

DAILY GENERAL AWARENESS QUIZ

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DIRECTOR
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Friday, 04 September 2026

1. Three Laureates Named For 2026 Ramon Magsaysay Awards. In context to the same tell us, The Ramon Magsaysay Award was established in memory of the former President of which country?

- (A) Philippines (B) Indonesia
(C) Malaysia (D) Thailand

2. Mission Rangeen Machhli 2031 Launched For Ornamental Fisheries. In context to the same tell us, Central Inland Fisheries Research Institute (CIFRI), the oldest premier institute for inland fisheries in India, is located at which place?

- (A) Mumbai (B) Kochi
(C) Cuttack (D) Barrackpore

3. NCDEX Launches RAINCHNNAI Rainfall Futures To Hedge Monsoon Risks. In context to the same tell us, Mawsynram, the wettest place on Earth with the highest average annual rainfall, is located in which state of India?

- (A) Arunachal Pradesh (B) Assam
(C) Meghalaya (D) Nagaland

4. IAF Indigenizes 62,300 Spares Using 3D Printing And Digital Twins. In context to the same tell us, what is the technical term commonly used to describe the manufacturing process behind 3D printing?

- (A) Computer Manufacturing
(B) Formative Manufacturing
(C) Subtractive Manufacturing
(D) Additive Manufacturing

5. Vaibhav Sooryavanshi Becomes Youngest Duleep Trophy Half-Centurion. In context to the same tell us, The Duleep Trophy is named after Kumar Shri Duleepsinhji, who belonged to the royal family of which former princely state?

- (A) Patiala (B) Nawanager
(C) Baroda (D) Mysore

6. Rajnath Singh Pays Tribute to Rani Avanti Bai Lodhi; Hails Her Bravery Beyond Caste and Gender. With reference to the military encounters and martyrdom of Rani Avanti Bai Lodhi, consider the following statements:

(1) In November 1857, her forces defeated the British army led by Mandla Deputy Commissioner Waddington at the Battle of Kheri.

(2) In March 1858, when encircled by British forces, she chose self-sacrifice over surrender.

(3) The Uttar Pradesh government honored her legacy by establishing a Women's PAC Battalion in her name at Badaun.

Which of the above is/are correct?

- (A) Only (1) and (3) (B) Only (1) and (2)
(C) Only (2) and (3) (D) All of the above

7. India Post Payments Bank Marks 9th Foundation Day; Unveils DakPay Sound Box and New Digital Platforms. With reference to the background and establishment of India Post Payments Bank (IPPB), consider the following statements:

(1) It was launched on 1st September 2018 under the Department of Posts, Ministry of Communications.

(2) It operates as a joint venture with a 51% controlling stake held by private commercial banks.

(3) Its core mandate is to build an accessible banking system for unbanked and underbanked populations.

Which of the above is/are correct?

- (A) Only (1) and (3) (B) Only (1) and (2)
(C) Only (2) and (3) (D) None of the above

8. India Rejects Hague Court Order on Indus Waters Treaty; Asserts Sovereign Right and Calls Body 'Illegally Constituted'.

Consider the following statements regarding the dispute resolution framework defined under the Indus Waters Treaty (IWT):

(1) Minor administrative or technical "questions" are first handled bilaterally by the Permanent Indus Commission (PIC).

(2) Unresolved technical "differences" are submitted directly to the United Nations General Assembly for mediation.

(3) Legal "disputes" or unresolved issues from the Neutral Expert level escalate to an ad-hoc Court of Arbitration (CoA).

Which of the above is/are correct?

- (A) Only (1) and (3) (B) Only (1) and (2)
(C) Only (2) and (3) (D) None of the above

