

Weekly Quiz Answers (18th-24th Sept)

Ans1. A

Explanation:

Santiniketan, a town established by Nobel laureate Rabindranath Tagore, made it to the UNESCO's World Heritage List.

- Located in West Bengal's Birbhum district, Santiniketan, which means "abode of peace", started taking shape in 1901 and is the place where Tagore laid the foundations of Visva-Bharati University.
- Santiniketan becomes India's 41st World Heritage Site to join the UNESCO List.
- The place exhibits an important interchange in human values, over a span of time or within a cultural area of world, on developments in architecture or technology, monumental arts, town planning or landscape design.

Historical Significance

- In 1862, Rabindranath Tagore's father, Debendranath Tagore, spotted this scenic landscape and decided to establish an ashram, building a house called Santiniketan, meaning "abode of peace".

Name Change

- The area, originally called Bhubadanga, was renamed Santiniketan by Debendranath Tagore due to its conducive environment for meditation.

Educational Legacy

- In 1901, Rabindranath Tagore chose a significant portion of land and established a school based on the Brahmachary Ashram model. This school later evolved into Visva Bharati University.

UNESCO's World Heritage Sites

- ✓ A World Heritage Site is a place that is listed by UNESCO for its special cultural or physical significance.
- ✓ The list of World Heritage Sites is maintained by the international 'World Heritage Programme', administered by the UNESCO World Heritage Committee.
- ✓ This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972.

Ans2. B

Explanation:

Three Hoysala Temples Declared 42nd World Heritage Sites. The Hoysala temples at Belur, Halebid, and Somanathapur in Karnataka were declared UNESCO World Heritage Sites in a move that will bring global recognition with prospects of increase in international tourism to these places.

The Chennakeshava temple at Belur and the Hoysaleswara temple at Halebid — both in Hassan district — have been on the UNESCO's tentative list since 2014. The Keshava temple at Somanathapur in Mysuru district was appended to the other two monuments under the tentative list and all three were officially nominated by the Centre as India's entry for 2022-23 in February 2022.

