

# UPCATET General Studies Sample Paper-2

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.** Which of the following organelles is present in plant cells but completely absent in typical animal cells?

- (A) Mitochondrion
- (B) Golgi apparatus
- (C) Plastids (chloroplasts, chromoplasts, leucoplasts) and a large central vacuole
- (D) Ribosome

**Q2.** The historic site of Hastinapur, associated with the Mahabharata period, is located in which present-day district of Uttar Pradesh?

- (A) Varanasi
- (B) Meerut
- (C) Prayagraj
- (D) Mathura

**Q3.** Who became the first Indian track and field athlete to win a gold medal at the World Athletics Championships?

- (A) Neeraj Chopra
- (B) Hima Das



- (C) Milkha Singh
- (D) P.T. Usha

**Q4.** The concept of 'Directive Principles of State Policy' in the Indian Constitution was borrowed from the constitution of which nation?

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

**Q5.** Which gas is primarily responsible for the phenomenon known as the 'Greenhouse Effect' leading to global warming?

- (A) Carbon dioxide
- (B) Nitrogen
- (C) Oxygen
- (D) Argon

**Q6.** Which of the following rivers flowing through Uttar Pradesh is a major tributary of the Yamuna River and originates in the Vindhya Range?

- (A) Ghaghara
- (B) Gomti
- (C) Betwa
- (D) Gandak

**Q7.** In computer networking, what does the acronym 'URL' stand for?

- (A) Universal Radio Link
- (B) Uniform Resource Locator
- (C) User Response Line
- (D) Unified Registry Location



- Q8.** The 'Green Revolution' in India, launched in the late 1960s to increase food grain production, primarily focused on which two crops?
- (A) Rice and Maize
  - (B) Wheat and Rice
  - (C) Cotton and Jute
  - (D) Pulses and Oilseeds
- Q9.** What is the scientific name and deficiency disease associated with Vitamin C?
- (A) Retinol; Night blindness
  - (B) Thiamine; Beriberi
  - (C) Ascorbic acid; Scurvy
  - (D) Calciferol; Rickets
- Q10.** The famous 'Kathak' classical dance form is historically and culturally associated with which Indian state?
- (A) Tamil Nadu
  - (B) Kerala
  - (C) Uttar Pradesh
  - (D) Odisha
- Q11.** Under whose leadership was the historic 'Kakori Train Action' (formerly Kakori Train Robbery) organized in 1925 near Lucknow?
- (A) Hindustan Socialist Republican Association (HSRA) led by Bhagat Singh
  - (B) Hindustan Republican Association (HRA) led by Ram Prasad Bismil and Ashfaqullah Khan
  - (C) Anushilan Samiti led by Aurobindo Ghosh
  - (D) Ghadar Party led by Lala Hardayal
- Q12.** Which type of computer memory is volatile, meaning it loses its stored data when the power is turned off?



- (A) ROM (Read-Only Memory)
- (B) RAM (Random Access Memory)
- (C) Hard Disk Drive
- (D) Solid State Drive

**Q13.** Who serves as the ex-officio Chairman of the NITI Aayog, which replaced the Planning Commission of India?

- (A) The President of India
- (B) The Finance Minister of India
- (C) The Prime Minister of India
- (D) The Governor of the Reserve Bank of India

**Q14.** Which of the following processes describes the conversion of a solid directly into a gas without passing through the liquid phase?

- (A) Condensation
- (B) Sublimation
- (C) Evaporation
- (D) Deposition

**Q15.** Which district of Uttar Pradesh is globally renowned as the 'Brass City' (Pital Nagari) due to its extensive brassware industry?

- (A) Firozabad
- (B) Khurja
- (C) Moradabad
- (D) Aligarh

**Q16.** The Dadasaheb Phalke Award is India's highest award presented annually in which of the following fields?

- (A) Classical Music



- (B) Literature
- (C) Cinema
- (D) Journalism

**Q17.** Which of the following protocols is used to securely transfer hypertext pages across the World Wide Web?

- (A) FTP
- (B) SMTP
- (C) HTTPS
- (D) IMAP

**Q18.** The Central Soil Salinity Research Institute (CSSRI) regional station handles soil reclamation issues, but which region of Uttar Pradesh is most extensively affected by the problem of alkaline/saline soils (Usar)?

