

TISSNET Disaster Studies 11th March 2024

Shift 3 Question Paper with Solutions

Time Allowed :105 Minutes	Maximum Marks :300	Total Questions :62
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. TISS-NET comprises 100 questions carrying 1 mark each.
2. There is NO negative marking in TISS-NET.
3. You have 100 minutes (1 hour 40 minutes) to complete this test.
4. There are THREE sections in this test:
General Awareness: 40 questions
Mathematics and Logical Reasoning: 30 questions
English Proficiency: 30 questions
5. You can attempt the questions and sections in any order.
6. Section toggling within TISS-NET is allowed.
7. You can review and change your answer to any question at any time before the 100 minutes are up.

1. As per the constitution of India, which of the following articles directs the State to improve public health, nutrition and the standard of living?

- (1) Article 41
- (2) Article 46
- (3) Article 47
- (4) Article 50

Correct Answer: (3) Article 47

Solution:

Article 47 of the Constitution of India directs the State to improve public health, nutrition, and the standard of living. It places a responsibility on the State to raise the level of nutrition and the standard of living of its people.

Conclusion: The correct answer is Article 47 (Option 3).

Quick Tip

Article 47 is one of the Directive Principles of State Policy that guides the State in enhancing the health and welfare of its citizens.

2. Who acts as the chairperson of the National Disaster Management Authority (NDMA)?

- (1) Prime Minister of India
- (2) Home Minister of India
- (3) Defence Minister of India
- (4) Health Minister of India

Correct Answer: (1) Prime Minister of India

Solution:

The Prime Minister of India acts as the chairperson of the National Disaster Management Authority (NDMA). NDMA is the apex body responsible for formulating policies and plans for disaster management in India.

Conclusion: The correct answer is Prime Minister of India (Option 1).

Quick Tip

NDMA plays a crucial role in disaster management and response, and its leadership is provided by the Prime Minister.

3. As per the constitution of India, which of the following entries in the Union List deals with inter-state quarantine?

- (1) Entry 51
- (2) Entry 61
- (3) Entry 71
- (4) Entry 81

Correct Answer: (2) Entry 61

Solution:

Entry 61 in the Union List of the Seventh Schedule of the Constitution of India deals with matters related to inter-state quarantine. This entry empowers the Union Government to legislate on quarantine and isolation practices for public health.

Conclusion: The correct answer is Entry 61 (Option 2).

Quick Tip

The Union List defines the areas in which the central government can legislate, including issues of public health and quarantine.

4. Which of the following is the nodal ministry for the management of Avalanche?

- (1) Ministry of Mines
- (2) Ministry of Road Transport and Highways
- (3) Ministry of Earth Sciences
- (4) Ministry of Defence

Correct Answer: (3) Ministry of Earth Sciences

Solution:

The Ministry of Earth Sciences is the nodal ministry responsible for managing the issues related to avalanches. This ministry conducts research, provides information, and develops systems for early warning of natural disasters, including avalanches.

Conclusion: The correct answer is Ministry of Earth Sciences (Option 3).

Quick Tip

The Ministry of Earth Sciences handles research and forecasting related to natural hazards like avalanches, earthquakes, and climate change.

5. Which of the following sections of the Disaster Management Act, 2005 is related to the constitution of the National Disaster Response Force?

- (1) Section 44
- (2) Section 46

(3) Section 48

(4) Section 50

Correct Answer: (1) Section 44

Solution:

Section 44 of the Disaster Management Act, 2005 deals with the constitution of the National Disaster Response Force (NDRF). This section empowers the Government of India to establish a specialized response force for handling natural and man-made disasters.

Conclusion: The correct answer is Section 44 (Option 1).

Quick Tip

The National Disaster Response Force (NDRF) is a specialized force created to manage disasters and provide immediate response to such situations.

6. Which Sustainable Development Goal (SDG) is related to ensuring healthy lives and promoting well-being?

(1) SDG Goal 2

(2) SDG Goal 3

(3) SDG Goal 4

(4) SDG Goal 9

Correct Answer: (2) SDG Goal 3

Solution:

SDG Goal 3 aims to ensure healthy lives and promote well-being for all at all ages. It covers a range of health-related issues, such as reducing maternal and child mortality, addressing infectious diseases, and ensuring access to healthcare services.

Conclusion: The correct answer is SDG Goal 3 (Option 2).

Quick Tip

SDG Goal 3 is a vital part of the UN's 2030 Agenda for Sustainable Development, with a focus on public health, access to medicine, and reducing health disparities.

7. What is the tenure of the judge of the International Criminal Court?

- (1) 3 years
- (2) 5 years
- (3) 6 years
- (4) 9 years

Correct Answer: (3) 9 years

Solution:

The tenure of a judge of the International Criminal Court (ICC) is 9 years. The judges of the ICC are elected for a fixed term of nine years, and they cannot be re-elected for consecutive terms.

Conclusion: The correct answer is 9 years (Option 4).

Quick Tip

The International Criminal Court plays a vital role in addressing crimes such as genocide, war crimes, and crimes against humanity.

8. Match List I with List II:

Reservoir	River
<i>A.Gandhi Sagar</i>	<i>I.Betwa</i>
<i>B.Panchet</i>	<i>II.Chambal</i>
<i>C.Matatila</i>	<i>III.Damodar</i>
<i>D.Nizam Sagar</i>	<i>IV.Manjira</i>

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

Correct Answer: (1) (A) - (I), (B) - (II), (C) - (IV), (D) - (III)

Solution:

The correct matching of Reservoirs and Rivers is:

- Gandhi Sagar Reservoir is on the Betwa river.
- Panchet Reservoir is on the Chambal river.
- Matatila Reservoir is on the Damodar river.
- Nizam Sagar Reservoir is on the Manjira river.

Conclusion: The correct answer is Option 1: (A) - (I), (B) - (II), (C) - (IV), (D) - (III).

Quick Tip

India has numerous reservoirs that are critical for irrigation, power generation, and flood control.

9. Those who leave the sovereign territory of one country in order to achieve refugee status in another country based upon claims of danger are called:

- (1) Asylum Seeker
- (2) Diaspora
- (3) Emigrant
- (4) Immigrant

Correct Answer: (1) Asylum Seeker

Solution:

An Asylum Seeker is someone who leaves their home country due to fear of danger and applies for refugee status in another country. They are seeking international protection.

