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GENERAL STUDIES (TEST CODE : 757)

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Center	Delhi	Date	24/09/16

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	12.5		
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5	12.5		
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18	12.5		
19	12.5		
20	12.5		
Total Marks Obtained:			
Remarks:			

- 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)।
- There are TWENTY questions printed in HINDI and ENGLISH.
इसमें बीस प्रश्न हैं तथा हिन्दी और अंग्रेजी दोनों में छपे हैं।
- All questions are compulsory.
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- 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।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- 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।

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EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

Answer all the questions in NOT MORE THAN 200 WORDS each. Content of the answers is more important than its length. All questions carry equal marks.

12.5X20=250

1. Trace the evolution of cave architecture in India with special reference to their design, nature and wall paintings.

भारत में गुफा वास्तुकला के विकास का उसके डिजाइन, प्रकृति एवं भित्ति चित्रों के विशेष संदर्भ में विवरण प्रस्तुत कीजिए।

Cave are the form of first human habitation, then used by Jain, Buddhist and Ajivika sect's monks and today in the form of tourist places or some habitation in mountain area.

Bhimbetka Cave architecture

- Mono entrance
- Small doors
- No outer decoration
- Natural colour used in wall paintings
- Hunting and gathering scenes were depicted

Barabar cave of Ajivika sect

- Non-monolithic
- Big-gate
- Outer decoration
- Used as chaitya and vihar
- Big mural and fresco could be found

Cave Architecture of MahabulipattamAzanta, Ellora and Elephanta cave

- Two-three storey caves
- Could be monolithic
- Paintings were mural and fresco
- No outer-decoration

Cave Architecture of Mahabalipuram

- The temple made by ~~cholo~~ Pallava kings
- Highly decorated and paintings depicts the ~~present~~ contemporary socio economic condition

2. With the help of examples, explain how Folk Paintings as an art form represent an array of human beliefs and cultural diversity.

विभिन्न उदाहरणों की सहायता से व्याख्या कीजिए कि कला के एक प्रारूप के तौर पर लोक चित्रकलाएँ कैसे मानवीय विश्वासों एवं सांस्कृतिक विविधता के एक प्रभावशाली प्रदर्शन को निरूपित करती हैं।

Folk paintings are the paintings done by local artists and it reflects the human beliefs and cultural diversity of a region.

For example.

Madhubani painting of Magadh

shows the love for nature and animals specially birds

Pahari Painting - shows the depiction of Nature in a vibrant form

Rajput Painting like Bani Tharu shows the dress code and ornament diversity of Rajasthan area

Thangka painting of Buddhism

Shows the belief in black magic and other forms of superstition.

Bengal school of Painting

- Belief in Indian Nationalism and culture (Bharat mata painting)
- Revival of tradition

• Raja Ravi Verma - Progressive, satirical painting

3. "The response to the Partition of Bengal was not a mere expression of Bengali sub-nationalism, but a resistance that carried in it the seeds of a coherent nationalist struggle for India's independence." Examine.

"बंगाल के विभाजन पर हुई अनुक्रिया केवल बंगाली उप-राष्ट्रीयता की अभिव्यक्ति नहीं थी, बल्कि एक ऐसा प्रतिरोध था जिसमें भारत की स्वतंत्रता हेतु सुसंगत राष्ट्रवादी संघर्ष के बीज निहित थे।" परीक्षण कीजिए।

Bengal is the land of origin of Indian National movement. It ~~so~~ started the first movements against the decline in age for Indian civil services. Till 1911 it was capital of British empire and was central to various socio-~~eco~~ economic activities of colonialism.

So, response to Partition of Bengal was not a mere expression of Bengali ~~sub~~ sub-nationalism. But it was the 25 year of sustained efforts which culminated into response of British divide and rule ~~policy~~ policy.

Nationalist struggle started since the 1857 revolution to formation of congress in 1885.

Various methods of propaganda, petition and constitutional measure were not succeeded. This led to increasing resistance among India masses, especially extremists.

The economic critique provided by moderates, the awareness generated by congress and leaders like Tilak and various news paper and other resources also fuel the feelings of nationalism.

All these stored energy got released in terms of

response to partition of Bengal.

4. The economic interpretation of British Colonialism by Indian intelligentsia during 1870-1905 brought forward unpleasant facts about the foreign rule. Analyse this statement and assess the impact of these interpretations on the National Movement.

