

Post S.No	Notification Number	Name of the Post
04	CUTN/NT/03/2016	Assistant Librarian

## **I Information and Communication**

Unit-I: Data, Information and Knowledge and their inter-relationship; Information – Notions; Information Theories

Unit-II: Library – Social relevance; Types; Functions

Unit- III: Information Transfer Cycle; Diffusion pattern; Communication – Theories and Models; Channels and Barriers to Communication

Unit-IV: Information / Memory institution of different kinds: Libraries, Archives, Documentation Centers, Information Analysis Centers, Museums and respective roles and functions.

Unit-V: Information Institutions and Association – UNESCO, IFLA, ALA, CILIP, ILA, IASLIC, IATLIS, etc

## **II Management of Information Centre's**

Unit-I: Management - Concept, Definition; Schools of Management Thought

Unit- II: Human Resource Management - Organisation models; job description and job Analysis; selection, recruitment, training

Unit- III: Financial Management: Planning and Control; Resource generation; Budget and Budgeting; Budgetary control techniques; Cost Benefit, Cost Effective analysis

Unit - IV: Materials Management: Collection development Policy; Issues - selection acquisition; Library routines, Circulation, Preservation and conservation.

Unit- V: Planning – Concept, Definition; Systems Analysis and Design; MBO and MIS

## **III Library Classification and Cataloguing**

Unit - I: Universe of Subjects; Modes of formation of Subjects; Knowledge Organization

Unit - II: Classification – Canners and Principles - Idea, Verbal and Notation planes; Facet analysis; CC, UDC, LC and DDC – Overview; BSO; General theory of classification; CRG

Unit - III: Cataloguing - Purpose, Structure, Types – Inner and Physical forms; Normative Principles, Canons & Laws; Standards – ISBDs, AACR, RDA; FRBR

Unit - IV: Subject Cataloguing – Principles; Subject heading lists; thesauri and vocabulary control

Unit - V: Bibliographic formats – International Standards - ISO 2709, MARC21, UNIMARC, CCF and National formats. Metadata – Standards: Dublin Core, Mark up languages – HTML, XML, RDF

## **IV Information Sources**

Unit - I: Information Sources – Types – Documentary and Non documentary; Primary, Secondary and Tertiary; Electronic Sources of Information; Human and

- Institutional Sources; Invisible Colleges; Technological Gatekeepers
- Unit - II: Reference Sources - Ready Reference Sources – Types - Dictionaries, Encyclopedias, Annuals, Biographical sources, Handbooks and Manuals, Geographical Sources.
- Unit - III: Bibliographical Sources – Bibliographies; Union Catalogues; Indexing and Abstracting sources; News summaries;
- Unit - IV: Web Resources - Subject Gateways and Portals; Databases – Bibliographical, Abstracting and Indexing; Full-text databases; Citation Databases
- Unit -V: Evaluation of Information sources - Print and Web Resources; Multimedia; Open Access Resources

## **V Information System, Products and Services**

- Unit - I: Information Services: Users Education & Information Literacy; Documents Delivery, Translation; Current Awareness, SDI, E-Alert & Web-based Services
- Unit- II: Information System - Concept, Purpose, and Types; Global & National Information Systems; UN Information Systems; NISCAIR, NASSDOC, Library Networks: INFLIBNET, DELNET, etc.
- Unit- III: Users of Information; Understanding the users; Categories of users and their needs; Information use contexts; Information seeking behavior of users; Theories of Information seeking behaviour.
- Unit – IV: Information Analysis and Consolidation Products and Services.
- Unit –V: Use Studies; Methods of Users studies; Major information users and use studies and their findings

## **VI Information Storage and Retrieval**

- Unit - I: Information Retrieval System – Concept, Definition, and Components
- Unit - II: Indexing systems – Pre-coordination and Post-coordination; General Theory of Subject Indexing; Keyword Indexing; Citation Indexing
- Unit - III: Information Retrieval Models – Boolean, Probabilistic, Cognitive and Vector Models; Alternative IR Models
- Unit - IV: Search and Searching - Search Process; Search strategies; Search engines
- Unit -V: Evaluation of Information Retrieval Systems - Purpose, Criteria – Recall and Precision; Major Evaluation Studies – MEDLARS; SMART Retrieval; STAIRS, Project TREC

