UGC NET - LIBRARY SCIENCE

MOCK TEST PAPER

- **PAPER - I**   *This paper contains 50 objective type questions.*

  Each question carries 2 marks.

  Attempt all the questions.

- **PAPER - II**   *This paper contains 100 objective type questions.*

  Each question carries 2 marks.

  Attempt all the questions.

- *Pattern of questions*   :   *MCQs*
- *Total marks (PAPER I & II)*   :   *300*
- *Duration of test*   :   *Paper I - 1 Hour*

     :   *Paper II - 2 Hours*

PAPER-I

1. In union budget 2018-19, the government announced setting up Ekalavya Model Residential School, Consider the following statement about it.

   (i) It will provide the best quality education to the tribal childrenin their own environment

   (ii) by 2022 it will be build in every block with more than 50% ST population.

   (iii) It will focus on preserving local art and culture.

   Which of the statement given above is/are correct?

   Select the answer using the codes given below:

   (1) i and ii only   (2) ii and iii only

   (3) iii only   (4) i, ii and iii

2. Which of the following statement is correct about the RISE by 2022 announced by government in Union budget 2018-19?

   (1) It is to step up investments in Education.

   (2) It is to step up investments in health.

   (3) It is to step up investments in telecommunication.

   (4) It is to step up investments in sports.

3. Which country to host the World Sustainable Development Summit – 2018 ?

(1) South Africa   (2) Nepal

(3) Brazil   (4) India

4. Which HRD Ministry-appointed committee is drafting new National Education Policy (NEP)?

(1) Ram Shanker Kureel committee

(2) K Kasturirangan committee

(3) V G S Rathore committee

(4) KJ Alphonse committee

5. With reference to Paris agreement on climate change, consider the following statements :

I. It was signed by 195 nations in Dec 2015 at Paris

II. The main aim is to keep a global temperature rise this century well below 3 degrees Celsius

III. It further aims to drive efforts to limit the temperature increase even further to 1.5 degrees Celsius above pre-industrial levels

Which of the above statements are correct ?

(1) I and II   (2) II and III

(3) I, II and III   (4) I and III

6. Which of the following statements are correct?

a. Parliament cannot alter the name and territory of J&K without the consent of the State legislature

b. The Union shall have the power to suspend the State Constitution on the ground of failure to comply with the directions given by the Union.

c. No proclamation of Emergency can be made by the President under Article 352 on the ground of "internal disturbance" in J&K without the concurrence of J&K Government

Which of the above statements are correct ?

(1) (a) and (b)   (2) (b) and (c)

(3) (a) and (c)   (4) (a), (b), (c)

7. **Assertion (A):** Global warming is the increase in Earth's near-surface air and ocean temperatures.

   Reason (R): The greenhouse effect is when water and carbon dioxide absorb outgoing infrared radiation, increasing the planet's temperature

   Choose the correct code:

   (1) Both (A) and (R) are correct   (2) Both (A) and (R) are incorrect,

   (3) (A) is true and (R) is true   (4) (A) is false and (R) is true

8. Which of these pairs are correctly matched ?

   a. The Vienna Convention : Protection of Ozone Layer

   b. Montreal Protocol : Substances that Deplete the Ozone Layer

   c. The Minamata Convention : Lead

   (1) a only

   (2) a and b only

   (3) c only

9. Representation of the People (Amendment and Validation) Bill, 2013, brought two key changes.These changes were :

   • Even if a person is prohibited from voting due to being in police custody or in jail,   he can file nomination for an election.

   • Definition of "disqualified" in the Act has been amended. disqualification has to be due to conviction for certain specified offences and can be on no other ground.

   • Anyone in prison or on the lawful custody of the police (other than preventive detention) is not entitled to vote.

   Select the correct answer using the codes given below.

   (1) I and ii only   (2) I and iii only

   (3) ii and iii only   (4) I, ii, iii

10. Match List – I and List – II and identify the correct code:

   a. World Health Day   i.16th September

   b. World Population Day   ii. 1st December

   c. World Ozone Day   iii. 11th July

   d. World AIDS Day   iv. 7th April

Codes:

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

11. **Assertion (A):** Water Borne diseases are largely caused by micro-organisms present in human or animal waste

    Reason (R): Typhoid fever is a Water Borne diseases.

    Choose the correct code:

    (1) Both (A) and (R) are correct

    (2) Both (A) and (R) are incorrect,

    (3) (A) is true and (R) is true

    (4) (A) is false and (R) is true

12. Which of the following statements regarding the meaning of research are correct

    a. Research refers to a series of systematic activity or activities undertaken to find out the solution of a problem

    b. It is a systematic, logical and an unbiased process where in verification of hypothesis data analysis, interpretation and formation of principles can be done

    c. It is an intellectual enquiry or quest towards truth

    d. It leads to enhancement of knowledge

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

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

13. Below are given two seat – research methods (Set-I) and data collection tools (Set-II). Match the two sets and indicate your answer by selecting the correct code:

A Experimental method	i Using primary secondary sources
B Ex post-facto method	ii Questionnaire
C Descriptive survey method	iii Standardized tests
D Historical method	iv Typical characteristics tests

Codes:

  A B C D

1. ii i iii iv
2. iii iv ii i
3. ii iii i iv
4. ii iv iii i

14. Consider the following statements :

a. Teaching is the stimulation, guidance, direction and encouragement of learning

b. Good teaching is as much about passion as it is about reason

c. Good teaching is also about bridging the gap between theory and practice

Which of the above statements are correct ?

(1) a and b   (2) b and c

(3) a and c   (4) a, b and c

15. Consider the following statements about NITI Aayog :

a. The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015

b. NITI Aayog fosters Cooperative Federalism

c. The President is its Chairman

Which of the statements given above is/are correct ?

(1) a and b only   (2) b and c only

(3) a and c   (4) a, b and c

16. Imagine you are working in an educational institution where people are of equal status. Which method of communication is best suited and normally employed in such a context?

(1) Horizontal communication   (2) Vertical communication

(3) Corporate communication   (4) Cross communication

17. An unsolicited e-mail message sent to many recipients at once is a

(1) Worm   (2) Virus

(3) Threat   (4) Spam

18. If the proposition 'All thieves are poor' is false, which of the following propositions can be claimed certainly to be true?

Propositions :

(1) Some thieves are poor.   (2) Some thieves are not poor.

(3) No thief is poor.   (4) No poor person is a thief.

19. It is communication of feelings, emotions, attitudes, and thoughts through body movements / gestures / eye contact, etc." which type of communication is this?

(1) Oral communication   (2) Written communication

(3) Non verbal communication   (4) None

Questions20-24 Study the follow ing graph carefully to answer the given questions.

PRODUCTION OF TWO COMPANIES A AND B (IN CRORE UNITS) OVER THE GIVEN YEARS
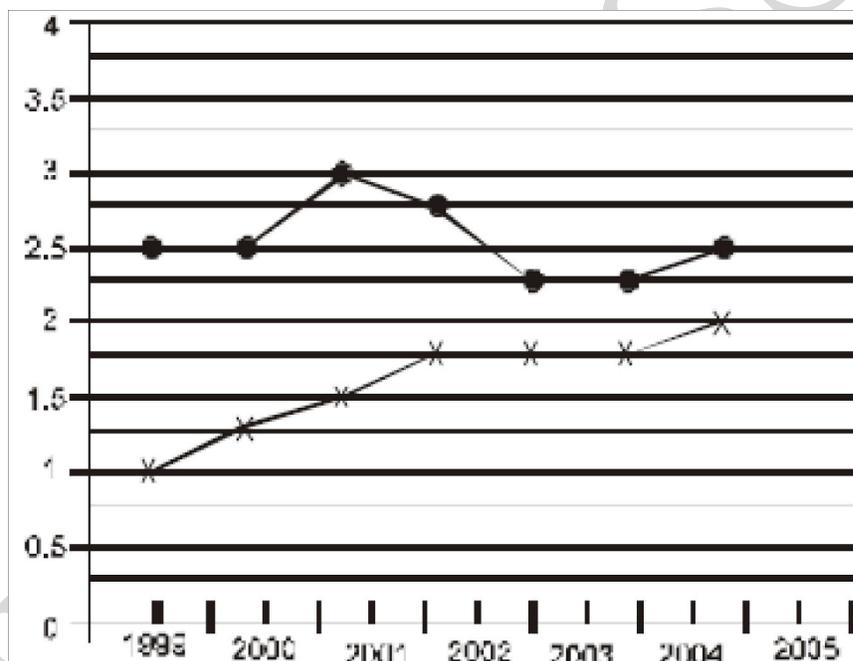
20. For Company A, how much is the percent increase in production in 2000 from 1999?