1-{A} - 2-{D} - 3-{C} - 4-{D} - 5-{B} - 6-{D} - 7-{A} 8-{A}



DAILY GENERAL STUDIES QUIZ

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BIOLOGY

- In eukaryotic cells, phosphorylation of the C-terminal domain (CTD) of RNA Polymerase II at Ser5 is primarily catalyzed by:**
 - CDK1–Cyclin B
 - CDK7 (TFIIH Complex)
 - CDK9 (P-TEFb)
 - Aurora B Kinase
- Which protein is primarily responsible for protecting single-stranded DNA at the eukaryotic replication fork?**
 - PCNA
 - RPA (Replication Protein A)
 - RFC
 - MCM7
- The enzyme ATP synthase synthesizes ATP through which mechanism?**
 - Substrate-level phosphorylation
 - Rotary catalysis driven by proton motive force
 - Direct oxidation of NADH
 - Phosphorylation by pyruvate kinase
- Which tumor suppressor protein directly inhibits E2F transcription factors by binding them?**
 - APC
 - p53
 - Retinoblastoma protein (Rb)
 - PTEN
- Which enzyme converts superoxide radicals ($O_2^{\bullet-}$) into hydrogen peroxide?**
 - Catalase
 - Superoxide Dismutase (SOD)
 - Glutathione Peroxidase
 - Peroxisome
- During bacterial transcription termination, the Rho factor exhibits which enzymatic activity?**
 - DNA Ligase
 - ATP-dependent RNA Helicase
 - DNA Polymerase
 - Primase
- Which metabolite allosterically activates phosphofructokinase-1 (PFK-1) in mammalian cells?**
 - ATP
 - Citrate
 - Fructose-2,6-bisphosphate
 - Acetyl-CoA
- Which chromatin-remodeling complex uses ATP hydrolysis to reposition nucleosomes?**
 - SWI/SNF Complex
 - DNA Ligase III
 - RNA Polymerase I
 - Cohesin Complex
- In adaptive immunity, AIRE (Autoimmune Regulator) protein is primarily expressed in:**
 - B Lymphocytes
 - Thymic Medullary Epithelial Cells
 - Plasma Cells
 - Macrophages
- Which DNA repair pathway specifically removes bulky UV-induced pyrimidine dimers?**
 - Base Excision Repair (BER)
 - Mismatch Repair (MMR)
 - Nucleotide Excision Repair (NER)
 - Non-Homologous End Joining (NHEJ)

1-{B}-2-{B}-3-{B}-4-{C}-5-{B}-6-{B}-7-{C}-8-{A}-9-{B}-10-{C}

Friday, 04 September 2026

Financial Legislatures, Money Legislatures and Other Legislatures : Constitutional Provisions, Special Powers and Differences

1 Parliament

- The Parliament of India consists of the President and the two Houses – the Council of States (Rajya Sabha) and the House of the People (Lok Sabha).
- Indian Parliament is the supreme legislative body—



Money
Bill



Financial
Bill



Appropriation
Bill



A Finance Bill is not a Money Bill, but if it contains provisions of Article 117(1), it is deemed to be a Money Bill in respect of those provisions only.

4 Importance



Ensures financial and constitutional control in governance.



Helps the government, and ensures financial discipline.



Facilitates planned development, financial stability and transparency.



Ensures accountability and efficient use of public funds.



Strengthens democracy through financial decentralization.

2 Constitutional Provisions



Money Bill
– Article 110



Special Procedure for Money Bill
– Article 109



Budget Provision
– Article 112



Demands for Grants
– Article 113



Appropriation Bill
– Article 114



Financial Bill
– Article 117

3 Special Powers

(a) Money Bill

- As per Article 110(1)(a) to (g), it includes provisions related to taxation, borrowing, custody of the Consolidated Fund, etc.
- The Lok Sabha has the exclusive right to pass a Money Bill.
- The Rajya Sabha can recommend amendments within 14 days, but the Lok Sabha is not bound to accept them.
- If the Rajya Sabha does not return it within 14 days, the Bill is deemed to have been passed by the Lok Sabha.
- The President's assent is mandatory (no joint sitting).

(b) Financial Bill

- Covered under Article 117.
- There are two types:
 - Article 117(1) – Financial Bill (Category I)
 - Article 117(3) – Financial Bill (Category II)
- Article 117(1) – Provisions related to Article 110 matters require President's recommendation.
- Article 117(3) – Provisions not related to Article 110 matters. Both Houses have equal powers.
- President's assent is required in both cases.

(c) Appropriation Bill

- Covered under Article 114. It authorizes withdrawal of money from the Consolidated Fund of India.
- It is introduced only in the Lok Sabha.
- It provides for allocation of amounts for specified services and purposes.
- Requires President's recommendation (as it involves expenditure from the Consolidated Fund of India).