Conclusion: The correct answer is Asylum Seeker (Option 1).

Quick Tip

Asylum seekers are different from refugees, as they are still in the process of seeking recognition as refugees under international law.

10. Which of the following is an artificial intelligence language?

- (1) BASIC
- (2) COBOL
- (3) FORTRAN

(4) LISP

Correct Answer: (4) LISP

Solution:

LISP is a programming language that is widely used in artificial intelligence (AI) and symbolic processing. It is particularly known for its use in AI research due to its adaptability and flexibility in handling complex data structures.

Conclusion: The correct answer is LISP (Option 4).

Quick Tip

LISP is one of the oldest programming languages still used in AI and symbolic computation.

11. Arrange the following in decreasing order:

(A) Exabyte

(B) Gigabyte

(C) Petabyte

(D) Terabyte

(E) Yottabyte

Choose the correct answer from the options given below:

(1) (C), (D), (B), (E), (A)

(2) (E), (C), (A), (D), (B)

(3) (E), (C), (A), (D), (B)

(4) (C), (D), (E), (B), (A)

Correct Answer: (4) (C), (D), (E), (B), (A)

Solution:

The correct decreasing order for data sizes is:

Yottabyte > Exabyte > Petabyte > Terabyte > Gigabyte

Quick Tip

In data storage, the sizes increase in the following order: Gigabyte ; Terabyte ; Petabyte ; Exabyte ; Yottabyte.

12. Which of the following Logic Gates are incorrectly listed?

- (A) AND
- (B) FOR
- (C) NAND
- (D) SUB
- (E) XOR

Correct Answer: (B) and (D) only

Solution:

The following gates are incorrectly listed: - FOR is not a logic gate. - SUB is also not a standard logic gate. - AND, NAND, and XOR are valid logic gates.

Conclusion: The correct answer is (B) and (D) only.

Quick Tip

Standard logic gates include AND, OR, NOT, NAND, NOR, XOR, and XNOR.

13. Which of the following is a correct example of Platform as a Service (PaaS) in Cloud Computing?

- (1) Apache
- (2) Amazon
- (3) Microsoft
- (4) Google

Correct Answer: (3) Microsoft

Solution:

Microsoft is a correct example of PaaS (Platform as a Service), as it provides cloud platforms like Azure, which offer a platform for developers to build and deploy applications without

managing the underlying hardware or software infrastructure.

Conclusion: The correct answer is Microsoft (Option 3).

Quick Tip

Platform as a Service (PaaS) provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the infrastructure.

14. Which of the following is the correct expansion for HPCC?

- (1) Highest Performance Computer for Computing
- (2) High Performance Computing and Communications
- (3) High Performance Computer and Communications
- (4) Higher Performing Computer and Communications

Correct Answer: (2) High Performance Computing and Communications

Solution:

HPCC stands for High Performance Computing and Communications, which refers to the use of supercomputers and high-speed communication systems for advanced computing tasks and research.

Conclusion: The correct answer is High Performance Computing and Communications (Option 2).

Quick Tip

HPCC plays a crucial role in fields like climate research, simulations, data analysis, and scientific computing.

15. Which of the following is primarily an interpreted logic programming language, designed for use in Artificial Intelligence (AI) applications?

- (1) PASCAL
- (2) PERL
- (3) PROLOG

(4) PostScript

Correct Answer: (3) PROLOG

Solution:

PROLOG is a logic programming language that is primarily interpreted. It is used extensively in Artificial Intelligence (AI) for tasks like natural language processing and machine learning.

Conclusion: The correct answer is PROLOG (Option 3).

Quick Tip

PROLOG is a declarative programming language, and it is particularly suited for solving problems that involve complex logical relationships.

16. Which of the following is responsible for executing the query in a database?

- (1) Code Generator
- (2) Query Optimizer
- (3) Query Parser
- (4) Query Processor

Correct Answer: (4) Query Processor

Solution:

The Query Processor is responsible for executing queries in a database. It interprets the query, optimizes it, and ultimately runs it to produce the desired results.

Conclusion: The correct answer is Query Processor (Option 4).

Quick Tip

The Query Processor is an essential component of the database management system (DBMS) that ensures efficient query execution.

17. In relation to outbreaks, 'the gap in time between the onset of primary case and secondary case' is known as

- (1) Incubation period
- (2) Lead time
- (3) Generation time
- (4) Serial interval

Correct Answer: (3) Generation time

Solution:

The Generation Time is the time gap between the onset of the primary case (first case) and the onset of the secondary case (subsequent case). It is crucial in studying the spread of infectious diseases.

Conclusion: The correct answer is Generation Time (Option 3).

Quick Tip

Generation time helps in understanding the dynamics of infectious disease spread and is critical in determining control measures.

18. Nutritional supplementation programmes are a form of which type of prevention?

- (1) Primordial
- (2) Primary
- (3) Secondary
- (4) Tertiary

Correct Answer: (2) Primary

Solution:

Primary Prevention involves efforts to prevent the onset of disease or health issues.

Nutritional supplementation programs fall under primary prevention as they aim to improve health and prevent malnutrition before any health problems arise.

Conclusion: The correct answer is Primary (Option 2).

Quick Tip

Primary prevention focuses on health promotion and disease prevention before any clinical signs or symptoms appear.

19. Which of the following dimensions is mentioned in the definition of Health, according to the World Health Organization (1948)?

- (1) Financial
- (2) Environmental
- (3) Social
- (4) Occupational

Correct Answer: (3) Social

Solution:

The World Health Organization (WHO) in 1948 defined health as a state of complete physical, mental, and social well-being. The social dimension is an integral part of the definition.

Conclusion: The correct answer is Social (Option 3).

Quick Tip

WHO's definition of health emphasizes that health is not merely the absence of disease but a holistic state of well-being in physical, mental, and social aspects.

20. Which of the following water-borne diseases are caused by protozoan?

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

Correct Answer: (2) (B) and (C) only

Solution:

Giardiasis and Amoebiasis are both caused by protozoa. The other diseases listed, such as Weil's disease, Cholera, and Hepatitis E, are not caused by protozoa but by bacteria and viruses.

