CUT OFF

Year	Category	UNRESERVED	OBC (NCL)	EWS	SC	ST	PWD
2025 JUNE	JRF & Assistant Professor	186	180	180	168	164	134
	Assistant Professor	166	152	152	144	140	116
2024 DEC	JRF & Assistant Professor	186	174	178	162	166	136
	Assistant Professor	166	152	154	142	140	130
2024 JUNE	JRF & Assistant Professor	188	178	180	168	162	140
	Assistant Professor	166	150	152	140	140	126
2023 DEC	JRF & Assistant Professor	188	178	180	168	160	178
	Assistant Professor	166	152	150	144	140	140
2023 JUNE	JRF & Assistant Professor	196	186	188	174	166	174
	Assistant Professor	176	162	164	154	146	152
2022 DEC	JRF & Assistant Professor	196	180	182	172	168	140
	Assistant Professor	170	156	156	148	144	130

Syllabus

Unit - I:

- Data, Information, Knowledge and Wisdom.
- Information Life Cycle - Generation, Collection, Storage and Dissemination.
- Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development.
- Information Science - Relationship with other subjects, Information Society and Knowledge Society.
- Communication – Concept, Types, Theories, Models, Channels and Barriers; Trends in Scholarly Communication.
- Information Industry - Generators, Providers and Intermediaries.
- IPR and Legal Issues - Categories, Conventions, Treaties, Laws.
- Plagiarism: Concept and Types.
- Right to Information Act (RTI); Information Technology Act.
- National Knowledge Commission; National Mission on Libraries.

Unit - II:

- Historical Development of Libraries in India; Committees and Commissions on Libraries in India.
- Types of Libraries – Academic, Public, Special and National.
- Library Legislation and Library Acts in Indian States; The Press and Registration of Books Act; The Delivery of Books and Newspapers (Public Libraries) Act.
- Laws of Library Science.
- Library and Information Science Profession - Librarianship as a Profession, Professional Skills and Competences; Professional Ethics.
- Professional Associations - National – ILA, IASLIC, IATLIS; International – IFLA, ALA, CILIP, ASLIB, SLA; Role of UGC, RRRLF and UNESCO in Promotion and Development of Libraries.
- Library and Information Science Education in India.
- Library Public Relations and Extension Activities.
- Type of Users - User Studies, User Education.
- Information Literacy - Areas, Standards, Types and Models; Trends in Information Literacy.

Unit- III:

- Information Sources - Nature, Characteristics, Types and Formats.
- Sources of Information - Primary, Secondary and Tertiary; Documentary and Non-Documentary.
- Primary Information Sources (Print and Electronic) - Journals, Conference Proceedings, Patents, Standards, Theses & Dissertations, Trade Literature.
- Secondary Information Sources (Print and Electronic) - Dictionaries, Encyclopedias, Bibliographies, Indexing & Abstracting, Statistical sources, Handbooks and Manuals.
- Tertiary Information Sources (Print and Electronic)- Directories, Year Books, Almanacs.
- Reference Sources - Bibliographical, Biographical, Educational, Language and Geographical.
- Electronic Information Resources - Subject Gateways, Web Portals, Bulletin Boards, Discussion Forums /Groups.
- Databases: Bibliographic, Numeric, Full text, Multimedia; Open Access Databases.
- Institutional and Human Resources.
- Evaluation of Reference Sources and Web Resources.

Unit – IV:

- Community Information Services.
- Reference Service – Concept and Types; Referral Services
- Alerting Services - CAS, SDI, Inter Library Loan and Document Delivery.
- Mobile based Library Services and Tools – Mobile OPAC, Mobile Databases, Mobile Library Website, Library Apps, Mobile Library Instructions, Augmented Reality, SMS Alerts, Geo-Location, Reference Enquiry.
- Web 2.0 and 3.0 - Library 2.0- Concept, Characteristics, Components; Instant Messaging, RSS Feeds, Podcasts, Vodcasts, Ask a Librarian
- Collaborative Services- Social Networks, Academics Social Networks, Social Tagging, Social Bookmarking.
- Web – Scale Discovery Services
- National Information Systems and Networks: NISCAIR, DESIDOC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National Knowledge Network (NKN), Biotechnology Information System Network
- International Information Systems and Networks: INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS).
- Library Resource Sharing and Library Consortia – National and International.

Unit -V:

- Universe of Knowledge - Nature and Attributes; Modes of Formation of Subjects.
- Knowledge Organisation - Classification – Theories, Cannons, and Principles; Simple Knowledge Organisation System (SKOS), Taxonomies, Folksonomy, Trends in Classification.
- Mapping of Subjects in Library Classification Schemes – DDC, UDC and CC.
- Knowledge Organisation: Cataloguing - Cannons and Principles; Centralized and Co-operative Catalogue; Library Cataloguing Codes: CCC and AACR - II.
- Standards of Bibliographic Record Formats and Description – ISBD, MARC 21, CCF, RDA, FRBR, Bibframe.
- Standards for Bibliographic Information Interchange & Communication – ISO 2709, Z39.50, Z39.71.
- Metadata Standards: Dublin Core; MARC21, METS, MODES, EAD.
- Indexing Systems and Techniques: Assigned - Pre-coordinate; Post-Coordinate; Derived- Title-based; Vocabulary Control.
- Abstracting – Types and Guidelines.
- Information Retrieval System – Features, Components, Models and Evaluation.

Unit -VI:

- Management - Principles, Functions and Schools of thought.
- Library and Information Centers Management - Book Selection Tools and Principles; Library Acquisition, Technical Processing, Circulation, Serial Control, Maintenance and Stock Verification; Preservation and Conservation; Hazards and Control Measures of Library Materials.
- Human Resource Management – Planning, Job Analysis, Job Description, Job Evaluation, Selection, Recruitment, Motivation, Training and Development, Performance Appraisal; Staff Manual.
- Financial Management in Libraries - Sources of Finance, Resource Mobilisation, Budgeting Methods; Cost Effective and Cost Benefit Analysis, Annual Reports & Statistics; Library Authority and Committee.
- Project Management - SWOT, PEST, PERT / CPM.
- Total Quality Management (TQM) - Concepts, Principles and Techniques, Six Sigma; Evaluation of Services of Libraries and Information Centers.
- Library Building, Furniture and Equipments; Green Library Building; Information Commons; Makers Space; Security and Safety.

- Management Information System (MIS), MBO, Change Management, Disaster Management, Crisis Management.
- Knowledge Management – Principles, Tools, Components and Architecture.
- Marketing of Library Products and Services – Plan, Research, Strategies, Mix, Segmentation, Pricing and Advertising; Management Consultancy.

Unit -VII :

- Computer Technology - Character Representation (ASCII, ISCII, Unicode); Computer Hardware, Software; Storage Devices; Input and Output Devices.
- Types of Software - System Software, Application Software.
- Programming Languages – Object Oriented, Procedural, High Level, Scripting; Web Languages.
- Telecommunication - Transmission Channels, Mode, and Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols.
- Wireless Communication – Media, Wi-fi, Li-fi, Satellite Communication, Mobile Communication.
- Computer Networks - Topologies, Types of Networks – LAN, MAN, WAN.
- Internet - Web browsers, WWW, E-mail; Search Engines, Meta and Entity Search engines.
- Internet Protocols and Standards – HTTP, SHTTP, FTP, SMTP, TCP/IP, URI, URL.
- Hypertext, Hypermedia, Multimedia, Video conferencing, Virtual Reality, Augmented Technologies.
- Data Security, Network Security, Firewalls, Cryptographic Techniques, Anti-virus software, Anti-spyware, Intrusion Detection System.

Unit -VIII:

- Library Automation – Areas, Planning, Selection of Hardware and Software, Implementation and Evaluation; Standards for Library Automation.
- Barcode, RFID, QR Code, Biometric, Smartcard: Features and Applications.
- Digitization – Planning, Selection of Materials, Hardware, Software, Process, Issues.
- Digital Library: Genesis, Characteristics, Types, Architecture; Standards, Formats and Protocols, DOI.
- Digital Preservation - Need, Purpose, Standards, Methods, Techniques, Projects (National and International).
- Digital Library Initiatives – National and International.
- Institutional Repositories - Need, Purpose, Types and Tools; Institutional Repositories in India; ROAR, DOAR, SHARPA-ROMIO.
- Content Management Systems – Architecture, Data Integration, CMS Software – Selection, Implementation and Evaluation.
- Application of Artificial Intelligence, Expert Systems and Robotics in Libraries; Social Mobile Analytics Cloud (SMAC); Cloud Computing.
- Ontology – Tools (RDF, RDFS, Potege); Semantic Web, Linked Data, Big Data, Data Mining, Data Harvesting.

Unit - IX:

- Research - Concept, Purpose, Functions, Scope and Ethics; Types of Research – Basic and Applied, Interdisciplinary and Multidisciplinary.
- Research Methods: Historical, Descriptive, Experimental and Delphi.
- Research Design - Selection of Research Problem, Review of Literature; Formulation of Research Problem; Hypothesis – Formulation, Types and Testing; Sampling Techniques.
- Methods of Data Collection: Questionnaire, Interview, Observation, Library Records, Scales and Checklist.
- Data Analysis and Interpretation - Presentation of Data; Statistical Methods/ Techniques.

- Statistical Packages – Spreadsheet, SPSS, Bibexcel, 'R' Statistics.
- Research Report Writing and Citation Tools – Structure, Style, Contents, Guidelines; Style Manuals; Online Citation Tools; Reference Style Management Tools; Antiplagiarism Tools; Evaluation of Research Report.
- Metric Studies in LIS - Bibliometrics, Scientometric, Webometrics, Altmetrics;
- Impact Factors – Journal, Institutional and Authors; h-Index, g-Index, i10 Index.
- Trends in Library and Information Science Research.

Unit - X:

- Academic Library and Information System.
- Public Library and Information System.
- Special Library and Information System.
- Health Science Library and Information System.
- Corporate Library and Information System.
- Agricultural Library and Information System.
- Engineering and Technological Library and Information System.
- Archive, Museums and Oriental Libraries.
- Community Information System.
- Information Services and System for Persons with Disability, Children and Women.