5 Difference Between Money Bill, Financial Bill and Appropriation Bill

Basis	Money Bill	Financial Bill	Appropriation Bill
Article	110	117	114
Subject	Matters under Article 110	Financial matters	Authorization for withdrawal of funds from the Consolidated Fund
Introduction	Only in Lok Sabha	117(1): Only in Lok Sabha 117(3): In either House	Only in Lok Sabha
President's Recommendation	Necessary	Necessary (for Article 117(1)) Equal powers in both Houses (except 117(1) where President's recommendation is required)	Necessary
Scope of Rajya Sabha	Can recommend amendments (within 14 days)	Equal powers in both Houses (except 117(1) where President's recommendation is required)	Can recommend amendments (within 14 days)
Voting	Absolute Majority	Absolute Majority	Absolute Majority
Joint Sitting	Not applicable	Applicable (for Article 108 matters if deadlock occurs)	Not applicable

Key Points



- ✓ All provisions of a Bill need not be in Article 110. Only those related to Article 110 matters are Money Bill provisions.

- ✓ A Finance Bill is not a Money Bill, but if it contains Article 117(1) provisions, it is deemed a Money Bill for those provisions only.

- ✓ An Appropriation Bill is introduced only in the Lok Sabha.

- ✓ Demands for Grants (Article 113) cannot be voted upon in the Rajya Sabha.



TOPIC OF THE DAY

Friday, 04 September 2026

Gross Domestic Product

Why in News?

India's real **GDP grew by 7.8%** in the first quarter (April–June) of the financial year **2026–27**, according to official data released by the **Ministry of Statistics and Programme Implementation (MoSPI)**.



Expository: -

Introduction

- Gross Domestic Product is a major indicator used to measure a country's **economic activities**.
- It represents the value of goods and services produced within a country's domestic territory during a specific period.
- Its growth rate is used to assess **economic growth or slowdown**.

Types of GDP

- Nominal GDP:** GDP measured at **current prices**.
- Real GDP:** GDP measured at the **constant prices of the base year**.
- GDP at Market Prices:** Represents the total value of final goods and services measured at **market prices**.

Three Methods of Measuring GDP

- Expenditure Method:** GDP is measured on the basis of consumption, investment, government expenditure, and net exports.
- Income Method:** GDP is measured on the basis of income earned through factors of production, such as wages, profits, interest, and rent.
- Production Method:** GDP is measured on the basis of the **value added** by different sectors of the economy.

Real GDP vs Nominal GDP

- Nominal GDP** is measured at **current prices**.
- Real GDP** is measured at **constant prices of the base year**.
- Real GDP is more useful for understanding **actual growth in production**.

Limitations of GDP

- GDP does not fully reflect **income inequality** and the distribution of income.
- It does not adequately measure **environmental damage** and the depletion of natural resources.
- Many **non-market activities**, such as household work, are generally not included in GDP.

Calculation of Gross Domestic Product (GDP)

- GDP is calculated through three main methods: **Production Method, Expenditure Method, and Income Method**.

- Each method provides a different perspective on a nation's economic activity.
- Income Method:** It measures the total income earned by the factors of production, mainly **labour and capital**, within a country's domestic territory.
- GDP by Income Method = GDP at Factor Cost + Taxes – Subsidies.**
- Expenditure Method:** It calculates the total expenditure on goods and services by all entities within a nation's domestic territory.
- GDP by Expenditure Method = C + I + G + (X – IM).**
- C:** Consumption expenditure. , **I:** Investment expenditure.
- G:** Government expenditure.
- X – IM:** Net exports, calculated by subtracting imports from exports.

Sector-wise Contribution to India's GDP

- The **services sector** makes the largest contribution to India's GDP, with financial, real estate, information technology, and professional services contributing approximately **27%**.
- Agriculture, livestock, forestry, and fishing** contribute approximately **18%** to India's GDP.
- The **manufacturing sector** contributes approximately **15%** to GDP.
- Trade, hotels, transport, and communication** contribute approximately **14%** to GDP.
- Public administration, defence, and other services** contribute approximately **13%** to GDP.
- The **construction sector** contributes approximately **8%** to GDP.
- Electricity, gas, water, and other utility services** contribute approximately **3%** to GDP.
- Mining and quarrying** contribute approximately **2%** to GDP.

