#### INDIAN STATISTICAL INSTITUTE

DOCUMENTATION RESEARCH AND TRAINING CENTRE 8<sup>th</sup>, Mile Mysore Road, Bangalore- 560 059

# Syllabus for the Entrance Examination for "Junior Research Fellow" in Library and Information Science

Candidates are expected to have the knowledge in all the topics covered in ADIS (awarded by the Indian Statistical Institute or INSDOC) or its equivalent degree (MLISc) awarded by the universities in India. To mention a few, some topics are given below:

### Area I: Foundations of information Science

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

#### **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 Systems and Programmes.

Identification, organization, utilization, 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 University 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.

## Paper 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.

# Area VI: Information System/Centre Planning and Management

Planning methodology. National Information System Planning; Information policy. Organization structures. Management by objectives, Budgeting Techniques – PPBS, Zero Budgeting, etc.

Management: Personnel, Financial, Material and other resources management, and the application of modern management ideas and techniques to libraries; Documentation and Information Centres; Referral centers; Data Banks and Information Analysis Centres. System evaluation.

Area VII: Research Methods, Bibliometrics/Informetrics and Scientometrics.

### **SAMPLE QUESTION PAPER**

for the entrance test for JRF's

#### 2006

SUB: Library and Information Science

**Code** : *RL-1* 

Note: RLI is an objective type test. Candidates are expected to

answer 60 question. The sample questions are:

#### Example:

- 1. Who is the publisher of Books in Print?
  - a) American Library Association
  - b) H.W. Wilson
  - c) Marcel Dekker
  - $\sqrt{d}$  R.R. Bowker
- 1. Two six-faced dice are tossed. What is the probability that both the dice will show 3.
  - a) 1/6
  - b) 1/36
  - c) 1/72
  - d) None of the above
- 2. Geology and climate are related in the same way as
  - a) Archaelogy and Arch
  - b) Astronomy and Weather
  - c) Geology and Statues
  - d) Physiology and Brain
- 3. Inverse Square Law of Scientific Productivity is the work of
  - a) GK Zipf
  - b) A J Lotka
  - c) S C Bradford
  - d) B C Brookes

- 4. By which of the following modes of formation, the subject "Econometrics" has developed.
  - a) cluster
  - b) distillation
  - c) fission
  - d) fusion
- 5. Main Entry is prepared for
  - a) part of a document
  - b) full document
  - c) more than four authors
  - d) alternative title
- 6. Principles of Osmosis is concerned with
  - a) stock taking
  - b) classification
  - c) reclassification
  - d) preservation
- 7. MBO stands for
  - a) Model Bibliographic Organisation
  - b) Management By Objectives
  - c) Model Budget Operations
  - d) none of the above
- 8. What is the purpose of Role Codes in CCF
  - a) Code for the tags
  - b) Code for information on the data in a field
  - c) Code for the length of a data field.
  - d) None of the above
- 9. What is a latent information need?
  - a) information need expressed by the intermediary
  - b) information need expressed by the user
  - c) information need could not be expressed by the user.
  - d) none of the above
- 10. Which organisation co-ordinates INIS work in India
  - a) Saha Institute of Nuclear physics
  - b) Indian Institute of Science
  - c) BARC
  - d) ISRO

# **SAMPLE QUESTION PAPER**

for the entrance test for JRF's

#### 2006

SUB: Library and Information Science

**Code** : *RL-2* 

- 1. What is a Main Entry?
- 2. Present briefly your views on the future of Cataloguing?
- 3. What are the measures of evaluation of retrieval system?
- 4. State and discuss Law of Scattering
- 5. Explain briefly various "current awareness services"