

1.

Macroeconomics deals with which of the following studies?

I. Reasons behind the unemployment of resources

II. Determination of total output

समष्टि अर्थशास्त्र निम्नलिखित में से किस अध्ययन से संबंधित है?

I. संसाधनों की बेरोजगारी के पीछे कारण

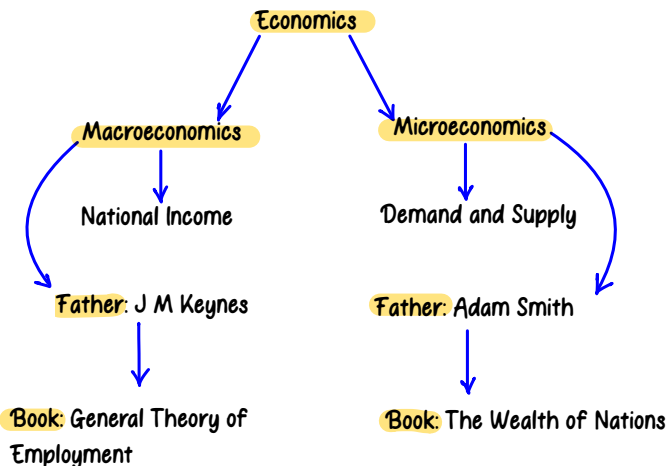
II. कुल उत्पादन का निर्धारण

1. Only I

2. Only II

3. Neither I nor II

4. Both I and II



Types of Unemployment

1. **Structural unemployment:** there is a mismatch between worker's skill and availability of job

eg: technology advancement, like machinery replacing farmer labour

2. **Educated unemployment:** degree → unemployment, seen in Urban part of India

3. **Frictional Unemployment:** type of unemployment while searching for a new job

eg: an employee leaving current job to move to a better one (seen in Urban)

4. **Disguised Unemployment:** Hidden unemployment when some people seem to be employed but are not, marginal productivity is zero

eg: Agriculture sector

5. **Cyclical unemployment:** Recession in economy (upturn and downturn)

When economy revives, there is opportunity to employment, seen in Urban

eg: Great Recession

sub-type

• **Seasonal Unemployment:** Employment based on the seasonal basis

Seen more rural part of India

eg: Light or fireworks sellers during Diwali

Expenditure Method

$$C + G + I + (X - M)$$

- **C:** Consumption
- **G:** Govt. expenditure
- **I:** Investment
- **X:** Export
- **M:** Import

2. The President of India decides on the question as to the disqualification of Members of Parliament in consultation with the _____.

भारत के राष्ट्रपति _____ के परामर्श से संसद सदस्यों की अयोग्यता के प्रश्न पर निर्णय लेते हैं।

- | | |
|---------------------------------|------------------------------|
| 1. Vice President | 1. उपराष्ट्रपति |
| 2. Supreme Court of India | 2. भारत का सर्वोच्च न्यायालय |
| 3. Parliament | 3. संसद |
| 4. Election Commission of India | 4. भारत का चुनाव आयोग |

