

## Syllabus for JRF (LIS)

### **Area 1 : Foundations of information Science**

**Information** : Definition, kinds, nature, use Information models and theories. Economics of information. Information and National Development Systems.

**Information System as a basic Component of NDS** :

Primary Information Communication System, Theories of human communication; Information diffusion, Secondary Information Service System. Normative principles of information systems. Different information phenomena (activities), and corresponding applied and fundamental disciplines. Information professions and their specializations.

**Information Science** : Definition; Scope; Educational Programmes in Library Science, Documentation, and "Information Science". Relationship of "Information Science" with other disciplines.

**Area II : Information Sources, communication Media, Information System and Programmes.** Identification, organization, utilisation limitations and other relevant characteristics of information sources.

1. Documentary sources
2. Human sources
3. Institutional sources

Structures, functions, products, and services of different categories of information systems such as, libraries, documentation centres, clearing houses, referral centres, information analysis centres, databank etc., national, regional, global information systems, services and programmes; overall objectives, basic factors to be considered in system design, characteristic features, illustrative examples, with emphasis on computerised systems and services and the methodology of handling the respective data bases.

### **Area III : Information Processing and Organisation**

Information Dissemination and Retrieval System and the concept of "surrogate" Descriptive indexing: Entry, Index and Indexing. Standardised description of Sources of Information as objects; Methodology of designing codes (Standards and Specifications) for descriptive indexing. General theory of subject Indexing Language (SIL): Linguistic and SIL. Subject and Subject proposition. Universe of Subjects.

Elements and their interrelationships, semantic structure, syntactic structure, and Pragmatics of SIL. Attributes of the Universe of Subjects; Modes of formation of subjects; the concept of development of the Universe of subjects. Subject Classification and Subject Indexing;

Organising classification; Associative Classification, Tools for classification / indexing Notational cum-verbal schemes for classification; their design and application. Verbal schemes for classification - Thesauri, Subject authority lists, etc., their design and application. "Classaurus" (a Classification scheme incorporation all essential features of a thesaurus): Its design and application. Defferent systems of indexing. Computerization of classification / indexing. Organization of information and the role of classification principles.

### **Area IV : Information Transfer and Dissemination**

Category of users, user needs, user studies. Information diffusion patterns and studies.

Organization, structures and provision of information services including:  
Current awareness services, SDI, Reference Services, Abstracting Services, Digests, Technical notes, New briefs, Product and process bulletins, State-of-the-art and Trend Reports, Products of information analysis, Data service, Translation service, Extension service and Technology transfer, Presentation of information, Marketing of information services, Information resources sharing.

### ***Area V : Information Technology and its Applications***

Brief overview of Computer technology, Communication technology and Reprography /printing technology as applied to information storage, retrieval and dissemination. Systems analysis and systems design concepts. Bibliographic formats such as MARC, ISO2709, CCF etc. Networking and Internet. Library Automation and MM Application.

Digital Library: Concept, Definition and background, digital library initiatives, applications, interoperability. Digitization of print materials (methods and tools). Searching collection of digital objects. Viewing digital collection objects and metadata standards.

### ***Area VI : Information System/Centre Planning and Management***

Planning methodology. National Information System Planning; Information policy. Organization structures.

Management: Personnel, Financial, Materiel and other resources management, and the applications of modern management ideas and techniques to libraries; Documentation and Information Centres; Referral centers; Data Banks and Information Analysis Centres. System evaluation. Knowledge Management: Definition, scope. Difference between information management and Knowledge Management. Types of knowledge. Knowledge management procedures. Role of library professionals in knowledge management.

### ***Area VII : Research Methods and Bibliometrics***