



# TARGET

# WEEKEND BATCH

COMPLETE REVISION of PRELIMS through 6000 MCQs & 70 CLASSES





### **CLASS & TEST**

- > 56 Concept cum Revision **Classes with Tests**
- > 20 Prelims Current Affairs Classes + Test



# **PRELIMS TEST SERIES**

- 6 Revision Tets
- 6 Sectional Tests
- ➤ 20 Mock Tests



### STUDY MATERIAL

- Ouick Revision Notes
- ➤ Prelims Current Affairs Compilation
- Prelims Fact File



### **SPECIAL CLASSES**

- Special Clases on Economic **Survey & Budget**
- ➤ 20 Special Classes on India Year Book & Mapping



SEPTEMBER, 2022

**TEST TIMINGS:** 09:00 AM to 10:00 AM

**CLASS TIMINGS:** 10:30 AM to 01:30 PM











**COURSE** 

# **Highlights**

# **■** Course Approach

Prelims is all about managing micro detailing of subjects & handling negative marking. As aspirants tend to get confused about what to study and how to study (i.e. up to what level/extent) for Civil Services Prelims, this programme has been designed to help students to cover whole syllabus effectively within a stipulated time and also have an assessment through test series.

# ■ Syllabus Coverage

This programme covers the complete prelims syllabus including - History, Geography, Polity, Economy, Science, Environment and Current Affairs with the correct mix of Fundamental and Advance level of study to cover micro detailing of sub-topics & current developments.

# **■ Class & Test Procedure**

56 Days Concept cum Revision Classes for covering basic concepts. In each session there will be a test of 50 questions (based on the topics given in schedule) followed by Class to cover basic aspects of each topic and approach to handle questions.

The idea behind taking test before classes is that, first students should brainstorm on the given topics through the test to find their strong and weak areas. Then a class on same topics will provide a conceptual clarity that helps to revise the topics twice on the same day. Revision Test (100 Questions) will be conducted after completion of each subject.

### **■** Current Affairs

20 days Current Affairs classes covering last 2 years current topics/issues supplemented by notes.

Current Affairs Classes will also include updates on Indian Year Book (IYB), PIB, Budget and Economic Survey.

Special Classes on Mapping (World & Indian Geography).

# **■ Test Series**

Prelims Test Series including 6 Sectional & 20 Mock Test will be provided.

# Study Material

Complete Prelims Study Material & Prelims Current Affairs Material will also be provided (It will cover Current Affairs of past 2 years).



**COURSE** 

# **Session Plan**

# **GEOGRAPHY**

### **GENERAL GEOGRAPHY & GEOMORPHOLOGY**

- Universe
- Earth Evolution
- Earth's Interior
  - ➤ Interior of the Earth
  - ➤ Sources of Information
  - ➤ Theories
- Geology and Rock system
  - ➤ Minerals
  - Major Elements of the Earth's Crust
  - Rocks (Aggregate of Minerals)
- Geomorphic Processes
  - ➤ Earth's Surface
  - ➤ Endogenic Forces
  - ➤ Exogenic Forces
- Earthquakes and Volcanism
- Distribution of Continents & Oceans
  - ➤ Theories
  - ➤ Continental Drift Theory
  - Evidence in support of Continental Drift Theory

- ▶ Isostacy
- Sea Floor Spreading
- ➤ Forces of Drifting
- ▶ Post Drift Studies
- Convectional Current Theory
- Mapping of the Ocean Floor
- Plate Tectonics
- Plate Boundaries –
   Divergent Convergent –
   Transform
- ➤ Rates of Plate Movements
- ➤ Force of plate movement
- ▶ Indian Plate
- Landforms and their evolution
  - ▶ Causes
  - Geomorphic Agent
  - Agents and their Impacts
     Wind, Running Water,
     Ground Water, Glaciers,
     Waves & Currents
  - ➤ Depositional Landforms
  - Running Water
  - Ground Water (Karst Topography)

# **SESSION: 01**

24 SEPTEMBER, 2022 (SATURDAY)



- ▶ Erosional Landforms Biological Weathering ▶ Depositional landforms ➤ Effects of Weathering ➤ Glaciers Significance of Weathering Waves and Currents Mass Movements Weathering Landforms across the world SESSION: 02 **GEOGRAPHY CLASS CONTINUE 25 SEPTEMBER, 2022** (SUNDAY) **OCEANOGRAPHY** ➤ Factors affecting salinity Hydroshpere ➤ Density of Ocean Waters Water on the Surface of the Earth Waves, Ocean Currents, Tides ➤ Hydrological Cycle ➤ Movements of ocean Water Submarine Relief Features Factors influencing Movement ➤ Oceans ➤ Motion – Horizontal and ➤ Relief of the Ocean floor **Vertical Currents** Divisions of the ocean floor ➤ Waves Minor relief features ➤ Tides SESSION: 03 ▶ Mid oceanic ridges ▶ Ocean Currents 01 OCTOBER, 2022 ➤ Seamount Marine Resources (SATURDAY) ➤ Submarine canyons ➤ Underground water ➤ Guyouts resource ➤ Volcanic Islands ➤ Surface water resources ➤ Fracture Zones ➤ Inland water resources: ➤ Hotspots Utilization of inland water resources ▶ Coral Islands
  - Temperature and Salinity
- ➤ Atoll
  - ➤ Temperature of the Ocean
  - Salinity of the Ocean Water

- ➤ Oceanic Water Resources (Marine Resource)
- Utilization of oceans by man
- Water consumption patterns



- Conservation of Water Resources
- ➤ Techniques of Water Conservation
- Ocean Deposits and Corals
  - ➤ Terrigenous Deposits

- ➤ Volcanic Deposits
- ➤ Biotic deposits
- ➤ Abiotic Deposits
- ➤ Coral Reefs
- ▶ Great Barrier Reef

### **CLIMATOLOGY**

### Atmosphere

- **▶** Composition
- ▶ Gases
- ➤ Water Vapour
- ▶ Dust Particles
- ➤ Structure
- > Altitude vs. Temperature

### Temperature

- ➤ Inversion of Temperature
- Factors controlling Temp distribution
- ▶ Distribution of Temp
- ➤ Range of Temp
- ➤ Inversion of Temperature
- Insolation and Heat Budget
  - ➤ Solar Radiation Heat

- Balance Temperature Insolation
- ➤ Aphelion and Perihelion
- Variability of Insolation at the surface of the Earth
- ➤ Heat Balance
- Heating and cooling of atmosphere
- ➤ Terrestrial Radiation
- Heat Budget of the Planet Earth
- ▶ Macro Budget
- Variation in the net Heat Budget at the Earth's Surface

#### Winds and Pressure belts

➤ Atmospheric Circulation and Weather Systems

# **SESSION: 05**

SESSION: 04

02 OCTOBER, 2022

(NATIONAL

**HOLIDAY**)

05 OCTOBER, 2022 (NATIONAL HOLIDAY)

# **WORLD CLIMATE + BIO-GEOGRAPHY**

### World Climate

- ➤ The Hot, Wet Equatorial Climate
- ➤ The Tropical Monsoon and Tropical Marine Climates
- ▶ The Savanna or Sudan

#### Climate

- The Hot Desert and Mid-Latitude Desert Climates
- ➤ The Warm Temperate
  Western Margin
  (Mediterranean) Climate



- ➤ The Temperate Continental (Steppe Climate)
- The Warm Temperate Eastern Margin (China Type Climate)
- ➤ The Cool Temperate
  Western Margin (British
  Type Climate)
- The Cool Temperate Continental (Siberian) Climate
- ➤ The Cool Temperate Eastern Margin (Laurentian) Climate
- ➤ The Arctic or Polar Climate

#### Soil Characteristics

- ➤ Factors Responsible for Soil Formation
- ➤ Stages of Soil Formation
- ➤ Soil Forming Processes
- ➤ Soil Profiles and Horizons
- ➤ Soil Classification
- Soil Erosion and Conservation
- ➤ The Cool Temperate Continental (Siberian) Climate
- ➤ The Cool Temperate Eastern Margin (Laurentian) Climate
- ➤ The Arctic or Polar Climate
- Soil Characteristics

- ➤ Factors Responsible for Soil Formation
- ➤ Stages of Soil Formation
- ➤ Soil Forming Processes
- ➤ Soil Profiles and Horizons
- ➤ Soil Classification
- ➤ Soil Erosion and Conservation

### Vegetation Resources

- ➤ Types of natural vegetation
- ➤ Forests
- ➤ Significance of forests
- ➤ Economic significance, Ecological significance
- ➤ Cultural significance
- Factors of forest development
- ➤ Extent of forest cover
- Classification of forests
- ▶ Grasslands
- ▶ Desert vegetation
- ➤ Tundra Vegetation
- Economic utilization of forests
- ▶ Deforestation
- Deforestation in tropical forests
- Deforestation in temperate forests