INDEX

UGC NET – LIBRARY & INFORMATION SCIENCE

Unit - 1

1.1 Data, Information, Knowledge and Wisdom ***1***

1.2 Information Life Cycle - Generation, Collection, Storage and Dissemination ***2***

1.3 Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development..... ***3***

1.4 Information Science - Relationship with other subjects, Information Society and Knowledge Society ***6***

1.5 Communication – Concept, Types, Theories, Models, Channels and Barriers, Trends in Scholarly Communication..... ***11***

1.6 Information Industry - Generators, Providers and Intermediaries..... ***17***

1.7 IPR and Legal Issues - Categories, Conventions, Treaties, Laws..... ***21***

1.8 Plagiarism - Concept and Types ***29***

1.9 Right to Information Act (RTI) - Information Technology Act..... ***30***

1.10 National Knowledge Commission - National Mission on Libraries ***31***

Unit - 2

2.1 Historical Development of Libraries in India - Committees and Commissions on Libraries in India..... ***35***

2.2 Types of Libraries – Academic, Public, Special and National..... ***47***

2.3 Library Legislation and Library Acts in Indian States, The Press and Registration of Books Act, The Delivery of Books and Newspapers (Public Libraries) Act..... ***50***

2.4 Laws of Library Science ***60***

2.5 Library and Information Science Profession - Librarianship as a Profession, Professional Skills and Competences, Professional Ethics ***61***

2.6 Professional Associations - National – ILA, IASLIC, IATLIS, International - IFLA, ALA, CILIP, ASLIB, SLA, Role of UGC, RRRLF and UNESCO in Promotion and Development of Libraries ***69***

2.7 Library and Information Science Education in India ***79***

2.8 Library Public Relations and Extension Activities ***84***

2.9 Type of Users - User Studies, User Education ***86***

2.10 Information Literacy - Areas, Standards, Types and Models, Trends in Information Literacy ***90***

Unit - 3

3.1 Information Sources - Nature, Characteristics, Types and Formats..... ***94***

3.2 Sources of Information - Primary, Secondary and Tertiary Documentary and Non-Documentary..... ***103***

3.3 Primary Information Sources (Print and Electronic) - Journals, Conference Proceedings, Patents, Standards, Theses & Dissertations, Trade Literature..... ***111***

3.4 Secondary Information Sources (Print and Electronic) - Dictionaries, Encyclopedias, Bibliographies, Indexing & Abstracting, Statistical sources, Handbooks and Manuals ***114***

3.5 Tertiary Information Sources (Print and Electronic)- Directories, Year Books, Almanacs..... ***117***

3.6 Reference Sources - Bibliographical, Biographical, Educational, Language and Geographical..... ***118***

3.7 Electronic Information Resources - Subject Gateways, Web Portals, Bulletin Boards, Discussion Forums Groups ***123***

3.8 Databases Bibliographic, Numeric, Full text, Multimedia Open Access Databases., ... **129**
3.9 Institutional and Human Resources **130**
3.10 Evaluation of Reference Sources and Web Resources. **131**

Unit - 4

4.1 Community Information Services..... **133**
4.2 Reference Service – Concept and Types Referral Services..... **136**
4.3 Alerting Services - CAS, SDI, Inter Library Loan and Document Delivery **141**
4.4 Mobile based Library Services and Tools - Mobile OPAC, Mobile Databases, Mobile Library Website, Library Apps, Mobile Library Instructions, Augmented Reality, SMS Alerts, Geo-Location, Reference Enquiry. **142**
4.5 Web 2.0 and 3.0 - Library 2.0- Concept, Characteristics, Components Instant Messaging, RSS Feeds, Podcasts, Vodcasts, Ask a Librarian **143**
4.6 Collaborative Services- Social Networks, Academics Social Networks, Social Tagging, Social Bookmarking **150**
4.7 Web – Scale Discovery Services **151**
4.8 National Information Systems and Networks NISCAIR, DESIDOC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National Knowledge Network (NKN), Biotechnology Information System Network..... **154**
4.9 International Information Systems and Networks, INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS) **161**
4.10 Library Resource Sharing and Library Consortia – National and International..... **163**

Unit - 5

5.1 Universe of Knowledge - Nature and Attributes, Modes of Formation of Subjects **168**
5.2 Knowledge Organisation - Classification – Theories, Cannons, and Principles_ Simple Knowledge Organisation System (SKOS), Taxonomies, Folksonomy, Trends in Classification. **169**
5.3 Mapping of Subjects in Library Classification Schemes – DDC, UDC and CC..... **184**
5.4 Knowledge Organisation, Cataloguing - Cannons and Principles, Centralized and Co-operative Catalogue, Library Cataloguing Codes, CCC and AACR - II.. ..... **195**
5.5 Standards of Bibliographic Record Formats and Description – ISBD, MARC 21, CCF, RDA, FRBR, Bibframe **204**
5.6 Standards for Bibliographic Information Interchange & Communication – ISO 2709, Z39.50, Z39.71 ..... **212**
5.7 Metadata Standards, Dublin Core, MARC21, METS, MODES, EAD. **214**
5.8 Indexing Systems and Techniques, Assigned - Pre-coordinate, Post-Coordinate, Derived-Title-based, Vocabulary Control **217**
5.9 Abstracting – Types and Guidelines **224**
5.10 Information Retrieval System – Features, Components, Models and Evaluation..... **225**

Unit - 6

6.1 Management - Principles, Functions and Schools of thought..... **229**
6.2 Human Resource Management – Planning, Job Analysis, Job Description, Job Evaluation, Selection, Recruitment, Motivation, Training and Development, Performance Appraisal Staff Manual **237**
6.3 Financial Management in Libraries - Sources of Finance, Resource Mobilisation, Budgeting Methods- Cost Effective and Cost Benefit Analysis, Annual Reports & Statistics- Library Authority and Committee **243**
6.4 Project Management - SWOT, PEST, PERT CPM **246**
6.5 Total Quality Management (TQM) - Concepts, Principles and Techniques, Six

Sigma Evaluation of Services of Libraries and Information Centers ***248***

6.6 Library Building, Furniture and Equipments Green Library Building, Information Commons, Makers Space, Security and Safety..... ***253***

6.7 Management Information System (MIS), MBO, Change Management, Disaster Management, Crisis Management..... ***254***

6.8 Knowledge Management – Principles, Tools, Components and Architecture. ***256***

6.9 Marketing of Library Products and Services – Plan, Research, Strategies, Mix, Segmentation, Pricing and Advertising-Management Consultancy ***257***

Unit - 7

7.1 Computer Technology - Character Representation (ASCII, ISCII, Unicode) Computer Hardware, Software, Storage Devices, Input and Output Devices..... ***262***

7.2 Types of Software - System Software, Application Software..... ***271***

7.3 Programming Languages – Object Oriented, Procedural, High Level, Scripting Web Languages..... ***273***

7.4 Telecommunication - Transmission Channels, Mode, and Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols ***276***

7.5 Wireless Communication – Media, Wi-fi, Li-fi, Satellite Communication, Mobile Communication..... ***281***

7.6 Computer Networks - Topologies, Types of Networks – LAN, MAN, WAN ***282***

7.7 Internet - Web browsers, WWW, E-mail Search Engines, Meta and Entity Search engines ***287***

7.8 Internet Protocols and Standards – HTTP, SHTTP, FTP, SMTP, TCP IP, URI, URL..... ***297***

7.9 Hypertext, Hypermedia, Multimedia, Video conferencing, Virtual Reality, Augmented Technologies ***302***

7.10 Data Security, Network Security, Firewalls, Cryptographic Techniques, Anti-virus software, Anti-spyware, Intrusion Detection System..... ***303***

Unit - 8

8.1 Library Automation – Areas, Planning, Selection of Hardware and Software, Implementation and Evaluation, Standards for Library Automation. ***309***

8.2 Barcode, RFID, QR Code, Biometric, Smartcard, Features and Applications..... **313**

8.3 Digitization – Planning, Selection of Materials, Hardware, Software, Process, Issues ***314***

8.4 Digital Library, Genesis, Characteristics, Types, Architecture, Standards, Formats and Protocols, DOI-..... ***315***

8.5 Digital Preservation - Need, Purpose, Standards, Methods, Techniques, Projects (National and International)..... ***320***

8.6 Digital Library Initiatives – National and International..... ***323***

8.7 Institutional Repositories - Need, Purpose, Types and Tools, Institutional Repositories in India, ROAR, DOAR, SHARPA-ROMIO ***.....*** ***326***

8.8 Content Management Systems – Architecture, Data Integration, CMS Software – Selection, Implementation and Evaluation..... ***328***

8.9 Application of Artificial Intelligence, Expert Systems and Robotics in Libraries, Social Mobile Analytics Cloud (SMAC), Cloud Computing ***330***

8.10 Ontology – Tools (RDF, RDFS, Potege), Semantic Web, Linked Data, Big Data, Data Mining, Data Harvesting. ***334***

Unit - 9

9.1 Research - Concept, Purpose, Functions, Scope and Ethics, Types of Research – Basic and Applied, Interdisciplinary and Multidisciplinary.. ..... ***337***

9.2 Research Methods, Historical, Descriptive, Experimental and Delphi ***341***

9.3 Research Design - Selection of Research Problem, Review of Literature, Formulation of Research Problem, Hypothesis – Formulation, Types and Testing, Sampling Techniques..... ***348***
9.4 Methods of Data Collection, Questionnaire, Interview, Observation, Library Records, Scales and Checklist..... ***353***
9.5 Data Analysis and Interpretation - Presentation of Data, Statistical Methods, Techniques..... ***359***
9.6 Statistical Packages – Spreadsheet, SPSS, Bibexcel, 'R' Statistics..... ***367***
9.7 Research Report Writing and Citation Tools – Structure, Style, Contents, Guidelines, Style Manuals, Online Citation Tools, Reference Style Management Tools, Antiplagiarism Tools, Evaluation of Research Report. ***369***
9.8 Metric Studies in LIS - Bibliometrics, Scientometric, Webometrics, Altmetrics ***374***
9.9 Impact Factors – Journal, Institutional and Authors_ h-Index, g-Index, i10 Index ***380***
9.10 Trends in Library and Information Science Research..... ***380***