भारतीय बुद्धिजीवियों द्वारा 1870-1905 के दौरान प्रस्तुत की गई ब्रिटिश उपनिवेशवाद की आर्थिक व्याख्या ने विदेशी शासन के संबंध में अप्रिय तथ्यों को प्रकट किया। इस कथन का विश्लेषण कीजिए और राष्ट्रीय आंदोलन पर इन व्याख्याओं के प्रभाव का आकलन कीजिए।

Economic critique provided by moderate leaders was the most significant contribution of moderate group - various contributors like Dadabhai Naoroji (Poverty and Un-British rule in India), R.C. Dutt (Economic History of India) forwarded the unpleasant facts like -

- 1) Drain theory - colonialism is draining the resources and money of country into Britain
- 2) ~~White man's burden~~
- 3) For the benefit of natives to mis-interpretation was exploded

- 3) Foreign investment, one-way free trade policy etc have been used to exploit Indian economy
- 4) De-industrialisation and preventing India becoming industrialised economy
- 5) Commercialisation of Agriculture and land revenue policies were exposed
- 6) Famine and hunger is because of British policy of neglect and hunger

Impacts

- 1) Feeling of Nationalism
- 2) Organisation structure of Congress improved
- 3) Mobilisation of locals
- 4) Mobilisation of Industrialists, moneylenders and zamindars which were hitherto with British

- 5) Paved the path for swadeshi movement
- 6) Early foundation of Indian National movement based on the principle of scientificism, humanism and rationalism

5. The role of women in Indian nationalism is well acknowledged, however, women who took part in armed struggle against the British are less known. In this context, examine the role played by Indian women in national movement with particular reference to revolutionary struggle.

भारतीय राष्ट्रवाद में महिलाओं की भूमिका को भली प्रकार से स्वीकार किया गया है, हालांकि अंग्रेजों के विरुद्ध सशस्त्र संघर्ष में भाग लेने वाली महिलाओं को पर्याप्त ख्याति नहीं मिली है। इस प्रसंग में, क्रांतिकारी संघर्ष के विशेष संदर्भ में राष्ट्रीय आंदोलन में भारतीय महिलाओं की भूमिका का परीक्षण कीजिए।

Role of women in Indian Nationalism
is widely known —

- 1) Kadambini Ganguly addressed congress session
 - 2) Bika ji kama in USA and Russia had good relationship
 - 3) Annie-besant home rule movement
 - 4) Sarojini Naidu, Usha ~~mehta~~ mehta Aruna Asaf Ali played decisive role in 1942 Quit India movement
 - 5) Rani Laxmibai fought bravely with the British army
 - 6) Begum Hazrat mahal was the representative of Lucknow in 1857 Revolution
- Apart from above ~~the~~ women took

active participation in →

- 1) Picketing of shops
 - 2) Burning of foreign clothes
 - 3) In various constructive works like
khadi spinning
 - 4) Challenge various social evils
and dogmas
 - 5) All India women conference was
constituted in 1927 to press for
their demands
 - 6) 'Satyagrah' - Gandhi called them
'true satyagrahi'
- Took part in Revolutionary
activities like —
- a) Rani Gaidien from Nagaland
 - b) Surya Sen's army said
composed various women soldiers

6. It has been argued that unlike the wars in 1962 and 1971, the war in 1965 was indecisive and brought neither victory nor peace to India. Critically analyse the proposition and also highlight how the experience of 1965 was helpful in the war of 1971.

यह तर्क दिया गया है कि 1962 और 1971 के युद्धों के विपरीत 1965 का युद्ध अनिर्णायक था और इसने भारत को न तो विजय प्रदान की और न ही शांति। इस तर्क का समीक्षात्मक विश्लेषण कीजिए और इस तथ्य पर भी प्रकाश डालिए कि 1965 का अनुभव 1971 के युद्ध में किस प्रकार सहायक रहा।

The war of 1965 was ended with 'Tashkent Agreement' in Tashkent between the prime ministers of two country according to which—

- 1) Both the forces will be at their earlier position.
- 2) India will surrender the occupied territory, will leave the caught Pakistani soldiers and their bodies and send for Pakistan.
- 3) No mention of Pak occupied Kashmir and proper demarcation of LOC.

So on the face of it, it seems like situation 'status quo' before and after the war of 1965. However it

must be noted that 1965 war helped India -

- 1) Revive its confidence and glory after 1962 war
 - 2) Feeling of Nationalism and harmony in the midst of food and economic crisis instead of conflicts
 - 3) It also helped in 1971 war
 - 4) Status of India, in International community is again raised.
- So, it was a diplomatic victory for India, if not any territorial gains or solving of disputes

This helped in 1971 war in the form of -

- 1) Weakness of Pakistan i.e Navy was understood
- 2) Money was diverted for defence procurement
- 3) Complete organisation overhaul battalions were upgraded to Brigades
- 4) Experience of Airforce also benefited.

so, above experience of 1965 war
helped India win 1971 war in just
15 days

7. Discuss whether the agrarian movements which emerged from the late 1970's should be referred to as 'New' Farmers' Movements. In light of the problems faced by poor farmers and agricultural labourers, critically evaluate these movements.

चर्चा कीजिए कि क्या 1970 के दशक के उत्तरार्द्ध में उभरे कृषि प्रधान आंदोलनों को 'नवीन' किसान आंदोलनों के रूप में संदर्भित किया जाना चाहिए। निर्धन किसानों एवं खेतिहर मजदूरों द्वारा सामना की जाने वाली समस्याओं के प्रकाश में इन आंदोलनों का आलोचनात्मक मूल्यांकन कीजिए।

Agrarian movements like Bhast Kisan Union, Sangharshi Sanghatan, Ryot Sangathan of Karnataka were characterised by -

- 1) Demand for fair price for crops like sugarcane, rice etc
- 2) Demand for subsidies and power tariff
- 3) Demand for cash-crops
- 4) Demands were largely dominated for large and middle farmers
- 5) Demand for mechanisation, irrigation project etc.

