Library and Information Science Paper

1. A Boolean query using only AND and NOT is

(A) Fuzzy query

(B) Conjunctive query

(C) Routing query

(D) Probabilistic query

Answer: (B)

2. In which year Janet (U.K.) was established ?

(A) 1957

(B) 1983

(C) 1987

(D) 1989

Answer: (B)

3. Who developed Repertory Grid Technique for assessing how the users view the world from their own perspective ?

(A) A. Delphi

(B) Calvin Mooer

(C) J. Belkin

(D) George Kelley

Answer: (D)

4. A chart in which some figures are broken down into its constituent parts is

(A) Bar chart

(B) Column chart

(C) Pie chart

(D) Band chart

Answer: (C)

5. OAISTER is an example of digital libraries architecture based on

(A) CORBA

(B) Software Agents Architecture

(C) Federated Database System

(D) Metadata Harvesting

Answer: (D)

6. RSS feed is a tool of

(A) Web 2.0

(B) Web 1.0

(C) Web 3.0

(D) Graphic Design

Answer: (A)

7. The use of more words or symbols than are necessary to convey a meaning results in

(A) Efficiency

(B) Accuracy

(C) Redundancy

(D) Precision

Answer: (C)

8. A rubber stamp impressed on the verso of title page giving information concerning the records and processing of each individual book acquired is called

(A) Book stamp

(B) Process stamp

(C) Date stamp

(D) Accession stamp

Answer: (D)

9. Ontology is

(A) A Documentation service

(B) An Indexing method

(C) Classification of Internet based documents

(D) Cataloguing of Internet based documents

Answer: (C)

10. In colon classification, which mnemonic is displayed in the use of digit '4' as for pathology, disease, transport, hybrid etc. ?

(A) Seminal

(B) Systematic

(C) Scheduled

(D) Alphabetical

Answer: (A)

11. Name the similarity measure in which similarity of a document is adjusted such that the similarity of a document to itself is 1.

(A) Cosine measure

(B) Distance measure

(C) Swet's measure

(D) Normalised similarity measure

Answer: (D)

12. Which law states that "An information retrieval system will tend not to be used whenever it is more painful and troublesome for a customer to have information than for him not to have it" ?

(A) Bradford's Law

(B) Mooer's Law

(C) Ziff's Law

(D) Lotka's Law

Answer: (B)

13. Who is the compiler of Web- Bibliography of Rabindranath Tagore ?

(A) Bengal Library Association

(B) RRRLF

(C) National Library of India

(D) IASLIC

Answer: (B)

14. Who are the publishers of 'Year Book on Human Rights' ?

(A) United Nations

(B) Ministry of Law, Govt. of India

(C) Europa Publishers

(D) R.R. Bowker

Answer: (A)

15. ASTINFO stands for

(A) Asian Scientific and Technological Information Network

(B) Association of Scientific and Technological Information Scientists in Asia

(C) International Network for Exchange of Science and Technology Information

(D) Regional Network for the Exchange of Information and Experience in Science and Technology in Asia and the Pacific

Answer: (D)

16. IFLA's programme for capacity building of library associations is named as

(A) BSLA

(B) ALP

(C) CLM

(D) PAC

Answer: (A)

17. The measure of certainty or predictability is called as

(A) Entropy

(B) Feedback

(C) Redundancy

(D) Distortion

Answer: (C)

18. A characteristic in which information tends to leak and the more it leaks, the more we have, is

(A) Synergetic characteristics

(B) Diffusive characteristics

(C) Compressible characteristics

(D) Shareable characteristics

Answer: (B)

19. Which of the following organizations are associated with the concept of '1000 crore plan to link 9000 libraries in India' ?

(i) National Library of India

(ii) National Mission on Libraries

(iii) INFLIBNET

(iv) RRRLF

Codes :

(A) (ii) and (iii) are correct.

(B) (iii) and (iv) are correct.

(C) (i) and (iv) are correct.

(D) (ii) and (iv) are correct.

