

UGC NET PAPER-1

GENERAL APTITUDE

Solved Paper June 2019

Time Allotted: 1 Hour

Maximum Marks: 100

Important Instructions:

- Each question carries 2 marks.
- This paper consists of fifty (50) multiple-choice type of questions.
- Each item has four alternative responses marked (a), (b), (c) and (d). You have to darken the oval as indicated below on the correct response against each item.
Example: where (c) is the correct response.
- Your responses to the items are to be indicated in the **Answer Sheet**.
- Use of any calculator or log table etc., is prohibited.**
- Negative Marking: For each incorrect answer 0.5 marks shall be deducted.**

- Which type of evaluation focuses on the identification of deficiencies and difficulties of the learner?
 - Summative evaluation
 - Follow up evaluation
 - Diagnostic evaluation
 - Criterion-referenced evaluation
- From the following list identify the qualitative research characteristics and select your answer from the codes given below:
 - Creating purpose statements and research questions
 - Stating the purpose and research questions in a broad way
 - Collecting data based on words from a small number of individuals
 - Collecting numeric data and statistical analysis
 - Using text analysis and interpreting larger meanings of the findings
 - (ii), (iii) and (v)
 - (i), (ii) and (iii)
 - (i), (ii) and (iv)
 - (i), (iii) and (v)
- Which of the following is an example of higher order cognitive learning outcome?
 - Learning of facts and their sequences
 - Learning roles and action sequences
 - Learning of concepts and abstractions
 - Learning of awareness and valuing
- Tertiary source of data is
 - Films, hoardings and posters
 - Government gazette, newspapers and magazines
 - Information derived from both primary and secondary sources
 - Data collected from policy papers
- What are the elements of evaluation plan?
 - Purpose
 - Resources
 - Analysis
 - Authority

Select the correct answer from the options given below:

 - 1 and 3
 - 2 only
 - 2, 3 and 4
 - 1, 2 and 3
- Position papers are
 - Compiling of academic articles
 - Providing review articles
 - Offering a synopsis of an extended research
 - Highlighting of issues and depiction of status
- A hypothesis is
 - A certain and established finding
 - A part of the research question
 - A strategy of evaluating data
 - A tentative statement providing an explanation
- Case studies are
 - Studies conducted in areas of genetics and microbiology
 - In-depth examination of a subject and its related conditions
 - A report on the existing socio political condition
 - Specialized research in the areas of health and sanitation

9. Which of the following is the key behaviour contributing to effective teaching?
- Summarising what was told by a student
 - Encouraging students to elaborate on an answer
 - Using direct and indirect questioning
 - Explaining concepts in a logical step by step presentation
10. Instructions which encourage live participation and interaction through online classes are called
- Synchronous instructions
 - Asynchronous instructions
 - Traditional instructions
 - Theoretical instructions

Direction for questions 11 to 15:

Read the following passage and answer questions.

Perhaps what bothered the media in the 1970s was the shift in liberty being suggested. For centuries, journalists had operated on the basis of negative liberty, or freedom from external restraints. Suddenly, however, the thrust was positive freedom, a freedom for pursuit of some predetermined goals. This new social responsibility seems grounded on a school of thought that sees negative liberty as insufficient and ineffective, somewhat like telling people they are free to walk without first making sure they are not crippled. Who better than the government is able to provide humanity with appropriate means? Government, even a democratic government, is seen by social responsibility adherents as the any-force strong enough to guarantee effective operation of freedom. This does not mollify observers who find social responsibility to be only a slightly disguised version of authoritarianism. Media philosopher John Merrill has been one of the most outspoken critics of the theory. To him, the proposition that pluralism of ideas should be governmentally mandated is ludicrous. Journalists, he says, must retain their freedom to make their own news and editorial judgements. Even well intentioned attempts by outside groups seeking media improvement are self-serving, and inevitably lessen the autonomy of journalists, Merrill maintains. This leads us to the issue of media autonomy.

