

UPSC IFS 2024

AIR-1

KANIKA ANABH

Roll No. 16000474

GS 1 (FLT 5)

August 27, 2024

VAJIRAM & RAVI

Q1.

Ans

Maueryan Period marked the beginning of new types of architecture such as rock cut or stupa architecture and these were closely linked to religious philosophies.

Profound Impact on Maueryan Architecture

(I) Buddhist Philosophy

- ① Building of Stupas (e.g.) Sanchi Stupa at MP by Ashoka
- ② Building chaityas and viharas as prayer halls and resting places for monks and nuns.
- ③ Rock and Pillar edicts → highlighted the philosophy of Dhamma
- ④ Stupas were bare with only symbolism used → Hinayana philosophy.

II Hindu Philosophy

① Lion Capital at Sarnath → lion signifies strength and power in Hinduism

② Abacus has figures of horse → philosophy of determination and bull → strength

III Ajivika Philosophy

① Akbar had donated the Barabar caves at Gaya for Ajivikas

However, other factors also influenced — ~~fact~~

① Pillar style inspired by Achaemenid empire.

② Using easily available wood for manufacturing — frugal philosophy

e.g. Kumrahar Palace

The Sanchi Stupa by Ashoka is a masterpiece of architecture and is one of UNESCO's world heritage sites.



Q2.

Ans.

The Maratha Empire, ruling in the central and western parts of India between 17th to 19th century presented one of the biggest challenges to the British rule.

Fall of Maratha Empire: Removal of Last Hurdle

- ① Marathas exercised sovereignty in nearby areas by charging chauth (25% revenue) and sardeshmukhi → would now go to Britishers
- ② Increase in territorial extent of British empire in Pune, Satara etc.
- ③ Subsidiary alliance by treaty of Bassein weakened Marathas further → increased British control.

(Please do not write anything except the question number in this space) कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस कॉपी में नहीं लिखना चाहिए।
Candidates must not write on this margin

- ④ Marathas had a formidable navy and warships → now under British control
- ⑤ Eminent leaders in Maratha empire like Shivaji were threat to Britishers
- ⑥ Marathas accomplished in military architecture and guerilla warfare → no longer threat after 3rd Anglo Maratha war.

However, few challenges to British paramountcy remained :-

- ① Increasing resentment across India due to policies like Doctrine of Lapse in Jhansi, Awadh etc.
- ② Racism and General Service Enlistment Act caused dissent in army
- ③ Threat of an invasion from European power like France or Russia
These threats persisted till 1858 when Queen's Proclamation officially made us a colony of the 'British Crown'

Q3.

Ans.

The Home Rule Movement was started in India by Annie Besant and Bal Gangadhar Tilak in 1917 as a fresh approach to freedom struggle.

Transition from 'prayer and petition' to 'demand and agitation'

- ① Adopted a rights based approach for the first time
(e.g) "Swarajya is my birth right and I shall have it" — Tilak
- ② Demand for 'self rule' was given importance for 1st time.
- ③ Moved away from organising and distributing pamphlets and cards to organising masses
- ④ belief in power of people to make a change → was missing during moderate

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

5) Change in operating model by having branches/offices in several provinces (e.g.) in Central India

6) Sought to have a wider spread than any other movement before
(e.g.) was spread in Madras, Bombay, Central Provinces

7) Increasing unity among various classes of leaders (e.g.) Annie Besant, Tinnals, Tilak → had very different ideologies

Its success however was limited by—

1) Following only 'Constitutional protests'

2) Lack of any agenda after August Declaration 1917.

Gandhiji joined the movement and renamed it Swrajya Sabha in 1920 which was later merged in Congress.



Q 4
-

The first world war or the Great War happened between 1914 to 1918 and brought a spell of destruction unseen by the world before.

Failed to enshrine peace and stability

- ① end of war marked by Treaty of Versailles → humiliating for Germany
- ② war indemnity of billions of pounds had to be paid by Germany only even though many powers involved in war.
- ③ The fertile and resource rich regions of Alsace and Lorraine had to be given to France → reducing chances of economic stability in Germany.
- ④ Military strength of Germany was cut to huge extent → making it vulnerable to war.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

5) The war brought with it dangerous forms of warfare like Trench warfare and use of poisonous Chlorine gas

6) The Ottoman Empire in Turkey was dismembered - Instability in Turkey

7) League of Nations formed as a result of First World War failed to ensure peace. Next war in 20 years.

8) Hyperinflation in Germany → severe economic crisis

9) Post war global economy unstable → Crash of Wall Street → Economic Depression of 1930 in USA.

The humiliation and hyperinflation created suitable conditions for the rise of an autocrat in Germany called Adolf Hitler who paved way for 2nd World War.

Q5.

In 2024, there were more than 37 days when the Indo-Gangetic plains experienced temperatures above 40°C — hinting towards severe and prolonged heatwave.

Causes of Heatwaves in Indo-Gangetic Plains

- ① Atmospheric low pressure conditions and local winds such as loo
- ② High solar insolation as sun is overhead above the Tropic of Cancer and Equator Region
- ③ Lack of sufficient precipitation to moderate the effect of heat — distance from coast.
- ④ High population → high emissions of greenhouse gases → localised warming high.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

5) In cities like Delhi, Lucknow etc.
Urban
→ 'Heat Island Effect' increases temperatures

6) Global Warming and Climate Change
→ Heatwaves to become more frequent in coming decades.

Measures for management

1) Coming up with Heat Action Plans
(e.g.) seen in Ahmedabad.

2) Following NDMA, 2010 guidelines → availability of water, ORS facilities at regular intervals to prevent heatstroke.

3) Early Warning Systems to limit human mobility outside during these phases.

Extreme events such as this are a byproduct of Climate Change and adhering to Paris Agreement goals can help reduce heatwaves.



Q6

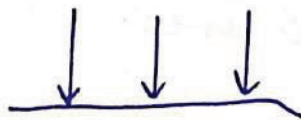
~~Open~~ Soil is an abiotic component of ecosystems comprising of both organic matter like humus and inorganic matter like minerals.

Soil character is highly variable and depends on geomorphology.