Answer: (D)

20. Which of the following are the core content of ISI web of knowledge ?

(i) Current Contents

(ii) ISI proceedings

(iii) Derwent Information Index

(iv) AGRICOLA

Codes :

(A) (i), (iv) and (iii)

(B) (i), (ii) and (iii)

(C) (ii), (iii) and (iv)

(D) (i), (ii) and (iv)

Answer: (B)

21. Which of the following are value added information services ?

(i) Aggregator Service

(ii) Referral Service

(iii) Document Delivery Service

(iv) Research Reports/Market Survey Reports

Codes :

(A) (i) and (iii) are correct

(B) (ii) and (iv) are correct

(C) (ii) and (iii) are correct

(D) (i) and (iv) are correct

Answer: (D)

22. Identify the methods used for plagiarism detection :

(i) Term occurrence analysis

(ii) API Testing

(iii) Citation-based plagiarism detection

(iv) Local similarity assessment

Codes :

(A) (i), (ii) and (iv) are correct.

(B) (i), (iii) and (iv) are correct.

(C) (ii), (iii) and (iv) are correct.

(D) (i), (ii) and (iii) are correct.

Answer: (B)

23. Which of the following are the main role operators of PRECIS ?

(i) Key System

(ii) Action

(iii) Performer of action

(iv) Form of Document

Codes :

(A) (i), (ii) and (iii)

(B) (ii), (i) and (iv)

(C) (i), (iii) and (iv)

(D) (ii), (iii) and (i)

Answer: (A)

24. Which of the following are the advantages of RFID technology in libraries ?

(i) Tags can be read inside a case.

(ii) Hundred of tags can be read at a time.

(iii) Cheaper than Barcode

(iv) More security and Privacy

Codes :

(A) (i) and (iii) are correct

(B) (i) and (ii) are correct

(C) (ii) and (iii) are correct

(D) (iii) and (iv) are correct

Answer: (B)

25. Which of the following are not Change Management Models ?

(i) Kurtlewin's Model

(ii) Beer's Model

(iii) Lasswell's Model

(iv) Epidemic Model

Codes :

(A) (i) & (iii) are correct.

(B) (ii) & (iii) are correct.

(C) (iii) & (iv) are correct.

(D) (ii) & (iv) are correct.

Answer: (C)

26. Which of the following are the International Cooperative Serials Control Program ?

(i) CONSER

(ii) BIBCO

(iii) SERLINE

(iv) CATLINE

Codes :

(A) (i) & (ii) are correct.

(B) (ii) & (iii) are correct.

(C) (i) & (iii) are correct.

(D) (ii) & (iv) are correct.

Answer: (C)

27. Which of the following are called 'path finders' to the literature ?

(i) Bibliography

(ii) Catalogue

(iii) Shelf List

(iv) Indices and Abstracts

Codes :

(A) (i) & (ii) are correct

(B) (i), (ii) & (iv) are correct

(C) (i) & (iv) are correct

(D) (ii) & (iii) are correct

Answer: (C)

28. Which of the following facilitate informal communication on the web ?

(i) Split Screens

(ii) Chat

(iii) Wikis

(iv) RSS feeds

Codes :

(A) (i) & (iii) are correct

(B) (ii) & (iii) are correct

(C) (iii) & (iv) are correct

(D) (i) & (ii) are correct

Answer: (D)

29. Which of the following associations have sponsored the Text Encoding Initiatives (TEI) ?

(i) ACL

(ii) ACRL

(iii) ALLC

(iv) ACH

Codes :

(A) (i), (ii) and (iii) are correct

(B) (ii), (iii) and (iv) are correct

(C) (i), (iv) and (ii) are correct

(D) (i), (iii) and (iv) are correct

Answer: (D)

30. Which of the following are limitations of digital libraries ?

(i) Full text searching

(ii) Operational costs

(iii) Rights management

(iv) Hyper text linking

Codes :

(A) (ii), (iii) and (iv) are correct

(B) (ii) and (iii) are correct

(C) (i), (ii) and (iv) are correct

(D) (i) and (iv) are correct

Answer: (B)

31. The sources of hypothesis, as enunciated by P.V. Young are

(i) Genealogy

(ii) Culture

(iii) Experiment

(iv) Analogy

Codes :

(A) (i), (ii) and (iii) are correct

(B) (i), (iii) and (iv) are correct

(C) (i), (ii) and (iv) are correct

(D) (ii), (iii) and (iv) are correct

Answer: (C)

32. "Women are more in library profession than men." Identify the variable in the statement.

(i) Men and women are independent variables.

(ii) Men and women are dependent variables.

(iii) Library profession is a dependent variable.

