



VISION IAS

www.visionias.in

GENERAL STUDIES (TEST CODE : 1838)

Name of Candidate	Parsanjot Kaur		
Medium Eng./Hindi	Eng.	Registration Number	1353871
Center	Online	Date	26.08.2022

INDEX TABLE

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

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुरितका 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 (क्यूसीए) पुरितका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में दिए 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 पुरितका 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

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi- 110009

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. The Chalukyan architecture uniquely epitomises the grandeur and hybrid characteristic style of temple building. Elaborate. (150 words) 10

चालुक्य स्थापत्य कला विशिष्ट रूप से मंदिर निर्माण की वैभवपूर्ण और संकर अभिलक्षणिक शैली का प्रतीक है। सविस्तार वर्णन कीजिए।

Temple building in India had some unique styles like Nagara, Dravida, Nayak, Vesara, Vijaynagar, Pala-Sena, Hoysala etc. All had common features of garbha-grahal sanctum (sanctorum), mandap, shikara, vahana.

Chalukyan architecture which was a sub-style under Vesara architecture uniquely epitomise the grandeur and hybrid characteristic style of temple architecture in the following ways

- The temple was based on slightly raised pattern
- Large enclosures were present around temple
- Shikaras showed much resemblance with

typical dravidian style

- Intricate carvings were present on the walls of temple
- Image of vahana was placed in front of deity
- At the top of shikara was present a kalash.
- Water tank in the temple complex was present in majority of the cases.

Some of the important examples include Doddabesha temple, Lakkshmi temple etc and they reflect the gracious and brilliance of Indian architecture.

2. The success or failure of a political movement is not always determined by the achievement of its stated goals. Discuss in light of the Ghadar movement.

(150 words) 10

किसी राजनीतिक आंदोलन की सफलता या विफलता सदैव उसके घोषित लक्ष्यों की प्राप्ति से निर्धारित नहीं होती है। गदर आंदोलन के आलोक में चर्चा कीजिए।

Independence struggle witnessed a number of movement both on Indian soil as well as abroad. Ghadar movement was one such movement.

Ghadar movement was led by people like Lala Hardayal, Sohan Singh etc. The movement arised during first world war and aimed at liberating India from British clutches. It operated secretly from San Francisco.

Movement popularised its ideas by bringing out a political magazine 'Ghadar' with the caption 'Angrazi raj ka dushman'.

Though movement aimed at restoring Indian rule over India but

failed to achieve success because of prior message received by British.

Yet the movement was successful in following aspects

- It encouraged poor people to have believe in their ~~for~~ ability.
- It mobilized people like Bhagat Singh to take revolutionary pathway for sake of independence.
- Movement was considered as first ever movement of Indians living abroad for freedom of country on a large scale.
- Movement was also important success in the respect that it instilled caution among Britishers about Indians and their potential.

Thus, it was a movement in long line of all those that contributed to freedom of country.

3. Discuss the ways in which Gandhian conceptualisation of Sarvodaya influenced Vinoba Bhave's Bhoodan movement. (150 words) 10
उन तरीकों की विवेचना कीजिए जिनसे सर्वोदय की गांधीवादी अवधारणा ने विनोबा भावे के भूदान आंदोलन को प्रभावित किया था।

Vinoba Bhave was the spiritual Heir of Gandhiji and was deeply influenced by Gandhi's ideals and values and was thus a Gandhian in thoughts, beliefs and action.

Vinoba Bhave started a movement - Bhoodan movement to give land to all those who lack it. This was much influenced and conceptualised from Sarvodaya concept which aim at collective awakening and welfare of all.

Sarvodaya aimed at addressing problem of hunger and poverty. Bhoodan movement had its essence in uplifting people of these disabilities.

Sanodaya aimed at establishing a society where everyone had equal opportunities and resources at disposal.

Bhoodan also stressed on this equality by redistributing surplus land from rich to poor and downtrodden.

Sanodaya as well as Bhoodan both aimed at addressing inequality in the society effectively and fighting for the sake.

Also as sanodaya stressed on voluntarism, so were the ideals of Bhoodan movement.

Thus both sanodaya and bhoodan movement were connected in letters and spirit.

4. Bring out the evidences, which led to the Plate Tectonics Theory. Also, discuss how this theory explains the movement of plates.