However, earlier farmer's movement were characterised by -

- 1) Demand for lowering rent, lowering the share to be given to land-owner
- 2) Land reforms like abolition of zamindari, tenancy reforms etc
- 3) Security of tenure.
- 4) Increase in minimum wages
- 5) demand against forced labour and 'begar'
- 6) livelihood security

So, most of earlier movements were regarding demand and problems of poor and agricultural labourers, so it can be said that movements after 1970, could be termed as 'New farmers' movements

8. Though both Bismarck and Sardar Patel played an important role in unifying their respective countries, yet given the different historical circumstances, the challenges faced by both and the strategies they adopted were different, Discuss.

यद्यपि बिस्मार्क और सरदार पटेल दोनों ने अपने-अपने देशों को एकीकृत करने में एक महत्वपूर्ण भूमिका निभाई है, फिर भी विभिन्न ऐतिहासिक परिस्थितियों को देखते हुए यह कहा जा सकता है कि दोनों को जिन चुनौतियों का सामना करना पड़ा और जिन रणनीतियों को उन्होंने अपनाया, वे भिन्न थीं। चर्चा कीजिए।

Unification of Germany was planned by Bismarck and integration of princely states was planned by Sardar Patel.

Challenges faced by Bismarck

- 1) Sovereign Powers like Austria, France etc were not in favour of unification of ~~the~~ Germany
- 2) Lack of International support
- 3) Mobilisation of the locals
- 4) Formation military and economic empowerment of ~~German~~ Prussia

Challenges faced by Sardar Patel

- Princely states were too many and how to demarcate the political boundaries
 - military forces of the princely states
 - Ethnic, language and religious diversity
- (Patel had both International and mass support)

strategies of Bismarck

- 1) Economic and military empowerment of Germany
- 2) Garnering international support by various treaty and agreement
- 3) Isolation of Austria ~~and~~ and Eternal Friendship with France.
- 4) Finally, he disclosed the terms of Napoleon III and led to Isolation of France.

It was mainly talk & approach.

strategies by Sardar Patel

- 1) Negotiation, debate discuss.
- 2) Incentives like pension, privy purse
- 3) Police action
- 4) Autonomy and other arrangement like UTs etc.

So, because of various historical circumstance challenges and strategies were different of Bismarck and Patel

9. Enumerate the reforms undertaken during the Gorbachev era and explain the reasons for undertaking these. To what extent could these reforms be held responsible for the breakup of the Soviet Union?

गोर्बाचेव के कार्यकाल के दौरान किए गए सुधारों को वर्णित कीजिए और इन्हें आरंभ करने के कारणों की व्याख्या कीजिए। सोवियत संघ के विघटन के लिए इन सुधारों को किस सीमा तक जिम्मेदार ठहराया जा सकता है?

Gorbachev to solve the various political and economic problem of USSR (United state of Soviet Republic) took the reforms like - Glasnost (openness) - To provide openness or democratic feeling a place, various civil liberties and rights were entitled under this Perestroika :- Under this reform economy of USSR was liberalised and hence private ownership was granted and state control reduced.

Various reasons includes -

- 1) Discontent among citizens
- 2) Internal rift under communist part

- 3) Stagnant economy of USSR
- 4) Defeat in Afghan war was also the major cause
- 5) Feeling of Nationalism and Freedom among the various ethnic groups like Kazaks, ~~an~~ Uzbeks etc.
- 6) Communist government across the world were weakened and not able to govern.

Because of non-performance or late outcomes of these reforms USSR gets ~~to~~ dis-integrated. Gorbachev, was trying to reform polity and economy of the country at the same time, which became the cause of fall of USSR. In China Deng Xiaoping only reformed the polity and thereby prevented fall

of communist regime.

However, It must be noted that USSR is completely different from China as—

- 1) Diverse ethnic group
- 2) History of Russian Revolution
- 3) External - rift

4) The personality of Gorbachev
So, the fall of USSR could not be blamed to only the reforms, it was perhaps destined and these reforms just accelerated it.

10. While the impact of French Revolution was largely limited to the European countries, the Russian Revolution had a much wider impact across the globe. Critically analyse.

यद्यपि फ्रांसीसी क्रांति का प्रभाव काफी हद तक यूरोपीय देशों तक सीमित था, किन्तु रूसी क्रांति का विश्वव्यापी प्रभाव हुआ था। आलोचनात्मक विश्लेषण कीजिए।

French revolution of 1789 with idea of liberty, equality and fraternity did not able to spread, which is evident from the fact that France itself was in monarchical rule under Napoleon Bonaparte.