(1) 0.25   (2) 2.5

(3) 25   (4)12.5

21. How many units is the total production of Company A for the given years?

(1) 9 crores   (2) 17.75 crores

(3) 12.25 crores   (4) 11 crores

22. What is the difference in units produced by the two companies in 1999?

(1) 1,50,000,000   (2) 15,00,00,000

(3) 15,00,000   (4) 15,000

23. How many units is the approximate average production of Company B for the given years?

    (1) 3 crores   (2) 2.55 crores

    (3) 2.75 crores   (4) 2.25 crores

24. In which year did both the companies have no change in production from the previous year?

    (1) 2000   (2) 2002

    (3) 2003   (4) 2004

25. Which of the following collection techniques were used as the primary research methods for this study?

    (1) Qualitative   (2) Quantitative

    (3) Both (1) and (2)   (4) None

26. Which of the following problems was India faced with after Independence ?

    (1) Military attack from a country across the border.

    (2) Lack of coordination between the Central and State Governments.

    (3) Improper coordination of various Government policies

    (4) Increasing the production from a very low level

27. Which of the following issues was not appropriately realized by the Central Government.

    (1) Ethnic diversity of the people

    (2) A national language for the country

    (3) Implementation of the formulated policies

    (4) Centre -State relations

28. Why was central economic planning found to be difficult?

    (1) Multiplicity of States and Union Territories

    (2) Lack of coordination in different Government departments

    (3) Autonomy given to the States in certain matters

    (4) Lack of will in implementing land reforms

29. Why was the linguistic reorganization of the State accepted?

    (1) The States were not cooperating with the Central Government

    (2) Non- Congress Governments in the States demanded such a reorganization of the States

(3) No common national language emerged

(4) Strong pressure from the States was exerted on the Central Government to create such States

30. Which, according to the passage, can be cited as an exercise in democratic practice in India before Independence?

(1) The handing over of power by the British to India

(2) The Indianisation of the Indian Civil Service

(3) A neutral role played by the Army

(4) None of the above

31. The information to be collected in survey method are related to

(1) Present Position

(2) Aims of the research

(3) The attainment of aim of research

(4) All of the above

32. One of the essential characteristics of research is

(1) Sensitivity   (2) Generalizability

(3) Usability   (4) Replicability

33. Identify the main Principle on which the Parliamentary System operates.

(1) Responsibility of Executive to Legislature

(2) Supremacy of Parliament

(3) Supremacy of Judiciary

(4) Theory of Separation of pow er

34. Match list I with list II and select the correct from the code given below :

 List I (Institutions)   List II (Locations)

1. Indian Veterinary Research Institute   i. Pune

2. Institute of Armament Technology   ii. Izat Nagar

3. Indian Institute of Science   iii. Delhi

4. National Institute for Educational Pannesi and Administrators vi. Bangalore

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

(3) 1-ii, 2-iii, 3- I, 4- iv   (4) 1-iv, 2-iii, 3-ii, 4-i

35. The prime minister of India is appointed from _____

(1) The leading Party in Lok Sabha

(2) The Leading Party in Rajya Sabha

(3) The leading party in Lok Sabha and Rajya Sabha combined

(4) None of the above

36. The study of interrelations between Organism and their environment is called___

(1) Biosphere   (2) Ecology

(3) Synecology   (4) Autecology

37. The term ICT is now also used to refer to the convergence of

(1) Audio visual   (2) Telephone netw ork

(3) Both (1) and (2)   (4) None

38. Fossil Fuels include

(1) Oil   (2) Natural Gas

(3) Coal   (4) All of the above

39. Noise in excess of _____ is called noise pollution

(1) 40-65 db   (2) 60-70 db

(3) 80-100 db   (4) None of the above

40. Effectiveness of teaching depends on ____

(1) Handwriting of Teacher   (2) Speaking ability of Teacher

(3) Qualification of the Teacher   (4) Subject Understanding of the Teacher

41. The participation of students will be maximum if ____ method is used for teaching.   (1) Text Books   (2) Discussion Method

(3) Conference Method   (4) Lectures

42. In following questions, number series is given. One of the numbers in each series is wrong. After searching wrong number find the correct number in its place.

510, 254, 126, 64, 30, 14, 6

(1) 252   (2) 62

(3) 130   (4) 9

43. Which reasoning determines whether the truth of a conclusion can be determined for that rule, based solely on the truth of the premises?

(1) Deductive   (2) Inductive

(3) Abductive   (4) All

44. Insert the missing number or letter from among the given alternatives.
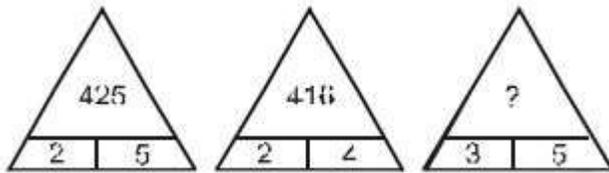
(1) 140

(2) 280

(3) 875

(4) 925

45. In the follow ing question assuming the given statements to be true, find out which of the two assumptions I and II given below them is/are definitely true give answer as.

(1) Only assumption I is implicit

(2) Only assumption II is implicit

(3) Either I or II is implicit

(4) Neither I nor II is implicit

(E) Both I and II are implicit

Statement: The State government has decided to appoint four thousand primary school teachers during the next financial year.

Assumptions:

I. There are enough schools in the state to accommodate four thousand additional primary school teachers.

II. The eligible candidates may not be interested to apply as the government may not finally appoint such a large number of primary school teachers.

46. What is the latest write-once optical storage media?

(1) Digital paper

(2) Magneto-optical disk

(3) WORM disk

(4) CD- ROM disk

47. Which of the following identifies a specific web page and its computer on the Web?

(1) Web site

(2) Web site address

(3) URL

(4) Domain Name

Direction (48-49) In the following figure, rectangle, square, circle and triangle represents the regions of wheat gram, maize and rice cultivation respectively. On the basis of the figure, answer the following questions.
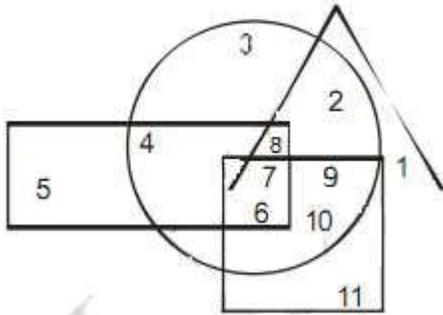
48. Which of the area is cultivated for wheat and maize only?

(1) 8   (2) 6

(3) 5   (4) 4

49. Which of the area is cultivated for maize only?

(1) 10   (2) 2

(3) 3   (4) 4

50. Pointing to a photograph. Bajpai said, " He is the son of the only daughter of the father of my brother." How Bajpai is related to the man in the photograph?

(1) Nephew   (2) Brother

(3) Father   (4) Maternal Uncle

PAPER-II

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

   (1) Bengal Library Association

   (2) RRRLF

   (3) National Library of India

   (4) IASLIC

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

   (1) BSLA   (2) ALP   (3) CLM   (4) PAC

3. 'Instagram' is acquired by

   i. Whatsapp

   ii. Yahoo

   iii. Facebook

   iv. Google

   Codes:

   (1) (i) and (ii) are correct.   (2) (i) only is correct.

   (3) (iii) only is correct.   (4) (ii), (iii) and (iv) are correct.

