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GENERAL STUDIES (TEST CODE : 1413)

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Medium Eng./Hindi	English	Date	25/10/2020
Center	Home		

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INSTRUCTIONS

Q. No.	Maximum Marks	Marks Obtained
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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 **ENGLISH & HINDI**.
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी 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 (यूसीए) 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 मिलेगा।
- 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।

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

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. In India, ancient and medieval storage structures such as the step wells, are not only magnificent in their conception, architecture and ornamentation but also hold a lesson for contemporary water concerns. Discuss with examples. (150 words) 10

भारत में बावड़ियों जैसी प्राचीन और मध्यकालीन जल भंडारण संरचनाएं न केवल अपनी अवधारणा, वास्तुकला और अलंकरण में श्रेष्ठ हैं, बल्कि जल संबंधी वर्तमान चिंताओं हेतु एक मीठा भी उपलब्ध कराती हैं। उदाहरणों सहित विवेचना कीजिए।

Ans Traditional water storage system in India like tanks, baoli, Johand, Oings etc. have been Centre of innovative practices even of today.

Importance

1. Water as essential commodity being recognised at earliest times if no water shortage was there.
2. Rani ke Vor, Ancient karez system shows architectural brilliance
3. Storage system at Modhwa is famous for step well ornamentation, and is known for its aesthetics looks during rainy system.

According to central water commission India needs 3000 billion cubic meter water every year. India receives 4000 billion cubic meter through rain.

This data shows that we don't have water ~~at~~ resource scarcity.

But utilization is not proper.

We only use 2% of rain water.

Lesson we need to learn from past

- 1.) Jal hi Teerun hai concept was popularised by ancient system.
 - 2.) Jal Sanchay as essential as idea of purity Ex. Ritual bathing, cremation near Ganga
 - 3.) Use water in Kamandal projects importance of judicious utilization.
 - 4.) Rain god is respected in our ancient system shows our concern for water.
- Work by Indian govt in form of Jal Teerun mission, Jal Kranti / Jal Shakti Abhiyan are important steps. However mass participation of type Tarun Bharat Sangh / Rajendra Kumar is need of hour.

2. In the period after 1919-20, the influence of Indian capitalist class over the nationalist movement progressively increased due to various reasons. Discuss. (150 words) 10

1919-20 के पश्चात् की अवधि में, विभिन्न कारणों से राष्ट्रीय आंदोलन पर भारतीय पूँजीवादी वर्ग का प्रभाव उत्तरोत्तर बढ़ा। चर्चा कीजिए।

Ans. Era of 1919-20 was the period of mass mobilisation, assertive politics, and demand for rule based order. Such participation require organisational homogeneity and resource to support such movement. Thus Capitalist role becomes instrumental in it.

Reasons

- (i) World war I and demand of non based weapon increased disposable income of Capitalist class.
- (ii) Rising left wing tendencies in the form of socialism made them realise that they can't stand aloof in growing dynamism.
- (iii) Many Capitalist like J.R.D. Tata, Jamnadas Bajaj were active member of INC, thus influenced the politics from within, which was visible

In congress demand in Economic program, Gandhi - 11 point formula, where private ownership was not touched upon.

(iv) for day to day working - required working capital was supplied by zamindar & Capitalist class.

(v) On one front they did not outrightly denied govt policies due to their entrepreneurial interest, but actively supported congress in boycotting public safety bill, Trade dispute Bill.

(vi) Formation of federation of Indian chamber of commerce (FICCI) 1927 gave them unified organisational support.

(vii) Congress too during their 28 months rule made sure that anti-zamindar & anti-capitalist laws were not passed. Major contribution towards economy came during 1944 when they put forward Bombay plan which became magna carta for industrial policies.

3. With modern education being introduced in India to meet the interests of the British, its reach was restricted and its character unsatisfactory. Discuss. (150 words) 10

ब्रिटिश हितों को पूरा करने के लिए भारत में आरंभ की गयी आधुनिक शिक्षा की पहुँच सीमित थी और इसका चरित्र भी असंतोषजनक था। चर्चा कीजिए।

Ans 3 Advent of modern education in India began with Thomas Babington Macaulay minute of 1834. There were various of Education system by British.

i) To serve the British needs by providing medium of instruction in English.

Benefits → People becoming accustomed to British way of life

2) Resentment to foreign rule will decline.

3) Provide justification for British cause as new generation will be fed with biased info.

