

BLI-222: INFORMATION SOURCES AND SERVICES

TUTOR MARKED ASSIGNMENT

Part I

Question-1) What do you understand by primary periodicals? Discuss its different types with suitable examples.

Answer:

Primary Periodicals

Primary periodicals are scholarly publications that primarily contain original research papers or articles presenting new findings, discoveries, or interpretations in a specific field. These periodicals are essential for researchers, academicians, and professionals as they provide the latest and most reliable information.

Features of Primary Periodicals

Primary periodicals have distinct characteristics that make them invaluable in the academic and research landscape:

1. Published by Reputable Organizations

- These periodicals are issued by professional bodies, learned societies, commercial publishers, or even government organizations.

2. Original Content

- The articles present new findings or interpretations, ensuring that the content contributes meaningfully to the field.

3. High Standards Maintained through Peer Review

- Submissions undergo a rigorous refereeing process to ensure academic and scientific quality.

4. Detailed Information

- Articles often include abstracts, the date of receipt, author addresses, and comprehensive lists of references.

5. Indexed in Secondary Sources

- These periodicals are systematically indexed or abstracted in secondary sources to facilitate easy discovery.

6. Focused Content

- Unlike magazines or general publications, they avoid editorials, obituaries, and unrelated notes.

7. Terminology

- Commonly referred to as journals, proceedings, or transactions.

Examples

- *Indian Journal of Chemical Technology*
 - *Pramana – Journal of Physics*
 - *Tetrahedron*
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Types of Primary Periodicals

1. Primary Periodicals Proper

- These are standard research journals containing full-length articles. They include all the features mentioned earlier and are the most common type of primary periodicals.
- Examples: *Nature*, *Science*.

2. Letters Journals

- These journals focus on short communications, often referred to as "letters."
- Features:
 - Articles typically describe ongoing research and are concise (1-2 pages).
 - Periodicity is usually weekly or fortnightly.
 - Often include author details and submission dates.
- Examples: *Physical Review Letters*, *Tetrahedron Letters*.

3. Data Periodicals

- Dedicated to publishing datasets of permanent scientific value.
- Fields: Found commonly in ionospheric science, climatology, hydrology, etc.
- Examples:
 - *Water Resources Data – Alaska* (published separately for each US state).
 - *Ionospheric Data – Delhi*.

4. Previews

- Contain summaries or preliminary notes of forthcoming research articles.
- Purpose: Help researchers avoid duplication of efforts.
- Examples:
 - *Biochimica et Biophysica Acta, Previews* (published during 1961-1967).
 - *Previews of Heat and Mass Transfer*.

5. Synopsis Journals

- Offer condensed versions of research papers, focusing on key findings rather than full details.
- Aim: Reduce publication costs and cater to readers interested in summaries.
- Historical Attempts:
 - *American Chemical Society* published condensed and archival versions of journals like *Journal of the American Chemical Society*.

6. Electronic Journals (E-Journals)

- Journals published digitally and accessed online.
- Features:
 - May be available in both print and electronic formats or exclusively online.
 - Facilitate quick dissemination and access to research.
- Examples: *IEEE Transactions*, *Springer Journals*.

Importance of Primary Periodicals

Primary periodicals are critical for academic, scientific, and industrial research. They provide up-to-date information, foster innovation, and serve as a platform for scholarly communication. The high-quality content, ensured by peer review and indexing, helps professionals and researchers stay informed about the latest developments in their fields. These periodicals are indispensable resources in libraries, universities, and research institutions worldwide.

(Word Count: 523)

Question-2) Describe in detail the process of computer-based searching.

Answer:

The Process of Computer-Based Searching

Computer-based searching involves leveraging technology to locate, retrieve, and organize information from digital databases efficiently. This process is facilitated by advancements in information and communication technologies (ICTs), which allow users to access vast stores of knowledge in machine-readable formats. Below is a detailed explanation of the process.