MAP OF THE DAY BHARAT

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Friday, 04 September 2026

TILAIYA PROJECT

India's First Multipurpose River Valley Project under DVC



LOCATION & BACKGROUND

- Tilaiya Project is located on the Barakar River in **Koderma district of Jharkhand**.
- The Barakar River is a major tributary of the Damodar River.
- Before independence, in **1943**, severe floods occurred in the Barakar River and other rivers of Bihar and Bengal.
- To control these floods, this project was planned.



OBJECTIVES & SIGNIFICANCE

- The dam was constructed in **1953** at Tilaiya on the Barakar River for **flood control, irrigation** and **power generation**.
- It is considered **India's first multipurpose river valley project** after independence.
- It is also the first project of the Damodar Valley Corporation (**DVC**).



TOURISM & PRESENT SCENARIO



- Today, Tilaiya is a picturesque area situated on the banks of this reservoir, attracting many tourists.
- It is different from Jhumri Tilaiya town, which is located about **13 km** to the north.



TECHNICAL DETAILS



Height of the Dam : About **30 metres**



Length of the Dam : About **366 metres**



Reservoir Surface Area : A large reservoir of about **36 sq km** is created behind the dam



Hydroelectric Capacity : Tilaiya Power Station capacity is **4 MW** (**2 × 2 MW**)

OTHER MAJOR DAMS UNDER DAMODAR VALLEY PROJECT (DVC)

DAM	RIVER	YEAR	FEATURE	LOCATION
 TILAIYA	Barakar	1953	First dam	Koderma, Jharkhand
 KONAR	Konar River	1955	Water storage and irrigation	Hazaribagh, Jharkhand
 MAITHON	Barakar	1957	Built mainly for flood control	Dhanbad, Jharkhand
 PANCHET	Damodar	1958	Flood control and power generation	Border of West Bengal and Jharkhand



The Tilaiya Project plays a vital role in flood control, irrigation, and power generation in the Damodar Valley. It remains an important example of regional development and tourism.



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MAP OF THE DAY WORLD

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LAKE ONTARIO

KEY FACTS FOR EXAMS

THE FINAL LINK OF THE GREAT LAKES TO THE ATLANTIC OCEAN

1. LOCATION & PART

- One of the five Great Lakes of North America. Others are: Superior, Michigan, Huron and Erie.
- It is the most easterly and the last lake in the chain.
- Bordered by Ontario Province (Canada) to the north and New York State (USA) to the south.
- It is the only Great Lake that does not share its boundary with Michigan.
- Major cities on the shore: Canada – Toronto (largest city of Canada), Hamilton, Oshawa; USA – Rochester.



THE GREAT LAKES



- Superior
- Michigan
- Huron
- Erie
- Ontario

QUICK FACTS

- Smallest in area among the Great Lakes.
- Deeper than all lakes except Superior.
- Contains about 2,000 islands and 100 diverse shorelines.

2. SIZE & PHYSICAL FEATURES

- Area: ~18,960–19,011 sq km – smallest in area among the five Great Lakes.
- Length: ~311 km; Width: ~85 km.
- Average Depth: ~86 m; Maximum Depth: 244 m – second deepest after Lake Superior.
- Elevation: Only 75 m above sea level – more than 100 m lower than Lake Erie, which created the Niagara Falls and Niagara Escarpment.
- Shape: Approximately elliptical.
- Contains about 2,000 islands and 100 diverse shorelines.

3. WATER FLOW SYSTEM (MOST IMPORTANT)

- Main Source:** Niagara River brings water from Lake Erie and supplies about **85%** of the water of Lake Ontario.
- Other Tributaries:** Genesee, Oswego, Black River (from New York) and Trent River (from Ontario).
- Main Outlet:** Water flows out through the St. Lawrence River to the Atlantic Ocean.
- Thus, Lake Ontario acts as the final link between the five Great Lakes and the Atlantic Ocean.

4. ORIGIN (GEOLOGICAL HISTORY)



Lake Ontario lies in a bedrock depression that was originally formed by water erosion and later modified by glaciation.