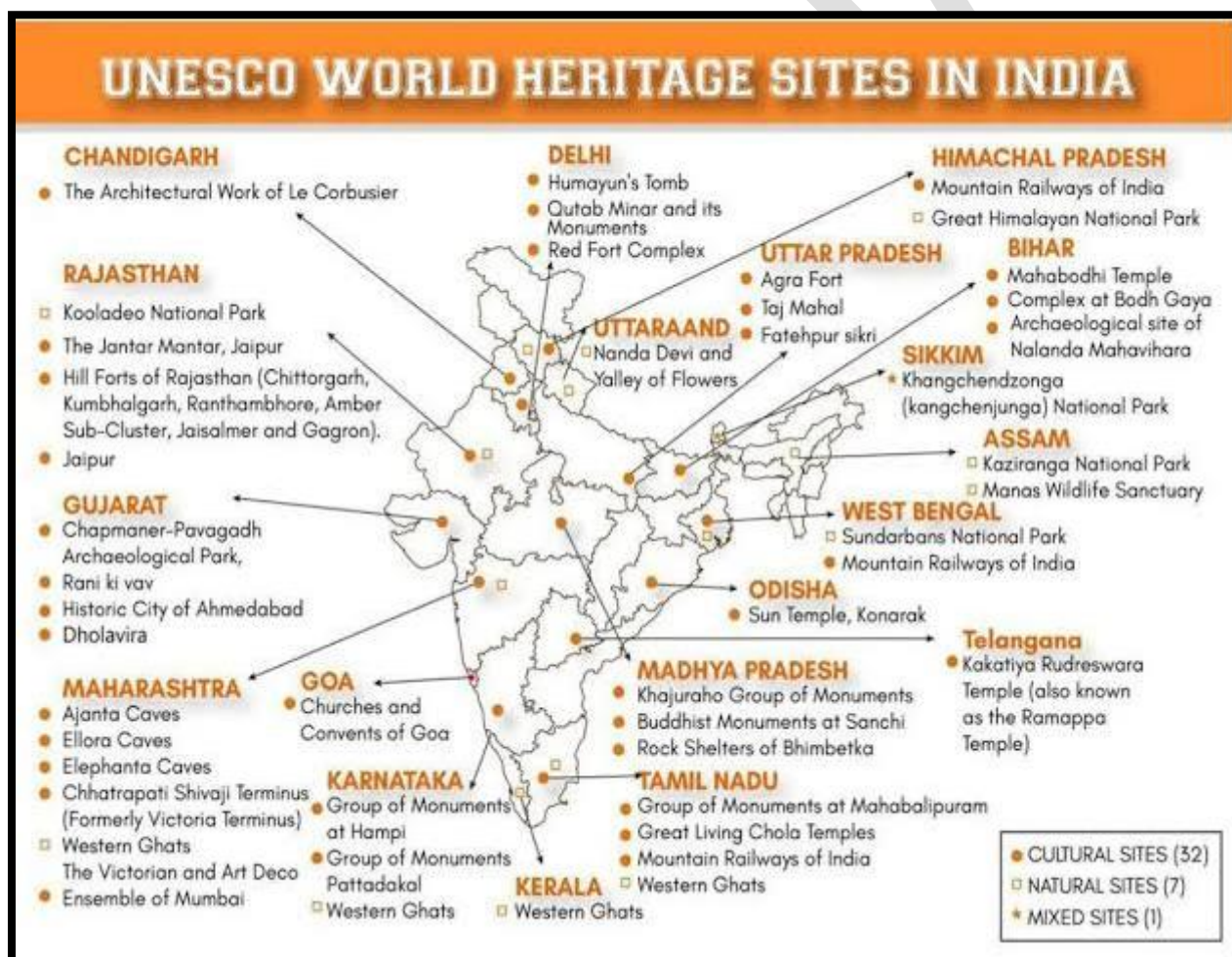
Ans3. D

Explanation:



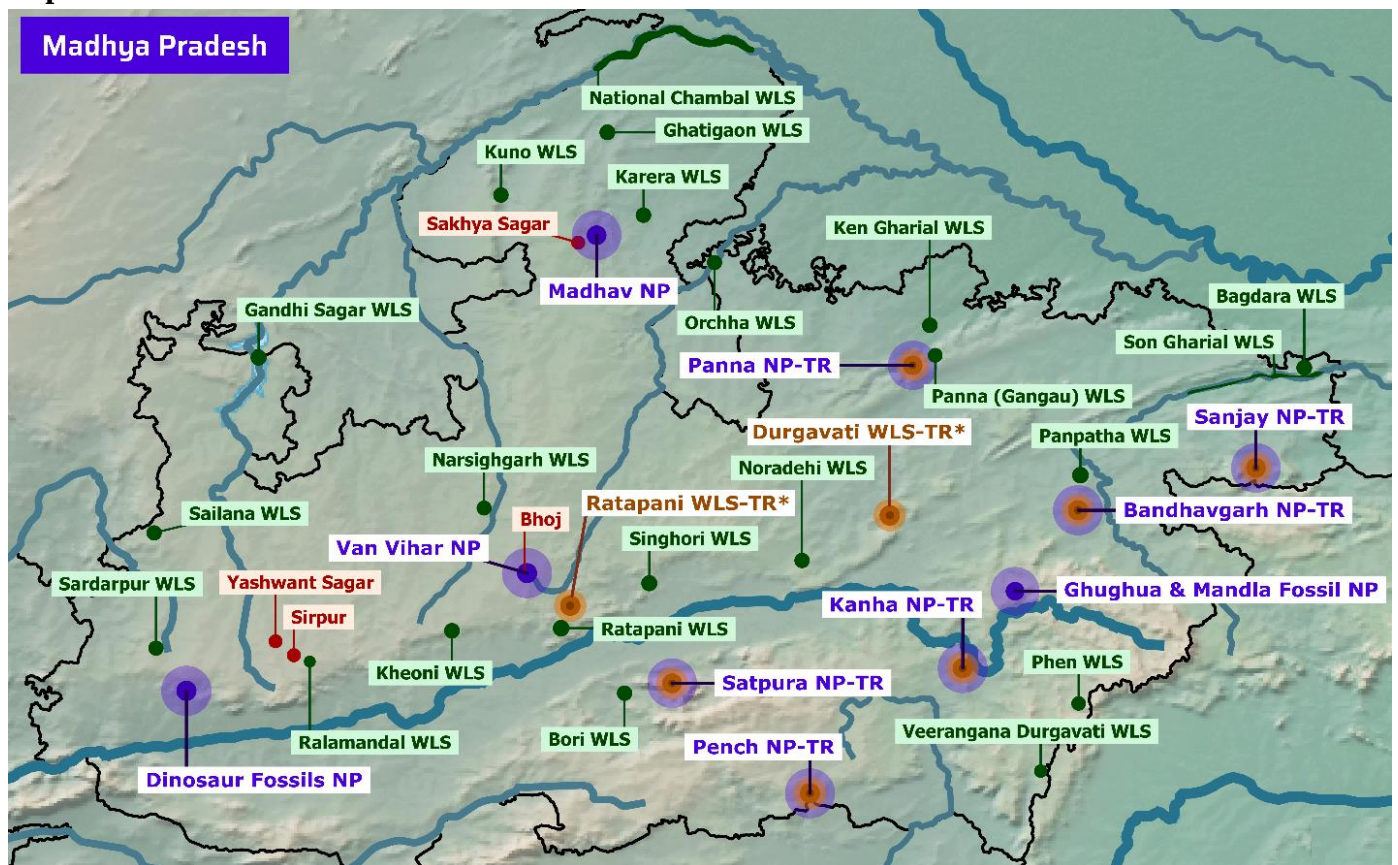
Ans4. C

Explanation:



Ans5. C

Explanation:



Ans6. C

Explanation:

Context: IIT Roorkee scientists have characterised dinosaur fossils from the middle-Jurassic period, found in the Thar desert near the Jaisalmer Basin by the Geological Survey of India. The remains are those of a sauropod dinosaur, and happen to be the oldest known fossils of this particular sauropod.

Key Highlights

- Sauropod dinosaur is the same clade as the long-necked herbivores in Jurassic Park – only these happened to be the oldest known fossils of this particular kind of sauropod.
- Belonging to the family Dicraeosauridae and from the superfamily Diplodocoidea, these fossils are the first dicraeosaurid sauropods to have been found in India.
- And at 167 million years old, they are the oldest known diplodocoid fossils in the world.



- The scientists named the dinosaur *Tharosaurus indicus*, with Tharo deriving from the Thar desert; saurus from the Greek 'sauros', or lizard; and indicus from its Indian origin.
- The most fascinating feature about sauropods is their size. They can grow more than a hundred feet. There are many sauropod groups that are even longer than the blue whale.
- However, members of the Dicraeosauridae family of sauropods – to which *Tharasaurus* belongs – were not nearly as large.
 - This family was unique: its members were smaller and had shorter necks and tails compared to the other long-necked sauropods.

Sauropods first appeared on the earth during the Jurassic period, about 200 million years ago. They were one of the most dominant clades of dinosaurs, surviving until the late Cretaceous period 65 million years ago, when dinosaurs went extinct.

- ✓ India has also been home to a few early, more primitive sauropods, like *Kotasaurus* and *Barapasaurus*.
- ✓ They were both discovered in the Kota Formation, a geological rock unit in Telangana, from the Early Jurassic period.
- ✓ In 2006, an Indo-German team found another middle Jurassic sauropod dinosaur fossil in the Kutch basin of Gujarat, named *Camarasaurus supremus*, which was also the oldest fossil of that group found at the time.
- ✓ There have been subsequent finds of extremely old sauropod fossils in the region by the same team since.