11. What was the basis of the operation of journalists earlier?
- Freedom of limited choices
 - Social responsibility

- Free from outside pressure
 - Government control
12. Some scholars consider social responsibility aspect of media as
- Negative freedom
 - Pluralism
 - Democratisation of media
 - Authoritarianism
13. Positive freedom means
- Grounded thought
 - Pursuing certain set goals
 - Freedom with conditions
 - Providing identified means
14. The passage critically analyses
- Operation of journalists
 - Mandate for government
 - Social responsibility theory of media
 - Regimented autonomy of journalists
15. According to John Merrill, seeking improvement in media, is
- Appropriate
 - Well-intentioned
 - Inevitable
 - Self-serving
16. Given below are two premises with four conclusions drawn from them. Which of the following conclusions could be validly drawn from the premises?
- Premises:**
- All cats are dogs
 - All dogs are cows
- Conclusions:**
- All cats are cows
 - Some cows are cats
 - All dogs are cats
 - No cow is dog
- Select the correct answer from the options given below:
- 2, 3 and 4
 - 4 only
 - 1 and 2
 - 2 and 4
17. Manoj's commission is 10% of all sales upto ₹ 10,000 and 5% on all sales exceeding this. He remits ₹ 75,500 to his company after deducting his commission. The total sales will come out to be
- ₹ 78,000
 - ₹ 80,000
 - ₹ 85,000
 - ₹ 90,000
18. In which method of arriving at knowledge the emphasis is on both proceeding from particular to general and from general to particular in a combined way?
- Inductive method
 - Deductive method

- (c) Scientific method
(d) Analogical method
19. Choose the missing term out of the given alternatives: QPO, NML, KJI, ____ .
(a) HGF (b) CAB
(c) JKL (d) GHI
20. In the communication process, signs derive meanings through
(a) The subjectivity of various components
(b) The objectivity of the decoder
(c) The network of inter-relations
(d) The neutrality of the channel
21. The simple interest on a certain sum of money for 3 years at 4% per annum is half the compound interest on ₹ 2,000 for 2 years at 10% per annum. The sum invested on simple interest is
(a) ₹ 8,750 (b) ₹ 1,750
(c) ₹ 2,500 (d) ₹ 3,500
22. Communication through colours can result in
1. Aesthetic codes 2. Cultural codes
3. Semantic codes 4. Binary codes
Choose the correct answer from the options given below:
(a) 1 and 4 (b) 2 and 3
(c) 2 and 4 (d) 1 and 2
23. Identify the reasoning in the following arguments:
'A pilot without flight plans is like an artist without paints.'
(a) Analogical (b) Deductive
(c) Inductive (d) Hypothetical
24. If proposition 'some milk is curd' is taken to be true then which of the following propositions can be false?
(a) No milk is curd
(b) All milk is curd
(c) Some curd is milk
(d) Some milk is not curd
25. **Assertion (A):** Media entertainment does not enhance the cultural level of society.
Reason (R): Most media entertainment encourages escapism, not content quality
Choose the correct answer from the options given below:
(a) Both (A) and (R) are true, and (R) is the correct explanation of (A)
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
(c) (A) is true, but (R) is false
(d) (A) is false, but (R) is true

26. Language of communication also constitutes
(a) The random world
(b) The divine world
(c) The social world
(d) The unsanctified world
27. The proposition 'some trees are green' is equivalent to which of the following propositions?
1. Many trees are green
2. Some green things are trees
3. Some green things are not non-trees
4. Trees are usually green
(a) 1, 2, 3 and 4 (b) 2 and 4
(c) 1 only (d) 3 and 4
28. The sum of all even natural numbers between 1 and 81 is
(a) 3280 (b) 3321
(c) 1646 (d) 1640
29. Connotative communication inside the classroom is
(a) Direct (b) Critical
(c) Implicit (d) Explicit
30. In a bag, there are coins of 5 ps, 10 ps and 25 ps in the ratio of 3:2:1. If there are ₹ 60 in all, how many 5 ps coins are there?
(a) 100 (b) 200
(c) 300 (d) 400

