

UPCATET General Studies Sample Paper-3

Duration: 10 Minutes

Maximum Marks: 80

Instructions

- This paper contains **20** Multiple Choice Questions.
- Each correct answer carries **+4** mark. Incorrect answer: **-1** marks. Only **one** correct option.
- Unattempted questions carry **0** marks.
- Use of mobile phones, smartwatches, or any electronic gadgets is strictly prohibited.

Q1. The Aligarh Muslim University, a prominent seat of higher learning in Uttar Pradesh, was originally founded as the Muhammadan Anglo-Oriental College in 1875 by which of the following personalities?

- (A) Sir Syed Ahmad Khan
- (B) Maulana Mohammad Ali Jauhar
- (C) Nawab Abdul Latif
- (D) Hakim Ajmal Khan

Q2. Minamata disease, a neurological syndrome characterized by severe methylmercury poisoning, first came to light due to the discharge of industrial wastewater containing mercury into Minamata Bay. In which country did this ecological disaster occur?

- (A) China
- (B) Japan
- (C) South Korea
- (D) Sweden

Q3. The Directive Principles of State Policy (DPSP) enshrined in Part IV of the Constitution of India are non-justiciable in nature but fundamental to the



governance of the country. This concept was borrowed from the constitution of which nation?

- (A) Ireland
- (B) Australia
- (C) USSR
- (D) United States of America

Q4. The prestigious Major Dhyan Chand Khel Ratna Award is India's highest sporting honor. Legendary field hockey player Major Dhyan Chand, after whom the award is named, was born in which city of Uttar Pradesh?

- (A) Prayagraj
- (B) Jhansi
- (C) Varanasi
- (D) Lucknow

Q5. In the context of computer memory hierarchy and architecture, which of the following types of memory operates at the highest speed and is located directly within or closest to the CPU core?

- (A) Static RAM (SRAM)
- (B) Dynamic RAM (DRAM)
- (C) CPU Registers
- (D) Cache Memory

Q6. The Narora Atomic Power Station (NAPS), a vital nuclear power plant in northern India operated by the Nuclear Power Corporation of India Limited, is located in which district of Uttar Pradesh?

- (A) Bulandshahr
- (B) Aligarh
- (C) Mathura
- (D) Meerut



- Q7.** The National Bank for Agriculture and Rural Development (NABARD) is the apex regulatory body for the overall regulation of regional rural banks and apex cooperative banks in India. In which year was NABARD established upon the recommendations of the B. Sivaraman Committee?
- (A) 1975
 - (B) 1982
 - (C) 1988
 - (D) 1991
- Q8.** The process of 'Eutrophication' in freshwater bodies, which leads to a severe depletion of dissolved oxygen and subsequent mortality of aquatic organisms, is primarily triggered by the excessive runoff of which chemical nutrients?
- (A) Sodium and Potassium
 - (B) Nitrogen and Phosphorus
 - (C) Calcium and Magnesium
 - (D) Iron and Zinc
- Q9.** The iconic Kathak dance format, one of the eight major forms of Indian classical dance, traditionally traces its origins and institutional development to the royal courts and cultural lineage of which city in Uttar Pradesh?
- (A) Lucknow
 - (B) Agra
 - (C) Kanpur
 - (D) Mathura
- Q10.** Phishing, a highly prevalent method of cyberattack used to steal user data including login credentials and credit card numbers, is categorized under which type of deceptive manipulation technique?
- (A) Social Engineering
 - (B) SQL Injection



- (C) Brute Force Attack
- (D) Distributed Denial of Service (DDoS)

Q11. The River Chambal, notorious for its expansive badlands and ravine topography created due to severe gully erosion, merges into the Yamuna River at which specific location in Uttar Pradesh?

- (A) Hamirpur
- (B) Etawah
- (C) Jalaun
- (D) Banda

Q12. By which specific Constitutional Amendment Act of India were the terms 'Socialist', 'Secular', and 'Integrity' officially appended to the Preamble of the Indian Constitution?

