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GENERAL STUDIES (TEST CODE : 1513)

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Medium Eng./Hindi	ENGLISH	Registration Number	578542
Center	DELHI	Date	22.12.21

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
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3	10	
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17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Time : 2 hours 58 mins.

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

1. In the context of protection of monuments, explain the role of the Archaeological Survey of India (ASI). Also, comment on the challenges faced by ASI and measures taken to address these. (150 words) 10

स्मारकों के संरक्षण के संदर्भ में, भारतीय पुरातत्व सर्वेक्षण (ASI) की भूमिका की व्याख्या कीजिए। साथ ही, ASI द्वारा सामना की जाने वाली चुनौतियों और उनसे निपटने के लिए किए गए उपायों पर टिप्पणी कीजिए।

India has more than 5 lakh monuments.

They need protection owing to preservation of cultural heritage, damage due to years of neglect and their tourism potential.

Role of Archaeological survey of India (ASI):-

- ① It is responsible for implementing Archaeological sites & Ancient monuments & Remains Act (1985).
- ② Ensures that monuments are retrofitted, repaired and given retouching.
- ③ Prescribes regulations for management of monuments.
- ④ Gives adequate protection to monuments declared of national importance.

[Challenge faced]:

- ① Shortage of human resource to implement these policies as also expertise to handle the technical challenges.
- ② Inadequate funding to preserve the vast landscape, leading to many monuments in degrading state.
- ③ Unawareness among people leading to wasteful tourism, where people scribble on walls and throw waste.

[Measures taken]:-

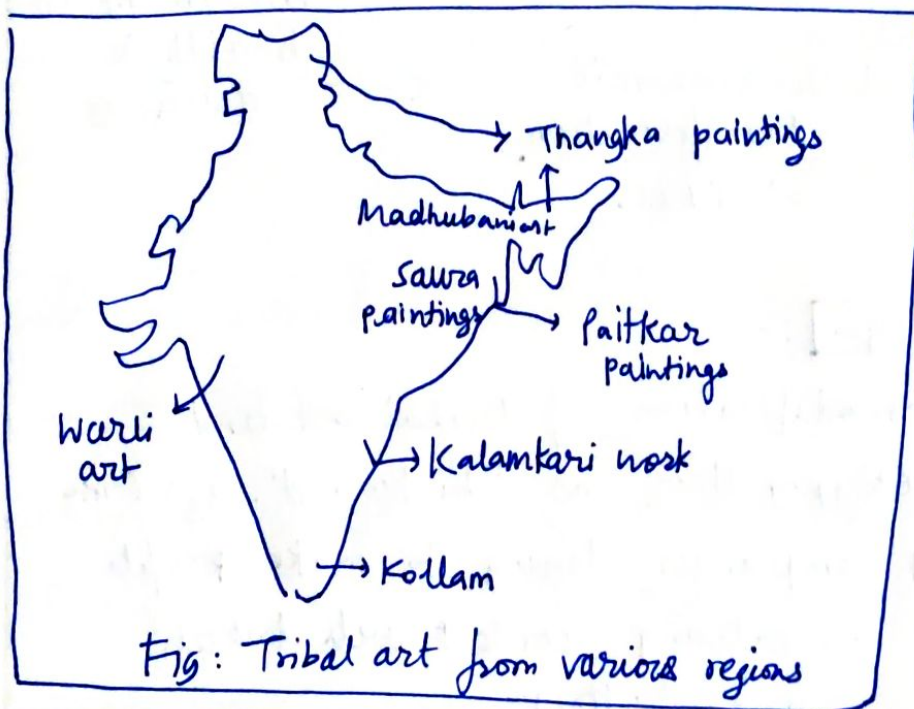
- ① PRASAD and HRIDAY scheme for development of heritage cities.
- ② Dekho apna Desh scheme to develop tourist places.
- ③ Government announced to develop archaeological sites in Budget 2020.

Thus, there is a need to protect our heritage, as per Article 51A(f) by strengthening AI.

2. Tribal art has a huge potential for acting as an economic resource and a tool for socio-economic transformation of tribals in India. Elucidate. Also highlight the challenges in this context. (150 words) 10

जनजातीय कला में भारत में जनजातियों के सामाजिक-आर्थिक परिवर्तन के लिए एक आर्थिक संसाधन एवं एक उपकरण के रूप में कार्य करने की असीम क्षमता है। स्पष्ट कीजिए। साथ ही, इस संदर्भ में विद्यमान चुनौतियों को भी रेखांकित कीजिए।

Tribal art is expressed in multitude of forms and styles, indicating rich diversity among the tribes.



Potential as economic resource and social transformation :-

① Increased demand for ethnic art

has meant that tribal art is in huge demand globally.

eg: TRIFED signed Global Selling

Program with Amazon to sell tribal art.

② Can give self confidence to tribes who are constantly facing pressure of being "backward", when their indigenous art will be demanded.

③ Greater economic development → Increased investment in health & education
 ← socio-economic transformation of tribes.

Challenges :-

① Commodification of tribal art and Stereotyping them as "backward". eg: Some tourist companies trying to make profits by advertising "contact with tribals" (Xaxa committee)

② Duplication of art and no standardisation has meant that tribals may not be the beneficiaries of their art.

Thus, there is need for protecting tribal art by giving Geographical Indication tags.

3. Though the Government of India Act, 1919 proposed some radical administrative changes, it remained short of fulfilling aspirations of Indians. Elaborate. (150 words) 10

यद्यपि भारत सरकार अधिनियम, 1919 ने कुछ मौलिक प्रशासनिक परिवर्तनों का प्रस्ताव किया, तथापि यह भारतीयों की आकांक्षाओं को पूरा करने में असमर्थ रहा। सविस्तार वर्णन कीजिए।

Montagu-Chelmsford reforms introduced Government of India Act 1919 as the 'carrot' of the carrot and stick policy. These were based on Montagu's statement of developing self government in India.

Radical administrative changes in Government of India Act 1919

- ① Introduction of dyarchy at provincial level.

It meant that for transferred subjects, ministers could be held accountable and removed by no-confidence motion.

- ② Women were given the right to vote for the 1st time.

- ③ Provincial budget was made separate from the Central budget, highlighting their growing autonomy.
- ④ Introduction of Bicameralism at Central level with Legislative Council & assembly.
- ⑤ Provision for Public Service Commission for recruitment to administrative services.

