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GENERAL STUDIES (TEST CODE : 852)

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Medium Hindi/Eng.	English	Registration Number	24778
Center	ORX	Date	12/08/2017

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	12.5	
2	12.5	
3	12.5	
4	12.5	
5	12.5	
6	12.5	
7	12.5	
8	12.5	
9	12.5	
10	12.5	
11	12.5	
12	12.5	
13	12.5	
14	12.5	
15	12.5	
16	12.5	
17	12.5	
18	12.5	
19	12.5	
20	12.5	

Total Marks Obtained:

Remarks:

Signature of Examiner

INSTRUCTIONS

- 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. How does an age structure changing towards a lower 'dependency ratio' creates a demographic advantage or 'dividend'? Explain in the context of India.

निम्न 'निर्भरता अनुपात' की ओर अग्रसर आयु संरचना किस प्रकार जनांकिकी लाभ या 'लाभांश' का सृजन करती है? भारत के संदर्भ में व्याख्या कीजिए।

"Demographic Dividend" is defined for a country as scenario when the ratio of working age population is greater than dependent population i.e. people in age 15-64 group is greater than dependents (Children and elders etc..). In context of India, "Demographic Dividend" is unique as it will be later than other nations and will continue for longer time horizon. According to World Bank report, average age of Indian in 2020 will be 29 years as compared to 37 in China & 45 in USA & Japan.

This changing age structure has many advantages -:

- (i) Increased labour force :- Will transform India as a source of labour in the world & will provide job

opportunities for Indian people.

(ii) Increase in per-capita income & thus increase in standards of living

(iii) Efficient resource distribution of state in economic development as the dependent population will be less, Government has to focus less resources in catering needs of them.

This will lead to diversion of resources in Capital & Human capital development.

(iv) Increased domestic savings of households

(v) Increased domestic consumption which will ~~sp~~ spur demands for goods & thus will boost economic growth.

Thus shift in age structure will not only benefit at individual level but also benefit society & well as reduce the burden on government & thus in overall sense will lead to development of nation

& ~~the~~ spur economic & societal & intellectual growth.

In context of India, it will lead to breaking up of caste barrier & influx of modern liberal. & equality ideas which will lead to inclusive & equitable growth & thus aid overall development of society & individual.

2. Exclusion, humiliation-subordination and exploitation are all equally important in defining the phenomenon of untouchability. Explain. Give an account of the provisions in the Indian Constitution and the steps taken by the government to compensate for past and present caste discriminations.

बहिष्कार, अपमानजनक-पराधीनता और शोषण ये तीनों वस्तुतः अस्पृश्यता के परिदृश्य को परिभाषित करने में समान रूप से महत्वपूर्ण हैं। व्याख्या कीजिए। अतीत एवं वर्तमान के जातिगत भेदभावों की क्षतिपूर्ति करने के लिए भारतीय संविधान में उल्लिखित प्रावधानों एवं सरकार द्वारा उठाए गए कदमों का विवरण प्रस्तुत कीजिए।

⇒ "Untouchability" is social discrimination prevalent in Indian society since ages. It is discrimination based on the notion of Purity & Pollution & thus an outcome of caste system. The phenomenon of untouchability is not merely Exclusion but it also includes humiliation, subordination & exploitation ^{by} one dominant Caste/group of other.

Untouchables are not allowed to live with dominant caste. They are kept secluded from the living areas & live in outskirts of city. They are not allowed being the part of religious rituals & ceremonies & thus are excluded from society.

They are indulge in menial works of manual scavenging & are forced to ~~work~~ work

at unhygienic places ~~at~~ in unhygienic conditions & thus are often exploited. They are not given respect for their jobs & are humiliated & seen with eye of suspicion. Garlanding them with Chappals, Social Boycott processions of Untouchable Community is common practice in rural areas. They are lynched as seen in recent news for suspicion of cow slaughter by vigilante groups etc. Thus Untouchability is not just a biased notion against socially backward class but also humiliation, exclusion & subordination leading to exploitation.