(150 words) 10

उन माथ्यों को उजागर कीजिए जिनसे प्लेट विवर्तनिकी सिद्धांत का प्रतिपादन हुआ। साथ ही, विवेचना कीजिए कि यह सिद्धांत किस प्रकार प्लेटों की गति की व्याख्या करता है।

Plate tectonic theory was proposed by Alfred Wegner according to which all the land mass of earth was a part of larger Pangea and it underwent splitting and displacement to give rise to present day continental configuration.

Evidences to support plate tectonic theory

- Jigsaw fitting of all continents is a strong evidence of plate tectonic theory.
- Organisms like Mesosaurus fossils have been reported in Brazil and South Africa which show their close association in geological scale.
- Similar placer deposits of gold present in both Africa and South America.

- similar age of rocks present in all southern continents
- Glossopteris fossils found in South America and Africa showing their association once upon a time.

Movement of plates is explained by this theory in the following manner-

Lithosphere is made up of seven major and several minor plates.

Convectional currents arise from heating of magma, that drags the plates ahead.

Magma cools and sinks to bottom after that.

This cyclic movement continues and hence plates gets positioned in different areas.

Plate tectonics theory is a major effort to understand evolving geomorphology of Earth.

5. Give an account of the formation of Abyssal Plains and highlight the relief features found on these plains. (150 words) 10

वितलीय मैदानों के निर्माण का विवरण दीजिए और इन मैदानों पर पाए जाने वाले उच्चावच संबंधी लक्षणों पर प्रकाश डालिए।

Oceanic bottom is characterised by many relief features. Abyssal plains are one such.

They are long stretched flat areas present on the ocean floor. They constitute about 40% of the total area.

Formation of abyssal plains

- The part of plains near to the continental margins are formed by the deposition from the land. River inflow also play a key role in it.
- The bulk of abyssal plains are formed by the eruptions of mid oceanic ridges. This magma spreads on either side to form abyssal plains.
- The part of plains near to shore-line comprise of older materials than that which is present in open sea.

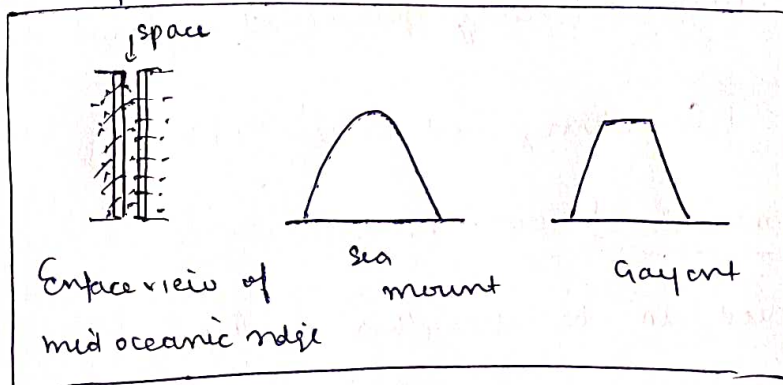
Many relief features are present on these abyssal plains. These include

a) mid oceanic ridges - these are parallel chains of mountains formed at ocean floor and magma erupts from space within them.

b) Seamounts - These are raised structures present on ocean floor. Their apex have an angle of $20-25^\circ$

eg- Emperor mound

c) Gayent - They are the seamount with flat tops.



Abyssal plains are site of rich mineral deposition and current attempt is to harness this potential.

6. What are the geographical and climatic conditions required for tea cultivation? In this context, discuss the reasons for the introduction of tea cultivation in the Duars region of the Himalayas by the British.

(150 words) 10

चाय की खेती के लिए आवश्यक भौगोलिक और जलवायविक दशाएं क्या हैं? इस संदर्भ में, अंग्रेजों द्वारा हिमालय के दुआर क्षेत्र में चाय की खेती शुरू करने के कारणों की विवेचना कीजिए।

India is the site of origin of Tea. It is most widely consumed beverage of the world. In India, superior quality tea is produced from tender leaves of Darjeeling hills plants.