4. Prof. P.N. Kaula had drafted the Library Development Plans and the Model Library Bills for the following States:

   i. Jammu and Kashmir   ii. Delhi

   iii. Punjab   iv. Haryana

   Codes:

   (1) (i) and (ii) are correct.

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

   (3) (i) and (iii) are correct.

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

5. Recent digital initiatives to push e-education are

   i. Swayam

   ii. Swayam Prabha

   iii. National Academic Depository

   iv. National Digital Library

   Codes:

(1) (i) and (ii) are correct.

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

(3) (i) and (iii) are correct.

(4) (i), (ii), (iii) and (iv) are correct.

6. National Mission on Libraries (NML) was launched in 2014 with the objective to

i. create a world class library system,

ii. foster reading habits

iii. provide information to people in a timely and convenient manner

iv. establish high-speed backbone connectivity which will enable knowledge and information sharing.

Codes:

(1) (i) and (ii) are correct.

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

(3) (i) and (iii) are correct.

(4) (i), (ii), (iii) and (iv) are correct.

7. Which of the following are the steps in operational research process?

i. Construction of mathematical model

ii. Deriving solution from the model.

iii. Graphic representation of work on a time scale.

iv. Developing network diagram showing interrelationships.

Codes:

(1) i and ii are correct.   (2) ii and iii are correct.

(3) iii and iv are correct.   (4) iv and i are correct.

8. Which of the following are International Referral Centres for Scholarly Information?

i. DARE

ii. INFOTERRA

iii. International Referral Network

iv. Information Referral

Codes:

(1) ii & iv are correct.   (2) i & iv are correct.

(3) i & ii are correct.   (4) ii & iii are correct.

9. Which of the following are the online databases of web of Science ?

(i) Book Citation Index

(ii) Conference Proceedings Citation Index

(iii) Index Chemicus

(iv) AGRICOLA

Codes :

(1) (i), (iv) and (iii)   (2) (i), (ii) and (iii)

(3) (ii), (iii) and (iv)   (4) (i), (ii) and (iv)

10. An indispensable function of Thesaurus is to

(i) Knowledge Classification

(ii) Grouping the words together according to similarity of meaning

(iii) Representation of Relationship between concepts

(iv) Knowledge Engineering

Codes:

(1) (i) and (ii) are correct.   (2) (ii) and (iii) are correct.

(3) (iii) and (iv) are correct.   (4) (i) and (iv) are correct.

11. Which of the following are the types of factors studied under ANOVA?

(i) Fixed   (ii) Frequency

(iii) Calculated   (iv) Random

Codes:

(1) (ii) and (iii) are correct.   (2) (i) and (iv) are correct.

(3) (i) and (iii) are correct.   (4) (ii) and (iv) are correct.

12. RDBMs are advantageous as they :

(i) Manage and Maintain

(ii) Represent data in the form of tables

(iii) Facilitate handling of objects rather than records

(iv) Are developed with mathematic theory of relations

Codes :

(1) (i), (iv) are correct.   (2) (ii), (iii) are correct.

(3) (ii), (iv) are correct.   (4) (iii), (iv) are correct.

13. The primary difference between knowledge classification and library classification are

(i) Knowledge classification arranges knowledge itself.

(ii) Library classification arranges the expression of knowledge in the form of documents.

(iii) Knowledge classification is the basis of Library Classification.

(iv) Knowledge classification follows system of numbers, called notation.

Codes :

(1) (i) and (ii) are correct   (2) (i) and (iii) are correct

(3) (i), (ii) and (iv) are correct   (4) (i), (ii) and (iii) are correct

14. Arrange the following in chronological order :

(i) Indian University Act

(ii) University Education Commission

(iii) University Grants Commission

(iv) National Policy on Education (NPE)

Codes :

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

15. Arrange the following in chronological order with reference to development of Library science :

(i) First Degree Course

(ii) Dept. of Library Science in University of Delhi

(iii). DRTC courses

(iv) Diploma to Degree

Codes :

(1) iv i iii ii

(2) iii ii i iv

(3) ii i iv iii

(4) i ii iii iv

16. Identify the correct sequence of communication models that were proposed by scholars :

(i)   Maxwell McCombs & Donald Shaw,

(ii)   Elihu Katz & Paul Lazarsfeld,

(iii)   Harold Lasswell,

(iv)   David White

Codes :

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

17.   Arrange the following steps of research according to the sequence of their occurrence

(i) formulation of hypothesis of research

(ii) designing of data and analysis plan

(iii) selection of data gathering method

(iv) report writing

Codes:

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

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

18.   Match the following:

List - I   List - II

a. N. Grogan   i. Scientific & Technical Libraries

b. J. Saha   ii. Scientific & technical libraries; an introduction to literature

c. Nilfred Ashworth   iii. Handbook of special librarianship & information work

d. L.J. Strauss   iv. Special libraries and information services in India & USA

Codes:

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

19.   Match the following:

List - I   List - II

a. Facts on File   i. Periodical Directory

b. World of Learning   ii. Index

c. Concordance   iii. Newspaper Digest

d. Willing's Press Guide   iv. Directory

   a b c d

(1) i iii iv ii

(2) ii i iii iv

(3) iii iv ii i

(4) iv ii i iii

20. 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 gate way

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

(1) iv iii ii i

(2) i iii iv ii

(3) iii i ii iv

(4) ii ii i iii

21. Match the following :

List - I   List - II

a. Sinha Committee   i. Library staff strength

b. Dr. S.R. Ranganathan Committee   ii. Central Medical Library

c. Report of Dr. Shaw and Dr. D. B. Krishna Rao   iii. Libraries at Panchayat, Block,District and State level

d. Dr. J. Bhore Committee.

iv. National Agricultural System of Agriculture Libraries

Codes :

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

22. 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

(1) i ii iii iv

(2) iii iv i ii

(3) ii iii iv i

(4) iv i ii iii

23. Match the following :

List - I	List - II
a. Statistical Quality/Process Control (SQC/SPC)	i. Identify the intensity of each problem in the production process
b. Check Shets	ii. Selected variables checked
c. Pareto Chart	iii. Identify the relationship between problems and causes
d. Fish Bone Diagram	iv. Record variables in the production process

Codes :

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

24. Assertion (A): Research starts in mind first and then in laboratories.

Reason (R): Systematically conducted research leas to generalization.

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.

25. Assertion (A): The National Library, India is the largest library in the country

Reason (R): It is India's library of public record

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.

26. Assertion (A): Save the time of the reader

Reason (R): It is the third law of library science

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.

27. Assertion (A):   National Digital Library was launched in 2014

Reason (R): It is a project under UGC

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.

28. Assertion (A) : All the states in India have enacted library legislation.

Reason (R) : The Indian Library Association has been contributing its bit for library legislation right from the beginning.

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.

Read the passage given below, and answer the questions based on your understanding of the passage. (Question Nos. 29-33)

One of the problems with automatic classification techniques is that they normally involve processing the whole collection in response to every request; this is inefficient, because we know in advance that a substantial part of the collection will not be relevant to the request. One of the major objectives of an information retrieval system is to allow the user to discard with the minimum of effort any items not relevant to an enquiry. Classification schemes set out to achieve this by grouping items according to specified characteristics; provided that our specification meets the user's needs, this grouping will be helpful, but if it does not, our organization of information may prove to be a positive hindrance instead of a help. There has been a substantial amount of research into computer techniques which would achieve the same end, by reducing the size of the collection to be searched in response to any given request. The classical Aristotelian definition of classification states that a class consists of a set of objects having a given characteristic in common, possession of that characteristic being a necessary and sufficient condition for class membership. A document may be described by a number of terms, derived or assigned, and that we expect to retrieve in answer to a request a set of documents which match the request closely but rarely exactly. This arises because the terms used to describe documents fall into a number of classes, and we can never be exhaustive in our characterization. In other words, we hope to retrieve a set of documents which maximizes the match between the query and the description of the classes into which the desired documents fall, without expecting the match to be exact in classical terms. Aristotelian classification assumes a single essential element; documentary classification assumes that related document will share a number of elements, without necessarily having all of those specified in a particular query.

29. One of the problems of automatic classification is that :

(1) It does not process the whole collection to answer a query.