(iv) Library profession is an independent variable.

Codes :

(A) (i) and (iii) are correct

(B) (i) and (iv) are correct

(C) (ii) and (iii) are correct

(D) (ii) and (iv) are correct

Answer: (A)

33. Systematic sampling is

(i) A type of probability sampling.

(ii) A type of non-probability sampling.

(iii) In which first unit is selected randomly.

(iv) Selected on the basis of specified characteristics.

Codes :

(A) (i) and (iii) are correct

(B) (i) and (iv) are correct

(C) (iii) and (iv) are correct

(D) (ii) and (iv) are correct

Answer: (A)

34. Who are associated with the digitization of the collection of Rabindra Bhavan, Vishav Bharati ?

(i) RRRLF

(ii) C-DAC

(iii) NIC

(iv) National Library of India

Codes :

(A) (i) and (iii) are correct

(B) (i) and (ii) are correct

(C) (ii) and (iv) are correct

(D) (iii) and (iv) are correct

Answer: (A)

35. Which of the following are the Pillars of SCONUL Seven Pillar Model ?

(i) Recognising Information need

(ii) Locating and accessing information

(iii) Using information technology for assessing information need.

(iv) Comparing and evaluating information.

Codes :

(A) (i), (ii) and (iii) are correct

(B) (i), (ii) and (iv) are correct

(C) (ii), (iii) and (iv) are correct

(D) (i) and (iv) are correct

Answer: (B)

36. Resource Description Framework consists which of the following ?

(i) Subject

(ii) Thread

(iii) Predicate

(iv) Object

Codes :

(A) (i), (ii) and (iii)

(B) (ii), (iii) and (iv)

(C) (iii), (iv) and (i)

(D) (iv), (i) and (ii)

Answer: (B)

37. Arrange the following factors of TQM in the order of their implementation :

i. Development of Human Resource Management

ii. Standardisation of Work process

iii. Improvement in Internal Organisation Management

iv. Quality Management Procedures

Codes :

(A) ii iii i iii

(B) iii iv ii i

(C) iv iii ii i

(D) ii iv iii i

Answer: (D)

38. Arrange the following according to their year of emergence :

i. ADINET

ii. SIRNET

iii. MANLIBNET

iv. DELNET

Codes :

(A) i iv ii iii

(B) iv ii iii i

(C) iv iii ii i

(D) iii i iv ii

Answer: (B)

39. Arrange the following according to their year of origin :

i. Indian National Bibliography

ii. British National Bibliography

iii. Cumulative Book Index

iv. Books in Print

Codes :

(A) i ii iv iii

(B) iii iv ii i

(C) ii iii iv i

(D) iv i ii iii

Answer: (B)

40. Arrange the following according to their levels :

i. Canons of Cataloguing

ii. Laws of Library Science

iii. General Normative Principles

iv. Principles of Cataloguing

Codes :

(A) ii iv i iii

(B) i iii ii iv

(C) iv i iii ii

(D) iii ii i iv

Answer: (D)

41. Arrange the following according to their year of emergence :

i. LISA

ii. Dissertation Abstracts

International

iii. Indian Science Abstracts

iv. Indian Library & Information Science Abstracts

Codes :

(A) iii iv ii i

(B) iv iii i ii

(C) ii i iii iv

(D) i ii iii iv

Answer: (C)

42. Arrange the following according to their year of emergence :

i. INIS

ii. AGRIS

iii. NATIS

iv. UNISIST

Codes :

(A) iii iv ii i

(B) iv i iii ii

(C) ii iv i iii

(D) i iii iv ii

Answer: (B)

43. Arrange in sequence the following Model Public Library Acts/Bills in India :

i. Model Public Library Bill by M.D. Sen Committee

ii. Model Public Library Act by S.R. Ranganathan

iii. Model Public Library Act of ILA

iv. Model Public Library Bill by working group of Planning Commission

Codes :

(A) i ii iii iv

(B) ii i iv iii

(C) iii iv i ii

(D) iv iii ii i

Answer: (B)

44. Arrange in sequence the medium used for 'Virtual Reference' in the order of their progress.

i. Web form

ii. Ask a Service

iii. E-mail

iv. Social Networking

Codes :

(A) i ii iii iv

(B) ii iii iv i

(C) iii i ii iv

(D) iv ii i iii

Answer: (C)