4) Teaching history among Hindu, Muslim, British (Book by James Mill) will create sectarian divide.

Restricted reach

↳ only to upper class on the presumption of downward filtration.

Benefit :- i) People with resources becoming loyal to British.

- ii) Education as gift by one person to another, gifts are never adversarial
- iii) Certain class divide among poor & rich, educated & illiterate thus common links & idea of mass mobilisation will be checked.

Character unsatisfactory

- i) Glory of British might was taught so that people relate themselves with being British.
- ii) Denying regional / Vernacular teaching at start keep people at bay about their own cultural, values & tradition
- iii) Money of 1813 Act, 1883 Act was too less for country vast as India, moreover education wasn't free.
- iv) 1904 Act put restriction on universities. However some reform by Humber Hartog was relief giving. In all education helped people in their emancipation as well.

4. Throw light on the reasons of poverty in the third world countries and enumerate the key ideas suggested in the Brandt report of 1980 to help them. (150 words) 10

तृतीय विश्व के देशों में निर्धनता के कारणों पर प्रकाश डालिए और उनकी सहायता करने के लिए वर्ष 1980 की ब्रॉन्ट (Brandt) रिपोर्ट में अनुशंसित प्रमुख विचारों को सूचीबद्ध कीजिए।

Any Third world countries refers to those countries whose economic, social, political development was not at par with rest of the contemporaries.

Reason of poverty

1) Education

[1.1] Education creates class divide, resource divide, & effective utilisation of those resources is curtailed thus leading to poverty.

[1.2] Education & undereducation leads to neo-slavery where informed ruled over illiterate & deprive them of basic need.

2) Development

2.1 Development is never multidimensional in third world nation, for Health, sanitation, Nutrition all are not dealt together in one unified way.

[2.2] Diversions, misdirection results
in loss/wastage of resources.

3) Technology

3.1 Technical challenges leads to delay
of public delivery
Ex Non automation of PDS

4) Third world habits

Caste, class divide, religion divide
diverts attention of popular govt from
developmental concerns.

Ideas suggested in Brandt report

- (i) following bottom up approach
- (ii) ensuring mass participation
- (iii) social audit of govt schemes.
- (iv) Decentralized policy making
- (v) Impact assessment
- (vi) Effective grievance redressal
mechanisms.

more people to people,
people to govt dialogue is needed.
developed nation must give
what is owed to developing world
~~that~~ in various agreements.

5. Give an account of various factors that have led to poor participation of women in Indian politics. (150 words) 10

भारतीय राजनीति में महिलाओं की निम्न भागीदारी हेतु उत्तरदायी विभिन्न कारकों का विवरण दीजिए।

Ans. Being an another gender, comparing half of the civilization, participation of women in various scenario has always been cause of concern.

Factors leading to poor participation

(i) Ancient time

1.1 ↳ women were kept at lower pedestal & in par with shudra by citing writting of Shastri's & purana's. Thus their participation was curtailed

1.2. Major onus of Domestic Chores was considered women's responsibility, thus unfair division of labour was practised.

1.3. Women's happiness was attached to men's. Hence in that society here role was not considered necessary Ex. After death of husband she has to perform sati

(ii) Medieval time

Debarring few leaders like Razia Sultana, Rupmati, Rudramadevi, if was all men led political order

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(सत्यमेव जयते)
(सत्य ही जीतता है)

due to belief in male based inheritance, social order.

3 Problem in Modern era

3.1 Century's old belief are deep rooted in women's mind.

Ex. Ghungat culture, speaking shawdy in front of men has curtailed their political participation.

3.2 Education which is tool to Egalitarianism has still distant dream for women

Ex. 52% literacy in Rajasthan

3.3 Concept of tokenisation, Panchayat pati has thwarted the freedom given by 73rd & 74th amendment Act

However there is growing number of women legislatures (MPs in 17 Lok Sabha) which is result of awakening. This will help in relaxing the dream of SDG of Gender equality.

6. Though both caste and race are manifestations of closed systems of stratification, there are important differences between the two. Explain.

(150 words) 10

यद्यपि, जाति और प्रजाति (race) दोनों ही स्तरीकरण की बंद व्यवस्था की अभिव्यक्तियाँ हैं, तथापि इन दोनों के मध्य महत्वपूर्ण अंतर भी हैं। स्पष्ट कीजिए।

Ans Caste refers to lineage system of kin which mostly identified through their work. Ex. Jotat, Rajput

Race is associated with person of origin & belongingness.