Indian constitution in Article 17 of Fundamental rights upvotes for Abolition of Untouchability & thus many laws have been made in past to abolish it -:

- * The Prevention of Atrocities on SC/ST Act
- * The Manual Scavenging Act, 2013

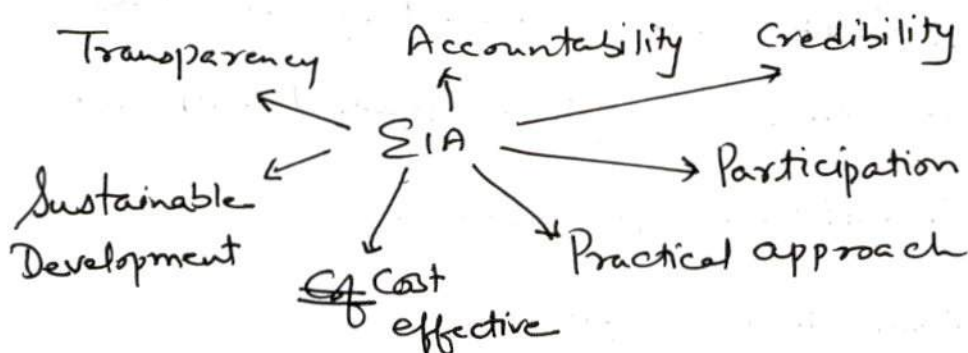
Constitution also provides Policy of "Affirmative Action" for socially backward classes in ~~ed~~ education, employment & political representation level so as to provide opportunity for equality & progression in society. Time to time progressive amendments are made to empower "Harijans."

3. How does Environment Impact Assessment (EIA) helps in minimizing the adverse impacts of large infrastructure projects? Examine whether it is an effective management tool to achieve sustainable development. Also, suggest some reforms for its improvement.

पर्यावरण प्रभाव आकलन (EIA) बृहद अवसंरचना परियोजनाओं के प्रतिकूल प्रभावों को कम करने में किस प्रकार सहायक है? परीक्षण कीजिए कि सतत विकास को प्राप्त करने के लिए क्या यह एक प्रभावी नीतिगत साधन है? साथ ही, इसे उन्नत बनाने के लिए कुछ सुधारों का सुझाव दीजिए।

As evident from past, large projects brings large risk of destruction / Hazard & thus Assessment & mitigation of the same is required & Environmental Impact Assessment can play a vital role here.

EIA is the assessment prior to construction of project so as to check the disasters it may create in future. EIA involves:-



and thus helps in minimizing adverse impacts.

Advantages of EIA

- Pre-identification of risk & mitigation measures
- Imp Involvement of locals & Gram Sabha
thus better rehabilitation & awareness about local conditions
- Brings a check of government & civil society on private players
- Helps in developing disaster resilient infrastructure

Certain limitations of EIA

- Prevalent illiteracy & lack of awareness amongst villagers makes dilution of law.
- Gram Sabha's often dominated by high castes & thus nexus corruption leads to surpassing of discussions in Gram Sabha.
- Administrative complacency
- EIA Act, makes the permission of Gram Sabha optional

Thus due to limitation of EIA & vested interest of certain sections there are roadblocks to have EIA as effective management tools.

EIA should be compulsorily & strictly adhered to. & Civil society & NGO's should be involved in process of Assessment. Also, Gram Sabha & villagers should be made part of it. Technical interventions for surveying & assessment can also be of vital help in this regard.

With increasing natural calamities & hazards, EIA is the need of hour for every infrastructure project in the country & thus should be strictly performed.

4. The differently abled are turned into 'disabled' because the society is built in a manner that does not cater to their needs. Comment.

भिन्न रूप से सक्षम एक व्यक्ति 'विकलांग/निःशक्तजन' बन जाता है, क्योंकि हमारे समाज की संरचना ही ऐसी है जो उनकी आवश्यकताओं की पूर्ति नहीं करती है। टिप्पणी कीजिए।

Disabled or differently abled is referred to the person who has certain deformity in his body. Owing to this deformity, disabled people faces challenges in day-to-day work. At present in India there are 2.8 crore disabled people & accounts for highest population for disabled in the world. Thus, society has a big role to play in improving their condition.

However, the scenario is different & disabled person is not disabled because of deformities but due to structure & prejudices of society which poses real challenge to them.

* In India, disability is considered as stigma associated due to sins of previous birth rather than biological reasons. This leads to

- Prejudices against differently abled
- leads to their seclusion & exclusion
- hamper cognitive development.

* Unsupportive infrastructure

- ↳ Architecture at Public places is not differently abled friendly. This leads to
 - inability to access services like hospitals, local transport etc.
 - due to lack of friendly resources, lack of education which further leads to lack of employment opportunities & thus trap into cycle of vicious poverty & deprivation.

* Attitude of people in society is not friendly towards differently abled & thus they are often targets of crimes & are seen with suspicion in criminal cases as well.

Thus both structural & behavioural challenges possess greater challenges to differently abled & makes them "disabled".