Direction for question 31 to 35:

Consider the following two tables (I and II) that show the percentage wise distribution (%) of the number of laptops sold by a shopkeeper during a period of six months from April to September 2018 and the ratio between the number of laptops sold of brand HP (H) and brand DELL (D) during the same six months. A total of 45000 laptops have been sold during these six months. Study these tables I and II and answer the questions that follow:

I. Sale of Laptops Month wise		II. Laptops Brand Ratio		
Name of Month	% of Laptops	Name of Month	Ratio	
April	17		H	D
May	22	April	8	7
June	25	May	4	5
July	8	June	3	2
August	12	July	7	5
September	16	August	7	8
		September	7	9

31. If 35% of the laptops sold of brand H during August were sold at a discount, how many laptops of brand H during that month were sold without a discount?
 (a) 882 (b) 1635
 (c) 1638 (d) 885
32. What is the total number of laptops sold of brand D during May and June together?
 (a) 9500 (b) 10000
 (c) 10500 (d) 15000
33. What is the ratio of the number of laptops sold of brand D during April to those sold during September of the same brand?
 (a) 119 : 145 (b) 116 : 135
 (c) 119 : 135 (d) 119 : 130
34. If the shopkeeper earned a profit of Rs. 434 on each laptop sold of brand D during July, what was his total profit earned on the laptops of that brand during the same month?
 (a) ₹ 6,51,900 (b) ₹ 6,46,500
 (c) ₹ 6,49,500 (d) ₹ 6,51,000
35. The number of laptops sold of brand H during April is approximately what percent of the number of laptops sold of brand H during September?
 (a) 110 (b) 140
 (c) 130 (d) 150
36. Which one of the following universities is not among the first three that were established during 1857?
 (a) Calcutta (b) Bombay
 (c) Delhi (d) Madras
37. Which of the following is an example of proprietary system software?
 (a) Linux
 (b) Microsoft Internet explorer
 (c) Microsoft office
 (d) Microsoft windows
38. Consider the following statements in the context of Millennium Development Goals (MDGs) adopted by the United Nations
1. Eradicate extreme poverty and hunger
 2. Improve maternal health
 3. Responsible consumption and production
 4. Reduce child mortality
- Choose the correct answer from the options given below:
 (a) 1, 2 and 3 (b) 2, 3 and 4
 (c) 1, 2 and 4 (d) 1, 3 and 4
39. Which one of the following coordinates, promotes and funds research activities of all social science disciplines?
 (a) ICPR, New Delhi
 (b) IAS, Shimla
 (c) ICSSR, New Delhi
 (d) NUEPA, New Delhi
40. With respect to computers, which one of the following best describes phishing?
 (a) A malicious program installed on a system that stays concealed to avoid detection
 (b) A method of bypassing normal authentication procedure over a connection to a network
 (c) A type of unsolicited bulk email of identical messages sent to numerous recipients
 (d) An attempt to acquire sensitive information for malicious reasons by masquerading as a trustworthy entity
41. Which of the following disasters belongs to the category of nuclear disasters?
 1. Fukushima disaster
 2. Chernobyl disaster
 3. Three mile Island incident
 4. The love canal disaster
- Choose your answer from the options given below:
 (a) 1, 2 and 3 (b) 1, 2 and 4
 (c) 1, 3 and 4 (d) 2, 3 and 4
42. **Statement I:** Most of the member countries in the International solar Alliance are located between the tropic of cancer and tropic of Capricorn
- Statement II:** Japan is a member country of the International solar alliance.
- Which of the above statements is/are correct?
 (a) I only (b) II only
 (c) Both I and II (d) Neither I nor II
43. In which of the following Ancient Indian universities, the culture and civilization of Tibet was built mainly through the writings of the schools?
 (a) Nalanda (b) Vikramshila
 (c) Jagaddala (d) Mithila
44. The Paris Agreement aims to limit the temperature rise in this century by how many degrees Celsius above the pre-industrial levels?
 (a) 1°C (b) 2°C
 (c) 0.5°C (d) 3°C