(2) It processes the part collection to answer a query.

(3) It processes the whole collection to answer a query.

(4) The substantial part of the processed collection will be relevant.

30. One of the major objectives of an IR system is

(1) To help the user to express their actual need.

(2) To help the user to discard irrelevant items with the minimum effort.

(3) To help the user not to discard irrelevant items with the minimum effort.

(4) To help the user to maximize their effort to locate an irrelevant item.

31. What does the research in computer techniques aim at?

(1) To increase the size of the collection to be searched not in response to any given request.

(2) To increase the size of the collection to be searched in response to any given request.

(3) To reduce the size of the collection to be searched in response to any given request.

(4) To reduce the size of the collection to be searched not in response to any given request.

32. Aristotelian definition of classification states that :

(1) No class should have common characteristics.

(2) A class should consist of a set of common terms.

(3) A class should consist of related common characteristics.

(4) A class should consist of a set of objects having a given characteristic in common.

33. Documentary classification assumes that

(1) A single element is essential.

(2) Related documents will share a number of elements having all those specified in a particular query.

(3) Related documents will share a number of elements, without necessarily having all those specified in a particular query.

(4) Documents should have a number of elements.

34. There are two types of the Internet Browsers, viz. Text based and _____.

(1) Graphic user interface   (2) Document based

(3) Index based   (4) All of above

35. _____ Network is often called as Remote Login.

(1) JANET   (2) NICNET

(3) TELNET   (4) None of above

36. Match the year in which the following were first introduced:

(1) Bibliometrics   1. 1980

(2) Informatics   2. 1947

(3) Librametry   3. 1960

  (1) A-3,B-1,C-3,   (2) A-1,B-2,C-3

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

37. G. Bhattacharya has postulated a generalized subject indexing language with a set of categories :

(1) Entity, Problem and discipline with modifiers

(2) Entity Action and Property with modifiers

(3) Entity , Action and Disciplines with modifiers

(4) None of above

38. Compatibility factors and measures of ISAR systems are :

(1) End user, Intermediary , and Data

(2) End user, Database , and Accession

(3) End user, intermediary, and Raw database

(4) None of above

39. Which is a group of models of information retieval ?

(1) Data, Information, and Knowledge retrieval models

(2) Data, knowledge and Query retrieval models

(3) Information, Knowledge and Intellectual retrieval models

(4) None of above

40. The process of searching information can be grouped as under ;

(1) Reference , Document, Fact, and Knowledge retrieval

(2) Document, Problems, Reference, and Fact retrieval

(3) Reference,Documents, Query and Knowledge retrieval

(4) none of above

41. Which kind of knowledge is provided by libraries and information centres ?

(1) Personal knowledge (2) Individual's knowledge

(3) Social knowledge (4) All of above

42. Identify the chronological sequence of documentary sources:

(1) Secondary sources (2) Tertiary sources

(3) Primary sources (4) none of above

43. Computerised serial control system requires which of the following group of files :

(1) Supplier file, serial file, order file , user file

(2) Document file, Borrower file, user file

(3) Supplier file, order file , document file, user file

(4) none of above

44. Wersig and Noveling have suggested six approaches of informations, Identify the group :

(1) Structural , knowledge, message, meaning effect and process approach

(2) Structural, message , meaning , process approach

(3) Structural knowledge, message , effect, and process approach

(4) none of above

45. Identify the group of basic elements of communication process :

(1) Source $\rightarrow$ Message $\rightarrow$ Destination

(2) Source $\rightarrow$ Data $\rightarrow$ Access

(3) Source $\rightarrow$ Message $\rightarrow$ Access

(4) none of above

46. Identify the correct approach group of information theory :

(1) $V(s) = f(P_p E_H V_i)$ (2) $V = f(P_p E_H V_i)$

(3) $V(s) = (P_p E_H V_i)$ (4) none of above

47. Identify the correct group of three levels for description of database architecture :

(1) Conceptual , external, internal

(2) Logical, external internal

(3) Linking, recording,internal

(4) None of above

48. Match the related year of introducing the following networks::

(A) BONET   (1) 1995

(B) BALNET   (2) 1988

(C) INFLIBNET   (3) 1984

(D) NICNET   (4) 1994

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

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

49. Identify the correct group of components of the structure of mark format :

(1) Leader → Record directory → Variables fields

(2) Centre → Database → Record format

(3) Leader → database → Variables fields

(4) None of above

50. Identify the group of major components of data centres :

(1) Data source → Database →Users

(2) Data collection → Data codification → Users

(3) Data source → Data collection → User

(4) None of above

51. Which is the correct statement ?

(1) Data generation precedes data compilation

(2) Data collection precedes data generation

(3) Data collection precedes data retrieval

(4) all of above

52. Which information centre have been providing reference service from Documentary sources to meet user information requirements ?

(1) Data Dissemination Centre   (2) Data Referral Centre

(3) Data Evaluation Centre   (4) All of above

53. Which catalogue generally provides information for its products, branches, depots, distributors, and conditions for sale ?

(1) Trade Index   (2) Trade Register

(3) Trade Catalogue/ directory   (4) All of above

54. National Index of Translations, a quarterly publication is published by :

(1) UNESCO   (2) JPRS, U.S. A.

(3) INSDOC, India   (4) All of above

55. Who started movement for social libraries first in USA ?

(1) E. Conedy   (2) Benjamin Franklin

(3) Abrahim linkon   (4) George Washington.