**SESSION: 06** 

08 OCTOBER, 2022 (SATURDAY) **GEOGRAPHY CLASS CONTINUE** 

SESSION: 07

09 OCTOBER, 2022

(SUNDAY)

**SESSION: 08** 

15 OCTOBER, 2022

(SATURDAY)



### **INDIA - PHYSICAL GEOGRAPHY**

- Physiography of India
  - ▶ Geological Region
  - ▶ Location
  - ➤ Physiographic Sub-Units
  - ➤ The Peninsular Peninsular Plateaus
  - Plains Northern Plains of India
  - ▶ Lakes
  - ▶ Deserts
  - ➤ Indian Coasts and Islands
- Drainage System
- Classification of Drainage

- ➤ Himalayan Drainage
- ► Indus river system
- ► Indus drainage system
- ➤ Ganga River System
- ➤ Brahmaputra river system
- ➤ Peninsular River System
- ➤ East flowing Rivers
- West flowing Rivers
- Mains Rivers and their tributaries
- Famous cities and river banks

# INDIAN CLIMATE & BIOGEOGRAPHY

- Climate
  - ➤ Factors influencing the climate of India
  - ➤ Monsoon
  - Mechanism of the Monsoon
  - ► EL NINO and LA NINA

- Seasonal rhythm
- Koppen's Climatic classification
- ➤ Indian Droughts and Floods
- Soils in India
- Natural Vegetation

# SESSION: 09

16 OCTOBER, 2022 (SUNDAY)

# HUMAN & ECONOMIC GEOGRAPHY (WORLD + INDIA)

#### Demography and Census

- ➤ Concept of Human Resources
- ➤ Factors affecting the distribution of Population
- ➤ Components of Population change
- ➤ Trends in Population Growth

- Doubling time of world population
- Spatial pattern of Population change
- Impact of Population Change
- ▶ Demographic Transition
- ➤ Theories of population growth



- Population Control Measures
- World population distribution, Density and Growth
- ➤ Population Composition
- ➤ Population problems
- ➤ Census 2011

### Human Development

- ➤ Growth vs Development
- ➤ The four pillars of Development
- Approaches to Human Development
- ▶ Measuring Human
- ➤ Internation Comparisions of Human Development
- Development

#### Economic Activities

- Primary Activities
- Secondary Activities
- Classification of Manufacturing Industries
- ➤ Tertiary, Quaternary and Quinary Activities
- Transport and Communication

- ➤ Transport
- ➤ Communications

#### International Trade

- History of international Trade
- Basis of International Trade
- Important aspects of International Trade
- Types of International Trade
- ➤ Case of Free Trade
- WTO World Trade
   Organisation and Regional
   Trade Blocs
- Gateways of International Trade

#### Settlement

- Types and Patterns of settlements
- ➤ Rural Settlements
- ▶ Urban Settlements
- ➤ Issues of Urbanization in India
- ➤ Rural Urban Migration
- ➤ Emergence of Slums
- Inclusive Cities/Smart cities

**SESSION: 10** 

22 OCTOBER, 2022 (SATURDAY) **GEOGRAPHY CLASS CONTINUE** 

23 OCTOBER, 2022 (SUNDAY)

**GEOGRAPHY REVISION TEST** 

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# **ECONOMY**

### **BASIC CONCEPTS + ECONOMIC MEASUREMENTS**

#### BASIC CONCEPTS

- ➤ Macroeconomic Concepts
- ➤ Microeconomic Concepts

#### ECONOMIC MEASUREMENTS

- ➤ National Income Concepts and Methods of Calculation
  - National Income
  - Real National Income
  - Calculating National Income
  - Gross Fixed Capital Formation (GFCF)
  - National?
     Organizations? Related to National Income Accounts?
  - Latest India's National Income Estimates
  - New Series of National Statistics (Base Year 2011-12)

- Annual Estimates of Expenditures on GDP
- Per Capita Income
- Purchasing Power Parity
- Lorenz Curve
- Philip's Curve
- Gini Coefficient
- ▶ Inflation
  - Concepts and Types of Inflation
  - Causes of Inflation
  - Effects of Inflation
  - Measures of Inflation
  - Change in Reporting of Inflation
  - Measures to Check Inflation??
  - Economic Growth and Development

# **SESSION: 12**

SESSION: 11

29 OCTOBER, 2022

(SATURDAY)

30 OCTOBER, 2022 (SUNDAY)

### **MONEY & BANKING**

#### MONEY AND BANKING

- Money Function and Classification
  - Money Concept
  - Measures of Money Supply in India
  - Indian currency system
  - Broad & Narrow Money
  - Money multiplier

- Digital Money
- New Monetary Aggregates
- Monetary Policy
- Financial Market and its Instruments
  - Concept and functions of financial markets
  - Importance of money market



- Types of capital market
- Distinguish between capital market and money market
- Nature and functions of a stock exchange
- Advantages of stock exchanges
- Limitations of stock exchanges
- The stock exchanges in India
- Insurance Industry -Insurance Industry and Reforms
- Role of Financial Regulators: SEBI & IRDA
- Banking Structure in India
  - Scheduled Commercial Banks
  - Nationalized?Banks
  - Public Sector Banks?
  - Private Banks
  - Foreign Banks
  - Regional Rural Banks
  - Scheduled Co-operative Banks
  - Reserve Bank of India (RBI)
  - Methods of Credit Control

- Cash Reserve Ratio
- Statutory Liquidity Ratio (SLR)
- Repo Rate
- Reserve Repo Rate
- Call Rates
- Marginal Standing Facility (MSF)
- Bank Rate
- Banking Sector Reforms in India
- Differentiated Banks
- New banking licence
- White Label ATM
- Unified Payments Interface
- Bank Board Bureau
- Marginal Cost of Funds Based Lending Rate
- Priority Sector Lending Certificates
- Concept of Micro ATM
- **Banking Reforms**
- Basel Norms
- Banking Ombudsman
- Development Financial Institutions
- Insurance Companies
- Recent developments in **Economic Sector**

# SESSION: 13

**05 NOVEMBER, 2022** (SATURDAY)

# **PLANNING + PUBLIC FINANCE IN INDIA**

- PUBLIC FINANCE IN INDIA
  - Budgeting
    - Union Budget

- Plan and Non Plan Expenditure
- Revenue Receipts
- Tax Revenue Receipts



- Non-Tax Revenue Receipts
- ➤ Fiscal Policy
  - Fiscal Responsibility and Budget Management (FRBM) Act, 2003
  - Revenue Deficit, Fiscal Deficit, Primary Deficit
  - Deficit and Surplus Budget
  - Deficit Financing
- ➤ Centre State Distribution
  - Finance Commission (A280)
- ➤ Tax Structure in India
  - Tax Direct Tax, Indirect Tax
  - Methods of Taxation Progressive,
  - Regressive, Proportional
  - Value Added Tax VAT in India
  - Goods and Services Tax GST, GST Council
  - Service Tax
  - DTC Direct Tax Code
  - PLANNING
- Meaning Objectives and History
  - Meaning of Economic Planning

- · Objectives of?Planning
- Strategies of Planning
- Regional and National Planning
- Imperative and Indicative Planning
- History of Planning in India
- Visvesvaraya Plan, Gandhian Plan FICCI Proposal, Congress Plan Bombay Plan
- Planning Commission and National Development Council(NDC)
- Central Planning 5 Year Plans, 20 Point Program, MPLADS
- Decentralized Planning
- ➤ Planning Institutions
  - Planning Commission
  - NITI Aayog
  - National Development Council (NDC)
- ➤ Five Year Plans in India
  - 12<sup>th</sup> Five Year Plan (2012-2017)
  - Alternative Scenarios During 12<sup>th</sup> Plan
  - · Economic Reforms

**SESSION: 14** 

06 NOVEMBER, 2022 (SUNDAY) **SECTORS OF ECONOMY** 

**SESSION: 15** 

08 NOVEMBER, 2022 (NATIONAL HOLIDAY)

**CLASS CONTINUE** 

OPEN ECONOMY

**SESSION: 16** 

12 NOVEMBER, 2022 (SATURDAY)

### OPEN ECONOMY

➤ Foreign Trade Concepts

### Balance of Payments

 Foreign Capital – FDI, FPI, FII, QFH



- Foreign Exchange-Exchange Rate NEER & REER, ETF
- FERA & FEMA
- **Capital Account** Convertibility in India
- India's External Debt
- **NRI** Deposits
- Trade Composition
- ▶ Trade Policy and Agreements
- Exchange Rate
- ➤ International Organization
  - **United Nations**
  - Food and Agriculture Organization (FAO)
  - International Civil Aviation Organization (ICAO)
  - International Fund for Agricultural Development
  - International Labour Organization (ILO)
  - International Maritime Organization (IMO)
  - International Monetary Fund
  - International **Telecommunication Union**
  - United Nations Educational. Scientific and Cultural Organization (UNESCO)