Conclusion: The correct answer is (B) and (C) only (Option 2).

Quick Tip

Protozoan diseases like Giardiasis and Amoebiasis are water-borne and can lead to gastrointestinal issues. Proper sanitation and hygiene are essential to control them.

21. An outbreak of disease in an animal population is known as

- (1) Epornithic
- (2) Exotic
- (3) Epizootic
- (4) Enzootic

Correct Answer: (3) Epizootic

Solution:

An Epizootic is an outbreak of disease that occurs in a specific population of animals, similar to an epidemic in humans. It is commonly used to describe diseases affecting animal populations over a large area.

Conclusion: The correct answer is Epizootic (Option 3).

Quick Tip

An epizootic is a term commonly used in veterinary medicine to describe widespread disease outbreaks in animals.

22. World Health Organization declared the end of Public Health Emergency of International Concern for COVID-19 on

- (1) 05 June, 2022
- (2) 05 May, 2022
- (3) 05 April, 2023
- (4) 05 May, 2023

Correct Answer: (3) 05 April, 2023

Solution:

On 05 April, 2023, the World Health Organization (WHO) officially declared the end of the Public Health Emergency of International Concern (PHEIC) for COVID-19.

Conclusion: The correct answer is 05 April, 2023 (Option 3).

Quick Tip

The WHO's declaration of the end of COVID-19 as a public health emergency marks a significant milestone in the global response to the pandemic.

23. Which of the following occupational diseases is often associated with Hay or Grain Dust?

- (1) Anthracosis
- (2) Hayosis
- (3) Grainestosis
- (4) Farmer's lung

Correct Answer: (4) Farmer's lung

Solution:

Farmer's lung is an occupational disease caused by inhaling dust from hay, grain, or other organic matter, leading to respiratory issues.

Conclusion: The correct answer is Farmer's lung (Option 4).

Quick Tip

Farmer's lung is a form of hypersensitivity pneumonitis, a condition caused by inhaling organic dust, particularly in agricultural settings.

24. In disaster triage system, which of the following colour is used for tagging the patients with 'urgent conditions, but who can be transported after sometime'?

- (1) Green
- (2) White
- (3) Yellow
- (4) Red

Correct Answer: (3) Yellow

Solution:

In disaster triage systems, Yellow is the colour used for patients who have urgent medical conditions but can wait for treatment after a short period.

Conclusion: The correct answer is Yellow (Option 3).

Quick Tip

In disaster triage, a yellow tag indicates that the patient requires medical attention but can be delayed for a short period without risk of death.

25. Which of the following is a triage system used in Mass Casualty Incidents and Disasters?

- (1) MOVE triage system
- (2) MASS triage system
- (3) RESCUE triage system
- (4) APA triage system

Correct Answer: (2) MASS triage system

Solution:

The MASS triage system is a method used in mass casualty incidents to prioritize patients based on the severity of their injuries.

Conclusion: The correct answer is MASS triage system (Option 2).

Quick Tip

The MASS triage system is a simple and quick system used during mass casualty incidents to prioritize treatment.

26. In which year did the Three Mile Island accident take place?

- (1) 1978
- (2) 1979

(3) 1980

(4) 1981

Correct Answer: (2) 1979

Solution:

The Three Mile Island accident occurred on March 28, 1979, in Pennsylvania, USA. It was the most serious accident in the history of the American commercial nuclear power generating industry.

Conclusion: The correct answer is 1979 (Option 2).

Quick Tip

The Three Mile Island incident was a partial nuclear meltdown that led to widespread fears about nuclear energy.

27. For high-quality Cardiopulmonary Resuscitation, chest compression should be at the rate of

(1) 70 to 90 chest compressions / minute

(2) 80 to 100 chest compressions / minute

(3) 90 to 110 chest compressions / minute

(4) 100 to 120 chest compressions / minute

Correct Answer: (4) 100 to 120 chest compressions / minute

Solution:

For high-quality Cardiopulmonary Resuscitation (CPR), the chest compression rate should be between 100 and 120 compressions per minute to ensure effective blood circulation during resuscitation.

Conclusion: The correct answer is 100 to 120 chest compressions per minute (Option 4).

Quick Tip

For optimal CPR, chest compressions should be continuous and at the proper depth, at a rate of 100 to 120 compressions per minute.

28. Epidemiological triad refers to

- (1) Agent, Disease, Environment
- (2) Host, Agent, Disease
- (3) Host, Disease, Environment
- (4) Host, Agent, Environment

Correct Answer: (4) Host, Agent, Environment

Solution:

The Epidemiological Triad consists of three components: Host, Agent, and Environment. These three factors interact to determine the occurrence and spread of diseases in populations.

Conclusion: The correct answer is Host, Agent, Environment (Option 4).

Quick Tip

The Epidemiological Triad is fundamental in understanding the dynamics of infectious diseases and forms the basis of disease prevention strategies.

29. Constant presence and/or usual prevalence of a disease of infectious agent in a population within a geographic area is known as

- (1) Sporadic
- (2) Endemic
- (3) Epidemic
- (4) Pandemic

Correct Answer: (2) Endemic

Solution:

An endemic disease is one that is constantly present or prevalent in a specific geographic area or population, but not spreading uncontrollably.

Conclusion: The correct answer is Endemic (Option 2).

Quick Tip

Endemic diseases are always present in a population but usually at a predictable and controlled level.

30. Which of the following was India's initiative for assistance to earthquake-hit Turkiye and Syria?

- (1) Operation Dost
- (2) Operation Kesari
- (3) Operation Rainbow
- (4) Operation Castor

Correct Answer: (1) Operation Dost

Solution:

Operation Dost was India's humanitarian assistance initiative to help Turkey and Syria after the devastating earthquake in 2023. India sent search and rescue teams, medical aid, and other relief supplies.

Conclusion: The correct answer is Operation Dost (Option 1).

Quick Tip

Operation Dost is an example of India's international aid efforts in times of global disasters, showcasing solidarity with other nations.

31. The legal doctrine of 'Parens Patriae' refers to:

- (1) Right to fair trial
- (2) Duty of citizens to serve the nation
- (3) Presumption of innocence until proven guilty
- (4) Obligation on the state to protect persons under disability

Correct Answer: (4) Obligation on the state to protect persons under disability

Solution:

The doctrine of Parens Patriae refers to the state's obligation to protect those who are unable

to protect themselves, such as minors or persons with disabilities. This principle gives the state the authority to intervene and act as a guardian in the best interest of vulnerable individuals.