- (A) Bundelkhand Region
- (B) Central and Western Indo-Gangetic Plains
- (C) Bhabhar and Terai Belt
- (D) Vindhyan Plateau Region

**Q19.** Which Constitutional Amendment Act lowered the voting age in India from 21 years to 18 years for the Lok Sabha and Legislative Assembly elections?

- (A) 42nd Amendment Act
- (B) 44th Amendment Act
- (C) 61st Amendment Act
- (D) 73rd Amendment Act

**Q20.** The 'Khelo India University Games' seek to unearth talent at the grassroots levels. Which state hosted the third edition of these games in 2023?

- (A) Odisha
- (B) Karnataka



(C) Uttar Pradesh

(D) Haryana



**Detailed Solutions****Q1.****Solution**

**Concept:** Plant and animal cells share several common cellular structures, but they exhibit structural modifications adapted to their specific physiological needs and modes of nutrition. Autotrophic plants require specialized pigments to harvest solar energy for carbohydrate synthesis, along with high structural turgidity to withstand environmental osmotic pressures.

**Solution:**

- (a) Plastids are double-membrane bound organelles found exclusively in plant cells and algae. They include chloroplasts (containing chlorophyll for photosynthesis), chromoplasts (synthesizing and storing carotenoid pigments), and leucoplasts (colorless organelles used for nutrient storage like starch, lipids, or proteins).
- (b) Plant cells possess a massive, prominent central vacuole enveloped by a membrane called the tonoplast. This organelle maintains cellular turgor pressure, regulates osmotic balance, and serves as a primary reservoir for water, ions, and metabolic waste materials.
- (c) Mitochondria are the respiratory powerhouses of the cell responsible for ATP production through cellular respiration. They are actively present in both plant and animal cells to sustain metabolic energy demands.
- (d) Golgi apparatus structures process and pack cellular proteins, while ribosomes serve as the primary sites for protein synthesis. Both of these components are foundational, essential organelles found ubiquitously across all eukaryotic life forms, including typical animal cells.

**Final Answer:** Plastids (chloroplasts, chromoplasts, leucoplasts) and a large central vacuole

**Answer: (C)**

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Q2.

**Solution**

**Concept:** The Indian subcontinent possesses numerous archaeological and historical settlements whose timelines link ancient literature with material excavations. Localizing ancient geo-cultural landmarks from epic narratives like the Mahabharata requires correlating literary descriptions with contemporary revenue districts and geographic surveys managed by archaeological agencies.

**Solution:**

- (a) Hastinapur served as the legendary capital city of the Kuru Kingdom in ancient Indian texts. Archaeological excavations led by B.B. Lal in the early 1950s revealed distinct Painted Grey Ware (PGW) culture strata at this site, providing historical evidence linking the region to the epic era.
- (b) Geographically, the ancient site of Hastinapur is located on the old banks of the Ganga River. In modern administrative geography, this historical locality falls completely within the Meerut district of western Uttar Pradesh.
- (c) Varanasi is situated in eastern Uttar Pradesh and is renowned as one of the oldest continuously inhabited cities globally, recognized primarily as a supreme spiritual center centered around Kashi Vishwanath.
- (d) Mathura is located in the western region but is specifically celebrated as the cultural center of the Surasena kingdom and the birthplace of Lord Krishna. Prayagraj marks the strategic holy confluence of the Ganga, Yamuna, and mythical Saraswati rivers.

**Final Answer:** Meerut

**Answer: (B)**

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Q3.

**Solution**

**Concept:** Indian athletics has witnessed a paradigm shift on the global stage, transitioning from historical near-misses at elite international events to podium finishes. The World Athletics Championships represent the absolute pinnacle of competitive global track and field events, requiring athletes to surpass elite global benchmarks.