- (A) 24th Amendment Act
- (B) 42nd Amendment Act
- (C) 44th Amendment Act
- (D) 52nd Amendment Act

Q13. Which of the following atmospheric layers contains the highest concentration of ozone gas (the ozone layer) that absorbs the harmful ultraviolet (UV) radiations emitting from the sun?

- (A) Troposphere
- (B) Stratosphere
- (C) Mesosphere
- (D) Thermosphere

Q14. During the Indian Rebellion of 1857, the historic siege and multi-layered resistance against the British East India Company forces at Kanpur was led by which of the following prominent leaders?



- (A) Kunwar Singh
- (B) Begum Hazrat Mahal
- (C) Nana Sahib
- (D) Khan Bahadur Khan

Q15. The United Nations General Assembly declared June 21 as the International Day of Yoga following an initiative championed by India. In which year was the inaugural International Day of Yoga celebrated globally?

- (A) 2014
- (B) 2015
- (C) 2016
- (D) 2017

Q16. Which network protocol is primarily responsible for dynamically assigning IP addresses, subnet masks, default gateways, and other network parameters to client devices on an IP network?

- (A) Domain Name System (DNS)
- (B) Dynamic Host Configuration Protocol (DHCP)
- (C) Simple Mail Transfer Protocol (SMTP)
- (D) Hypertext Protocol (HTTP)

Q17. The Panchayati Raj System was constitutionally institutionalized in India through the 73rd Constitutional Amendment Act, 1992. Which state was the very first to establish a three-tier Panchayati Raj system at the district level in 1959?

- (A) Rajasthan
- (B) Andhra Pradesh
- (C) Uttar Pradesh
- (D) Madhya Pradesh



- Q18.** Scurvy is a disease characterized by bleeding gums, skin spots, and delayed wound healing. It is caused by a severe, prolonged dietary deficiency of which of the following vitamins?
- (A) Vitamin A
 - (B) Vitamin B1
 - (C) Vitamin C
 - (D) Vitamin D
- Q19.** The Dudhwa National Park, a protected conservation area renowned for its rich population of swamp deer and tigers, is situated in which district of Uttar Pradesh?
- (A) Lakhimpur Kheri
 - (B) Pilibhit
 - (C) Bahraich
 - (D) Sonbhadra
- Q20.** The traditional folk theatrical form known as 'Nautanki', which blends historical, mythological, and contemporary themes with musical dialogues, is most popular in which region of India?
- (A) Uttar Pradesh
 - (B) Rajasthan
 - (C) Bihar
 - (D) Punjab



Detailed Solutions**Q1.****Solution****Concept:**

The development of modern educational infrastructure in 19th-century India was heavily influenced by social reform movements aimed at community upliftment. In northern India, particularly within the United Provinces (modern-day Uttar Pradesh), the synthesis of traditional values and western scientific education became a major focus for social reformers seeking to empower citizens under colonial rule.

Solution:

- (a) Sir Syed Ahmad Khan was a pioneering educator and social reformer who recognized that the socio-economic advancement of the community depended heavily on access to modern scientific education.
- (b) To bridge the gap between traditional perspectives and contemporary global advancements, he established the Muhammadan Anglo-Oriental College at Aligarh in 1875.
- (c) The institution was intentionally modeled after top-tier western universities like Oxford and Cambridge to instill a rigorous academic, scientific, and analytical temperament among its students.
- (d) This foundation laid the groundwork for the Aligarh Movement, a powerful intellectual and cultural renaissance that advocated for systemic educational reforms, critical thinking, and social modernization across the region.
- (e) The college rapidly evolved into a vital intellectual hub and was later chartered and elevated to its current status as the prestigious Aligarh Muslim University (AMU) in 1920.

Final Answer: Sir Syed Ahmad Khan

Answer: (A)

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Q2.

Solution**Concept:**

Industrial ecology and environmental toxicology study the catastrophic impacts of unregulated hazardous waste disposal on natural biomes and human populations. Heavy metal bioaccumulation within aquatic food webs serves as a critical entry point for lethal chemical compounds, which eventually manifest as severe, systemic neurological disorders within high-tier consumer populations.