Ex. White, African, Indian.

In Ancient times by the idea of division of responsibility these systems emerged, according to lineage, & achievement

Stratification is then happened.

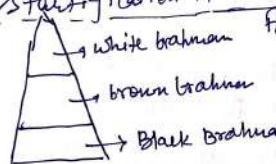


fig. 1. Stratification of class Caste & Race in an order

There exist important difference between them

Caste	Race
(i) They are identified originally with work assigned Ex. Shudra - Servitude	(ii) They are identified with colour, creed, region. Ex. African American European.

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सत्यमेव जयते

Caste	Race
(i) Solidarity among Caste people is common phenomenon Ex. Jati Samaj, Gujar Mahasabha (ii) They have generally organisational structure Ex. Suryamal foundation (iv) Generally an idea of good world country or Ancient Brahminical brother Ex India, Nepal	(i) They themselves comprises of many Castes, thus fraternity is absent (iii) Such thing was Absent (iv) This is modern concept & present through out globe

In changing dynamism of today's world it is high time that we realise even if we are different in caste & race, we are same in nature, & we allegiance to one flag & Constitution to project unity in diversity.

7. What are peri-urban areas? Highlight the problems of peri-urban areas in India and also suggest corrective measures. (150 words) 10

परिनगरीय (peri-urban) क्षेत्र क्या हैं? भारत में परिनगरीय क्षेत्रों की समस्याओं पर प्रकाश डालिए और साथ ही सुधारात्मक उपायों का भी सुझाव दीजिए।

Ans 7. Peri-urban areas refers to the Area nearby a urban town which is in fast developing stage, or has developed due to agglomeration economy.

Problem of peri Urban Area & Suggestion

(i) Automatic expansion leads to severely managed town

(i) Establishing Municipal board or town management Committee

(ii) Dumping ground of urban efflux
Ex. Waste material near Rohini in Delhi

(ii) People participation & state's active involvement
Ex. Garbage Cafe Ambikapur.

(iii) Ghettoization is common problem
Ex Dharvi

(iii) City level planning in terms of master plan is needed
Ex Slum Rehabilitation work.

Problem	Remedy
(iv) Health, Sanitation, Social wld of gender disparity are common.	(iv) More NGo, Mahalla Clinic, mobile health vans are needed.
(v) Education, political participation, vote bank politics are major concerns	(v) Awareness through SWEP. NGo like TYCIA should be promoted. Ex. Jyoti Mission of = Uditia for innovative housing can be replicated.

With developing Economy
Coming of peri-urban Area is inevitable,
Sustainable planning (like Chandigarh) is
need of hour to ~~realise~~ realise
dream of SDG of Sustainable cities.

8. Studying the cosmos for over a quarter century, the Hubble Space Telescope has changed our fundamental understanding of the universe. Elaborate. (150 words) 10

एक चौथाई सदी से अधिक समय तक ब्रह्मांड का अध्ययन करते हुए, हबल स्पेस टेलीस्कोप ने ब्रह्मांड के संबंध में हमारी मौलिक समझ को बदल दिया है। सविस्तार वर्णन कीजिए।

Ans 8. Hubble space telescope is the observatory by NASA in High sky. Which captures the transient events of outer space



Contribution of Hubble

- ↳ Discovery of background cosmic radiation from outer space
- ↳ Exploring extra-solar space.
Ex. Oumuamua.
- ↳ Sudden burst events like supernova, meteorite etc are analysed.
- ↳ Discovery of gravitational lensing
- ↳ Phenomenon of solar flares, Sun spot.

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- ↳ Our understanding of eclipse
- ↳ Our understanding of chandra
Shekhar limit of various star,
by which we can say sun is
in Red giant state.

It's various discoveries
has led to scientific, atomic
understanding of universe from
discovery of gravitational waves
to science for humanity in terms of
cosmic study.

9. Give an account of the location of pharmaceutical industry in India. Also, give reasons as to why India has emerged as the pharmacy of the world.

(150 words) 10

भारत में औषध उद्योग की अवस्थिति का विवरण दीजिए। साथ ही, इसका कारण भी बताइए कि भारत विश्व की औषधशाला (फार्मसी) के रूप में क्यों उभरा है।

Ans.

Pharmaceutical are drugs producing industries with various use in medicinal field.

Location of
pharma
industries



Fig.

Locations dependence factor

Raw Material

As pharmaceutical are made from API (Active pharmaceutical Ingredients) which are majority imported from China, thus industries are located on or near coast to reduce Transportation cost & easy exports.