Evolution of Computer-Based Searching

Computer-based searching originated in the mid-1960s when computers were used to create and print indexes and abstracts. In the late 1960s and early 1970s, improvements in computer power, speed, and memory, coupled with the ability to connect via telephone lines, enabled the development of online searching systems.

Notable milestones include:

1. **MEDLINE:** The first major online service launched by the National Library of Medicine, providing access to the MEDLARS database.
2. **Commercial Services:** Platforms like DIALOG and ORBIT emerged in the 1970s, offering extensive search capabilities.
3. **World Wide Web:** By the 1990s, the graphical user interface on the internet made searching accessible to novice users, eliminating the need for intermediaries.

Today, most scholarly publications, including primary, secondary, and tertiary sources, are available in digital formats such as CD-ROMs, online platforms, and web-based databases.

Basic Steps for Computer-Based Searching

1. Understanding the Subject

- Define the subject area and objectives of the search.
- Ensure clarity about the type of information required, such as research articles, reviews, or datasets.

2. Deciding on Scope, Coverage, and Period

- Determine the timeframe, geographic scope, and subject depth to ensure the search is focused and relevant.

3. Arranging Internet Access

- For online searches, an active internet connection is essential.
 - Register with an Internet Service Provider (ISP) and choose a suitable connection type, such as broadband or dial-up.
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4. Logging into the Search Service Provider

- Use credentials provided by a database vendor (e.g., ProQuest, EBSCO) or directly by publishers (e.g., Emerald, Springer).
- Navigate to the provider's web interface and authenticate using a user ID and password.

5. Selecting the Appropriate Database

- Choose a database based on the subject area, user category, and institution type.
- Examples include:
 - *PubMed*: For medical literature.
 - *ERIC*: For education research.
 - *IEEE Xplore*: For engineering and technology studies.

6. Formulating the Search Expression

- Identify keywords, phrases, synonyms, and related terms for the search.
- Use a thesaurus or subject-specific controlled vocabulary, if available.
- Combine keywords using Boolean operators:
 - **AND**: Narrows the search by including all terms.
 - **OR**: Broadens the search by including any of the terms.
 - **NOT**: Excludes unwanted terms.
- Familiarize yourself with the database's search syntax and functionalities, such as truncation, wildcards, and proximity operators.

7. Choosing a Display Format

- Specify the output format for search results, such as brief records, detailed records, or custom views.
- This helps in efficiently reviewing and selecting relevant information.

8. Reformulating the Query

- Evaluate the results for relevance and accuracy.
- Modify the search expression to refine results, such as adding new terms, changing Boolean operators, or adjusting filters.
- Repeat the process until satisfactory results are obtained.

9. Selecting the Mode of Delivery

- Download the selected records to a local device.
- Alternatively, print or email the results for offline access.

Advantages of Computer-Based Searching

1. **Speed and Efficiency:** Compared to manual searches, computer-based searching retrieves information almost instantaneously.
2. **Advanced Search Options:** Databases provide filters, sort options, and specialized tools for precise searches.
3. **Frequent Updates:** Online databases are updated regularly, ensuring access to the latest research.
4. **Global Accessibility:** Users can access databases from anywhere with an internet connection.
5. **Enhanced Usability:** Modern interfaces and training modules make it easy for users of all skill levels to perform searches effectively.

Computer-based searching has revolutionized information retrieval, making it faster, more accurate, and accessible. Understanding its process ensures that users can harness its full potential for academic, professional, or personal purposes.

(Word Count: 536)

Question-3) Explain, how peripheral information professionals can perform the functions of information disseminators.

Answer:

Peripheral Information Professionals as Information Disseminators

Peripheral information professionals, while not always linked to conventional information systems like libraries or archives, play a crucial role in disseminating information to a broad audience. Their expertise and interaction with the public make them indispensable in spreading knowledge and ensuring the accessibility of relevant information. Here's how they fulfil this role:

1. Library Professionals

Library professionals, including librarians and cataloguers, contribute significantly to information dissemination.