45. Arrange in order the process of stock rectification and stock verification as suggested by S.R. Ranganathan :

i. Checking with charged tray

ii. Shelf Rectification

iii. Shelf checking

iv. Deciding the Quota

Codes :

(A) iii i iv ii

(B) iv i ii iii

(C) iv ii iii i

(D) ii iv i iii

Answer: (B)

46. Match the following :

List – I	List – II
a. Outdated Information	i. Information Diffusion
b. Condensed Information	ii. Obsolete Information
c. Message	iii. Compressible Information
d. Vintage model	iv. Understanding

Codes :

    a b c d

(A) iv iii ii i

(B) i ii iv iii

(C) iii iv ii i

(D) ii iii iv i

Answer: (D)

47. Match the following :

List – I	List – II
a. Technique for identifying the theme of a document	i. Cataloguing
b. Prussian Instruction ROM	ii. Standard for encoding data on CD-
c. ISO-9960	iii. Data Transmission Speed
d. Baud	iv. Bibliographic coupling

Codes :

    a b c d

(A) iv i ii iii

(B) i ii iii iv

(C) ii iii iv i

(D) iii ii i iv

Answer: (A)

48. Match the following :

List – I	List – II
a. Maurice B. Line	i. Resource Management in Academic Libraries
b. David Baker	ii. Planning Academic and Research Library Buildings
c. Peter Brophy	iii. Academic Library Management
d. K.D. Metcalf	iv. The Academic Libraries

Codes :

    a b c d

(A) iii i iv ii

(B) i ii iii iv

(C) iv i ii iii

(D) ii iii i iv

Answer: (A)

49. Match the following :

List – I   List – II

a. Digital Library   i. Collections are stored in electronic media formats and accessible via computers

b. Hybrid Library   ii. Access to electronic information in a variety of remote locations through a local online catalogue or other gateway

c. Virtual Library   iii. Provides services in a mixed mode electronic and paper environment

d. Electronic Library   iv. Collection of electronic resources that provides direct/indirect access to a systematically organised collection of digital objects

Codes :

    a b c d

(A) iv iii ii i

(B) i iii iv ii

(C) iii i ii iv

(D) ii ii i iii

Answer: (A)

50. Match the following :

List – I   List – II

a. Survey of requirements   i. Design phase

b. Determining cost efficiency and effectiveness   ii. Installation phase

c. Review of the programs and their goals   iii. Analysis phase

d. Complete change over basics of system   iv. Evaluation phase

Codes :

    a b c d

(A) i ii iii iv

(B) ii iii iv i

(C) iii iv i ii

(D) iv i ii iii

Answer: (C)

51. Match the following :

List – I	List – II
a. Nadir to Ascending	i. Hypothesizing
b. Ascending to Zenith	ii. Verification
c. Zenith to Descending	iii. Deductive
d. Descending to Nadir	iv. Empirical

Codes :

    a b c d

(A) i iii ii iv

(B) ii iv i iii

(C) iii i iv ii

(D) iv i iii ii

Answer: (D)

52. Match the following characteristics of DBMS with respective activity :

List – I	List – II
a. Reduction of redundancy	i. Encryption
b. Data sharing	ii. Centralized control
c. Data integrity	iii. No. Of application programs
d. Data security	iv. Accurate and consistent data

Codes :

    a b c d

(A) ii iii iv i

(B) iv iii ii i

(C) iii iv i ii

(D) i ii iv iii

Answer: (A)

53. Match the following :

List – I   List – II

a. XML   i. Joe Becker

b. METS   ii. Defence Organizations

c. UNICODE   iii. W3C

d. Cryptography   iv. Library of Congress

Codes :

   a b c d

(A) i ii iii iv

(B) iii iv i ii

(C) ii iii iv i

(D) iv i ii iii

Answer: (B)

54. Match the following :

List – I   List – II

a. Social Microscope   i. Cluster Technique

b. Fundamental Research   ii. No control over variance

c. Ex-post facto research   iii. Case study method

d. Multi stage random sampling   iv. Knowledge for knowledge sake

Codes :

   a b c d

(A) i ii iii iv

(B) iii iv ii i

(C) ii iii i iv

(D) iv i ii iv

Answer: (B)