However, following facts needs to be noted about French revolution—

- a) It helped in feeling of Nationalism in Spain and Portugal
- b) Unification of Italy and Germany was also influenced by it
- c) American constitution is based on the idea of Equality, liberty and Fraternity
- d) It encourage nationalist movement in colonies of Asia and Africa.

So, Impact of French Revolution though limited to Europe, but its influence was across the world.

The Russian Revolution of 1917, which gave call for violent form of movement for establishment of communism had wider impact which evident from—

- 1) Communist uprising in various European and Asian countries
- 2) Formation of Trade Union in India in 1927
- 3) Establishment of communist part of India in 1925
- 4) Congress of oppressed Nations in 1927 was influenced by Russian Revolution
- 5) Establishment communist governments in various Latin American and eastern European countries

So the Impact of Russian Revolution
was wider than French Revolution
but in contemporary world the
idea of equality, fraternity and
liberty seems to be universal.

11. Give an account of the factors which influence gender equality in basic education. What can be done to bridge the existing gender gap in this context?

उन कारकों का विवरण प्रस्तुत कीजिए जो आधारभूत शिक्षा में लैंगिक समानता को प्रभावित करते हैं। इस संदर्भ में विद्यमान लिंग अंतराल को समाप्त के लिए क्या किया जा सकता है।

Gender equality in education is one of most powerful tool to bridge the gender gap in a country. Various factors influencing gender equality in education includes-

1) Social factors

- Patriarchal mindset
- Preference of 'son'
- Burden of marriage and dowry
- Orthodoxy as girls are seen as 'Praya' dhan'
- Safety and security concern of girls in a region

2) Economic factors

- Economic status of family and parents.
- Availability of employment

suitable for girls

- cost of schooling of a girl child

Infrastructural

- availability of school near by
- availability of toilets and other facilities for girls
- Communication facilities
- Scholarships, residential facilities and others

To bridge the existing gap following measures must be taken -

- 1) Target Approach - State like Bihar and Rajasthan must be focused more given their high gender gap.
- 2) Infrastructure facilities - PM Modi's call for construction of toilets in all school is in right direction

3) Financial assistance in form of scholar ships etc. Sukanya Samriddhi Yojana must be implement with greater emphasis on adolescent girls

4) Behavioural and Attitudinal change

Beti Bachao, Beti Padhao campaign of GOI must be based in local language and should be based on local leaders

5) Involvement of NGOs for girl education

6) Exposure of girl's role model like Indira Mui etc.

All of the above social, economic and infrastructural measure will help in bridging the gap.

12. While state action alone cannot ensure social change, no social group howsoever weak or oppressed is only a victim. Examine the statement in the context of organised action for justice and dignity for manual scavengers in India.

कोई सरकारी कार्यवाही अकेले ही सामाजिक परिवर्तन नहीं ला सकती, कोई भी सामाजिक समूह चाहे भले ही वह कितना भी कमजोर और सताया हुआ हो, सिर्फ अत्याचारों का शिकार ही नहीं होता है। भारत में मैला ढोने वालों को न्याय और आत्मसम्मान दिलाने हेतु एक संगठित कार्रवाई के संदर्भ में इस कथन का परीक्षण कीजिए।

13. Give an account of the factors driving people to migrate from the countryside to urban areas even if it entails living in slums. Highlight some important facts about slums unique to India. Also discuss some strategies which can be adopted for transforming India's slums.

उन कारकों का विवरण प्रस्तुत कीजिए जो लोगों को ग्रामीण इलाकों से शहरी क्षेत्रों में प्रवास करने लिए प्रेरित करते हैं, भले ही इसके परिणामस्वरूप उन्हें मलिन बस्तियों में ही क्यों न रहना पड़ता हो। भारत की मलिन बस्तियों के संदर्भ में विशिष्ट तथ्यों पर प्रकाश डालिए। साथ ही उन रणनीतियों की चर्चा कीजिए जो भारत में मलिन बस्तियों की दशा को सुधारने के लिए अपनाई जा सकती हैं।

Various 'push' and 'pull' factors are responsible for the migration of rural people into urban areas -

Push factors

- Stagnant Agriculture
- Distress rural economy
- Unemployment
- Poverty
- Social discrimination for STs and SCs
- Lack of urban facilities
- Education, health etc are not available

Pull factors

- Better prospects and opportunities
- Prospects for employment
- Civic Infrastructure
- Opportunity for Health and Education
- Perception of good future.