45. Jatin's laptop has a LCD screen. The acronym LCD stands for:
- Light Crystal Display
 - Liquid Compact Display
 - Light Compact Display
 - Liquid Crystal Display
46. **Assertion (A):** Night time temperatures in the central parts of a city are generally higher than those over the surrounding rural areas.
- Reason (R):** Radiation losses over the urban areas are less than that over the rural areas.
- Choose the correct answer from the options given below:
- Both (A) and (R) are true and (R) is the correct explanation of (A)
 - Both (A) and (R) are true but (R) is not the correct explanation of (A)
 - (A) is true but (R) is false
 - (A) is false but (R) is true
47. A special focus on the problems of the examination system of India formed a part of which one of the following reports?
- Report of the Calcutta university commission
 - Report of the University Education Commission (1964-1966)
 - Hartog committee report
 - Report on standards of University education UGC (1965)
48. "Gyanvani" launched by IGNOU to cover the educational needs of India refers to
- Satellite based educational T.V. channel
 - Educational F.M. Radio network
 - Global initiative of academic networks
 - MOOCs
49. Why would BCC: be used in an E-mail/email?
- BCC: allows the recipient to identify all the other recipients in the list when a group email address is used
 - BCC: allows the sender to indicate who the email is for if there is more than one recipient
 - BCC: allows the sender of a message to conceal the recipient entered in the BCC: field from the other recipients
 - BCC: allows recipients to be visible to all other recipients of the message
50. A computer network which is used within a building is called a
- | | |
|---------|---------|
| (a) WAN | (b) MAN |
| (c) LAN | (d) SAN |

Answer Key

Q.No.	Answer	Topic's Name	Chapter's Name
1	c	Evaluation systems	Teaching aptitude
2	a	Types of research	Research aptitude
3	c	Learner characteristics	Teaching aptitude
4	c	Methods of data collection	Research aptitude
5	d	Evaluation systems	Teaching aptitude
6	d	Article writing	Research aptitude
7	d	Steps of research	Research aptitude
8	b	Methods of research	Research aptitude
9	d	Factors affecting teaching	Teaching aptitude
10	a	Methods of teaching	Teaching aptitude
11	c	Fact based	Comprehension
12	d	Inferential based	Comprehension
13	b	Fact based	Comprehension
14	c	Inferential based	Comprehension
15	d	Fact based	Comprehension
16	c	Syllogism	Logical reasoning
17	b	Proportion and percentage	Mathematical aptitude
18	c	Deductive and inductive reasoning	Logical reasoning
19	a	Alphabet series	Mathematical aptitude
20	c	Types of communication	Communication
21	b	Interest	Mathematical aptitude
22	d	Non-verbal communication	Communication
23	a	Analogies	Logical reasoning
24	a	Arguments and propositions	Logical reasoning
25	a	Mass media	Communication
26	b	Society	Communication
27	a	Arguments and propositions	Logical reasoning
28	d	Number series	Mathematical aptitude
29	c	Classroom communication	Communication
30	c	Ratios	Mathematical aptitude
31	c	Data interpretation	Data interpretation
32	b	Data interpretation	Data interpretation
33	c	Data interpretation	Data interpretation
34	d	Data interpretation	Data interpretation
35	c	Data interpretation	Data interpretation
36	c	Higher education in ancient India	Higher education system
37	d	Components of computer	Information and communication technology
38	c	Millenium development goals	People, development and environment
39	c	Governance	Higher education system
40	d	Terminology	Information and communication technology