Government of India realises that the actual development of country cannot be done without empowering

"divyangs" & thus has taken various measures & schemes in this regard.

* Sugamya Bharat Abhiyan

- ↳ Accessible infrastructure
- ↳ disabled friendly services
- ↳ friendly & cohesive environment for development

* Disability Rights Bill has been amended to consider more number of issues in disabilities & increase reservation in offices & jobs from 3% to 4%.

Also, rights of disabled are clearly stated to prevent them from deprivation.

Thus the attitudinal change & right govt interventions are the real day need for development & empowerment of differently abled citizen.

5. What is the purpose behind formulation of National Air Quality Index (AQI)? What information does it convey? Discuss the distribution of AQI across various regions in India. Also suggest some measures to improve it.

राष्ट्रीय वायु गुणवत्ता सूचकांक (AQI) को विकसित करने के पीछे निहित उद्देश्य कौन-से हैं? यह कौन-सी सूचना प्रकट करता है? भारत में विभिन्न क्षेत्रों में AQI के वितरण की चर्चा कीजिए। इसमें सुधार करने के लिए कुछ उपाय भी सुझाइए।

→ According to WHO report, "ten out of top twenty (20) polluting cities of the world are from India", & this trend will go up in future if the present condition prevails. This report identifies the purpose behind the formulation of National Air Quality Index (AQI).

AQI ~~with~~ comprises of 8 pollutants & is functional in 17-18 cities of India & gives information about the pollution at real time level. It grades the air quality based on Good, Bad, Satisfactory... etc. as defined in Index.

- * AQI data reveals the poor air quality in Central & Northern India.
- * Cities like Agra, Lucknow, Gwalior has very poor air quality.
- * AQI in Mumbai & other coastal cities are better than ~~the~~ landlocked cities of UP & other north Indian states.

Thus AQI data creates awareness about the degrading air quality which has detrimental effect on human health.

following measures are required to improve it -:

- * Increase emphasis on use of Public transport
- * Check the pollution from vehicular emissions
- * Incorporate Bharat-VI norms all over the country
- * Check on Stubble burning & industrial air chimney vents etc..
- * Install air purifiers

* Design a national level policy to control rising air pollution menace.

Thus ~~an~~ an integrated approach at central, state & local level is required to check the menace of rising air pollution in the country.

6. Discuss the impact of globalization on mass media in India. Also examine whether cinema influences society or it is vice-versa.

भारत में मास मीडिया पर वैश्वीकरण के प्रभाव की चर्चा कीजिए। साथ ही परीक्षण कीजिए कि क्या सिनेमा समाज को प्रभावित करता है या फिर क्या समाज से सिनेमा प्रभावित होता है।

→ Globalisation is a process where social, cultural, economical integration of countries at world & people's level takes place. Globalisation has touched & impacted almost every sector in Indian society & mass media remain no different to it.

- * It has led to increase in both quantity & quality of content & thus has enriched its value.
- * Print media has not been limited to national boundaries but has reached to international destinations same day due to technological interventions.
- * Electronic media has benefitted the most. With Internet & social media, television media & cinema has taken a deep rooted place in Indian Society.
- * Indian media houses have transformed themselves into big corporates & thus has provided jobs & employment in sectors.

However there are many ill-effects -:

- * Globalisation has led to increase in competition & this has led to journalism taking back seat & marketing coming front
 - leading to decline in journalism quality
 - Populist shows rather than real issues
 - Flashy & Breaking news showing glamour rather than social grievances

* Today all forms of media is owned by single enterprise (due to some FDI etc. from global firms) & thus has led to monopoly & issues of corruption, paid news etc. Thus, this has degraded old media house & media culture of India.

Cinema in the era of globalisation has taken a new role & is influenced by the change in society. Cinema in 1950-60 was related to ~~national~~ freedom & social issues, while in 70's-80's it was romantic movies & today science fictions & superheroes

are making space. Thus, the cinema reflects changing ~~soci~~ interest of people & thus of society.

On other hand society is influenced by media & cinema. Rising crimes, increasing commodification of women & also awareness on social issues are contributions of cinema in society. Cinema not only determines national but also international views about a nation & thus is a tool of soft power.

Thus, in essence it is both way relation & cinema influences society & society is influenced by cinema equally.

7. Green revolution was hailed as a major scientific achievement when it was introduced. However, in the long term, certain negative social as well as environmental consequences came to the fore. Examine. Suggest some safeguards that the government should take while ushering in the second Green Revolution.