**Solution:**

- (a) Neeraj Chopra created sports history by securing India's first-ever gold medal at the World Athletics Championships during the 2023 event held in Budapest, Hungary. He secured the top podium spot in the men's javelin throw event with an exceptional throw of 88.17 meters.
- (b) This achievement followed his historic performance at the Tokyo 2020 Olympic Games, making him one of the few athletes globally to hold the reigning Olympic and World Championship titles simultaneously in the field track discipline.
- (c) Legendary sprinter Milkha Singh achieved historic fourth-place glory in the 400-meter final at the 1960 Rome Olympics. P.T. Usha achieved a similar heartbreaking fourth-place finish in the 400-meter hurdles at the 1984 Los Angeles Olympic Games.
- (d) Hima Das secured a world title at the U-20 junior level championships in the 400-meter race in 2018, but she has not won a gold medal at the senior World Athletics Championships.

**Final Answer:** Neeraj Chopra

**Answer: (A)**

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Q4.

**Solution**

**Concept:** The framing of the Constitution of India involved an extensive comparative study of various global constitutional frameworks. The constituent assembly selected and adapted proven governance principles from different nations to build a welfare state that aligned with India's unique socioeconomic challenges.

**Solution:**

- (a) The Directive Principles of State Policy (DPSP), contained within Part IV of the Indian Constitution from Articles 36 to 51, serve as non-justiciable constitutional guidelines. They outline the socioeconomic goals that state authorities must strive to achieve while formulating national policies.
- (b) The architects of the Indian Constitution borrowed this progressive concept directly from the Irish Constitution of 1937. Ireland itself had adopted these directive social principles from the historic Spanish constitutional framework.
- (c) Fundamental Rights, judicial review mechanisms, and the independence of the judiciary were borrowed from the United States framework. Fundamental Duties and the concept of planning ideals were derived from the Soviet Union (USSR).
- (d) The concurrent list, provisions governing freedom of trade and commerce, and the mechanism for conducting joint sittings of Parliament were adapted from the Australian constitutional system.

**Final Answer:** Ireland

**Answer:** (C)

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Q5.

**Solution**

**Concept:** The greenhouse effect is a naturally occurring thermal regulatory process where specific atmospheric gases trap infrared radiation emitted from the Earth's surface. While this mechanism keeps the planet habitable, anthropogenic emissions have increased these gas concentrations, accelerating global warming and climate change.

**Solution:**

- (a) Carbon dioxide ( $CO_2$ ) is the most significant greenhouse gas driving anthropogenic global warming. Although gases like water vapor trap heat effectively, massive global industrial emissions from burning fossil fuels and extensive deforestation make  $CO_2$  the primary driver of climate change.
- (b) Industrialization has raised atmospheric carbon dioxide concentrations to historic levels, intensifying radiative forcing. This traps excess thermal energy within the troposphere and causes global temperatures to rise.
- (c) Nitrogen and oxygen are the two most abundant gases in Earth's atmosphere, accounting for roughly 78% and 21% of its volume respectively. However, their homonuclear diatomic structure prevents them from absorbing or infrared radiation.
- (d) Argon is a chemically inert noble gas that makes up roughly 0.93% of the atmosphere. Because it lacks the molecular structure to absorb thermal radiation, it does not contribute to the greenhouse effect.

**Final Answer:** Carbon dioxide

**Answer:** (A)

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Q6.

**Solution**

**Concept:** The drainage system of Uttar Pradesh comprises perennial Himalayan rivers and seasonal peninsular streams. Understanding the state's hydrology requires identifying the precise source origins, directional paths, and confluences where these major networks meet.