Unit - 10

10.1 Academic Library and Information System. ***384***
10.2 Public Library and Information System..... ***384***
10.3 Special Library and Information System ***386***
10.4 Health Science Library and Information..... ***386***
10.5 Corporate Library and Information System ***386***
10.6 Agricultural Library and Information System ***387***
10.7 Archive, Museums and Oriental Libraries... ***387***
10.8 Community Information System..... ***387***
10.9 Information Services and System for Persons with Disability, Children and Women..... ***389***

NUMBER OF QUESTIONS ASKED IN UGC NET - LIBRARY & INFORMATION SCIENCE (DEC 2015 to JUNE 2025)

		2015	2016	2017		2018	2019		2020	2021	2022	2023			2024	2025	
UNIT - 1		DEC	JUL	JAN	NOV	JUL	JUN	DEC	JUN	JUN	JUL	MAR	JUN	DEC	SEP	JAN	JUN
1.1	Data, Information, Knowledge and Wisdom	-	-	1	3	1	-	-	-	-	-	1	-	1	2	-	-
1.2	Information Life Cycle - Generation, Collection, Storage and Dissemination	-	-	-	1	-	-	-	1	-	1	-	-	1	-	1	1
1.3	Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development	1	-	-	5	1	-	-	-	-	-	-	3	-	-	2	-
1.4	Information Science - Relationship with other subjects, Information Society and Knowledge Society	1	-	2	2	1	-	1	1	1	1	6	3	2	1	-	-
1.5	Communication – Concept, Types, Theories, Models, Channels and Barriers, Trends in Scholarly Communication	2	7	-	1	1	-	2	12	2	2	1	-	-	1	1	1
1.6	Information Industry - Generators, Providers and Intermediaries	-	-	1	6	1	-	-	1	2	5	1	1	-	-	-	-
1.7	IPR and Legal Issues - Categories, Conventions, Treaties, Laws	6	-	-	3	4	1	-	2	3	4	4	3	-	3	1	1
1.8	Plagiarism - Concept and Types	-	-	-	-	-	-	1	-	2	-	-	-	-	-	1	1
1.9	Right to Information Act (RTI) - Information Technology Act	-	3	2	-	-	-	-	-	1	-	-	-	-	-	-	1
1.10	National Knowledge Commission - National Mission on Libraries	-	-	1	3	2	-	-	1	2	-	-	-	1	-	-	1

CHAPTER 1

Unit 1.1: Data, Information, Knowledge and Wisdom

Previous Year Exam Questions

(JAN 2017)

1. Who differentiated information and knowledge in the following way? "Information is piecemeal, fragmented, particular; whereas knowledge is structural, coherent and universal"

(1) B.C. Brooks and N.J. Belkin
(2) S.G. Faibisoff and D.P. Ely
(3) F. Machlup and U. Mansfield
(4) J.H. Shera

(NOV 2017)

2. Identify the author of 'Essays of an Information Scientist' from among the following:

(1) F.W. Lancaster
(2) Derek J. de Solla Price
(3) Eugene Garfield
(4) B.C. Vickery

(NOV 2017)

3. Who has coined the term 'Information Society' from the following?

(1) B.C. Brookes (2) Fritz Machlup
(2) B.C. Vickery (4) N.J. Belkin

(NOV 2017)

4. Hermeneutics, principle is primarily related with:

(1) Interpretation of texts
(2) Interrelation between data and knowledge
(3) Human experience
(4) Human behaviour

(JULY 2018)

5. What is the meaning of the term "Information Iceberg"?

(1) 1/3 Non-Visible and 2/3 Visible
(2) 1/3 Visible and 2/3 Non-Visible
(3) 1/4 Non-Visible and 3/4 Visible
(4) 1/4 Visible and 3/4 Non-Visible

(MARCH 2023)

6. Who said "Where is the information lost in data, knowledge lost in information and wisdom lost in knowledge"?

(1) Richard Smiraglia (2) Ackoff Russel
(3) Allan Frost (4) T.S. Eliot

(DEC 2023)

7. Arrange the following concepts in the reverse order of their application:

(A) Wisdom
(B) Data
(C) Information
(D) Knowledge

Choose the correct answer from the options given below:

(1) (A), (D), (C), (B) (2) (C), (B), (A), (D)
(3) (A), (D), (B), (C) (4) (A), (B), (C), (D)

(SEP 2024)

8. The word "Data" was originated from ___ word.

(1) Greek (2) Latin
(3) Spanish (4) Persian

(SEP 2024)

9. Which of the following are true of Information

A. Information is a property of data
B. Product of human brain
C. Information may be abstract or concrete
D. Information can not be creative
E. Information is personal knowledge

Choose the correct answer from the options given below:

(1) B, C and D only (2) A, B and C only
(3) A, C and D only (4) B, C and E only

ANSWER KEY								
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
(3)	(3)	(2)	(1)	(2)	(4)	(1)	(2)	(2)

EXPLANATIONS

1. Explanation: (3)

The distinction between information as piecemeal, fragmented, particular, and knowledge as structural, coherent, and universal was made by F. Machlup and U. Mansfield.

2. Explanation: (3)

Eugene Garfield is the author of the influential book series "Essays of an Information Scientist." He is widely recognized for his contributions to the field of information science and bibliometrics.

3. Explanation: (2)
Fritz Machlup coined the term "Information Society" in the 1960s. He used it to describe a society where the creation, distribution, and manipulation of information have become significant economic, social, and cultural activities.

4. Explanation: (1)
Hermeneutics is the theory and methodology of interpretation, especially of textual material. It focuses primarily on understanding and interpreting texts, including literature, historical documents, and other forms of communication.

5. Explanation: (2)
The "Information Iceberg" metaphor suggests that the majority of information is hidden or non-visible, just like how the bulk of an iceberg lies beneath the surface of the water. In this analogy, only about 1/3 of the information is visible or easily accessible, while 2/3 is not visible or hidden.

6. Explanation: (4)
The quote is by **T.S. Eliot,** highlighting the challenge of transforming data → information → knowledge → wisdom. It emphasizes that at each stage, meaning or insight can be lost, reflecting the difficulty of fully understanding and applying knowledge.

7. Explanation: (1) (A), (D), (C), (B)
The following concepts are arranged in the reverse order of their application:
- **Wisdom**: The highest level of understanding and application of knowledge, involving sound judgment and experience.
- **Knowledge**: Acquired information that has been processed and understood.
- **Information**: Data that is organized and processed to have meaning.
- **Data**: Raw facts and figures without context or meaning.

8. Explanation: (2)
The word "Data" comes from the **Latin word** "datum," which means "something given" or "a piece of information." In Latin, "datum" is the singular form, while "data" is the plural, meaning multiple pieces of information. Over time, "data" became commonly used to refer to information in various fields.

9. Explanation: (2) A, B and C only
The following statements are true of Information:
- **Information is a property of data** – Data becomes meaningful when processed into information.
- **Product of the human brain** – Humans interpret and create information from raw data.
- **Information may be abstract or concrete** – It can exist as concepts, ideas (abstract) or physical forms like reports (concrete).

Unit 1.2: Information Life Cycle - Generation, Collection, Storage and Dissemination

Previous Year Exam Questions

(NOV 2017)

1. Which of the following roles does a library have in the information transfer cycle?
(a) Information organization and control
(b) Primary distribution
(c) Secondary publication
(d) Secondary distribution
Code:
(1) (b) and (d) are correct
(2) (b) and (c) are correct
(3) (a) and (d) are correct
(4) (a) and (b) are correct

(June 2020)

2. Arrange in sequence, the following functional entities of the OASIS Reference Model that occur in the digital information life cycle:
(a) Administration
(b) Archival storage
(c) Access
(d) Digital management
(e) Ingest
Choose the correct answer from the options given below:
(1) (a), (b), (c), (d), (e) (2) (b), (c), (d), (e), (a)
(3) (c), (a), (b), (e), (d) (4) (e), (b), (d), (c), (a)

(JULY 2022)

3. According to Goodman the information life cycle includes:
(A) Design and creation of records
(B) Restructuring of records
(C) Circulation, Access, Loan, Use
(D) Marketing
Choose the correct answer from the options given below:
(1) (A) and (B) only (2) (A) and (C) only
(3) (B) and (D) only (4) (D) and (A) only

(DEC 2023)

4. _____ is a routine knowledge about which the expert is conscious and often resides in short term memory.
(1) Procedural knowledge
(2) Declarative knowledge
(3) Semantic knowledge
(4) Episodic knowledge

(JAN 2025)

5. **What is the primary goal during the "preservation" phase of the information life cycle?**
   (1) To ensure information is made accessible and used effectively.
   (2) To ensure that information is stored securely and backed up.
   (3) To archive and protect information for long term retention.
   (4) To delete outdated and unnecessary information.

(JUNE 2025)

6. **In Chain Procedure the link which does not represent a subject with a definite name is known as _____ link.**
   (1) Missing (2) Unsought
   (3) False (4) Sought

ANSWER KEY					
1	2	3	4	5	6
(3)	(4)	(2)	(2)	(3)	(3)

EXPLANATIONS

1. **Explanation: (3)**
   A library plays a crucial role in the organization and control of information , such as cataloging and classifying materials, and in secondary distribution , which involves making information accessible to users by lending or providing access to materials. Primary distribution and secondary publication are not typical roles of a library.

2. **Explanation: (4)**
- **Ingest -** Receives Submission Information Packages (SIPs) from producers and prepares them for preservation.
- **Archival storage -** Stores, maintains, refreshes, and ensures the long-term preservation of Archival Information Packages (AIPs).
- **Digital management (Data Management) -** Manages descriptive information, metadata, databases, and supports search and retrieval.
- **Access -** Delivers Dissemination Information Packages (DIPs) to users in response to queries.
- **Administration -** Oversees the archive's overall operation, policies, coordination, and system management.

3. **Explanation: (2) (A) and (C) only**
   According to Goodman, the information life cycle includes:
- **Design and creation of records:** Information is first produced, organized, and recorded systematically for future use.
- **Circulation, access, loan, use:** After creation, records are distributed, accessed, or used by individuals or organizations.

4. **Explanation: (2)**
   Declarative knowledge is the type of knowledge that pertains to facts and information that can be consciously recalled. It includes two subtypes: semantic knowledge (general facts and concepts) and episodic knowledge (personal experiences).

5. **Explanation: (3)**
   The preservation phase of the information life cycle aims **to archive and protect information for long-term retention.** It focuses on ensuring the longevity of data by preventing degradation or loss, maintaining its integrity, and ensuring it remains accessible for future use, even over extended periods.