56. Match the related publisher of the following bullentins:

(A) Industrial Equipment News   (1) Arun Chamber, Bombay

(B) Industrial market Bulletin   (2) Thimmegowda,Bangalore

(C) Bombay market   (3) Balaji Publishing, Fort, Bombay

(1) A-3,B-2,C- 1   (2) A-1,B-2,C-3

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

57. Match the related publishers of following International Bulletins of information products:

(1) Machinery Market   1. Sewell Publications , London

(2) Product Finishing   2. MBC Industrial Electronic Publica tions ,Kent

(3) Made in Europe   3.Frankfurt, West Germany

(4) Electrical Equipments   4. Machinery Market, Kent, England

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

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

58. Match the year of starting the following Abstracts:

(1) Sociological , New York   1. 1927

(2) Psychological Abstract,Washington   2. 1951

(3) Education Abstract, Paris   3. 1949

(4) International Pol. Sc. Abstract , oxford   4. 1952

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

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

59. Match the year of establishment of the following centres:

(A) DESIDOC   (1) 1967

(B) ICAR   (2) 1971

(C) SANDOC   (3) 1967

(4) OCLC   (4) 1958

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

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

60. The Headquarter of Raja Ram Mohan Roy Library Foundation (RRRLF) is at:

(1) Kolkata   (2) Mumbai

(3) New Delhi   (4) Patna

61. UNESCO launched UNISIST programe in

(1) 1970   (2) 1973   (3) 1975   (4) 1978

62. The author of "Introduction to Librarianship" is

(1) R.N. Lock   (2) J.K. Gates

(3) M. George   (4) L. Carnovsky

63. Match the related year of introducing the following networks.

(A) CALIBNET   (1) 1992

(B) PUNENET   (2) 1993

(C) ADINET   (3) 1994

(D) MALIBNET   (4) 1988

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

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

64. What are the two parts of the annual report of the library

(1) Primary and Secondary   (2) Analytical and Systematic

(3) Upper and Lower   (4) Descriptive and Statistical

65. The UGC in India is based on the model found in

(1) Great Britain   (2) USA

(3) France   (4) Canada

66. In India during 1957 the Library Committee was appointed by the UGC under the Chairmanship of

(1) D.S.Kothari   (2) C.D.Deshmukh

(3) S.R.Ranganathan   (4) None of the above

67. The Kothari Commission was established by

(1) S.R.Ranganathn   (2) C.D.Deshmukh

(3) M.C. Chagla   (4) None of the above

68. 'Library is the heart of education' said by

    (1) Paul Buck   (2) S.R.Ranaganathan

    (3) G.Bhattacharyya   (4) Melvil Dewey

69. Which network in India provided the first e-mail service in the country?

    (1) NICNET   (2) DELNET

    (3) ERNET   (4) INFLIBNET

70. The International Information System for Science and Technology is

    (1) UNISIST   (2) IFLA   (3) ALA   (4) NISSAT

71. INSDOC was renamed as

    (1) NISKAIR   (2) NISCAIR

    (3) NYSCAIR   (4) None of the above

72 A computer that connects one network to another for the purpose of file transfer is known as …

    (1) Highway   (2) Search Engine

    (3) Gateway   (4) Super way

73. NASSDOC is functioning under the control of

    (1) CSIR   (2) CLRI   (3) IFLA   (4) ICSSR

74. What is Bibliometry?

    (1) Function of Library Network   (2) Information Management Service

    (3) Information Management Tool.   (4) Library Service

75. Fundamental factors for libraries ae

    (1) Manpower   (2) Collections

    (3) Users   (4) All the above

76. Match the related place of location of the following journals :

    (A) Herald of Library Science   (1) Chicago

    (B) IASLIC Bulletin   (2) Lucknow

    (C) ILA Bulletin   (3) Calcutta

    (D) Library Quarterly   (4) Delhi

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

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

77. Match the related place of location of the following references sources :

(A) Manorama Year Book   (1) Calcutta

(B) International Library Review   (2) Paris

(C) UNISIST News Letter   (3) London

(D) Grantbalaya   (4) Kottayam

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

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

78. Relate the name of the author of the undermentioned books :

(A) Elements of Library Classification   (1) Dr. C.K. Sharma

(B) Library Administration: Theory and Practice   (2) B. Guha

(C) University Library: Organization and   (3) R. L. Mittal

    Management

(D) Documentation and Information   (4) Dr. S.R. Ranganathan

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

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

79. Relate the names of author of undermentioned books :

(A) Five Laws of Library Science   (1) Dr. C.K. Sharma

(B) Information Science   (2) Dr. S.R. Ranganathan

(C) Library & Culture   (3) Dr. S.R. Ranganathan

(D) Prolegomence to Library Classification   (4) R.C. Benge

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

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

80. The 3rd volume of DDC (19th ed.) is called.........

(1) Index   (2) Special Index

(3) Comprehensive Index   (4) Relative Index

81. Five Fundamental Categories in CC are.........

(1) DMRST   (2) PREST   (3) PMEST   (4) RCEST

82. There are two kinds of Abstracts, viz. Informative and.........

    (1) Logical   (2) Possesive

    (3) Indicative   (4) None of these

83. The Unitern indexing system was developed by:

    (1) IFLA   (2) M. Taub

    (3) G. Denton   (4) UNISIST

84. ISSN (International Standard Serial Number) consists of.........

    (1) Eight digits   (2) Nine digits

    (3) Ten digits   (4) Eleven digits

85. The concept of "Systematic Indexin" was developed by:

    (1) E.J. Coats   (2) B.C. Vickery

    (3) V.C. Vickery   (4) F.W.Lancaster

86. In which cataloguing code, the name of series is rendered in main entry in Note Section:

    (1) CCC   (2) AARC-II

    (3) LC system   (4) None of these

87. Informal self education is possible in what kind of library?

    (1) National Library   (2) Public Library

    (3) Specific Library   (4) College Library

88. The catalogue code which recognizes the "Principal Author" is:

    (1) CCC   (2) AACR–II

    (3) Vatican Code   (4) None of these

89. Which cannon is known as Master Canon of Cataloguing in CCC?

    (1) Canon of Individualization

    (2) Canon of Sough heading

    (3) Canon of Recall value

    (4) Canon of Ascertainability

90. Brown Issue System was devised by:

(1) Nina Brown   (2) R.J. Brown

(3) A.J. Brown   (4) J.D. Brown

91. In which book Rangnathan suggested staff formula:

(1) Five Laws of Library Science   (2) Library Administration

(3) Library Administration   (4) None of these

92. Who enunciated the 'two factor theory of motivation'?

(1) F. Herzberg   (2) Dewey

(3) Ranganathan   (4) Reference Service

93. Who enunciated the principle of "The best book to the largest number at least cost":

(1) Drury   (2) Dewey

(3) Management   (4) McColvin

94. ISO 9000 is one of the most widely recognized quality tool for:

(1) Administration   (2) Organisation

(3) Management   (4) Reference Service

95. Which network is primarily concerned with academic activities?

(1) ERNET   (2) INFLIBNET

(3) NICNET   (4) DELNET

96 Which is the correct structure of U.K. Mark format ?

(1) Record Level / Directory / Control field / Variable data field

(2) Record writing / Instruction / Control field / variable

(3) Record writing / Directory / Control field / Variable data field

(4) None of these

97. UNIMARC is based on :

(1) ISSN   (2) ISBN   (3) ISBD   (4) All of above

98. Staff exchange is the part of

(1) resource sharing   (2) personnel management

(3)Cooperative cataloguing   (4) inter library loan

99. The varienties of thesaurus are categorized as

(1) Source, construction and adjunct thesaurus

(2) Source, adjunct and cumulative thesaurus

(3) Cummulative , controlled and adjunct thesaurus

(4) None of above

100. Which is the correct Structure of U.S. MARC format ?

(1) Leader/ Directory / Control field / Variable data field

(2) Leader / Instruction / Survey / Data structure

(3) Leader /Directory/ Variable data field / Control field.

(4) None of above

ANSWER KEY

PAPER-I

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Answer	4	1	4	2	4	3	1	2	1	2	1	4	3	4	1	1	4	2	3	3
Question	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Answer	4	1	2	4	1	4	1	3	4	2	4	3	1	1	1	2	3	4	3	4
Question	41	42	43	44	45	46	47	48	49	50										
Answer	2	2	1	4	1	4	4	4	3	4										

PAPER-II

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Answer	2	1	3	1	4	2	1	3	2	2	2	3	4	4	3	2	2	1	3	1
Question	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Answer	3	2	1	3	3	1	4	4	3	2	3	4	3	1	3	1	2	3	1	1
Question	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	3	4	1	1	2	1	1	1	1	1	1	2	3	3	2	1	1	1	1	2
Question	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Answer	2	2	1	4	1	3	3	1	2	1	2	3	4	3	4	3	1	1	3	4
Question	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Answer	3	3	2	2	4	1	2	2	3	1	2	1	2	2	2	1	3	1	2	1

HINTS AND SOLUTIONS

1.(4) Eklavya schools will be established for scheduled caste (SC) and schedule tribe students by 2022 on the lines of Navodaya schools.

They will be model residential schools set up in each Block. It will in areas with more than 50% tribal areas and 20,000 tribal people.

These schools will be part of Navodaya Vidyalayas. It will provide training in sports and skill development.

It has special facilities for preserving local art and culture.

2.(1) Revitalising Infrastructure and Systems in Education (RISE) Scheme :

RISE scheme aims to lend low-cost funds to government higher educational institutions. It will be launched with a total investment of Rs. 1 lakh crore in the next four years. It will be financed via restructured higher education financing agency (HEFA), a non-banking financial company.

3.(4) The World Sustainable Development Summit–2018 was held in New Delhi on February 16.

The summit will address a wide variety of issues, including combating land degradation and air pollution, effective waste management and create financial mechanisms to enable effective climate change mitigation.

The theme of the 2018 Summit is–Partnerships for a Resilient Planet, which seeks to create action frameworks to resolve some of the most urgent challenges facing developing economies in the backdrop of climate change.

It seeks to bring together on a common platform, global leaders and thinkers in the fields of sustainable development, energy and environment sectors.

4.(2) The 9-member committee, headed by former ISRO chief K Kasturirangan, was constituted by the Union HRD Ministry to draft new National Education Policy (NEP) on June 2017.The committee will submit its report by March 31, 2018. The existing NEP was framed in 1986 and revised in 1992.

5.(4) An historic agreement to combat climate change and unleash actions and investment towards a low carbon, resilient and sustainable future was agreed by 195 nations in Paris in Dec 2015.

The Paris Agreement for the first time brings all nations into a common cause based on their historic, current and future responsibilities.