Temperature & Moisture conditions plays a major role in drug manufacturing. Thus neutral effect of on-shore wind are favorable.

Reason for India Emerging pharmacy hub

- (i) Govt Initiative such as compulsory licensing under 3d patent to manufacturing patented drug.
- (ii) Readily availability in west market
Ex U.S.A., China
- (iii) Liberal export policy for drug, & duty inversion on imported raw material
- (iv) Evergreening of licence is checked.
- (v) Drug pharma policy is investment friendly.

Healthy mind, healthy body has always been vision of Indian society. Availability of pharmaceutical at cheap & affordable price has rightly made India as largest exporter in world.

10. Giving example, explain how continental rupture ultimately results in the formation of a new ocean basin. (150 words) 10

महाद्वारण अस्तु हृत्, स्पष्ट कीर्ति ए किं प्रकार महाद्वीपीय विदारण का परिणामस्वरूप अस्तुः
अभीन महासागरीय बेसिन का निर्माण होता है।

Ans Plate tectonics forms the basic & well accepted theory behind movement & drift of the continent & Oceans.

There are several places in the world that lies on the Rift valley direction.

Ex. Red sea, East African rift valley
: Narmada in vindhyan range.



Fig. 1. Rupture margin.

Causes.

When land masses lie at divergent plate boundaries, over the year tectonic forces splits

them apart leading to the formation of new oceanic floor.

Ex. As happened with Red sea when

Ardahan peninsula was separated.

It is predicted that after several thousand years East African Continental rapture will give rise to new land mass & subsequent ocean between the.

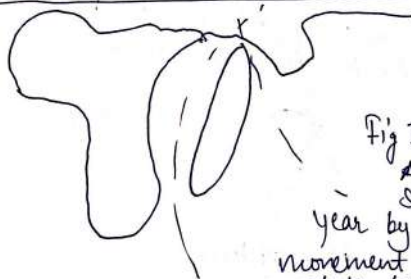


Fig II.

After several year by predicting movement of plate boundaries.

Movement of boundaries & plate helps us understand the formation of various landmarks as it stand today Ex Madagascar, Alution Island etc.

This study of tectonics has become essential part of mankind.

11. A strong tradition of linguistic analysis developed in ancient India and there remained a continuous focus on its preservation and transmission. Elucidate. (250 words) 15

प्राचीन भारत में भाषा संबंधी विश्लेषण की एक सुदृढ़ परंपरा विकसित हुई थी और इसके संरक्षण एवं संचरण पर निरंतर ध्यान दिया जाता रहा था। स्पष्ट कीजिए।

Ans:

Language in India, since time immemorial has been centre of every culture, & tradition.

In ancient India during many symposiums [shastras] use of Sanskrit language to win an arguments was practice popularised.

Many text of ancient India like Abhigyan Shakuntalam, Ratnavali, Asthadyayi represents rich knowledge of Sanskrit language.

Various other language like pali (popularised by Tspitakas), prakrit (used by Ashoka in Dharma) were preserved through writing.

Continuity of linguistic tradition

- (i) Upasadh were created to give proper meaning to the shruti's of ancient guru's. they were

compiled in same language in which original lecture was delivered

(ii) Jangam tradition through various writing
Takkapayim preserved the essence of classical language

(iii) Preservation was ensured by converting & translating one work in many languages.
Ex Mahabharat in Razmnama (Persian)

(iv) Transmission was ensured through permanent writing by Raja's through edicts, pillars & prashasti.

Coming of New language & their preservation

(i) Arabic was popularized by Sultanat ruler as seen in Kitab-ul-Hind by Minh Siraj.

(ii) Turkish was preserved through Baburnamah.

- vii) New language like Urdu was born by use of Hindi & Persian.
- iv) Various literary style, prose writings, gazals did the work of transmitting and preserving Urdu.

Modern Era & preservation

- i) Writing of Raja Ram Mohan Ray in various highlighted the idea of language linguistic heterogeneity
- ii) Sanskrit / Bengali was preserved again by Bankim chandra Chatterjee
- iii) Vivekanand, Dayanand revived Sanskrit cultural one lost to Persian & arabic writing

Through NEP 2020 we retreated one century old tradition of preserving language & maintaining unity in diversity of language through 3 language formulae.