6. **Explanation: (3)**
   In the Chain Procedure, a **False link** is one that does not represent a subject with a definite name. It is an incorrect or irrelevant link that doesn't align with the intended subject, disrupting the chain of connections.

Unit 1.3: Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development

Previous Year Exam Questions

(DEC 2015)

1. **'Half-life' in Information Science relates to:**
   (1) Rate of obsolescence
   (2) Rate of growth
   (3) Degree of scatter
   (4) Information explosion

Read the passage given below and answer the questions based on your understanding of the passage.

The medical community is not homogeneous. We have a wide range of kinds of work and, hence, we have a wide range of kinds of needs for information. Therefore, solutions for better access by investigators to information that they need might not help practicing physicians at all. Science in medicine and the practice of medicine differ greatly. How they differ was described succinctly by Peter Mere Latham well over a century ago: "Medicine is a strange mixture of speculation and action. We have to cultivate a science and to exercise an art. The calls of science are upon our leisure and our choice; the calls of practice are of daily emergence and necessity". Latham's point is well made, but it is not quite detailed enough for

our considerations here. Let me sketch out how the information needs of investigators and physicians differ.

(1) An investigator usually poses one question (or faces one problem) at a time and works on it for a long period. A physician constantly faces a quick succession of problems that call for rapid solutions.
(2) The investigator's problem is usually narrow and readily defined. The problems dealt with by the physician tend to be highly various and fogged by many uncertainties.
(3) An investigator's earnings are not tightly coupled to how he spends time from minute to minute and hour to hour. A physician's earnings are tightly coupled to every day's working hours and how they are spent.

These differences lead to differences in kinds of information needs and searches.

(1) The investigator tends to need an exhaustive search of information sources ("the literature") but at infrequent intervals. The time available for the search is relatively large and can be carried out at relatively low cost in "purchase" and in "time-cost".
(2) The physician needs quick access to valid information of immediate and high utility. The time available for a search is small. The "time-cost" for a search is high. The physician has to work mainly with thoroughly digested concepts and with most of the needed data carried in his head; the brain has a very rapid access time. Additional facts needed for clinical decisions must be accessed very rapidly.

Both investigator and physician occasionally have needs like those of the other. The investigator may need quick access to a small and specific piece of technical information; the physician may be willing occasionally to embark on a broad search to deal with a rare problem. Further, both have ongoing needs for general awareness of new developments that may come eventually to have high utility.

These differences seem to me to determine how investigators and physicians use or do not use various kinds of information materials and sources.

Investigators tend to use reports of specific and individual research efforts-journal articles. They tend to carry out searches themselves or to assign them to close professional associates. They have time to assess and to digest individual papers. Synoptic information, such as that in review articles, is used mainly for orientation to a new problem.

(NOV 2017)

2. How do Peter Mere Latham differentiate calls of 'Science' (in Medicine) from that of the 'practice' (of medicine)?

(1) The calls of science are upon one's leisure and choice, where as the calls of practice are of daily emergence.
(2) 'Medicine' is a non exotic mixture of certainty, while practice of medicine is an infrequent phenomenon.
(3) Science is not a study of the natural world, where as practice is based on facts learned through a formal study.
(4) Science is not a method of reconciling practical ends with scientific laws, where as 'practice' do not allow repeated exercise to make one proficient.

(NOV 2017)

3. How Lathams differentiates the information needs of Investigators from that of Physicians.

(1) An Investigator unconventionally faces with multiple problems at a single point of time and works on it for a long period, while a physician constantly faces slow-witted succession of problems that hardly warrant rapid solution.
(2) An investigator ordinarily faces one question/problem at a time which is usually narrow and rapidly defined, while a physician constantly faces a quick succession of varied problems fogged by many uncertainties.
(3) Earnings of an Investigator are strictly coupled to how he spends time from minute to minute, whereas a Physician's earnings are not tightly coupled to every day working hours.
(4) Information needs of Investigators are solely academic, where as the needs of Physicians are both academic and utilitarian.

(NOV 2017)

4. Who tends to need quick access to valid Information of immediate and high quality?

(1) An Investigator (2) A Screwball
(3) A Physician (4) A Teacher

(NOV 2017)

5. Why 'time cost' for a search made by a Physician is higher?

(1) Slow access to invalid Information.
(2) Access to information that are distant in need and of less utility.
(3) Exhaustive search of information sources.
(4) Rapid access to high quality information needed for clinical decision.

(NOV 2017)

6. Why the Investigators tend to carryout searches themselves?

(1) They have time to assess and digest individual papers.
(2) They are unaware of appropriate information sources.
(3) They have no access to information/literature they need.
(4) They cannot afford time to search, identify, and digest the articles of high quality.

(JULY 2018)

7. **"To make at least one in every household e-literate" is thrust area of policy (# 7) included in:**
   (1) National Knowledge Commission, 2005
   (2) National Policy on Information Technology, 2012
   (3) National Education Policy, 1992
   (4) National Policy on Library and Information Systems, 1986

(JUNE 2023)

8. **According to Botha, who is now using Facebook as an alternative to e-mail?**
   (1) Generation X (2) Generation Z
   (3) Generation Y (4) Generation W

(JUNE 2023)

9. **The term Knowledge-based Economy was coined by**
   (1) World Summit on Information Society
   (2) National Knowledge Commission
   (3) Organization for Economic Cooperation and Development
   (4) The World Network Society

(JUNE 2023)

10. **Sequence the following in the order of their inception**
    A. Internet-based communication
    B. Written communication
    C. Mass communication
    D. Telecommunication
    E. Oral communication
    Choose the correct answer from the options given below
    (1) A, B, D, C, E (2) A, B, C, D, E
    (3) E, B, C, D, A (4) B, C, D, E, A

(JAN 2025)

11. **One characteristic of information is, 'it is diffusive', it means:**
    (1) It can be condensed and concentrated
    (2) It tends to leak
    (3) It is sharable
    (4) It is not reduced by use and share

(JAN 2025)

12. **Which of the following are the necessary elements of an information society?**
    A. Confidentiality
    C. Integrity
    B. Vulnerability
    D. Personality
    E. Availability
    Choose the most appropriate answer from the options given below:
    (1) A, C and E only (2) B, C and D only
    (3) C, D and E only (4) B, D and E only

ANSWER KEY									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(1)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(3)	(3)
11	**12**								
(2)	(1)								

EXPLANATIONS

1. **Explanation: (1)**
   In Information Science, half-life denotes the time required for half of the literature in a subject to become obsolete or no longer actively used. It is therefore a direct measure of the **rate of obsolescence of** information.

2. **Explanation: (1)**
   Peter Mere Latham distinguishes the calls of science and practice in medicine by stating that the calls of science come during one's leisure and choice, meaning it is something pursued voluntarily or during available time. In contrast, the calls of practice in medicine are of daily emergence, meaning that physicians face practical problems regularly and must address them promptly as part of their daily work.

3. **Explanation: (2)**
   Latham differentiates the information needs of investigators and physicians by highlighting that investigators usually work on a single, narrowly defined problem at a time, requiring focused and in-depth information. In contrast, physicians face a continuous series of problems that are often uncertain and varied, requiring rapid, real-time access to information to make decisions quickly in a clinical setting.

4. **Explanation: (3)**
   Physicians need quick access to valid information of immediate and high utility to make fast decisions for patient care. Unlike investigators who typically have more time for exhaustive research, physicians often need rapid, accurate information to address urgent medical issues in real-time.

5. **Explanation: (4)**
   For a physician, the time cost of a search is high because they require rapid access to high-quality, accurate information needed to make clinical decisions quickly. The fast-paced environment of medical practice means physicians need immediate, relevant data to address patient needs effectively, which increases the time pressure when conducting searches.

6. Explanation: (1)
Investigators typically have more time and flexibility in their work to carry out thorough searches for relevant literature. Unlike physicians who need quick access to information, investigators often engage in more in-depth research and analysis, allowing them to assess and digest individual papers at their own pace.

7. Explanation: (2)
The National Policy on Information Technology, 2012, included the thrust area of making at least one person in every household e-literate, aiming to promote digital literacy across India.

8. Explanation: (3)
According to Botha, **Generation Y** (also known as Millennials) is now using Facebook as an alternative to email. This generation is known for their heavy use of social media platforms for communication, including Facebook, as a substitute for traditional email.

9. Explanation: (3)
The term Knowledge-based Economy was coined by the **Organization for Economic Cooperation and Development (OECD).** It refers to an economy that is primarily driven by knowledge, innovation, and technology, where the creation, distribution, and use of knowledge are key drivers of economic growth.

10. Explanation: (3) E, B, C, D, A
The sequence of communication forms in the order of their inception is:
- **Oral communication** – The earliest form of communication, using spoken words.
- **Written communication** – Developed after oral communication, enabling information to be recorded and transmitted across time and space.
- **Mass communication** – Emerged with technologies like printing and broadcasting, reaching large audiences.
- **Telecommunication** – The transmission of information over long distances using electronic means, such as telegraphs and telephones.
- **Internet-based communication** – The most recent, enabled by the internet, allowing instantaneous global communication.

11. Explanation: (2)
The characteristic "diffusive" means that information **tends to leak or spread** easily. When information is shared, it can travel quickly and broadly beyond its initial source or audience, often becoming widely accessible. This highlights how information naturally disperses once made available.

12. Explanation: (1) A, C and E only
The necessary elements of an information society typically include:
- **Confidentiality**: Ensuring that sensitive information is protected from unauthorized access.
- **Integrity**: Ensuring that information is accurate, reliable, and has not been tampered with.
- **Availability**: Ensuring that information is accessible when needed.

Unit 1.4: Information Science - Relationship with other subjects, Information Society and Knowledge Society

Previous Year Exam Questions

(DEC 2015)

1. Assertion (A): Information reflects the synergic combination of medium and message.
Reason (R): There is no difference between conduit and content.
Codes:
(1) Both (A) and (R) are true.
(2) Both (A) and (R) are false.
(3) (A) is true but (R) is false.
(4) (A) is false but (R) is true.