41	a	Nuclear disasters	People, development and environment
42	c	International Solar alliance	People, development and environment
43	b	Higher education in ancient India	Higher education system
44	b	Paris Agreement	People, development and environment
45	d	Abbreviations	Information and communication technology
46	a	Anthropogenic activities and their impact on environment	People, development and environment
47	d	Educational reports	Higher education system
48	b	Non-conventional learning programmes in India	Higher education system
49	c	E-Mail	Information and communication technology
50	c	Basics of internet and intranet	Information and communication technology

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- Option (c) is correct.**
Diagnostic evaluation is the evaluation which is done while learning to know difficulties and deficiencies of learner in learning process.
- Option (a) is correct.**
Qualitative research method involves collection, analysis and interpretation of qualitative or non-numeric data. This will include study of behaviour, reactions, beliefs, attitudes, etc.
- Option (c) is correct.**
Abstraction is an depth understanding of an idea and not just an event or situation. Concepts and abstraction both are based on the experience of an individual and mostly can be generalized.
- Option (c) is correct.**
Tertiary source is a compilation or index of primary and secondary sources both. It is basically the synthesis of primary and secondary sources. Examples can be dictionaries, encyclopaedia, etc.
- Option (d) is correct.**
An evaluation plan will describe how you will monitor and assess any project or assignment. It will normally include the purpose of evaluation, resources available for evaluation, and tools of analysis.
- Option (d) is correct.**
Position paper is compiled to put forward an opinion or position in relation to any ongoing issue. It is basically an argument for or against any topic and its goal is to convince an audience.
- Option (d) is correct.**
Hypothesis is a statement about an expected result or assumptions about an outcome. It is set at the beginning of study. Researcher will test the set hypothesis and prove it to be right or wrong.
- Option (b) is correct.**
Case study is a method in which researcher will investigate an event, situation, person or institute. They will identify the major areas of concern in that case and try to understand the reason for that.
- Option (d) is correct.**
The basic foundation of ensuring effective teaching will be identifying the logical step by step sequence of the theory being discussed and explaining it to learners in the best possible manner.
- Option (a) is correct.**
Synchronous instructions involve any type of learning where teacher and students are present at the same place and discussions are possible. It can be either online classes or traditional offline classes.
- Option (c) is correct.**
According to the paragraph, earlier journalists operated on the basis of negative liberty or free from external pressure. The shift from this thought of school is something that troubled the media in the 1970s.
- Option (d) is correct.**
According to the paragraph, Scholars like John Merrill consider the social responsibility driven media as authoritarian and self-serving. He says it decreases the autonomy of the media.
- Option (b) is correct.**
According to the paragraph, Positive freedom means freedom of the media to follow a pre-set goal. This concept sees negative liberty as lacking effectiveness.
- Option (c) is correct.**
The passage critically analysis the concept of social responsibility driven journalists and

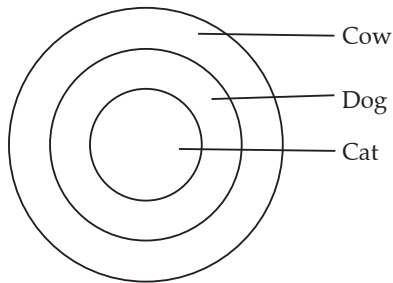
media. It discusses the belief where autonomy of media is considered as a negative freedom.

15. Option (d) is correct.

According to John Merrill, aiming for any changes or improvement in media from its current form, is self-serving and something that will decrease the autonomy of media.

16. Option (c) is correct.

We have two statements
All cats are dogs.
All dogs are cows.



Considering above statements, we can conclude that,
All cats are cows.
Some cows are cats.

17. Option (b) is correct.

Total sales = A
Manoj's commission will be:
 $10000 \times 10/100 = 1000$, and,
 $(A-10000) \times 5/100 = (A-10000) \times 0.05 = 0.05A - 500$

Hence,

$$\begin{aligned} A - 75500 &= 1000 + 0.05A - 500 \\ A - 0.05A &= 1000 - 500 + 75500 \\ A - 0.05A &= 76000 \\ A(1 - 0.05) &= 76000 \\ 0.95A &= 76000 \\ A &= 76000/0.95 = 80000 \end{aligned}$$

18. Option (c) is correct.

In scientific method of reasoning the theories are developed to explain any concept. These theories are constructed through trial and error methods by using both inductive and deductive reasoning.