12. Explain, using examples, how the nature of peasant movements changed during the colonial period. (250 words) 15

उदाहरणों के साथ स्पष्ट कीजिए कि औपनिवेशिक काल के दौरान किसान आंदोलनों की प्रकृति किस प्रकार परिवर्तित हुई।

Ans/2. Peasant in colonial times
renowned for their regional demand.
& against the ~~exploitative~~ exploitative policies.

Early colonial phase



Fig 1
during 1820-1870

(i) In Indigo movement their demand was to wit planters, forefull Indigo sowing should be stopped. Govt. responded by passing Bengal tenary Act, 1858.

(ii) In Pabna they were risen against petty zamindar, money lender & against

artificial exiction.
Govt responded with stopping transfer
of urban landownership.

(iii) In Decan they were hard hit
by American civil war, & cotton
price inflation.
Govt responded with Decan
Agricultural relief Act. 1876

During 1870-1930 Independence

(i) Mopilla - Against Jamini hindus, (land
(1920) took communal colour on the
back drop of Khilafat movement,
they established parallel govt.
Govt response - Crushed with force

(ii) Indigo II Champaran

↳ Against tin kathia system,
and overshoot ~~the~~ bengal indigo
planters.
with help of Gandhiji's govt. restored
normalcy between planters & peasants

by agreeing to just terms.

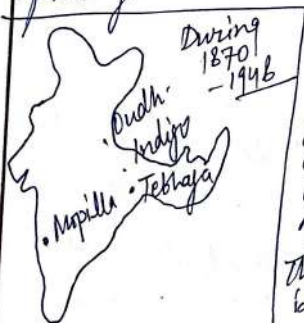
Tebhaga movement 1942

↳ Against eviction by zamindar in Bengal, local movement & crushed by regional people use of force.

Oudh Kisan movement & Eka movement

During Non-Cooperation by Gannishankar Awastha, & Madripasi respectively. Used National movement to fulfill regional demand. Initially was against bedakhal system.

Govt responded by passing Oudh Relief Act of 1925, however few violent uprising were crushed too.



These movement helped nationalist in realizing that even peasant can be mobilised for greater cause if guided properly. These movements gave idea of agitation & reforms to peasants.

13. What were the conditions and circumstances that led to the emergence of Socialist Movement in India? Analyse the impact of socialist ideas on the Indian National Movement. (250 words) 15

भारत में समाजवादी आंदोलन के उद्भव के लिए उत्तरदायी पस्थितियाँ और घटनाक्रम क्या थे? भारतीय राष्ट्रीय आंदोलन पर समाजवादी विचारों के प्रभाव का विश्लेषण कीजिए।

Ans/3. Socialist Movement began in India in the pretext of Russian Revolution succession & coming of new age liberal intelligensia in Indian politics.

J.L. Nehru in his famous speech observed "I have no faith in modern Rajas & kings. I believe in people participation & democracy. I am a proud socialist."

Circumstance & Condition of socialist movement

i) Triumphant of socialist movement in erstwhile world. Ex Russia, Irish etc.

ii) failure of govt. to deliver on popular promises and basic need of people.

iii) Era of practice, petition, prayers becoming thing of past.

iv) Rising awakening in Indian masses through idea of fraternity, liberty, etc.

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of rights in erstwhile world through
revolution

- (vi) Lenin, marxism taking hold on political ideologies
- (vi) Failure of mass-movement like NCM resulted in people diverting to form new organisation.
Ex HRA to become HORA
- (vii) Violent movement curb by govt. thus new intelligensia hit the govt with basic common man problems & their participation
- (viii) Idea of Universal franchise, No Taxation without representation, idea of redistributive Income, Justice got held in the masses.
- (ix) Economic planning model, formation of labour organisation (AITUF), ITUF led to idea of socialist movement
- (x) formation of parties like Socialist Council by Narayan Dev, N.M. Joshi.

Impact

- i) Reform in govt. policies reflected by 1935 Act, where federalism, provincial autonomy, increased participation, enhanced voting based was enlisted
- ii) forming of govt in provinces by govt and passing of labour friendly Act
- iii) Defeat of Royal Commission on labour, trade dispute, public safety bill.
- iv) Economic planning, fundamental right being adopted in INC, which later enshrined in Constitution.
- v) Raja's Mahaja's authority of rule started declining.

Socialism teaches

Broaders revolution which ultimately became the guiding path for freedom.