Conclusion: The correct answer is Obligation on the state to protect persons under disability (Option 4).

Quick Tip

The concept of Parens Patriae is deeply rooted in law and highlights the state's duty to care for vulnerable individuals.

32. Which of the following prepares the National Plan for Disaster Management in India?

- (1) National Institute of Disaster Management
- (2) National Disaster Response Force
- (3) National Executive Committee
- (4) Special Centre for Disaster Research, JNU

Correct Answer: (3) National Executive Committee

Solution:

The National Executive Committee (NEC) is responsible for preparing the National Plan for Disaster Management, which outlines the country's strategies for disaster preparedness, mitigation, and response.

Conclusion: The correct answer is National Executive Committee (Option 3).

Quick Tip

The NEC works under the Ministry of Home Affairs and plays a crucial role in disaster planning and coordination in India.

33. Which of the following mentioned Acts is enumerated in the 'Schedule I' of the National Green Tribunal Act, 2010?

- (1) Wild Life (Protection) Act, 1972

- (2) Public Liability Insurance Act, 1991
- (3) Energy Conservation Act, 2001
- (4) Solid Waste Management Act, 2006

Correct Answer: (1) Wild Life (Protection) Act, 1972

Solution:

The Wild Life (Protection) Act, 1972 is one of the key legislations listed in Schedule I of the National Green Tribunal Act, 2010. This Act addresses the protection of wildlife and their habitats in India.

Conclusion: The correct answer is Wild Life (Protection) Act, 1972 (Option 1).

Quick Tip

The National Green Tribunal deals with environmental and ecological issues, and its jurisdiction includes the Wild Life (Protection) Act, 1972.

34. How many priorities for action are outlined under the Sendai Framework for Disaster Risk Reduction?

- (1) Three
- (2) Four
- (3) Five
- (4) Seven

Correct Answer: (3) Five

Solution:

The Sendai Framework for Disaster Risk Reduction outlines five priorities for action, which focus on understanding disaster risks, strengthening disaster risk governance, and improving disaster preparedness and response.

Conclusion: The correct answer is Five (Option 3).

Quick Tip

The Sendai Framework emphasizes the need for comprehensive strategies and multi-stakeholder collaboration to reduce disaster risks.

35. Irrelevant spatial data entered during digitizing, scanning or data transfer in GIS is termed as

- (1) Garbage
- (2) Mis-allocated data
- (3) Noise
- (4) Null Data

Correct Answer: (3) Noise

Solution:

In Geographic Information Systems (GIS), noise refers to irrelevant or extraneous spatial data that does not contribute meaningfully to the analysis and may distort results.

Conclusion: The correct answer is Noise (Option 3).

Quick Tip

In GIS, noise can be caused by errors during data collection, digitization, or transfer. It is important to clean the data for accurate analysis.

36. In 1964, Laboratory for Computer Graphics and Spatial Analysis (LCGSA) was developed in -

- (1) Harvard University
- (2) Moscow University
- (3) Chicago University
- (4) John Hopkins University

Correct Answer: (1) Harvard University

Solution:

The Laboratory for Computer Graphics and Spatial Analysis (LCGSA) was established at Harvard University in 1964. It played a pivotal role in the development of computer graphics and spatial analysis techniques.

Conclusion: The correct answer is Harvard University (Option 1).

Quick Tip

The LCGSA at Harvard University was instrumental in advancing geographic and spatial computing technologies.

37. SDSS stands for -

- (1) Special Decision Support System
- (2) Spectral Data Support System
- (3) Spatial Decision Support System
- (4) Special Database Support System

Correct Answer: (3) Spatial Decision Support System

Solution:

SDSS stands for Spatial Decision Support System. It refers to a system that provides support for spatial decision-making by incorporating spatial data analysis and decision modeling.

Conclusion: The correct answer is Spatial Decision Support System (Option 3).

Quick Tip

An SDSS is designed to support decision-making in situations where spatial data plays a crucial role, such as urban planning, environmental management, and disaster response.

38. Which of the following types of malware do not replicate or clone themselves through infection?

- (1) Root Kits
- (2) Trojans
- (3) Viruses
- (4) Worms

Correct Answer: (2) Trojans

Solution:

Trojans are types of malware that do not replicate themselves. Unlike viruses or worms, they are often disguised as legitimate software and do not self-replicate but instead rely on users

to execute them.

Conclusion: The correct answer is Trojans (Option 2).

Quick Tip

Trojans can cause harm to systems without self-replicating. They usually rely on social engineering techniques to trick users into installing them.

39. There is a collective term for malicious spying programs used for security monitoring of someone's activities and actions over a digital medium -

- (1) Keylogger
- (2) Malware
- (3) Remote Access Trojans
- (4) Spyware

Correct Answer: (4) Spyware

Solution:

Spyware refers to malicious software that secretly monitors and records a user's activity on a computer or network, typically for gathering personal information or spying on the user.

Conclusion: The correct answer is Spyware (Option 4).

Quick Tip

Spyware can track keystrokes, browsing history, and other personal information without the user's knowledge or consent.

40. Who is the father of computer security?

- (1) August Kerckhoffs
- (2) Bob Thomas
- (3) Charles Babbage
- (4) John McCarthy

Correct Answer: (1) August Kerckhoffs

Solution:

August Kerckhoffs is considered the father of computer security. He formulated the principle that a cryptographic system should be secure even if everything about the system, except the secret key, is known. His work laid the foundation for modern cryptography and computer security.

Conclusion: The correct answer is August Kerckhoffs (Option 1).

Quick Tip

Kerckhoffs' Principle remains a fundamental idea in cryptography, emphasizing the importance of keeping only the encryption key secret.

41. The reduction in calcification rates in reef-building corals and algae is due to

- (1) Sea Water Chemistry
- (2) Sea Water Temperature
- (3) Sea Level Rise
- (4) Storm Frequency and Intensity

Correct Answer: (1) Sea Water Chemistry

Solution:

The reduction in calcification rates in reef-building corals and algae is mainly due to changes in sea water chemistry, particularly the increased acidification of the oceans caused by higher atmospheric CO₂ levels.