(JAN 2017)

2. Assertion (A): A collaborative culture is an important condition for knowledge transfer between individuals.
Reason (R): Knowledge transfer do not require individuals to come together to interact, exchange, and share ideas and knowledge with one another.
Codes:
(1) (A) is true, but (R) is false
(2) (A) is false, but (R) is true
(3) Both (A) and (R) are true
(4) Both (A) and (R) are false

(JAN 2017)

3. Identify from the following the features of tacit knowledge:
(a) Resides in human mind
(b) Cannot be articulated
(c) Tangible
(d) Easily accessible
Codes:
(1) (a) and (c) are correct.
(2) (b) and (c) are correct.
(3) (a) and (b) are correct.
(4) (c) and (d) are correct.

(NOV 2017)

4. Match the following terms with the corresponding authors who coined them:

List - I	List - II
(a) Knowledge Economy	(i) Mikhailov, Chernyi and Gilyarevskii
(b) Documentation	(ii) Calvin Mooers
(c) Informatics	(iii) Paul Otlet
(d) Information Retrieval	(iv) Peter Drucker

Code:

(a) (b) (c) (d)
(1) (ii) (iii) (iv) (i)
(2) (i) (iv) (ii) (iii)
(3) (iv) (iii) (i) (ii)
(4) (iii) (i) (ii) (iv)

(NOV 2017)

5. **Which of the following are the necessary elements of an information society?**
(a) Confidentiality **(b) Vulnerability**
(c) Integrity **(d) Availability**
Code:
(1) (b), (c) and (d) are correct
(2) (a), (b) and (c) are correct
(3) (a), (c) and (d) are correct
(4) (a), (b) and (d) are correct

(JULY 2018)

6. **Wersig and Neveling gave which of the following approaches for defining information?**
(a) The Action Approach
(b) The Message Approach
(c) The Process Approach
(d) The Structural Approach
Code:
(1) (a), (b), (c) are correct.
(2) (b), (c), (d) are correct.
(3) (a), (c), (d) are correct.
(4) (a), (b), (d) are correct.

(DEC 2019)

7. **The concept of 'Information Encountering' (IE) was introduced in the domain information behaviour literature by Sanda Erdelez in 1997, where she proposed a conceptual framework for facilitating systematic study of IE. Identify the three key elements proposed by Erdelez in her study:**
(i) Characteristics of the information user
(ii) Characteristics of information seeking habit
(iii) Characteristics of information environment
(iv) Characteristics of encountered information
Choose the correct answer from the following options:
(1) (i), (ii) and (iv) are correct
(2) (ii), (iii) and (iv) are correct
(3) (i), (ii) and (iii) are correct
(4) (i), (iii) and (iv) are correct

(June 2020)

8. **Which of the following are the component pillars of 'Knowledge Society' as reflected in UNESCO' s "Building Knowledge Societies'?**
(a) Freedom of expression
(b) Internet Governance
(c) Quality Education for all
(d) Information Security
Choose the correct answer from the options given below:
(1) (a) and (b) only (2) (b) and (c) only
(3) (a) and (d) only (4) (a) and (c) only

(June 2021)

9. **In UNESCO's conceptual model of Media Information Literacy (MIL), 2013, which one of the following circle represents:**
"The information resources and the means by which information is communicated..."
(1) Centre circle
(2) The Second Circle from the Centre
(3) The Third Circle from the Centre
(4) The Final Circle

(JULY 2022)

10. **The addition of Information as a sector in, "The Information Economy (1977)" was done by**
(1) E. Machlup (2) M.V. Porat
(3) R.M. Hayes (4) M.M. Parker

(MARCH 2023)

11. **GIS stands for:**
(1) Geological Informative Survey
(2) Geographic Information System
(3) Geographic Information Services
(4) Geographic Information Software

Read the following passage and answer the questions.

There are many reasons to tell stories to children. Pragmatically speaking, story telling is all about language. When children listen and focus on a story told to them, they are developing listening, comprehension, and analytical skills. In terms of higher-level thinking, storytelling helps children recall details, summarize sequence, and visualize and describe the settings and scenes. They can speculate on what will happen next, and afterward, cite the clues that support their predictions. They can analyze the story structure, discuss plot elements, and evaluate, debate, and make their own judgements about why the characters behaved the way they did. They can compare and contrast other similar stories.

Finally, they can synthesize the experience in a creative way, perhaps acting out the story, writing an original tale using the same structure, or retelling the story from another character's point of view. All the strategies we use to analyze and evaluate other texts, both fiction and nonfiction, work just as well if not better, when a story is told.

Hearing stories also makes a child want to read more of them. Storytelling helps turn kids into readers. But

perhaps the best reason to tell stories is that it brings joy to the teller and listener alike.

(MARCH 2023)

12. Hearing stories make a child to _____

(1) Sleep Peacefully (2) Stop Thinking
(3) Read more stories (4) Sit patiently

(MARCH 2023)

13. Best reason to tell stories is _____.

(1) To keep children quiet
(2) To impress children
(3) to speculate future
(4) To bring joy to the teller and listener

(MARCH 2023)

14. Story telling is all about _____

(1) Language (2) Story
(3) Telling (4) Children

(MARCH 2023)

15. In terms of higher lever thinking, the story telling will help in _____

(1) developing listening skills
(2) Improving comprehension
(3) developing analytical skills
(4) Summarizing sequence

(MARCH 2023)

16. Story telling help kids to _____

(1) help in predicting
(2) Help them in becoming story writers
(3) turn them into readers
(4) Avoid classes

(JUNE 2023)

17. Who has said "Information is essentially found in answer to questions that begin with such words as who, what, where, when and how many"?

(1) Gene Bellinger (2) T S Eliot
(3) Ingetraut Dahlberg (4) Ackoff Russel

(JUNE 2023)

18. Which of the following are true for ACRL information Literacy Competency Standards?

A. Applicable to higher education sector
B. Rescinded in 2006
C. Proposes five standards with 20 performance indicators
D. The information literate student determines the nature and extent of information needs
E. Bloom's Taxonomy of Educational objectives have been considered to map the outcomes

Choose the correct answer from the options given below:

(1) A, D and E only (2) B, C and D only
(3) C, D and E only (4) A, B and C only

(JUNE 2023)

19. Organize the kinds of knowledge on the basis of their increasing complexity

A. Know-how
B. Know-why
C. Know-what
D. Know-who

Choose the correct answer from the options given below

(1) A, B, C, D (2) C, B, A, D
(3) B, D, A, C (4) A, C, D, B

(DEC 2023)

20. The origin of the discipline of Information Studies could be traced to the founding of _____ .

(1) UNESCO
(2) International Institute of Bibliography
(3) The British Library
(4) American Library Association

(DEC 2023)

21. Match List - I with List - II.

List-I Concept	List – II Explanation
(A) Information society	(I) Seeks to overcome the problem of digital divide
(B) Knowledge society	(II) Investigates the properties and behavior of information
(C) Information studies	(III) Information is seen as a commodity
(D) Information science	(IV) Emerged from cross fertilization of ideas

Choose the correct answer from the options given below:

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
(3) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
(4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(SEP 2024)

22. Who coined the term "Infoshere"?

(1) Delphi (2) Likert
(3) Luciano Floridi (4) Brophy

ANSWER KEY									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(3)	(1)	(3)	(3)	(3)	(2)	(4)	(4)	(1)	(2)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(2)	(3)	(4)	(1)	(4)	(3)	(4)	(1)	(2)	(2)
21	**22**								
(3)	(3)								

EXPLANATIONS

1. Explanation: (3)

Information is created by the combination of the medium (the channel used to convey it) and the message (the content itself). The medium and message are distinct; the conduit merely carries the

information, while the content is the actual knowledge or data being communicated. Therefore, the assertion is true, but the reason is false.

2. Explanation: (1)

- **Assertion (A): True -** A collaborative culture is indeed an important condition for knowledge transfer between individuals. When individuals collaborate, they can share ideas, experiences, and knowledge more effectively.
- **Reason (R): False -** Knowledge transfer generally requires individuals to interact, exchange, and share ideas. Knowledge transfer is most effective when people come together and engage in discussions or collaborative efforts. Therefore, the statement that knowledge transfer does not require interaction is incorrect.

3. Explanation: (3)

Tacit knowledge refers to knowledge that:

- **Resides in human mind:** Tacit knowledge is personal, internal, and often unconscious, stored in an individual's mind.
- **Cannot be articulated:** It is difficult to express tacit knowledge in words or formal descriptions, as it often involves experiences, intuition, and skills learned over time.

Tangible and Easily accessible are not features of tacit knowledge. Tacit knowledge is typically intangible and hard to access without personal interaction or experience.

4. Explanation: (3)

- **Knowledge Economy — Peter Drucker:** Peter Drucker coined the term "Knowledge Economy" to describe an economy driven by the production and use of knowledge.
- **Documentation — Paul Otlet:** Paul Otlet, known as the "Father of Documentation," used the term to describe the collection, organization, and dissemination of information.
- **Informatics — Mikhailov, Chernyi, and Gilyarevskii:** These scholars introduced the term "Informatics" to refer to the study of scientific information and its properties.
- **Information Retrieval — Calvin Mooers:** Calvin Mooers coined "Information Retrieval" to describe the process of finding and retrieving specific information from a document collection.

5. Explanation: (3)

The necessary elements of an information society include confidentiality, integrity, and availability. These elements are fundamental to the security and reliability of information systems, ensuring that data is protected, accurate, and accessible when needed. Vulnerability is not considered a necessary element but rather a risk to be managed.

6. Explanation: (2)

Gernot Wersig and Ulrich Neveling identified six approaches for defining the concept of information, which include:

1. **The Message Approach:** Information as symbols on a physical carrier used in communication.
2. **The Process Approach:** Information as a process, like the human mind processing data.
3. **The Structural Approach:** Information as static relations or structures in the world, perceived or not.
4. **The Knowledge Approach:** Information as recorded knowledge based on the perception of the world's structure.
5. **The Meaning Approach:** Information defined by the semantic content of a message.
6. **The Effect Approach (Recipient-Oriented):** Information viewed as the effect of a process on a recipient.

7. Explanation: (4)

In her 1997 study on Information Encountering (IE), Sanda Erdelez proposed a conceptual framework identifying three key elements that influence how people encounter information:

1. Characteristics of the information user: Personal traits, interests, and cognitive styles affecting IE.
2. Characteristics of the information environment: Contexts, channels, and sources where information may appear.
3. Characteristics of encountered information: Nature, relevance, and usefulness of the information encountered.