15. Almost all the major 'divisive' problems of today have been there ever since Independence, or even earlier. But in spite of them India has not only survived as a nation but also become stronger. Discuss. (250 words) 15

वर्तमान समय की लगभग सभी प्रमुख 'विभाजनकारी' समस्याएँ स्वतंत्रता के समय से या यहाँ तक कि उससे पहले से रही हैं। किन्तु इन सबके बावजूद न केवल एक राष्ट्र के रूप में भारत का अस्तित्व बना रहा बल्कि यह पहले से अधिक सुदृढ़ भी हुआ है। चर्चा कीजिए।

Ans: This year we celebrated 73rd year of independent democratic Country. In the time of growing global uncertainties, rising polarisation, & country being bifurcated, this itself present picture of our strong democratic values.

Problems & our evolution through them.

- i) At the time of Independence only 11% people could read & write, today this stands at 74% (literacy). The growth was slow yet decisive.
- ii) Condition of women was miserable, due to ancient belief system Indian society is patriarchal and this deep rooted, however this is changing women are rising in forefront,

VISION IAS

Rising political participation (14% in U.S.), declining NMR, increasing literacy rate, women like Indira Gandhi, Sucheta Kripalani, Vasundhara Raje becoming head of govt is testimony to our growth.

(iii) Poverty, hunger, malnutrition are problem of any colonial Country, Through green revolution, Food Safety Act, our work is applaudable to eliminate these short coming.

(iv) Our share in global trade, & GDP is rising & we are fast developing nation

(v) Our philosophy of peaceful coexistence, Sarva Dharma Sadbhavana, Yoga has gained the international fame & recognition.

(VI) Having 130 billion people and still serving needs of them, feeding them is gigantic task and we are achieving them through democratic way

(VII) We present exceptional resilience and spirit of peace and awarded proportionally through global agreement
Ex Civil Nuclear deal.

Hence few problems like communal clashes, vigilantism, caste divide still exist but history is testimony to fact that these are just roadblocks & India ~~will~~ is well capable of removing them as it time and again proved.

16. Domestic servants are one unique group of workers in modern India, which is ubiquitous but remains invisible. Indicate the challenges faced by this section of workers. Also, discuss the factors that contribute to these challenges and suggest measures to address them. (250 words) 15

घरेलू नौकर आधुनिक भारत में श्रमिकों का एक अद्वितीय समूह है, जो सर्वव्यापी है किन्तु अदृश्य बना रहता है। श्रमिकों के इस वर्ग द्वारा सामना की जाने वाली चुनौतियों का उल्लेख कीजिए। साथ ही, इन चुनौतियों में योगदान देने वाले कारकों की विवेचना कीजिए और उन्हें दूर करने के उपाय भी सुझाइए।

Ans 16. Domestic Servants Sometime Invariable referred as "help" are people who work in house doing work like Cleaning, cooking etc.

Ubiquitous :→ As they are every where, even Govt vacancies are there (ex picnic etc)

Invisible :→ As they are not part of formal economy, their pay structure is greatly varied, and are never fixed. And their job is of limited hour, hence they remain invisible.

Challenges faced

- (i) Exploitation by employer
- (ii) Sexual abuse to female worker

- (iii) No social security, moreover pay cut if they take medical or emergency leave
- (iv) No holidays, there work is of continuous nature
- (v) Job losses are very frequent without remedy.

Factor that contribute

- (i) Insensitivity towards them.
- (ii) Lack of organisational structure among worker some union etc
- (iii) Lack of negotiating power in view of quick work
- (iv) Abundant availability in case of fire.

Remedy

- (i) Data gathering for counting
- (ii) formal cancel for rehabilitation of such sexual abuses

(iii) Penal provisions

(iv) Strong law for protection.

17. The story of contemporary India is a story of migration. In this context, explain how migration has shaped India socially and economically.

(250 words) 15

समकालीन भारत की कहानी वस्तुतः प्रवासन की एक कहानी है। इस संदर्भ में, स्पष्ट कीजिए कि प्रवासन ने किस प्रकार भारत को सामाजिक और आर्थिक रूप से आकार दिया है।

Ans 7

One find Punjabi speaking native making biryani in Hyderabad and another find dal-batti churma in difficult reaches of Meghalaya & Mizoram.

As B.R. Ambedkar also described "India as a nation is always on churn." People in India has migrated from one place to another from time immemorial.