↓

Disqualification of membership

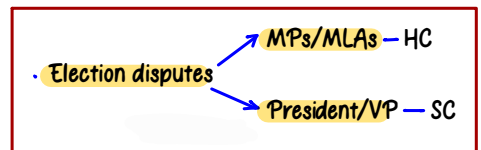
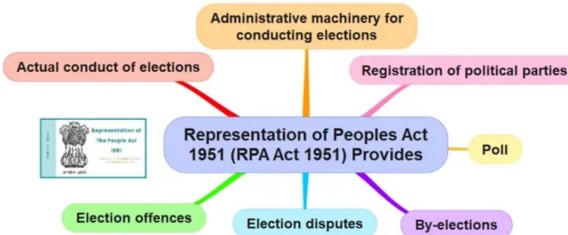
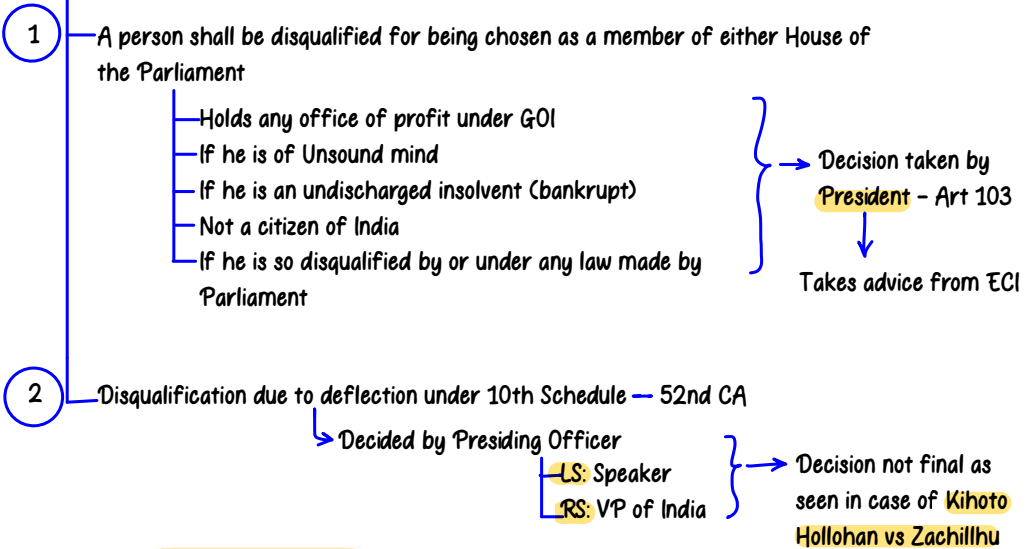
↓

Sukumar Sen: 1st Chief Commissioner of India

↓

Conducts elections of: LS + RS, President + VP, LA + LC

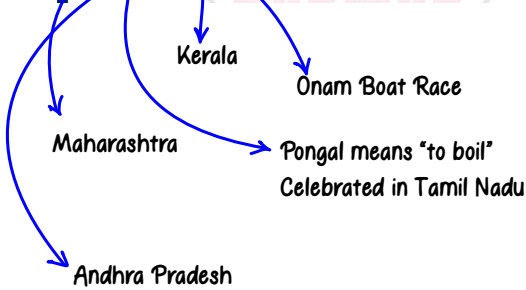
- Art 102: Disqualification of membership



3. Which of the following cultural festivals of South India is associated with the folklore of King Mahabali?

- | | |
|---------------|----------------|
| 1. Gudi Padwa | 1. गुड़ी पड़वा |
| 2. Onam | 2. ओणम |
| 3. Ugadi | 3. उगादि |
| 4. Pongal | 4. पोंगल |

Attukal Pongala: Kerala



4. What is the maximum number of electrons that the third orbit or M-shell can have?

तीसरी कक्षा या एम-कोश में इलेक्ट्रॉनों की अधिकतम संख्या क्या हो सकती है?

1. 32
2. 8
3. 18
4. 2

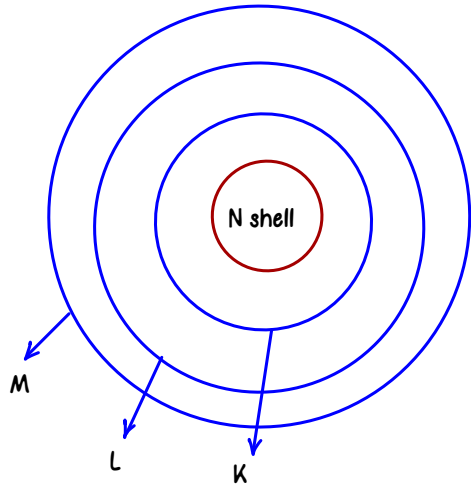
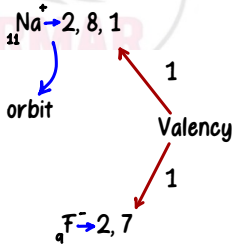
$2n^2 \rightarrow$ Where $n =$ no. of orbit

$2 \times 1^2 = K = 2$

$2 \times 2^2 = L = 8$

$2 \times 3^2 = M = 18$

$Z = e^- = p^+$



5. Europeans entered India with a mindset of trading only. This streak was initiated by which of the following European nations?