- United Nations Industrial Development Organization (UNIDO)
- Universal Postal Union (UPU)
- World Bank Group (WBG)
- International Bank for Reconstruction and Development (IBRD)
- International Finance Corporation (IFC)
- International Development Association (IDA)
- World Health Organization (WHO)
- World Intellectual Property Organization (WIPO)
- World Meteorological Organization (WMO)
- **World Tourism Organization** (UNWTO)
- World Trade Organization (WTO)
- Asian Development Bank
- Asian Infrastructure Investment Bank (AII)
- New Development Bank
- African Development Bank
- ➤ Trade Agreements
- Recent Developments in **External Sector**

**SESSION: 17** 

**13 NOVEMBER, 2022** (SUNDAY)

**CLASS CONTINUE** 

**19 NOVEMBER, 2022** (SATURDAY)

**ECONOMY REVISION TEST** 

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# **INDIAN POLITY**

# **EVOLUTION OF THE CONSTITUTION + SALIENT FEATURES OF INDIAN CONSTITUTION**

# EVOLUTION OF THE CONSTITUTION

- ➤ The Company Rule (1773-1858)
- ➤ Regulating Act, 1773
- ➤ Amending Act, 1781
- ➤ Pitt's India Act, 1784
- ➤ Amending Act of 1786
- ➤ Charter Act, 1793
- ➤ Charter Act, 1813
- ➤ Charter Act, 1833
- ➤ Charter Act, 1853
- ➤ The Crown Rule (1858-1947)
- ➤ Government of India Act, 1858
- ▶ Indian Councils Act, 1861
- ► Indian Councils Act, 1892
- ► Indian Councils Act, 1909
- ➤ Government of India Act, 1919
- ➤ Simon Commission
- ➤ Government of India Act, 1935
- ► Indian Independence Act, 1947
- Drafting and Sources of Indian Constitution)
- ➤ Seminal Sources

- ➤ External Sources
- ▶ Developmental Sources
- ➤ Constitutional Practices
- Important Committees of the Constituent Assembly and their Chairman

### SALIENT FEATURES OF INDIAN CONSTITUTION

- Constitution and Types
- ➤ Types of Political System
- Types of Majorities as per the Indian Constitution
- Preamble and Values in the Constitution
- Amendment of the Constitution
- ➤ Procedure for amendment
- > Types of Amendments
- ➤ Amendability of FR's
- Ingredients of basic structure
- ➤ Doctrine and Terms
- Doctrine of severability
- Validity of Re-Constitutional Laws
- ▶ Doctrine of Eclipse
- Doctrine of Colorable Legislation (Article 246)
- Doctrine of Territorial Nexus
- ➤ Doctrine of Laches

### 20 NOVEMBER, 2022 (SUNDAY)



- ➤ Due Process of Law
- Procedure Established by
  - Law

- Other Constitutional Dimensions
- ➤ Schedules and Subjects
- ➤ Official Languages

# UNION & ITS TERRITORY + CITIZENSHIP + FUNDAMENTAL RIGHTS + DPSP + FUNDAMENTAL DUTIES

#### UNION & ITS TERRITORY

- ➤ ARTICLE 1-4
- CITIZENSHIP
  - ➤ Constitutional Provisions
  - ➤ Indian Diaspora

#### FUNDAMENTAL RIGHTS

- Evolution Objectives And Features
- ➤ Article 12 and Article 13
- ➤ Right to Equality
- ➤ Right to Freedom
- ➤ Right against Exploitation
- Right to Freedom of Religion

- Cultural and Educational Rights
- Right to Constitutional Remedies
- ➤ FR's other Dimensions

### DIRECTIVE PRINCIPLES OF STATE POLICY (DPSP)

- Evolution, objectives, and features
- ➤ Socialistic Principles
- ▶ Gandhian Principles
- ➤ Liberal-Intellectual Principles
- Directive Principle Outside Part IV
- FUNDAMENTAL DUTIES

# SESSION:20

SESSION: 19

**26 NOVEMBER. 2022** 

(SATURDAY)

27 NOVEMBER, 2022 (SUNDAY)

# **POLITY: CLASS CONTINUE**

**SYSTEM OF GOVERNANCE** 

# SESSION: 21

03 DECEMBER, 2022 (SATURDAY)

#### SYSTEM OF GOVERNANCE

- ➤ Centre-State Relations
  - Legislative relations (Articles) 245
  - Related to Territorial

#### **Powers**

- Related to Legislative Powers
- Related to Parliament's Powersto make Laws in State



- Sarkaria Commission's Opinionon Legislative Relations
- Administrative Relations
- Delegation of Union Functions to the States
- Sarkaria Commission's Opinionon Administrative Relations
- Financial relations
- National Integration Council
- ➤ Inter State Relation
  - Inter state water dispute
  - Inter state councils
  - Inter state trade and commerce

- Zonal Councils
- Special Provisoions for some States
  - Provisions for Maharastra and Gujarat, Nagaland, Assam and Manipur
  - Provisions for Jammu and Kashmir (A370) (now abrogated)
- ➤ Types of Emergencies
  - National Emergency
  - Constitutional/State Emergency /President's Rule
- Financial Emergency

### **UNION EXECUTIVE + STATE EXECUTIVE**

### UNION EXECUTIVE

- ➤ President
  - Eligibility
  - Conditions of Office
  - Term of Office
  - Election
  - Manner of Election
  - Vacancy in the Office of President
  - Powers of the President
- ➤ Vice President
  - Oualification
  - Conditions of Office
  - Term of Office
  - Election
  - Removal
  - Vacancy

- Functions of the Vice-President
- ➤ Prime Minister
  - Appointment of Prime Minister
  - Deputy Prime Minister
  - Prime Minister's Office
  - Eligibility
  - Powers and Functions of Prime Minister
  - Relationship between the President and the Prime Minister
- ➤ Union Council of Minister
  - Article 74
  - Article 75
  - Article 77

SESSION: 22

**04 DECEMBER, 2022** 

(SUNDAY)



- Article 78
- Nature of advice by Ministers
- Strength of the Council
- Appointment of a Nonlegislator as a Minister
- Collective responsibility of the Ministers
- Individual Responsibility of Ministers

#### STATE EXECUTIVE

- ➤ Governor
  - Article 152: Definition
  - Article 153: Governors of States
  - Article 154: Executive power of State
  - Discretionary power
  - Article 155: Appointment of Governor
  - Article 156: Term of office of Governor
  - Article 157: Qualifications for Appointment as Governor

- Article 158: Conditions of Governor's office
- Article 159: Oath or affirmation by the Governor
- Article 160: Discharge of the functions of the Governor in certain contingencies
- Article 161
- Article 162: Extent of executive power of State
- Recommendations on the office of Governor
- ARC (Administrative Reforms Commission)
- Sarkaria Commission
- National Commission to Review the working of the Constitution
- ➤ The Chief Minister and the CoM
  - Powers and Functions of Chief Minister
  - Composition of the **Council of Ministers**
  - Responsibility of Ministers
  - Advocate-General for the State

# **UNION LEGISLATURE + STATE LEGISLATURE**

**SESSION: 23** 

10 DECEMBER, 2022 (SATURDAY)

- UNION LEGISLATURE
  - ➤ Organisation of Parliament
    - · Qualifications and Disqualifications for being a Member of Parliament (Article 84)
- Functioning of the **Parliament**
- Sessions of Parliament
- Devices of Parliamentary **Proceedings**



- Legislative Assembly (Vidhan Sabha)
- Powers and Functions
- Speaker & Deputy Speaker
- Parliament's Control over State Legislature
- ➤ Legislative Council (Article 169)
  - Qualifications
  - Powers and Functions
  - Parliamentary Privileges and Immunities
  - Collective Privileges of the House
  - Individual Privileges
  - Houses of the Parliament
- Parliament, Lok Sabha and Rajya Sabha
  - Lok Sabha Composition
  - Rajya Sabha Composition
  - Presiding Officers of the Parliament
  - Speaker
  - Powers & Functions of the speaker
  - Deputy Speaker
  - Panel of Chairpersons of Lok Sabha
  - Speaker Pro Tem
  - Chairman of Rajya Sabha
  - Deputy Chairman of

Rajya Sabha

- Panel of Vice-Chairpersons of Rajya Sabha
- Chairman and Deputy chairman of the Council of States
- Legislative Procedure and Committees of Parliament
  - Legislative Procedure in Parliament
  - Ordinary Bill
  - Money Bill
  - Financial Bill
  - Constitution
     Amendment Bill
  - · Lapsing of Bills
  - Annual Financial Statement: Budget Article 112)
  - Demand of Grants
  - Appropriation Bill
  - Cut motions
  - Stages in Enactment of Budget
  - Other Grants
  - Related Information of Budget
  - Parliamentary committees