55. Match the following :

List – I   List – II

a. Estimation of future expenditure on the basis of previous year expenditure   i. Programme

b. Rs. 15 per student and Rs. 200/- per teacher   ii. Comparison

c. 6.5%-10% of university budget for the development of library   iii. Per capita

d. Activities to be accomplished by the library   iv. Proportional

Codes :

    a b c d

(A) ii iii iv i

(B) i ii iii iv

(C) iii iv i ii

(D) iv i ii iii

Answer: (A)

56. Match the following :

List – I   List – II

a. Identification of user categories   i. Market positioning

b. Prioriting user groups and services   ii. Segmentation\

c. Information seeking behaviour of users   iii. Marketing Mix

d. Product, price, place, promotion   iv. Consumer analysis

Codes :

    a b c d

(A) i ii iii iv

(B) ii i iv iii

(C) iii iv i ii

(D) iv iii ii i

Answer: (B)

57. Match the following :

List – I   List – II

a. FRBR	i. Paul Otlet
b. POPSI	ii. IFLA
c. UDC	iii. G. Bhattacharya
d. www	iv. Tem Berners-Lee

Codes

    a b c d

(A) ii i iii iv

(B) ii iii i iv

(C) ii iv i iii

(D) iv ii iii i

Answer: (B)

58. Match the following :

List – I	List – II
a. Index Translationum	i. NISCAIR
b. Translation Register Index (TR-I)	ii. NTC, Chicago
c. World Trans Index	iii. UNESCO
d. Common-wealth Index of Unpublished Transtations	iv. ITC, Delft, Netherlands

v. ASLIB

Codes :

    a b c d

(A) ii iii i iv

(B) iii ii iv v

(C) v iii i ii

(D) iv ii v iii

Answer: (B)

59. Match the following evaluation criteria of print materials :

List – I	List – II
a. Authority	i. Typography
b. Scope	ii. Stated purpose

c. Format   iii. Publisher's reputation

d. Arrangement   iv. Cross references

Codes :

   a b c d

(A) ii iii i iv

(B) i iv ii iii

(C) iii ii i iv

(D) iii iv ii i

Answer: (C)

60. Match the following :

List – I   List – II

a. Measure of similarity between two documents   i.
Proportion of coefficient association

b. Similarity measure based on overlap in terms between two documents   ii.
Rectangular distance coefficient

c. Document similarity based solely on the occurrence of words   iii.
Coefficient of association

d. Similarity measure which is based on the city block distance between two documents   iv.
Lexical similarity

Codes :

   a b c d

(A) i iii ii iv

(B) iii i ii iv

(C) iii i iv ii

(D) ii iii iv i

Answer: (C)

61. Match the following authors with their statements on information characteristics :

List – I   List – II

a. Peter Drucker   i. Human and shareable

b. Borlando Cleveland   ii. Quantity, Quality, Life

c. K.J. McGarry   iii. Natural and man-made physical resources

d. Williams   iv. Resources by analogy with classic resources of labour

Codes :

     a b c d

(A) iii i iv ii

(B) iii ii i iv

(C) i iii iv ii

(D) i iv ii iii

Answer: (A)

62. Match the following :

List – I   List – II

a. Saraswati Mahal Library, Tanjavur (1535)   i. Lord Curzon

b. Khuda Baksh Oriental Public Library, Patna (1876)   ii. Telugu Nayakas

c. Library of Asiatic Society of Bengal (1784)   iii. Maulana M.B. Khan

d. Imperial Library, Calcutta (1901)   iv. Sir G. William Jones

Codes

     a b c d

(A) iii ii iv i

(B) ii iii i iv

(C) ii iii iv i

(D) iii ii i iv

Answer: (C)

63. Assertion (A) : With the introduction of Internet, need for reference librarians has been minimised to fulfil the users reference needs.

Reason (R) : FAQ facility on internet is substituting the need for human interface in libraries.

Codes :

(A) Both (A) and (R) are partially true.

(B) Both (A) and (R) are true.

(C) Both (A) and (R) are false.

(D) (A) is true but (R) is false.

Answer: (A)

64. Assertion (A) : Approaches to Research is not dependent on Epistemologies.

Reason (R) : Scientific research relies on the application of the scientific method.

Codes :

(A) Both (A) and (R) are true.

(B) Both (A) and (R) are false.

(C) (A) is true and (R) is false.

(D) (R) is true and (A) is false.