यूरोपीय लोग व्यापार की मानसिकता से ही भारत में आये। यह सिलसिला निम्नलिखित में से किस यूरोपीय राष्ट्र द्वारा शुरू किया गया था?

- | | |
|---------------|--------------|
| 1. Dutch | 1. डच |
| 2. French | 2. फ्रेंच |
| 3. British | 3. ब्रिटिश |
| 4. Portuguese | 4. पुर्तगाली |

→ 1498: Vasco de Gama (1st to discover route to India)

→ Visited court of Zamorin (Calicut King)

Portuguese → Dutch → English → Danes → French

- 1608: Captain William Hawkins in the court of Jahangir
Brought his ship - Hector
- 1615: Thomas Roe in the court of Jahangir

- 1611: 1st factory estd. in Masulipatnam (temporary)
- 1613: in Surat (permanent)

6. Which of the following government departments is associated with infrastructure development in India?

निम्नलिखित में से कौन सा सरकारी विभाग भारत में बुनियादी ढांचे के विकास से जुड़ा है?

1. Division of Electricity Agenda
2. Division of Economic Agenda
3. Department of Energy Affairs
- ✓ 4. Department of Economic Affairs

Under Capital Expenditure

1. विद्युत एजेंडा का विभाजन
2. आर्थिक एजेंडा का विभाजन
3. ऊर्जा मामलों का विभाग
4. आर्थिक मामलों का विभाग

7. Which of the following Articles of the Constitution of India provides that the Governor appoints the Chief Minister and later, the Chief Minister recommends the appointment of ministers to the Governor?

भारत के संविधान के निम्नलिखित में से कौन सा अनुच्छेद यह प्रावधान करता है कि राज्यपाल मुख्यमंत्री को नियुक्ति करता है और बाद में, मुख्यमंत्री राज्यपाल को मंत्रियों की नियुक्ति की सिफारिश करता है?

1. Article 163
2. Article 165
- ✓ 3. Article 164
4. Article 167

Advocate General (highest law officer of the State)

Real head/de facto head

• Art 74: There shall be a Council of Ministers with **Prime Minister** to aid and advice the President

• Art 75 + 89 = Art 164 (in case of State)

- 1 - The Prime Minister shall be appointed by the President and the other Ministers shall be appointed by President on advice of the PM
- 2 - The Ministers shall hold office during the pleasure of the President
- 3 - They are collectively responsible to the house of the People
- 4 - Oaths of the office by President
- 5 - A Ministers who for any period of six consecutive month is not a member of either house of the Parliament → Upon expiration of the period shall cease to be a Minister
- 6 - Salaries and Allowances of Ministers

- Art 76: Attorney General of India
- Art 77: Conduct of business of the Government of India
- Art 78: Duties of Prime Minister

8. What type of climate is found in North Western Europe, West Coast of North America, North of California, Southern Chile, South-eastern Australia and New Zealand?

उत्तर पश्चिमी यूरोप, उत्तरी अमेरिका के पश्चिमी तट, कैलिफोर्निया के उत्तर, दक्षिणी चिली, दक्षिण-पूर्वी ऑस्ट्रेलिया और न्यूजीलैंड में किस प्रकार की जलवायु पाई जाती है?

Observed within the tropics (near the equator) → Outside ITCZ

1. Tropical wet and dry climate	1. उष्णकटिबंधीय आर्द्र एवं शुष्क जलवायु
2. Cold snow forest climate	2. ठंडी बर्फाली वन जलवायु
3. Marine west coast climate	3. समुद्री पश्चिमी तट की जलवायु
4. Subtropical steppe climate	4. उपोष्णकटिबंधीय मैदानी जलवायु

Grasslands

9. Which of the following is NOT a part of western coastal plains?

निम्नलिखित में से कौन सा पश्चिमी तटीय मैदान का हिस्सा नहीं है?