The universal agreement's main aim is to keep a global temperature rise this century well below 2 degrees Celsius and to drive efforts to limit the temperature increase even further to 1.5 degrees Celsius above pre-industrial levels.

The 1.5 degree Celsius limit is a significantly safer defense line against the worst impacts of a changing climate.

6.(3) Under Part XXI of the Constitution of India, which deals with "Temporary, Transitional and Special provisions", the State of Jammu and Kashmir has been accorded special status under Article 370. Even though included in 1st Schedule as 15th state, all the provisions of the Constitution which are applicable to other states are not applicable to J&K.

Special Features- J&K is the only state in India which has a Constitution of its own. The Constitution of J&K was enacted by a separate Constituent Assembly set up by the State and it came into force on 26th January 1957**.**

7.(1) Global warming is the increase in Earth's near-surface air and ocean temperatures. The greenhouse effect is when water and carbon dioxide absorb outgoing infrared radiation, increasing the planet's temperature. Greenhouse gases contribute to global warming. What is determined to be a greenhouse gas is any heat-trapping gas present in the Earth's atmosphere.

The two most common greenhouse gases are water vapor and carbon. These gases help absorb infrared radiation and regulate the Earth's climate. However, the increase in industrial production has increased the amount of greenhouse gases present in the atmosphere.

The increase in carbon dioxide emissions has made it difficult for heat to escape the atmosphere which in turn contributes to the warming effect.

8.(2) The Vienna Convention for the Protection of the Ozone Layer is a Multilateral Environmental Agreement. It was agreed upon at the Vienna Conference of 1985 and entered into force in 1988.

It acts as a framework for the international efforts to protect the ozone layer.

The Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer) is an international treaty designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion.

The Minamata Convention on Mercury is an international treaty designed to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

The Convention was signed by delegates representing close to 140 countries on 19 January 2013 in Geneva and adopted later that year on 10 October 2013 on a Diplomatic Conference held in Kumamoto, Japan. The Convention is named after the Japanese city Minamata.

9.(1) In July 2013, Supreme Court had ruled that a person, who is in jail or in police custody, cannot contest elections to legislative bodies.

Representation of the People (Amendment and Validation) Bill, 2013 however, brought two key changes:

Firstly , even if a person is prohibited from voting due to being in police custody or in jail, as long as his name is entered on the electoral roll he shall not cease to

be an elector. This implies that he can file nomination for an election. Secondly, definition of "disqualified" in the Act has been amended.

Prior to this act, the definition of disqualified means disqualified for either being chosen as or being a MP or MLA.

Secondly, definition of "disqualified" in the Act has been amended.

The amendment adds a ground to the definition that the disqualification has to be due to conviction for certain specified offences and can be on no other ground.

Conviction for only these certain offences would result in the person's name being removed from the electoral roll and he would cease to be an elector.

10.(2)

11.(1) Water Borne diseases are largely caused by micro-organisms present in human or animal waste, which find their way into human body.

These diseases are infectious, which means that they can spread from one person to another.

So high standards of hygiene and sanitation are needed to stop the disease from spreading.

Waterborne diseases include:

(i) Typhoid fever

(ii) Giardia

(iii) Dysentery

(iv) Cholera

(v) Diarrhoea (caused by a variety of pathogens)

(vi) Hepatitis

(vii) Polio

(viii) Worms

12.(4) Research has been defined in a number of different ways.

A broad definition of research is given by Godwin Colibao: "In the broadest sense of the word, the definition of research includes any gathering of data, information, and facts for the advancement of knowledge."

Another definition of research is given by John W. Creswell, who states that "research is a process of steps used to collect and analyze information to increase

our understanding of a topic or issue".

It consists of three steps: pose a question, collect data to answer the question, and present an answer to the question.

The Merriam-Webster Online Dictionary defines research in more detail as "a studious inquiry or examination; especially investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.

13.(3) In **descriptive survey method**- we've to use questionnaires (Because it's 'survey).

Descriptive research is all about describing people who take part in the study.

There are three ways a researcher can go about doing a descriptive research project, and they are: Observational, Case study and Survey, defined as a brief interview or discussion with an individual about a specific topic

Historical method- we have to use primary and secondary sources.

Historical method comprises the techniques and guidelines by which historians use primary sources and other evidence, including the evidence of archaeology, to research and then to write histories in the form of accounts of the past.

In **experimental method**- we can collect data in a way that permit standardized tests. The experimental method is a systematic and scientific approach to research in which the researcher manipulates one or more variables, and controls and measures any change in other variables.

An ex post facto research design is a method in which groups with qualities that already exist are compared on some dependent variable.

Also known as "after the fact" research, an ex post facto design is considered quasi-experimental because the subjects are not randomly assigned - they are grouped based on a particular characteristic or trait.

14.(4) According to Burton, Teaching is the stimulation, guidance, direction and encouragement of learning.

Good teaching requires some basics that a teacher should follow to achieve the main goal of teaching.

Good teaching is as much about passion as it is about reason. It's about not

only motivating students to learn, but teaching them how to learn, and doing so in a manner that is relevant, meaningful, and memorable.

It's about caring for your craft, having a passion for it, and conveying that passion to everyone, most importantly to your students.Good teaching is also about bridging the gap between theory and practice. It is about listening, questioning, being responsive, and remembering that each student and class is different. It is about caring, nurturing, and developing minds and talents.

Diagnosis, Remedy, Direction and Feedback are required for good teaching.

15.(1) The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015.

NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs. While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

The Government of India, in keeping with its reform agenda, constituted the NITI Aayog to replace the Planning Commission instituted in 1950.

An important evolutionary change from the past, NITI Aayog acts as the quintessential platform of the Government of India to bring States to act together in national interest, and thereby fosters Cooperative Federalism.

The Prime minister is its Chairperson.

16.(1) Horizontal communication is the communication where information or messages flows among the similar or same level statuses of people in the organizational structure.

Horizontal communication is the communication that flows laterally within the organization, involves persons at the same level of the organization. Horizontal communication normally involves coordinating information and allows people with the same or similar rank in an organization to cooperate or collaborate. Thus in terms of statuses horizontal method is used.

17.(4) Spam is an irrelevant or unsolicited messages sent over the Internet, typically to large numbers of users, for the purposes of advertising, phishing, spreading malware, etc.

Spam is flooding the Internet with many copies of the same message, in an

attempt to force the message on people who would not otherwise choose to receive it. Most spam is commercial advertising, often for dubious products, get-rich-quick schemes, or quasi-legal services.

18.(2) Propositions are contradictory when the truth of one implies the falsity of the other, and conversely.

if 'All thieves are poor' is false, then the proposition 'Some thieves are not poor ' must be true**.**

19.(3) Non verbal communication is communication of feelings, emotions, attitudes, and thoughts through body movements / gestures / eye contact, etc.

20.(3) % increase = $\dfrac{0.25 crore}{1\, crore} \times 100$

= 25%

21.(4) For company A

1 + 1.25 + 1.5 +1.75 + 1.75 + 1.75 +2

 = 11 crore

22.(1) (2.5 – 1) crores = 1.5 × 100 00 000

= 150 00 000

23.(2) Total production of B

= 2.5 + 2.5 + 3 + 2.75 +2.25 + 2.25 +2.5

= 17.75

Average production = $\dfrac{17.75}{7} = 2.55$

24.(4) In year 2004.

25.(1) Qualitative data collection techniques were used as the primary research methods for this study. Participant and direct observation plus note taking were the most important techniques used.

**26.(4)** Production was at very low level.

27.(1) Ethnic diversity of the people was not appropriately realized by the Central Government.

28.(3) Central economic planning found to be difficult because autonomy was given to the States in certain matters

29.(4) Because that time no common language emerged.

30.(2) "The Indianisation of the Indian Civil Service" , can be cited as an exercise in democratic practice in India before Independence

31.(4) The information to be collected in survey method are related to present position, aims of the research & the attainment of aim of research. Exposure units must be defined, must be considered in developing DQOs for project, or results may not be accepted.

Sufficient samples are required 8-10 samples when contaminant concentrations vary w ithin a narrow range 10-15 sample when concentrations are less predictable

Calculate 90th Upper Confidence Limit (UCL)

32.(3) One of the essential characteristics of research is usability.