However, because of high land prices, high rental facilities and lack of affordable houses they ended up into the slums

Important facts unique in India

- 1) Concentrated in the centre of metropolitan cities
- 2) More than 17% urban population lives in slums
- 3) Lack of basic health and education facilities
- 4) Lack water and sanitation and other facilities
- 5) Disease specially vector borne are prevalent in these slums

Various strategies to transform slums includes

- 1) Retrofitting of existing slum areas

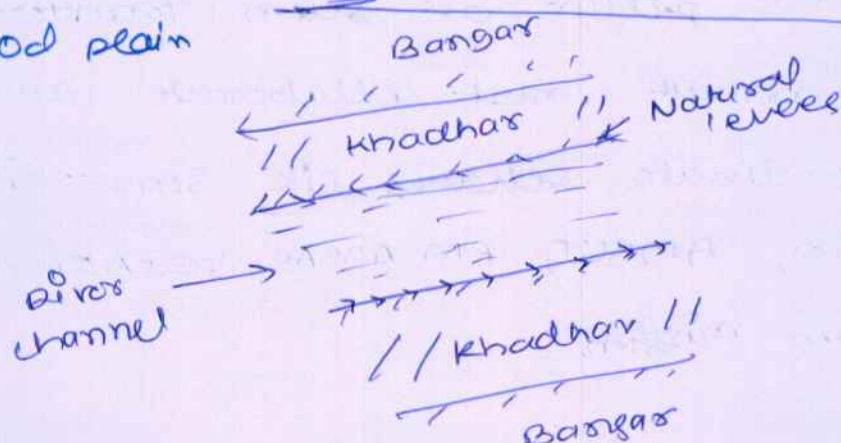
- 2) Interest subsidy and subvention scheme
- 3) Affordable houses ~~are~~ by 'PPP' methods
- 4) Financial assistance
- 5) Community Participation in maintenance, awareness and management
- 6) Revival of Rural economy, thereby controlling amount of migrants

So, Affordable housing, good governance, decreasing migration may be the pillar of slum transformation. Government must collaborate and co-ordinate schemes like Smart City Mission, AMRUT, PM AWAAS UDAJA and Rurban Mission.

14. Define flood plains and explain their significance. Also, examine how anthropogenic activities have contributed to recent instances of urban flooding.

बाढ़ के मैदानों को परिभाषित कीजिए और उनके महत्व की व्याख्या कीजिए। साथ ही, परीक्षण कीजिए कि शहरी बाढ़ की हाल ही की घटनाओं में मानवीय गतिविधियों ने किस प्रकार योगदान दिया है।

Flood plains are part of land that gets submerged when river is at its full. In North India 'khadar' is known as a new flood plain and 'Bangar' is known as old flood plain. Generally natural levees ~~gets~~ ^{are} the demarcation line between river channel and flood plain.



Significance of flood plains

- 1) Flood leads to sedimentation of the land there by increasing

its ~~for~~ fertility

2) Regulation of water flow - flood plain prevent water flow from intruding in urban - habitat.

3) Ground water recharge - due to surface expansion, it helps in ground water recharge

4) Nutrients availability

5) Fishing etc.

However, due to various anthropogenic activities urban flooding has increased

(i) Encroachment of flood plains

(ii) Concretisation of pavement there by low ground water recharge and increased surface water

(iii) Lack of proper drainage system

(iv) Lack of storm water drainage

(v) Deforestation also leads to low ground water - recharge

(vi) Water bodies like lakes, open

space, ponds etc have been encroached upon and they are dried up.

Way forward - Flood zone planning based on 'Rasthriya Bar Aayog' s recommendation, afforestation, rejuvenation of water bodies and proper storm water drainage is the need of hour to prevent urban flooding.

15. Why do forest fires occur frequently in certain regions of India? Examine the ecological significance of forest fires and identify the measures to tackle the phenomenon.

भारत के कुछ क्षेत्रों में दावानल की पुनरावृत्ति के क्या कारण हैं। दावानल के पारिस्थितिक महत्व का परीक्षण कीजिए और इस परिघटना से निपटने के लिए उपायों की पहचान कीजिए।

Forest fires in India have seen as increased in frequency in all the past. Various reasons includes-

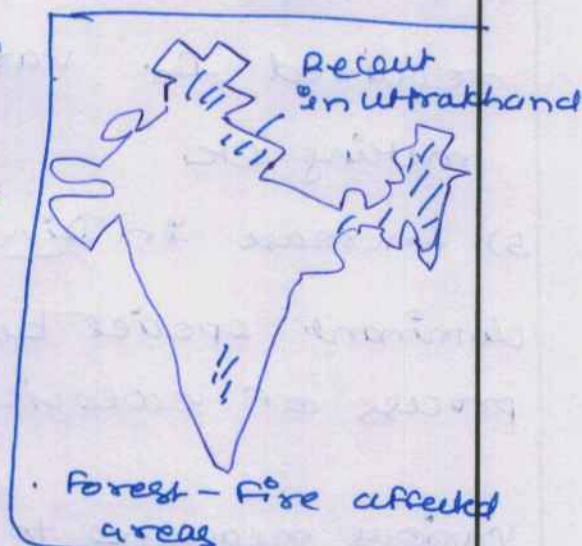
1) Increase in general temperature due to events like El-Nino climate change

2) Shifting cultivation

'burn and slash' also contributed to its frequency.

3) Various anthropogenic reasons like spark of bidi, cigarettes etc could also trigger the forest fire

4) Friction of rolling stone and pebbles also led to forest fire.