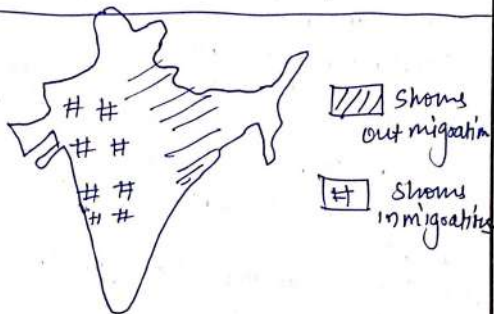
Various factors for migration. (Pull factor)

- (i) Better job opportunities
- (ii) Better education (students in Delhi)
- (iii) New horizons & entrepreneurship environment (Bangalore)
- (iv) Marriages (concept of patrilocality)
- (v) Labour & daily wages. (from Bihar & up to Western States)

Push factor

- (1) Poverty, Nutrition, Sanitation etc.
Ex Migration from Jharkhand etc.

- (iii) Violence ridden surroundings
Ex. Naxalite in Eastern India.
- (iv) Dwindling resource, obsolete Industries.
Ex. Conventional energy based plants
- (v) Growing population & resource crunch
Ex. Alluvial plain of Ganges.



Thus India we see today is culmination of various factors led to migration from one place to another which ultimately shaped idea of India.

Socially

- (i) Society is more or less becoming cosmopolitan in culture

(ii) Migration due to marriage has led to marriage of two regions' culture & tradition.
Ex. Jaat of Raj wedding of UP

(iii) Inter-caste, Inter-religions marriages has made idea of India secular in colour

However few concept like Son of soil doctrine, protectionism in terms of Marathi first, Reservation for domestic quota are road block in realising idea of India

Economically

(i) Better utilisation of resources & capabilities, division of labour, proper human resource redistribution.

(ii) spreading of footloose industries, Traditional Crafts throughout the nation has increased disposable income & found new markets.

Economic survey points out that migration although helped in better condition for many. However road block in terms of Health, Nutrition, Food security still looms (as seen in covid).

All India PDS system is welcome step in this regard.

18. Briefly describe the process of ozone hole formation. Also, explain why ozone hole over Antarctic is greater in size than the one over Arctic.

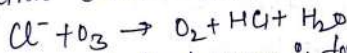
(250 words) 15

ओजोन छिद्र के निर्माण की प्रक्रिया का संक्षेप में वर्णन कीजिए। साथ ही, स्पष्ट कीजिए कि अंटार्कटिक के ऊपर का ओजोन छिद्र, आर्कटिक के ऊपर के छिद्र की तुलना में आकार में बड़ा क्यों है।

Ans 18

Research paper published in 1985, opened the eyes of people that their ambition is leading to crisis of humanity. and this led to formation of Montreal protocol & Nobel of peace in 1991. Ozone save us from harmful UV-A, UV-B rays. Process of ozone hole formation.

(i) Using cooling substances like chlorine & Bromine in refrigeration helps in formation of free Radical which upon reaction create O_3 (ozone) to oxygen.

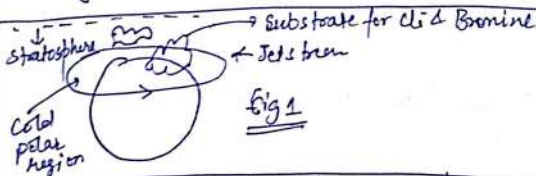


(ii) In Ground level ozone is formed due to photochemical smog which results in global warming, thus causing cooling at polar Areas, which becomes substrate for Cl, Br free radical.

(iii) Polar stratospheric cloud

In polar Area a strong wind of westerly jet stream flows

around low pressure zone in polar region which keeps colder air confined to polar area, effluent emitted gets substrate in terms of cooled cloud & rise upto the level of stratosphere due to vertical movement. Thereby causing harm to ozone gas.



Since ozone hole is weakening of ozone concentration in upper atmosphere in terms of ozone depletion unit (100 unit of 0.1 mm thick layer on instrument), it is not a hole as such.

Reason of hole greater over Antarctic

Land mass in surrounding is not present in Antarctic, which could have weakened the polar stratospheric cloud or polar vortex formation as in case of Arctic.

- (i) Antarctic is 2-200 meter thick ice over land, where Arctic is shallow. Thus Albedo is always higher in Antarctic.
- (ii) Strong winds due to absence of land mass perfectly incises. The low pressure zone, & ~~that~~ cold climate remains intact in Antarctic, in Arctic they take shape of Rosby waves.
- (iv) Human habitation, exploration activities are very low.
- (v) Antarctic has highest elevation. This stratosphere lies closer to surface than Arctic.