Conclusion: The correct answer is Sea Water Chemistry (Option 1).

Quick Tip

Ocean acidification due to increased CO₂ absorption disrupts the ability of corals and algae to calcify, impacting coral reef ecosystems.

42. Which of the following is closely related to Sustainable Development?

- (1) Prime Minister of Estonia
- (2) Prime Minister of Finland
- (3) Prime Minister of Norway

(4) Prime Minister of Sweden

Correct Answer: (4) Prime Minister of Sweden

Solution:

The Prime Minister of Sweden has been closely associated with sustainable development initiatives. Sweden has consistently been a global leader in promoting sustainable development practices through green policies and environmental protection strategies.

Conclusion: The correct answer is Prime Minister of Sweden (Option 4).

Quick Tip

Sweden has made significant strides in integrating sustainable development goals (SDGs) into their national policies and international initiatives.

43. Which of the following is not identified as the drivers of changes in ecosystem goods and services as per the Millennium Ecosystem Assessment Report (2005)?

- (1) Cultural
- (2) Economic
- (3) Religious
- (4) Socio-political

Correct Answer: (3) Religious

Solution:

The Millennium Ecosystem Assessment Report (2005) identifies cultural, economic, and socio-political factors as the primary drivers of change in ecosystem goods and services. Religious factors are not explicitly identified as a main driver in the report.

Conclusion: The correct answer is Religious (Option 3).

Quick Tip

The Millennium Ecosystem Assessment focuses on human impact and environmental factors influencing ecosystems and services across the globe.

44. Which of the following diversity indices represents diversity between habitats or between communities?

- (1) Alpha (α)
- (2) Beta (β)
- (3) Epsilon (ϵ)
- (4) Gamma (γ)

Correct Answer: (2) Beta (β)

Solution:

Beta diversity (β) refers to the diversity between different habitats or communities. It measures the difference in species composition between ecosystems or locations.

Conclusion: The correct answer is Beta (β) (Option 2).

Quick Tip

Beta diversity helps understand how diverse ecosystems are across space, highlighting the variability of species composition.

45. Which of the following is considered as a high impact species?

- (1) Flagship species
- (2) Keystone species
- (3) Threatened species
- (4) Umbrella species

Correct Answer: (2) Keystone species

Solution:

Keystone species are those that have a disproportionately large effect on the ecosystem compared to their abundance. These species are crucial for the structure, diversity, and functioning of their environment.

Conclusion: The correct answer is Keystone species (Option 2).

Quick Tip

Keystone species play a critical role in maintaining the ecological balance and health of ecosystems.

46. Match List I with List II

Pollutants	Sources
(A). Flourides	(I). Chemical industries, oil wells, refineries
(B). H ₂ S	(II). Manufacture of fertilizers, ceramics, aluminium smelting
(C). Mercury	(III). Power stations and industrial furnaces
(D). NO _x	(IV). Manufacture of papers, chemicals and paints

Choose the correct answer from the options given below:

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

Correct Answer: 3: (A) - (I), (B) - (I), (C) - (IV), (D) - (III)

Solution:

The correct matching is based on the sources and pollutants they are related to:

- Flourides come from **Chemical industries, oil wells, refineries**.
- H₂S is a by-product from **Manufacture of fertilizers, ceramics, and aluminium smelting**.
- Mercury comes from **Manufacture of papers, chemicals and paints**.
- NO_x comes from **Power stations and industrial furnaces**.

Quick Tip

Understanding the sources of various pollutants can help in targeting the right strategies for reducing environmental impacts.

47. A particular kind of toxin including physical, chemical or biological agents, that causes cancer is called

- (1) Carcinogen
- (2) Estrogen
- (3) Mutagen
- (4) Teratogen

Correct Answer: (1) Carcinogen

Solution:

A Carcinogen is any substance, organism, or physical agent that promotes or causes cancer in living tissue.

Estrogen, Mutagen, and Teratogen refer to hormones, substances that cause genetic mutations, and substances that cause birth defects, respectively, but they are not necessarily carcinogenic.

Conclusion: The correct answer is Carcinogen (Option 1).

Quick Tip

Carcinogens are agents that directly contribute to the development of cancer, either by causing mutations in DNA or by affecting cellular functions.

48. Which of the following waste management approaches is not an energy recovery method?

- (1) Compositing
- (2) Incineration
- (3) Pyrolysis
- (4) Fluidized Bed Combustion

Correct Answer: (1) Compositing

Solution:

Composting (Option 1) is a waste management process that decomposes organic waste into nutrient-rich soil, but it does not directly recover energy. Incineration, Pyrolysis, and

Fluidized Bed Combustion all involve thermal processes that generate energy by burning or chemically processing waste.

Conclusion: The correct answer is Composting (Option 1).

Quick Tip

Composting is an eco-friendly waste management method that turns organic waste into valuable compost, but it does not provide energy recovery.

49. Which of the following is the common scientific sponsor of the other listed international programmes?

- (1) ICSU
- (2) IGBP
- (3) IHDP
- (4) WCRP

Correct Answer: (1) ICSU

Solution:

The International Council for Science (ICSU) is the common sponsor of various international programs including IGBP, IHDP, and WCRP. These programs focus on global environmental change, sustainable development, and climate studies.

Conclusion: The correct answer is ICSU (Option 1).

Quick Tip

ICSU sponsors collaborative global research programs that focus on scientific issues like climate change and sustainability.

50. Quantification of the adverse effects arising from exposure to a hazardous reagent or toxic, based on the degree of exposure is called

- (1) Dose Response Assessment
- (2) Exposure Assessment
- (3) Hazard Identification

(4) Risk Characterization

Correct Answer: (1) Dose Response Assessment

Solution:

Dose Response Assessment refers to the process of evaluating the relationship between the dose of a harmful substance and the extent of its adverse effects on human health or the environment.

Conclusion: The correct answer is Dose Response Assessment (Option 1).

Quick Tip

Dose Response Assessment is crucial for understanding how exposure to a chemical or toxin leads to specific health outcomes.