Ans7. C

Explanation:

Nilgiri Thar

- IUCN – Endangered
- Wildlife (Protection) Act of India, 1972 - Schedule I : This provides absolute protection and offences under these are prescribed the highest penalties

Ans8. C

Explanation:

Temple	Features
Chennakeshava Temple (Belur, Hassan, Karnataka) 	• Year: 1117 AD (period of king Vishnuvardhana) • Deity: Lord Vishnu (Chennakesava) • Richly sculptured exterior depicting scenes from Vishnu's life, epics, and some representations of Shiva. • "Chenna" means beautiful, "Keshava" means Vishnu • Follows a stellate plan with a raised platform. Constructed using chloritic schist (soapstone).
Hoysaleswara Temple (Halebidu, Hassan, Karnataka) 	• Year: 1121 CE • Deity: Lord Shiva (Hoysaleswara) • Known for more than 240 wall sculptures depicting various themes • Walled complex with three Jaina basadi (temples) and a stepped well in Halebid.
Keshava Temple (Somanathapura, Mysuru, Karnataka) 	• Year: 1268 CE (regime of Narasimha III) • Deity: Lord Krishna (Keshava, Janardhana, Venugopala) • Trikuta Temple dedicated to Lord Krishna in three forms: Janardhana, Keshava, and Venugopala. • The main Keshava idol is missing, and the Janardhana and Venugopala idols are damaged.

Ans9. D

Explanation:

Why did the cheetahs die?

There have been a variety of reasons and causes attributed to the deaths of the six adults and three cubs. **Radio collars** are not the underlying reason for the deaths of any of these cats, at least that is the officially stated position. One needs to determine if the African cheetahs are susceptible to **certain insects and parasites** in India, and if the collars provide a micro-environment conducive for these to thrive.

The first cheetah which died is said to have perished due to a renal condition. The question that arises is why the Government of India agreed to bring a cheetah which was sick and put it through more stress by transporting it and having it adapt to a new environment.

One of the females died when authorities attempted to get the cheetah to mate inside the enclosure.

Three of the four cubs born in India are reported to have died due to heatwave conditions.

One of the males is reported to have died due to cardio-pulmonary failure but what caused it (the ultimate cause), has still not been determined.

The last three deaths occurred during the monsoon. While there have been several conflicting reports regarding the cause of their deaths, no definitive cause has been shared in the public domain.

Even though the cheetahs were under constant monitoring, nine deaths have occurred. It is time the **authorities reassess the approach** and **act decisively** so that one can **prevent such deaths**, especially when the animals are in captivity. We also have to be **cognisant of the effects of long periods of captivity** on the **fitness** of these cats to be released to run free in the wild.

Ans10. B

Explanation:

Nearly a year after deciding to cut the number of prizes annually awarded by its Ministries, the Union government is set to institute the Rashtriya Vigyan Puraskar — 56 prizes to felicitate scientists, technologists and innovators.

- Akin to the prestigious Padma awards, these awards will not include any cash component; instead, they will likely bestow a certificate and a medallion on the awardee.

Key Highlights

- According to the proposal, the RVP will comprise three Vigyan Ratna, 25 Vigyan Shri, 25 Vigyan Yuva-Shanti Swarup Bhatnagar and three Vigyan Team awards.
- **Multidisciplinary prizes:** These prizes will be awarded annually for physics, chemistry, biological sciences, mathematics and computer science, earth science, medicine, engineering science, agricultural science, environmental science, technology and innovation, atomic energy, space science and technology, and a 13th category, simply called “others”.
- The Vigyan Ratna awards shall be for “**lifetime contributions along with excellence made in any field of science**”, the Vigyan Shri for “**distinguished contribution to any field**”, and the SSB for

“exceptional contribution by young scientists”. The team awards shall be for three or more researchers who have made an “exceptional contribution as a team”.

- There are **no age limits** for any prizes except the SSB, for which recipients must be 45 years or younger.
- “It may be ensured that each domain may be represented. Adequate representation of women may also be ensured,” said the proposal forwarded by the Department of Science and Technology (DST) to the Union Home Ministry.
- The 56 proposed awards are a stark reduction from the almost 300 science prizes that used to be given by Union Ministries.