- **Cataloguing and Organization:** By creating catalogues and indexes, librarians enable users to locate materials efficiently.
- **Reference Services:** They assist users in finding specific information from library resources or guide them to external sources when needed.
- **Awareness Services:** Tools such as accession lists inform users about newly acquired resources in the library.

2. Documentalists and Information Officers

Documentalists and information officers operate in various sectors, providing critical services.

- **Processing and Retrieval:** They acquire, record, and organize documents, ensuring easy access to information.
- **Selective Dissemination:** Services such as translations, bibliographies, and current awareness bulletins target specific user needs.
- **Institutional Roles:** They manage information centers in government departments, answering public queries and disseminating information about government initiatives.

3. Extension Workers

Extension workers act as intermediaries between specialized knowledge and the general public, particularly in rural and less literate areas.

- **Agricultural Extension:** They educate farmers on modern techniques, leading to improved productivity.
- **Health Extension:** Public health workers promote awareness about hygiene, family planning, and disease prevention through interactive methods.

4. Marketing Professionals

Marketing professionals, such as executives, trade representatives, and hawkers, are essential in spreading product-related information.

- **Market Insights:** Marketing executives share knowledge about market trends, demand-supply dynamics, and customer preferences.
- **Personal Interaction:** Trade representatives engage directly with customers, providing detailed information about products and services.
- **Hawkers:** By advertising products in busy public spaces, hawkers inform people about benefits, prices, and availability in an approachable manner.

5. Advertisers

Advertisers play a pivotal role in the dissemination of information related to products, services, and ideas.

- **Creative Communication:** Through advertisements in print, digital, and broadcast media, they reach a wide audience effectively.
- **Public Awareness:** Campaigns often focus on educating the public about social causes, government initiatives, and public health measures.

6. Broadcasting Professionals

Broadcasting professionals, including newsreaders, editors, and reporters, contribute to mass information dissemination.

- **Timely Updates:** They provide real-time news and insights on current events through television, radio, and online platforms.
- **Specialized Knowledge:** Their expertise ensures accurate and reliable information reaches the audience.

7. Consultants and Other Professionals

Consultants, teachers, doctors, lawyers, and similar professionals disseminate specialized knowledge in their respective fields.

- **Consultants:** Provide tailored advice in areas such as law, engineering, and healthcare.
- **Doctors and Teachers:** Share health-related and educational information directly with individuals and communities.

Conclusion

Peripheral information professionals such as hawkers, advertisers, extension workers, and others complement traditional information systems by reaching diverse audiences effectively. Their domain-specific expertise and direct interactions make them vital contributors to society's information dissemination network. By bridging gaps and addressing various needs, they ensure knowledge is shared widely and appropriately.

Word Count: 507

Question-4) Discuss in detail how will you conduct a user study?

Answer:

Conducting a User Study

Conducting a user study involves systematic planning and execution to gain insights into user behaviors, needs, and interactions with services or systems. Below are the steps to plan and execute a successful user study.

Planning the User Study

A user study requires careful planning to ensure reliable and actionable results. The key stages are:

1. **Define Objectives:** Clearly outline the purpose of the study, specifying what it seeks to uncover (e.g., user satisfaction, usability, or behavior). This serves as the foundation for the study.
2. **Survey Existing Literature:** Review previous studies to understand methodologies and findings, ensuring your study adds value.
3. **Identify Variables:** Determine the factors to be examined, such as frequency of use, ease of access, or user satisfaction.
4. **Select a Model:** Decide on a framework or approach that aligns with your objectives and variables.
5. **Choose the Sample Population:** Identify the target user group and select a sampling method (e.g., random sampling, stratified sampling, or convenience sampling).
6. **Determine Data Collection Methods:** Choose the most appropriate tools (e.g., surveys, interviews, or observations) to gather the required information.
7. **Pre-Test the Study:** Conduct a pilot test to refine methods and resolve any issues before the full-scale study.
8. **Full-Scale Study:** Implement the study plan and ensure systematic data collection.
9. **Analyze Data and Prepare Report:** Process the data to derive insights, summarize findings, and present results effectively in a comprehensive report.