Characteristics of information seeking habits is not part of the core framework for IE, as it focuses on unintentional discovery rather than deliberate searching.

8. Explanation: (4)

In UNESCO's framework *Building Knowledge Societies*, the core pillars include Freedom of expression and Quality education for all.These enable inclusive knowledge creation and sharing, while internet governance and information security are important enablers but not identified as foundational pillars in this model.

9. Explanation: (1)

In UNESCO's conceptual model of Media and Information Literacy (MIL), 2013, the **Centre circle** represents "The information resources and the means by which information is communicated." This

circle focuses on the core elements of media and information literacy, which include the resources and methods used to convey information.

10. Explanation: (2)
M.V. Porat added Information as a distinct sector in *"The Information Economy" (1977)*, categorizing economic activities related to information production, processing, and distribution, highlighting the growing role of information in modern economies.

11. Explanation: (2)
GIS stands for **Geographic Information System,** a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data. It is widely used in mapping, urban planning, environmental studies, and resource management.

12. Explanation: (3)
The passage states: "Hearing stories also makes a child want to read more of them. Storytelling helps turn kids into readers." This indicates that listening to stories encourages children to **read more stories** themselves.

13. Explanation: (4)
The passage emphasizes that storytelling not only develops skills in children but also creates enjoyment. It states: "the best reason to tell stories is that it **brings joy to the teller and listener** alike." This shows that the main purpose of storytelling is the shared happiness and emotional engagement it provides.

14. Explanation: (1)
The passage begins with: "Pragmatically speaking, storytelling is all about **language.**" This highlights that storytelling primarily develops language skills, including listening, comprehension, and analytical abilities.

15. Explanation: (4)
The passage states that for higher-level thinking, storytelling helps children "recall details, summarize sequences, and visualize and describe the settings and scenes." **Summarizing the sequence** reflects advanced cognitive processing beyond basic listening or comprehension.

16. Explanation: (3)
The passage mentions: "Hearing stories also makes a child want to read more of them. Storytelling helps **turn kids into readers**." This shows that storytelling encourages children to develop a habit and love for reading.

17. Explanation: (4)
Ackoff Russel, a renowned American professor and systems theorist, emphasized that information is obtained by answering questions that start with who, what, where, when, and how many. His work primarily focused on the role of information in decision-making and systems thinking.

18. Explanation: (1) A, D and E only
The following statements are true for the ACRL Information Literacy Competency Standards:
- The ACRL Information Literacy Competency Standards are **applicable to the higher education sector**, aiming to guide students' development of information literacy skills.
- The **information literate student determines the nature and extent of information needs**, a key aspect of information literacy.
- **Bloom's Taxonomy of Educational Objectives** was indeed used to **map the outcomes** of the standards.

19. Explanation: (2) C, B, A, D
The kinds of knowledge arranged in order of increasing complexity are:
- **Know-what**: This is the basic knowledge, such as facts and information (e.g., "what is").
- **Know-why**: This involves understanding the reasons or causes behind something, going beyond just the facts.
- **Know-how**: This is practical knowledge or the ability to perform tasks based on understanding and skills.
- **Know-who**: This is relational knowledge, understanding who to turn to for specific expertise or tasks.

20. Explanation: (2) The discipline of Information Studies originated with the founding of the **International Institute of Bibliography** in 1895, which was later renamed the International Federation for Information and Documentation (FID). It focused on organizing and cataloging bibliographic data, laying the foundation for modern information science.

21. Explanation: (3) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- **Information society: Information is seen as a commodity** in an information society, where information is a key resource for social, economic, and political development.
- **Knowledge society**: A knowledge society **seeks to overcome the problem of the digital divide** by ensuring equitable access to knowledge for all.
- **Information studies**: Information studies **emerged from the cross-fertilization of ideas** from various disciplines, such as library science, computer science, and social sciences.

- **Information science**: This field **investigates the properties and behavior of information**, focusing on how information is created, shared, and used.

22. Explanation: (3)

Luciano Floridi, an Italian philosopher, coined the term "Infoshere" to describe the informational environment in which human beings interact with data and information. It refers to the vast network of digital information that surrounds us, shaping our understanding and interactions with the world.

Unit 1.5: Communication – Concept, Types, Theories, Models, Channels and Barriers- Trends in Scholarly Communication

Previous Year Exam Questions

(DEC 2015)

1. Which of the following are the level of problems in communication process identified by Warren Weaver?

(a) Technical **(b) Semantic**
(c) Effective **(d) Interpreter**
Codes:
(1) (a), (c), (d) are correct.
(2) (a), (b), (c) are correct.
(3) (b), (c), (d) are correct.
(4) (a), (b), (d) are correct.

(DEC 2015)

2. Which of the following are linear models of communication?

(a) Dance's Helical model
(b) Lasswell model
(c) W. Schramm's Interactive model
(d) Becker's Mosaic model
Codes:
(1) (a) and (c) are correct
(2) (c) and (d) are correct
(3) (b) and (c) are correct
(4) (a) and (d) are correct

(JULY 2016)

3. 'Transactional Model of Communication' was suggested by

(1) Peter Drucker (2) George Zipf
(3) Dean Barnlund (4) A.C. Kessler

Read the passage given below and answer the questions based on your understanding of the passage:

One of the major features of the World Wide Web is the capability to create links between pages. These links are often viewed as analogues of citations in scientific publications (e.g. ROUSSEAU, 1997; BJORNEBORN & INGWERSEN, 2001; CRONIN, 2001). Links can lead to a different site or may lead to a page in the same site. Links for which the source and the target of the page are within the same site or domain are called self-links. Instead of counting self-links, we count self-sitations - the number of pages on the site having a link or links pointing to the same site. The difference between self-links and self-sitations is that for self-sitations a page with several self-links is counted with multiplicity one. The reason for counting self-sitations instead of self-links is technical: commercial search engines report the number of pages with self-links and not the number of self-links. The term-sitation has been coined by ROUSSEAU (1997). In this paper we develop the measures self-linking and self-linked, which correspond to the classical measures for journals: self-citing and self-cited. We calculate these rates for a number of academic institutions on the Web. Self-links seems to be more problematic than selfcitations (of authors in scientific publications), because self-links are often inserted for navigational purposes.

(JULY 2016)

4. Self-links denote:

(1) Links between two websites.
(2) Links between two authors.
(3) Links between source and the target of the page within the same site or domain.
(4) Links between two articles written by two different authors.

(JULY 2016)

5. Commercial search engines report

(1) the number of pages with self-links
(2) the number of self-links
(3) the number of sites
(4) the total number of total citations

(JULY 2016)

6. Self-linking and self-linked measures calculate their rates for

(1) Number of academic institutions on the web
(2) Number of websites on the web
(3) Number of databases available on a given site
(4) Number of subject gateways on the web

(JULY 2016)

7. Links in domain can lead to

a. different site on www
b. page in the same site
c. page in the different sites
d. all available e-documents
Codes:
(1) a and c are correct.
(2) a and b are correct.
(3) b and d are correct.
(4) c and d are correct.

(JULY 2016)

8. Reason for counting self-sitations is

(1) Academic (2) Classificatory
(3) Technical (4) Non-technical

(JULY 2016)

9. Arrange the following information encountering (IE) steps that occur during an IE experience as developed by Sanda Erdelez:

a. Examining **b. Returning**
c. Slopping **d. Capturing**

Codes:

(1) c, b, d and a (2) c, a, d and b
(3) a, d, c and b (4) b, c, d and a

(NOV 2017)

10. Dance's Helical Spiral communication model is a:

(1) Classical (2) Linear
(3) Non-Linear (4) Multi-dimentional

(JULY 2018)

11. Match the following communication concepts with corresponding explanations:

List - I	List - II
(a) Kinesics communication	(i) Use of touch to communication
(b) Haptics communication	(ii) Use of Interpersonal space
(c) Proxemics communication	(iii) Facial Expression, gestures, eye movement
(d) Iconics communication	(iv) Interpretation of symbolism

Code:

(a) (b) (c) (d)

(1) (i) (iii) (ii) (iv)
(2) (iii) (iv) (ii) (i)
(3) (ii) (iii) (i) (iv)
(4) (iii) (i) (ii) (iv)

(DEC 2019)

12. "Haptics" is a form of non-verbal communication that uses":

(1) Facial expression
(2) Touch-to-communicate
(3) Interpersonal space
(4) Interpretation of symbols

(DEC 2019)

13. Who proposed 'General System Theory of Communication'?

(1) Robert T. Craig
(2) W.R. Ashby
(3) Shannon and Weaver
(4) Ludwig Von Bertalanffy

(June 2020)

14. Who developed the ABX model of communication?

(1) Dean C. Barnlund
(2) Westley & MacLean
(3) Shannon & Weaver
(4) Theodore M Newcomb

(June 2020)

15. Arrange in sequence, the following communication models in order of their emergence:

(a) The Dance Model of Harold Dwight Lasswell
(b) Circular Model of Lee Thayer
(c) SMCR Model of David Kenneth Berio
(d) Interactive Model of Wilbur Schramm

Choose the correct answer from the options given below

(1) (a), (c), (b), (d) (2) (c), (d), (a), (b)
(3) (b), (d), (d), (c) (4) (a), (d), (c), (b)

Read the passage given below and answer the questions that follow.

Communication on WhatsApp has been encrypted since 2016, which affords the app an aura of security and trust, and further distinguishes it from mainstream platforms that have been shown to compromise user privacy (Zanon, 2018). However, these claims must be measured against countering arguments. Research has argued that WhatsApp's end-to-end encryption is performative rather than being a core value of the company (Santos and Faure, 2018) - plus encryption does not necessarily mean that Facebook is not in a position to collect Whats App data (see Zanon, 2018). Yet other scholars identify encrypted chat apps as a 'safer' space for activists and ordinary citizens to share information and engage in civic in contexts where legacy media and other social and political networking and action, particularly in contexts where legacy media and other social media ave heavily censored and surveilled by the state [Khazraee and Losey, 2016; Dencik, et al, 2016 Hintz, et al, 2019) Despite the perception that end-to-end encryption means that surveillance is limited on WhatsApp, it also means that content circulates in a manner largely unregulated and unmoderated by the platform. This can be prob ematic, because as WhatsApp becomes an increasingly important channel for the dissemination of news (Newman, et al., 2018) and meme culture (Ballesteros Doncel, 2016; Ncube, 2016; Al Zidjaly, 2017), so does it play an important role in facilitating "information disorder" the spread of misinformation, disinformation, and malinformation in closed groups not subjected to any kind of platform moderation (Wardle and Derakshan, 2017).