Ans11. C

Explanation:

- Rashtriya Vigyan Puraskar will be announced annually on May 11, which is **National Technology Day**, and will be awarded on **National Space Day**, August 23.
 - These are the days on which India successfully conducted its second nuclear test in 1998, and then catapulted the Chandrayaan-3’s Vikram lander on the moon this year.
- The RVP awards, which will commence from 2024, will be given by the President or the Vice President, according to the proposal.
- A committee will be constituted every year, comprising the Secretaries of six Science Ministries, up to four presidents of science and engineering academies, and six distinguished scientists and technologists from various fields.
- The **CSIR** will coordinate the administration of the awards process for two years, after which it will be taken over by the proposed **National Research Foundation**.

Ans12. C

Explanation:

Approximately four of every five people with hypertension are not adequately treated, but if countries can scale up coverage, 76 million deaths could be averted between 2023 and 2050, the World Health Organization (WHO) said in its **first-ever report** on the global impact of high blood pressure.

Key Highlights

- The WHO report states that hypertension affects one in three adults worldwide.
- This common, deadly condition leads to stroke, heart attack, heart failure, kidney damage and many other health problems.
- The number of people living with hypertension (blood pressure of 140/90 mmHg or higher or taking medication for hypertension) doubled between 1990 and 2019, from 650 million to 1.3 billion.

What is Hypertension?

- Blood pressure is the force exerted by circulating blood against the walls of the body’s arteries, the major blood vessels in the body.
- Hypertension is when blood pressure is too high.
- It is defined as having systolic blood pressure level greater than or equal to 140 mmHg or diastolic blood pressure level greater than or equal to 90 mmHg or/and taking anti-hypertensive medication to lower his/her blood pressure.

- Nearly half the people with hypertension globally are currently unaware of their condition.
- More than three-quarters of adults with hypertension live in low- and middle-income countries.

Ans13. D

Explanation:

Research confirms that adolescents raised in environments conducive to healthy choices have a lower risk of developing PCOS.

Key Highlights

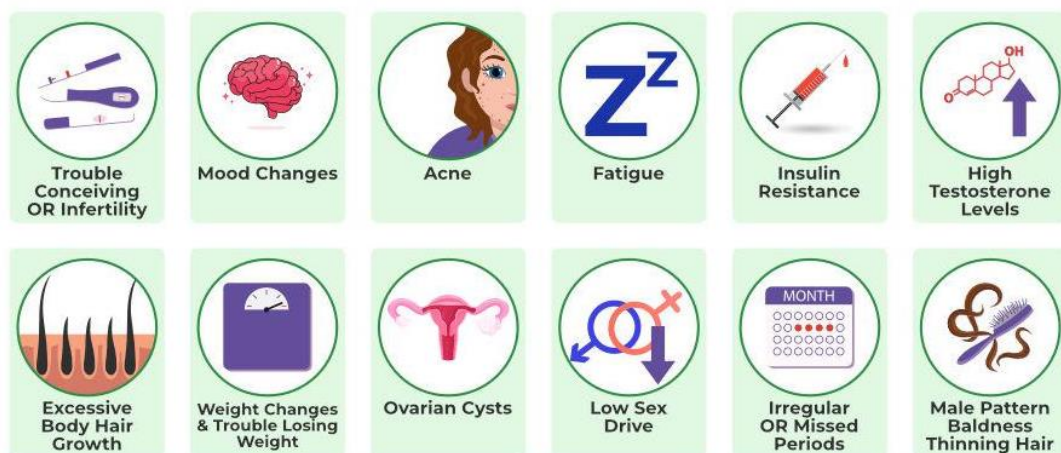
In September, amid **PCOS awareness month**, a concerning reality emerges: academic pressure may unknowingly contribute to a silent health crisis among young girls.

- It starts in classrooms but often leads to gynaecologists' offices, where ultrasound scans reveal ovarian cysts, resulting in a diagnosis of Polycystic Ovary Syndrome (PCOS).

Increasingly Common

- Various studies and reports, reveal PCOS as an increasingly common health issue among modern Indian women.
- One in five women in India grapples with PCOS, with 60% of those seeking infertility treatments doing so due to PCOS-related problems. Gynaecologists nationwide concur that this condition is on the rise.
- PCOS lacks a single known cause.
 - It affects individuals with a genetic predisposition, often marked by a family history of diabetes or obesity, exposed to environments that encourage neither a healthy diet nor regular exercise and are stress-laden.

