

# SSC CHSL Tier I Test 24

## Key Points

- The **Duckworth-Lewis (DLS) method** is used in **cricket** to calculate the target score for a match interrupted by **weather** or other circumstances.
- It was created by two Britishers-**Frank Duckworth and Tony Lewis**.
- The method was formerly known as the **Duckworth-Lewis method** and it was adopted officially by the **ICC in 1999**.
- **Tony Lewis**, one of the men behind the **Duckworth-Lewis-Stern** method used in weather-affected limited-overs cricket matches passed away in April 2020.

## Additional Information

Various **sports and terms** related to them are mentioned below:

Sport	Term Related	
Hockey	Advantage, Back-stick, <b>Bully</b> , Cary, Centre Forward, Centre, Corner, Dribble, Flick, Free-hit, Goal Line, Blue line, Halfway Line, Hat-trick, Off-side, Red Car, Roll-in, Scoop, Short Corner, Sixteen-yard hit.	
Cricket	Boundary, Bowling, Caught, Chinaman, Cover Drive, Crease, Duck, Duckworth-Lewis, Fine Leg, Follow On, Full Toss, Googly, Gully, Hat-trick, Hit-Wicket, In-swinger, L.B.W., Leg-break, Leg-bye, Leg Glance, late Cut, maiden over, No Ball, Over, over Pitch, Popping Crease, Run Out, Short Pitch, Silly Point, Slip, Square Leg, Straight Drive, Stumped, Short leg, Spin, Swing, Third-man, Yorker.	
	Golf	Bogey, Bunker, Caddie, Fairway, Fourball, Greed Holes, Links, Par, Put, Rough, Stymied, Tee.
	Football	Bend, Dribble, Dummy, Feint, Free Kick, Header, Red Card, Throwins.
	Archery	Target, Bull's Eye.
	Swimming	Breast Stroke, Crawl, Butterfly, Freestyle, Back Stroke.

<b>Fencing</b>	Allez, Assault, Black Card, Foil, Saber, Hilt, Jury, Lane.		
<b>Basketball</b>	Dunk, Frontcourt, Held Ball, Lay-Up, Pivot, Rebound.	<b>Chess</b>	Bishop, Capture, Castling, Checkmate, En Passant, Gambit, Grand Master, King, Knight, Pawn, Queen, Rook, Stalemate, Sicilian Defence.
<b>Billiards</b>	Baulk Line, Break, Bolting, Cannon, Cue, Hazard, In-off, Jigger, Long, Jenny, Pot, Scratch, Screw Back, Spot Stroke, Strike.	<b>Table Tennis</b>	Foil, End line, Late control, Flat hit, Block stroke, Service, Penholder grip, Backspin, Centreline, Half Court, Side spin, Swing stroke, Push Stroke, Rally, Let, Reverse, Top Spin, Drop shot, Lob, Chopped return.
<b>Baseball</b>	Diamond, Hitter, Home, Pinch, Pitcher Plate, Pullout, Short Stop, Hitter, Batter, Strike, Infield, Outfield, Base, Battery, Bunting, Catcher.		
<b>Volley Ball</b>	Antennae, Attack hit, Ace, Base-line, Blocking, Doubling, Foot Fault, Heave, Holding, Jump Set, Lob Pass, Love-All, Point, Quick Smash, Scouting, Service, Spike, Tactical Ball, Volley, Windmill Service.		

### ★ Important Points

- **Azad Hind Fauj** was an armed force formed by Indian Nationalists.
  - It was formed in **1942** in Southeast Asia.
  - It is also called **Indian National Army**.
  - Azad Hind Fauj was founded by **Mohan Singh**.
  - Azad Hind Fauj or the Indian National Army (INA) was established to free India from British control.
  - They tried to invade India through **Imphal and Kohima in 1941** but the campaign failed.
  - **Subhas Chandra Bose** became the Commander-in-Chief of the Indian National Army from **1943 to 1945**.

### 🔑 Key Points

- **Lakshmi Sahgal** was a member of the Azad Hind Fauj.
  - She is commonly referred to in India as "**Captain Lakshmi**".
  - She was an officer of the Indian National Army and the Minister of Women's Affairs in the **Azad Hind government**.
  - She was the leader of the Women's Regiment of the Indian National Army, **Rani of Jhansi Regiment**.
  - She was arrested by the British army in May 1945, remaining in **Burma** until March 1946.