(June 2020)

16. Which one of the following is the primary reason for Whatsapp to get the trust of public?

(1) User Privacy (2) Free Service
(3) Encryption (4) Real-time sharing

(June 2020)

17. Why WhatsApp encryption is performative as stated by Santos and Faure?

(1) Facebook can collect WhatsApp
(2) No end-to-end encryption.
(3) Compromised user privacy.
(4) No core value of the company.

(June 2020)

18. Why is WhatsApp considered as a 'safer' space for citizens?
(1) Heavily censored (2) Encrypted chat app
(3) State surveillance (4) Easy sharing

(June 2020)

19. Which one of the following is NOT perceived as end-to-end encryption?
(1) Content is unregulated
(2) Content is unmoderated
(3) Unlimited Surveillance
(4) Meme culture

(June 2020)

20. According to Wardle and Derakshan, what is the reason for 'information disorder' of WhatApp?
(1) Lack of platform moderation
(2) Political networking
(3) Increasingly a news channel
(4) Encrypted conversations

Read the passage given below and answer the questions that follow.

More than two decades ago we entered a new world where a mouse no longer referred to Mickey: a floppy rarely described a hat and Apple and BlackBerry became proper nouns. We have now entered a universe where "twittering" is no longer the preserve of birds; communication in addition to food is "Delicious", and to have an avatar in a Second Life does not require the penance of an Asian mystic. We have, in short, entered the universe of Reference 2.0. This universe has moved at such a fast clip that defining it and understanding its ramifications continue to skitter across many viewpoints. That goal of effective reference remains timeless, namely, the satisfaction of the user. However, the dramatic technology tools thrown up by Web 2.0 in which mass participation and web socialization have become both the norm and the expectation have added a new dimension to business as usual.

(June 2020)

21. More than two decades ago, we entered a new world where:
(1) A mouse referred to a longer Mickey
(2) A floppy always described a rare hat
(3) Apple became Black Berry
(4) Blackberry became a proper noun

(June 2020)

22. We have now entered a universe where:
(1) "Twittering" is not the preserve of birds
(2) Communication is a delicious food
(3) An avatar is not required in Second Life
(4) Second Life is an Asian mystic

(June 2020)

23. In this passage, what has moved at such a fast clip?
(1) Universe of Knowledge
(2) Universe of Reference 2.0
(3) Universe of our world
(4) Universe of second life

(June 2020)

24. The goal of effective reference is to:
(1) Remain timeless
(2) Name the user
(3) Satisfy the user
(4) Skitter across many viewpoints

(June 2020)

25. What has become both the norm and the expectation?
(1) Dramatic technological tools
(2) Web 2.0
(3) Business
(4) Mass participation

(June 2021)

26. Who said, "a number of basic human needs can be identified from the social and psychological functions of the mass media"?
(1) William Katz and Bill Katz
(2) M. Sandelowski and H. Haas
(3) E. Katz, M. Gurevitch and H. Haas
(4) Sull H. Lee and Celia Hales Mabry

(June 2021)

27. In the context of dialogue between a user and computer through an interface, Tefko Saracevic's Stratified Model (1997) when viewed from the human side represents which strata:
(a) Content levels
(b) Processing
(c) Cognitive
(d) Affective
(e) Situational
Choose the correct answer from the options given below:
(1) (a), (b) and (c) only (2) (b), (c) and (d) only
(3) (b), (d) and (e) only (4) (c), (d) and (e) only

(JULY 2022)

28. The study of signs and codes is called ___ .
(1) Semiotics (2) Bionics
(3) Cybernetics (4) Altmetrics

(JULY 2022)

29. Match List I with List II:

List I **Communication Model**	**List II** **Year of origin**
(A) Charles E Osgood's Model	(I) 1956
(B) Harold D Lasswell's Model	(II) 1954
(C) Shannon and Weaver's Model	(III) 1948
(D) George Gerbner's Model	(IV) 1949

Choose the correct answer from the options given below:
(1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(2) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

(3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
(4) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

(MARCH 2023)

30. is the informal organizational communication network.
(1) Invisible network (2) White Water Rapids
(3) Calm Waters (4) Grapevine

(SEP 2024)

31. Information communication processes can be classified broadly into the following four categories in terms of its level. Arrange them in decreasing levels of involvement of the number of people in the process.
A. Interpersonal Communication
B. Intra personal Communication
C. Group Communication
D. Mass Communication
Choose the correct answer from the options given below:
(1) A, B, C, D (2) B, C, A, D
(3) D, C, A, B (4) B, A, C, D

(JAN 2025)

32. In Shannon and Weaver's model of communication, what is the primary function of the 'encoder'?
(1) To interpret the message
(2) To transmit the message
(3) To convert the message into signals
(4) To receive the message

(JUNE 2025)

33. Arrange the following communication models in chronological order of their introduction:
A. Schramm's Interactive Model
B. Berlo's SMCR Model
C. Riley and Riley
D. Jakobsen's Model
E. Shannon and Weaver Model
Choose the correct answer from the options given below:
(1) E, A, D, C, B (2) D, B, A, E, C
(3) B, A, E, D, C (4) E, D, B, C, A

ANSWER KEY									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(2)	(3)	(3)	(3)	(1)	(1)	(2)	(3)	(2)	(3)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(4)	(2)	(4)	(4)	(4)	(3)	(4)	(2)	(3)	(1)
21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
(4)	(1)	(2)	(3)	(4)	(3)	(4)	(1)	(4)	(4)
31	**32**	**33**							
(3)	(3)	(1)							

EXPLANATIONS

1. Explanation: (2)
Warren Weaver identified three levels of problems in the communication process: technical (accuracy of signal transmission), semantic (precision of meaning conveyed), and effectiveness (impact of the message on receiver behavior). The interpreter level is not part of Weaver's model.

2. Explanation: (3)
Harold Lasswell's model is a classic linear model of communication. In many LIS/communication-science treatments used for examinations, Schramm's model—though interactive—is often grouped with early linear transmission frameworks when contrasted with evolutionary or non-linear models like Dance's Helical and Becker's Mosaic.

3. Explanation: (3)
The Transactional Model of Communication was suggested by **Dean Barnlund.** This model views communication as a simultaneous, dynamic process in which all participants are senders and receivers at the same time, emphasizing feedback, context, and mutual influence.

4. Explanation: (3)
The passage defines self-links as hyperlinks where both the source page and the target page belong to the same website or domain, distinguishing them from links pointing to external sites.

5. Explanation: (1)
The passage explicitly states that commercial search engines report the number of pages with self-links, not the total number of self-links, which is why the study counts self-sitations instead of self-links.

6. Explanation: (1)
The passage clearly states that the self-linking and self-linked measures were calculated for a number of academic institutions on the Web, analogous to self-citing and self-cited measures used for journals.

7. Explanation: (2)
The passage states that web links can lead to a different site on the WWW or to another page within the same site or domain. There is no mention that links lead to all available e-documents, so d is incorrect.

8. Explanation: (3)
Self-sitations are counted for technical reasons because commercial search engines report the

number of pages with self-links, not the total number of self-links.

9. Explanation: (2)

According to Sanda Erdelez, the Information Encountering (IE) experience follows a sequential process:

- **Stopping –** becoming aware of unexpected but useful information
- **Examining –** evaluating the relevance of the encountered information
- **Capturing –** saving or recording the information for later use
- **Returning –** going back to the original task

10. Explanation: (3)

Dance's Helical Spiral communication model is a non-linear model. It illustrates communication as an ongoing, dynamic process where the sender and receiver continuously interact, rather than following a straightforward, one-way path. The "spiral" represents the continuous, evolving nature of communication over time.

11. Explanation: (4)

- **Kinesics communication — Facial Expression, gestures, eye movement:** Kinesics refers to body movements used in communication, including facial expressions, gestures, and eye movement.
- **Haptics communication — Use of touch to communicate:** Haptics involves communication through touch, such as a handshake or a pat on the back.
- **Proxemics communication — Use of interpersonal space:** Proxemics relates to how people use personal space and distance in communication, such as intimate, personal, social, and public spaces.
- **Iconics communication — Interpretation of symbolism:** Iconics involves symbolic representation, often using signs, symbols, or images to convey meaning.

12. Explanation: (2)

Haptics refers to communication through touch, such as handshakes, pats, hugs, or other physical contact, conveying emotions, support, or social cues. It is a key form of non-verbal communication distinct from facial expressions, personal space, or symbolic gestures.

13. Explanation: (4)

Ludwig Von Bertalanffy proposed the General System Theory (GST), which laid the foundation for understanding communication as a system of interrelated components. This theory emphasizes the holistic and dynamic nature of systems, influencing later communication models and information science.

- **Robert T. Craig –** Known for communication theory frameworks.
- **W.R. Ashby –** Developed concepts in cybernetics and system regulation.
- **Shannon and Weaver –** Proposed the Mathematical Model of Communication, focused on signal transmission.

14. Explanation: (4)

The **ABX model of communication** was developed by **Theodore M. Newcomb**. It explains communication as a social process involving **A (sender)**, **B (receiver)**, and **X (object or issue)**, focusing on how communication maintains or restores balance and shared orientation between A and B toward X.

15. Explanation: (4)

- **The Dance/Lasswell Model —** proposed by Harold Dwight Lasswell (1948), one of the earliest linear formulations of communication.
- **Interactive Model —** developed by Wilbur Schramm (early–mid 1950s), introduced feedback into communication.
- **SMCR Model —** proposed by David Kenneth Berlo (1960), structured communication as Source–Message–Channel–Receiver.
- **Circular Model —** given by Lee Thayer (late 1960s), emphasizing continuous, circular communication.

16. Explanation: (3)

The passage states that WhatsApp communication has been encrypted since 2016, which gives the platform an aura of security and trust and distinguishes it from platforms known to compromise user privacy. This encryption is identified as the primary reason for public trust, even though scholars debate its effectiveness and implications.