The geographical and climatic conditions for the growth of tea include

- High altitude area
- warm and moist temperature and air conditions
- well drained loamy soil
- Temperature of $21^{\circ}-25^{\circ}\text{C}$ best for growth of young leaves.
- Clear weather at the time of plucking of tender leaves.

British introduced tea cultivation in the duars region of Himalayas due to following reasons

- The geographical and climatic conditions of region supported tea cultivation
- Some of the wild varieties of trees were present here, so easy availability of seeds.
- The region also was close to sea and thus tea could be easily exported out.
- Region had plenty of vacant space where tribals called Chai bagh mazdoors could be easily housed in.
- Moreover as compared to further north-east regions, this area had slightly less dense forests, so supporting viability and economic feasibility.

This way, Indian tea industry started and today we are 4th largest exporter of tea.

7. Briefly bring out the distinction between flash droughts and conventional droughts. Also, examine the reasons behind the increasing vulnerability of India to flash droughts. (150 words) 10

आकस्मिक सूखा और पारंपरिक सूखा के मध्य अंतर को संक्षेप में स्पष्ट कीजिए। साथ ही, आकस्मिक सूखे के प्रति भारत की बढ़ती सुभेद्यता के कारणों का परीक्षण कीजिए।

With about 68% of area prone to droughts, annually about 50 million people suffer from it adding huge economic, social, emotional and cultural misery.

Distinction between flash droughts and conventional droughts

Points	Flash droughts	Conventional drought
Time	They settle very quickly	They settle after taking long time
Reason	Short period of high temperature and no precipitation	Long period of no precipitation
Vulnerability	More people of even non-drought prone regions affected	Usually people of drought-prone region affected

migration

Produce comparatively
less migrantsLong list of
migrants generated

Moefee had reported an increase in flash droughts in country. Many reasons are responsible for this increase in vulnerability

- Growth of urban heat islands and destruction of green spaces.
- Damage to natural aquifers like wetlands and lakes.
- Increasing global warming, green house effect and climate change which alters natural precipitation pattern.
- Deforestation, change in land use pattern, consumerism are other reasons.

Commitments to UNSDGs ~~from convention~~ could be a solution to address problem of droughts and flash droughts.

8. Though various initiatives have been taken to ensure social security for informal workers in India, there still exist gaps which need to be plugged. Discuss. (150 words) 10

हालांकि भारत में अनौपचारिक श्रमिकों के लिए सामाजिक सुरक्षा सुनिश्चित करने हेतु विभिन्न पहलें शुरू की गई हैं, फिर भी कुछ कमियां मौजूद हैं जिन्हें दूर करने की आवश्यकता है। चर्चा कीजिए।

Informal workers are those who are employed in unorganised sector with no security of tenure. They constitute 85-90% of total workforce of country.

To extend social security to unorganised and informal workers, many ~~most~~ initiatives have been taken. These include - Unweiling of Code of social security, e-Shram portal etc.

Despite this, a number of gaps still exist - Nearly $3/4^{th}$ of workers are still not registered, problem of fake and duplicate entry, no commitment from side of employers etc.

To address this, following steps may

be taken

- Strict legal provision to promote implementation of social security code.
- Awareness to all the workers to get them registered on suitable portal.
- Setting up a dedicated wing to check duplicate and fake accounts.
- Incentives to the employers who extend these benefits to the workers for their welfare.
- Organising frequent top to down review and periodic direct talks event to settle any grievance.
- Digital literacy, draft data protection bill are other steps.

Such social security benefits would make India committed to 90 charter and welfare of labour class.

9. Critically assess the government's move on raising the age of marriage of women in India from 18 to 21 years. (150 words) 10
भारत में महिलाओं के विवाह की आयु 18 वर्ष से बढ़ाकर 21 वर्ष करने के सरकार के कदम का समालोचनात्मक मूल्यांकन कीजिए।

Recently a move has been started to raise the marriage age of women to 21 years from current 18 years. This has raised serious debates and concerns.

Some allege that move has been on a fair side as

- It would promote females to have higher education which would enrich human capital.
- It would also promote health standard of female (Currently 53% females anaemic)
- It would also encourage political participation of female (only 14% MPs are female currently)
- would promote employment and address economic inequality (70% poor are female)
- would also address the dogmas of

Patnarchy and caste system.