### Additional Information

- **Sarojini Naidu** was the first female to become the Governor of an Indian state.
  - She was appointed as the Governor of Uttar Pradesh from 1947 to 1949.
  - She is well known as '**Nightingale of India**'.
  - She was appointed as the President of the Indian National Congress's Kanpur session in 1925.
- **Aruna Asaf Ali** was an Indian political activist.
  - She hoisted the Indian National flag at the **Gowalia Tank Maidan, Bombay during a Quit India Movement in 1942**.
  - She is popularly called the "**Heroine of Quit India movement**".
  - She was appointed as Delhi's first Mayor.
- **Vijaya Lakshmi Pandit** was an Indian politician.
  - She was the first Indian woman to hold a cabinet post in pre-independent India.
  - She was the first woman President of the United Nations General Assembly.

### CONCEPT:

- **Measurement** is the comparison of an unknown physical quantity to a known quantity.
- A **Physical quantity** is the property of a material or an object.
- There are seven basic quantities such as length, mass, time, temperature, electric current, amount of substance, and luminous intensity.

### EXPLANATION:

- When a body is displaced by using a force on it, then it is clear that the work is done on an object by that force.
- It is a product of the force applied and the displacement.
- **$W = F \times s$**
- The SI unit of work is **Joule (J)**.
- The dimensional formula for work is  $ML^2T^{-2}$ .
- Heat is a form of energy.
- It involves the transfer of energy from one body to another.
- It has the same SI unit and dimension as the work.

### Additional Information

- **Temperature**
  - It is the degree of hotness or coldness of a body.
  - The SI unit of temperature is **Kelvin (K)**.
- **Mole**
  - It is the SI unit of the fundamental quantity called the **amount of substance**.
- **Specific heat**
  - It is the quantity of heat required to raise the temperature of one gram of a substance by one degree Celsius.
  - Its SI unit is  $Jkg^{-1}K^{-1}$ .

### Key Points

- Pt .Ravi Shankar was a renowned Sitarist who was awarded India's highest civilian honor, the **Bharat Ratna, in 1999**.
- He was also an Indian composer and musician born on 7 April 1920.
- He has been honored with prestigious awards such as **Padma Bhushan, Padma Vibhushan, Bharat Ratna, and Grammy Award**.
- The "Sitar maestro" was the best-known proponent of the sitar in the second half of the 20th century and influenced many other musicians throughout the world including Beatles guitarist George Harrison.

## Key Points

- **Ustad Amjad Ali Khan-**
  - A distinguished maestro in the field of playing the sarod, Ustad Amjad Ali Khan is popularly known as the “**Sarod Samrat**”.
  - He is the sixth generation sarod player in his family.
  - He learned from his father **Haafiz Ali Khan**, who was a court musician in Gwalior up until Independence in 1947.
  - He was awarded India's second-highest civilian honor Padma Vibhushan in 2001.
  - The name sarod comes from the Persian ‘**sarod**’ meaning ‘**melody**’, alluding to its more melodic tone.

## Additional Information

Instrument	Famous instrumentalist of India
Tabla	<ul style="list-style-type: none"><li>• Zakir Hussain</li><li>• Pandit Anindo Chatterjee</li><li>• Pandit Anokhelal Mishra</li><li>• Ahmad Jan Thirakwa</li></ul>
Violin	<ul style="list-style-type: none"><li>• L. Subramaniam</li><li>• N. Rajam</li><li>• Ragini Shankar</li><li>• L. Athira Krishna</li></ul>
Veena	<ul style="list-style-type: none"><li>• Muthuswami Dikshitar</li><li>• Veenai Dhanammal</li><li>• Veena Sheshanna</li></ul>

## Key Points

- **World Wetlands Day** every year on the **2nd February** is celebrated to promote awareness of wetlands.
- The **UN General Assembly adopted Resolution 75/317** on **August 30, 2021**, and established February 2 as World Wetlands Day.
- Wetlands are vital ecosystems that contribute to biodiversity, climate mitigation and adaptation, freshwater availability, global economies, and more.
- The celebration of World Wetlands Day in 2022 is especially significant
- **The theme for 2022 is Wetlands Action for People and Nature**
  - Stressing the need of taking action to ensure the conservation and sustainable use of wetlands for human and planetary health.
- This year marks the **51st anniversary of the creation of World Wetlands Day**.
- This day marks the date of the adoption of the Convention on Wetlands on **2 February 1971**, in the **Iranian** city of Ramsar on the **shores of the Caspian Sea**.