Ecological significance

1) Equi-climax - it represents the

equilibrium in the process of
ecological succession

2) Nutrient recycling

3) Fertilisation of seeds and sprouts

4) It helps in increase in temperature
required for various activities like
meting, etc.

5) Increase in Diversity, because
dominant species burn down and new
process of ecological succession starts

Various measures to tackle forest fire

1) Regulation and monitoring using
satellite imagery.

2) Preventing shifting cultivation
and encouraging sedentary culti-
vation

3) Preparedness to combat such
disasters.

4) Core areas should be prohibited
for any type of anthropogenic

activities.

5) Forest department must be equipped with the required resources like man, technology and machine.

Forest fire, ecologically not a disaster, however its increased frequency is the cause of concern and which has to be tackled.

16. What are the different types of rainfall? Give an account of the world distribution of rainfall.

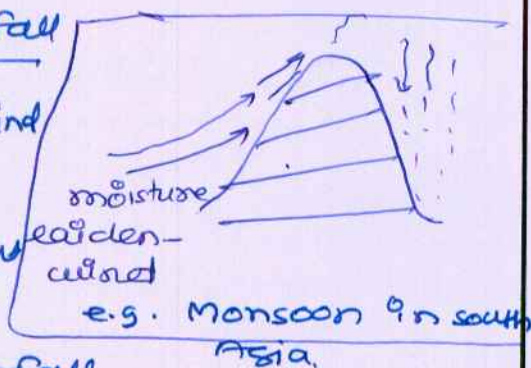
वर्षा के विभिन्न प्रकार क्या हैं? विश्व भर में वर्षा के वितरण का विवरण प्रस्तुत कीजिए।

Rainfall or precipitation as explained by collision-coalescence theory and ice-crystal theory can be of three type depending on mechanism responsible for it.

(1) Orographic rainfall

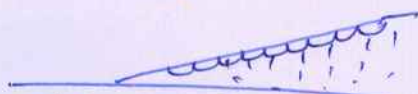
- Moisture laden wind

↓
upward movement
↓
cooling → rainfall.



- It is generally heavy rainfall in a concentrated area for long duration

(2) Frontal rainfall - When two contrasting air masses form fronts leads to formation of clouds and then rainfall



- Warm front

- large area

- slow

e.g. in

temperate region



cold front

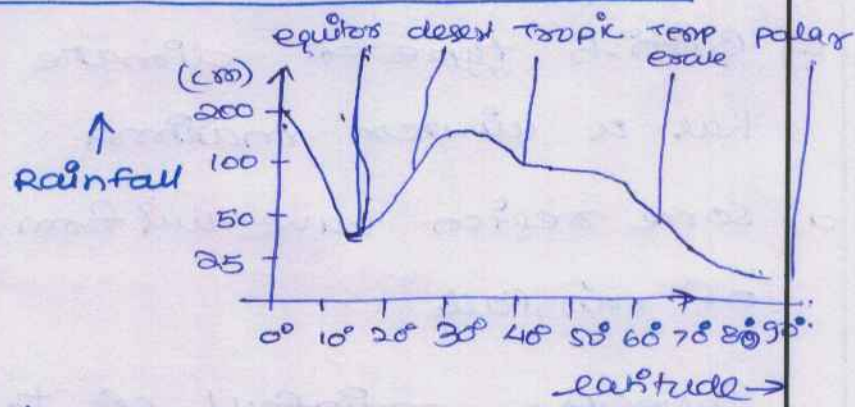
- small area

- heavy rainfall

3) Conventional rainfall - Because of strong heating of surface, this rain fall occurs. for eg. 3'o clock and 10 o'clock rain in equatorial region.

World distribution of rainfall

1) General pattern of world distribution



2) Regional pattern

- ocean have more rainfall than land
- Area with mountain at coast have more rainfall like Rockies and Andes
- Areas with monsoonal rainfall have more rainfall like south Asia
- continental deserts and leeward zones have very low rainfall

3) seasonal ~~part~~ Distribution

- a) maximum rainfall occurs in summer month of the respective area.
- b) Mediterranean type of climate is characterised by summer dry and winter wet.
- c) British type of climate also has a winter maxima
- d) Some region have uniform distribution of rainfall.

Therefore rainfall of the world is distributed in general, region and seasonal (temporal) pattern depending upon type of climate and topography.

17. The prevailing water crisis in the country is not about the unavailability of water rather the mismanagement of available resources. Do you agree? Discuss the short-term and long-term socio-economic impacts of the water crisis on India.

देश में व्याप्त जल संकट का संबंध जल की अनुपलब्धता से नहीं बल्कि उपलब्ध संसाधनों के कुप्रबंधन से है। क्या आप इससे सहमत हैं? भारत पर जल संकट के अल्पकालिक और दीर्घकालिक सामाजिक-आर्थिक प्रभावों की चर्चा कीजिए।

India is again facing the water crisis, with most of the states declaring drought in continuous two years. It has been argued that it is because of low monsoon rainfall because of prevalent EL-Nino condition. However, it is because of mismanagement of available resources like -

- 1) Faulty agricultural practices - states like Punjab, Haryana, Cauvery basin, Maharashtra are growing water-intensive crops against the agro-climatic conditions.
- 2) Misuse of water resources due to low power tariff and other subsidy.
- 3) Exploitation of groundwater by agriculture, industry and domestic.

households

- 4) No water conservation methods like reduce, reuse and recycling
- 5) Pollution of water also leads to water crisis.
- 6) Deforestation led ~~lead~~ disruption in the hydrological cycles.