Shortcomings :

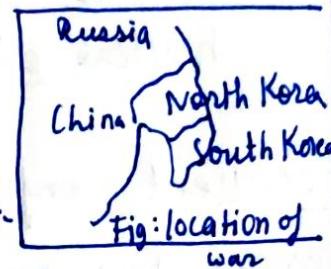
- ① No ^{real} devolution of powers at provincial level and frequent conflicts due to dyarchy.
- ② Non responsible government at Central level.
- ③ Governor general retained the powers of veto and ordinances.
- ④ States representation in Assembly based on their relative importance.

Thus, the act was criticised of falling short of aspirations in IMC Bombay session under Hasan Imam.

4. Often deemed as the 'forgotten conflict', the Korean War had far-reaching implications. Elucidate. (150 words) 10

प्रायः 'विस्मृत संघर्ष' के रूप में ज्ञात कोरियाई युद्ध के दूरगामी प्रभाव थे। स्पष्ट कीजिए।

Korean War (1949-53) was a result of Cold war politics between Communist and Capitalist block of nations, under USSR & USA respectively.



Deemed as "forgotten conflict" :-

- ① Though the war occurred on large scale, relative stability and stalemate regarding border issue has meant that the conflict is often forgotten.
- ② Normalisation of separate societies, unlike Vietnam or Germany's divisions, has resulted in status quo and deepening of different economic systems.

Far reaching implications :-

- ① It has led to division of Korea into capitalist and communist blocs.

② North Korea has developed nuclear arsenal to protect its sovereignty against USA Backed South Korea.

2.1. This poses clangers to use of nuclear technology and hampers the goal of nuclear disarmament.

③ Frequent conflict:- Normalisation of two Koreas has meant frequent attacks by North Koreans like recent bombing of freindship bridge in 2020.

④ Economic underdevelopment of North Korea due to sanctions by USA, has meant further isolation and shift towards China, in global geo-politics.

Thus, Korean War continues to shape global discourse, especially in field of nuclear disarmament.

5. Explaining the origin of earth's magnetism, discuss its significance with special reference to its interaction with solar particles. (150 words) 10

पृथ्वी के चुम्बकत्व की उत्पत्ति की व्याख्या करते हुए, सौर कणों के साथ इसकी अंतःक्रिया के विशेष संदर्भ में इसके महत्व पर चर्चा कीजिए।

Geomagnetism refers to the property of earth acting as a magnet, with periodic reversal in the direction of polarisation.

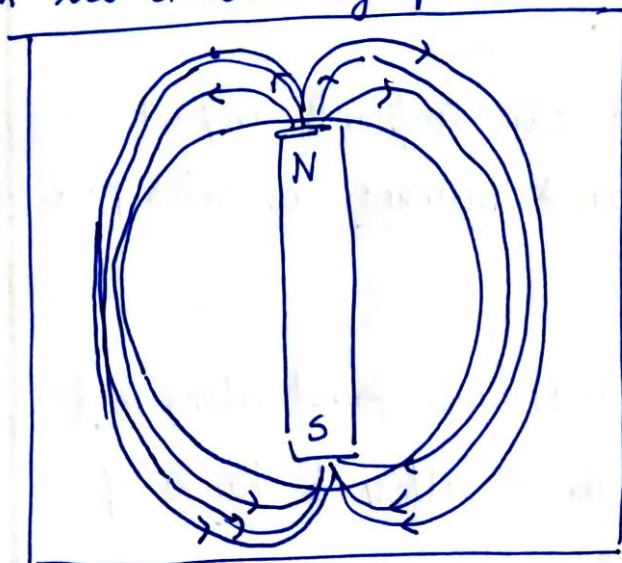


Fig: Geomagnetism of Earth

Origin of magnetism

- ① Metallic elements like nickel and iron within the earth's core led to generation of magnetism.
- ② Electric potential generated due to electrons within the charged metals was the reason.

Significance of magnetism :-

- ① Interaction with solar particles : Magnetic fields from earth's core interact with solar particles + generate magnetic field lines called Auroras in Thermosphere.

1.1. Their interaction can significantly impact presence of telecom & humans in outerspace.
- ② Sea floor study : Materials found along mid oceanic ridges show alternate bands of reverse polarity, helped to understand sea floor spreading at ridges and submergence at crests.
- ③ Magnetism also influences the presence of minerals in earth's crust.

Thus, the phenomenon of geo-magnetism has wide implications on human life.

6. Discussing the challenges pertaining to dam safety in India, highlight the potential of Dam Rehabilitation and Improvement Project to address them.

(150 words) 10

भारत में बांध सुरक्षा से संबंधित चुनौतियों पर चर्चा करते हुए, उन्हें दूर करने के लिए बांध पुनर्बास और सुधार परियोजना की क्षमता पर प्रकाश डालिए।

India has 3rd largest network of dams in the world. But, their safety needs to be ensured.

Challenges in dam safety :-

① Old age of dams: Out of 5000 dams, nearly 20% are of pre-colonial times resulting in weak structures.

eg: Krishnaraj Sagar dam is 90 years old, raising safety concerns.

② High siltation: Many dams experience heavy siltation, that leads to inadequate water storage.

③ Flooding in downstream areas due to improper handling of dams.

Potential of Dam Rehabilitation & Improvement Program :-

- ① DRIP project, implemented with World Bank aims to refurbish the old dams and retrofit the inadequacies.
- ② It will focus on improving dams that are crucial for a region and ensure structural and technical improvements.

As Former PM Nehru called Dams "temples of modern India," there is a need to reinvigorate steps on dam safety.

7. What is understood by Carbon Compensation Depth (CCD)? Discuss the implications of the rise in this depth due to anthropogenic warming as well.
(150 words) 10

कार्बोनेट क्षतिपूर्ति गहराई या कार्बन कंपनसेशन डेप्थ (CCD) से क्या अभिप्राय है? साथ ही, मानवजनित तापन (एंथ्रोपोजेनिक वार्मिंग) के कारण इस गहराई में हुई वृद्धि के निहितार्थों की भी विवेचना कीजिए।

Carbon Compensation Depth (CCD) refers to the level of depth of ocean till where carbon doesn't dissolve and is present in adequate amount.

Features:

- ① It is essential for survival of marine organisms, whose bodies are made of carbonate shells like corals, mollusks, planktons, etc.
- ② Carbon dioxide above the CCD is locked in, however, the carbon below CCD is free and dissolved.