19. Option (a) is correct.

The alphabets in the series are written in reverse order like, QPO is in reverse order. Also, the entire series of alphabets is written backwards. So, the correct option is HGF.

20. Option (c) is correct.

The language or any other medium of communication is developed due to inter relationships and networking of people. Sign has a meaning because people learn that meaning from each other due to a network of inter relations.

21. Option (b) is correct.

$$\begin{aligned} \text{Compound Amount (A)} &= P \left(1 + \frac{R}{100} \right)^n \\ &= 2000 \left(1 + \frac{10}{100} \right)^2 \\ &= 2000 \times (1.1)^2 \\ &= 2000 \times 1.21 \\ A &= 2420 \\ \text{Compound Interest CI} &= A - P = 420 \\ \text{Simple interest} &= (P \times R \times T)/100 \\ &= \frac{P \times 3 \times 4}{100} \end{aligned}$$

According to the problem

$$\begin{aligned} \frac{CI}{2} &= SI \\ SI &= 420/2 \\ &= P \times 3 \times 4/100 \\ 210 &= P \times 3 \times 0.04 \\ 210 &= P \times 0.12 \\ P &= 210/0.12 = 1750 \end{aligned}$$

22. Option (d) is correct.

Aesthetic codes represent various art forms like painting, sculptures, dancing, music, etc. Cultural codes represent signs, symbols, etc that carry a special meaning for the people of a particular community.

23. Option (a) is correct.

Analogical reasoning is a way of thinking that believes if two things are similar in a certain way, then they will be similar in future. Hence any thing that is true for one will be true for another also.

24. Option (a) is correct.

Considering the statement "Some milk is curd" to be true, then the statement "No milk is curd" can never be true. At least some part of the milk will be curd.

25. Option (a) is correct.

Statement a is Media entertainment does not the culture level of society. The correct reason for such a phenomenon can be that media

entertainment promotes distraction from reality and does not provide quality content.

26. Option (b) is correct.

Societal factors play an important role in the process of communication and the process of development of language used by people in a society.

27. Option (a) is correct.

Statement "some trees are green" can be related to all four statements in the option.

28. Option (d) is correct.

Total even number from 1 to 81 = 40

Sum of even numbers = $N/2 (F+L)$

$N = 40, F = 2, L = 80$

Sum = $40/2 (2+ 80)$

Sum = 1640

29. Option (c) is correct.

Connotative communication is the use of words which suggest some different meaning rather than its literal meaning. Like the term blue represents sadness and sometimes fear.