**Solution:**

- (a) The Betwa River is a prominent peninsular stream that originates in the northern slopes of the Vindhya Range near Hoshangabad district in Madhya Pradesh. It flows northeast across Madhya Pradesh and enters southwestern Uttar Pradesh.
- (b) The Betwa acts as a major tributary of the Yamuna River, joining it near the Hamirpur district of Uttar Pradesh. The river is highly significant for regional irrigation schemes and powering local hydroelectric projects across Bundelkhand.
- (c) The Gomti River is a unique perennial plain-origin river that begins its journey at Fulhar Jheet in Pilibhit district, flowing past Lucknow before joining the Ganga near Varanasi.
- (d) The Ghaghara and Gandak rivers are major Himalayan tributaries that originate in northern glacial zones. They flow southward into the Indo-Gangetic plains to join the Ganga River system directly, rather than emptying into the Yamuna.

**Final Answer:** Betwa

**Answer:** (C)

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Q7.

**Solution**

**Concept:** Information and Communication Technology uses standardized addressing frameworks to identify and locate digital assets across global networks. Every file, document, image, or web page hosted on the internet requires a structured, unique identifier to ensure data transfers reach the correct destination.

**Solution:**

- (a) URL stands for Uniform Resource Locator. It functions as a global web address used to locate specific resources on the internet. A standard URL contains the access protocol (like HTTP or HTTPS), the domain name or host IP address, and the specific file directory path.
- (b) The locator provides the network communication subsystem with explicit instructions on where to retrieve target documents on web servers, allowing users to browse websites seamlessly worldwide.
- (c) Universal Radio Link is a fictitious technical term and does not correspond to any internet addressing standards or communication architectures.
- (d) Terms like User Response Line and Unified Registry Location are incorrect distractors that do not represent established data communication terminology or standard networking acronyms.

**Final Answer:** Uniform Resource Locator

**Answer: (B)**

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Q8.

**Solution**

**Concept:** The Green Revolution was a targeted agricultural transformation initiative launched in response to severe food crises in mid-20th century India. It introduced high-yielding crop varieties (HYV), expanded irrigation infrastructure, and integrated chemical fertilizers to achieve food self-sufficiency.

**Solution:**

- (a) Launched under the leadership of agricultural scientists like M.S. Swaminathan, the initiative focused primarily on increasing the production of wheat and rice. High-yielding semi-dwarf seed varieties imported from Mexico and the Philippines were introduced to boost yields.
- (b) The initiative achieved immediate success in regions with reliable irrigation, such as Punjab, Haryana, and western Uttar Pradesh. Wheat production surged dramatically, turning India from a grain-importing country into a self-reliant nation.
- (c) Commercial cash crops like cotton and jute were not the primary focus of this initial food security drive, as the government prioritized stabilizing essential dietary grain supplies.
- (d) Pulses and oilseeds were excluded from the early phases of the Green Revolution. This created a production gap between cereal crops and pulses that agricultural policies sought to address in later decades.

**Final Answer:** Wheat and Rice

**Answer: (B)**

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Q9.

**Solution**

**Concept:** Vitamins are essential micronutrients that the human body cannot synthesize in sufficient quantities, requiring them to be consumed through diet. They act as vital cofactors for enzymatic reactions, meaning a deficiency can disrupt metabolic processes and cause specific clinical diseases.

**Solution:**

- (a) Vitamin C is scientifically known as ascorbic acid. It is a water-soluble vitamin found abundantly in citrus fruits like lemons, oranges, and Indian gooseberry (amla). It plays a crucial role as an antioxidant and is essential for collagen synthesis.
- (b) A chronic deficiency of ascorbic acid leads to scurvy, a disease characterized by weakened collagen structures, bleeding gums, delayed wound healing, spotty skin hemorrhages, and generalized physical weakness.
- (c) Retinol is the chemical name for Vitamin A, and its deficiency leads to night blindness. Thiamine is Vitamin B1, which prevents the nervous system disorder known as beriberi.
- (d) Calciferol corresponds to Vitamin D, which regulates calcium absorption. A deficiency in calciferol leads to bone-weakening conditions like rickets in children and osteomalacia in adults.

**Final Answer:** Ascorbic acid; Scurvy

**Answer:** (C)

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Q10.

**Solution**

**Concept:** Indian classical dances are structured artistic traditions deeply tied to the cultural and spiritual history of their regions. Each style features distinct footwork, costumes, and storytelling expressions that evolved in temples, royal courts, and local communities over centuries.