Implications of rise in depth:

Global warming has led to ocean acidification

and subsequent increase of carbon in the oceans. It has meant rise in CO₂ in oceans.

- ① It will lead to more organisms being exposed to waters with lesser carbon, resulting in their shells dissolving and animal deaths.
- ② This rise means less carbon will be trapped in oceans, leading to decline of blue carbon in the world. This will further enhance global warming.

Thus, there is urgent need to tackle ocean acidification, where ocean temperature has also risen globally by 0.7°C.

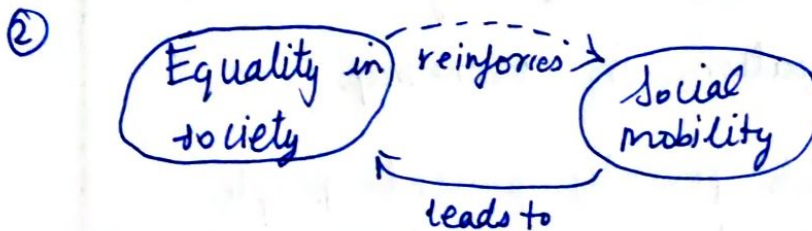
8. Explaining the concept of social mobility and its relationship with equality, mention the impediments in ensuring it. (150 words) 10

सामाजिक गतिशीलता की अवधारणा और समानता के साथ इसके संबंध की व्याख्या करते हुए, इसे सुनिश्चित करने में आने वाली बाधाओं का उल्लेख कीजिए।

Social Mobility refers to upward movements of families towards better health, education and work opportunities, inter-generationally.

Relationship with equality :-

- ① Upward social mobility can bring societies into wellbeing and make them equal to already well off people.



- ③ At the same time, an unequal society can lead to concentration of wealth and downward social mobility.

eg: As per Oxfam 2019, 1% of India's richest hold 4 times the poorest 70% Indians.

Impediments in path to social mobility :-

① Caste divisions : Lower castes are often denied the benefits of education and employment and often face violent crimes.

eg: A study showed that equally qualified Dalits had 67% less chance of being selected in interviews.

② Patriarchy : often, women are restricted to domestic sphere and 90% men feel that it is women's work only. This impedes women's participation in economy.

③ Poverty : High poverty prevents people from accessing better services in health and education, leading to poor human development.

As per Amartya Sen, it is important to develop human capabilities for ensuring social mobility.

9. In view of demographic changes in recent decades, do you think India needs a two-child policy? Discuss in light of various strands of the debate surrounding this issue. **(150 words) 10**

हाल के दशकों में जनसांख्यिकीय परिवर्तनों को देखते हुए, क्या आपको लगता है कि भारत में दो-बच्चों की नीति (टू चाइल्ड पॉलिसी) की आवश्यकता है? इस मुद्दे से संबंधित बहस के विभिन्न पहलुओं के आलोक में चर्चा कीजिए।

According to NFHS -5, India's total fertility rate is 1.9. Further, as per Lancet journal, (TFR) India is set to reach peak of demographic dividend in 2041.

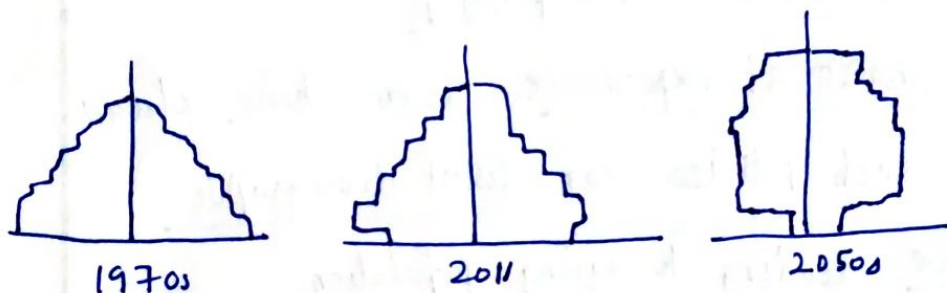


Fig- Demographic changes

India needs 2-child policy:-

- ① Rising population: Although TFR is declining, overall population is increasing and set to surpass China's by 2027.

- ② Standard of living: more children means lower standard of living and less productive

development.

③ Many ~~para~~ states are not showing behavioural changes and continue to have high TFR.

eg: Bihar's TFR is more than 3.

④ Better human development by focussing on lesser number of children.

India doesn't need 2 child policy :-

- ① International experience from China shows that such policies can distort demographic balance, leading to ageing population.
- ② Already declining TFR, set to decline even further.
- ③ men often desert wives if more than 2 children are produced.
- ④ Can lead to female foeticide and infanticide.
- ⑤ Deprives the marginalised communities further.

Thus, instead of 2 child policy, India needs to increase access to healthcare and education.

10. Globalization is incredibly efficient but has so far been incredibly unjust.
Examine the statement in the context of developing countries like India.

(150 words) 10

वैश्वीकरण अद्वितीय रूप से दक्ष है परन्तु अब तक अत्यधिक अन्यायपूर्ण रहा है। भारत जैसे विकासशील देशों के संदर्भ में इस कथन का परीक्षण कीजिए।

Globalisation is the process of international integration of nations, economically and socio-culturally.

Incredibly efficient process:-

- ① Globalisation can increase trade & growth of countries.
eg: With formation of WTO, world trade grew by 64 times in a decade.
- ② Globalisation leads to arrival of grants for developing nations by World Bank, NHOS like Save The Children, etc.
- ③ It can lead to borrowing of best practises and efficient technology to change local problems.
eg: Flood management techniques of Netherlands studied by India.

Globalisation - An Unjust process:-

- ① In India, globalisation has led to restriction on subsidies government gives to the poor due to WTO.
- ② It has brought many businesses in loss due to better and more efficient competition from foreign markets.
eg: Government restricting entry of Australia's dairy industry to preserve local industry.
- ③ Use of traditional indigenous knowledge without giving patent rights.
- ④ Insensitive development: often infrastructure projects come at cost of displacement of local communities and environment degradation.
- ⑤ Loss of traditional culture as people are moving towards western cultures.

Thus, the process of globalisation must be reoriented to achieve SDG 17 of sustainable productive partnerships.

