Social Science & Environmental Studies	5	100
3	ADPT123	Foundation Course in Information Technology	4	100
4	ADPT124	Teaching of Science & Mathematics	5	100
5	ADPT125	Social & Cultural Activities	5	100

**Module Name:** MATERIAL DEVELOPMENT AND EVALUATION (Practical)

**Module Name:** TEACHING OF SOCIAL SCIENCE & ENVIRONMENTAL STUDIES

1. Importance of Social Science
2. Need for Teaching Different Subject Under Social Studies
3. General Objectives of Teaching Social Science
4. Specific Objectives of Teaching Social Science
5. Behavioral Terms as per Bloom's Taxonomy
6. Curriculum of Social Studies
7. Approaches to Curriculum
8. A Teacher of Social Science
9. Models of Teaching Social Science
10. Micro- Teaching in Social Science
11. Study of Current Affairs
12. Remedial Teaching

**Module Name:** FOUNDATION COURSE IN INFORMATION TECHNOLOGY

1. **Information Technology (IT) & Society:** Information, information processing & Information Technology. Evolution of IT. IT business and entrepreneurship, education, communication, entertainment, healthcare, agriculture, and its contribution to India's development. Government Initiatives: Particular initiatives – AADHAR, E-Panchayat, National Knowledge Network.

2. **Information Handling:** Devices assisting IT with special focus on Computers and Mobiles. Components of computer: Hardware and Software. Connecting and Configuring External Devices – like Printer, scanner, projectors etc. Hardware Connectivity Options – Ports, Wi-Fi, Bluetooth etc.
3. **Document Preparation & Presentation:** Document preparation and presentations using tables, pictures, graphs, animations, audio and video contents. Use of shortcut keys. Ways to make effective presentations. Use of references and citations. Document format and their conversion.
4. **Internet, Security & Legal Aspects:** WWW, Basics of webpage, Social network sites. Effective Searching. Popular Online Applications - e-ticketing, e-payment. Email & internet Forums. Issues – virus, malware, spam, phishing, copyright, plagiarism, cybercrime; Protective measures: password, https; Cyber Laws – IT Act. Open source philosophy. Licensing and domain of open source technology. Open source software development. Commonly used open source technologies.
5. **Library and Information Resource Center** s: E-Information Resources: Concept and types (e-books, e-journals, on-line databases: subscribed, free and open access databases). Institutional Repository: concepts, components. Library Systems – Introduction to library, Library and Information sciences (User and reference services , Current Awareness Service, Selective Dissemination of Information, Online Information Bulletin Board), Call Number (Class Number, Book Number, Location Number). Arrangement of Information Resources: Call Number (Class Number, Book Number, Location Number), On-line Public Access Catalogue (Data Fields and elements, search options, Reservation facilities). Bibliographic Standards for Citation – Modern Language Association Style, American Psychology Association style. Article Reference, Book Reference, Conference Reference, Web Resource Reference.

## **Module Name:** TEACHING OF SCIENCE & MATHEMATICS

### **Unit 1: Mathematics in School Curriculum**

- 1) Objectives of teaching Mathematics at primary stage.
- 2) Curriculum of Mathematics – its various components.
  - a) Objectives / Learning outcomes
  - b) Course Content .
  - c) Learning Experiences.
  - d) Evaluation.

### **Unit 2: Methods of Teaching Mathematics**

- 1) Concept formation in mathematics– Piagetian stages and number development.
- 2) Question answer technique.
- 3) Inductive and deductive approach.
- 4) Play way method.
- 5) Project method.
- 6) Problem solving method.

### **Unit 3: Teaching Aids**

- 1) Teaching aids (abacus, geoboard, paper folding, charts, models, geometry box, mathematics kits, etc).
- 2) Role of teaching aids in teaching learning process.
- 3) Preparation of teaching aids and their uses.

### **Unit 4: Recreational Mathematics**

- 1) Mathematical games.
- 2) Magic squares (3x3, 4x4).
- 3) Setting of mathematics laboratory / Club.

### **Unit 5: Content analysis & lesson planning**

- 1) Analysis of mathematical content in terms of facts, concepts, generalizations and processes.
- 2) Unit planning and lesson planning.

### **Unit 6: Teaching of Fractional Numbers**

- 1) Concept of fractional number – Fractional number as a part of whole and as a part of group.

- 2) Distinction between a fractional number and rational number, various kinds of fractions, unit, proper, improper, fractions, conversion of fractions to decimals and decimals to fractions.
- 3) Four fundamental operations on fractions.

**Unit 7: Teaching of Measures**

- 1) Measures of length, weight, time, capacity, temperature, basics and other units
- 2) Relationship between various units of the same measures, skills of measuring different measures, solving problems based on different measures.

**Unit 8: Teaching of Mensuration**

- 1) Concept of region and space, areas as a measure of region and volume as a measure of space; area of rectilinear figure, formula of area of rectangle, square, triangle, parallelogram, rhombus, trapezium, circle, volume of cuboid, cube, cylinder, sphere, cone, surface area of the above mentioned solids; area of four walls of a cuboidal room or box.

**Unit 9: Commercial Arithmetic**

- 1) Percentage as a form of representing a fractional number, its applications, profit and loss, discount, simple and compound interest.

**Unit 10: Teaching of Number System**

- 1) Evolution of Hindu Arabic System of numeration.
- 2) Number and numerals, digits.
- 3) Concept of place value of a digit in a number.
- 4) Development of number systems from natural numbers to real numbers.
- 5) Representation of various kinds of number on number line : adequacy and inadequacy of a number system.
- 6) Various kinds of numbers such as odd, even, prime, composite, co-primes and twin primes.
- 7) Concept of factors, multiples, common factors, common multiples, LCM and HCF.
- 8) Concept of four fundamental operations on decimal.
- 9) Four fundamental operations and their interrelationships with emphasis on the use of number line.

**Module Name:** SOCIAL & CULTURAL ACTIVITIES (Practical)