#### STATE LEGISLATURE

➤ Legislative Assembly



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11 DECEMBER, 2022 (SUNDAY)

**SESSION: 25** 

17 DECEMBER, 2022

(SATURDAY)

# **POLITY: CLASS CONTINUE**

### THE JUDICIARY

#### THE JUDICIARY

- ➤ The Supreme Court
  - Chief Justice of India
  - Acting Chief Justice of India
  - Appointment of Supreme Court Judges
  - Oualifications for Supreme Court Judges
  - Removal of a Supreme Court Judges
  - Process of **Impeachment**
  - Ad hoc and Retired Judaes
  - Salaries and allowances of SupremeCourt Judges
  - Chief Justices of India (Since 1951)
  - Jurisdiction of the Supreme Court
  - Judicial Independence

- Judiciary Executive Relations
- ➤ The High Court, Subordinate Courts & Lok Adalats
  - The High Courts
  - Jurisdiction of the High Courts
  - **Subordinate Courts**
  - Gram Nyayalayas Act, 2008
  - Alternative dispute Resolution
  - Lok Adalat
  - All India Judicial Service
  - E-governance in Judiciary
  - Judicial Impact Assessment
  - Judges Standards and AccountabilityBill, 2010
  - National Legal Services Authority (NALSA)

# **SESSION: 26**

18 DECEMBER, 2022 (SUNDAY)

# **LOCAL GOVERNMENT + UNION TERRITORIES AND** SPECIAL AREAS

#### LOCAL GOVERNMENT

- ▶ Panchayati Raj
  - Evolution of the Panchayati Raj Institution (PRI)
  - 73rd Amendment Act of

#### 1992

#### LOCAL GOVERNMENT

- ▶ Panchayati Raj
  - Evolution of the Panchayati Raj Institution (PRI)



- 73rd Amendment Act of 1992
- Compulsory and Voluntary Provisions
- ▶ Urban Local Government
  - 74th Constitutional Amendment Act
- Schedule and Tribal Areas
  - Administration of Schedule Areas
  - Types of Urban Governments In India

### UNION TERRITORIES AND SPECIAL AREAS

- ➤ Union Territories
  - Creation of Union Territories
  - Administration of UT's
  - Special provisions for Delhi
  - Special Category Status
  - Administration of Tribal areas

# CONSTITUTIONAL & NON CONSTITUTIONAL BODIES + POLITICAL DYNAMICS

### CONSTITUTIONAL & NON CONSTITUTIONAL BODIES

- Constitutional Bodies
  - Finance Commission
  - Comptrollerand Auditor General of India
  - Attorney-General of India
  - Other Constitutional Bodies
  - State Public Service Commission (SPSC)
  - Joint State public Service Commission (JSPSC)
  - National Commission For SCs
  - National Commission For STs
  - Special Officer for Linguistic Minority

- The Advocate General (Article 165)
- ➤ Non Constitutional Bodies
  - Special officer for linguistic Minorities
  - Central Information
     Commission
  - State Information Commission
  - Lokpal and Lok Ayukta
  - National Human Rights Commission
  - State Human Right Commission
  - CVC (Central Vigillance Commission)

#### POLITICAL DYNAMICS

- Political Parties and Election
  - Electoral System in India

# 24 DECEMBER, 2022 (SATURDAY)

**SESSION: 27** 



- Electoral Reforms Since 1988
- Salient features of the Representation of People Act, 1950
- Types of Political **Parties**
- Party System in India
- Political Parties in India
- Pressure Groups

# **SESSION: 28**

25 DECEMBER, 2022 (SUNDAY)

SESSION: 29

31 DECEMBER, 2022

(SATURDAY)

# **POLITY: CLASS CONTINUE**

### **GOVERNANCE**

### Governing Institutions in India

- Structure of Ministries/ departments
- ➤ Political head
- Secretariat organization secretary
- ➤ Functions of the secretariat
- Functions of attached and subordinate office
- ➤ Other organizations
- ➤ Public sector undertakings
- ➤ The Executive organization
- ➤ Advantages of the separation of secretariat and executive organization.
- Strengths and weaknesses of the existing structure

- ➤ Recommendations for improving the Organizational structure
- Audit and other Transparency initiatives
  - ► CVC
  - ▶ CAG
  - ▶ Lokpal
  - ➤ Lok Ayukta
- Role of SHG, NGOs, Civil Society
  - ➤ SHGs
  - ➤ NGOs
  - ➤ Micro Finance Institutions
- Social Sector Bills
- Welfare Schemes

# **SESSION: 30**

01 JANUARY, 2023 (SUNDAY)

**GOVERNANCE: CLASS CONTINUE** 

07 JANUARY, 2023 (SATURDAY)

**POLITY & GOVERNANCE REVISION TEST** 



# **HISTORY**

### **ANCIENT HISTORY - 1**

#### PRE HISTORIC TIMES

- ➤ Periodization of Indian Pre History
- Sources of Pre History
- Palaeolithic Or Old Stone
- Mesolithic Or Middle Stone Age
- ➤ Neolithic Age Or New Stone Age
- Chalcolithic Age
- ➤ Major Chalcolithic Cultures
- ➤ Early Iron Age
- Geographical Distribution and Characteristics

#### INDUS VALLEY CIVILIZATION

- ► IVC Geography and Archaeological Findings
- ▶ IVC Society and Culture
- ➤ IVC Economy
- ► Harappan Trade
- ▶ Decline of Harappan Culture

#### RIG VEDIC PERIOD

- ➤ Sources for Reconstructing **Vedic Society and Culture**
- ➤ Geography of the Rig Vedic Period - Area of Settlement
- ➤ Political Organisation and **Evolution of Monarchy**
- Social Organization

- ➤ Economy
- ➤ Religious Practices and Culture

#### LATER VEDIC PERIOD

- ➤ Geography of the later Vedic Phases - Area of Settlement
- ▶ Political System
- ➤ Social Organisation and Varna System
- ➤ Economy
- ➤ Religious Practices and Culture

#### JAINISM

- ➤ Birth and Life of Mahavira (540- 468 B.C.)
- ➤ Teachings of Mahavira
- ➤ Organisation and Sects of Jainism
- Literature of Jainism
- ➤ Councils, Spread and Royal **Patrons**

#### BUDDHISM

- ➤ Birth and Life of Buddha (563-483 BC)
- > Teachings of Buddha
- ➤ Organisation and Sects of Buddhism
- ➤ Literature of Buddhism

08 JANUARY, 2023 (SUNDAY)



- ► Councils, Spread of and Royal Patronage
- ➤ Causes for the Decline
- MAHAJANAPADAS PERIOD
  - Republics and Monarchies
  - ► 16 Mahajanapadas
  - ➤ Magadha

- Key Dynasties
- Persian Invasions
- Alexander's Invasion
- Society and Rise of urban centres
- Economy
- System of Administration

### **ANCIENT HISTORY - 2**

#### MAURYAN EMPIRE

- ➤ Sources: Inscriptions and Sites and
- ➤ Literary Sources (The Arthasastra)
- Rulers and Political History of the Mauryas
- Asoka's Inscriptions and Sites
- Asokan Reign
- Asoka and Buddhism
- ➤ Asoka Policy of Dhamma
- ➤ Mauryan Administration
- ➤ Foreign Relations
- ▶ Decline of the Mauryas

#### POST-MAURYAN INDIA

- ➤ Society: Evolution of Jatis
- ➤ Satavahanas
- Sungas and Kanvas
- ➤ Sakas
- Kushanas
- Kanishka
- GUPTA PERIOD

- ➤ Sources of Gupta Rule
- ➤ Rulers and Political history of Guptas Chronology
- ➤ Foreign Travellers Visit -Fahien's Visit
- ▶ Gupta Administration
- ➤ Other Important Dynasties
- ➤ Society Religion and Culture
- ➤ Urban centres in Gupta period
- Economy
- Science and Technology
- Literature
- Later Guptas
- Other Important Dynasties

### HARSHAVARDHANA PERIOD

- ➤ Harsha Military Conquests
- ➤ Harsha and Buddhism
- ➤ Administration
- Society and Culture
- ➤ Economy

# **SESSION: 32**

14 JANUARY, 2023 (SATURDAY)



| 0 | <b>SANGAM PERIOD (SOUTH</b> |
|---|-----------------------------|
|   | INDIAN DYNASTIES)           |

- ➤ Sangam Literature
- ➤ South Indian Dynasties
- Sangam Polity, Society and Culture
- ➤ Economy of Sangam Period
- ➤ Foreign Dynasties
- Commercial Contacts with the Outside World
- ➤ Schools of Art

# **SESSION: 33**

15 JANUARY, 2023 (SUNDAY)

**SESSION: 34** 

21 JANUARY, 2023

(SATURDAY)