PCOS Symptoms



- Research confirms that adolescents raised in environments conducive to healthy choices have a lower risk of developing PCOS. Unfortunately, such environments are scarce, especially for students in the Indian context.
- Physical education classes, where they exist, are typically once a week for a mere 30-45 minutes, a trend that has worsened, as revealed by the 2022 India Report Card team.

- This falls far short of the WHO's recommendations for adolescent physical exercise, suggesting at least 60 minutes of aerobic activity and strength training three times a week.
- With parents enrolling children in tuition and coaching classes, sometimes from kindergarten, there's little time or motivation for physical activity. Many women only start exercising when health scares or infertility emerge.
- Experts in neuroscience, however, emphasise that fostering physical activity must start in childhood; those neglecting exercise in youth find it hard to initiate later when health issues arise.

The highly competitive education system not only makes normal expectations for physical activity unattainable but also subjects adolescents to extreme stress. Studies establish a clear link between stress and PCOS and in Indian adolescents, the most common cause of stress is academic.

- Dr Aslam points out, "Academic stress can be productive if channelled effectively, but education on coping skills and emotion regulation is overlooked in India. Most Indian schools lack mental health professionals to assist students with stress."

Ans14. B

Explanation:

About Hoysala Temples

Hoysala architecture, developed between the 11th and 14th centuries in southern Karnataka under the Hoysala Empire.

- The Hoysala temples are known for evolving a distinct style that is ornate with temple architecture following a stellate plan built on a raised platform.
- A unique style blending elements of Dravida and Nagara architectures.
- Influences from Bhumija, Nagara, and Karnataka Dravida architectural traditions.
- The material used in temple construction is chlorite schist which is also known as soapstone that are soft and amiable to carving.
- The temples have horizontal friezes and many of the sculptures are signed by artists which is unique in the history of Indian art while the doorways show intricate carvings showcasing the excellence achieved by the artist.

Ans15. B

Explanation:

About Nilgiri Thar	
Local Name	The species is locally known as Varaiaadu .
Other Name	It is also known as Nilgiri Ibex .
Habitat	● It is the sole Caprinae species found in the tropical mountains of southern India. ● The Nilgiri tahr prefers montane grasslands, with steep and rocky terrains at an altitude between 300 metres and 2,600 metres above sea level.

	- Historically, the Nilgiri Tahr was known to inhabit a large portion of the Western Ghats. - They live in highly fragmented habitats in the Western Ghats in Tamil Nadu and Kerala, ranging between the Nilgiris in the north and the Kanniyakumari hills in the south, according to a 2015 study by WWF-India.
Population	- It is estimated that there are 3,122 Nilgiri Tahrs in the wild. - It has become locally extinct in around 14% of its traditional shola forest-grassland habitat. - The Adult males of Nilgiri Tahr species develop a light grey area or “saddle” on their backs and are hence called “Saddlebacks”.
Status	✓ IUCN – Endangered ✓ Wildlife (Protection) Act of India, 1972 - Schedule I : This provides absolute protection and offences under these are prescribed the highest penalties.
Threats	✓ Anthropogenic pressures ✓ Threats from invasive plants such as wattles, pines, and eucalyptus in the grasslands. ✓ Other threats are poaching and populations of these animals are small and isolated, making them vulnerable to local extinction and Climate Change.
Nilgiri Tahr Day	- October 7 will be celebrated as ‘Nilgiri Tahr Day’ in honour of E.R.C. Davidar. - He was responsible for pioneering one of the first studies on Nilgiri Tahr in 1975.
Cultural Significance	- There are multiple references to the Nilgiri Tahr in Tamil Sangam literature dating back to 2,000 years. - The late Mesolithic (10,000-4,000 BC) paintings highlight the significance of the Tahr in folklore, culture and life. - It was designated as the State animal of Tamil Nadu in recognition of its ecological and cultural significance.