## Key Points

- Dilwara Temples were built between the **11th and 13th centuries AD** by the **Chalukya** dynasty.
- It is located just 2.5 km from Mount Abu, Rajasthan.
- **There are five temples here and each temple has its own unique identity.**
- **The five temples are the following:**
  - **Vimal Vasahi** - Dedicated to the first Jain Tirthankara, Shri Adinatha
  - **Luna Vasahi** - Dedicated to the 22nd Jain Tirthankara, Shri Neminatha.
  - **Pittalhar** - Dedicated to the first Jain Tirthankar, Shri Adinatha.
  - **Parshvanath** - Dedicated to the 23rd Jain Tirthankara, Shri Parshvanatha.
  - **Mahavir Swami** - Dedicated to the last Jain Tirthankara, Shri Mahaviraswami.

## Additional Information

- **The Chausath Yogini temple**
  - It is in **Mitaoli village (also spelt Mitawali or Mitavali)**, near Padaoli in Morena district **40 kilometres (25 mi)** from **Gwalior**. **Therefore, It is not located in Baghelkhand Region.**
  - According to an inscription dated 1323 CE (Vikram Samvat 1383), the temple was built by the Kachchhapaghata king Devapala (r. c. 1055 – 1075).

- **Magnetic Tape**
  - It is a medium for magnetic storage.
  - It is made of a thin, magnetizable coating on a long, narrow strip of plastic film.
  - It is **Auxiliary Storage Device**, which means it is an external storage device.
  - In the magnetic tape, only one side of the ribbon is used for storing data.
  - It is sequential memory which contains a thin plastic ribbon to store data and is coated by magnetic oxide.

### **Additional Information**

- **Random access memory (RAM)**
  - It is a type of **data storage** used in computers that are generally located on the motherboard.
  - This type of memory is volatile and all information that was stored in RAM is lost when the computer is turned off.
  - There are two main types of RAM: Dynamic Random Access Memory (DRAM) and Static Random Access Memory (SRAM).
- **Laser Printer**
  - It is a type of computer printer that uses non-impact photocopier technology where there are no keys striking the paper.
  - Hence, it is an **output device**.
- **Light pen**
  - It is a light-sensitive computer input device
  - It is used to select a displayed menu item or draw pictures on the monitor screen.
  - Hence, it is an **input device**.

### **Key Points**

- In short, the **best way to prevent rust** is to prevent moisture from reaching the metal, or by using a material that corrodes more slowly. In short, the best way to prevent rust is to prevent moisture from reaching the metal, or by using a material that corrodes more slowly.
- The following are the best ways to prevent rust.
  - **Galvanization: Galvanizing** coats iron or steel in zinc to protect from rust. Zinc corrodes much slower than iron or steel, so it's highly effective in slowing rust.
  - **Paint the Metal:** A good paint prevents moisture from reaching the metal and slows the development of rust.
  - **Tin Plating:** Tin plating is the process of depositing a solderable coating of tin on the surface of a material by means of an electric current.

### **Additional Information**

- **Crystallization or crystallization** is the process by which solids are formed in which the atoms or molecules are highly organized into structures known as crystals.
- Crystallization occurs in two main steps:
  - The first is **nucleation**, where a crystalline phase emerges from a supercooled liquid or supersaturated solvent.
  - The second step, known as **crystal growth**, is the expansion of the grains to a crystalline state.