<ul style="list-style-type: none"> 1. Konkan 2. Coromandel Coast 3. Kannad Plain 4. Malabar coast 	<p>Western Coastal Plains</p> <ul style="list-style-type: none"> • Narrow in middle and wider in the ends • Submerging • Rivers do not form delta • Formation of Kayals ('Backwaters') • Port development is easy 	<p>Eastern Coastal Plains</p> <ul style="list-style-type: none"> • Wider • Emerging • Form Delta
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Mutilated → Punnamada Kayal: Nehru Trophy (Boat race)



Western Ghats

- Continuous and can be crossed through passes only
- Higher than eastern: 900-1600 m
- Stretch from Tapi to South of Nilgiri Hills
- Spread across: Gujarat, Maharashtra, Karnataka, Kerala, Tamil Nadu, Goa
- Cause Orographic rainfall
- Height increase from North to South
- Highest peak: Anaimudi (Anaimalai Hills)- 2695 m
- 2nd highest peak: Doddabetta (2637 m)
- Southernmost Hills: Cardamom Hills

Kerala

on Nilgiri Hills

Ooty is here (Hill station)

Tamil Nadu

Eastern Ghats

- Discontinuous, irregular, and Dissected by rivers
- Stretched from Mahanadi Valley to the Nilgiri → Connects Western Ghats to Eastern Ghats
- Highest peak: Mahendragiri (1501 m)/ Jindhagada (1690 m)
- Shevaroy Hills and Javadi Hills are located to the southeast to it

10.

A free-market economy is a crucial aspect of _____.

एक मुक्त-बाजार अर्थव्यवस्था _____ का एक महत्वपूर्ण पहलू है।

1. Socialism
2. Capitalism
3. Feudalism
4. Functionalist

Govt. regulations → Social welfare

Focuses more on profit → Demand and Supply

11.

Who among the following Mauryan kings turned to Buddhism and its tenet of non-violence after the Kalinga war?

261 BC

निम्नलिखित में से कौन सा मौर्य राजा कलिंग युद्ध के बाद बौद्ध धर्म और उसके अहिंसा के सिद्धांत की ओर मुड़ गया?

1. Ashoka
2. Dasharatha
3. Chandragupta Maurya
4. Bindusara

1. अशोक
2. दशरथ
3. चन्द्रगुप्त मौर्य
4. बिन्दुसार

Mentioned in XIII Rock Edict

Sat on throne after 8 yrs with the help of Radhagupta

Replaced Bherighosha with Dhammaghosha

Philosophy spread across through

- 14 Rock Edicts → Deciphered by James Prinsep
- 7 Pillar Inscription

12. Which of the following Articles of the Indian Constitution empowers the Parliament to restrict or abrogate the Fundamental rights of the members of the armed forces, para-military forces, police forces, intelligence agencies and analogous forces?

भारतीय संविधान का निम्नलिखित में से कौन सा अनुच्छेद संसद को सशस्त्र बलों, अर्ध-सैन्य बलों, पुलिस बलों, खुफिया एजेंसियों और अनुरूप बलों के सदस्यों के मौलिक अधिकारों को प्रतिबंधित या निरस्त करने का अधिकार देता है?

- ✓ Article 33
 - 2. Article 31
 - 3. Article 37
 - 4. Article 35
- 1. अनुच्छेद 33
 - 2. अनुच्छेद 31
 - 3. अनुच्छेद 37
 - 4. अनुच्छेद 35

• Art 37: They are non-justiciable

↓
DPSP: Non-justiciable rights

The power to make laws, give effect to certain specified FRs shall vest only in the Parliament

Under DPSP (non-justiciable)

• Art 34: Restrictions on FRs when Martial Law is enforced

13. Gopika Varma has won the Sangeet Natak Akademi Award in 2019 in which of the following dance forms?

गोपिका वर्मा ने निम्नलिखित में से किस नृत्य शैली में 2019 में संगीत नाटक अकादमी पुरस्कार जीता है?

- 1. Bharatanatyam
 - ✓ Mohiniyattam
 - 3. Kathak
 - 4. Kuchipudi
- 1. भरतनाट्यम
 - 2. मोहिनीअट्टम
 - 3. कथक
 - 4. कुचिपुडी

Kerala → Dedicated to Lord Vishnu

Exponents of Mohiniyattam

TRICK

Mohini Gopi K Kan Me Suna Jay Radha Krishna Ki

Amma

- Mohini — Mohiniyattam
- Gopi — Gopika Verma
- Kan — Kanak Rele
- Suna — Sunanda Nair
- Jay — Jayaprabha Menon
- Radha — Radha Dutta
- Krishna — Pallavi Krishnan
- Amma — Kalyanikutty Amma

→ Founder of Keral Kalyanam, 1952

14. Haripriya Nambudiri is an exponent of which Indian classical dance form?

हरिप्रिया नंबूदिरी किस भारतीय शास्त्रीय नृत्य शैली की प्रतिपादक हैं?