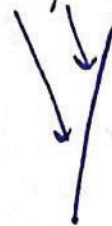
Geomorphology influencing Soil Character

① Parent material - Some parent materials are easily weathered such as limestone rocks → leading to soil formation with Calcium and Magnesium in it

② Topography - Soil on flat plains is formed easily and has a deeper profile compared to that on steep slopes



Flat ground : Direct Sun Rays → more erosion



Steep slope → oblique rays → less weathering

(Please do not write anything except the question number in this space)
कुछा इस स्थान में प्रश्न संख्या के अनिश्चित कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाथिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

3) Temperature of the Place

Tropical areas

High heat → more chemical action → deeper soil profile

Tundra

Lack of chemical action at sub zero temperature → ~~low~~ shallow profiles

4) Precipitation

very low precipitation
↓
lack organic matter
e.g. sandy soil.

High precipitation

Soil formed generally devoid of minerals due to leaching
e.g. laterite soil in Western Ghats

5) Rivers and deltas deposition

— have fertile alluvial soil due to Khadar
e.g. in Sunderban delta.

6) Proximity to coast

— leads to formation of saline soils
e.g. in Chennai, Gujarat

Due to excess human activity, soil in India has faced catastrophic erosion. There is need to reverse this degradation to fulfill SDG - 14 : life on land.

Ann

PDS

ben

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th



Q.7

Ans

Mangroves are special types of vegetation adapted to grow in saline situations such as in estuaries and they comprise 0.15% of India's total ~~so~~ land area.

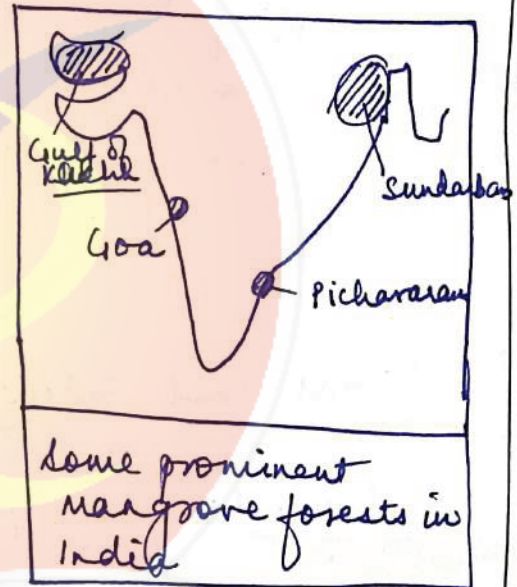
Status of India's mangrove ecosystem

① Excess exploitation has led to decline
e.g. in Sundarbans

② Clearing up of mangroves for traditional rice monoculture

③ Some mangrove trees like Conocarpus used for ~~de~~ornamentation in Gujarat → but turned to be invasive

④ Climate change and Pollution impacting health of mangroves



Function of mangroves as Bioshield

① Shield against pollution →

(i) Can uptake harmful minerals from water → helping in bioremediation

(ii) Take up excess salt content from estuarine water → making it liveable for other species

② Shield against disasters →

(i) Reduce the impact of Tsunamis or cyclones by acting as windbreak

(e.g) in 2004 Tsunami → acting as shield in Tamil Nadu coast

(ii) Up to 10 times more effective than gray infrastructure like waterbreaks (IUCN)

③ Shield against climate change - Can sequester 5 times more carbon than Tropical forest of same size (IUCN)

Keeping these benefits in mind, government has launched MISHTI scheme to protect mangroves.

Q8.

Ans.

The recent collapse of Silkyara Tunnel in Uttarakhand last year highlights stress on Himalayan geo resources.

Stress on Himalayan geo resources

- ① Mineral Resources (e.g.) recently Lithium discovered in Jammu (Reasi) → will lead to mining.
- ② Hydropower - Mega dams like Bhakra Nangal, Tehri dam on Himalayan Rivers.
- ③ Biodiversity - Hunting of animals like Chiru for wool.
- ④ Excess tourism → puts stress on fragile Himalayas along with higher waste and plastic pollution by tourists.
- ⑤ Groundwater Resources - Stressed by population increase and tourism.

(Please do not write anything except the question number in this space) कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis. (Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाथिए में नहीं लिखना चाहिए। Candidates must not write on this margin

Threatening lifetime lifeline of a billion

- ① Increased frequency of landslides (e.g.) in Manali in 2024.
- ② Increased cases of cloudbursts and glacial lake outburst floods (e.g.) Sikkim - South Lhonak glacier flood
- ③ More prone to earthquakes as Himalayas are in seismic zone IV and V
- ④ Dam induced flooding (e.g.) Chamoli. flood due to dam collapse.
- ⑤ Melting of the 'Third Pole' - Himalays and Hindu Kush glacier due to climate change.
- ⑥ water crisis in Himalayan areas (e.g.) in Lahaul and Spiti

To tackle the above problems, government has started National Mission for Sustainable Himalayas.



Q9.

Ans

Dr. B R Ambedkar defined described the rigidity of caste system by comparing it with a "tower without any stairs" to go from one level to next.

Caste deployed for parochial interests

- ① Often used to claim superiority over other sections (e.g) Brahmins over other castes.
- ② Used to gain professional advantages (e.g) giving promotion / favours to members of same caste.
- ③ Forming 'echo chambers' to reproclaim the greatness of a caste → instilling false sense of pride
- ④ Used to designate an occupation to a caste.
(e.g) 98% manual scavengers are SCs.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए
Candidates must not write on this margin

5) Using caste for exclusion or discrimination

(e.g.) in 2014 → 27% people still said to practice untouchability.

6) Using caste to find suitable partners to ensure 'purity' and avoid 'pollution'

(e.g.) caste based filters on Teeran Sathi

7) Intercaste marriages often meet fate of honour killings (e.g.) in Haryana

However, it is also used for social unity sometimes —

1) Retaining culture based on Kuldarta worship (e.g.) Chitragepta Pooja by Kayasthas.

2) Encouraging bright minds (e.g.) Felicitation ceremonies by caste groups.

"Caste is in India's air".

This saying has proven itself to be true through time.



(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्जिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

Q10

Ans.

Women Organisations in India saw their humble start during the late 19th - early 20th century and have grown considerably now.

Impact of Women Organisations in bridging divide

- ① All India Women's Conference (AIWC) by Margaret Cousins helped in promoting female equality, widow remarriage.
- ② Bharat Stree Mahamandal by Sarla Devi focused on cause of Women's education.
- ③ Bhartiya Mahila Parishad by Kanabai Ranade focused on education, preventing child marriage.
- ④ Bethune School → imparted education to young ladies.
Kadambini Ganguly studied medicine.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए
Candidates must not write on this margin

here and graduated in 1890 while women graduated from Oxford in 1920.