The present water level and outlet were established about 11,000 years ago after the last Ice Age.

5. ECONOMIC & TRANSPORTATION IMPORTANCE

- Through the St. Lawrence Seaway, ocean-going ships can reach the Atlantic Ocean.
- Welland Canal provides access to the upper Great Lakes ports.
- Rideau Canal – a route for small vessels from Kingston to Ottawa.
- Trent–Severn Waterway connects the Bay of Quinte and the Georgian Bay.
- Fertile agricultural lands of Ontario and northwestern New York led to dense settlements.
- More than 55% of the population of Ontario Province lives near this lake and it is a source of drinking water for millions.

6. NAME & DISCOVERY (HISTORY)



- The name Ontario is derived from a word in the Iroquois (Huron) language, meaning “beautiful lake”.
- First European to see the lake was the French explorer **Étienne Brûlé**, a disciple of Samuel de Champlain, who arrived here around **1615**.
- In the 17th–18th centuries, the French built several forts along the shores of the lake.

7. ENVIRONMENTAL ASPECTS



All other Great Lakes ultimately drain into Lake Ontario, so it receives pollution from all the other lakes – it is considered the **most polluted** among the five Great Lakes.



In **2017**, the lake level reached the **highest in 100 years**, causing severe flooding and land erosion.



Continuous efforts are being made by Canada and the USA for conservation and sustainable management of the lake.



★ NOTE: Lake Ontario is geographically, economically and environmentally a very important lake and a key link of North America.

DAILY CURRENT AFFAIRS QUIZ

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Friday, 04 September 2026

- Gollala Gudi, recently declared a monument of national importance, is located in which state?
(A) Andhra Pradesh (B) Telangana
(C) Karnataka (D) Odisha
- Who has been appointed as the first Chief Executive Officer of the Shri Ram Janmabhoomi Teerth Kshetra Trust?
(A) Air Marshal Narmadeshwar Tiwari
(B) Air Marshal Ashutosh Dixit
(C) Lieutenant General Rajiv Ghai
(D) Air Marshal Jeetendra Mishra
- Who inaugurated the two-day international workshop on "Tiger Landscapes" in New Delhi on 2 September 2026?
(A) Bhupender Yadav (B) Rajnath Singh
(C) Ashwini Vaishnaw (D) Kirti Vardhan Singh
- Which country will host the inaugural ICC Women's Champions Trophy 2027?
(A) Sri Lanka (B) India
(C) Bangladesh (D) South Africa
- Which digital dialogue series on Ayurveda was launched by the All India Institute of Ayurveda in September 2026?
(A) Ayurveda Samvad (B) Ayurveda Vimarsh
(C) AyurVarta (D) Ayush Charcha
- Lakkundi, recently in news for a LiDAR survey and geospatial mapping project, is located in which district of Karnataka?
(A) Dharwad (B) Koppal
(C) Haveri (D) Gadag
- Who assumed charge as Air Officer-in-Charge Maintenance (AOM) of the Indian Air Force on 1 September 2026?
(A) Air Marshal KAA Sanjeeb
(B) Air Marshal Sanjiv Ghuratia
(C) Air Marshal Ashutosh Dixit
(D) Air Marshal Narmadeshwar Tiwari
- Which Indian institution signed a cooperation agreement with UNESCO MGIEP in September 2026 to develop next-generation AI and immersive learning technologies?
(A) IIT Delhi (B) IIT Bombay
(C) IIT Madras (D) IIT Kanpur
- Who was appointed as Executive Director of the Reserve Bank of India with immediate effect in September 2026?
(A) T. Rabi Sankar (B) Suman Ray
(C) M. Rajeshwar Rao (D) Swaminathan J.
- Who assumed charge as the Assistant Chief of the Air Staff (Education) at Air Headquarters?
(A) Air Vice Marshal Shakti Sharma
(B) Air Vice Marshal Ashutosh Dixit
(C) Air Marshal K. A. A. Sanjeeb
(D) Air Marshal Narmadeshwar Tiwari

1-{B} - 2-{D} - 3-{A} - 4-{B} - 5-{C} - 6-{D} - 7-{A} - 8-{C} - 9-{B} - 10-{A}



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