17. Explanation: (4)

Santos and Faure argue that WhatsApp's end-to-end encryption is performative, meaning it is presented as a feature for public reassurance rather than reflecting a core value or foundational commitment of the company. The passage explicitly contrasts encryption as an appearance of security with doubts about the company's underlying priorities.

18. Explanation: (2)

The passage notes that scholars consider WhatsApp a "safer" space because it is an encrypted chat application, which enables citizens and activists to share information and engage in civic activities,

especially in contexts where legacy media and social media are heavily censored or surveilled by the state.

19. Explanation: (3)
End-to-end encryption is perceived to limit surveillance, creating a sense of privacy and safety for users. The passage explicitly mentions that users believe surveillance is restricted, not unlimited. In contrast, encryption is linked to unregulated and unmoderated content circulation and the spread of meme culture. Hence, *unlimited surveillance* is not a perception associated with end-to-end encryption.

20. Explanation: (1)
Wardle and Derakhshan link *information disorder* on WhatsApp to the way content circulates in closed, encrypted groups without platform moderation. Because messages are not monitored or regulated by the platform, misinformation, disinformation, and malinformation spread easily.

21. Explanation: (4)
The passage explains how technological terms replaced their original meanings. It states that words like Apple and BlackBerry became proper nouns, symbolizing the shift into a technology-driven world. Hence, the correct choice is BlackBerry became a proper noun.

22. Explanation: (1)
The passage highlights how meanings have shifted in the digital age, noting that *"twittering"* now refers to online communication rather than birdsong. This example illustrates the transition into the Web/Reference 2.0 universe.

23. Explanation: (2)
The passage explicitly states, "we have… entered the universe of Reference 2.0. This universe has moved at such a fast clip…" Hence, it is the Universe of Reference 2.0 that is described as evolving rapidly.

24. Explanation: (3)
The passage clearly states that "the goal of effective reference remains timeless, namely, the satisfaction of the user." Hence, the correct option is to satisfy the user.

25. Explanation: (4)
The passage states that with Web 2.0, *mass participation and web socialization* have become both the norm and the expectation. Hence, the correct option is Mass participation.

26. Explanation: (3)
Elihu Katz, Michael Gurevitch, and Haas proposed that "a number of basic human needs can be identified from the social and psychological functions of the mass media." This statement is part of their work on understanding the role of mass media in fulfilling various social and psychological needs.

27. Explanation: (4) (c), (d) and (e) only
In Tefko Saracevic's Stratified Model (1997), when viewed from the human side, the strata are:

- **Cognitive:** This refers to the mental processes of the user, such as understanding, interpreting, and reasoning.
- **Affective**: This involves the user's emotions, attitudes, and feelings during the interaction with the system.
- **Situational**: This relates to the context or environment in which the interaction takes place.

28. Explanation: (1)
Semiotics is the study of signs, symbols, and codes and how they convey meaning. It examines how signs represent ideas, objects, or concepts in language, media, and culture, helping us understand communication, interpretation, and the construction of meaning in human interactions and information systems.

29. Explanation: (4)
(A)-(II), (B)-(III), (C)-(IV), (D)-(I)

- **Charles E Osgood's Model — 1954:** Osgood's model of communication was developed in 1954, focusing on the circular process of communication.
- **Harold D Lasswell's Model — 1948**: Lasswell's model, which outlines the communication process, was introduced in 1948.
- **Shannon and Weaver's Model — 1949**: This foundational communication model was published in 1949 by Shannon and Weaver.
- **George Gerbner's Model — 1956**: Gerbner's model, focusing on mass communication, was developed in 1956.

30. Explanation: (4)
The **grapevine** refers to the informal communication network in organizations. It spreads information through unofficial channels, often via word-of-mouth, rumors, or casual conversations, complementing formal communication structures.

31. Explanation: (3) D, C, A, B
The communication processes arranged in decreasing order of people involved:

- **Mass Communication** – One-to-many; reaches a large audience via media.
- **Group Communication** – One-to-few; information shared within a small group.
- **Interpersonal Communication** – between two individuals.
- **Intra-personal Communication** – communication within oneself.

32. Explanation: (3)

In Shannon and Weaver's model of communication, the encoder's primary function is **to convert the message into signals** (such as electrical impulses, sound waves, etc.) that can be transmitted through the communication channel. This step is essential to make the message suitable for transmission to the receiver.

33. Explanation: (1) E, A, D, C, B

The correct chronological order of the communication models based on their introduction is:

- **Shannon and Weaver Model** (1949): The first model of communication, focusing on the linear process of communication with sender, message, and receiver.
- **Schramm's Interactive Model** (1954): Introduced the concept of shared fields of experience between sender and receiver, making communication interactive.
- **Jakobsen's Model** (1959): Focused on the role of context and emphasized the idea of the message being produced and received through various communicative functions.
- **Riley and Riley** (1971): Introduced a model focusing on the interactive and complex nature of communication, looking at communication as a more dynamic process.
- **Berlo's SMCR Model** (1960): Focused on the source, message, channel, and receiver as the primary components of communication.

Unit 1.6: Information Industry - Generators, Providers and Intermediaries

Previous Year Exam Questions

(JAN 2017)

1. Assertion (A): 'Information Economy' which is based on the premise that, information has economic value and as such requires an 'Information Market Place' in which such value can be exchanged, holds no good in the contemporary information age.
Reason (R): Information as a valuable resource occupies a slum dwelling in the town of economics, as this economic reality runs counter to the popular and historic notion that, "information is free".
Codes:
(1) (A) is true, but (R) is false.
(2) (A) is false, but (R) is true.
(3) Both (A) and (R) are true.
(4) Both (A) and (R) are false

(NOV 2017)

2. Who is responsible for development and maintenance of UGC official website?
(1) MHRD (2) Do E
(3) NIC (4) INFLIBNET

(NOV 2017)

3. Which of the following components are essential for National Information Policy?
(a) Legislation framework
(b) E-Journal consortium
(c) Digital repositories
(d) National bibliography
Code:
(1) (a) and (b) are correct
(2) (a) and (d) are correct
(3) (b) and (c) are correct
(4) (b) and (d) are correct

(NOV 2017)

4. SWAYAM, the free online education was developed by:
(a) IIT, Madras
(b) AICTE
(c) IIM, Ahmedabad
(d) MHRD, Govt. of India
Code:
(1) (b) and (d) are correct
(2) (c) and (d) are correct
(3) (a) and (b) are correct
(4) (a) and (d) are correct

(NOV 2017)

5. 'Embargo' in the context of 'Book Trade' is:
(a) a limitation on access, to older resources by the publishers.
(b) perpetual ban on the access of the given resources of a publisher.
(c) a limitation on access to resources placed by publishers.
(d) a limitation on access to the resources usually to prevent the cancellation of individual subscription.
Code:
(1) (c) and (d) are correct
(2) (a) and (b) are correct
(3) (a) and (c) are correct
(4) (a), (c) and (d) are correct

(NOV 2017)

6. Match the following threats to 'information society' with the corresponding concept:

List-I	List-II
(a) Compromises intellectual property	(i) Confiscation of equipment or information
(b) Deliberate acts of theft	(ii) Unauthorized access to data
(c) Deliberate acts of information extortion	(iii) Piracy
(d) Deliberate acts of espionage or trespass	(iv) Blackmail of information disclosure.

Code:

(a) (b) (c) (d)

(1) (iii) (iv) (i) (ii)
(2) (iv) (ii) (iii) (i)
(3) (i) (ii) (iii) (iv)
(4) (iii) (i) (iv) (ii)

(NOV 2017)

7. Match the following with corresponding explanation:

List-I	List-II
(a) Embargo	(i) Publisher's list of new titles
(b) Big Deal	(ii) Authorization for regular shipment of new editions of specific products
(c) Front List	(iii) Publisher's restriction one-resource access
(d) Standing order	(iv) Large bundled e-journal package of single publisher on discounted price

Code:

(a) (b) (c) (d)

(1) (iii) (iv) (i) (ii)
(2) (i) (iv) (iii) (ii)
(3) (iv) (ii) (i) (iii)
(4) (ii) (iii) (i) (iv)

(JULY 2018)

8. 'Wikipedia' owned by the non-profit "Wikipedia Foundation" was launched on January 15, 2001 by:

(1) Jimmy Wells and Larry Sanger
(2) Jimmy Wells and Vincent J. Aceto
(3) Larry Sanger and W. Kathy
(4) William A. Ford and W. Kathy

(June 2020)

9. Identify the intermediaries of an information industry among the following

(a) Invisible colleges
(b) Online Vendors
(c) Computer Programmers
(d) Students and Research Scholars

Choose the most appropriate answer from the options given below:

(1) (a) and (b) only (2) (b) and (c) only
(3) (c) and (d) only (4) (a) and (d) only

(June 2021)

10. "Edanz", a journal suggestion service is associated with which leading publisher?

(1) Elsevier (2) Sage
(3) Springer (4) Wiley

(June 2021)

11. Which of the following are the Product and Services of OCLC?

(a) E. Z. Proxy
(b) Librarians yellow pages
(c) Green Glass
(d) Cataloguing Distribution Service

Choose the correct answer from the options given below:

(1) (a) and (c) only (2) (a) and (b) only
(3) (b) and (c) only (4) (c) and (d) only

Read the given passage and answer the questions that follows:

A century ago, library Services were focused on architecture, physical workflow design and urban planning. Planning the physical environment is still important, but more often than not, it serves as the backdrop for patrons operating in a world dominated by online information sources. The experience and preference of library users is being affected by other, non-library services such as Amazon, Google, Facebook, Twitter, and social question and answer sites, etc., Library catalogs have long been the point of discovery and delivery of content. People want to find information quickly and conveniently, and they expect the interface to be familiar to them. Unfortunately, libraries have not consistently employed their usage data to fully mobilize discovery services in the same way as Google. Providing seamless points of access to the content people discover through other online services could be a point of distinction for libraries. A study concluded that access-not discovery-is the major challenge for today's information seekers, who may be better served by online library catalogs that improve delivery and provide more links to more online content. It is true that services like Google help people discover content more quickly and conveniently, but their search results often leave them wanting more. When faced with sifting through a lot of content, people want search engines that return information relevant to their search queries in order to minimize their need to evaluate the content.

(JULY 2022)

12. Major problem with tools like Google and Twitter is ___ .

(1) Relevancy of information