Study of ozone & its consequence is important phenomenon and climate change due to it is no longer phenomenon but reality, thus it's high time to study cause-effect relationship when it comes to ozone.

19. Ocean deoxygenation is one of the most detrimental, yet under-reported side-effects of human-induced climate change. Identify the causes behind it. Also, mention its socio-economic and environmental implications for the world. (250 words) 15

महासागरीय डीऑक्सीजनेशन मानव प्रेरित जलवायु परिवर्तन के सर्वाधिक हानिकारक, तथापि अल्पसूचित दुष्प्रभावों में से एक है। इसके लिए उत्तरदायी कारणों की पहचान कीजिए। साथ ही, विश्व के लिए इसके सामाजिक-आर्थिक और पर्यावरणीय निहितार्थों का भी उल्लेख कीजिए।

Ans. Ocean-deoxygenation is phenomenon where more CO_2 is dissolved in the ocean water & O_2 availability is shrunked.

Most determinant

- ↳ loss of marine life
- ↳ decline of coral & phytoplankton
- ↳ shifting of isocline (Carbonate dissolved line)
- ↳ phenomenon of winter kill & food insecurity in surrounding region
- ↳ Biodiversity losses

Causes behind it

- i) Increasing global warming and more injection of CO_2 in oceans through Carbon cycles.

- (i) Discharge of Industry effluent into ocean & increasing BOD & COD of the water.
- (ii) Phenomenon of Eutrophication, Winter kill, harming Ocean life & more oxygen used by decomposer
- (iii) Inefficient ocean exploration & degassing of harmful gases from basin.
- (iv) Unsustainable fishing & toxic substances like plastic being thrown into sea.

Socio Economic Implications

- (i) Loss of marine resources.
- (ii) Vicious cycle of poverty, hunger & diseases increases
- (iii) Pollution of rich minerals at sea bed
- (iv) loss of tourism due to loss of scenic beauty of algae & its colour
- (v) Frequent occurrence of natural hazard will hit economic uplift of nation

Environmental

- (i) Global warming will increase due to increased carbon cycle & increasing albedo
 - (ii) Submergence of coastal plain
 - (iii) more algal bloom
 - (iv) Toxic substance & invasive species will tend to flourish.
 - (v) Less availability of oxygen will give birth to new toxic cycle which will threaten biodiversity.
 - (vi) Flora & fauna kill
- Convention like UNCLOS, MARPOL should work in resonance with country to save humanity from such effects.
- Sunscreen
microplastic by
Step in this regard.
- Step like banning of Naram are welcome

20. Watershed management can ensure effective use of both natural and social capitals. In this context, discuss how the concept of integrated watershed management can help meet the sustainable development goals in India. (250 words) 15

जलसंभर प्रबंधन प्राकृतिक और सामाजिक, दोनों पूंजियों का प्रभावी उपयोग सुनिश्चित कर सकता है। इस संदर्भ में, विवेचना कीजिए कि एकीकृत जलसंभर प्रबंधन की अवधारणा भारत में स्थायी विकास लक्ष्यों को प्राप्त करने में किस प्रकार सहायता कर सकती है।

Ans. Watershed management ~~refers~~ to efficient control & utilization of river's catchment area & drainage basin.

Effective use leads to

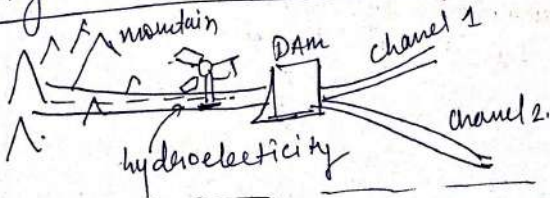
Natural Capital

- ↳ Efficient flow in riverine, marshes, estuaries is ensured
- ↳ Beautiful landscaped are formed
- ↳ Exploitation is checked

Social Capital

- ↳ Availability of resources.
- ↳ Better Subistence living
- ↳ water considered as essential life element

Integrated watershed management



- (i) Availability of electricity through turbines
- (ii) Artral change & nimal chana ensured
- (iii) water availability to share area.
- (iv) Dam construction for storage & Data upgradation

SDG.

- ↳ Availability for all (water) (SDG-6)
- ↳ Sustainable Consumption is ensured through monitoring
- ↳ Poverty removal due to efficient utilization of resource
- ↳ Building sustainable Infrastructure Capacities.