Steps in Conducting a User Study

1. **Survey Existing Literature:**
 - Understand existing research to ensure your study addresses gaps or provides fresh insights.
2. **Define Objectives:**
 - Clearly articulate the study's aims. This clarity helps guide all subsequent steps.
3. **Determine Variables and Study Model:**
 - Identify specific variables to investigate, such as usage frequency, satisfaction, or challenges.

- Select a model to frame the study effectively.

4. Select the Sample Population:

- Choose participants carefully to ensure they represent the target group.
- Use appropriate sampling techniques to maintain objectivity and reliability.

5. Decide on Data Collection Methods:

- **Surveys and Questionnaires:** Directly gather user input.
- **Interviews:** Conduct detailed, one-on-one discussions for deeper insights.
- **Observations:** Monitor user behavior in real-time.
- **Records Analysis:** Examine existing data to infer usage patterns.

6. Pre-Test the Study:

- Conduct a small-scale trial to identify issues in the methodology or tools. Refine based on feedback.

7. Conduct the Full-Scale Study:

- Execute the study with the finalized methods, ensuring systematic data collection and adherence to ethical guidelines.

8. Analyze Data and Prepare Report:

- Use statistical and thematic analysis to process data.
- Present findings in a structured report, including recommendations for action.

Conclusion

A well-planned and executed user study provides valuable insights into user needs and behavior, aiding in the improvement of services and systems. By clearly defining objectives, selecting appropriate methods, and systematically analyzing data, the study can produce actionable and meaningful results.

Word Count: 485

Part II

Question-1) Discuss the role of international agencies as sources of information.

Answer:

Role of International Agencies as Sources of Information

International agencies play a vital role in providing information across various fields, especially in developing nations. They contribute significantly to knowledge dissemination, policymaking, and capacity building. Key roles of these agencies are highlighted below:

United Nations (UN)

The UN, through its bodies, specialized agencies, and programs (as detailed in Table 6.2), is a major source of information. For instance, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) fosters cooperation in education, science, and culture. It serves as a clearinghouse for knowledge dissemination and assists member states in capacity building.

World Health Organization (WHO)

WHO leads global health initiatives by providing guidance on health research, setting standards, and developing evidence-based policies. It is a critical source for health statistics and publications such as **The World Health Report** and **International Health Regulations**, which address global health challenges and trends.

Food and Agriculture Organization (FAO)

FAO works to combat hunger and promote sustainable agriculture worldwide. It produces over 300 publications annually on topics like food security, climate change, and rural livelihoods. Prominent reports include **The State of Food and Agriculture (SOFA)** and **The State of World Fisheries and Aquaculture (SOFIA)**.

Asian Development Bank (ADB)

ADB focuses on fostering economic and social progress in the Asia-Pacific region. It provides resources, data, and research aimed at improving infrastructure, reducing poverty, and supporting sustainable development in member countries.

International Development Research Centre (IDRC)

IDRC supports developing nations by funding research to address social, economic, and environmental challenges. It provides insights and practical solutions tailored to local contexts to promote self-reliance and innovation.

Regional Organizations (SAARC and ASEAN)

SAARC promotes regional cooperation among South Asian nations in economic, social, and cultural fields, emphasizing collective self-reliance. Similarly, ASEAN fosters geopolitical and economic collaboration among Southeast Asian countries, focusing on sustainable development and integration.

Conclusion:

These international agencies act as invaluable sources of information, addressing global challenges and promoting sustainable development across regions.

Word Count: 250



Question-2) Describe the different types of information needs.

Answer:

Types of Information Needs

Information needs vary widely among individuals and can change depending on their work, environment, and personal interests. User surveys have categorized information needs into the following types:

1. Current Information Needs

This type refers to the need for staying updated with the latest developments in a specific area of interest. It is a regular and ongoing requirement, particularly common among professionals such as corporate executives who need information about markets, competitors, product innovations, and business strategies.