### **Key Points**

- Vishishtadvaita is one of the main branches of Vedanta, which itself is one of the six classic schools of Hindu philosophy.
- It translated into 'non-dualism with differentiation'.
- **Ramanujacharya was the founder of Visistadvaita Siddhanta.**
- He believed that knowledge (jnana) and devotion (bhakti) were of equal importance.
- **According to Vishishtadvaita philosophy, Brahman is eternal, but also includes elements of plurality.**
- The soul, or the Self, and the material world both exist only through Brahman.
- Unlike some Hindu philosophies, Vishishtadvaita doesn't see the world as simply an illusion, which would make it separate from Brahman. The material world is a part of Brahman's nature.



## Key Points

- **Nikhil Kamath**, the cofounder of Zerodha, has topped the 'IIFL Wealth Hurun India 40 & Under Self-Made Rich List 2022' with a net worth of Rs 17,500 crore.
- **Bhavish Aggarwal**, the founder of Ola, came in second place (Rs 11,700 crore).
- The list, released on 28 Sept 2022, includes self-made Indian entrepreneurs aged 40 & under with a fortune of Rs 1,000 crore.



## Additional Information

- Hurun Report is a **leading research group established in London in 1998**.
- It has presence in India, China, France, the UK, the USA, Australia, Japan, Canada and Luxembourg.
- Hurun Report is the largest **compiler of the rich list globally**.

## Key Points

- The **first National Emergency** was declared in India on **26 October 1962** during the India-China war.
- **National Emergency** in India has been declared **3 times** - **1962** (China war), **1971** (Pakistan war), and **1975** (Internal Disturbances).
- **National Emergency** can be proclaimed by the **President** when he/she perceives threats to the nation from internal and external sources or from financial situations of crisis.
- **National Emergency** is mentioned in **Article 352**.

## Additional Information

Articles	Emergency
Article 352	<ul style="list-style-type: none"><li>• <b>National Emergency.</b></li><li>• Can be declared on the grounds of War, External aggression and Armed Rebellion.</li></ul>
Article 356	<ul style="list-style-type: none"><li>• <b>President's Rule or Constitutional Emergency.</b></li><li>• Due to the failure of Constitutional machinery in any state.</li></ul>
Article 360	<ul style="list-style-type: none"><li>• <b>Financial Emergency.</b></li><li>• Declared when there is a threat of financial instability in the countr</li></ul>

## Key Points

- **Burrakatha** is a highly dramatic form of the ballad of **Andhra Pradesh**.
- Burra Katha or Burrakatha is a **Telugu art of oral storytelling**.
- The term Burra refers to tambura and Katha means a story.
- It is performed in the Coastal Andhra region, **Rayalaseema and Telangana**.

## Important Points

Different names of Burra Katha	
Coastal Andhra region	Jangam katha.
Rayalseema region of Andhra Pradesh	Tandana Katha or suddulu
Telangana	Tamboorakatha or Saradakatha

## Additional Information

- **Other important dances of Andhra Pradesh:**
  - Kuchipudi Dance
  - Burrakatha Dance
  - Burrakatha Dance
  - Dappu Dance
  - Tappeta Gullu Dance
  - Lambadi Dance
  - Kolattam Dance
  - Banalu Dance

## Key Points

- **Writer Dr Madhav Hada** will be awarded the **32nd Bihari Puraskar** for his 2015 literary criticism book 'Pachrang Chola Pahar Sakhi Ri'.
- Named after famous Hindi poet Biharilal, the award is given every year for an outstanding work published in the last 10 years by a author in Hindi or Rajasthani.
- It carries a cash prize of ₹2.5 lakh and a citation.
- **Instituted by:** KK Birla Foundation in 1991.

## Additional Information

- **Books:**
  - A book titled "**The Resilient Entrepreneur**" written by **Dhruti Shah** was launched in July 2022.
  - A new book "**The Boy Who Wrote a Constitution**", released on the occasion of Dr **BR Ambedkar's 131st birth anniversary**, is written by noted playwright and author **Rajesh Talwar**.
  - **Union Education and Skill Development Minister Dharmendra Pradhan** released the book "**Birsa Munda – Janjatiya Nayak**" on 5 April 2022.
  - It has been written by **Prof. Alok Chakrawal, Vice-Chancellor, Guru Ghasidas Vishwavidyalaya, Bilaspur**.
  - A new book authored by **Dr Sreeram Chaulia** titled "**Crunch Time: Narendra Modi's National Security Crises**" was released on 31 March 2022 by the Minister of State for External Affairs, **Meenakshi Lekhi**.
  - On 31 March 2022, HarperCollins India published the book "**The Tiger of Drass: Capt. Anuj Nayyar, 23, Kargil Hero**" by **Meena Nayyar and Himmat Singh Shekhawat**.
  - Social activist and author, **Pranay Patil** launched his first book, "**Burgundy Winters in Europe**." on 29 March 2022.