51. How much cultivable area is vulnerable to drought in India?

- (1) Nearly 36 percent
- (2) Nearly 48 percent
- (3) Nearly 58 percent
- (4) Nearly 68 percent

Correct Answer: (4) Nearly 68 percent

Solution:

India has a significant portion of its cultivable land prone to drought. Nearly 68 percent of the country's cultivable area is vulnerable to drought conditions. Drought is a common issue in many parts of India, especially in the western and central regions.

Conclusion: The correct answer is Nearly 68 percent.

Quick Tip

Drought vulnerability in India affects agricultural productivity, leading to food insecurity and economic challenges.

52. Which of the following are influences of increased UV-B radiation on human health, plants, and aquatic ecosystem?

- (A) Skin cancer and eye cataracts
- (B) Human immune system suppression
- (C) Increased crop yields and tree growth
- (D) Increased phytoplankton productivity
- (E) Possible climate change

Choose the correct answer from the options given below:

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

Correct Answer: 1. (A), (B), and (E) only

Solution:

Increased UV-B radiation is a harmful environmental issue, affecting human health, plants, and aquatic ecosystems.

- (A) Skin cancer and eye cataracts are well-documented health issues related to UV-B radiation exposure.
- (B) UV-B radiation can suppress the human immune system, making people more susceptible to infections and diseases.
- (E) It is linked to possible climate change due to its effect on the atmosphere and ecosystems.

However, (C) and (D) are not accurate because UV-B radiation can actually reduce crop yields and tree growth and can disrupt aquatic ecosystems, rather than increase productivity.

Conclusion: The correct influences are (A), (B), and (E) only.

Quick Tip

UV-B radiation increases can lead to significant health risks, ecological shifts, and climate-related impacts.

53. Which of the following attributes are correct about the concept of ‘sex’?

- (A) Sex is a biological construction

- (B) Sex connotes different social roles of men and women in society.
- (C) Sex is generally considered to be static and dictated by forces of nature
- (D) Sex is a synonym for Gender.
- (E) Sex is a socio-cultural construction

Choose the correct answer from the options given below

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

Correct Answer: (1) (A) and (C) only

Solution:

- (A) Sex is a biological construction: This is correct as sex refers to the biological differences between males and females, such as reproductive organs and chromosomes.
- (B) Sex connotes different social roles of men and women in society: This is incorrect because this definition refers to gender, not sex.
- (C) Sex is generally considered to be static and dictated by forces of nature: This is correct. Sex is often considered a natural, fixed characteristic determined by biological factors.
- (D) Sex is a synonym for Gender: This is incorrect. Sex refers to biological differences, while gender refers to the social roles and identities associated with being male or female.
- (E) Sex is a socio-cultural construction: This is incorrect as it refers to gender, not biological sex.

Conclusion: The correct answer is (A) and (C) only.

Quick Tip

Sex refers to biological differences, while gender is a socio-cultural construct based on those biological differences.

54. Which of the following are parts of the main pillars of the National Disaster Management Plan, 2019?

- (A) Social inclusion as a ubiquitous and cross-cutting principle

- (B) Mainstreaming Environmental Impact Assessment as an integral feature
- (C) Conforming to Disaster Management Act, 2005
- (D) Conforming to Environment, Climate, and Disaster Management
- (E) Mainstreaming Prime Minister's Ten Point Agenda for DRR

Choose the correct answer from the options given below

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

Correct Answer: 2. (A), (C) and (E) only

Solution:

- (A) Social inclusion as a ubiquitous and cross-cutting principle: This is part of the National Disaster Management Plan (NDMP) as it ensures that marginalized communities are included in disaster risk management and response.
- (B) Mainstreaming Environmental Impact Assessment as an integral feature: This is not a main pillar of the NDMP. While environmental concerns are part of disaster management, EIA is not identified as a central pillar in the 2019 plan.
- (C) Conforming to Disaster Management Act, 2005: This is a main pillar of the plan. The NDMP aligns with the provisions of the Disaster Management Act of 2005 to ensure a unified approach to disaster management.
- (D) Conforming to Environment, Climate, and Disaster Management: While important, this is not explicitly identified as a central pillar in the NDMP. The plan does consider environmental and climate factors but does not label this as one of its main pillars.
- (E) Mainstreaming Prime Minister's Ten Point Agenda for DRR: This is an important pillar of the NDMP as it incorporates the Prime Minister's Ten Point Agenda to strengthen disaster risk reduction (DRR) efforts.

Conclusion: The correct answer is (A), (C), and (E) only.

Quick Tip

The National Disaster Management Plan emphasizes inclusivity, conformity with existing laws, and DRR strategies to strengthen the nation's disaster resilience.

55. The Rights of Persons with Disabilities Act, 2016 includes the following under physical disability -

- (A) Leprosy cured person
- (B) Cerebral Palsy
- (C) Multiple Sclerosis
- (D) Autism spectrum disorder
- (E) Acid attack victims

Choose the correct answer from the options given below

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

Correct Answer: (A), (B) and (C) only

Solution:

The Rights of Persons with Disabilities Act, 2016 includes several disabilities under physical disability. Among the options given:

- Leprosy cured person (A) is considered a physical disability under the Act.
- Cerebral Palsy (B) and Multiple Sclerosis (C) are also listed under physical disability.
- Autism spectrum disorder (D) is categorized as a developmental disorder and not a physical disability.
- Acid attack victims (E) are also included in the Act but under a separate category related to specific types of disability, not as physical disability.

Conclusion: The correct answer is (A), (B), and (C) only.

Quick Tip

The Rights of Persons with Disabilities Act provides broad coverage of disabilities, including physical, mental, and developmental, ensuring the rights and welfare of affected individuals.

56. Which of the following mobile applications implemented by the National Disaster Management Authority (NDMA) publishes official warnings for all disasters from authorized sources?

- (1) D-Map
- (2) DAMINI
- (3) RAKSHAK
- (4) SACHET

Correct Answer: (2) DAMINI

Solution:

DAMINI is the mobile application launched by the NDMA that provides real-time earthquake information and official warnings from authorized sources. It is an important tool for disaster management, providing users with timely information on seismic activity.

Conclusion: The correct answer is DAMINI (Option 2).

Quick Tip

DAMINI helps in disseminating earthquake-related information to the public quickly, ensuring better preparedness and response.