Solution:

- (a) Minamata disease is a severe neurological syndrome caused by chronic, high-concentration methylmercury poisoning, which damages the central nervous system, causing loss of motor control and speech impairment.
- (b) The historical disaster first came to light during the mid-1950s around Minamata Bay, located in Kumamoto Prefecture, where local populations suffered extreme physiological symptoms.
- (c) The root cause was traced directly to a chemical manufacturing plant operated by the Chisso Corporation, which routinely discharged untreated industrial wastewater containing highly toxic methylmercury into the bay.
- (d) The heavy metal compounds entered the marine ecosystem, undergoing rapid biomagnification inside local fish and shellfish populations, which served as a staple dietary component for the surrounding coastal communities.
- (e) This public health tragedy triggered strict global environmental regulations, forced a re-evaluation of industrial chemical discharge parameters worldwide, and stands as a foundational event in modern environmental toxicology.

Final Answer: Japan

Answer: (B)

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Q3.

Solution**Concept:**

Constitutional engineering often relies on comparative constitutionalism, where drafting assemblies analyze, adapt, and refine established governance legal frameworks from various international models. This allows a nation to construct a customized socio-legal fabric that balances fundamental civic entitlements with mandatory policy objectives designed to steer executive and legislative actions toward public welfare.

Solution:

- (a) Part IV of the Indian Constitution contains the Directive Principles of State Policy, which outline the core philosophical and socio-economic guidelines intended to direct the state in framing national laws.
- (b) These principles are explicitly designated as non-justiciable, meaning they cannot be enforced through a court of law, yet they remain legally fundamental to the country's governance philosophy.
- (c) During the extensive drafting process, the constituent assembly analyzed multiple international legal instruments to find structural provisions that balanced individual political liberties with overarching socioeconomic goals.
- (d) The framework for these directives was directly adapted from the landmark 1937 Constitution of Ireland, which had similarly incorporated directed social objectives to guide its parliamentary processes.
- (e) By implementing this structure, the framers aimed to build a comprehensive welfare state where governance decisions are continually guided by deep principles of economic equity, social justice, and inclusive development.

Final Answer: Ireland**Answer:** (A)[Go Back to Question 3](#)

Q4.

Solution**Concept:**

The cultural geography of sports history tracking in India highlights specific regional hubs that have consistently nurtured iconic athletic talent. Documenting the early lives and physical environments of legendary historical sports figures provides valuable insights into the regional roots and institutional frameworks that shaped the nation's rich sporting heritage.

Solution:

- (a) The Major Dhyan Chand Khel Ratna Award represents the pinnacle of athletic recognition in India, honoring sportspersons who achieve exceptional international distinctions.
- (b) The award is named in memory of Major Dhyan Chand, a legendary field hockey player universally acclaimed for his extraordinary stickwork, field vision, and prolific goal-scoring abilities.
- (c) He played a defining role in securing three consecutive Olympic gold medals for India in 1928, 1932, and 1936, solidifying the nation's global dominance in field hockey.
- (d) He was born on August 29, 1905, in the historic city of Prayagraj (formerly known as Allahabad), located in the northern state of Uttar Pradesh.
- (e) His birthday is celebrated annually as National Sports Day across India, underscoring his lasting legacy and the pride his home state and city continue to derive from his achievements.

Final Answer: Prayagraj

Answer: (A)

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Q5.

Solution**Concept:**

Computer architecture organizes memory into a structured hierarchy based on access speed, physical proximity, and storage capacity to maximize Central Processing Unit processing efficiency. Minimizing latency during data fetch operations requires micro-architectural storage units located inside the processor logic gates to avoid bottlenecks caused by system bus communication lines.