But according to some, the move is
baseless because -

- Age of consent still at 18 would increase incidents of sexual exploitation.
- Average age of marriage for girls still at 22 years, thus no validity in raising age bar.
- No guarantee of political participation -
Sarpanch pati norms still prevail.
- No guarantee of movement to higher education (girls spent 318 days in unpaid work by not attending schools)
- May not promote employment (due to safety concerns of parents)

In this regard, recommendations of
Jaya Jaithey committee and Law commission
may be taken as way ahead.

10. Reservation for locals in private sector has again brought the debate around regionalism into focus. In this context, examine whether regionalism is a threat to national integration. (150 words) 10

निजी क्षेत्रक में स्थानीय लोगों के लिए आरक्षण के मुद्दे ने क्षेत्रवाद के इर्द-गिर्द होने वाली बहस को पुनः केंद्र में ला दिया है। इस संदर्भ में, परीक्षण कीजिए कि क्या क्षेत्रवाद राष्ट्रीय एकता के लिए खतरा है।

Regionalism refers to greater love and affection for the ~~people~~ ^{land} of a region rather than nation by the concerned people. It is related to Sons of soil doctrine.

Many state governments like AP, Haryana, Karnataka have brought out bills for reservation in private sector for people of the native states. This has raised concern of regionalism - favouring people on the basis of domicile.

According to some, regionalism is a threat to national integration as

→ It divides people into narrow circles of region.

→ It promote insurgency and law and order problems. eg - in North East

- It leads to discrimination among people (report of Berbaksh committee)
- Regionalism also fuel extremism, succession and autonomy demands (eg - Khalistan movement and Punjab)

But according to some regionalism is also positive in the sense it promote unity and brotherhood among people, lead to stability in states and their progress. This ultimately contribute to national growth.

Thus, there is no wrong in regionalism until and unless it does not contradict nationalism. The same spirit is to be rejoiced in letters and spirit.

11. Explain how agricultural surplus, growth of crafts and trade, and growing population led to the second urbanisation in ancient India. (250 words) 15

ब्याख्या कीजिए कि किस प्रकार कृषि अधिशेष, शिल्प और व्यापार की वृद्धि तथा बढ़ती जनसंख्या के कारण प्राचीन भारत में द्वितीय नगरीकरण हुआ है।

Second urbanisation in ancient India is related to age of Buddha and growth of trade, towns and merchant class was its chief attribute.

Second urbanisation was caused by number of factors. Agricultural surplus, growth of crafts and trade and growth of population were some of them.

Agricultural surplus → This period saw use of iron ploughs, bullock carts and improved farming techniques due to which agricultural surplus was produced.

This surplus particularly of rice varieties like Vrihi and Shali were exported out to regions of Middle East and South

East. This export led to inflow of capital. This capital was further invested to increase production. All these led to disposal of money at hands of people that increased their purchasing power. To meet these, workshops were set up and urbanization grew.

Growth of Crafts and Trade - Craft work like bell metal work and trade of agricultural, craft and other items brought capital to economy. In addition, it led to development of some areas where import-export occurred, where merchants lived. Gradually these towns got transformed into cities and hence urbanization spread.

Growing population - One of the attribute of urban areas that distinguish it from

rural areas is high population density in a region. As population increased, more and more people began to live in compacted areas. Prospect of job and share in rising trade also mobilized migration and all this led to urbanisation and growth of urban centres - are characterised with thick population density.

Chaul, Ghantashala, Pataliputra,
Kaushambi, Vaishali are some areas
that urbanized in this stream of
second urbanisation.

12. India of the 18th century failed to make progress economically, culturally and socially at a pace, which would have saved the country from collapse.
Comment. (250 words) 15

18वीं शताब्दी का भारत आर्थिक, सांस्कृतिक और सामाजिक रूप से उस गति से प्रगति करने में विफल रहा, जो देश को पतन से बचा सकता था। टिप्पणी कीजिए।

Late 18th century India is tracked to be a period of downfall of Mughals and rise of British.

India failed to make progress economically, culturally as well as socially in this period, as reflected

Economically - downfall of agricultural sector could not match rise of industrial sector. This led to economic stagnation of the country.

India from the export hub of finished goods became exporter of raw material to industrialised Britishers.