### **HISTORY CLASS CONTINUE**

# (INDIAN CULTURE) VISUAL ARTS + PERFORMING ARTS

#### VISUAL ARTS

- ➤ Architecture
  - Harappan Period
  - Mauryan Architecture
  - Post-Mauryan Period
  - Gupta Period
  - Temples of Khajuraho
  - Temples of Odisha
  - Temples of Gwalior
  - Temples of Gujarat
  - Temples of Rajasthan
  - Temples of Bengal
  - Temples of Assam
  - Temples of Himachal Pradesh
  - Temples of Jammu and Kashmir
  - Pallava Period Temples
  - Chola Period Temples
  - Pandya Temples
  - Vijaynagar Period Temples
  - NayakaTemples

- Temples of Kerala
- Rashtrakuta Period Temples
- Schools of Temple Architecture
- Indo-Islamic Architecture
- Modern Architecture Sculptures
- ▶ Paintings
- ➤ Pottery Tradition
- Numismatics

#### PERFORMING ARTS

- ➤ Music in India
  - Classical Indian Music
  - Main Pillars of Indian Music
  - Forms of Indian Music
  - Musical Instruments
  - Institutions Related to Music in India
  - Folk Music
- ➤ Dances in India



- Concept of Dance in India
- Concept of Ashta Nayika
- Rasa and Bhava
- Eight Classical Dance Forms in India
- Folk Dances
- Modern Dances
- ➤ Sports in India
  - Various Type of Sports
  - Genesis of Martial Arts
  - Forms of Traditional Martial Arts

- Animal Sports
- ➤ Indian Theatre
  - History of Theatre in India
  - Classical Sanskrit Theatre
  - Traditional Theatre
  - Regional Theatre
  - Modern Theatre in India
  - Renaissance of Indian Theatre
  - Cinema in India
- ➤ Indian Puppetry

# (INDIAN CULTURE) **RELIGION, LANGUAGE & LITERATURE + MISCELLANEOUS**

### RELIGION, LANGUAGE & **LITERATURE**

- ➤ Religions in-India
  - Pre-Vedic Religion
  - Hinduism
  - Buddhism
  - **Jainism**
  - Sikhism
  - Islam
  - Christianity
  - Zoroastrianism
  - Judaism
  - Philosophy in India
  - **Bhakti Movement**
  - Saints of Bhakti Movement

- Sufism
- ► Languages and Literature in India
  - Classical Language
  - Sanskrit Literature
  - Pali Literature
  - Prakrit Literature
  - Tamil Literature
  - Telugu Literature
  - Malayalam Literature
  - Kannada Literature
  - Odia Literature
  - Assamese Literature
  - Bengali Literature
  - Gujarati Literature
  - Rajasthani Literature
  - Punjabi Literature

# **SESSION: 35**

# 22 JANUARY, 2023 (SUNDAY)



|   |       |      | • • •  |      |
|---|-------|------|--------|------|
| • | Marat | hi I | iterat | IIIP |

- Hindi Literature
- Persian Literature
- **Urdu Literature**

- Influence/Contribution of foreign languages & Literature to India language
- Miscellaneous

# **SESSION: 36**

26 JANUARY, 2023 (NATIONAL HOLIDAY)

**SESSION: 37** 

28 JANUARY, 2023

(SATURDAY)

### INDIAN CULTURE: CLASS CONTINUE

### **MEDIEVAL HISTORY**

- Major Dynasties (750-1200) Of Early Medieval India
- Cholas And Other South **Indian Kingdoms**
- Early Muslim Invasions
- The Delhi Sultanate (1206-1526 Ad)
- Struggle For Empire In North India (Afghans, Rajputs And Mughals)
- The Establishment Of The North Indian Empire
- Consolidation And Expansion Of The Empire – Akbar
- State And Government Under Akbar
- Akbar's Religious Views
- The Deccan And The Mughals (Up To 1657)

- Foreign Policy Of The Mughals
- India In The First Half Of The Seventeenth Century
- Climax And Crisis Of The Mughal Empire: The Marathas And The Deccan
- The Maratha And Other Indian States And Society In The 18th Century
- Vijayanagar Empire
- Regional States In The Medieval Period
- Northern India In The First Half Of The Eighteenth Century
- Society-Structure And Growth
- **Economic Life-Patterns And Prospects**

# **MODERN HISTORY 1 (1757 TO 1857)**

# **SESSION: 38**

29 JANUARY, 2023 (SUNDAY)

- THE ADVENT OF EUROPEANS IN INDIA
  - ➤ The Portuguese in India
  - ▶ De Almeida

- ➤ Albuquerque
- ➤ Causes of failure of Portuguese empire in India
- ➤ The Dutch in India
- ➤ The Danes in India



- ➤ The English
- ➤ The French
- Anglo-French Rivalry
- ➤ First Carnatic War
- ➤ Rise of the Hyderahad
- ➤ The Second Carnatic War
- ➤ The Third Carnatic War
- ➤ Causes of English Succes

#### BRITISH EXPANSION IN INDIA

- Bengal
- Anglo Maratha Wars
- ➤ The Subsidiary Alliance System
- Second Phase of British
- ➤ Expansion In India
- ➤ The Conquest of Sindh
- Anglo-Sikh Wars
- ▶ Doctrine of Lapse
- ➤ Annexation of Oudh

### ADMINISTRATION BEFORE 1857

- ➤ The Dual System
- ➤ The Charter Acts
- ▶ Judicial System
- ➤ Impact of British Administration

### **ECONOMIC POLICIES OF THE BRITISH**

- ➤ Phase of Mercantilism (1757-1813)
- ➤ Phase of Free Trade (1813-1858)
- ▶ Phase of Finance Imperialism (1858 onwards)

### IMPACT OF BRITISH **ADMINISTRATION**

- ➤ Industrialization—Ruin of Artisans and Handicrafts men
- ➤ Impoverishment of Peasantry
- ➤ Emergence of New Land Relations, Ruin of Old Zamindars
- ▶ Land Revenue Policy
- ➤ Impact of British Policy on Indian Economy
- ▶ Drain of Wealth Theory
- ➤ Stagnation and Deterioration of Agriculture
- ➤ Commercialization of Indian Agriculture
- ➤ Development of Modern Industry
- ➤ Rise of Indian Bourgeoisie
- ➤ Economic Drain
- ➤ Famine and Poverty
- ➤ Nationalist Critique of Colonial Economy
- Abolition of the Dual System

#### THE REVOLT OF 1857

- ➤ Causes of the Revolt
- Centres and Spread of the Revolt
- Leaders of the Revolt
- ➤ Causes of Failure of the Revolt
- ➤ Nature and Impact of the Revolt



- ➤ Consequences
- ADMINISTRATIVE CHANGES **AFTER 1857** 
  - Administration Central, Provincial, Local
- ➤ Changes in the Army
- ▶ Public Services
- ▶ Princely States
- ➤ Foreign Policy

# **MODERN HISTORY 2 (1858 TO 1905)**

### Changes After 1858

- ➤ Change in Army
- ► Change in approach towards princely states
- ➤ Gol Act. 1858
- ➤ Change in Civil Services
- ➤ Administrative changes and policies
- ➤ Hostility to Educated **Indians**
- ▶ Labour legislations, Factory Acts, Society Registration Act, CrPC (1882, and 1898)
- Increase in the Racial Antagonism
- ▶ Origin of Local Administration
- Decentralization of British administration through Acts
- ➤ Important Viceroys, their acts, and impacts

# Foreign Policy of British India

- ➤ Conquest of Burma
- ➤ Anglo-Afghan wars
- ➤ Relation with Tibet and China
- ➤ Relation with Bhutan

### Development of Modern education

- ➤ Wood's dispatch
- ➤ Various commissions
- ➤ Various Acts
- ➤ Role of Indian Intelligentsia

### Development of Press

- ➤ Restrictions on the Press: various Acts
- Publications and Journals

### Economic Impact of the **British Rule**

- ▶ Impact on agriculture
- ➤ Rise of New Landlordism
- ► Impact on artisans, craftsmen
- ➤ Introduction of modern Industries
- Poverty and famines

### Social Reforms and **Personalities**

- ➤ Fractionalization of Brahmo Sabha
- ➤ Reforms towards Women Education
- ➤ Reforms towards widow remarriage

# **SESSION: 39**

# **04 FEBRUARY, 2023** (SATURDAY)



- Reforms towards child education and child marriage
- ➤ Reforms towards Caste discrimination
- Reforms by Various religious communities: Muslims, Parsi, Sikhs
- ➤ Reformist vs revivalist approach
- ➤ Ishwar Chandra Vidyasagar
- ➤ Dayanand Saraswati
- ➤ Keshab Chandra Sen
- ▶ Ramkrishna Mission: Paramhamsa and Vivekananda
- ➤ Syed Ahmad Khan
- ▶ Impact of socio-religious reforms
- ▶ Jyotiba Phule
- ▶ MG Ranade
- ➤ Others
- Nationalist Movement 1858-1905: Organized struggle for **Freedom** 
  - Causes of Nationalism in this Period