Solution:

- (a) The memory hierarchy of a computer is systematically designed to reconcile the vast speed difference between high-performance processors and standard physical storage drives.
- (b) CPU registers sit at the absolute pinnacle of this structural hierarchy, operating as ultra-fast, small capacity storage cells built directly into the internal processor architecture.
- (c) These registers hold the immediate binary data instructions, operand values, and execution states that the arithmetic logic unit requires during active clock cycles.
- (d) While cache memories and static random-access memory also provide fast performance, they reside further down the architectural path and require extra decoding cycles to access.
- (e) By operating at the processor's native core speed without internal bus delays, registers effectively prevent computing bottlenecks, making them the fastest memory element in hardware design.

Final Answer: CPU Registers

Answer: (C)

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Q6.

Solution**Concept:**

The spatial distribution of strategic energy infrastructure reflects a country's regional developmental goals and resource management planning. Industrial mapping of nuclear installations requires careful consideration of geographical placement, geological stability parameters, and proximity to major transmission grids to safely fulfill regional electricity requirements.

Solution:

- (a) The Narora Atomic Power Station stands as a major atomic energy installation in northern India, functioning under the direct administrative oversight of the Nuclear Power Corporation of India Limited.
- (b) This critical facility features twin pressurized heavy water reactor units that supply significant baseload electricity to the northern regional power grid.
- (c) Geographically, the installation is situated near the banks of the Ganga River in the Narora region, which falls within the administrative boundaries of the Bulandshahr district.
- (d) The site was carefully engineered to meet stringent environmental safeguards and seismic regulations, ensuring safe operations within the fertile Indo-Gangetic plains.
- (e) As the sole nuclear power facility operating within Uttar Pradesh, it plays a vital role in meeting the agricultural, domestic, and industrial energy demands of the state.

Final Answer: Bulandshahr

Answer: (A)

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Q7.

Solution**Concept:**

The institutional history of institutional agricultural financing in post-independence India highlights structural shifts aimed at improving rural credit access. Establishing specialized financial regulatory bodies reflects a deliberate policy choice to move away from multi-purpose banking systems toward dedicated organizations focused on rural economic growth.

Solution:

- (a) For decades following independence, the Reserve Bank of India and the Agricultural Refinance and Development Corporation directly managed rural credit allocations and agricultural financing strategies.
- (b) Recognizing the need for a specialized approach, the Government of India formed the B. Sivaraman Committee to assess institutional arrangements for rural development.
- (c) The committee recommended creating a singular apex regulatory institution to oversee regional rural banks, cooperative networks, and rural financial policies.
- (d) This led to the official establishment of the National Bank for Agriculture and Rural Development via a dedicated parliamentary act.
- (e) The institution was formally set up on July 12, 1982, centralizing rural development financing and providing a structural framework to support India's vast agrarian economy.

Final Answer: 1982

Answer: (B)

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Q8.

Solution**Concept:**

Limnology and environmental chemistry analyze how excessive chemical loading impacts the biological equilibrium of freshwater systems. When high volumes of chemical compounds enter aquatic environments, they trigger rapid ecological chains that alter dissolved gas balances, degrade water quality, and severely impact local biodiversity.

Solution:

- (a) Eutrophication is an environmental process where water bodies receive an excessive load of nutrients, stimulating intense growth of algae and microscopic aquatic plants.
- (b) This process is primarily driven by an overabundance of nitrogen and phosphorus, elements commonly found in agricultural fertilizers, industrial waste, and domestic detergents.
- (c) Rainwater carries these chemical compounds from agricultural fields and urban centers into nearby ponds, lakes, and rivers.
- (d) The nutrient surge triggers rapid algal blooms that blanket the water surface, blocking sunlight and depleting dissolved oxygen as the plant matter decays.
- (e) This severe drop in oxygen levels creates hypoxic conditions that lead to widespread mortality among fish and other aquatic organisms, degrading the ecosystem.

Final Answer: Nitrogen and Phosphorus

Answer: (B)

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Q9.

Solution**Concept:**

The sociology of performing arts explores how classical dance traditions transform as they move from ancient ritual settings to formal royal courts. Royal patronage frequently reshapes choreography, thematic narratives, and aesthetic styles, establishing specific cities as institutional centers for cultural preservation and artistic development.