33.(1) A parliamentary system is a system of democratic government in w hich the ministers of the Executive Branch derive their legitimacy from and are accountable to a Legislature or parliament; the Executive and Legislative branches are interconnected. It is a political system in w hich the supreme power lies in a body of citizens who can elect people to represent them.

34.(1) IVRI is situated in Izat Nagar.

IAT is situated in Pune

IISc is situated in Banglore

NIEPA is situated in Delhi.

35.(1) The prime minister of India is appointed from the leading Party in Lok Sabha.

36.(2) The study of interrelations between Organism and their environment is called ecology.

37.(3) The term ICT is now also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system.

38.(4) Fossil fuels are fuels made by natural processes such as anaerobic decomposition of buried dead organisms.Ex. Oil, Natural gas, coal etc.

39.(3) Noise in excess of 80-100DB is called noise pollution.

40.(4) Effectiveness of teaching depends on Subject Understanding of the Teacher

41. (2) The participation of students will be maximum if Discussion Method is used for teaching.

42.(2)
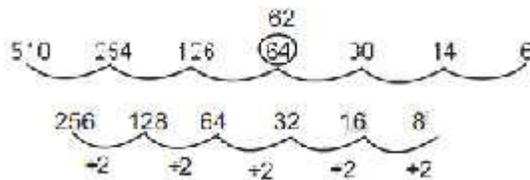
"30, 64 is wrong & must be replaced by 62.

43.(1) Deductive reasoning determines whether the truth of a conclusion can be determined for that rule, based solely on the truth of the premises.

44.(4) $(2)^2 = 4$, $(5)^2 = 25 \Rightarrow 425$

$(2)^2 = 4$, $(4)^2 = 16 \Rightarrow 416$

$(3)^2 = 9$, $(5)^2 = 25 \Rightarrow 925$.

45.(1) Such decisions as given in the statement are taken only after taking the existing vacancies into consideration. So, I implicit while II does not implicit.

46.(4) CD-ROM disk is the latest write-once optical storage media

47.(4) Domain Name identifies a specific web page and its computer on the Web.

48.(4) The required region is the one which is common only to the rectangle and circle and is not a part of either the triangle or square

49.(3) The required region is the one which lies inside the circle but outside the rectangle, square and triangle,

50.(4) The man in the photo is the son of the sister of Bajpai. Hence, Bajpai is the maternal uncle of the man in the photograph.

PAPER-II

1.(2)

2.(1)

3.(3) Facebook the social networking website started by Mark Zuckerberg in 2004, has evolved into a huge company.

After becoming profitable in 2010, it had its IPO in 2012. The company has a market cap of over $176 billion and an earnings-per-share in 2014 of $1.10.

Since its founding, Facebook has purchased many different companies, the most famous of which were Instagram in 2012 and WhatsApp in 2014.

4.(1) Prof. P.N. Kaula had drafted the Library Development Plans and the Model Library Bills for the following States: Jammu & Kashmir 1951 Delhi (Then Part C State) 1954.

5.(4) Four major digital initiatives were launched by Government Of India in July 2017, to push e-education.

They are Swayam, Swayam Prabha, National Academic Depository and National Digital Library.All these digital initiatives are operational under Union Ministry of Human Resource and Development.

6.(2) National Mission on Libraries (NML) was launched in 2014.

It is a mission by Ministry of Culture to modernize and digitally link public libraries across the country and was established on the basis of recommendations of report of National Knowledge Commission (NKC).

Its objectives are to create a world class library system, foster reading habits, facilitate research work and provide information to people in a timely and convenient manner which is also universal and equitable.

7.(1)

8.(3) DARE: International Social Sciences Directory - Institutions, Specialists, Periodicals -Access to world wide information on social science, peace, and human rights research and training institutes, social science specialists, and social science periodicals.

INFOTERRA : International Referral System for Sources of Environmental Information

9.(2) Web of Science (previously known as Web of Knowledge) is an online subscription-based scientific citation indexing service originally produced by the Institute for Scientific Information (ISI), now maintained by Clarivate Analytics . It provides a comprehensive citation search. It gives access to multiple databases that reference cross-disciplinary research, which allows for in-depth exploration of specialized sub-fields within an academic or scientific discipline.

Conference Proceedings Citation Index covers more than 160,000 conference titles in the Sciences starting from 1990 to the present day.

Book Citation Index covers more than 60,000 editorially selected books starting from 2005.

Index Chemicus lists more than 2.6 million compounds. The time of coverage is from 1993 to present day.

10.(2)

11.(2) An ANOVA test is a way to find out if survey or experiment results are significant.

In Analysis of Variance (ANOVA) and some other methodologies, there are two types of factors: fixed effect and random effect.

Which type is appropriate depends on the context of the problem, the questions of interest, and how the data is gathered.

Fixed effect factor: Data has been gathered from all the levels of the factor that are of interest.

Random effect factor: The factor has many possible levels, interest is in all possible levels, but only a random sample of levels is included in the data.

12.(3) A Relational Database management System(RDBMS) is a database management system based on the relational model introduced by E.F Codd.

In relational model, data is stored in relations(tables) and is represented in form of tuples(rows).

There is a direct correspondence between the concept of a table and the mathematical concept of a relation. A substantial theory has been developed for relational databases.

13.(4) Classification is a tool of organization. Books and other information sources are knowledge objects which can be classified and arranged like other physical

objects.

A library classification is a system of knowledge organization by which library resources are arranged according to subject.

Library classifications use a notational system that represents the order of topics in the classification and allows items to be stored in that order.

14.(4) Indian University Act 1904

University Education Commission (1948-49)

University Grants Commission (1956)

National Policy on Education (NPE) (1986)

15.(3) University of Delhi Vice chancellor was invited Dr. S. Ranganathan to organise a Dept. of Library Science. The Department was started in 1947 to conduct Post- Graduate Diploma in Library Science.The University of Delhi instituted the first post-diploma degree course in 1948.

Diploma to Degree :   The full time one year Diploma course was conducted to degree course (B. Lib. Sc.) in 1960 by Madras University

DRTC courses   : Dr. Ranganathan started Documentation Research and Training Centre at Bangalore in 1962 under the auspices of Indian Statistical Institute (ISI) Calcutta. Its training course was of 14 months duration.

16.(2)

17.(2)

18.(1)

19.(3) Facts on file : weekly world news digest with cumulative index.

The Europa World of Learning is the online version of the classic reference text in print, The World of Learning. It is an annual publication that began in 1947 and remains one of the most authoritative sources for information and data on academic institutions from around the globe.

The index of concordance is a "global" index for validating the predictive ability of a survival model.

It is the fraction of pairs in your data, where the observation with the higher survival time has the higher probability of survival predicted by your model.

Willing's Press Guide (London, James Willing) is issued annually and forms a comprehensive Index and Handbook to the Press of the United Kingdom, North-

ern Ireland and the Republic of Ireland. Details are given of a number of periodicals, magazines and annuals. It is the World's Leading Media Directory.

20.(1)

21.(3)

22.(2) The Extensible Markup Language (XML) is a simple text-based format for representing structured information: documents, data, configuration, books, transactions, invoices, and much more.

W3C stands for "World Wide Web Consortium.

W3C's XML Schema, SML, and data binding technologies provide the tools for quality control of XML data.

The Metadata Encoding and Transmission Standard (METS) is a metadata standard for encoding descriptive, administrative, and structural metadata regarding objects within a digital library, expressed using the XML schema language of the World Wide Web Consortium (W3C).

The standard is maintained as part of the MARC standards of the Library of Congress, and is being developed as an initiative of the Digital Library Federation (DLF).

Unicode is an international encoding standard for use with different languages and scripts, by which each letter, digit, or symbol is assigned a unique numeric value that applies across different platforms and programs.

Joseph D. Becker is one of the co-founders of the Unicode project, and an Officer Emeritus of the Unicode Consortium.

Cryptography involves creating written or generated codes that allow information to be kept secret.

23.(1)

24.(3)

25.(3) The National Library is the largest library in India by volume, 7th Largest libraries in the world, and India's library of public record.