2. Exhaustive Information Needs

Exhaustive information needs arise when users seek comprehensive details on a specific topic. This need is typically occasional and most relevant to researchers conducting literature surveys to avoid duplication of effort, identify research gaps, or report findings by comparing their results with previous studies.

3. Everyday Information Needs

This category includes the need for specific, factual information required for day-to-day tasks. Examples include finding a telephone number, confirming the boiling point of a compound, or identifying the address of a company's managing director. These needs are usually quick and targeted.

4. Catching-Up Information Needs

Users unfamiliar with a subject may require an overview to understand its developments concisely and comprehensively. This need often arises in multidisciplinary projects where a person is an expert in one field but requires foundational knowledge of related fields to contribute effectively.

5. General Reading Needs

Some users require information for general reading purposes to improve their knowledge, skills, or personal interests. Libraries fulfill this need by providing a wide range of resources like books, journals, and multimedia materials.

6. Informal Information Needs

This type of need includes informal and unstructured information, often gathered through discussions, social interactions, or casual exploration, helping users improve their work or gain personal insights.

Libraries of all types—academic, public, and special—play a crucial role in meeting these diverse information needs by acquiring, organizing, storing, and disseminating information in various formats. These institutions ensure that individuals across professions and interests can access the knowledge required for personal and professional growth. **Word Count: 250**

Question-3) Differentiate between responsive and anticipatory services.

Answer:

Differences Between Responsive and Anticipatory Services

Aspect	Responsive Services	Anticipatory Services
Definition	Services provided in response to specific user requests.	Services provided proactively in anticipation of user needs.
Nature	Passive services, initiated by the user's demand.	Active services, initiated by the library without user requests.
Objective	To address immediate and specific information needs of users.	To keep users updated and informed about relevant developments.
Examples	General information provision, reference services, literature search, document delivery, and referral services.	Current awareness services, indexing/abstracting services, readers' advisory services, and information literacy training.
User Interaction	User approaches the library with a clear question or need.	Library anticipates user needs and provides relevant resources.
Delivery Mode	Delivered after receiving the user's request.	Delivered regularly or preemptively based on user profiles or trends.
Target Audience	Individual users seeking specific information.	Broader audience or specific groups (e.g., researchers, students).
Timeframe	Immediate or short-term response (e.g., ready reference).	Long-term focus on ongoing user needs (e.g., current awareness).
Examples of Tools Used	Library catalogues, reference books, or interlibrary loans.	Current awareness bulletins, research-in-progress bulletins, or bibliographic instruction.
Level of Effort	Often involves quick solutions or focused research.	Requires ongoing planning and monitoring of user needs.

Summary: Responsive services focus on addressing specific, immediate requests, while anticipatory services aim to proactively inform and educate users to meet their current and future information needs. Both are essential for holistic library services.

Question 4) Discuss the emerging trends in database services.

Answer:

Emerging Trends in Database Services

Advancements in Information and Communication Technology (ICT) have significantly transformed database services, enhancing their utility and efficiency. The following are the emerging trends:

1. **Integration of Primary and Secondary Services:** Traditionally separate industries, indexing and abstracting services, and primary journal publishers are now merging. Publishers offer online access to full-text e-journals to print subscribers under license agreements.
2. **Diversification of Content:** Bibliographic database producers now include statistical, factual, and multimedia content. These databases integrate graphics, audio, and video alongside text, addressing the growing demand for diverse data formats.
3. **Linkage and Aggregation Services:** Database producers provide links from citations to full-text articles on publishers' sites. Aggregators like EBSCO and ProQuest provide access to full-text databases with secondary-to-primary linkage capabilities.
4. **Customized Services:** Tailored offerings such as journal issue alerts, citation alerts, and topic-specific notifications ensure users receive relevant updates.
5. **Advanced Search Features:** Modern databases offer enhanced search capabilities, allowing users to sort results by parameters like relevance, date, or author. Search results can also be saved to personal accounts, with some databases providing graphical displays of results.
6. **Emergence of New Players:** Digital libraries, institutional repositories, and open-access platforms are becoming key contributors, expanding accessibility and fostering competition in the market.