- ➤ Early organizations
- Formation of Indian **National Congress**
- ➤ Struggle within: Moderates vs. Extremists
- Approach of Moderates
- Approach of Extremists
- ➤ Rise of revolutionary activities: causes, and impacts
- ➤ Early revolutionary organizations, approach & methods, personalities, and impacts
- Peasants and Tribal **Movements** 
  - ➤ Peasants' movements in this period and related personalities
  - Tribal movements in this period and related personalities

# **MODERN HISTORY 3 (1906-1947)**

# **SESSION: 40**

**05 FEBRUARY, 2023** (SUNDAY)

- REVOLUTIONARY **NATIONALISM** 
  - ➤ The Extremist (1905-1920)
  - ▶ Differences between the Moderates and the **Extremists**
- INDIAN NATIONAL **MOVEMENT - I (1905-1918)** 
  - ➤ Partition of Bengal (1905)
  - ➤ Swadeshi Movement
  - ➤ Muslim League, 1906
  - ➤ Surat Session of INC, 1907



- ► Indian Council Act (Morley-Minto Act) 1909
- ➤ Ghadar Party, 1913
- ➤ Komagata Maru Incident 1914
- ➤ The Lucknow Pact (1916)
- ➤ Home Rule Movement (1915–1916)
- ➤ August Declaration, 1917

# INDIAN NATIONALMOVEMENT -II (1918-1929)

- World War I-Reforms and Agitation
- ➤ Champaran Satyagraha (1917)
- ➤ Ahmadabad Mill Strike (1918)
- ➤ Kheda Satyagraha (1918)
- ➤ The Government of India Act, 1919
- ➤ The Non-Cooperation Movement (1920-22)
- ▶ Bardoli Resolution
- Nagpur Session of Congress
- Swaraj Party and its Evaluation
- ➤ Muddiman Committee (1924)
- ➤ Rowlatt Act and Jallianwala Bagh Massacre (1919)
- ➤ Khilafat Movement
- ➤ Simon Commission (1927)
- ➤ Bardoli Satyagraha (1928)
- Nehru Report (1928)

- Jinnah's Fourteen Points
- ► Lahore Session, 1929
- ➤ Conference, 1930
- Gandhi-Irwin Pact, 1931
- ➤ Karachi session of 1931
- ➤ Second Round Table Conference, 1931
- Civil Disobedience
   Movement (Second-Phase)
- ➤ Third Round Table Conference (17 November 1932)
- Communal Award
- ➤ Poona Pact, 1932
- ➤ Government of India Act, 1935
- World War II and Indian Nationalism
- ➤ Resignation of Congress Ministers (1939)
- ➤ Poona Resolution and Conditional Support to Britain (1941)
- ➤ August Offer of 1940
- ➤ The Individual Civil Disobedience
- ➤ Two-Nation Theory
- ➤ Cripps Mission (1942)
- ➤ Demand for Pakistan (1942)
- ➤ Quit India Movement
- ➤ Azad Hind Fauj
- ▶ Indian National Army
- ► I.N.A. Trials



# **⊕** TARGET PT 2023

- ► I.N. Rebellion
- ➤ Rajagopalachari Formula, 1945
- ➤ Desai Liaqat Pact
- ➤ Cabinet Mission (1946)
- ➤ Wavell Plan
- ▶ Jinnah's Direct Action

- Resolution
- ➤ Mountbatten Plan of June 1947
- ➤ Indian Independence Act 1947
- **o GOVERNOR GENERALS DURING BRITISH INDIA**

**SESSION: 41** 

11 FEBRUARY, 2023 (SATURDAY)

**MODERN HISTORY: CLASS CONTINUE** 

12 FEBRUARY, 2023 (SUNDAY)

**HISTORY REVISION TEST** 

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**SESSION: 42** 

18 FEBRUARY, 2023

(SATURDAY)



# **SCIENCE & TECHNOLOGY**

# **FUNDAMENTALS OF PHYSICS, CHEMISTRY, AND BIOLOGY & THEIR APPLICATION IN DAILY LIFE**

### Fundamentals of Physics

- ➤ Properties of fundamental particles
- Fundamental forces
- ➤ Energy and its various types
- ➤ Fundamental Optics
- ➤ Electromagnetic spectrum
- ➤ Laws and theories in physics, Relativity
- ➤ Electromagnetism
- ➤ Heat and thermodynamics
- Waves
- Mechanical
- ➤ Electromagnetic waves
- ➤ Universe
  - Planets, stars, and galaxies
  - Big-bang theory and singularity
  - Dark matter and energy
  - Black holes
  - **Neutrino Observatory**
  - **Gravitational Waves**
  - Sunspot
  - Magnetars and Neutron stars

### Fundamentals of Chemistry

- ➤ Elements and molecules
- States of Matters
- ➤ Atomic structure
- ➤ Chemical bonding
- Metals and non-metals
- Metallurgy
- Acid and base
- ➤ Applications of electrochemistry (Battery and Charging devices)
- ➤ Properties of solution
- ➤ Chemicals in everyday life
- ➤ Polymers and Biopolymers
- ➤ Chemistry of Pharmaceuticals
- Carbon and its allotropes
- ➤ Hydrocarbons and their derivatives
- ▶ Biomolecules
- ▶ Vitamins and Enzymes

### Fundamentals of Biology

- ➤ Chemical Building Blocks of Life
- ➤ History and Origin of Life
- ➤ Diversity of Living Things
  - Classification and Domains of Life



- Viruses
- Prokaryotes
- Eukaryotes
- **Protists**
- **Plants**
- Fungi
- Animals
- ➤ Evolution
  - Evolution of Life
  - Human Evolution
- ➤ Genetics
  - Inheritance
  - DNA and RNA
  - Gene Expression
  - Gene Regulation
  - Mutation
- Cells
  - Cell Structure
  - **Membranes**
  - **Cell-Cell Interactions**
  - Respiration
  - Energy and Metabolism
  - Cells Division
- Tissues
  - Epithelial tissue
  - Connective tissue
  - Muscle tissue
  - Nervous
  - Myocardial
  - Hepatic
- Organ system and Human physiology

- **Endocrine System**
- Respiratory system
- Circulatory system
- Skeletal and Muscular Systems
- Reproduction
- Excretion, Osmoregulation and Thermoregulation
- The Digestive System
- Immune system
- ➤ Nutrition
  - Classification by Source of Energy and Carbon
  - Plant Nutrition
  - **Animal Nutrition**
  - Human Diet
- ➤ Plant physiology
  - Photosynthesis
  - Respiration
  - Plant-water balance
  - Reproduction
- ➤ Economic Zoology
  - Microbes in Human Welfare
  - Beneficial animals
  - Beneficial insects
- ➤ Economic botany
  - Family of angiosperms
  - Tissue culture
  - Grafting
  - Horticulture



#### Imaging techniques

- ➤ CT scan
- Magnetic resonance imaging
- Positron emission tomography (PET)
- ➤ Microscopy
- ➤ Spectroscopy

#### Biological fuel generation

- Generation and significance of fossils fuels
- ➤ Biofuels from biomass
- ▶ Biodiesel
- ➤ Natural gas and petroleum
- ➤ Hydrogen

### **SESSION: 43**

# 19 FEBRUARY, 2023 (SUNDAY)

# HEALTH AND DISEASES; BIOTECHNOLOGY AND APPLICATIONS; NUCLEAR ENERGY AND TECHNOLOGY

#### Health and Diseases

- ➤ Human Diseases
  - Common diseases in human and their causative agents
  - Diseases due to nutrient deficiency
  - Molecular biology and human disease
  - Chromosomal inheritance and disease
  - Extra chromosomal inheritance and disease
  - Vector borne diseases
  - Water borne diseases
  - Lifestyle diseases
- ➤ Immunity and its types
- Vaccination and Immunisation
- Vaccination program of India
- Medicines

- Antibiotics
- Antiviral and antifungal drugs
- Monoclonal antibodies therapy
- Antimicrobial drug resistance
- Drug formulations
- Drug pricing in India
- Pharmacogenetics

# Biotechnology and applications

- Genetic engineering, process, and application
- Genomics
- ➤ Proteomics
- ➤ RNA types and technology
- Genome sequencing and its applications
- Application of biotechnology in Environment



- Bio composting
- **Bioremediation**
- Microbial remediation
- Carbon capture Technology
- Plant biotechnology
  - Transgenic plants
  - Methods and application of Plant biotechnology
- Animal biotechnology
  - Transgenic animals
  - Methods and application of Animal biotechnology
- Application of Biotechnology in Food and beverage industry
  - Bioprocessing
  - **Bioreactors**
  - Manipulation of **Enzymes**
  - Food processing
  - Single cell protein
  - Food fortification
- Application of Biotechnology in agriculture
  - GM technology
  - GM crops
  - Pest Resistant **Plants**
- Biotechnology and medicine
  - Gene Editing
  - Gene therapy
  - Molecular Diagnosis