हरित क्रान्ति का जब शुभारम्भ हुआ था तो इसे एक बड़ी वैज्ञानिक उपलब्धि माना गया था। लेकिन दीर्घावधि में इसके कुछ नकारात्मक सामाजिक और पर्यावरणीय परिणाम सामने आए। परीक्षण कीजिए। कुछ ऐसे सुरक्षात्मक उपाय बताइए जो सरकार को दूसरी हरित क्रान्ति के दौर में प्रवेश करते समय अपनाने चाहिए।

→ Green revolution in 1960-70 is a landmark event as it created self-sufficiency in food production & also led to development of agriculture in the country.

However in long run as we see today it has created wide negative consequences:-

Environmental Consequences

* Degradation of fertility of fields due to overuse of fertilised.

* Depletion of groundwater resources & soil salinisation

* Increase in pest attacks due to development of resistance

* Loss of biodiversity & cropping pattern

Social Consequences

- * Created regional disparities
 - ↳ Green revolution primarily in Punjab, Haryana, Western UP
- * Created rich-poor divide
 - ↳ due to lack of land reforms, rich received most benefits.
- * Politicisation on Caste lines
- * Migration of peasants.
- * Social Backwardness in women
 - ↳ Punjab-Haryana sex ratio is worst as compared to other states.

Thus in long term due to lack of management, further innovations & improper land reforms, Green revolution cannot impart its potential success.

Thus, while ushering second green revolution, government should follow following safeguards -:

- * Equal emphasis on all crops & more on local conditions bases.
for instance -∴ Pulses & millets should be emphasised in dryland & arid farming areas
- * Emphasis on organic farming & other traditional methods should be made
- * Equal emphasis on all regions should be made
- * Should be integrated with other projects of watershed development & institutional building for future support.

Green revolution in words of Dr. Swaminath
-an is not a one time process but it
is a ever-continuing exercise & thus
 Government should try to continue by bringing innovations & research in agriculture.

8. What are wetlands and how are they different from lakes? Why are wetlands considered ecologically important? Critically examine the Draft Wetland Rules 2016.

आर्द्रभूमि क्या हैं और वे झीलों से किस प्रकार भिन्न हैं? आर्द्रभूमियों को पारिस्थितिक रूप से महत्वपूर्ण क्यों माना जाता है? आर्द्रभूमि नियम प्रारूप 2016 (ड्राफ्ट वेटलैंड रूल्स 2016) का आलोचनात्मक परीक्षण कीजिए।

9. Degradation of natural resources can occur, not just by the action of pollutants but also by improper resource utilization practices. Explain along with appropriate examples and suggest possible solutions for the same.

प्राकृतिक संसाधनों का निम्नीकरण न केवल प्रदूषकों की क्रियाशीलता से अपितु संसाधनों के दोहन की अनुचित प्रथाओं द्वारा भी घटित हो सकता है। उचित उदाहरणों सहित व्याख्या कीजिए और उनके लिए संभावित समाधान सुझाइए।

10. India was one of the first countries to explicitly announce an official population policy in 1952. Critically analyse various aspects of the population policy of the country over the years.

1952 में अपनी जनसंख्या नीति की घोषणा करने के साथ ही भारत उन चुनिन्दा देशों के समूह में सम्मिलित हो गया जिनकी अपनी अधिकारिक जनसंख्या नीति थी। इसके पश्चात के वर्षों के दौरान देश की जनसंख्या नीति के विभिन्न पहलुओं का आलोचनात्मक विश्लेषण कीजिए।

→ Population stabilisation has been a part of policy planning since Independence & first National Population Policy was announced in 1952 with an aim to stabilise population growth. However, ~~little~~ due to economic development agenda, ~~and~~ & three wars in succession population continued to grow.

In 1970's, forceful sterilisation practices were introduced & sterilisation camps were set up in large number during emergency. This step was coercive & led to deterrence towards family planning.

In 1980's, forceful sterilisation was denounced & persuasive approach was followed. The Population Policy of 2000, defined objectives in terms of IMR, MMR, TFR to be achieved by 2010 & targeted

approach was followed. However, desired outcomes were not achieved. & inadequacies of sterilisation camps led to death of many women patients.

In 2006, Population stabilisation fund was set up & two schemes - Preme & Santushti were introduced to incentivize & reward parents & couples & set out examples in society & Thus we are seeing a shift from targeted approach to Conciliatory approach.

Today, natural birth spacing, use of contraceptives & male sterilisation is promoted by the government instead of targeted & sterilisation promotion approach.