So, it is because of mismanagement of available water-resources.

~~Various short-term measures~~

Various short-term economic impacts

- 1) Crop-failure
- 2) water distress - low availability of drinking water
- 3) Unemployment
- 4) Loss of livestock
- 5) Conflict over water distribution
- 6) Famine and hunger
- 7) marginalised section like women and children, old age, will suffer
- 8) Distressed migration

Long-term socio-economic impacts

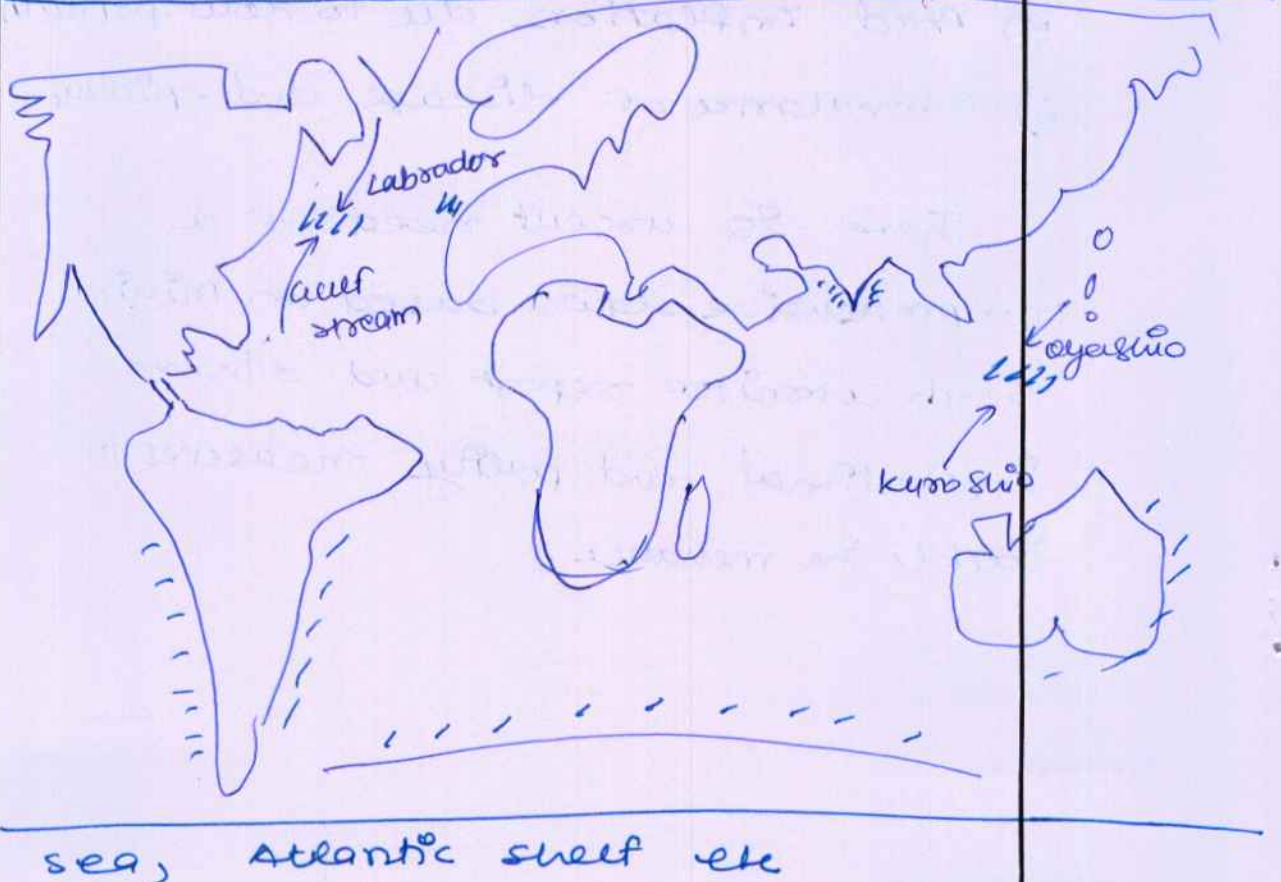
- 1) Poverty due to indebtedness
- 2) Soil erosion, degradation and desertification leading to loss of fertile land
- 3) Urban poverty, slums due to distress migration
- 4) Fiscal burden to provide livelihood
- 5) Food inflation due to low production
- 6) Prevalence of disease and epidemics

There is urgent need of a comprehensive law based on Minor Shah Committee report and other institutional and policy measures to tackle the menace.