57. The International Day for Disaster Risk Reduction was started in which year?

- (1) 1985
- (2) 1989
- (3) 1990
- (4) 1994

Correct Answer: (3) 1990

Solution:

The International Day for Disaster Risk Reduction was first celebrated in 1990. It aims to promote a global culture of disaster risk reduction and raise awareness about the importance of disaster preparedness and response.

Conclusion: The correct answer is 1990 (Option 3).

Quick Tip

The International Day for Disaster Risk Reduction highlights the need for building resilience against disasters worldwide.

58. National Disaster Management Guidelines on Disability Inclusive Disaster Risk Reduction were released by

- (1) Special Centre for Disaster Research, JNU
- (2) National Institute of Disaster Management
- (3) Department of Empowerment of Persons with Disabilities
- (4) National Disaster Management Authority

Correct Answer: (4) National Disaster Management Authority

Solution:

The National Disaster Management Guidelines on Disability Inclusive Disaster Risk Reduction were released by the National Disaster Management Authority (NDMA). These guidelines aim to ensure the inclusion of persons with disabilities in disaster risk reduction efforts.

Conclusion: The correct answer is National Disaster Management Authority (Option 4).

Quick Tip

The NDMA has been instrumental in developing guidelines that focus on the inclusion of marginalized groups, including persons with disabilities, in disaster preparedness and response.

59. Community Based Disaster Management (CBDM) is an example of

- (1) Reactive approach for disaster mitigation
- (2) Top-down approach for disaster mitigation
- (3) Bottom-up approach for disaster mitigation
- (4) Science-driven approach for disaster mitigation

Correct Answer: (3) Bottom-up approach for disaster mitigation

Solution:

Community Based Disaster Management (CBDM) is a bottom-up approach that emphasizes local involvement and community participation in disaster preparedness, response, and recovery. This approach focuses on strengthening local resilience and ensuring that communities are well-equipped to handle disasters.

Conclusion: The correct answer is Bottom-up approach for disaster mitigation (Option 3).

Quick Tip

CBDM empowers local communities, helping them take ownership of their disaster management efforts and reducing their vulnerability to disasters.

60. Which of the following institutions had developed National Action Plan for Children, 2016?

- (1) Ministry of Health and Family Welfare
- (2) Ministry of Women and Child Development
- (3) Ministry of Labour and Employment
- (4) Ministry of Home Affairs

Correct Answer: (2) Ministry of Women and Child Development

Solution:

The National Action Plan for Children, 2016 was developed by the Ministry of Women and Child Development.

This plan focuses on improving the well-being of children in India, with specific strategies and actions to address issues like health, education, protection, and development.

Conclusion: The correct answer is Ministry of Women and Child Development (Option 2).

Quick Tip

The National Action Plan for Children aims to implement comprehensive measures for the holistic development and protection of children in India.

61. Which of the following is not a key priority area as per the National Policy for Children, 2013?

1. Survival, Health and Nutrition
2. Protection
3. Participation
4. Preservation

Correct Answer: 4. Preservation

Solution:

The National Policy for Children, 2013 focuses on the survival, development, protection, and participation of children. The key priorities include survival, health, nutrition, protection, and participation. Preservation is not explicitly listed as a priority area in the policy.

Conclusion: The correct answer is Preservation (Option 4).

Quick Tip

The National Policy for Children aims to ensure the rights and well-being of children by focusing on their survival, development, and participation in society.

62. Human Development Index (HDI) value ranges between

1. -1 and +1
2. 0 and 1
3. 0 and 5
4. 1 and 5

Correct Answer: 2. 0 and 1

Solution:

The Human Development Index (HDI) is a measure of human development that ranges

between 0 and 1. A value closer to 1 indicates higher human development, while a value closer to 0 indicates lower development.

Conclusion: The correct answer is 0 and 1 (Option 2).

Quick Tip

The HDI measures a country's achievements in health, education, and income, with a scale from 0 (lowest) to 1 (highest).

63. Who coined and popularized the term Heteronormativity?

1. Michael Warner
2. Michel Foucault
3. David Kooper
4. Will Moot

Correct Answer: 1. Michael Warner

Solution:

The term Heteronormativity was coined and popularized by Michael Warner. It refers to the belief that heterosexuality is the default or norm, and it marginalizes non-heterosexual identities and behaviors.

Conclusion: The correct answer is Michael Warner (Option 1).

Quick Tip

Heteronormativity challenges the assumption that heterosexuality is the only valid sexual orientation and highlights the social bias towards heterosexual norms.

64. One 'DALY' as used in the context of human health represents the loss of

1. Equivalent to one year of full health
2. Equivalent to one year of disease-free life
3. Equivalent to one human life
4. Equivalent to one decade of bed-ridden life

Correct Answer: 1. Equivalent to one year of full health

Solution:

DALY (Disability-Adjusted Life Year) is a measure used to assess the overall disease burden. It represents the loss of one year of full health due to disease, injury, or premature death. It combines years of life lost due to premature death and years lived with disability.

Conclusion: The correct answer is Equivalent to one year of full health (Option 1).

Quick Tip

DALY is used to quantify the burden of disease and compare health outcomes across populations.

65. As per Indian Public Health Standards, Rural Primary Health Centre in the hilly and tribal areas should be established for a population of

1. 10,000
2. 20,000
3. 30,000
4. 50,000

Correct Answer: 2. 20,000

Solution:

As per the Indian Public Health Standards (IPHS), a Rural Primary Health Centre in hilly and tribal areas should be established for a population of 20,000. This is to ensure that healthcare services are available to populations living in remote and difficult areas.

Conclusion: The correct answer is 20,000 (Option 2).

Quick Tip

Rural Primary Health Centres are essential to provide primary healthcare services in underserved areas, improving access to essential medical care.

66. Meteorological and Oceanographic Satellite Data Archival Centre (MOSDAC), a data repository for the missions of the Indian Space Research Organization (ISRO) disseminates information in near real time but does not provide information on

1. City Weather
2. Forest Fire
3. Heat Waves
4. Sea State

Correct Answer: 1. City Weather

Solution:

MOSDAC (Meteorological and Oceanographic Satellite Data Archival Centre) provides valuable satellite data related to meteorological and oceanographic phenomena, including forest fires, heat waves, and sea states.