- PCR
- ELISA
- ➤ Antibody-Antigen interactions and detections
  - Embryo transfer technology
  - Stem cells and their engineering
  - Biopharmaceuticals/ therapeutic proteins
  - Brain fingerprinting technology
- ➤ Bioethics and Biopiracy
- ▶ Biosafety protocols
- ➤ IPR in Biotechnology
- Recent trends in biotechnology and applied biotechnology

### Nuclear energy and **Technology**

- > Types of nuclear reactions
- ➤ Nuclear Energy and its application
  - Civil and military applications of Nuclear Energy
- ➤ Nuclear fuels and centrifugation
- ➤ Nuclear Reactor
- ➤ Nuclear Policy of India
- ➤ Nuclear Radiation and its impact
- ➤ Radioactive Waste
- ➤ Nuclear & Radiological Disasters



**SESSION: 44** 

25 FEBRUARY, 2023 (SATURDAY)

**SESSION: 45** 

26 FEBRUARY, 2023

(SUNDAY)

# **SCIENCE & TECH CLASS CONTINUE**

# SPACE SCIENCE AND TECHNOLOGY; DEFENSE TECHNOLOGY AND DEFENSE EXERCISES; NANOTECHNOLOGY AND ITS APPLICATION

#### Types of orbits

- ➤ Types of Launch Vehicles and application
- Space missions of key space agencies
  - NASA
  - ISRO
  - ESA
  - ROSCOSMOS
  - JAXA
  - CNSA
- ➤ ISRO and its role in national development
- ➤ Private sector in space
- Public-private partnership in space sector
- Space technology
  - Cryogenics
  - Nanosatellites
  - Electric Propulsion
  - Aviation Internet, Starlink communication
  - Satellite communications
  - Remote sensing and its applications
  - Ground Segment-As-A-Service
  - Green Propellant

- Deep Space Atomic Clock
- ➤ Strategic dimensions
  - Space weapons
  - A-SAT technology
  - Laser technology
  - HGV technology
- International space collaboration
- Various space observatories
- ➤ Various telemetry
- Navigation
  - Global Positioning System
  - Galileo
  - GLONASS
  - IRNSS
- ➤ Geopolitics of outer space

#### Defence

- Missile system and classification
- Ballistics and cruise missile
- ➤ India's Missile System
- Integrated guided missile program



- ➤ Missile defence programmes
- Defence Technology
- > Application of robotics in defence sector
- ➤ Application of Al in defence
- ➤ Internet of Military Things (IoMT)
- ➤ Cyber warfare, and preparedness
- ➤ Drone technology
- ➤ Unmanned Aerial Vehicle
- ➤ Stealth technology
- ➤ Advanced Defense Equipment
- ➤ Air Defence system
- > 3-D printing missiles
- ▶ Lethal Autonomous Weapons
- Hypersonic technology
- ➤ Hypersonic glide vehicles
- ➤ Hypersonic cruise missiles
- Weapon system
  - Classical weapons
  - Weapon of mass destruction
- ➤ Fission and fusion bombs
- ➤ Chemical Weapons
- ▶ Biological Weapons
  - Directed Energy Weapons
- Defence reforms
  - CDS
  - Various committees and recommendations

- Domains of warfare
- ➤ Defence platforms
  - Submarine
  - Aircraft carrier
  - Combat aircraft
- ➤ Defence Organizations and **laboratories** 
  - Defence Exercises

### Nanotechnology and its application

- ➤ Basics of Nan science and Nanotechnology
- Nanomaterial
- Applications of nanotechnology
  - Nano medicine
  - Semiconductors and computing
  - Food
  - Textiles
  - Sustainable energy
  - **Environment**
  - **Transport**
  - **Space**
  - Agriculture
  - Impacts of Nanotechnology
  - Adverse Health and Environmental
- ➤ Social and Ethical Impacts
  - Nano-science and nano-technology in India



**SESSION: 46** 

04 MARCH, 2023 (SATURDAY)

### **SCIENCE & TECH CLASS CONTINUE**

# IT, ELECTRONICS AND COMMUNICATIONS; AI AND ROBOTICS; INTELLECTUAL PROPERTY RIGHTS; MISCELLANEOUS; RECENT DEVELOPMENTS

### IT, Electronics and Telecommunications

- ➤ Computers
  - Generation of computers
  - Computer terminologies
  - Supercomputer and its applications
  - Cloud computing
- ➤ Information technology
  - Components of IT
  - IT enabled services
  - Application of IT
- Display technologies
  - Cathode ray
  - LCD
  - LED
  - Plasma Monitors
  - OLED
  - AMOLED
- ➤ Mobile generations
- Smartphone
- ➤ Net Neutrality
- ➤ Internet of Things
- Big Data Initiative and Privacy
- ➤ Cyber-crime and security
- ➤ Government initiatives

#### Robotics and AI

- ➤ Robotics
  - Machine vs Computer vs Robots
  - Parts of a Robot
  - Classification of Robots
  - Advantages and Disadvantages of Robot
  - Applications of Robotics in Agriculture, industry, defence, etc.
- ► Al
  - Neural networks
  - Machine Learning and Deep learning
  - Application of Al
- Artificial Intelligence and Robotics

#### o IPR

- What are Intellectual property rights (IPR)?
- Types of Intellectual Property Rights
- ➤ International Agreements and institutions on IPR
- ➤ IPR Regime in India
- National Intellectual Property Rights Policy

# **SESSION: 47**

05 MARCH, 2023 (SUNDAY)



#### Miscellaneous

- ➤ India's policy in the field of the science and technology
- ➤ Various policies for S&T
- Institutional structure
  - Department of Science & Technology
  - CSIR
  - Science and Engineering Research Board
  - Technology **Development Board**
  - National Accreditation Board For Testing And **Calibration Laboratories**
- Science and technology as a source of Human Resource Development

- Awards related to Science
- ► India and global collaboration in science projects
- ➤ Technology Vision Document 2035

#### Recent Developments

- ▶ Deepfakes
- ➤ Web 3.0
- ► Indian Space Association
- ➤ National Policy for Rare Diseases
- ➤ Deep Sea Mission
- ▶ Desalination plants
- ➤ Digital geological map of moon
- ➤ NASA's Artemis mission
  - Genome India Project

07 MARCH, 2023 (TUESDAY)

# SCIENCE & TECH REVISION TEST

# **GEOGRAPHY MAPPING**

**SESSION: 48** 

11 MARCH, 2023 (SATURDAY)

MAPPING (WORLD GEOGRAPHY)

SESSION: 49

12 MARCH, 2023 (SUNDAY)

**MAPPING (INDIA GEOGRAPHY)** 

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# **ENVIRONMENT**

### **ENVIRONMENTAL ECOLOGY**

### Origin of Life forms

#### Basic Concepts of Ecology

- Ecological Hierarchy
- Scope of Ecology
- ➤ Habitat & Ecological Niche
- Deep vs Shallow Ecology
- Ecological Principles
- ➤ Ecological Community
- Ecological Succession
- Range of Tolerance , Maximum Range
- ➤ Difference between Ecology , Environment and Ecosystem

### Ecosystem functions

- ➤ Ecosystem Definitions
- Functions and Properties of Ecosystem
- ➤ The Structure/Components of Ecosystem
- ➤ Ecosystem Dynamics
- Biomagnifications
- ➤ Biological Control

#### Population Ecology

- ➤ Types of species
- ➤ Population Ecology
- ➤ Population Growth Models
- ➤ Methodology of Tiger census
- Methodology of Lion Census

### Adaptation of Species and Interactions

Adaptation

- ➤ Homeostasis
- Interaction between Species
- Ecotone
- Endemic Species
- Keystone Species
- Indicator Species
- Invasive Species
- Allopatric and Sympatric Speciation

#### Terrestrial Ecosystems

- > Terrestrial ecosystem
- Forest Ecosystem in India
- Grasslands
- ➤ Tundra
- Deserts
- Mountains

#### Aquatic Ecosystem

- ➤ Aquatic ecosystem
- ➤ Factors affecting the productivity of aquatic ecosystems
- > Fresh water ecosystem
- Marine ecosystem
- Marine Organisms
- ▶ Plankton
- ➤ Phytoplankton
- ➤ Factors Affecting Phytoplankton Biodiversity
- ➤ Human Modified Ecosystems