⑤ Women's University and Lady Hardinge Medical College → By DK Karve to promote women medical education.

⑥ Post independence → SEWA formed by Ela Bhatt to focus on women's education and economic independence.

⑦ NGOs like Jagori, Roshni etc.

However their impact was limited —

① Child marriage rampant even in present day in areas of Rajasthan.

② Women literacy on independence was only 8.9% despite multiple organisations' focus on it.

③ Increased sexual harassment against women (e.g) Kolkata Rape case.

"If development is not engendered, it's endangered. These organisations have tried to ensure "engendered" development.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

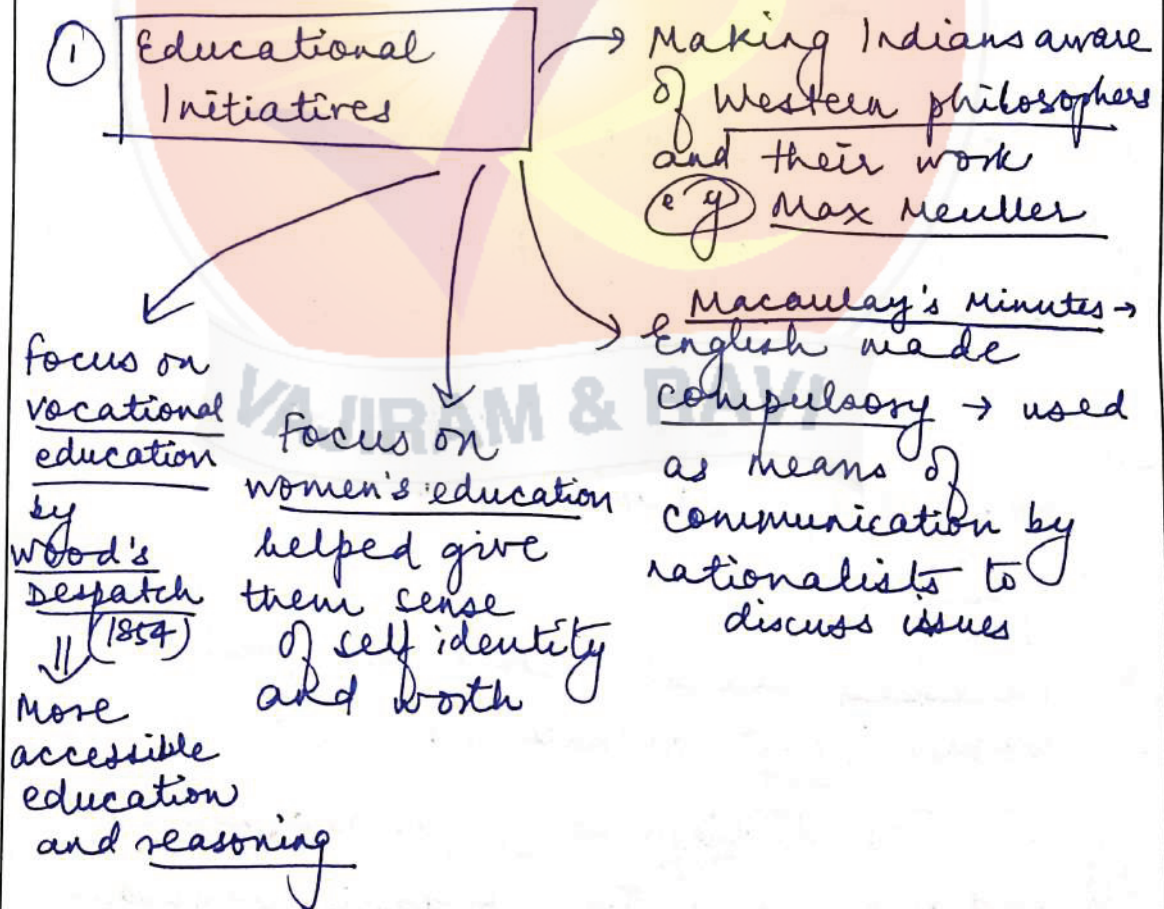
Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्जिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

Q11.

After their political supremacy had been established in India, Britishers started taking active steps in the educational and sociocultural domains for greater influence on India.