Use of NGO's, & civil society activists are taken to promote population policy & achieve ~~TFR~~ TFR rate below 2.1

Thus over the years the government approach has changed & progressed in progressive, citizen friendly & ~~of~~ result oriented direction.

11. Regionalism in India is not only rooted in India's diversity of languages, cultures, tribes and religions but also fuelled by a sense of regional deprivations. Discuss.

भारत में क्षेत्रवाद की जड़ें न केवल भारत की भाषाओं, संस्कृतियों, जनजातियों और धर्मों की विविधता में निहित हैं बल्कि वह क्षेत्रीय अपवंचनों की भावना से भी भड़कता है। चर्चा कीजिए।

→ Regionalism is a political ideology which in reference to nation is a sub-nationalism concept. Regionalism in India persists due to ~~vast~~ vast geography, ethnicity & thus there exist diversity in languages, tribes, cultures which fuels regionalism.

Regionalism is also fuelled by sense of regional deprivation. In present issue of demands of separate states are mainly due to these persisting deprivations.

- * North Eastern States since Independence found themselves isolated & less economically developed ~~to this~~
- * Chattisgarh, Telangana etc. are created due to the regional deprivation issues.
- * Present, demand of Gorkhaland in West Bengal also has regional deprivations as major factors.

Regional deprivations leads to :-

- * lack of services health, education, infrastructure, jobs etc.
- * leads to large scale migration thus loss of human capital to states.
- * Persistence of poverty & malnutrition & low indicators of health

All these factors leads to development of animosity between regions & thus demand of separate states or special category status

The north-south divide seen in the country is not only due to caste & language & culture but also due to economic development of southern states as compared to northern states.

Regional deprivation has often led to loss of fear of jobs in host states & thus has also aggravated steps such as son of soil policy, reservation to kannadigas etc.

In a vast geography like India, regionalism is ~~not~~ bound to happen. However when fuelled with regional deprivations, it hampers national integrity & ruptures social fabric of society.

Over past 70 years since independence, many issues related to regionalism has aggravated but nation's unity & cohesiveness has failed the secessionist movements & had led to separation & creation of new states on viable grounds.

12. In spite of accounting for 4% of world water resources India has been facing an acute water crisis. Discuss. In context of the National Water Policy, 2012 enumerate the steps that can be adopted for sustainable use of water resources.

विश्व के 4% जल संसाधनों से संपन्न होने के बाद भी भारत तीव्र जल संकट का सामना करता रहा है। चर्चा कीजिए। राष्ट्रीय जल नीति, 2012 के संदर्भ में जल संसाधनों के सतत उपयोग के लिए अपनाए जा सकने वाले कदमों को एक-एक करके बताईए।

India is blessed with ~~quite~~ number of ~~co~~ rivers & accounts for 4% of world water resources but still it faces acute water crisis.

Reasons

- India has 17% of world's population & thus resources are inadequate to serve rising needs.
- Lack of rain-water harvesting & conservation techniques
- Pollution of water due to Industrial & Solid waste makes it unfit for human use
- Lack of awareness amongst citizens about conservation of water.

- Unplanned Agriculture techniques
 - ↳ Water intensive crops are planted
 - ↳ over-irrigation of land. et al.

National Water Policy 2012 tries to bring conservation of water as the prime agenda in policy making. However due to lack of proper implementation it suffers a setback & acute crisis prevails.

Steps for Sustainable use of water resources

- Point Source of Pollutions should be checked
- Awareness about conservation techniques should be made
- Rain water harvesting should be made compulsory in buildings
- Agriculture :- water intensive crops should be disincentivised from cultivation
 - ↳ Agro-climatic farming should be promoted.

- Over irrigation & Evaporation losses from canals, rivers should be checked.
- Water Crisis should be tackled at policy planning at local level.
- Interlinking of rivers should be worked out as an option.
- Desalination of sea water & R&D on cost effective techniques should be done.

An integrated approach is thus required to solve the acute water shortage.

13. Global warming would not only result in change in global climate but will also adversely impact biodiversity, global food production, global health and world politics. Comment.

वैश्विक तापन के परिणामस्वरूप न केवल वैश्विक जलवायु में परिवर्तन होगा अपितु यह जैवविविधता, वैश्विक खाद्यान्न उत्पादन, वैश्विक स्वास्थ्य और विश्व राजनीति को भी प्रतिकूल रूप से प्रभावित करेगा। टिप्पणी कीजिए।

Global Warming refers to the increase in temperature of earth due to heating because of increasing Greenhouse gases in atmosphere due to anthropogenic activities. It has wide adverse impacts:-

Impact on biodiversity

- * ~~Impact~~ Loss of habitat
 - Extinction of keystone species
 - Fish etc. & other sea animals will die due to increasing temperature of water.
- * Coral bleaching due to increasing acidification.