### Nutrient Cycling

Concept of Biogeochemical Cycle

# SESSION: 50

18 MARCH, 2023 (SATURDAY)



- ➤ Carbon Cycle
- Hydrological Cycle
- ▶ Nitrogen Cycle

- ➤ Oxygen Cycle
- ➤ Sulphur Cycle
- ➤ Phosphorus Cycle

### **BIODIVERSITY**

### Basics of Biodiversity

- Biodiversity
- Types of biodiversity
- Patterns of biodiversity
- ➤ Bio-geographical classification of World
- ➤ Bio-geographical classification of India
- ➤ Functions of biodiversity
- ➤ Hotspots of biodiversity
- ▶ Bio informatics
- ▶ Eco Regions
- ➤ Role of Traditional Knowledge in Biodiversity
- ▶ Biopiracy
- Animal and Plant Diversity

- > Plant and Animal Kingdom
- ➤ Threats to biodiversity
- ➤ Biodiversity Conservation
- National Parks
- Wildlife Sanctuaries
- ▶ Biosphere Reserves
- Species based conservation programmes
- ▶ Important Coastal and marine Biodiversity Areas
- Global initiative
- **Estuaries**
- Mangroves
- Coral Reef
- Wetlands

# **ENVIRONMENTAL POLLUTION + RESOURCE DEGRADATION & MANAGEMENT**

# **SESSION: 52**

**SESSION: 51** 

19 MARCH, 2023

(SUNDAY)

25 MARCH, 2023 (SATURDAY)

- Basics of Pollution
  - ➤ Sources of pollution
  - Classification of pollutants
  - ▶ Pollution Indicator species
- Mining and Pollution
  - ➤ Mining and Environment
  - ➤ Sensitivity of Select **Ecosystems to Mining**
  - Impact of Mining

- ➤ Indirect Impact of Mining
- ➤ International Laws on Mining
- Main Act or Statue to regulate the impact of
- ▶ Indian Mining Sector
- Sustainable Mining
- **Air Pollution** 
  - ➤ Causes of air pollution



- Harmful Effects of air pollution
- ➤ Top-ten gases in air pollution
- ➤ Control of Air Pollution
- ➤ Concepts related to Air pollution
- ➤ Marine Pollution
- ➤ Noise Pollution
- Biological Pollution
- ➤ Radioactive Pollution
- ➤ Thermal Pollution
- Waste Management

#### Land Resource

- ➤ Causes of land degradation
- Impact of land degradation
- ▶ Desertification
- Sustainable Land Management

#### Forest Resource

- Definition of forests by FSI
- ➤ Types of Forest Cover
- ➤ Forest Survey of India (FSI report 2017)
- ➤ Types of Forests In India
- **▶** Deforestation
- ➤ Causes of Deforestation
- Consequences of Deforestation on the Wildlife of India
- Strategies for Reducing

#### Deforestation

➤ Government Programmes for Conservation of Forests

#### Soil Resource

- ➤ Soil Characteristics and Soil formation process
- ➤ Factors Responsible for Soil Formation
- ➤ Soil Forming Processes
- ➤ Soil Profiles and Horizons
- ➤ Type of Soils
- ➤ Soils in India
- Soils in World
- Soil Erosion
- ➤ Problems due to excessive irrigation
- ➤ Soil Conservation
- ➤ Soil health card scheme
- ▶ Organic Farming

#### Water Pollution

- ➤ Surface Water Resource
- ➤ Ground Water Resources
- Sources of Water Pollution
- ➤ Measurement of Water pollution
- Causes of Water Pollution
- ➤ Harmful effects of water pollution
- ➤ Other terms associated with water pollution
- ➤ Energy Resources

# **SESSION: 53**

26 MARCH, 2023 (SUNDAY)

# **ENVIRONMENT CLASS CONTINUE**



**SESSION: 54** 

01 APRIL, 2023

(SATURDAY)

# **७ TARGET PT 2023**

# **CLIMATE CHANGE**

# Climate Change Basics

- What is Climate Change?
- ➤ What is Global warming?
- ➤ Factors Affecting Climate Change
- ➤ Causes of climate change
- Urbanization and climate change
- ► Impact of agriculture on climate
- ➤ Non green House Gases and Aerosols

- ➤ Radioactive forcing and global warming
- ➤ Ecological footprint
- ➤ Carbon footprint
- Global Warming Potential (GWP)

### Climate Change Impact

- ► Impacts of the Climate Change
- ➤ Global Warming & Health
- ➤ Climate change mitigation

### **ENVIRONMENTAL GOVERNANCE**

#### Acts and Policies

- Constitutional Provisions related to environment
- ➤ Wildlife Protection Act 1972
- ➤ Environmental Protection Act
- ▶ National Forest Policy
- ➤ Biological Diversity Act 2002
- Schedule Tribes and Other **Forest**
- ▶ Dwellers Act 2006
- ➤ Coastal Regulation Zone
- ➤ Wetland Rules 2010
- National Green Tribunal
- ➤ Ozone Depleting Substance Rules
- Environment Impact **Assessment (EIA)**

- ➤ What is EIA?
- ➤ Brief History of EIA in India
- ➤ EIA Process in India
- ➤ The 8 steps of the EIA process
- ➤ Environmental Appraisal **Process**
- ▶ Drawback in EIA Process
- Recommendations for **Improvement**
- ➤ Environment Management
- ➤ EIA in India Sectorial **Analysis**
- ➤ International Environmental Governance
- ► India and Climate Change
- ➤ Environment related Institutions in India
- ➤ Environmental schemes in India

# **SESSION: 55**

02 APRIL, 2023 (SUNDAY)



**SESSION: 56** 

08 APRIL, 2023 (SATURDAY) **ENVIRONMENT CLASS CONTINUE** 

09 APRIL, 2023 (SUNDAY)

**ENVIRONMENT REVISION TEST** 

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**SESSION PLAN** 

# **Current Affairs**

| SESSION NO. | DATE | SUBJECT                 | ТҮРЕ         |
|-------------|------|-------------------------|--------------|
| Session 57  |      | Environment & Ecology 1 | Class & Test |
| Session 58  |      | Environment & Ecology 2 | Class & Test |
| Session 59  |      | Environment & Ecology 3 | Class & Test |
| Session 60  |      | Polity 1                | Class & Test |
| Session 61  |      | Polity 2                | Class & Test |
| Session 62  |      | International Relations | Class & Test |
| Session 63  |      | Indian Culture          | Class & Test |
| Session 64  |      | Geography & Mapping 1   | Class & Test |
| Session 65  |      | Geography & Mapping 2   | Class & Test |
| Session 66  |      | Geography & Mapping 3   | Class & Test |
| Session 67  |      | Governance & schemes 1  | Class & Test |
| Session 68  |      | Governance & schemes 2  | Class & Test |
| Session 69  |      | India Year Book         | Class & Test |



| Session 70 | Science & Technology 1   | Class & Test |
|------------|--------------------------|--------------|
| Session 71 | Science & Technology 2   | Class & Test |
| Session 72 | Science & Technology 3   | Class & Test |
| Session 73 | Indian Economy 1         | Class & Test |
| Session 74 | Indian Economy 2         | Class & Test |
| Session 75 | Indian Economy 3         | Class & Test |
| Session 76 | Economic Survey & Budget | Class & Test |

# **SESSION PLAN**

# **Sectional Test**

| TEST NO.           | TOPICS                     |
|--------------------|----------------------------|
| Sectional Test: 01 | Polity & Governance        |
| Sectional Test: 02 | Economy                    |
| Sectional Test: 03 | Environment                |
| Sectional Test: 04 | History & Culture of India |
| Sectional Test: 05 | Geography                  |
| Sectional Test: 06 | Science & Technology       |



# **SESSION PLAN**

# **Full Mock Test**

| TEST NO.     | DATE              |
|--------------|-------------------|
| Mock Test 1  | Mock 1 (Paper 1)  |
| Mock Test 2  | Mock 2 (Paper 2)  |
| Mock Test 3  | Mock 3 (Paper 1)  |
| Mock Test 4  | Mock 4 (Paper 2)  |
| Mock Test 5  | Mock 5 (Paper 1)  |
| Mock Test 6  | Mock 6 (Paper 2)  |
| Mock Test 7  | Mock 7 (Paper 1)  |
| Mock Test 8  | Mock 8 (Paper 2)  |
| Mock Test 9  | Mock 9 (Paper 1)  |
| Mock Test 10 | Mock 10 (Paper 2) |

| TEST NO.     | DATE              |
|--------------|-------------------|
| Mock Test 11 | Mock 11 (Paper 1) |
| Mock Test 12 | Mock 12 (Paper 2) |
| Mock Test 13 | Mock 13 (Paper 1) |
| Mock Test 14 | Mock 14 (Paper 2) |
| Mock Test 15 | Mock 15 (Paper 1) |
| Mock Test 16 | Mock 16 (Paper 2) |
| Mock Test 17 | Mock 17 (Paper 1) |
| Mock Test 18 | Mock 18 (Paper 2) |
| Mock Test 19 | Mock 19 (Paper 1) |
| Mock Test 20 | Mock 20 (Paper 2) |