11. "It would not be completely wrong to state that in India, art is religion and religion is art." In light of the statement, discuss the impact of various religions on art in India, citing relevant examples. (250 words) 15

"यह कहना पूर्णतः गलत नहीं होगा कि भारत में कला ही धर्म है और धर्म ही कला है।" इस कथन के आलोक में, प्रासंगिक उदाहरण देते हुए भारत में कला पर विभिन्न धर्मों के प्रभाव पर चर्चा कीजिए।

India has more than 5 lakh monuments in place. First art that developed in India could be traced back to Indus valley civilisations bronze dancing girl and mother goddess figures, who were worshipped, showing link between art and religion.

Impact of various religions on art in India:

① Buddhism

1.1. Buddhist art developed in the form of symbols like Bodhi tree representing enlightenment & horse showing departure.

1.2. Stupa art :-

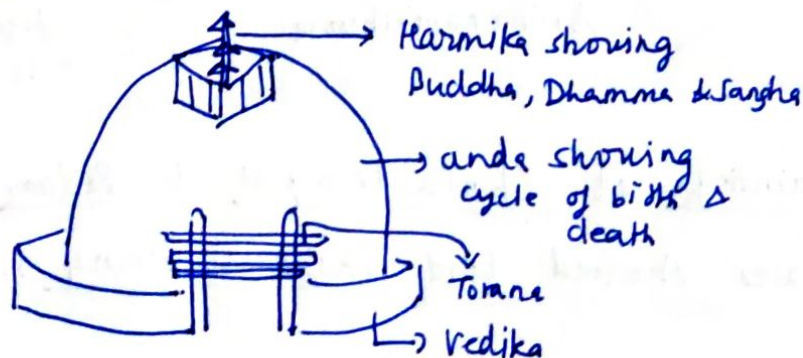


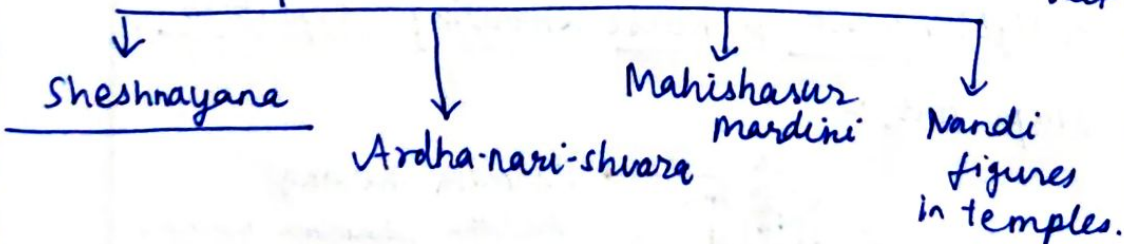
Fig: Stupa

- 1.3 Images of Yakshas like at Didarganj, Patna as also carvings at Bharhut, Madhy Pradesh were inspired from Buddhism.
- 1.4. Buddhist paintings developed at Ajanta caves.
- 1.5. Image worship also begin with Buddhism at Kandhara, Mathura and Sarnath schools. Buddha's form in human was worshipped for many centuries.

② Hinduism:

- 2.1. Hinduism influenced temple art to a great extent, in the form of chariots (sun temple - Konark).

- 2.2. Examples of sculptures inspired by Hindu sect



- 2.3. Paintings at Chola temples & Badami caves showed Lord Shiva & Vishnu image.

2.4. Bronze sculptures showing image of god.



Fig: Tondara bronze from Chola times.

③ Islam:-

3.1. Islam influenced architecture to show Quranic verses, pietra-dura and tesallation as drawing images was forbidden.

3.2. Places of worship & cremation became art like Humayun's tomb & Tame Masjid.

④ Jainism:-

4.1. Jain sculptures like at shravan Belgola represent images of Jain tirthankars.

4.2. Jain temples like in Rajasthan also show beautiful art.

Thus many religions, including Sikhism and Christianity, influenced art in India.

12. Despite organizational apathy from the Indian National Congress in its initial years, the working class in various parts of the country subsequently participated overwhelmingly in the nationalist movement. Discuss.

(250 words) 15

भारतीय राष्ट्रीय कांग्रेस के प्रारंभिक वर्षों में संगठनात्मक रूप से इससे दूर रहने के बावजूद, देश के विभिन्न हिस्सों में मजदूर वर्ग ने बाद में राष्ट्रवादी आंदोलन में प्रभावशाली रूप में भाग लिया। चर्चा कीजिए।

Indian National Congress (INC) during its early phase (1885-1905) was apprehensive of supporting workers as it didn't want to hurt growth of Indian industries.

Initial years - Limited efforts & organisational apathy towards workers :-

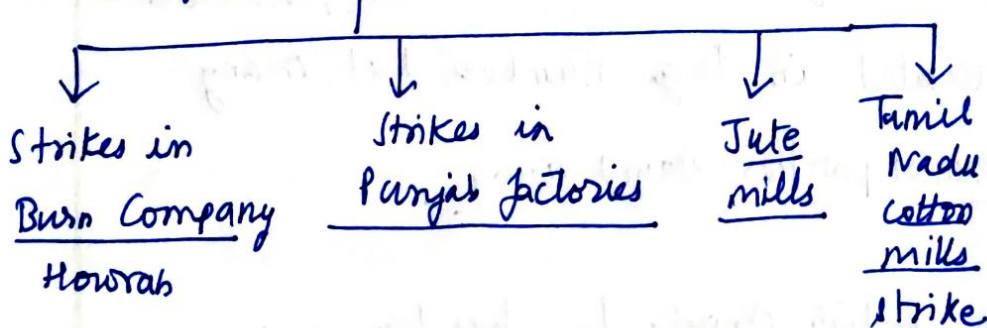
- ① Congress shied from supporting Indian factory workers.
- ② Limited efforts were made including:-
 - 2.1. Saipada Banerjee started newspaper Bharat Shroojee.
 - 2.2. Sorasji Shapoorji Bengalee tried to bring a bill supporting workers' cause
 - 2.3. NM Lokhande founded Workmen's Club.

2.4. G. Subramaniam Aiyer supported their cause.

Working class participated overwhelmingly in national movement :-

Starting from 1st strike by Great Indian Railways in 1999, Indian working class participation included :-

① During Swadeshi movement (1905) :-



② Non-Cooperation Movement (1919-20) witnessed the formation of All India Trade Union Congress and dedicated efforts to support the freedom struggle.