30. Option (c) is correct.

If total coins = 6A

5 ps coins = $3A \times 5/100 = ₹ 0.05 \times 3A$

10 ps coins = $2A \times 10/100 = ₹ 0.1 \times 2A$

25 ps coins = $1A \times 25/100 = ₹ 0.25 \times 1A$

$0.25A + 0.2A + 0.15A = 60$

$A = 100$

Total coins = 600

5 ps coins = 300

31. Option (c) is correct.

Total Laptop sold in six months = 45000

Laptop sold in August = $45000 \times 12/100 = 5400$

Ratio of laptop sold in August = 7:8

No. of laptop sold by H in August = $5400 \times 7/15 = 2520$

Laptop sold without discount = $2520 \times 65/100 = 1638$

32. Option (b) is correct.

Total Laptop sold in six months = 45000

Laptop sold in May = $45000 \times 22/100 = 9900$

Laptop sold by D in May = $9900 \times 5/9 = 5500$

Laptop sold in June = $45000 \times 25/100 = 11250$

Laptop sold by D in June = $11250 \times 2/5 = 4500$

Total Laptop sold by D in May and June = 10000

33. Option (c) is correct.

Total Laptop sold in six months = 45000

Laptop sold in April = $45000 \times 17/100 = 7650$

Laptop sold by D in April = $7650 \times 7/15 = 3570$

Laptop sold in September = $45000 \times 16/100 = 7200$

Laptop sold by D in September = $7200 \times 9/16 = 4050$

Ratio will be 3570:4050 = 119:135

34. Option (d) is correct.

Total Laptop sold in six months = 45000

Laptop sold in July = $45000 \times 8/100 = 3600$

Laptop sold by D in July = $3600 \times 5/12 = 1500$

Total profit of shopkeeper = $1500 \times 434 = 651000$

35. Option (c) is correct.

Total Laptop sold in six months = 45000

Laptop sold in April = $45000 \times 17/100 = 7650$

Laptop sold by H in April = $7650 \times 8/15 = 4080$

Laptop sold in September = $45000 \times 16/100 = 7200$

Laptop sold by D in September = $7200 \times 7/16 = 3150$

Percentage will be = $4080/3150 \times 100 = 130$

36. Option (c) is correct.

Delhi University was established in 1922.

Calcutta University was established on January 24, 1857.

Bombay University was established on July 18, 1857.

Madras University was established on September 5, 1857.

37. Option (d) is correct.

Proprietary software is the software which is the copyright of any company or individual. There is a restriction on production and distribution of such software. Users have to buy proprietary software against a certain sum of money. Users have to buy Microsoft Windows legally to install it.

38. Option (c) is correct.

The eight Millennium development goals of the UN include control on extreme poverty, HIV/AIDS, ensure Maternal health, reduce child mortality, Gender equality, Universal primary education, Environmental sustainability, and Global partnership for development.

39. Option (c) is correct.

The ICSSR, Delhi provides funds, grants, fellowships for projects in social science. It also

looks after the publications, collaborations, etc. in the field of social science.

40. Option (d) is correct.

Phishing is an activity of sending fraudulent messages usually through emails to people with the objective of getting any kind of sensitive information like login details or card and bank details. It is a very common type of cyber-attack.

41. Option (a) is correct.

The Fukushima nuclear disaster occurred in 2011 at the Fukushima nuclear power plant in Japan.

The Chernobyl nuclear disaster occurred in 1986 at the Chernobyl nuclear power plant in Ukraine.

The three-mile island disaster occurred in 1979 due to the meltdown of a reactor at a nuclear generating station in Pennsylvania.

The Love Canal disaster was an environmental disaster of the 1970s due to improper landfill near Niagara Falls, USA.

42. Option (c) is correct.

International solar alliance is a group of 124 countries have plenty of sunshine. This alliance is the initiative of India with headquarters at Gurugram. The objective is to promote clean energy and a sustainable environment.

43. Option (b) is correct.

Vikramshila University was built in the 8th century by ruler Dharmapala. It was among the main centres for Buddhist learning.

44. Option (b) is correct.

The Paris agreement aims to limit the global temperature increase in the century to 2°C. Its goal is to control greenhouse gas emission along with the promotion of other sustainable practices.

45. Option (d) is correct.

The full form of LCD is Liquid Crystal Display.

46. Option (a) is correct.

The city centre at night is warm in comparison to its surroundings. The buildings and other infrastructure absorb more solar energy than soils and fields. Also, evaporation is less in urban areas. Radiative losses are less in Urban areas in comparison to rural areas.

47. Option (d) is correct.

The report on standards of university education was published in 1965 by UGC. Its aim was to promote and coordinate University education along with ensuring the standards of teaching, research and evaluation in universities.

48. Option (b) is correct.

Gyanvani is an educational FM station of IGNOU which provides an interactive platform to the students. It was launched in March 2000.

49. Option (c) is correct.

BCC means blind carbon copy. The recipients whose email is entered in BCC will not be able to check other recipients in the BCC of the email.

50. Option (c) is correct.

Local area network is a network which connects the computers within the small area like a residential complex, company, etc.