Impact on food production

- * Will lead to frequent floods & draughts
- * Reversal in monsoon. (delay as well)
- * Change in cropping pattern.

- * Change in ocean current circulation will impact local climates & fisheries production
- * Death of phytoplanktons due to acidification.

Global health

- * Will give rise to new epidemics
- * Will make pathogens resistant to conditions due to their evolution & treatment will get tough.
- * Increasing dengue, Chikungunya & other new diseases evidents this

World Politics

- * Will create scarcity of water & resources
- * Will lead to ~~wide~~ mass migration.
- * Will create new challenges for policy makers
- * Scarcity will lead to increasing protectionism & undoing of efforts of past 3 decades.

The threats of Global warming are real & increasing day by day & thus preventing the degradation due to anthropogenic activities is the need of the hour. The Paris Climate Agreement & INDS goals are strictly to be adhered with to prevent the rise of temperature in future.

14. Discuss the relevance of sacred groves and forests in protection of biodiversity in India. Also, highlight the various challenges associated with the conservation of sacred groves.

भारत में जैव विविधता के संरक्षण में पवित्र उपवनों और वनों की प्रासंगिकता पर चर्चा कीजिए। साथ ही, पवित्र उपवनों के संरक्षण से सम्बद्ध विभिन्न चुनौतियों पर प्रकाश डालिए।

Sacred Grooves are part of forests
Conserved by tribals or local population
due to their religious & cultural
beliefs. Sacred Grooves are widely
present in North East, Maharashtra
& other tribal belts.

Relevance of Grooves

- Enriches the concept of Community based Conservation
- Rely on ~~Ancient~~ Ancient & Traditional Conservation methods
- Helps in maintaining ecological balance with surrounding
- In consonance with Tribal Panchsheel policy & ethos of constitution & tribal rights.

- A livelihood source for tribals

Relevance of forest in biodiversity protection

- Provides shelter for fauna & thus Habitat for animals.
- Provides food to flora & fauna.
- Protects them from predators
- Thus forests provides conducive environments to plants & animals for survival.

Challenges Associated with conservation of sacred grooves

- Changing societal practices from nature worship to temple worship
- Changing living patterns in tribal areas
- Conflict of conservation of sacred grooves with development of areas
- Mixing up of tribals with outside world is impacting their culture

This changing societal & living pattern
& increasing demand for resources
possess challenges for conservation of
sacred grooves. & thus Government
& Tribal councils should take the
steps to preserve this ancient traditional
sustainable preservation culture.

15. The Chipko movement not only raised the issue of ecological sustainability but also those related to socio-economic inequalities and political representation. Analyse.

चिपको आंदोलन ने न केवल पारिस्थितिक संधारणीयता के मुद्दे को उठाया अपितु इसने सामाजिक-आर्थिक असमानताओं और राजनीतिक प्रतिनिधित्व से संबंधित मुद्दे भी उठाए। विश्लेषण कीजिए।

Chipko Movement was started in 1973 in areas of Present day Uttarakhand by local tribal population against the forest officers orders to grant forest land to commercial ventures.

This movement raised the issues of ecology sustainability, socio-economic disparities as well as political representation.

Ecological Sustainability

- Gave a context of Community based Conservation.
- Exemplary for other communities to protest in future.
- Emphasised on Traditional Conservation Techniques to preserve environment.

Socio-economic inequality

- was a majorly a feminist movement.
- highlighted the conditions of forest workers, dwellers & tribals
- was against the vested corporate interests & raised voice against unequal treatment by authorities.

Political representation

- Political activists highlighted the issues at various levels
- Post this movement various environment conservation Acts were passed.
- Efforts led to the passing of forest rights act.

Thus Chipko movement was a watershed movement in the Environmental Conservation Efforts of India.

16. What are the causes for the loss of biodiversity? Why is it necessary to conserve biodiversity? Explain the in-situ and ex-situ measures of conservation.

जैव विविधता की हानि के क्या कारण हैं? जैव विविधता का संरक्षण क्यों आवश्यक है? संरक्षण के स्व-स्थानिक एवं बाह्य-स्थानिक (इन-सीटू एवं एक्स-सीटू) उपायों की व्याख्या कीजिए।

Biodiversity refers to collective flora, fauna & human beings in environment. It is the diversity of living beings.