Regenerating Sense of Reasoning

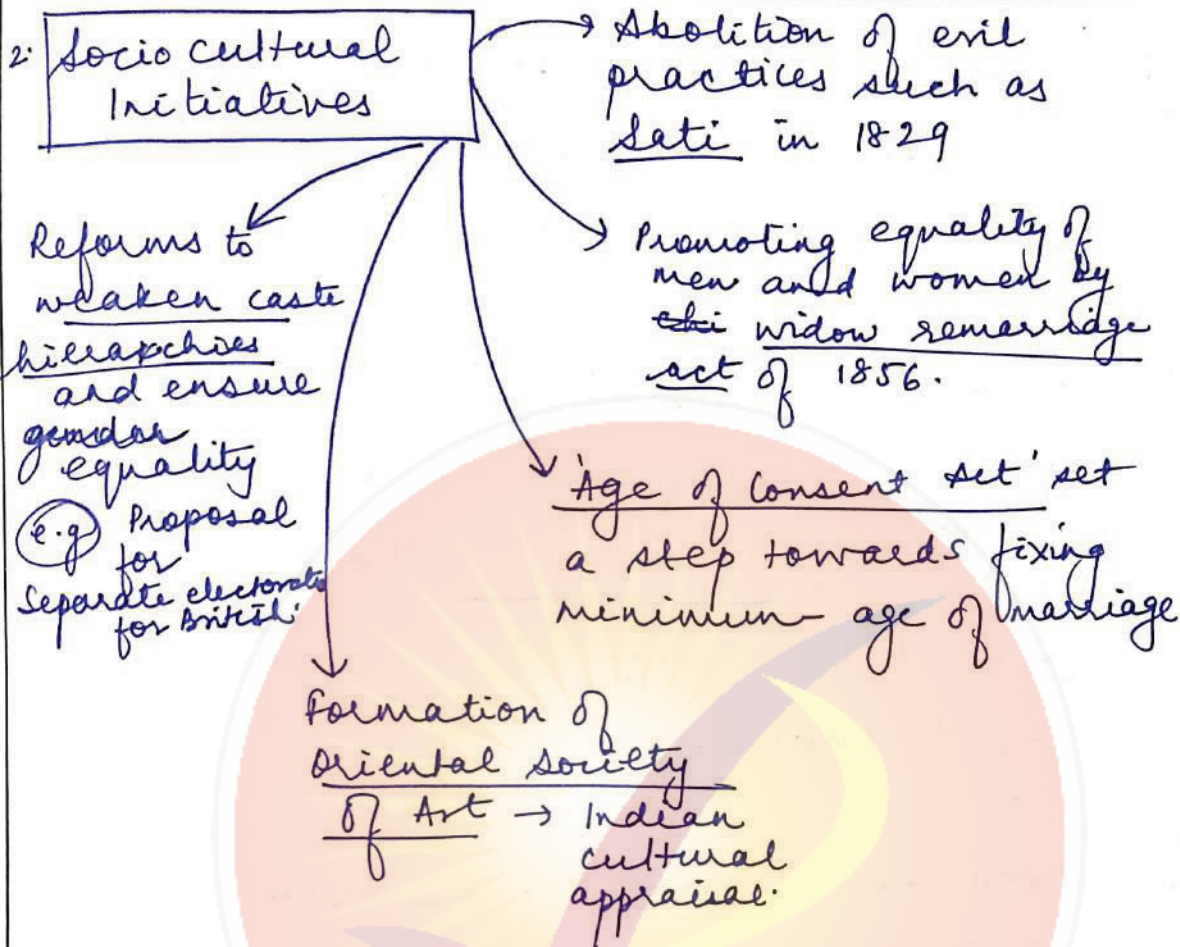


UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।



However, ~~none~~ ^{most} of these initiatives were directed towards securing their interests

- ① Education made more theoretical and rote learning based → suitable for clerical jobs not critical thinking
- ② Education restricted for few by neglecting mass primary education
- ③ Focus of women's education was only on "home sciences" to make them good housewives and mothers.

④ Indian culture considered uncivilised and reforms were part of their "White man's Burden"

⑤ Sense of cultural inferiority prevailed
"A single shelf in a good European library is worth more than all Oriental literature" → remarked by Macaulay.

⑥ even some good reforms such as sati ban, ~~the~~ widow remarriage were seen as interference in our customs by some.

These reforms were not just the initiative of British but tireless efforts of our reformers like Raja Ram Mohan, Ishwar Chandra, Vidyasagar etc.

Q12

The British Empire was known to follow a 'Carrot and Stick' policy in their constitutional reforms in India — leading to reactive policies.

Reactive Rather Than Genuine Efforts

① Regulating Act of 1773 and Pitt's Act of 1784 → to reduce corruption by East India Company officials and ensure revenues for its shareholders.

② 1813 Regulating Act ended monopoly of East India company in many goods → in response to fear of Continental Blockade by Napoleon.

③ same act also allowed missionaries in India and education budget of 1 lakh per year → to spread Christianity.

- 4) 1858 Act of Good Governance or Queen Victoria's Proclamation was also reactive
- i) Increased proportion of Europeans in army to prevent further rebellion.
 - ii) Labelling 'Gorkhas and Pathans as 'martial races' to reward their loyalty to British crown in 1857 revolt.
 - iii) following a policy of 'divide and rule' to curb Hindu Muslim unity rather than genuine concern for Muslims.
- 5) 1892 - India Councils Act allowed discussion of budget and asking of questions after slogans of 'No taxation without representation' → but many parts still not votable.
- 6) Morley Minto Reforms of 1909 → Separate electorate to further divide and rule policy after 1905 Swadeshi revolt
- 7) Montague Chelmsford Reforms 1919 → to pacify demands for 'self government' being made by Home Rule League.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

8) Indian Act of 1935 - to create Federation instead of granting freedom as per 'Swarajya' demand made at 1929 Lahore session of Congress.

9) August Offer, Shimla Plan, Wavell Plan etc. → to ensure India's involvement in 2nd world war

10) Indian Independence Act 1947 → passed in haste to escape responsibility of Partition and violence.

There were few genuine efforts too: -

Genuine Efforts

→ local self government by Lord Ripon

→ Lord Metcalfe: liberator of Indian Press

Reservation for depressed classes in assemblies.

(Please do not write anything except the question number in this space) कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

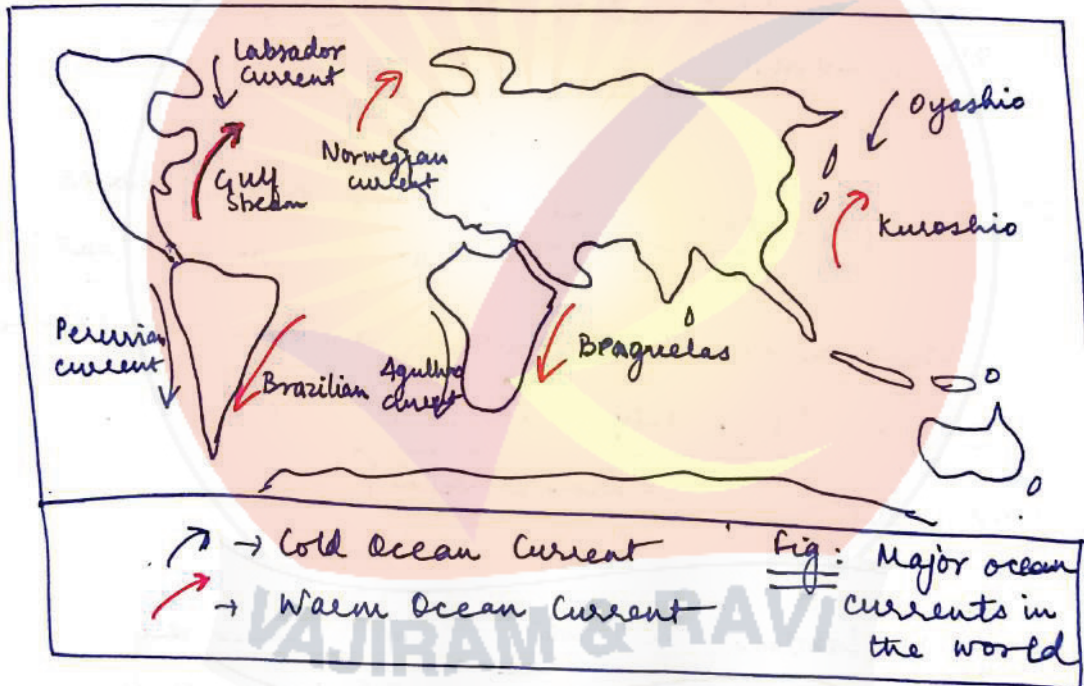
UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

Q.13.