③ Civil Disobedience Movement (1930s) :-

31. Workers in Dharasana salt works and

Sholapur staged violent protests on Gandhi's arrest.

3.2. Further, labour class from Delhi, Kolkata and Chennai also joined the mass struggle.

④ Organisation of workers by Communist parties (1920) also increased their participation

⑤ Finally, during Quit India Movement, workers participated in large numbers, but many communist parties stayed away.

Thus, India's struggle for freedom was strengthened by participation of working class and contributed to its socialist nature.

13. Though some of his early measures restored faith among the Indians in the liberal tradition of England, Lord Ripon's tenure did not bring about significant changes in the conservative mindset of the colonial bureaucracy. Comment. (250 words) 15

यद्यपि लॉर्ड रिपन द्वारा किए गए कुछ शुरुआती उपायों ने इंग्लैंड की उदार परंपरा में भारतीयों के विश्वास को पुनर्बहाल किया, तथापि उसके कार्यकाल में औपनिवेशिक नौकरशाही की रूढ़िवादी मानसिकता में महत्वपूर्ण बदलाव नहीं हुए। टिप्पणी कीजिए।

Lord Ripon was the Viceroy of India from 1880-1883. His tenure saw many reformative steps.

Measures that restored faith among Indians in liberal tradition of Britain :-

① Local governance reforms:- Ripon's reforms led to him being called "Father of local governance in India".

1.1. He brought greater autonomy to these bodies and ensured increased participation of local peoples, instead of bureaucracy.

② Liberating Indian press by removing the reactionary Vernacular Press Act (1878),

that had introduced pre-censorship.

③ Reforms in education:- Body formed during this time suggested division of education into vocational and professional, as per students' intellect.

④ Factory laws of 1881 reduced work hours of women and increased age of child labour.

Absence of significant changes in conservative nature of colonial bureaucracy :-

① Ilbert Bill controversy : A Bill that held that Europeans could be tried by Indian judges, was severely opposed by Britishers and not allowed to pass.

② Continuance in recruitment of Europeans to higher posts of bureaucracy and army.

③ Absence of progressive laws for empowerment of women.

Thus, Ripon's tenure brought meaningful reforms but fell short of reforms needed in the society.

14. The New Social Movements in post-independence period made an important beginning in awakening the society against injustices and deepened the very notion of democracy in India. Discuss. (250 words) 15
- स्वातंत्र्योत्तर अवधि में नए सामाजिक आंदोलनों ने अन्याय के विरुद्ध समाज को जागरूक बनाने में एक महत्वपूर्ण शुरुआत की और भारत में लोकतंत्र की धारणा को सुदृढ़ किया। चर्चा कीजिए।

India has had a tradition of social movement since colonial times in the form of 'Renaissance' movement as well as freedom struggle.

New Social Movements in post-independence period strengthening democracy and rising against injustices :-

① Chipko Movement (1972) in Uttarakhand led the fight for forest conservation under Sunderlal Bahuguna.

1.1. It prevented commercialisation of forests and ensured local management of forest resource..

② Movement for Right to Information by Mazdoor Kisan Shakti Sangathan (PKS) led to

enactment of RTI act, leading to greater transparency and accountability in governance and ~~deepening~~ deepening of democracy by people's participation.

③ Anti- Arrack movement in Andhra Pradesh led to women's fight against illicit liquor trade and liquor consumption by men.

3.1. They rose to fight against unemployment of men & domestic violence of women.

④ Dalit Panthers movement (1970s) led to awakening among Dalits to fight the oppression imposed by upper castes and also led to enactment of Prevention of Atrocities Act (1989).

⑤ Narmada Bachao Andolan (1990s) led to

fight for peasant & tribal rights against land alienation as also submergence of forest land.

Thus, these new social movements brought hitherto voiceless people into mainstream and deepened democracy by airing of their grievances. Redressal of these grievances ensured political solutions, instead of violence.

15. What are the reasons for recurrent and often catastrophic wildfires in places like Australia and the United States? Are there any lessons to be learnt from these events by India? Explain adequately. (250 words) 15
ऑस्ट्रेलिया और संयुक्त राज्य अमेरिका जैसे देशों में बार-बार और प्रायः विनाशकारी बनाग्रि के क्या कारण हैं? क्या भारत को इन घटनाओं से कोई सीख लेनी चाहिए? विस्तारपूर्वक व्याख्या कीजिए।

Recently, catastrophic wildfires were observed in USA and Australia. The wildfires spanned several months and resulted in deaths of hundreds of animals.

Reasons behind recurrence of wildfires :-

- ① Very dry climate conditions and absence of rainfall for long durations creates conditions for wildfires to develop.
- ② Rising climate temperature has further exacerbated the risk of heatwaves and wildfires.
- ③ Dry temperate foliage of trees eases the spread of wildfires and absence of firebreaks.

Lessons to be learnt by India:-

- ① Though most wildfires in India are manmade, there are significant natural wildfires as well.
- ② Need for firebreaks in forests that can prevent spread of fires in catastrophic manner. eg: line of barren land without trees to cut fire spread.
- ③ Need for adequate monitoring via satellite to prevent its widespread and early warning system to control it.
- ④ Adequate focus is needed on forest management especially dry deciduous forests.
eg: Ensuring no inflammable substance is thrown by tourists.

If occurring in small scale, fires can be beneficial for soil replenishment; but such large scale fires are catastrophic and must be prevented.

16. Discuss why India needs a cross border flood management mechanism. Also, state the major issues in cross border flood management and suggest remedial measures in this context. (250 words) 15

चर्चा कीजिए कि भारत को सीमा-पार बाढ़ प्रबंधन तंत्र की आवश्यकता क्यों है। साथ ही, सीमा-पार बाढ़ प्रबंधन से जुड़े प्रमुख मुद्दों को वर्णित करते हुए इस संदर्भ में उपचारात्मक उपायों का सुझाव दीजिए।

India frequently experiences floods in cross border areas like Bihar & Assam, including

2020-21.