These trends indicate a shift towards more integrated, user-centric, and multimedia-enhanced database services, catering to the evolving needs of researchers and library users.

Word Count: 250

Question 5) Explain the criteria for evaluating a dictionary.

Answer:

Criteria for Evaluating a Dictionary

Evaluating a dictionary involves analyzing various criteria to determine its utility and quality. Below are the key considerations:

1. **Past Record:** The history of a dictionary reflects its evolution and credibility. Dictionaries like the *Oxford English Dictionary (OED)* have set benchmarks through continuous updates and diverse editions catering to varied audiences.
2. **Authority:** The reputation of the publisher and expertise of the lexicographers play a vital role. A dictionary compiled by renowned editors ensures reliability.
3. **Scope:** A dictionary's scope is judged by its comprehensiveness. It should cover common, scientific, technical, colloquial, obsolete, and slang terms. The number of entries, such as 400,000 for unabridged dictionaries, also signifies its breadth.
4. **Arrangement:** Most dictionaries follow alphabetical arrangements, either letter-by-letter or word-by-word, ensuring ease of access.
5. **Word Treatment:** This includes essential aspects like:
 - **Spelling:** Includes British, American, or simplified spellings.
 - **Pronunciation:** Diacritical marks or phonetic alphabets indicate correct pronunciation.
 - **Definition and Synonyms/Antonyms:** Definitions should be precise and user-friendly, with related words listed for better understanding.
 - **Additional Elements:** These include syllabification, etymology, derivatives, usage labels, and idioms.
6. **Special Features:** Features like usage guides, abbreviations, and supplementary elements (e.g., symbols, geographical names) enhance user experience.
7. **Revision:** Regular updates are essential to include new words and maintain relevance.
8. **Format:** The design and layout of the dictionary should be user-friendly, with clear fonts and organization.

Conclusion: No single dictionary fulfills all criteria, so selection depends on specific needs using the evaluation checklist.

Word Count: 250

Question-6) Discuss the process of implementing marketing mix in library services.

Answer:

The Process of Implementing Marketing Mix in Library Services

The implementation of the marketing mix in library services entails a systematic approach, where each component is carefully tailored to meet user needs while maximizing resource utilization and enhancing user satisfaction. The following elements outline the process:

1. **Product:** Libraries must identify and develop their offerings—be it books, e-resources, or specialized services—to meet the present and potential needs of their users. This involves continuous assessment and innovation in services such as reference support, database access, or community events.
2. **Price:** Determining the cost incurred by users, whether in monetary terms (e.g., membership fees or service charges) or non-monetary aspects (e.g., time and effort), is crucial. Libraries must balance free and fee-based services to ensure inclusivity while sustaining operations.
3. **Place:** Accessibility is a core factor. Libraries should strategize how to deliver services—whether on-site, through mobile services, or via virtual platforms—ensuring convenience for both local and remote users.
4. **Promotion:** Effective communication with users is achieved through various promotional strategies, including social media campaigns, newsletters, events, and feedback mechanisms. Libraries can use both one-way communication, such as posters, and two-way interaction, such as focus groups.
5. **People:** Staff play a pivotal role in service delivery. Continuous training and a user-centric approach ensure that interactions between users and staff are effective and meaningful.
6. **Physical Evidence:** The library's physical and virtual environments contribute to user experiences. Clean, organized spaces and user-friendly websites enhance usability and satisfaction.
7. **Process:** Streamlined workflows, from cataloging to service delivery, ensure efficiency. Emphasizing seamless interaction across activities improves user engagement.

By adapting the traditional "4Ps" into a user-focused "4Cs" model, libraries can better align their services with user needs while remaining relevant in a dynamic environment.

Four Ps	Four Cs
Product	Customer value
Price	Cost to the customer
Place	Convenience
Promotion	Communication

Word Count: 250