Ocean currents are moving, predictable and directional masses of ocean water moving under the influence of gravity, Coriolis force, thermohaline features etc.



Moderating Thermal extremities along coasts

- ① Cold ocean currents can prevent excessive heating and ensure good fish resources by upwelling. (e.g) Peruvian current

② Warm Ocean Currents play very important role in moderating temperatures

① Along British coast : plays moderating role by raising temperature in Britain which would have been very cold due to high latitude.
Moderation done by warm Norwegian current.

② Along Japan Coast : while parts closer to Oyashio current experience significant cold → temperatures along Kuroshio current's coast is moderate. (warm current)

③ Gulf Stream Current → moderates temperatures along Mexico and east coast of USA.

④ Brazilian and Agulhas Current → ensure enough rainfall on eastern coasts of South America and Africa respectively → prevent desert formation

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

(V) Similarly, East Australian Current along eastern Australia ensures abundant rainfall and agriculture

(3) Meeting points of Warm and Cold ocean currents leads to rainfall and fogging → climate moderation

(e.g) Meeting point of Labrador and Gulf Stream near St Lawrence in USA

Ocean currents through AMOC also help maintain a global conveyor belt circulation to ensure mixing of masses of water.

VAJIRAM & RAVI

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

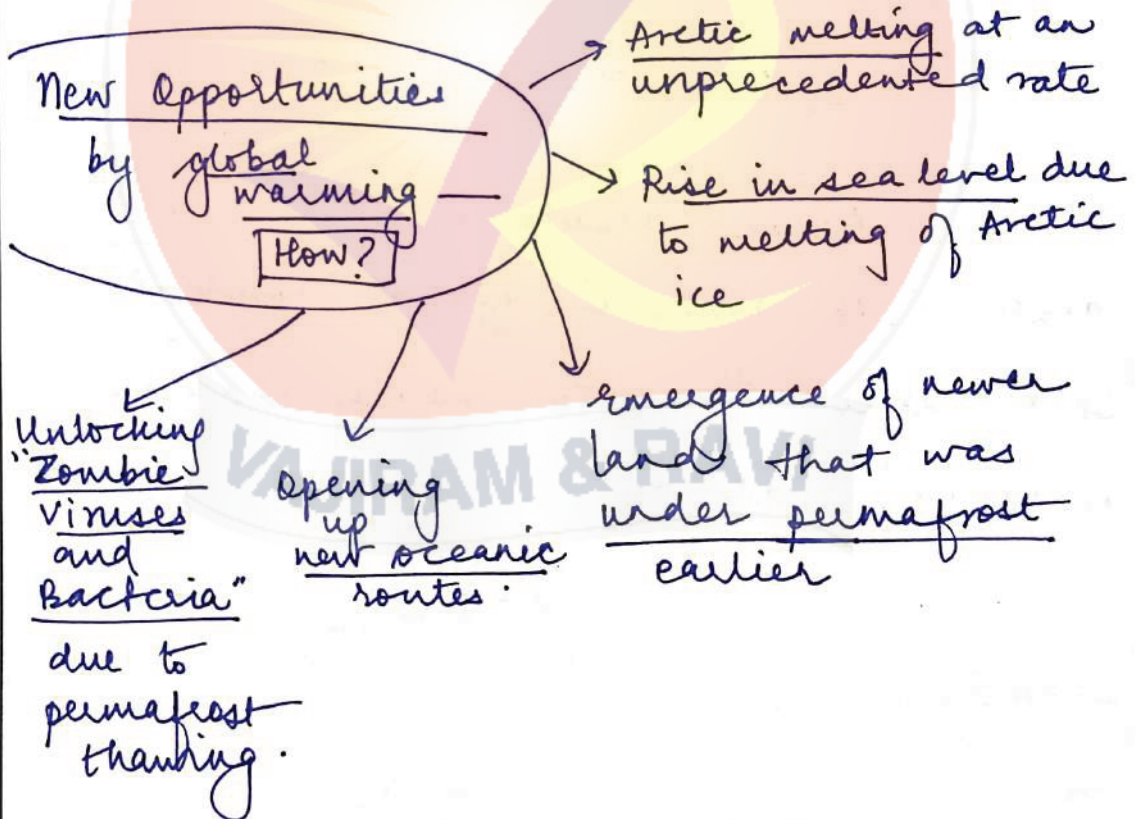
Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

Q 14.

Ans.

The Arctic Region is experiencing "Arctic Amplification" due to global warming with its snow melting nearly two times faster than any other region in world.



NEW WORLD OF OPPORTUNITIES

① Bio Resources

① Fisheries and Sea weed Industry can benefit with more than 50

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

billion tonnes of fishery resources.

② Zombie Viruses and Bacteria → can be studied for better understanding of biodiversity and previous glaciation events

III Non Bio Resources

① Energy — Arctic is a storehouse of crude oil, natural gas and coal → ensuring global energy security

(e.g) Russia, Canada even have mines in Arctic

② Minerals — such as Iron, Tin, Copper etc. can be found abundantly. Critical Minerals could also be present.

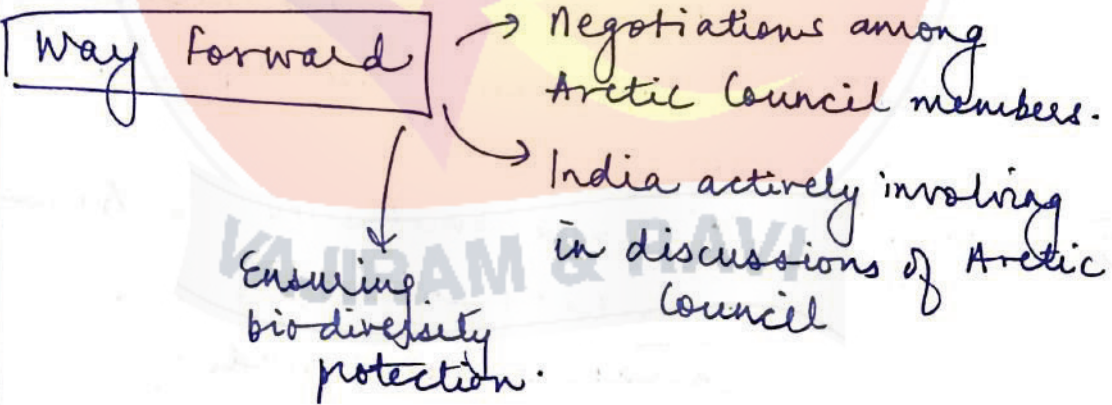
③ Strategic — New sea routes due to Arctic ~~sea~~ ice melting could enhance global trade.