However, it does not provide city weather data. Instead, the focus is more on large-scale atmospheric and oceanic conditions.

Conclusion: The correct answer is City Weather (Option 1).

Quick Tip

MOSDAC focuses on satellite data related to oceanographic and meteorological conditions at a broader scale, rather than localized city weather information.

67. Match List I with List II

List I (Lake)	List II (Location)
A. Great Lakes	I. Central Africa
B. Malawi Lake	II. East Africa
C. Tanganyika Lake	III. South America
D. Titicaca Lake	IV. North America

Choose the correct answer from the options given below:

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

Correct Answer: Option 4: (A) - (IV), (B) - (II), (C) - (III), (D) - (I)

Solution:

- The Great Lakes are located in North America. Therefore, (A) corresponds to (IV).
- Malawi Lake is located in East Africa. Therefore, (B) corresponds to (II).
- Tanganyika Lake is located in South America. Therefore, (C) corresponds to (III).
- Titicaca Lake is located in Central Africa. Therefore, (D) corresponds to (I).

Quick Tip

Understanding the locations of major lakes helps in recognizing their significance in regional geography, economics, and ecology.

68. While studying the property of materials, the shear modulus measures

1. The resistance to flow of a liquid
2. The resistance to change in shape
3. The resistance to change in volume of a liquid
4. The resistance to change in volume of a solid

Correct Answer: 2. The resistance to change in shape

Solution:

Shear modulus, also known as the modulus of rigidity, is the property of a material that measures its resistance to shear deformation, or in other words, its resistance to change in shape. It is defined as the ratio of shear stress to shear strain.

Conclusion: The shear modulus measures the resistance to change in shape of a material.

Quick Tip

Shear modulus is important for understanding how materials deform under shear forces without changing volume.

69. The process by which masses of rock and soil move downhill under the influence of gravity is called

1. Hydraulic action

2. Landsliding
3. Mass Wasting
4. Solifluction

Correct Answer: 3. Mass Wasting

Solution:

Mass wasting refers to the downward movement of rock, soil, and debris under the influence of gravity. It includes processes such as landslides, rockfalls, and soil creep.

Conclusion: The correct term for the movement of rock and soil downhill under gravity is mass wasting.

Quick Tip

Mass wasting is a key geological process that shapes landforms and contributes to erosion and deposition.

70. Match List-I with List-II

Peaks	Mountains
(A). Mt. Blane	(I). Arakan Yoma
(B). Mt. Elbert	(II). Alps Mountains
(C). Mt. Kennedy	(III). Alaska Range
(D). Mt. McKinley	(IV). Rocky Mountains

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

(2). (A) - (IV), (B) - (III), (C) - (I), (D) - (II)

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

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

Correct Answer: (3). (A) - (I), (B) - (IV), (C) - (II), (D) - (III)

Solution:

The correct matching is based on geographical locations:

- Mt. Blane is located in the **Arakan Yoma** range.

- Mt. Elbert is located in the **Rocky Mountains**.
- Mt. Kennedy is located in the **Alps Mountains**.
- Mt. McKinley (now Denali) is located in the **Alaska Range**.

Quick Tip

For mountain ranges and peaks, knowing the geography and location of peaks can help in identifying the mountain ranges they belong to.

71. The movement of sand grains along the beach refers to:

- (1) Wave refraction
- (2) Turbidity current
- (3) Longshore drift
- (4) Ebb tide

Correct Answer: Option 3: Longshore drift

Solution:

Longshore drift refers to the movement of sand along the shore, driven by the action of waves hitting the beach at an angle. This movement is responsible for the redistribution of sand along the coastline.

Quick Tip

Understanding the dynamics of wave action can help explain the phenomenon of long-shore drift and the redistribution of beach sediments.

72. What drives the Earth's internal heat engine?

- (1) Radioactivity
- (2) Solar energy
- (3) Volcanoes
- (4) Ocean Tides

Correct Answer: 1: Radioactivity

Solution:

The Earth's internal heat engine is primarily driven by the heat generated from radioactive decay in the Earth's mantle and crust. This process is responsible for driving volcanic activity, plate tectonics, and other geological processes.

Quick Tip

The primary source of heat in the Earth's interior comes from radioactive decay, which powers geological processes like convection currents in the mantle.

73. If sand input is greater than sand output in a beach's sand budget, the beach will:

- (1) Be long, wide, and sandy
- (2) Have large sand dunes
- (3) Have a large tidal flat
- (4) Have high cliffs

Correct Answer: 1: Be long, wide, and sandy

Solution:

When the input of sand to a beach exceeds the output (i.e., the beach receives more sand than it loses), it results in a beach that is long, wide, and sandy due to the accumulation of sediments over time.

Quick Tip

The sand budget concept helps explain coastal changes by analyzing how sand is deposited and eroded, influencing the size and shape of the beach.

74. Shearing stresses and shallow earthquakes are associated with:

- (1) Subduction zones
- (2) Continent convergence
- (3) Spreading centers
- (4) Transform boundaries

Correct Answer: (4) Transform boundaries

Solution:

Transform boundaries, where tectonic plates slide past each other, are characterized by shearing stresses. These stresses often result in shallow earthquakes along faults where the plates interact.

Quick Tip

Transform boundaries are the primary sites of shallow earthquakes caused by the lateral motion of tectonic plates.

75. Match List I with List II

List I (Disaster)	List II (Location)
A. Guangxi Cadmium Spill	I. Tokyo, Japan
B. Love Canal	II. Minas Gerais, Brazil
C. Mariana Dam Disaster	III. Niagara Falls, New York
D. Tokaimura Nuclear Plant	IV. Longjiang River, China

Choose the correct answer from the options given below

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

Correct Answer: Option 1: (A) - (IV), (B) - (III), (C) - (II), (D) - (I)

Solution:

- The Guangxi Cadmium Spill occurred in Longjiang River, China (Option IV).
- The Love Canal disaster took place in Niagara Falls, New York (Option III).
- The Mariana Dam Disaster occurred in Minas Gerais, Brazil (Option II).
- The Tokaimura Nuclear Plant disaster was located in Tokyo, Japan (Option I).

Quick Tip

Familiarizing yourself with global disaster events can help in understanding the impact of industrial activities and their environmental consequences.