Solution:

- (a) Kathak is recognized as one of the eight major classical dance forms of India, characterized by intricate footwork, rapid pirouettes, and expressive storytelling.
- (b) The dance format originated with nomadic bards known as Kathakars, who traveled throughout northern India performing stories from epics and mythology.
- (c) During the medieval and Mughal eras, the dance transitioned from temple courtyards into royal courts, where its stylistic focus shifted toward complex technical movements.
- (d) The art form developed distinct artistic lineages, or Gharanas, primarily under the royal patronage of the Nawabs of Awadh centered in Lucknow.
- (e) This institutional support helped refine the Lucknow Gharana, emphasizing grace, expressive expressions, and creative compositions that define modern classical Kathak presentations.

Final Answer: Lucknow

Answer: (A)

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Q10.**Solution****Concept:**

Cybersecurity threat modeling categorizes digital vulnerabilities based on exploit mechanisms, separating technical software flaws from human vulnerabilities. Analyzing deceptive user manipulation highlights how bad actors exploit psychological tendencies rather than relying on breaking technical security barriers to breach sensitive data.

Solution:

- (a) Phishing is a common cyberattack method where attackers impersonate trusted institutions, such as banks or government agencies, through deceptive emails or messages.
- (b) The primary goal is to trick users into revealing sensitive data, including login credentials, security codes, and financial details.
- (c) Rather than exploiting software bugs or vulnerabilities, this method relies on social engineering, manipulating human psychology and trust.
- (d) Attackers create a false sense of urgency or fear, prompting victims to click malicious links or download compromised attachments.
- (e) Understanding this distinction helps organizations emphasize user awareness training alongside technical firewalls, addressing the human element in digital security.

Final Answer: Social Engineering

Answer: (A)

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Q11.

Solution**Concept:**

The study of fluvial geomorphology examines how extensive river networks shape terrain through continuous structural erosion, resulting in distinct landscape features. Understanding the precise geographic drainage patterns and confluence points where distinct river systems merge is essential for mapping regional river basins, managing ecological resources, and controlling soil degradation.

Solution:

- (a) The Chambal River is a major tributary of the Yamuna River system, flowing through Madhya Pradesh and Rajasthan before entering Uttar Pradesh.
- (b) It is globally renowned for its unique, highly degraded badland topography, which was formed over millennia by severe gully erosion across the alluvial plains.
- (c) This continuous geological process has carved out an extensive network of deep ravines, creating a complex and fragile ecosystem along its banks.
- (d) As the river reaches the final leg of its course, it carries significant sediment volumes and winds through the southwestern border districts of the state.
- (e) The Chambal River completes its journey by merging into the Yamuna River at a specific confluence location situated within the Etawah district.

Final Answer: Etawah

Answer: (B)

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Q12.

Solution**Concept:**

Constitutional developments and jurisprudence reveal how formal amendments modify a nation's foundational charter to mirror changing political ideologies and institutional priorities. Analyzing text modifications within introductory sovereign declarations provides valuable insights into how a state defines its core identity, socio-economic goals, and national unity over time.

Solution:

- (a) The Preamble serves as the prefatory declaration to the Constitution of India, outlining the core values, principles, and ultimate objectives that guide the nation.
- (b) Throughout the legal history of the Republic of India, the Preamble has been subjected to a formal legislative modification on exactly one occasion.
- (c) This historic modification was carried out under the provisions of the Forty-second Constitutional Amendment Act, which was passed by Parliament in 1976.
- (d) This sweeping piece of legislation explicitly inserted three critical terms into the opening text, namely Socialist, Secular, and Integrity.
- (e) The inclusion of these terms structurally redefined the statutory description of the Indian polity, emphasizing a commitment to social welfare, secularism, and unity.

Final Answer: 42nd Amendment Act

Answer: (B)

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Q13.

Solution**Concept:**

Atmospheric physics and environmental chemistry examine the distinct thermal, structural, and chemical layers that wrap around Earth to sustain its biosphere. Mapping the concentration variations of specific trace gases across these layers is essential for understanding how the planet blocks lethal cosmic radiation and regulates temperature.