India began importing machine made goods from Britain that led to

decoration of Indian handicraft industries and plunging people to absolute poverty.

The result was that at the time of independence, India only contributed about 7-8% to global GDP.

Culturally, India remained trapped in its of casteism and prejudice to women.

This led to further divisiveness in the country, thus retarding pace of development of country. Also India remained trapped with customs like human and animal sacrifice etc that badly effected country.

Socially, India suffered from poverty, illiteracy, poor health and disease.

This plunged nation to repeated episodes of famines, epidemics thereby affecting enrichment of human capital.

All these led to collapse of India

- India remained unaware of evils of Britishers in world.
- India failed to adopt modern wave of renaissance and reformation
- India did not give preference to logic over believes.
- India and Indians continue to fight over petty issues of caste and discrimination.

All these deprived India of golden window of progress leading to stagnation and deterioration of nation

13. The withdrawal of the Civil Disobedience Movement triggered a two-stage debate on the strategic course of India's freedom struggle. Elucidate.
(250 words) 15

सविनय अवज्ञा आंदोलन की वापसी ने भारत के स्वतंत्रता संघर्ष की रणनीतिक कार्यप्रणाली के संबंध में दो-चरणों वाली बहम को आरंभ कर दिया। स्पष्ट कीजिए।

Civil disobedience movement was withdrawn by Gandhi as one of the commitment to Gandhi - Irwin pact. After round table conference, Gandhi restarted the movement, but the momentum faded by 1934.

After complete withdrawal of the Civil disobedience movement (CDM), there were two-stage debates on the strategic course of India's freedom struggle.

→ One stream was of the view to start constructive work by going back to villages and people.

→ Second stream was of the view of participating in the upcoming election,

winning the seats and disrupting legislature from within.

Yet there was another set of people like Bose, Nehru who were of view to continue mass struggle till the time independence is achieved.

There after in order to prevent any split in congress, it was decided.

- Few will contest the elections to get into assemblies and legislatures
- Goal of independence to be resorted as soon as possible rather than self comfort should guide all legislatures
- Few can go to villages and start

propagating Gandhian ideals and khadi,
swarajya and swaraj

→ Yet others can continue to inspire and
ignite youth so that the same may
be used when conditions arise.

Such approach was in line with
Struggle - Truce - Struggle doctrine of
Gandhiji.

14. Throw light on the causes, course and outcomes of the civil war, which followed Russian revolution. Also bring out the reasons behind the Bolshevik victory.

Russian revolution took place in two phases - February and October revolutions and ultimately led to establishment of constitutional authority and abolishment of monarchy under Tsar Nicholas II.

After Russian revolution, a civil war broke out between Bolsheviks and so called Socialist revolutionary Party. The main causes were:

- Bolsheviks were not comfortable with their method of governance.
- They did not want terms to be dictated upon them.

→ An important cause was also the dis-satisfaction of Bolsheniks with the results of election.

As the civil war broke out, it took following course

→ Foreign powers like France, Britain etc began to support the elected govt and group came to be known as "Whites".

→ Bolshenik began to gather support of industrial workers and peasants against protest.

Outcome of the civil war was that Bolsheniks were sworn into power under V. Lenin and elected government and external powers were defeated.

Many reasons could be sighted for victory of Bolsheviks

- Leadership ability under Vladimir Lenin was no match
- They were better organised and lacked internal disputes than whites
- Perception of fight against foreigners was also important reason for victory of Bolsheviks
- Lenin stressed equally on hard power and ideology that enabled him to swim through.

Post civil war, era of socialism started in Russia that took at its height, cold war and ultimately fading by 1991.

Q5. What are Glacial lake outburst floods (GLOFs)? Highlighting the susceptibility of the Himalayan region to GLOFs, state the measures required to address them.

Glacial lake outburst floods (GLOFs) refers to sudden rupture of glacial lake due to displacement of temporary wall like structure formed by accumulation of glacial material. This results in sudden release of large volume of water.

Incidents like Tapovan and Vishnuganga incidents of February 2021 and like wise many indicate the susceptibility of Himalayan regions to GLOFs. This is because

→ Himalayas referred to as 3rd pole with number of glaciers in it.

→ Tectonic activities are at peak which

in turn stimulate GLOFs events.