Causes for the loss

→ Increasing Pollution & human activities has led to -:

→ loss of habitat

→ fragmentation of habitat

→ overexploitation of resources leading to extinction.

- Introduction of invasive species

↳ Peemai Karuvilam tree in Madras did
widespread diversity loss

→ Climate Change & Global warming

- Extinction of keystone species

Need to conserve biodiversity

- Biodiversity gives

- ↳ economic benefits
- ↳ provides food security (a source of nutrition)
- ↳ helps in maintaining ecological balance & conservation of nature
- ↳ helps in understanding nature, resources & evolution etc.

loss of biodiversity will impact life of humans & will lead to threat to survival of mankind & thus its conservation is important.

Measures of Conservation

Ex-situ Conservation:- Refers to measures where species are taken out/away from habitat for conservation

In-situ conservation:- Species are conserved by declaring their habitat as protected area.

In Situ Conservation
techniques

National Parks
Wildlife Sanctuaries
Tiger Reserves
Community Reserves
Sacred Groves

Ex-Situ
techniques

Zoological Parks
Botanical Parks
Seed Banks
Gene Banks
et. al.

Conservation of biodiversity is important for survival of humankind & thus more interventions than at present are required in this regard..

17. Explain the Ozone hole phenomenon and discuss why it is distinctly pronounced over Antarctic as compared to other regions. Examine the success of the Montreal Protocol in combating ozone depletion.

ओजोन छिद्र परिघटना की व्याख्या कीजिए और चर्चा कीजिए कि अन्य क्षेत्रों की तुलना में अंटार्कटिक के ऊपर यह स्पष्ट रूप से परिलक्षित क्यों होता है। ओजोन क्षरण से निपटने में मॉन्ट्रियल प्रोटोकॉल की सफलता का परीक्षण कीजिए।

→ Ozone hole phenomenon is referred to a process of depletion of Ozone layer in Stratosphere leading to a hole in the layer.

→ The ~~Chloro~~ Chlorofluoro Carbons (CFC's) & Hydro ~~fluor~~ Chloro fluoro carbon (HCFC's) emitted by refrigerants etc. in troposphere escapes & reaches stratosphere.

→ They come in contact with UV light & Chlorine (Cl) radical gets dissociated which reacts with ozone & reduces it into oxygen & regenerates Chlorine which further degrades ozone & thus creating a hole in the layer.

As compared to Arctic, this phenomenon is distinctly pronounced over Antarctic region due to -:

- * Climatic & weather conditions
 - ↳ Cool climate favours stability of Chlorine in Stratosphere
- * Presence of stratospheric cloud (nauclilicium cloud) which further aids depletion.
- * Cold climate & low temperature even in summer due to position at pole further leads to depletion.

Montreal Protocol was signed in 1987 with an objective to prevent the depletion of ozone layer by banning the use of CFC's, HCFC's etc. ~~& develop new~~

Its success can be evident from following

facts -:

- * NASA observation about recovery of ozone layer

- All members of United Nations are members of this protocol
 - CFC's & HCFC's has been faced out & alternatives have been developed.
 - It has led an example & recent Paris agreement, legal agreement etc. are following same global cooperation path.
- Thus, Montreal Protocol has been highly successful in creating global awareness & cooperation in subverting climate change & prevent depletion of ozone layer.

18. 'Swachh Bharat' cannot succeed unless there is adequate management of solid waste in India. In this context, enumerate the salient features of the new Solid Waste Management Rules (SWM) 2016. Also discuss to what extent they can help in achieving the aims of 'Swachh Bharat'.

भारत में ठोस अपशिष्ट प्रबंधन की पर्याप्त व्यवस्था के बिना 'स्वच्छ भारत' अभियान सफल नहीं हो सकता। इस संदर्भ में, नए ठोस अपशिष्ट प्रबंधन (SWM) नियम 2016, की मुख्य विशेषताओं को बताइए। साथ ही यह चर्चा भी कीजिए कि 'स्वच्छ भारत' के लिए स्थापित लक्ष्यों की प्राप्ति में वे किस सीमा तक सहायक हो सकते हैं?

→ Acc. to government statistics, India produces 62 million tonnes of Municipal solid waste every year & 81% of that waste is dumped to ground without treatment.

To curb this menace new Solid Waste Management Rules has been introduced. with following features:-

- * Applicable beyond Municipal Areas this will incorporate outside slum areas
- * Envisages Waste Segregation at source
- * Allows Municipal ~~authorities~~ bodies to levy collection -n fees
- * Brand owner of non-biodegradable components are required to develop waste collection system.
- * Fine for littering at public places.