Solution:

- (a) Earth's atmosphere is divided into concentric layers based primarily on temperature gradients, starting from the Troposphere and extending out to the Exosphere.
- (b) The Stratosphere is the second major layer of the atmosphere, positioned directly above the turbulent Troposphere and extending upward to an altitude of roughly fifty kilometers.
- (c) This stable layer houses the highest concentration of ozone gas, forming a protective blanket often referred to as the ozone layer.
- (d) The triatomic ozone molecules within this band perform a vital ecological function by absorbing nearly all incoming harmful ultraviolet solar radiation.
- (e) Without this crucial protective mechanism in the Stratosphere, high-energy radiation would reach the surface, causing severe biological damage to terrestrial organisms.

Final Answer: Stratosphere

Answer: (B)

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Q14.

Solution**Concept:**

The historiography of the Indian Rebellion of 1857 maps the localized networks of anti-colonial resistance that erupted across urban centers in northern India. Investigating the leadership structures and military strategies of these local uprisings reveals how various displaced elites coordinated resistance against the British East India Company.

Solution:

- (a) The Indian Rebellion of 1857 was a major watershed event that posed a massive challenge to British East India Company governance across the subcontinent.
- (b) Kanpur emerged as a major center of this armed resistance, due to deep political grievances stemming from the controversial Doctrine of Lapse policy.
- (c) Nana Sahib, the adopted son of the exiled Maratha Peshwa Baji Rao II, assumed absolute leadership of the rebel forces within this industrial hub.
- (d) Assisted by his capable military commanders, he successfully mobilized local sepoys and citizens to besiege the fortified British positions in the city.
- (e) His leadership during the siege made Kanpur a key symbol of resistance, demonstrating the strategic coordination between traditional rulers and revolutionary soldiers.

Final Answer: Nana Sahib

Answer: (C)

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Q15.

Solution**Concept:**

The institutionalization of global cultural events reflects international diplomatic efforts to promote holistic healthcare frameworks and traditional wellness practices. Analyzing the timeline from formal international resolutions to actual global implementation provides clear insights into how modern soft diplomacy elevates indigenous heritage on the world stage.

Solution:

- (a) Yoga is an ancient physical, mental, and spiritual practice that originated in India and has gained widespread international appreciation over the centuries.
- (b) In September 2014, India introduced a formal proposal before the United Nations General Assembly to establish a dedicated global day for yoga.
- (c) The resolution received overwhelming international endorsement, with a record number of co-sponsoring nations approving June 21 as the official date.
- (d) Following this successful diplomatic initiative, the inaugural International Day of Yoga was celebrated worldwide with synchronized public events in 2015.
- (e) This annual global observation highlights the universal relevance of preventative healthcare practices and has cemented yoga as a key element of modern wellness.

Final Answer: 2015**Answer: (B)**[Go Back to Question 15](#)

Q16.

Solution**Concept:**

Computer networking protocols govern the automated distribution of operational parameters across local and wide-area networks to ensure seamless data routing. Utilizing automated configuration systems eliminates the need for manual setup, preventing address conflicts and optimizing how client devices connect to the network.

Solution:

- (a) For a computer or device to communicate effectively on an IP-based network, it must possess a unique IP address along with valid configuration data.
- (b) The Dynamic Host Configuration Protocol functions as a core client-server application layer protocol designed to automate this complex assignment process.
- (c) When a device connects to a network, it broadcasts a request that is captured by a specialized configuration server on the subnet.
- (d) The server automatically assigns an IP address from its designated pool, alongside essential parameters like subnet masks and default gateways.
- (e) By automating this system, the protocol prevents address conflicts, simplifies network administration, and enables efficient device mobility across different network environments.

Final Answer: Dynamic Host Configuration Protocol (DHCP)

Answer: (B)

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Q17.

Solution**Concept:**

The history of democratic decentralization in India reveals a long-term evolution from exploratory regional pilot projects to uniform national legislative mandates. Documenting the early implementations of local self-governance helps track how rural administrative frameworks were tested and refined prior to receiving full constitutional protection.