It is under the Department of Culture, Ministry of Tourism & Culture, Government of India.The library is designated to collect, disseminate and preserve printed material produced in India.

26.(1) Fourth Law: Save the time of the reader

This law is a recognition that part of the excellence of library service is its ability to meet the needs of the library user efficiently.

To this end, Dr. Ranganathan recommended the use of appropriate business methods to improve library management.

He observed that centralizing the library collection in one location provided istinct advantages.

He also noted that excellent staff would not only include those who possess strong reference skills, but also strong technical skills in cataloging, cross-referencing, ordering, accessioning, and the circulation of materials.

27.(4) National Digital Library is a large online library containing 6.5 million books.

It provides free access to many books in English and the Indian.It is a project under Ministry of Human Resource Development, India. The objective is to integrate several national and international digital libraries in one single web-portal.The Library was launched in pilot form in May 2016.

28.(4) All the states in India have not yet enacted library legislation. Only 20 States/ UTs have so far enacted Library legislation.

Latest Library Act is MP Library Act 2013.

The Indian Library Association has been contributing its bit for library legislation right from the beginning.

In 1989, it got a Model Public Libraries Act prepared by Dr. V. Venkatappaiah, who was the Chairman of its Central Sectional Committee on Public Libraries.

This was discussed at a Seminar held in Delhi on 14 February 1990 organized by ILA in collaboration with RRRLF.

29.(3)

30.(2)

31.(3)

32.(4)

33.(3)

34.(1) There are two types of the Internet Browsers, viz. Text based and graphic user interface.

35.(3) TELNET network is often called as Remote Login.

36.(1) (A) Bibliometrics   3.   1960

        (B) Informatics   1.   1980

        (C) Librametry   2.   1947

        These are completely matching with each other.

37.(2) G. Bhattacharya has postulated a generalized subject indexing language with a set of categories entity action and property with modifiers.

38.(3) Compatibility factors   and measures of ISAR systems are end user, intermediary, and raw database.

39.(1) Data, Information, and Knowledge retrieval models is a group of models of information retieval.

40.(1) The process of searching information can be grouped as under reference , document, fact, and knowledge retrieval.

41.(3) Social knowledge is provided by libraries and information centres.

42.(4) The chronological sequence of documentary sources are none of above.

43.(1) Computerised serial control system requires supplier file, serial file, order file , user file.

44.(1) Wersig and Noveling have suggested six approaches of informations, structural , knowledge, message, meaning effect and process approach.

45.(2) The group of basic elements of communication process is Source $\rightarrow$ Data $\rightarrow$ Access.

46.(1) The correct approach group of information theory is V (s) = f (P_p E_H V_i).

47.(1) The correct group of three levels for description of database architecture is conceptual , external, internal.

48.(1) (A) BONET   (4) 1994

        (B) BALNET   (1) 1995

        (C) INFLIBNET   (2) 1988

        (D) NICNET   (3) 1984

        It is a correct match.

49.(1) The correct group of components of the structure of mark format is Leader → Record directory → Variables fields

50.(1) The group of major components of data centres is Data source → Database →Users.

51.(1) Data generation precedes data compilation is the correct statement.

52.(2) Data Referral Centre have been providing reference service from documentary sources to meet user information requirements.

53.(3) All of above catalogue generally provides information for its products, branches, depots, distributors, and conditions for sale.

54.(3) National Index of Translations, a quarterly publication is published by INSDOC, India.

55.(2) Benjamin Franklin started movement for social libraries first in USA.

56.(1) (A) Industrial Equipment News   - Balaji Publishing, Fort, Bombay
(B) Industrial market Bulletin   - Thimmegowda,Bangalore
(C) Bombay market   - Arun Chamber, Bombay

57.(1) (A) Machinery Market   - Machinery Market, Kent, England
(B) Product Finishing   - Sewell Publications , London
(C) Made in Europe   - Frankfurt, West Germany
(D) Electrical Equipments - MBC Industrial Electronic Publications ,Kent

58.(1) (A) Sociological , New York   - 1952
(B) Psychological Abstract,Washington   - 1927
(C) Education Abstract, Paris   - 1949
(D) International Pol. Sc. Abstract , oxford - 1951

59.(1) (A) DESIDOC   - 1958
(B) ICAR   - 1967
(C) SANDOC   - 1971
(D) OCLC   - 1967

60.(2) The Headquarter of Raja Ram Mohan Roy Library Foundation (RRRLF) is at Mumbai.

61.(2) UNESCO launched UNISIST programe in 1973.

62.(2) The author of "Introduction to Librarianship" is J.K. Gates.

63.(1) (A) CALIBNET   - 1988

        (B) PUNENET   - 1992

        (C) ADINET   - 1993

        (D) MALIBNET   - 1994

64.(4) Descriptive and statistical are the two parts of the annual report of the library.

65.(1) The UGC in India is based on the model found in Great Britain.

66.(3) In India during 1957 the library committee was appointed by the UGC under the chairmanship of S.R.Ranganathan

67.(3) The Kothari Commission was established by M.C. Chagla.

68.(1) 'Library is the heart of education' said by Paul Buck.

69.(2) DELNET in India provided the first e-mail service in the country.

70.(1) The International Information System for Science and Technology is UNISIST.

71.(2) INSDOC was renamed as NISCAIR.

72.(3) A computer that connects one network to another for the purpose of file transfer is known as Gateway.

73.(4) NASSDOC is functioning under the control of ICSSR.

74.(3) Bibliometry is information management tool.

75.(4) Fundamental factors for libraries as all the above.

76.(3) (a) Herald of Library Science   - Lucknow

        (b) IASLIC Bulletin   - Calcutta

        (c) ILA Bulletin   - Delhi

        (d) Library Quarterly   - Chicago

        It is the correct match.

77.(1) (a) Manorama Year Book   - Kottayam

        (b) International Library Review   - London

        (c) UNISIST News Letter   - Paris

        (d) Grantbalaya   - Calcutta

        It is the correct match.

78.(1) (a) Elements of Library Classification   - Dr. S.R. Ranganathan

(b) Library Administration: Theory and Practice   - R. L. Mittal

(c) University Library: Organization and   - B. Guha

 Management

(d) Documentation and Information   - Dr. C.K. Sharma

It is the correct match.

79.(3) (a) Five Laws of Library Science   - R.C. Benge

    (b) Information Science   - Dr. S.R. Ranganathan

    (c) Library & Culture   - Dr. S.R. Ranganathan

    (d) Prolegomence to Library Classification   - Dr. C.K. Sharma

    It is the correct match.

80.(4) The 3rd volume of DDC (19th ed.) is called relative index

81.(3) Five fundamental categories in CC are PMEST.

82.(3) There are two kinds of abstracts, viz. informative and indicative.

83.(2) The unitern indexing system was developed by M. Taub.

84.(2) ISSN (International Standard Serial Number) consists of nine digits.

85.(4) The concept of "Systematic Indexing" was developed by F.W.Lancaster.

86.(1) In CCC cataloguing code, the name of series is rendered in main entry in Note Section:

87.(2) Informal self education is possible in public library.

88.(2) The catalogue code which recognizes the "Principal Author" is AACR–II.

89.(3) Canon of recall value is known as Master Canon of Cataloguing in CCC.

90.(1) Brown Issue System was devised by Nina Brown.

91.(2) In library administration, Rangnathan suggested staff formula.

92.(1) F. Herzberg enunciated the 'two factor theory of motivation'.

93.(2) Dewey enunciated the principle of "The best book to the largest number at least cost":

94.(2) ISO 9000 is one of the most widely recognized quality tool for management.

95.(2) INFLIBNET network is primarily concerned with academic activities.

96.(1) Record Level / Directory / Control field / Variable data field is the correct structure of U.K. mark format.

97.(3) UNIMARC is based on ISBD.

98.(1) Staff exchange is the part of resource sharing.

99.(2) The varienties of thesaurus are categorized as source, adjunct and cumulative thesaurus.

100.(1) Leader/ Directory / Control field / Variable data field is the correct sequence.