④ Territorial claims over land in Arctic

However, these opportunities come at a cost.

① Arctic melting will reduce albedo and further amplify global warming.

- ② Threat posed by newly thawed microorganisms — potential for pandemic
- ③ Overexploitation and destruction of Arctic ecosystem.
- ④ oil spills could increase marine pollution in the region.
- ⑤ Conflicts among countries over control on Arctic resources — unlike Antarctica, Arctic is not global common.



These steps will lead us to
SDG — 13 : life Under Water.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को
इस हाशिए में
नहीं लिखना
चाहिए।
Candidates
must not
write on this
margin

(Please do not
write anything
except the
question number
in this space)
कृपया इस स्थान
में प्रश्न संख्या के
अतिरिक्त कुछ
न लिखें।

Q15

Ans.

India - with a varied geography and demography is home to various industries that are influenced by these factors.

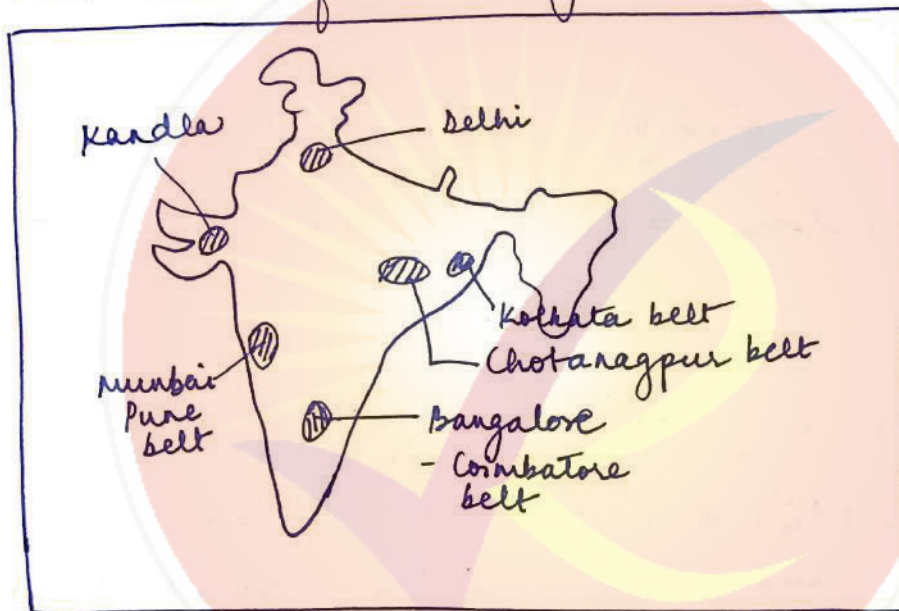


Fig: Major industrial regions in India

Primacy of Demography in Industry Location

- ① In North West India → mainly agrarian economy and livelihood → More food processing industries and high population
- ② Chotanagpur Region → due to poverty, cheap labour rates → suitable for Iron and Steel Industry. ∴ Also for Coal

- ③ Delhi, Mumbai → educated youth available → proliferation of service sector
- ④ Mumbai has suitable climate & technical know how for pharma industry.
- ⑤ Southern India → lots of sugarcane cultivation → sugar mills and industries present.
- ⑥ Cheap and semi-skilled labour in Kolkata → proliferation of textile and footwear industries (e.g.) Khadims.
- ⑦ In rural areas, more women left behind after men migrate → handicraft and food processing industries (e.g.) Madhubani paintings in Bihar Agri ladders in Jharkhand
- ⑧ lot of well educated, skilled youth in Bangalore → IT industry boom.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

However, other factors also play a role in determining industry location such as —

- ① Raw material presence closeby (e.g.) coal near iron plants
- ② Presence of water sources such as river for water, hydroelectricity.
- ③ favourable economic policies (e.g.) industries in Kandla SEZ
- ④ Production linked Incentives and Manufacturing Parks e.g. PM MITRA for textiles.

Thus, several factors play a role in determining industry location.

VAJIRAM & RAVI

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

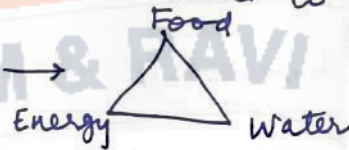
Q.16

Ans

Despite being a tropical country, only about 1.6% of our primary energy mix consists of solar energy as per Economic Survey '24. This indicates towards need to expand solar energy but it has challenges.

Competing demand for land limiting development of mega solar parks.

① Can disrupt agriculture lands and reduce outputs → threat to food security and nexus



② India's population is over 140 billion and nearly 35% people undernourished → Need to increase agriculture outputs

③ Land acquisition often challenge due to protest from local communities

④ Disruption to Biodiversity (e.g.) in Jaisalmer → Solar Park disrupting habitat of great Indian Bustard.

⑤ Solar waste generated due to PV cells → can cause land degradation.

Potential of Rooftop Solar Power

① "Decentralisation" of solar power generation process → easier to generate power.

② Efficient resource utilisation → using vacant land/^{area} on terraces of homes

③ Increased income for individual households → can sell extra amount to power companies.

④ Conscious energy use → conserving energy to be able to sell it to generate profits

⑤ Can decrease Urban Heat Island effect in urban areas by acting as a proxy for "cool roof" technology

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

⑥ Multiplier effect - small amount of solar energy generation in multiple houses → Cumulatively contributes significantly to solar energy.

⑦ Reduction of transmission losses due to 'Use at source' model.

Challenges

- High initial cost of installation
- Unpredictability of solar energy availability → in monsoons.
- Difficulties in integrating grids of multiple houses together.