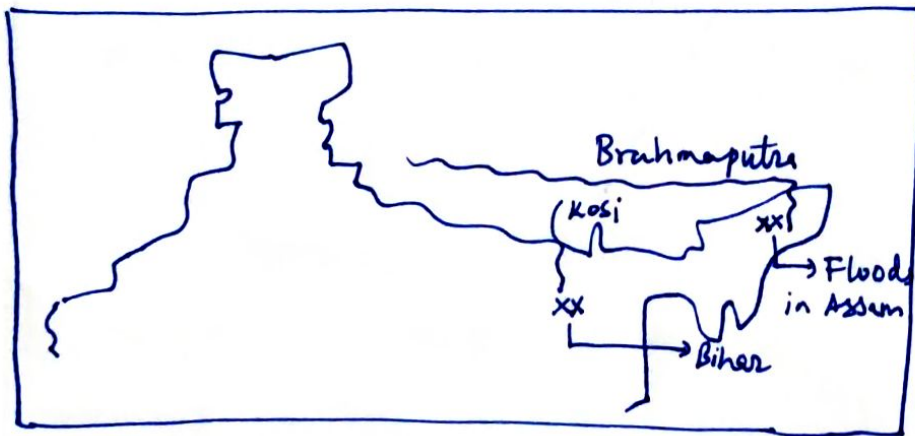
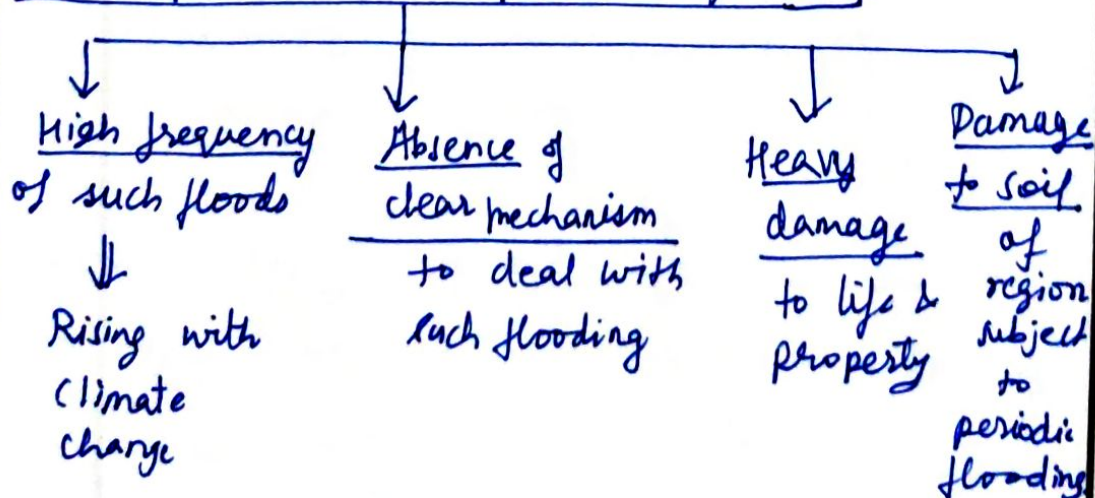


Fig: Cross Border Flood prone areas

Need for cross border flood management :-



Major Issues in cross border flood management:-

- ① Absence of warning systems that can alert the downstream states regarding excess water release.
- ② Irregularity in domestic rainfall pattern & use renders cross border management difficult.
- ③ Frequent siltation of dams built to control cross border flow of rivers.
- ④ Lack of agreement on release of water between border nations and lack of incentive to help riparian nation.

Remedial measures:-

- ① Early conclusion of cross border flood management agreements between the nations.
- ② Use of localised water harvesting solutions to prevent flooding like water can be used to replenish National Parks in Kaziranga.
- ③ Removal of encroachment on border areas

watershed region to ensure quick water percolation.

- ④ Installation of radars & satellites to assess the level of water that can cause floods.

Thus, only sustainable partnerships between nations (SDG 17) can help in flood management properly.

17. Depletion of water resources in India is both a geo-climatic phenomenon as well as a result some short-sighted government policies. Discuss.

(250 words) 15

भारत में जल संसाधनों का ह्रास एक भू-जलवायु (जियो-क्लाइमेटिक) घटना के साथ-साथ कुछ अदूरदर्शी सरकारी नीतियों का परिणाम है। चर्चा कीजिए।

According to World Resources Institute, 54% of Indians face high to extremely high water stress. Further, as per NITI Aayog, 2 lakh people die every year due to lack of access to clean water.

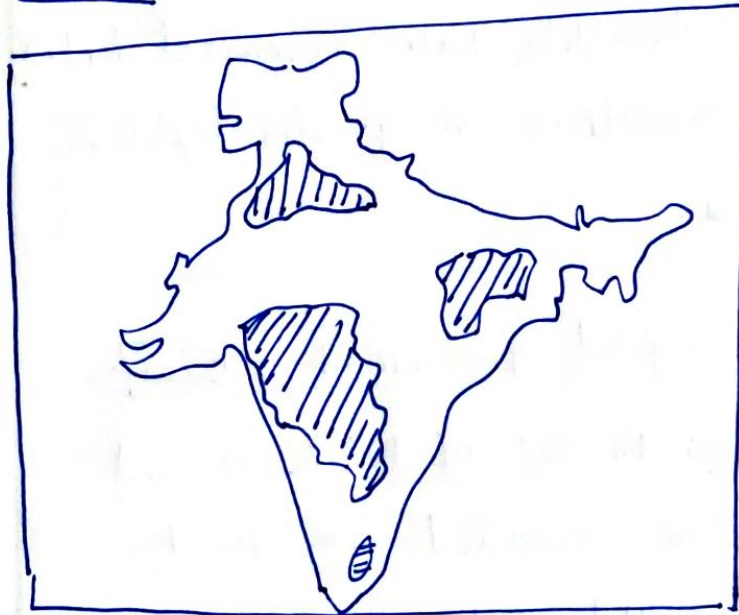


Fig: Water stressed regions

Depletion of water resource due to geo-climate phenomenon :-

- ① Droughts and heat stress :- As 69% India is

vulnerable to droughts, it has led to depletion of water resources.

② Limited rainfall in winters :- Only south east India receives rainfall in winters and country depends on few months of rain for entire year.

③ Climate Change : As per Ministry of Earths science report, droughts have increased by 1-3% per decade, resulting in greater depletion of water resources.

Result of short-sighted government policies :-

①. High subsidies in use of fertilisers and electricity has resulted in great amount of withdrawal of water by diesel pumpsets.