Solution:

- (a) Democratic decentralization aims to empower rural populations by transferring administrative authority and financial resources to grassroots local institutions.
- (b) The Balwant Rai Mehta Committee report recommended a standardized three-tier system of local self-governance to encourage active community participation.
- (c) Long before this framework received nationwide constitutional backing in 1992, several progressive states began experimenting with democratic decentralization.
- (d) The state of Rajasthan became the absolute pioneer in this effort, officially launching the three-tier system in Nagaur district on October 2, 1959.
- (e) This historic launch served as a major practical model for rural governance, providing valuable lessons that shaped future local administration across India.

Final Answer: Rajasthan

Answer: (A)

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Q18.

Solution**Concept:**

Nutritional biochemistry and metabolic pathology analyze how micro-nutrient deficiencies disrupt vital biological processes inside human cellular systems. Tracking the metabolic roles of specific water-soluble vitamins reveals how a lack of these organic compounds undermines tissue integrity and causes systemic clinical disorders.

Solution:

- (a) Scurvy is a complex metabolic disease characterized by distinct clinical symptoms, including fragile blood vessels, bleeding gums, and significantly delayed wound healing.
- (b) The underlying cause of this pathology is a severe, prolonged dietary deficiency of Vitamin C, also known as ascorbic acid.
- (c) Vitamin C serves as a crucial enzymatic cofactor required for the post-translational modification and synthesis of stable collagen fibers.
- (d) Collagen acts as a vital structural protein that reinforces connective tissues, blood vessel walls, and skin matrices throughout the human body.
- (e) When Vitamin C levels drop, defective collagen synthesis weakens blood vessels and tissues, leading directly to the classic physical symptoms of scurvy.

Final Answer: Vitamin C

Answer: (C)

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Q19.

Solution**Concept:**

Biogeography and wildlife conservation mapping identify key protected zones established to safeguard threatened species within specific regional biomes. Documenting the precise geographical locations of these national parks is crucial for understanding ecosystem distribution and coordinating regional anti-poaching and habitat restoration initiatives.

Solution:

- (a) Dudhwa National Park is a major wildlife sanctuary located within the Terai arc landscape, running along the marshy sub-Himalayan border region.
- (b) This vital conservation zone features an ecosystem of dense sal forests, extensive clay-rich swamps, and expansive, nutrient-dense alluvial grasslands.
- (c) The park provides sanctuary to several critically endangered species, including the Indian rhinoceros, the Royal Bengal tiger, and the swamp deer.
- (d) Administratively, this protected wildlife refuge is situated across the northern reaches of the Lakhimpur Kheri district in Uttar Pradesh.
- (e) Its proximity to international borders makes it a critical area for biodiversity conservation, habitat management, and collaborative cross-border ecological protection.

Final Answer: Lakhimpur Kheri

Answer: (A)

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Q20.

Solution**Concept:**

The ethno-theatrical mapping of regional folk performing arts examines how folk performance mediums act as vehicles for preserving local history, mythology, and social commentary. Tracking the geographical distribution of these traditional art forms reveals how regional communities maintain distinct performance styles, musical patterns, and storytelling structures.

Solution:

- (a) Nautanki is a highly popular, traditional operatic folk theater form native to northern India, featuring a vibrant mix of verse, dance, and music.
- (b) The art form developed from secular musical recitals and historical ballads, growing into a complex and interactive style of public entertainment.
- (c) Performances traditionally blend classical Urdu poetry and local Hindi dialects, accompanied by the distinct rhythmic beats of the nagara drum.
- (d) While popular across the broader Hindi-speaking belt, its primary creative centers and historical schools developed within the state of Uttar Pradesh.
- (e) The Hathras and Kanpur traditions represent the main stylistic schools, preserving this folk theater as an important piece of regional cultural heritage.

Final Answer: Uttar Pradesh

Answer: (A)

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Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	A	2	B	3	A	4	A	5	C
6	A	7	B	8	B	9	A	10	A
11	B	12	B	13	B	14	C	15	B
16	B	17	A	18	C	19	A	20	A