The potential however outweighs challenges and hence, government has launched 'Surya Ghar Bijlee Yojana' this year to promote rooftop solar in over 1 crore households.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

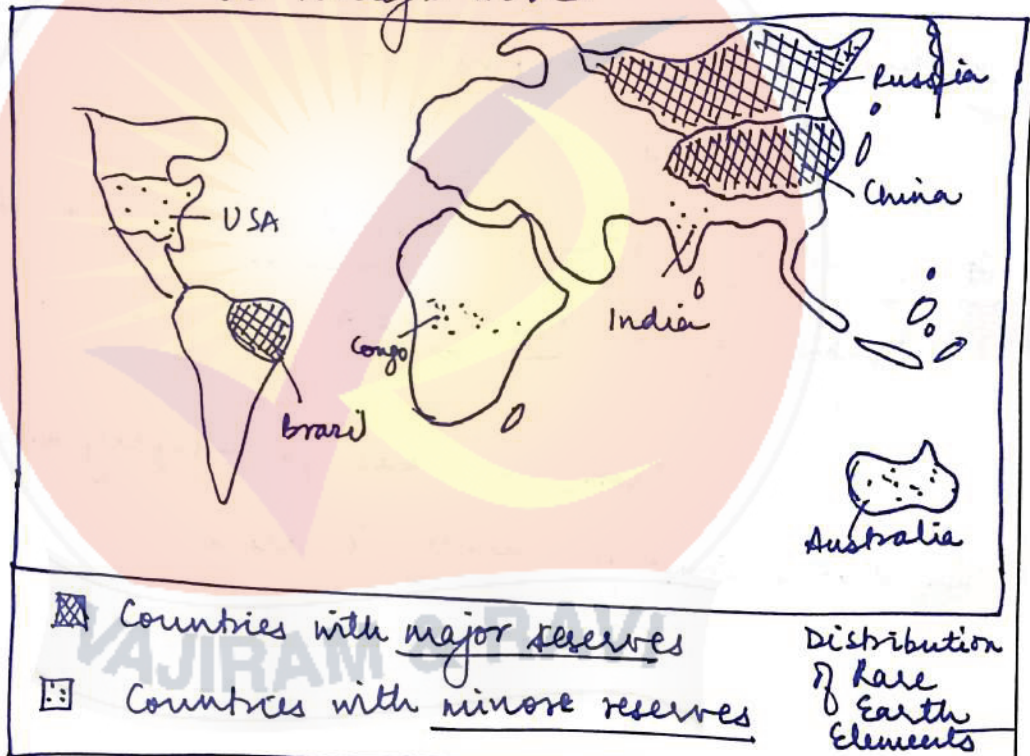
Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्गिण में नहीं लिखना चाहिए।
Candidates must not write on this margin.

Q17:

Ans -

Rare Earth Elements (REEs) are a group of 'F block elements' which are limited in their distribution but are finding newer applications in today's world.



Distribution

→ Bulk of REEs found in China, Brazil and Russia
→ India, USA have few reserves e.g. Yttrium, Cerium etc.
Resource potential unexplored for many areas.

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिये में नहीं लिखना चाहिए।
Candidates must not write on this margin

Importance in 4th Industrial Revolution

- ① Can be used in automation based parts and their chips.
(e.g.) could replace silicon in chips.
- ② Can be used to make sustainable solar cells → used to power industrial revolution.
- ③ Elements like Europium, scandium etc. can be studied for superconductivity → making machines highly efficient.
- ④ Metals like Tantalum discovered in Kuttaj basin in India → applications in electronics, semiconductor technology.
- ⑤ Can find application in space and defence technology for new age

However, Challenges

- lack of enough exploration
- limited reach, so expensive
- mining: adverse environmental impact

Way forward

- ① Investing more in R&D by Govt for better and accurate estimation in India
- ② Testing in different conditions to identify unique properties -
- ③ Ensuring diverse supply chains for minerals not found in India but are still critical.

India has joined Mineral Supply Partnership (MSP) of the USA to ensure supply sustainability for these minerals.



UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

Q18

India ^{on} "one hand" lifted 312 million people out of poverty in past few years with a multidimensional poverty of only 15%. On the other hand its rank in Global Hunger Index is 111 out of 180 countries

Juxtaposition of improvement over NPI and GHI

- ① Indicates that despite decrease in poverty, nutritional outcomes are still low (e.g.) 38% wasting in children (NFHS-5)
- ② Mismatch in demand and supply of nutrition despite a PDS which covers 80 crore people.
- ③ Indication of microhunger or hidden hunger due to micronutrient deficiency. (e.g.) 50% women anaemic (NFHS-5)

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

- ④ Also indicates India's crisis of abundance where lakhs of metric tonnes of wasted food exists along with child hunger.
- ⑤ Even if people are being lifted out of poverty, they're spending on unhealthy food → poor nutrition
(e.g) increasing demand for fast food in India
- ⑥ Leakages and corruption in the food delivery systems → causing exclusion errors.
- ⑦ Rising food inflation → 9.4% as per Economic Survey '24 → unaffordable vegetables and fruits
- ⑧ Climate change destroying crops → e.g. wheat productivity went down due to heat waves in Punjab.
- ⑨ Excess reliance on rice-wheat over millets or pulses → yield half nutrition only

Please do not write anything except the question number in this space.
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

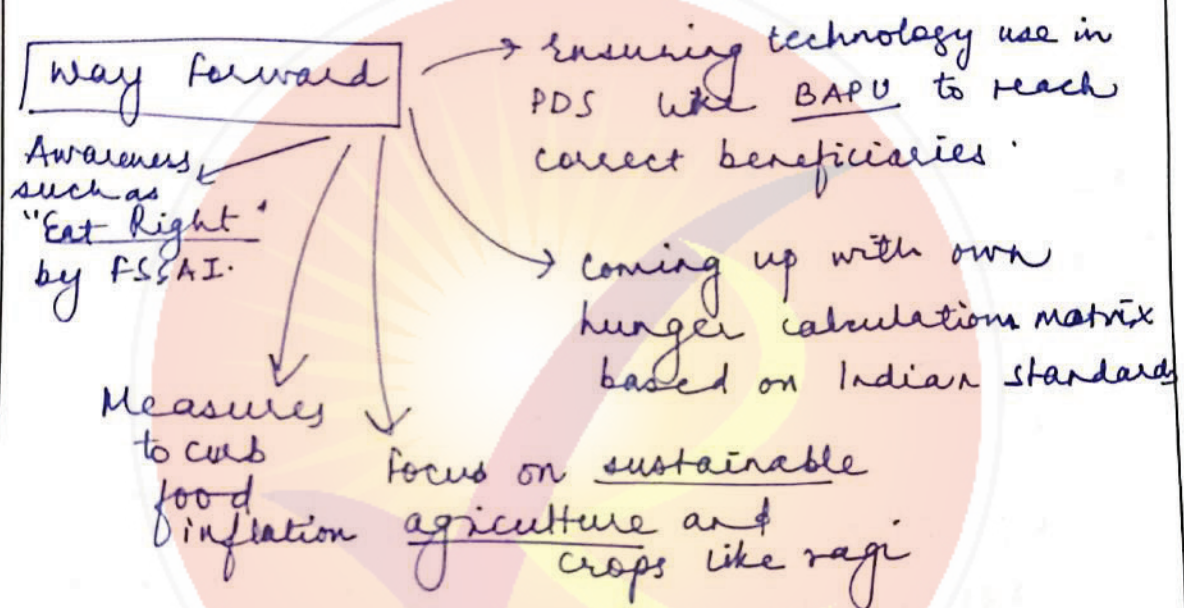
UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस दृष्टिकोण में नहीं लिखना चाहिए।
Candidates must not write on this margin