## **VII Research Methods**

- Unit – I: Research - Concept, Definition, Objectives and Significance; Types; Research Problems
- Unit – II: Research Design – Definition, Need; Sampling; Hypothesis – Types and Testing
- Unit - III: Methods and Tools - Data collection - Survey, Experimental, Case-study, Observation, Statistical, Questionnaire, Interview schedules.
- Unit - IV: Introduction to Statistics; definition of statistical terms-population, sample, data and variables; frequency distributions; scales of measurement;

presentation of data- graphical and tabular; frequency tables, histogram, frequency curves; correlation and regression analysis; curve fitting; probability, probability distributions; measures of central tendency and dispersion; binominal, Poisson, geometric and Negative binomial distributions; Quantitative tools and techniques in LICs

Unit - V: Report Writing – Components of a Research Report; Style manuals – MLA, APA, Chicago, etc

### **VIII Introduction to IT and Library Automation**

Unit – I: Information Technology - Evolution of Digital Computers; Introduction to Telecommunications; Number Systems: Binary, Octal, Hexadecimal, Representation of Numbers in Computers; Character Representation: ASCII, ISCII and UNICODE; File formats

Unit – II: Basic components of a Computer – Arithmetic Logic Unit; Control Unit; Memory Unit – Static and Dynamic RAM, ROM, Cache memory; Input / Output devices including bar codes and RFID

Unit - III: Operating System: Linux, Windows; Fundamentals of Programming; Introduction to C programming; Object Oriented programming; Java, PHP

Unit – IV: DBMS – Concepts, Functions; Integrity and Security issues

Unit - IV: Library Automation; Overview of library automation software; Criteria for selection of software; and Hardware (including differently-abled); Open and Commercial LMS

### **IX Digital Libraries**

Unit- I: Digital Libraries - Concept and Definition; Historical development of Digital Libraries. Copyright and license issues.

Unit- II: Digitization Process - Software, Hardware and Best practices; Scanners and Scanner types; OCR and OCR software

Unit- III: Technology for DLs - Open source software - DSpace, GSDL: Features and comparative study of DSpace, Eprints and Fedora; Open Standards and File formats; Harvesting metadata, OAI-PMH and DL Interoperability;

Unit- IV: Digital Library Architecture - Grid architecture; Open URL integration;

Unit- V: Digital Resources Management - Digital Preservation- Persistent identifiers – DOI and CNRI Handles; Multilingual digital repositories and Cross-language information retrieval

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<b>Post S.No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
<b>15 &amp; 17</b>	<b>CUTN/NT/04/2017</b>	<b>Semi Professional Assistant (Library) Library Assistant</b>

### **I Library and Society**

- Unit – I: Library as a Social Institution; Impact of Libraries on Social, Political, Economical, and Cultural aspects
- Unit – II: Types of Libraries – Public, Academic and Special Libraries; Library Movement in India
- Unit- III: Library Legislation; Public Library Act; Delivery of Books and Newspapers (Public Library) Act; Intellectual Property Rights – Copyright Act
- Unit-IV: Library Associations and Professional Associations – ALA; CILIP; ILA; IATLIS
- Unit –V: Library Networks and Library development – RRRLF; UGC- INFLIBNET

## **II Library Management**

- Unit –I: Management – Concept; Definition; School of Thoughts - Scientific and Behavioural; POSDCORB
- Unit - II Library Sections and Routines – Acquisition, Processing and Circulation
- Unit – III Resource Management – Material and Personnel; Material Selection, Maintenance such as shelving and stock rectification, stock verification, Binding; Personnel management – recruitment, training, motivation, etc.
- Unit – IV: Budget and Budgeting – Types (budgetary control system); Sources of income to various types of libraries: Public – Library cess; Academic – Matching Grant, Plan grant, etc.
- Unit – V: Library Records; Statistics; Reports

## **III Library Classification**

- Unit –I: Library Classification – Concept; Definition; Need and Purpose
- Unit – II: Library Classification – Types: General and Special; General classification schemes – Colon Classification; Dewey Decimal Classification; Universal Decimal Classification
- Unit- III: Classification Principles - Canons and Laws
- Unit – IV: Facet and Facet analysis – Fundamental Categories (PMEST); Analytico-Synthetic approach
- Unit – V: Notation – Types; Characteristics

## **IV Library Cataloguing**

- Unit- I: Library Cataloguing – Concept; Definition; Need and Purpose
- Unit –II: Library Catalogues – Types – Physical forms and Inner forms - Alphabetical, Classified, and Alphabetico-Classified; Bibliography; Trade catalogues; Book-Sellers catalogues
- Unit-III: Cataloguing Standards – ISBDs; Cataloguing Codes – Classified Catalogued Code of Ranganathan, Anglo-American Cataloguing Rules
- Unit- IV: International Standards – MARC – CCF; UNIMARC; MARC21; Metadata – Metadata standards – Dublin Core
- Unit – V: Subject Cataloguing – Sears’ List of Subject Headings, LCSH

## **V Information Sources**

Unit-I: Information Sources – Types – primary, secondary, and tertiary; Print Vs.