## Key Points

### Suresh Tendulkar Committee 2009

- The people living in poverty in the country are calculated on the basis of the **poverty line** set by the **Tendulkar Committee**.
- According to the Tendulkar Committee, **21.9%** of the total population of India lives **below** the **poverty line**.

Area	Per capita Consumption
Rural Areas	₹27 per day (₹816 per month)
Urban Areas	₹33 per day (₹1000 per month)

Thus, the correct answer is **₹27**.

## Key Points

- **Minister of Fisheries and Animal Husbandry Parshottam Rupala** on 10 August 2022 launched a unique coffee table book titled 'Fish & Seafood -a collection of 75 gourmet recipes' in New Delhi.
- The Department of Fisheries has come up with this initiative to boost the domestic consumption of fish and seafood, along with popularizing the local fish species.

## Additional Information

- **Union Home and Cooperation Minister Amit Shah** on 9 August 2022 launched the onboarding of cooperatives on the Government e-Marketplace (GeM) portal.
- Union Minister Sarbanand Sonowal inaugurated **the Chababar Day conference** in Mumbai on 31 July 2022.
- **Union Minister of Ayush Sarbananda Sonowal** on 24 July 2022 launched Bal Raksha mobile app at the All India Institute of Ayurveda (AIIA).
- **Union Minister Jitendra Singh** on 18 July 2022 launched the "National Standards for Civil Service Training Institutions" (NSCSTI) in New Delhi.
- Union Minister Jitendra Singh inaugurated **India's first Autonomous Navigation facility, TiHAN at the IIT Hyderabad campus** on 4 July 2022.
- **Union Minister for Minority Affairs, Mukhtar Abbas Naqvi** inaugurated the fifth Global Film Tourism Conclave (GFTC) in Mumbai on 1 July 2022.

## Key Points









- **Rongali Bihu** is another name for **Bohag Bihu**.
- It is an **ethnic tradition** that is celebrated throughout **northeastern India**, including the **state of Assam**.
- The **Assamese indigenous ethnic tribes** commemorate it.
- It marks the beginning of the **Assamese New Year**.
- The majority of the festival's components are of **indigenous heritage**, including **Tibetan and Tai aspects**.
- It usually occurs during the **second week of April**, which historically denotes the **harvest season**.
- It always falls on the **14th of April**.
- Locally, **Rongali Bihu** in Assam begins with the onset of "**Bohag**."
- **Bohag Bihu or Rongali Bihu, Kati Bihu or Kongali Bihu, and Magh Bihu or Bhogali Bihu** are the three main varieties of bihu.
- Each festival historically commemorates a **distinct paddy crop** agriculture cycle.
- There are seven apex periods throughout Rongali Bihu: "**Sot**," "**Raati**," "**Goru**," "**Manuh**," "**Kutum**," "**Mela**," and "**Sera**."

## Key Points

- Vitamins **A, D, E, and K** are called the **fat-soluble vitamins**, because they are soluble in organic solvents and are absorbed and transported in a manner similar to that of fats.
- Vitamin E deficiency, which is rare and usually due to an underlying problem with digesting dietary fat rather than from a diet low in vitamin E, can cause nerve problems.

