

## **ADVANCED DIPLOMA (NURSERY TEACHER TRAINING) – PART TWO**

**Optional Early Certificate: - Certificate (NTT)**

**Syllabus:-**

<b>Sr. No.</b>	<b>Module Code</b>	<b>Name of Module</b>	<b>Credits</b>	<b>Total Marks</b>
1	ADNT121	Understanding Language and Early Literacy	5	100
2	ADNT122	Craft and Participatory Work	5	100
3	ADNT123	Foundation Course in Information Technology	4	100
4	ADNT124	Teaching of Science & Mathematics	5	100
5	ADNT125	Teaching of Numbers And Shapes	5	100

**Module Name: UNDERSTANDING LANGUAGE AND EARLY LITERACY**

### **Unit 1: Nature of language**

- Rule governed system and language
- Relationship of Language and Society: Identity, power and discrimination
- Nature of multilingualism: Differential status of Indian language classroom
- Critiquing state policies on language and education

### **Unit 2: Language Acquisition**

- Language Acquisition and Language Learning: pre-school and early school years Children's background and School Experience.

### **Unit 3: Language across the Curriculum**

- Function of Language: In the classroom, outside the classroom
- Language in Education and Curriculum
- Learning language and Learning through Language

### **Unit 4: The classroom practices and possibilities**

- Perspectives on recording and writing
- Prevalent language teaching practices and their critique
- Connections between classroom instruction and theories

- Role of literature in language learning
- Learner's active role in understanding literature
- Using Children's literature across curriculum.

#### **Unit 5: Assessment**

- Assessment as a continuum
- Use of multiple sources for comprehensive assessment
- Ways of assessment- observation, records, maintaining profiles, etc.

#### **Suggested Readings:**

1. Anderson, R.C. (1984). Role of the Reader's Schema in Comprehension, Learning and Memory. In R.C. Anderson, J. Osbon & R.J. Tierney (Eds.) *Learning to Read in American schools: Based Readers and content texts*. Hillsdale, NJ: Lawrence Erlbaum Associates.
2. Armbruster, Bonnie B. (1984). The Problem of "Inconsiderate Text" In Duffy, G. G. (eds.) *Comprehension Instruction, Perspectives and Suggestions*. Longman Chapter 14.
3. Kumar, K. (2007). *The Child's Language and the Teacher*. India: NBT.
4. Labov, W. (1972). The logic of Non- Standard English. In *Language in Education*. Prepared by Language and Learning course Team. London: Routledge. 198-211.
5. Monson, R. J. (1991). Charting a New Course with Whole Language. *Education Leadership*. 48(6), 51-53.
6. Sinha, S. (2000). Acquiring Literacy in Schools. *Redesigning Curricula: A symposium on working a framework for School education*. September, 493.
7. Agnihotri, R.K. (1995). Multilingualism as a classroom resource. In K. Heugh, A. Sieruhn and P. Pluddemonn (Eds.) *Multilingual education for South Africa*. Johannesburg, South Africa: Heinemann. 3-7.
8. Butler, A. and Turnbull, J. (1984). *Towards Reading-Writing Classroom*. New York: Primary English Teaching Association Cornell University, Chapter 2 and Chapter 3.
9. Martin, Jr. B. (1987). The Making of a Reader: A Personal Narrative. In Bernice E. Cullinan, *Children's Literature in the Reading Programme*. Michigan: International Reading Association.
10. Pinnell, G.S. (1985). Ways to Look at the Functions of Children's Language. In A. Jaggar, M. Trika and Smith-Burke (eds.) *Observing the language learner*. Newark, DE: International Reading Association, 57-72.
11. Rhodes, L. K. and Shanklin N. L. (1993). *Windows into Literacy*. UK: Heinemann, The University of Michigan. Chapter 4: Assessing Language Systems and Strategies in Reading.
12. Rothleen, L. and Meinbach A. M. (1991). *The Literature Connection: Using Children's Books in Classroom*, Tucson, USA: Good Year Books.

**Module Name:** CRAFT AND PARTICIPATORY WORK (Practical)

**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: TEACHING OF NUMBERS AND SHAPES**

#### **1. Nature of Mathematics**

- a. Scope and importance of Mathematics
- b. Objectives of teaching Mathematics (at pre-primary stage)
- c. Point, line, ray, triangle, square, Rectangle, circle, Cube, Cuboid

#### **2. Concept formation of numbers & Pre Numbers**

#### **3. Methods of teaching Numbers & Shapes**

- a. Inductive and deductive approach.
- b. Play way method
- c. Project method
- d. Problem solving method

**4. Use of Resources**

- a. Primary maths Kit (uses of Abacus, dominos, cubic rods, cuisenaire strips).
- b. Low cost Teaching Aids.
- c. Improvising Teaching Aids.

**5. Action Games with simple equipments**

- a. Walk along a shape
- b. Addition & subtraction disks.
- c. In and Out
- d. Musical Islands
- e. Joining the figures along the numbers
- f. Tambola, snakes and Ladder, Ludo Odd one out