- | | |
|------------------|--------------|
| 1. Kuchipudi | 1. कुचिपुड़ी |
| 2. Odissi | 2. ओडिसी |
| 3. Bharatanatyam | 3. भरतनाट्यम |
| ✓ Kathakali | 4. कथकली |

Exponents of Kathakali

- Milena Salvini
- P.V. Balkrishna
- Kunchu Kurup
- Gopi Nath
- Kottakal Nandakumaran Nair
- Mrinali Sarabhai

TRICK

Bal Milena na mile Kuch Gopi ki Kali mil jaye

15. Which of the following is a type of connective tissue?

- Blood
- Bone
- Ligament

निम्नलिखित में से कौन संयोजी ऊतक का एक प्रकार है?

- रक्त
- हड्डी
- बंधन

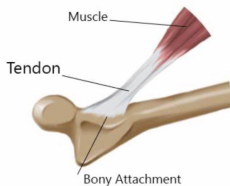
- Only III
- Only II and III
- ✓ I, II and III
- Only I and III

Group of cells

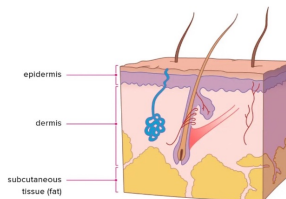
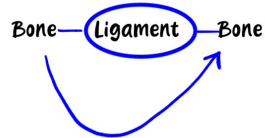
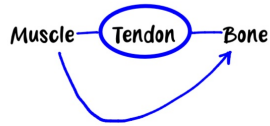
Connective Tissue

- Connects various body parts
- Cells are embedded in an intracellular matrix
- Matrix may be jelly, fluid, dense or rigid

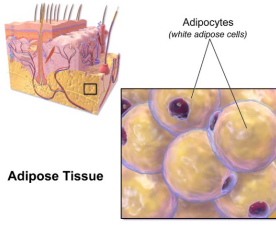
Cartilage Blood Bone



Tendons

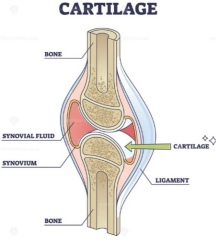


Dermis



Adipose Tissue

Adipose



CARTILAGE

Cartilage

16.

An isotope of which of the following is used in the treatment of cancer?

निम्नलिखित में से किसका आइसोटोप कैंसर के उपचार में प्रयोग किया जाता है?

- ✓ 1. Cobalt
- 2. Aluminium
- 3. Nickel
- 4. Iron

Same atomic no but different atomic mass

Isobars: Same atomic mass but different atomic no.

$^{131}_{53}\text{I}$: used in treatment of Goitre

$^{235}_{92}\text{U}$: used in reactors

Fuel installed in Kalpakkam, Tamil Nadu

Fast Breeder Reactor

Iodine is also used as an antiseptic

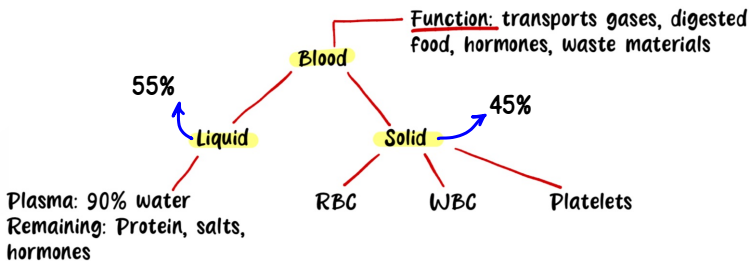
17.

How big are red blood cells in diameter?

लाल रक्त कोशिकाएं व्यास में कितनी बड़ी होती हैं?