1.1. This has meant that 92% groundwater is used by agriculture in India.

② Lack of water processing & recycling :

There is no policy to recycle & harvest water, until recently, resulting in only 30% water recycled and 10% harvested.

③ Increasing water pollution : As per NITI

Aayog, 75% water is contaminated in

India due to lack of policies on discharge of effluents in water & lack of enforcement.

Thus, India must start developing localised water solutions like Taanka (UP), subsurface dams (Andhra) and Rainwater harvesting (Ralegaon Siddhi) to achieve S.D.G 6.

18. What are the major lithospheric plates? How and why do these plates move?
(250 words) 15

प्रमुख स्थलमंडलीय प्लेटें कौन-सी हैं? ये प्लेटें कैसे और क्यों गति करती हैं?

Plate Tectonic Theory identified large lithospheric plates of both land and oceanic crust, that moves as a single block over the asthenosphere.

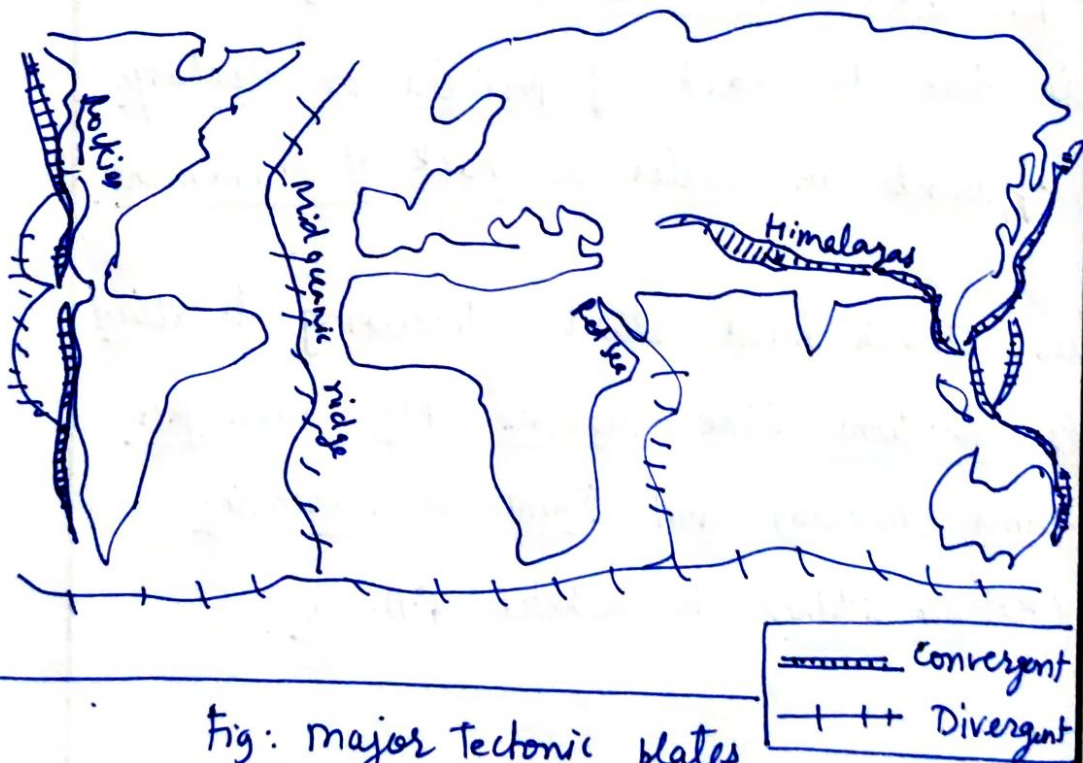


Fig: Major tectonic plates

Reason behind plate movement:-

- ① Earth's asthenosphere and core have convection currents due to temperature

and heat differences.

- ② These differences ^{exist} ~~do~~ to heat within the core from different electric potential and residual heat from earth's formation.
- ③ These convective currents causes the plates to move.

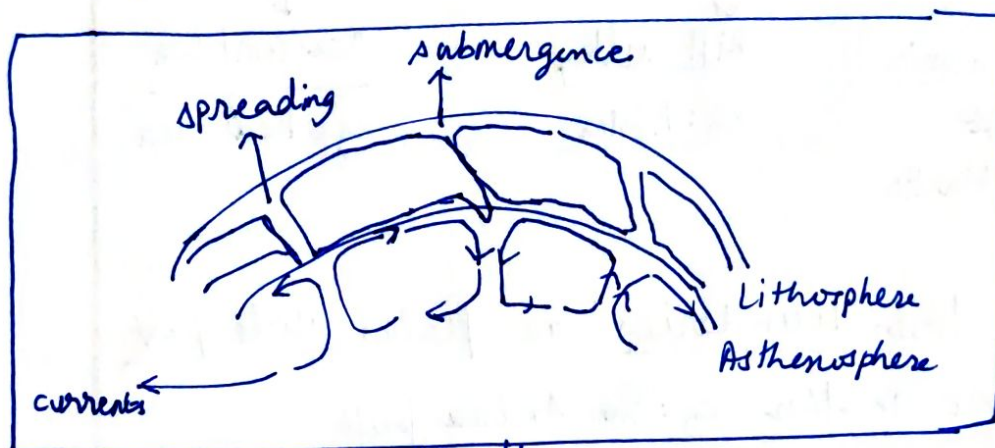


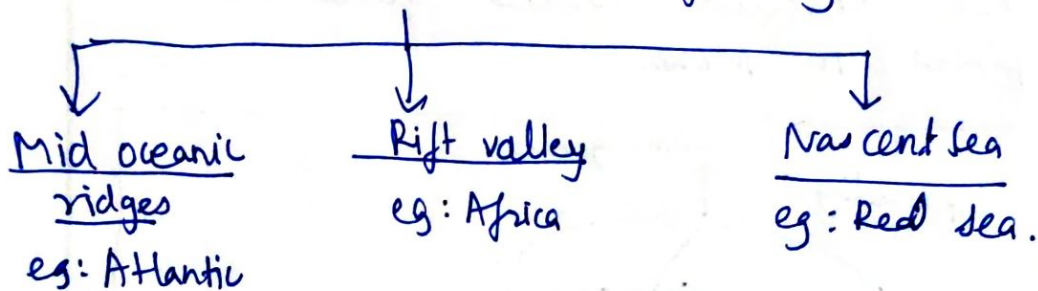
Fig: Sea floor movement

Types of plate movement :-

- ① Convergent boundaries where plates move towards each other, as one plate subducts below other & forms trenches.
- 1.1. Oceanic-oceanic convergence creates Volcanic island arcs eg: Indonesia.
- 1.2. Oceanic-continental convergence shows volcanic mountains eg: Rockies.