Electronic resources; Human Vs.

Institutional Unit-II: Evaluation of Information Sources – Criteria

Unit-III: Secondary Sources: Dictionaries, Encyclopedias, Indexing and Abstracting Sources, Directory, Biographical Sources; Geographical Sources

Unit-IV: Electronic Information Sources - Databases; Full-text databases

Unit-V: Information Sources – Discipline-oriented sources – Pubmed; INSPEC; etc; UGC-Infonet; Open Sources

## **VI Information Services**

Unit-1: Reference Services - Types: Ready reference and Long range reference services; User education; Information literacy

Unit-II: Literature search – Bibliography compilation and Bibliographical services Unit-III: Current Awareness Services – SDI

Unit-IV: Indexing and Abstracting services

Unit-V: Reprography, Translation and other specialized services

## **VII Computer and Computer Applications**

Unit-I: Computer – Definition; Characteristics; Classification of Computers

Unit- II Computer Hardware – Generations; Input and Output Devices; Secondary

Storage Devices

Unit-III Computer Software – Meaning; Types – System Software and Application Software; Operating System – Single-user vs. Multi-user; Open Sources vs, Proprietary

Unit-IV Database – Concept; Database Management System (DBMS) – Concepts; Functions; Packages

Unit- V: Library Automation - Need; Areas for library automation; Library automation software packages – Proprietary vs. Open

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<b>Post S.No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
<b>18</b>	<b>CUTN/NT/04/2017</b>	<b>Laboratory Assistant</b>

### **Life Science**

Introduction to concept of Biology, invertebrates and vertebrates, plant and animal physiology, ecology, ultrastructure of the cell, function of cellular organelles, biomolecules, carbohydrates, proteins and lipids: basic structure and classifications, vitamins and deficiencies , basic human physiology and basic microbiology, basics of common laboratory equipment and applications.

### **Physics**

Technical Knowledge in Physics, BSc( Physics) level-Mechanics, Optics, Electromagnetism, Modern Physics, Electronics Condensed Matter Physics, Sound and Waves , Thermal and Statistical Physics, Atomic, Molecular and Nuclear Physics. Instrumentation and lab equipment.

## **Material Science**

### **PART-A Discipline related**

Fundamentals in Physics and Chemistry up to UG

### **level PART-B Aptitude**

- i) Logical Reasoning
- ii) Analytical Reasoning Capabilities
- iii) Quantitative Ability
- iv) Qualitative Ability
- v) General Awareness
- vi) Aptitude

## **Epidemiology**

1. Epidemiology- Concept of health and disease ,Definition and uses of epidemiology, Natural history of disease, case fatality rate, survival analysis, Measurement of morbidity and mortality ratio, Epidemiological study designs, Screening and surveillance, air-borne, water- borne, food borne diseases, Pollutions in India, infectious disease Epidemiology, Vector borne diseases and its Transmission, Sexually transmitted Disease, Demography and Family planning. Occupational health. Communicable and Non-Communicable diseases Tropical diseases, Laboratory test for identification of bacteria and virus, culture media and methods, Sterilization and disinfection.

2. Public Health- public health concepts and goals, MDGs and SDGs, Health promotion and disease prevention, NGOs in health practice, Determinants of health, Globalization and health, Bio-statistics in public health and epidemiology, Health system management, Healthy policy programmes in India, Health communication and Media, Nutrition and Health.

\*Syllabus for chemistry will be flashed separately.

## **Chemistry**

1. Atomic Structure & Chemical Bonding
2. States of Matter & Ionic Equilibrium
3. Basics and Hydrocarbons
4. Chemical Thermodynamics and its Applications
5. s- and p-Block Elements
6. Oxygen Containing Functional Groups
7. Phase Equilibria and Chemical Kinetics
8. Coordination Chemistry
9. Stereochemistry
10. Organic reaction mechanisms
11. Electrochemistry
12. Quantum Chemistry & Spectroscopy
13. Spectroscopy
14. Green Chemistry
15. Analytical Chemistry
16. Instrumental Methods of Analysis
17. Basic Analytical Chemistry

18. Solutions
19. First aid
20. Good laboratory Practices

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Post S.No	Notification Number	Name of the Post
27	CUTN/NT/04/2017	Laboratory Attendant

### **Life Science**

NCERT (national council of educational research and training) 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> biology text book

### **Physics**

Units and Dimensions, mechanics, sound, optics, Electricity and Magnetism, Basics of atomic and nuclear Physics, Experimental Physics, lab instruments. Properties of matter.