**Solution:**

- (a) Kathak is one of the eight major classical dance forms of India, originating in northern India with its primary historical roots centered in Uttar Pradesh. The name comes from the Sanskrit word 'Katha', meaning a story, and 'Kathakar', meaning a storyteller.
- (b) The dance form evolved significantly through the historical Bhakti movement and later in the Mughal courts. This led to the development of distinct stylistic lineages known as gharanas, specifically the Lucknow, Varanasi, and Jaipur gharanas.
- (c) Tamil Nadu is home to Bharatnatyam, an ancient dance style rooted in temple devotion. Kerala is famous for Kathakali, a highly stylized classical dance-drama known for its elaborate makeup and costumes.
- (d) Odisha is the birthplace of Odissi, a classical dance form characterized by its fluid movements and sculptural poses inspired by ancient temple carvings.

**Final Answer:** Uttar Pradesh

**Answer:** (C)

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Q11.

**Solution**

**Concept:** The Indian national movement featured diverse revolutionary strategies alongside mainstream political agitation. Underground organizations emerged across northern India to challenge colonial authorities through direct armed interventions, intending to disrupt administrative financing channels and secure funds needed to sustain revolutionary operations.

**Solution:**

- (a) The Kakori Train Action was a meticulous revolutionary enterprise executed on August 9, 1925, near the town of Kakori near Lucknow. The tactical operation targeted an official British government treasury shipment transported aboard the Number 8 Down Train.
- (b) This historical mission was conceived and systematically organized by the Hindustan Republican Association (HRA). The key leadership and execution team included notable freedom fighters Ram Prasad Bismil, Ashfaqullah Khan, Chandrashekhar Azad, and Rajendra Lahiri.
- (c) The operational objective was to acquire colonial state funds to purchase advanced weaponry and publish revolutionary literature designed to spark an armed rebellion against foreign occupation.
- (d) The Hindustan Socialist Republican Association (HSRA) was a later ideological restructuring of the organization established in 1928 under Bhagat Singh. The Anushilan Samiti operated primarily out of Bengal, while the Ghadar Party carried out activities from North America.

**Final Answer:** Hindustan Republican Association (HRA) led by Ram Prasad Bismil and Ashfaqullah Khan

**Answer: (B)**

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Q12.

**Solution**

**Concept:** Computer systems organize physical storage architectures into distinct functional hierarchies defined by their processing speeds, access locations, and operational stability. Memory behavior depends directly on whether a continuous external electric current is required to maintain stored configuration states.

**Solution:**

- (a) Volatile memory acts as temporary workspace computing storage that requires constant power transmission to maintain its internal registers. The moment the electrical power source is interrupted, all stored byte structures are instantly lost.
- (b) RAM (Random Access Memory) is the primary volatile system memory used by CPUs to hold active application processes and operating runtime systems. It offers high-speed data access but lacks permanent retention capabilities.
- (c) ROM (Read-Only Memory) represents non-volatile infrastructure that holds permanent operational instructions like the system BIOS. It preserves its encoded firmware profiles even when the host system is completely powered down.
- (d) Hard Disk Drives and Solid State Drives are categorized as persistent non-volatile secondary storage solutions. They utilize magnetic fields or NAND flash transistors to safely retain user data long-term without needing active electricity.

**Final Answer:** RAM (Random Access Memory)

**Answer: (B)**

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Q13.

**Solution**

**Concept:** National policy formulation and cooperative federalism initiatives in contemporary India are coordinated by high-level statutory advisory bodies. Structuring these institutions requires linking executive administration with advisory experts to ensure development planning matches regional economic realities.