→ Growing anthropogenic interference in pristine ecosystem (eg - Nagar development initiative of Uttarakhand) also supports it.

Such events lead to huge loss of life, property, infrastructure, beside affecting ecosystem badly in terms of water pollution by debris. Following measures would help to address the problem -

→ Preparing an atlas of glacial lakes (like recently by Jal Shakti ministry)

→ Detecting hazard vulnerability of the region.

→ Promoting sustainable development in the region.

→ Comprehensive and mandatory EIA for all projects in the Himalayan ecosystem

→ Preventing hazard to transform to disaster by educating the people and spreading awareness.

→ Further more investment in R&D can help to further address the problem.

Given livelihood of 500 million people associated with Himalayas, recommendation of Ravi Chopra committee may be adopted as a way forward.

16. Highlighting the significance of critical minerals, provide an account of their distribution in India and the world. (250 words) 15

महत्वपूर्ण खनिजों के महत्व को रेखांकित करते हुए, भारत और विश्व में उनके वितरण का विवरण प्रस्तुत कीजिए।

Critical minerals are those which are of utmost importance for execution of any project or manufacture of a component. Their supply chain threat can affect economic ventures severely.

Examples - Lithium, Cobalt, Titanium etc.

Significance of critical minerals

→ They are basis of present day industrial revolution eg- iron

→ They help in automation and contribute to battery driven technologies

eg- Lithium

→ Also contribute to manufacture of electronics and electrical components.

eg - about 3000 silicon chips in a e-car.

→ They are also used to make defence equipments, space ships and space crafts.

→ Critical minerals are also used in research (eg - organometallics)

Distribution in India

Most of the critical minerals are located in Deccan and Chotanagpur belt

Nickel - parts of Odisha, Jharkhand

Cobalt - Odisha, Chhattisgarh, Telangana

Manganese - MP, Odisha, Chhattisgarh

Aluminium - parts of Rajasthan, Odisha, North-east.

Some like Lithium are absent. Research in Ladakh, H.P to find them is going on.

Distribution in world

Lithium - Chile, Bolivia, Argentina,
Australia.

Aluminium - Australia, China

Vanadium - China, Kazakhstan

Nickel - Canada, USA

Cobalt - USA, Brazil

Gold - Brazil, South Africa

Though mining of critical
minerals is necessary, but concern of
their limited availability, high demand
and environmental consequences (Cobalt 60
and Delhi pollution) need also to be
balanced:

17. Highlighting the importance of ice sheets, discuss the likely impact of their melting on the planet with special focus on India. (250 words) 15

हिम चादरों के महत्व पर प्रकाश डालते हुए, भारत के विशेष संदर्भ में पृथ्वी पर उनके पिघलने के प्रभाव की विवेचना कीजिए।

Ice sheets are large snow laden blankets that are present in polar region and in the continents at high altitude. It constitutes cryosphere of Earth.

Importance of ice sheets

- It is reservoir of water and serve as source of perennial rivers
- It act as a trap for green house gases like CO_2
- It reflects the solar radiation and thus prevent heating of Earth.
- Ice sheet also serve as a zone of

fossil deposition and their preservation

eg - mammoth fossils

→ Also serve as habitat for number of organisms.

eg - Polar bear and Arctic ice sheet.

Due to increase in global temp as a result of global warming, ice sheet is rapidly depleting. WMO has predicted first snow free summer in Arctic by 2040.

This would have following impact

→ would affect the flow of perennial rivers (eg - Himalayan river system)

→ would release greenhouse gases thereby contributing to climate change

→ would ^{produce} ~~reflect~~ more dark areas that

would further absorb more solar radiations.

→ would severely contribute to 6th mass extinction phase.

→ would alter pattern of monsoon in India.

→ would alter jet streams and their path over Indian subcontinent.

→ May increase extreme events of El-Nino and La-Nino leading to countries rising vulnerability.

Thus there is need to conserve ice sheet. Joint collaboration, cooperation and consensus would be key in this regard.

18. What are twin cyclones? Discuss the role of Rossby waves and Madden-Julian Oscillation (MJO) in their formation. (250 words) 15

जुड़वाँ चक्रवात (ट्विन साइक्लोन) क्या होते हैं? उनके निर्माण में रॉस्बी तरंगों और मैडेन-जूलियन दोलन (MJO) की भूमिका की विवेचना कीजिए।

Twin cyclones are two systems of low pressure centre that originate at same latitude and move in opposite direction. Recently, one such incidence has been reported in Indian ocean.