The juxtaposition could also be due to —

- ① Faulty calculations metrics based on western standards of GHI.
- ② Overestimation of poverty alleviation numbers by MPI.



These steps will be important to achieve the twin goals of SDG 1 and SDG 2 — No Poverty and Zero Hunger.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin.

Q19

PVTGs are a group of severely backward tribes. India has 75 PVTGs spread over 18 States and UTs.

Criteria for PVTG as per Dhebar commission

- Primitive technology level
- Lack of education
- Isolation
- Economically backward
- Stagnant / declining population.

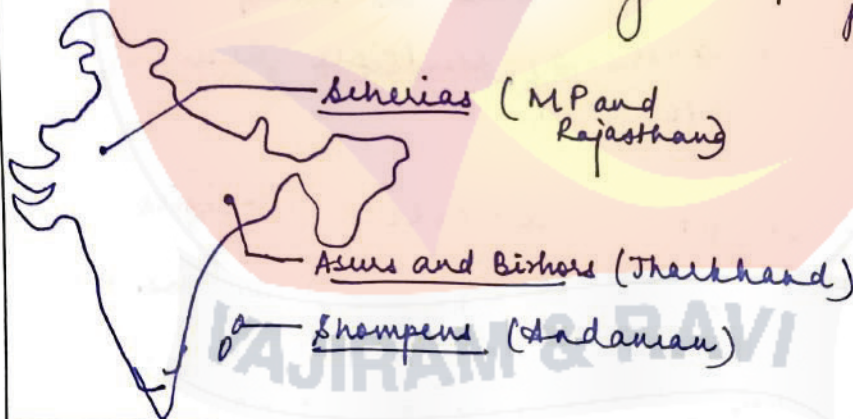


Fig: Some PVTGs in India

Challenges faced by PVTGs

- ① Isolation with outside world → unaware of technological developments etc.
- ② Some tribes like Onges, Sentinelese in Andaman very aggressive towards any outsiders → upliftment difficult.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

- ③ Poor levels of literacy and education (even lower than 59% which is for STs in general)
- ④ Lack of access to healthcare interventions → deaths due to preventable diseases.
- ⑤ Unviable economic activity (E.g) Musahar community in Thakhand earlier had to consume rats
- ⑥ Higher susceptibility to some genetic diseases due to genetics (E.g) Sickle Cell Anaemia → as defence against malaria.
- ⑦ Stagnant or declining population → loss of community, customs and traditional wisdom.

Significance of PM - JANMAN scheme

- ① Specially designed for the upliftment of PVTG community.
- ② Will enable infrastructure development and facilities in areas where PVTGs are found.

(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस कॉपी में नहीं लिखना चाहिए।
Candidates must not write on this margin.

- ③ Ensuring connectivity in these areas by building roads and railnetwork
- ④ Social infrastructure development by building schools and hospitals in areas of PVTG residence.
- ⑤ Ensuring financial inclusion by opening of PSB. branches in remote areas → making them accessible for government welfare schemes.

These steps will truly help in the success of the motto - "Sabka Sath, Sabka Vikas"

VAJIRAM & RAVI

(Please do not write anything except the question number in this space) कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis. (Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए। Candidates must not write on this margin

Q20

India is an ancient land of customs, traditions and many religions but several beliefs of these religions have been misinterpreted to promote patriarchal beliefs

Patriarchal Interpretation of Religion Beliefs

Impact on Socio-Economic Status of women.

① Preventing temple entry during menstruation interpreted as 'women's impurity' (e.g.) Sabarimala

Women given secondary status, even treated as untouchables in that time.

② 'Kanyadaan' during marriage → interpreted wrongly

Women sometimes thought as 'burden' or 'objects' to be given away

③ Fasts kept for good health and well being of family

Women considered inferior to male counterparts, Fasting restricted to females only.



(Please do not write anything except the question number in this space)
कृपया इस स्थान में प्रश्न संख्या के अतिरिक्त कुछ न लिखें।

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को इस शरीर में नहीं लिखना चाहिए।
Candidates must not write on this margin.

④ Covering face with veil in Hinduism and Islam

Women restricted to 'domestic sphere' and not participating in economy.

⑤ Promoting polite behaviour and care towards family

Women must be subservient to others.

⑥ Streedhan to ensure finances for women → interpreted as ' dowry'

Bride burning, torture cases seen in many parts of India

⑦ Mangalsutra, Sindoor in married women for 'shringar' → interpreted as marks of 'possession'

Madras High Court Judge → Not wearing mangalsutra - ultimale form of cruelty to husband

way forward

- ① Need to revisit some contentious provisions in religious texts like manusmriti
- ② Discussion and debates among religious

UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

उम्मीदवारों को
इस हाशिए में
नहीं लिखना
चाहिए
Candidates
must not
write on this
margin

leaders and scholars to ensure true message of beliefs reaches people.

③ Liberal interpretation of provisions
e.g. Raja Ram Mohan Roy had done for
Sati

④ Awareness campaigns and initiatives
like Beti Bachao, Beti Padhao

As Dr. Ambedkar said, "I
measure the progress of a community by
the status of its women". We must
strive to improve the status of women

VAJIRAM & RAVI