**Solution:**

- (a) The NITI Aayog (National Institution for Transforming India) was established through a Union Cabinet resolution on January 1, 2015. It replaced the decades-old Planning Commission to implement a collaborative bottom-up approach to national policy.
- (b) The organizational hierarchy establishes that the Prime Minister of India serves as the ex-officio Chairman of the institution. This ensures direct executive leadership over macroeconomic policies and interstate strategic partnerships.
- (c) The administrative framework also includes a Vice-Chairperson and a Chief Executive Officer along with a governing council made up of all state Chief Governors.
- (d) The President occupies the formal head position of the Republic, while the Finance Minister manages budgetary allocations. The Governor of the Reserve Bank manages monetary controls, and none of them head this specific policy body.

**Final Answer:** The Prime Minister of India

**Answer: (C)**

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Q14.

**Solution**

**Concept:** Thermodynamic phase transitions describe the physical transformation of matter between distinct states determined by kinetic energy variations and ambient pressure parameters. Certain chemical compounds undergo direct phase boundary crossings without transitioning through intermediate molecular configurations.

**Solution:**

- (a) Sublimation is an endothermic phase transition where a solid transitions directly into a gas without passing through a liquid state. This occurs at temperatures and pressures below the specific triple point of a chemical substance.
- (b) Common laboratory examples of sublimating materials include solid carbon dioxide (dry ice), naphthalene spheres, camphor crystals, and elemental iodine flakes when exposed to specific thermal energy levels.
- (c) Condensation describes the reverse exhalation phase change where an active gas cools down and condenses back into liquid droplets. Evaporation represents a surface-level liquid transformation into gaseous vapors.
- (d) Deposition is the precise thermodynamic counterpart to sublimation, describing a phase modification where a gaseous substance transforms directly into solid crystals without becoming a liquid.

**Final Answer:** Sublimation

**Answer: (B)**

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Q15.

**Solution**

**Concept:** The industrial landscape of Uttar Pradesh is defined by historical regional clusters specializing in specific traditional handicrafts. The One District One Product (ODOP) institutional initiative highlights these specialized geographic hubs to support regional exports and preserve artisanal manufacturing heritages.

**Solution:**

- (a) Moradabad was established in the mid-seventeenth century and has grown into a major international hub for metal handicrafts. The district is globally recognized as the Brass City due to its massive output of hand-hammered brassware.
- (b) The local industrial ecosystem exports thousands of crores worth of intricate brass artifacts, interior decor, utensils, and ritual objects to global markets in North America and Europe annually.
- (c) Firozabad is celebrated as India's glass capital, specializing in glass bangles, chandeliers, and laboratory glassware. Khurja, located in Bulandshahr, is a famous center for ceramic pottery.
- (d) Aligarh holds a historic global monopoly in manufacturing security hardware and complex locking mechanisms, earning it the traditional title of the Lock City of India.

**Final Answer:** Moradabad

**Answer:** (C)

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Q16.

**Solution**

**Concept:** National cultural honors recognize outstanding lifelong contributions to the evolution and enrichment of mass communication mediums. Evaluating institutional accolades requires identifying the specific national ministries, selection criteria, and creative domains associated with each award.

**Solution:**

- (a) The Dadasaheb Phalke Award stands as the highest official recognition in the field of Indian cinema. Instituted in 1969 by the Directorate of Film Festivals under the Ministry of Information and Broadcasting, it honors artists for their outstanding contributions to the growth of Indian film.
- (b) The award is named after Dhundiraj Govind Phalke, the pioneering filmmaker who directed India's first full-length silent feature film, Raja Harishchandra, in 1913.
- (c) Recipients are honored with a golden lotus medallion (Swarna Kamal), a cash prize, and a ceremonial shawl during the national film awards ceremony.
- (d) Classical music achievements are primarily honored through the Sangeet Natak Akademi Fellowships. Outstanding literary contributions receive the Jnanpith Award, while investigative journalism is recognized through dedicated media foundations.

**Final Answer:** Cinema

**Answer:** (C)

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Q17.

**Solution**

**Concept:** Application layer protocols implement structured communication rules that govern data transfers between client web browsers and hosting servers. Secure network architectures rely on cryptographic layers to safeguard transmitted text packets against unauthorized interception.