Rosby winds are the winds which flow parallel to isobars. They arise in condition when pressure gradient and coriolis force balance each other and they lead to Rosby waves

Madden Julian Oscillation (MJO)

are the system of winds that move from west towards east in tropical regions as long extended bands.

Lowby waves and MJO lead to formation of twin cyclones in following way -

Series of rotating water movements in northern and southern hemisphere force the water in between to life up as vapour. It condense to form clouds with release of energy. This energy further intensify cyclones.

Meanwhile MJO promote water to rotate in high speed and thus intensify the cyclones.

In this way, they contribute to formation of twin cyclone.

19. Since independence, planning strategies for women's upliftment has evolved from welfare to development to empowerment. Elucidate. Also, discuss the role played by voluntary organizations in this context.

(250 words) 15

स्वतंत्रता के पश्चात्, महिलाओं के उत्थान के लिए नियोजन रणनीतियां कल्याण से लेकर विकास और सशक्तीकरण तक विकसित हुई हैं। स्पष्ट कीजिए। साथ ही, इस संदर्भ में स्वयंसेवी संगठनों द्वारा निभाई गई भूमिका की भी विवेचना कीजिए।

women constitute about 50% of the population, yet suffer from illiteracy (69% literate), poor health (53% anemic) and poverty (40% poor are female)

Since independence, many strategies have been taken for women upliftment. These have evolved as below -

→ Aimed at welfare :- These include setting up of Anganwadi centres to address nutritional status of women

Extension of right to vote was also in line of extending welfare to most vulnerable community.

Annex at development - This include
initiatives like

Education :- Beti bachao, beti padhao.

Health :- Janani Suraksha Yojana

Rashtriya Kishor Swasthya Karayakaram.

Employment :- Reservation in MGNREGA

:- 33% reservation in police

Annex at empowerment -

These include

→ Reservation in panchayats and
municipalities by 73 and 74 amendment
act.

→ Schemes like start up india and

Stand up india to promote entrepreneurship
among women.

→ Initiatives like coche facility for
working women kids etc were all meant

to empower women and liberate her from domestic duties and limitations.

In this context, beyond government voluntary organisations have also played vital role.

- Kudumbashree has uplifted women of deprivation and ignorance.
- SHGs have mobilized about 46 million affected women.
- NGOs like Disha foundation continue to work for females.

These voluntary organisation plug the gaps left by government, fill the lacunae and take governance to all.

Upliftment of women would help to meet UNSDG 05 and India should aspire to realise it.

20. How far do you agree with the view that globalisation has aggravated the challenges faced by the poor in India? (250 words) 15

आप इस बिचार से कहाँ तक सहमत हैं कि वैश्वीकरण ने भारत में निर्धनों द्वारा सामना की जाने वाली चुनौतियों को और बढ़ा दिया है?

With about 364 million poor in the country, India is one of the most multi-dimensional poor country of the world.

Poor in India traditionally faced a number of challenges like - poor health, educational deprivation, economic inequality, vulnerability to disasters etc. But it is said that globalisation has aggravated challenges faced by poor. This is in following respect

→ Problem of unemployment has increased and India is today facing 45 years high unemployment.

→ Globalisation has led to increase in child labour and 3 out of 4 such children

are from poor background.

- Globalization has promoted gig economy which has deprived many (particularly poor) of social security benefit.
- Globalization has made health and education services costly due to PPP etc making them out of reach of poor.
- Globalization has also increased imports of finished goods and agricultural commodities, thereby affecting small craftsmen and farmers.

But this can't be sole
effect of globalization

- Globalization has also promoted more FDIs, thereby making accessible sectors like telecom accessible to poor.

→ Globalisation has also led to a push for new entrepreneurs - who employ poor in their factories.

→ Also it is result of globalisation that organisations like Bill and Melinda Gates foundation are actively involved in uplyment health of most deprived.

Thus, globalisation for poor is a bag of mixed blessings. Focus should be on building strength further and addressing concern to achieve UNSDG 01