Swachh Bharat Mission envisages to Clean India of Solid Waste by 2019 & thus Solid Waste Management Rules are in sync with the mission. SBM targets behavioural ~~etc~~ & attitudinal change at community & individual level & measures like waste segregation at source will be a right intervention in this regard.

Also, allowing local municipal bodies to levy fees will make waste management system more efficient & self-reliant.

The onus on brand owners to develop waste collection system is a step in direction of setting accountability of corporates & industries towards environment which is a way SBM envisages as well.

Fine for littering at Public Places will curb littering & will keep places clean. & thus will aid in SBM.

Thus the new rules are completely in
sync & widely appreciated. Government
should try to run awareness campaigns
to promote such rules & imposition &
implementation of rules will be vital in
success of Swachh Bharat Mission.

19. Despite numerous efforts by the government, the Child Sex Ratio (CSR) in India has been on the downward trend. Discuss the causes and implications of this trend. Also, suggest some measures required to improve the scenario.

सरकार द्वारा अनेकों प्रयास किए जाने के बावजूद भी, भारत में बाल लिंगानुपात (CSR) में निरंतर गिरावट की प्रवृत्ति रही है। इस प्रवृत्ति के कारणों एवं निहितार्थों की चर्चा कीजिए। साथ ही इस परिदृश्य को सुधारने के लिए आवश्यक कुछ उपायों को सुझाईए।

Despite various interventions like Beti Bachao, Beti Padhao, Leadli Lakshmi Yojana etc. the Child Sex ratio has decreased from 927 in 2001 to 919 in 2011 & thus is a case of concern.

Causes of this trend

- * Prevalent Patriarchy & Preference of male child.
- * Increasing living cost leading to one child family & thus move towards male child.
- * Technological interventions like Ultrasound etc. leading to sex selective abortions
- * Exorbitant culture of dowry etc. makes girl child a burden on parents
- * Patrilineal System of lineage makes girl considered as "Paraya Dhan" in family

Implications

Declining number of females in society will lead to:-

- * Adverse sex ratio
- * Disruption in culture of society
- * Increase in cases of Bride price, forceful marriage, abduction, rape & harassment of women
- * May lead to either increase in Polyandry or many males unmarried.
- * Will lead to failure of family as root of child development.
- * Societal structure may change in women's favour
- * Intercaste marriages may increase

Measures required

- * Change in attitude & perception in society (Gender Sensitisation)
- * Ban on sex-selective abortion techniques
- * Stringent actions against dowry etc.
- * Ban on female infanticide, incentivise & appreciate & motivate birth of girl child.

- * Empowerment of women → Educational
→ Political
 - * Women centered jobs to be promoted at village level.
 - * Celebrities etc. should be inculcated in promotion & awareness of policy in schemes.
- Schemes such as Apki Beti Namahi Beti by Maryame Government has led to improvement in CSR in Maryama & thus such schemes should be promoted at national level.

20. Give an account of the causes of noise pollution and examine its impact on human health. Enumerate the steps taken by the government to deal with noise pollution.

ध्वनि प्रदूषण के कारणों का विवरण प्रस्तुत कीजिए एवं मानव स्वास्थ्य पर इसके प्रभावों का परीक्षण कीजिए। ध्वनि प्रदूषण से निपटने के लिए सरकार द्वारा उठाए गए कदमों को बताईए।

Acc. to WHO report, India accounts for highest number of mental health cases due to noise pollution.

Cause of Noise Pollution

- Noise from industries
- Vehicular horns & engine noise
- Sound from household, construction sites
- Arbit usage of loud speakers & music system in ceremonies parties
- Noise from defence machine testing & space vehicles
- Noise from aircraft et al.

Impact on human health

It impacts psychological healths & physiological health

- leads to depression, anxiety
- Headache

- deafness
- Can hamper artery's
- increasing blood pressure, may lead to heart attack
- Affects persons mental health adversely as one also suffers from loss of memory.

Steps taken by Government

- Banning on use of loud speakers & strict prohibition from 10pm-6am
- Noise pollution has been added in list of Air pollution.
- Govt. has prescribed usage of ear Caps/plugs at work in noisy places etc.

However due to lack of implementation of law noise pollution continues to impact citizens of country.

- decibel limit of horns should be prescribed
- Segregation of industrial, residential & market area in city planning
- Planting tree line across the residential areas
- Creating awareness about ill-effects of sound pollution should be done.

Such actions along with stringent law & efficient implementation will help in curbing noise pollution.