**Solution:**

- (a) HTTPS (Hypertext Transfer Protocol Secure) is the industry-standard network protocol used to securely transmit web pages across internet systems. It encrypts standard HTTP communication traffic using Transport Layer Security (TLS) or Secure Sockets Layer (SSL).
- (b) This protocol ensures data integrity, authentication of target websites, and complete privacy for sensitive transactional information, preventing third-party eavesdropping during network transits.
- (c) FTP (File Transfer Protocol) is a network utility designed specifically for moving files between storage servers, lacking the structural optimizations required for rendering web interfaces.
- (d) SMTP (Simple Mail Transfer Protocol) manages outgoing email transits, while IMAP (Internet Message Access Protocol) handles retrieving messages from mail storage servers.

**Final Answer:** HTTPS

**Answer:** (C)

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Q18.

**Solution**

**Concept:** Agricultural productivity across the Indo-Gangetic basin is often constrained by soil degradation, which creates distinct zones of high salinity and alkalinity. Managing these variations requires studying how local topography, high water tables, and intensive irrigation systems interact.

**Solution:**

- (a) Alkaline and saline soils, known locally as Usar or Reh lands, are widely distributed across the Central and Western Indo-Gangetic Plains of Uttar Pradesh. Districts like Kanpur, Unnao, Aligarh, and Mainpuri are heavily affected.
- (b) These degraded soils develop due to poor natural drainage combined with a hot climate and long-term unscientific canal irrigation. This setup causes salts to accumulate on the surface through capillary action, reducing crop yields.
- (c) The Bundelkhand region features a landscape dominated by rocky terrain and expansive black and red soils, which present unique dryland farming challenges rather than widespread surface salinity.
- (d) The northern Bhabhar and Terai belt features moist alluvial soils with high water tables, while the Vindhyan plateau contains shallow gravelly structures that do not show typical Usar soil degradation.

**Final Answer:** Central and Western Indo-Gangetic Plains

**Answer: (B)**

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Q19.

**Solution**

**Concept:** Democratic expansion in India involved progressive constitutional changes aimed at increasing political participation among young citizens. Altering core electoral rules requires formal constitutional amendments passed by Parliament under Article 368.

**Solution:**

- (a) The 61st Constitutional Amendment Act of 1988 amended Article 326 of the Constitution to lower the voting age from 21 to 18 years for Lok Sabha and State Legislative Assembly elections.
- (b) This reform took effect in 1989 under Prime Minister Rajiv Gandhi's administration. It aimed to include the country's youth in democratic processes, significantly expanding the national voter base.
- (c) The 42nd Amendment Act of 1976 introduced sweeping constitutional changes during the Emergency, including adding the Fundamental Duties to Part IVA.
- (d) The 44th Amendment Act of 1978 restored key civil liberties protections, while the 73rd Amendment Act of 1992 established the constitutional framework for three-tier Panchayati Raj rural local governance.

**Final Answer:** 61st Amendment Act

**Answer:** (C)

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Q20.

**Solution**

**Concept:** The Khelo India initiative is a national program designed to strengthen grassroots sports infrastructure across India. The university edition provides a competitive platform for student-athletes, with hosting duties rotated among states to develop regional sports facilities.

**Solution:**

- (a) Uttar Pradesh hosted the third edition of the Khelo India University Games from May 25 to June 3, 2023. Competitions were held across four cities: Lucknow, Varanasi, Greater Noida, and Gorakhpur.
- (b) The event brought together over 4,000 athletes from over 200 universities nationwide, featuring a diverse range of sports. The official mascot was Jitu, representing the swamp deer (Barasingha), the state animal of Uttar Pradesh.
- (c) Panjab University clinched the overall championship title at this edition, which successfully showcased the state's expanding sports hosting capabilities.
- (d) Odisha hosted the inaugural edition of the games in 2020, while Karnataka hosted the second edition in Bengaluru. Haryana has hosted several flagship Khelo India Youth Games but did not host this 2023 university event.

**Final Answer:** Uttar Pradesh

**Answer:** (C)

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**Answer Key**

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