1.3. ~~Area~~ Continental - Continental convergence
forms ~~into~~ fold mountains and
earthquakes eg: Himalayas

② Divergent plate boundaries move
away from each other, forming :-



③ Transform boundaries as plates slide past
one another eg: San Andreas fault.

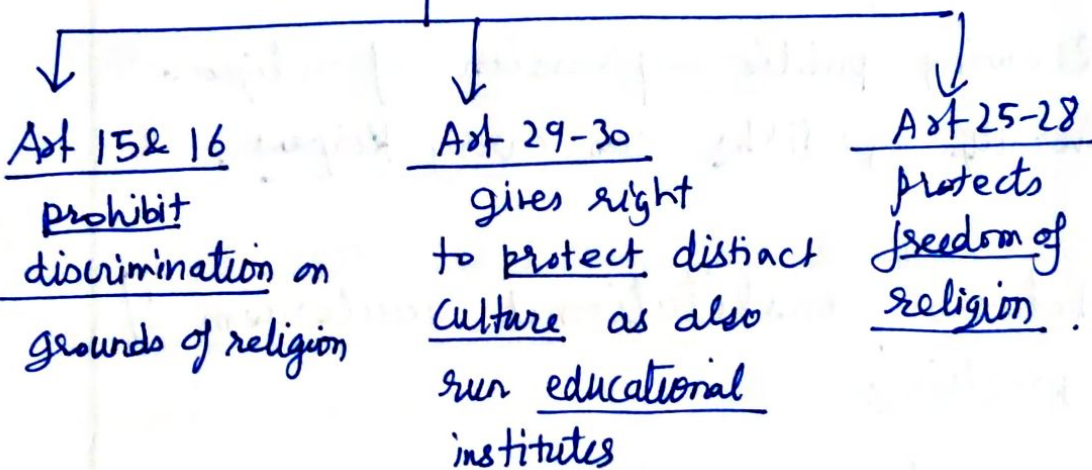
Thus, movement of plates is responsible for
vast geomorphological diversity on earth.

19. There exists a wide gap between the constitutionally professed secularism and its practice in India. Do you agree? Substantiate with relevant arguments. (250 words) 15

संवैधानिक रूप से घोषित पंथनिरपेक्षता और भारत में इसे व्यवहार में लाने के बीच एक व्यापक अंतर मौजूद है। क्या आप इससे सहमत हैं? प्रासंगिक तर्कों के साथ पुष्टि कीजिए।

Secularism refers to separation between state and religion. In India, it further means equal protection and respect for all religions.

Constitutionally professed secularism:



Sync between constitutional secularism and its practise:-

- ① Indian government actively promotes and protects religions through schemes like:

- P.M. Janvikas Karyakram
- VSTAAD scheme
- Nai Roshni & Naya Savera

- ② Provision of holidays on major festivals of all religions, and their celebration through out India.
- ③ Non interference in religious matters as enshrined in Shirur Mutt case (1954), where essential practices are protected.
- 3.1. However, India has targetted evil practices like untouchability and triple talaq.
- ④ Allowing public expression of religious diversity. eg: Sikhs can carry Kirpans.

Gap between constitutional secularism & its practice :-

- ① Presence of communalism and religious violence like Muzaffarnagar riots or recent Kapurthala violence; denies the freedom to practise religion.
- ② Caste, ^{and religion} based identity politics despite

its prohibition in Representation of People's Act.

→ 2:1. slogans like Ghar Waapsi and "outsiders" to other communities harms the secular features of India.

③ Fear of assimilation in smaller religions like Sikhism into larger homogenous whole.

④ state's involvement in religious affairs like Ayodhya dispute hampers its secular credentials.

⑤ Unequal protection and development among religions. eg: While Jains, Sikhs & Hindus show relatively better growth, Muslims have lowest per capita consumption of Rs 32.6 daily (NSO).

Thus, there is a need to strengthen secular credentials of India as it is a basic feature of our Constitution, as per SR Bommai case (1994).

20. India spends less than one per cent of GDP on care work infrastructure and services. In view of the statement, explain how increased public investment in care economy infrastructure can be instrumental in meeting multiple policy objectives. (250 words) 15

भारत द्वारा देखभाल से संबंधित अवसंरचना और सेवाओं पर जी.डी.पी. के एक प्रतिशत से भी कम व्यय किया जाता है। इस कथन के आलोक में, स्पष्ट कीजिए कि देखभाल अर्थव्यवस्था अवसंरचना (केयर इकोनॉमी इंफ्रास्ट्रक्चर) पर सार्वजनिक निवेश में वृद्धि कई नीतिगत उद्देश्यों को पूरा करने में कैसे सहायक हो सकती है।

With less than 1% investment on care economy, it has remained a largely domestic and informal work.

Increased investment on care economy infrastructure can be instrumental in meeting policy objectives:-

- ① Oldage : India's old age population is set to rise to 20% population by 2050 and needs support structure in the form of old age homes, healthcare, etc.

1.1. This investment will not only ensure wellbeing of older people, but also ensure their economic contribution continues.

1.2. eg :- Cohin provides class of home care

Community Dementia Health Workers. This model can be emulated.

② Children:- Children show high stunting of 35.5% and underweight 19%, showing need for investment in childcare (NPHS5).

2.1. Investment in Anganwadis has already benefitted 76 million children and can further improve health indicators.

2.2. These ASHA workers can be trained for pre-school education as well, leading to Early Childhood Care & Education goal of National Education Policy.

③ Mental healthcare: WHO called India world's most depressing country, with 1 in 7 Indians showing mental health issues.

2.1. Currently India spends only 33 paise on each mental health patient, highlighting need to increase investment on mental healthcare.

④ Women's work : Currently 90% of care work is performed by women, which is unpaid as well.

4.1. Women spend 2 hours of sleep extra than men to care for family work.

4.2. Investment in care infrastructure can increase women's participation in the formal economy and can increase India's GDP by 27% (IMF).

Thus, investment in care economy can have multigarious benefits for society as a whole.