18. Enlist the major fishing zones of the world along with the reasons for their distribution. Does India's deep sea fishing policy warrant a fresh look? Examine in context of the recommendations of the Meena Kumari committee on the matter.

विश्व के प्रमुख मत्स्यन क्षेत्रों की सूची प्रस्तुत कीजिए और साथ ही उनके वितरण के कारण बताइए। क्या गहरे समुद्र में मछली पकड़ने संबंधी भारत की नीति को नए दृष्टिकोण से देखने की आवश्यकता है? इस मामले पर मीना कुमारी समिति की अनुशंसाओं के संदर्भ में परीक्षण कीजिए।

Fisheries contribute to more than 5% of food requirement of the world. Major fishing zones include
1) Continental shelf — like Arabian



- 2) Upwelling zones - like west-chile, because of cold peruvian current
- 3) Mixing of cold and warm current
like Newfoundland Ireland, east coast of Canada - mixing of Labrador and Gulf stream
- mixing of Kuroshio and Oyashio
- 4) Inland fisheries like paddy fields and lakes and other wetlands

In this context, recently meenakumari committee recommended for deep-sea fishing ~~rule~~ based on allowing of big vessel and foreign trawlers. It could lead to

- 1) Loss of livelihood of fishermen
due to low efficiency and low marketing capability
- 2) Degradation of fishing zones
due to over-exploitation

3) Thermal and marine pollution of the ~~fish~~ fishing zone

4) ~~Un-sustainable~~

4) Un-sustainable practices could lead to long-term impact on fishing economy of India.

So, given its environmental, social and economic impact there is urgent need of a fresh look in Meera-kumari report on deep fishing. Though it seems to be progressive and pragmatic but the social and environmental costs have been neglected.

19. It has been observed that deltas formed by Indian rivers have been shrinking for the past few years. Discuss reasons for the same in context of different rates of shrinking of deltas of major rivers.

यह देखा गया है कि भारतीय नदियों द्वारा निर्मित डेल्टा पिछले कुछ वर्षों से सिकुड़ते जा रहे हैं। प्रमुख नदियों के डेल्टाओं के सिकुड़ने की विभिन्न दरों के संदर्भ में इनके कारणों पर चर्चा कीजिए।

Formation of ~~deltas~~ delta of a river depends on the following conditions—

- 1) large sediments
- 2) Absence of currents, waves and tide, go to the flow of river
- 3) low-relief, plain area rather than steep-slope
- 4) Absence of rejuvenation cycles ~~and~~
i.e. coastal stability ~~and~~ (no land subsidence or upliftment)

Various reasons for shrinking delta include—

- 1) Construction of large dams, which prevents the sedimentation to be carried out till the mouth
- 2) Deforestation - which leads to

increase in water velocity and low sedimentation

3) Encroachment of flood plains and concretisation of them also leads to low sedimentation

4) Frequent dredging and desilting for various navigation and other purposes

5) River training and other modification in the river channel.

6) There are also incidences of land subsidences like in eastern region, which leads to rejuvenation and thereby increase in erodible capacity. For eg. old deltas in Bengal are known as 'Moribund'

7) Distributaries have been disappearing because of low water level,

and river training, which leads to shrinking of deltas.

So, depending upon intensity and various measures taken on a river, deltas of major Indian rivers are shrinking.

20. Why does the Arabian Sea experience fewer tropical cyclones as compared to the Bay of Bengal? Explain why tropical cyclones do not occur during the southwest monsoon season.

अरब सागर, बंगाल की खाड़ी की तुलना में उष्णकटिबंधीय चक्रवातों का कम अनुभव क्यों करता है? व्याख्या कीजिए कि दक्षिण पश्चिम मानसून की ऋतु के दौरान उष्णकटिबंधीय चक्रवात क्यों नहीं आते हैं?

Tropical cyclone is a low pressure system, with rotating air, a efficient heat engine that converts latent heat of vapourisation into mechanical energy.

Arabian sea experience fewer cyclone then Bay of Bengal because -

~~On the Western side~~: As tropical cyclone are embedded on ~~eastern~~ ~~side~~ they touch the land on eastern side

- 1) High temperature of Bay of Bengal
- 2) Inter-tropical convergence zone is over Bay of Bengal for more time

- 3) closed nature of Bay of Bengal as compare to Arabian sea
- 4) High evaporation in Bay of Bengal as compare to Arabian sea
- 5) Pressure belt of low pressure equatorial region is over Bay of Bengal
- 6) Absence of cold currents and upwelling in Bay of Bengal region

Tropical cyclone do not occur during South-west monsoon because-

- 1) Absence of low pressure system :-
As ITCZ is over Northern plains as compare to Bay of Bengal
- 2) Absence of latent heat of vapourisation
because this heat is ~~not~~ released as latent heat of condensation
- 3) Development of high pressure in Arabian sea like Mascarene high
- 4) Absence of land-sea differential

which is the driving sector of
Tropical cyclone.

South-west monsoon inhibits
all other phenomenon and dominates
over India in the four months
of June to September.