## Additional Information

- Vitamin C is a water-soluble vitamin found in citrus and other fruits and vegetables. It is used to **prevent and treat scurvy**.
- Vitamin D is responsible for increasing intestinal absorption of calcium, magnesium, phosphate, and many other biological effects.
- Vitamin A, also known as **retinol**, has several important functions, helping your body's natural defense against illness

COMPLETE FAT SOLUBLE VITAMINS		
VITAMIN	FUNCTION	SOURCES
VITAMIN A	 VISION, SKIN, IMMUNE SYSTEM	 CARBONS, SWEET POTATO, SPINACH, CANTALOUPE
VITAMIN D	 BONE DEVELOPMENT, IMMUNE SYSTEM, MOOD	 THE SUN, FATTY FISH, BEEF LIVER, EGGS, MUSHROOMS
VITAMIN E	 HEALTHY SKIN, ANTIOXIDANT, FAT DESTRUCTION	 SUNFLOWER SEEDS, AVOCADO, OLIVE OIL, LEAFY GREENS
VITAMIN K	 BLOOD CLOTTING, BONE + TISSUE DEVELOPMENT	 LEAFY GREENS, BROCCOLI, BRUSSELS SPROUTS, ASPARAGUS, CABBAGE



## Key Points

- The **Battle of Chausa** was fought between Humayun and Sher Shah Suri.
- Sher Shah defeated Humayun in the battle of Chausa in 1539.
- The tomb of Sher Shah Suri is located in Sasaram, Bihar.

## Additional Information

Important battles in history:

Battles	Year	Result
1st battle of Panipat	1526	Babur defeated Ibrahim Lodi
Battle of Khanwa	1527	Babur defeated Rana Sanga
Battle of Chanderi	1528	Babur defeated Medini Rai (an associate of Rana Sanga)
Battle of Chanderi	1528	Babur defeated Medini Rai (an associate of Rana Sanga)
Battle of Ghaghra	1529	Babur defeated Mahmud Lodi and Sultan Nusrat Shah
Battle of Kanauj	1540	Sher Shah defeated Humayun for the second time
2nd battle of Panipat	1556	Akbar defeated Hemu.

## Key points

- The **permanent Settlement Act** came into force in the year **1793** as part of the land reforms policy of the E.I.C.
- It was implemented by the then Governor-General **Lord Cornwallis (1786-1793)** in the areas of **Bihar, Bengal, and Orissa**.
- It is also known as the "**Zamindari Settlement**" or the "**Sunset Settlement**" as the Zamindars had to pay the revenue before the sunset on a fixed date.

## Additional Information

- Zamindars were recognized as the landowners and they can transfer the land as per their wish.
- The British Government fixed **10/11th portion or 89%** of the total revenue as its **Income** and the remaining **1/11th portion or 11%** belonged to the **Zamindar**.
- The **revenue** fixed by the British Govt. was **fixed for every year** and was not the function of the cropping pattern for that particular season.
- The **base** year fixed for Permanent Settlement was **1790-91**.
- Lord Cornwallis is also known as the "**Father of Civil Services**" in India.

## Key Points

- The money value of all the final goods and services produced within the country during a particular year is called Gross Domestic Product.
- **The nominal gross domestic product** is the **gross domestic product (GDP) evaluated at current market prices**.
- **Real GDP**, on the other hand, is calculated by taking a base year as a determinant.
- **Real GDP adjusts for price changes due to inflation/deflation**.
- The main difference between **nominal GDP** and **real GDP** is the **adjustment for inflation**.

## Additional Information

- **The average income** received per person in a given area (city, region, world, etc in a given year is determined by **per capita income (PCI)** or **average income**.
- **Net domestic product (NDP)** is an annual measure of the economic output of a nation that is adjusted to account for depreciation.
- **The National Income** of any country means the complete value of the goods and services produced by any country during its financial year.

---

## Key Points

- **Daojali Hading** is a neolithic site in the Dima Hasao District of **Assam**.
- Here stone tools including mortars and pestles have been found.
- It is the **first** stratified neolithic site discovered in **Northeast India**.
- Excavated in 1961-63 by a team led by **M C Goswami and T C Sharma**

## Additional Information

- The **Brahmaputra Valley** has an average width of about **80 Km**.
- The main river of the valley, **Brahmaputra** is one of the largest rivers in the world and ranks **fifth** concerning its average discharge.
- The river originates from the **Kailash ranges** of the Himalayas.
- In Bangladesh, Brahmaputra is known by the name **Jamuna**.
- **Yarlung Tsango** is the Tibetan name for the upper course of Brahmaputra.
- In Arunachal Pradesh, Brahmaputra is known by the name **Dihang**.
- The Brahmaputra is also called the **Red River**.