- 1. 40.0 μm
- ✓ 2. 7.5 μm
- 3. 2.0 μm
- 4. 4.0 μm

RBCs > Platelets > WBCs



Solid

RBC

- red in colour due to presence of heme (Fe)
- Heme has high affinity towards oxygen
- Heme transports oxygen throughout the body to carry out respiration to produce energy
- Graveyard of RBC: Spleen
- Shape: Biconcave, disc-shaped
- Also known as erythrocytes

Time period of RBC: 120 days
End point: Spleen
Diameter: 6-8 μm

Formed in Red Bone Marrow

WBC

- Also known as leukocytes
- Prevent from infection, provide our body a defence mechanism
- Is formed in bone marrow

Types

- Monocytes
- Lymphocytes
- Neutrophils
- Basophils
- Eosinophils

- Shape: Irregular

Life span: 12 days-20 days

Diameter: 12-17 μm

Platelets

- Helps in blood clotting
- If suffering from dengue, it reduces
- Also known as thrombocytes

If WBC is low, it may cause Leukaemia

• study of blood: hematology

• Study of liver: Hepatology

18.

The Wadali Brothers are _____ singers.

वडाली ब्रदर्स _____ गायक हैं।

1. Bhatiali
2. Lavani
3. Sufi
4. Pandavani

1. भटियाली
2. लावनी
3. सूफी
4. पंडवानी

Maharashtra

Other dances

Koli
Lavani
Lezim
Dhangari Gaja
Tamasha
Gafa
Mouni

Chattisgarh

Baithakichi

Teejan Bai associated with it

19

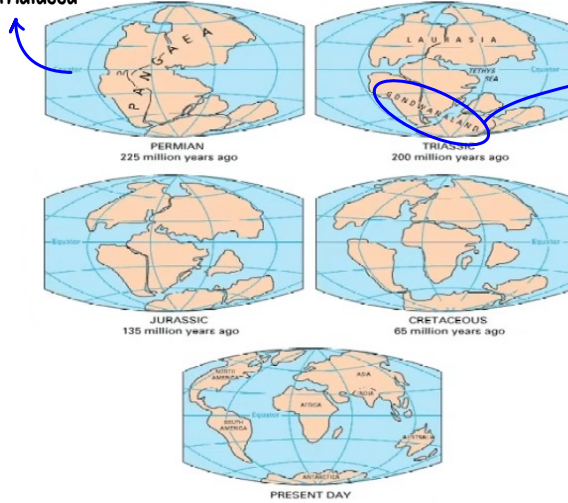
What is the name of the large supercontinent that existed 200 million years ago when all the continents were together?

उस विशाल महाद्वीप का क्या नाम है जो 200 मिलियन वर्ष पहले अस्तित्व में था जब सभी महाद्वीप एक साथ थे?

- ✓ Pangea
- 2. Asia
- 3. India
- 4. America

- 1. पैंजिया
- 2. एशिया
- 3. भारत
- 4. अमेरिका

Panthalassa



India is part of Gondwanaland

Continental drift theory → Alfred Wegener

Convection current theory → Arthur Holmes

Discussed the possibility of convection currents in the mantle area

The fluid asthenosphere circulates as convection currents underneath the solid lithosphere

Sea floor spreading theory → Harry Hess

20.

Which among the following is INCORRECT about the salient features of the 73rd Amendment Act?

73वें संशोधन अधिनियम की मुख्य विशेषताओं के बारे में निम्नलिखित में से कौन सा गलत है?

Part III → FRs

- ✓ The Act corresponds to Part III of the Constitution of India.
 - 2. The Act gives a Constitutional status to the Panchayati Raj Institutions.
 - 3. The Act has added the Eleventh Schedule to the Constitution of India.
 - 4. It contains 29 functional items of the Panchayats and deals with Article 243 to 243(O).
1. यह अधिनियम भारत के संविधान के भाग III से मेल खाता है।
 2. यह अधिनियम पंचायती राज संस्थाओं को संवैधानिक दर्जा देता है।
 3. इस अधिनियम ने भारत के संविधान में ग्यारहवीं अनुसूची जोड़ी है।
 4. इसमें पंचायतों की 29 कार्यात्मक वस्तुएं शामिल हैं और अनुच्छेद 243 से 243 (ओ) से संबंधित है।

• Bihar rank first, with respect to the percentage of total population as per 2011 Census

↳ Population density: 1106

• RBI is the regulatory body for microfinance institutions in India