Answer: (A)

65. Assertion (A) : According to the Third Law of Librarianship given by Michael Gorman, we need to use technology intelligently to enhance service.

Reason (R) : Technology is used to solve problems and improve services and achieve costeffectiveness rather than adopted for its own sake.

Codes :

(A) (A) is true, but (R) is false.

(B) Both (A) and (R) are true, but (R) is not correct explanation of (A).

(C) Both (A) and (R) are false.

(D) Both (A) and (R) are true.

Answer: (D)

66. Assertion (A) : All reference sources provide uptodate information in their respective categories.

Reason (R) : As these are compiled from primary sources of information.

Codes :

(A) Both (A) and (R) are true.

(B) Both (A) and (R) are false.

(C) (A) is false but (R) is partially true.

(D) (A) is true but (R) is false.

Answer: (C)

67. Assertion (A) : The hierarchy based classification schemes have a major role in the organization of the web.

Reason (R) : The 'hotlists' retrieved by robots based search engines use the technique of relevance of subject descriptors.

Codes :

(A) (A) is true, but (R) is false.

(B) (A) is false, but (R) is true.

(C) Both (A) and (R) are correct.

(D) Both (A) and (R) are wrong.

Answer: (A)

68. Assertion (A) : Performance Based Budgeting demands that the objectives and goals of agency be clear and performance measures and target to put in place.

Reason (R) : The key to success firmly rely upon its clear sense of mission and objectives which the funding agencies have proposed to reach them.

Codes :

(A) (A) is true, but (R) is false.

(B) (A) is false, but (R) is true.

(C) Both (A) and (R) are true.

(D) Both (A) and (R) are false.

Answer: (C)

69. Assertion (A) : Majority of University Libraries in India are not fully automated.

Reason (R) : University Libraries in India are meddling with automation of circulation activities.

Codes :

(A) (A) is true but (R) is false.

(B) (A) is false but (R) is true.

(C) Both (A) and (R) are true.

(D) Both (A) and (R) are false.

Answer: (C)

70. Assertion (A) : Mean, median and mode are the simple techniques to get exact averages for data analysis in research.

Reason (R) : These are the well accepted statistical techniques of research for data analysis of historical data.

Codes :

(A) (A) is false, but (R) is true.

(B) Both (A) and (R) are true.

(C) (A) is true but (R) is false.

(D) Both (A) and (R) are false.

Answer: (C)

71. Assertion (A) : Online Reference Service can be offered using IMs, SMs, VoIP, Video, Blogs, Websites and host of such other mechanisms.

Reason (R) : Majority of academic libraries in India are equipped with required infrastructure.

Codes :

(A) Both (A) and (R) are true.

(B) (A) is true, (R) is false.

(C) (A) is false, (R) is true.

(D) Both (A) and (R) are false.

Answer: (B)

72. Assertion (A) : Semantic web is an extension of www in which web contents cannot be expressed in natural language.

Reason (R) : Semantic web can be easily associated with spider web.

Codes :

(A) Both (A) and (R) are false.

(B) (A) is true, but (R) is false.

(C) Both (A) and (R) are true.

(D) (A) is false, but (R) is true.

Answer: (A)

73. Assertion (A) : BIOS is a set of programs that handles startup operations in a computer such as

power on, self tested and low level control for hardware.

Reason (R) : The graphical display at the beginning of the program prolongs the life of monitor.

Codes :

(A) Both (A) and (R) are true.

(B) (A) is false, but (R) is true.

(C) Both (A) and (R) are false.

(D) (A) is true, but (R) is false.

Answer: (D)

74. Assertion (A) : For providing an effective reference service, best & up to date reference collection is not as important as is the competent reference librarian.

Reason (R) : An efficient reference librarian can serve the users more effectively even in the absence of best reference collection.

Codes :

(A) (A) is true but (R) is false.

(B) Both (A) and (R) are true.

(C) (A) is false but (R) is true.

(D) Both (A) and (R) are false.

Answer: (B)

75. Assertion (A) : India's contribution to LIS literatures is decreasing.

Reason (R) : Authors find it more convenient to get their articles published in openaccess journals.

Codes :

(A) Both (A) and (R) are true.

(B) (A) is false, but (R) is true.

(C) Both (A) and (R) are false.

(D) (A) is true but (R) is false.

Answer: (B)