### **Material Science**

### **General Knowledge**

Indian Constitution, Science – Inventions & Discoveries, History, Budget and Five Year Plans, Geography of India & Gujarat, Important Financial & Economic News, Economy, Scientific Research, Culture, India and its neighboring countries, Sports, Knowledge of Current Events, General Politics, Countries & Capitals, Economy, Banking, and Finance, Special Reference to Tamil Nadu State.

### **Physics and Chemistry**

Physics and Chemistry up to 12<sup>th</sup> standard

### **Epidemiology**

1. Epidemiology- Concept of health and disease ,Definition and uses of epidemiology, Natural history of disease, case fatality rate, survival analysis, Measurement of morbidity and mortality ratio, Epidemiological study designs, Screening and surveillance, air-borne, water- borne, food borne diseases, Pollutions in India, infectious disease Epidemiology, Vector borne diseases and its Transmission, Sexually transmitted Disease, Demography and Family planning. Occupational health. Communicable and Non-Communicable diseases Tropical diseases, Laboratory test for identification of bacteria and virus, culture media and methods, Sterilization and disinfection.
2. Public Health- public health concepts and goals, Health system management, Healthy policy programmes in india, Health communication and Media, Nutrition and Health.
3. Basics in Biology, Physics, Chemistry. Fundamentals of Human Anatomy and Physiology.

\*Syllabus for chemistry will be flashed separately.

### **Chemistry**

The questions will be based on the conceptual knowledge. The candidate must refer 11<sup>th</sup> and 12<sup>th</sup> N.C.E.R.T books for basic knowledge of the concepts.

### **The topics are as follows:**

Basic Concepts of Chemistry - Organic Chemistry-Some Basic Principles and

Techniques and Hydrocarbons - States of Matter – Thermodynamics - Chemical Equilibrium- Structure of Atom - Classification of Elements and Periodicity In Properties -Environmental Chemistry - Chemical Bonding and Molecular Structure - Solid State – Electrochemistry – Solutions - States of Matter: Gasses and Liquids – Chemical Kinetics - Surface Chemistry - s, p, d and f Block Elements - Coordination Compounds - Chemistry in Everyday Life – Haloalkanes and Haloarenes - Alcohols, Phenols and Ethers – Amines - Aldehydes, Ketones and Carboxylic Acids – Biomolecules – Polymers - Fire Safety - First-aid - Good Laboratory Practices .

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Post S.No	Notification Number	Name of the Post
07	CUTN/NT/04/2017	Security Officer

1. General Knowledge
2. Quantitate Aptitude
3. Reasoning
4. General Awareness

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Post S.No	Notification Number	Name of the Post
06 & 10	CUTN/NT/04/2017	Section Officer & Assistant

### **Part – I**

1. General Intelligence & reasoning
2. General Awareness
3. Quantitative Aptitude
4. English Comprehension

### **Part- II**

1. Government of India Rules and Regulations.

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Post S. No	Notification Number	Name of the Post
12	CUTN/NT/04/2017	Hindi (Jr) Translator

1. Translate into English Words
2. Translate into Hindi Words
3. Translate into English Expressions
4. Translate into Hindi Expressions
5. Translate into English Sentences
6. Translate into Hindi Sentences
7. Write the Correct Answer ( Questions from Hindi language, literature and Official language)
8. Correct the Sentences
9. Write Two Model Letters
10. Translate into English (One Paragraph)
11. Translate into Hindi (One Paragraph)



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<b>Post Sl. No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
20	CUTN/NT/04/2017	Driver

1. Traffic rules and regulations,
2. First aid
3. General English
4. General Maths
5. General Knowledge

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<b>Post S.No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
23,24,25&26	CUTN/NT/04/2017	<b>Cook, Kitchen Attendant, Peon/Office/MTS &amp; Multi – Tasking Staff</b>

1. General Intelligence
2. Quantitative Aptitude Test
3. English Language
4. General Awareness
5. Questions related to the post

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<b>Post S.No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
22	CUTN/NT/04/2017	<b>LDC (Care Taker)</b>

1. Mathematics
2. General Science
3. General English
4. History, Geography and Current Events
5. Questions related to the post

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<b>Post S.No</b>	<b>Notification Number</b>	<b>Name of the Post</b>
19	CUTN/NT/04/2017	<b>LDC</b>

1. Mathematics
2. General Science
3. General English
4. History, Geography and Current Events

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