

खण्ड-A/ Section-A

उम्मीदवारों को
इस भाग में
लिखना मना है।
Candidates
must not
write on
this margin

- Q.1 Gender Equality is not a "women's issue"-it's good for men too.
लैंगिक समानता सिर्फ "महिलाओं का मुद्दा" नहीं है - यह पुरुषों के लिए भी बेहतर स्थिति है।
- Q.2 Is UCC, the unity that we aspire in our diversity?
क्या समान नागरिक संहिता वही एकता है, जिसकी हम अपनी विविधता में आकांक्षा करते हैं?
- Q.3 Problems of 21st century are problems without passport.
21वीं सदी की समस्याएँ सीमाविहीन वैश्विक समस्याएँ हैं।
- Q.4 The more we are developing, the more unhealthy we are getting. Where does the real problem lie?
हम जितने अधिक विकसित हो रहे हैं, उतने ही अधिक अस्वस्थ होते जा रहे हैं। वास्तविक समस्या कहाँ है?

Q.3)

"PROBLEMS OF 21st CENTURY ARE
PROBLEMS WITHOUT PASSPORT"

"All voices world over raise in hays,
There is need to find alternate ways,
Collaboration is must, situation orders,
New problems transcend all the borders."

- self.

As the day shines today, we breathe
the air of freedom and peace,
endeavour to utilize the full

potential, strive for scientific temper and achievements. But, more than 100 years ago, it was dark and deviance everywhere, violation of human rights, bonded labourers from India and China ^{were} ~~was~~ working in plantation fields of Africa and Mauritius, all due to the deadliest colonialism gripped most of the world. Colonialism links the historical problem of many major nations and consequently the present problems of 21st century are unacquainted with national borders.

In this write up, we will try to explore various dimensions like what are major

problems of 21st century? How do they transcend all the boundaries? What is the nature of the problem? And some suggestions to tackle them.

The most grave problem that the whole world suffers is 'lack of contentment' (Asantosh).

In the words of Guru Nanak Dev Ji,

"Practising truth, contentment and kindness is the perfect way to live a life". Lack of contentment, truth and kindness degrades the ethical principles.

Actions with hollow base (without ethics) creates grave problems and the whole world becomes obligated to face those problems.

Recently, UN General Secretary, Antonio Guterres said "it is the era of global ^{boiling} warming". Is global warming affecting the land where UN is situated only? No, but the effects of this global warming are reaching to far countries also, like Togo, Fiji, Maldives etc. The sword of climate change is hanging all over the world which requires an immediate action to stop the temperature rise above 2°C . As per IPCC reports, Arctic melting rate has increased twice which is rising sea levels near Indian coast and let's see what is the future of small island countries?

To add in this, one of the cherished principles as propagated by Mahatma Gandhi is "Sarv Dham Sambhav" (tolerance for diversities) but the racial discrimination in America and Europe (recent killing of a black boy), Persecution of Uyghur minorities in China, ethnic conflicts in India, religious rivalry in Afghanistan, vandalism, for example attacks on mosques in Pakistan, fundamentalism in Iran and Iraq etc reflect that not even a single country is free from such forms of violences.

The another such grave concern lies in the degradation.

of values of democracy. As per J.S. Mill's ideas, "democracy is the highest virtue and justice", but this idea seems to be diluting as frequent military coups are observed like it in Niger, Pakistan or Burkinafaso. Relaxation of Jail term in Su Yu Ki by Myanmar Junta shows a hope. Isn't it?

Very recently, a tiny virus, COV-19 has shown the world the worst time it could have ever seen. In the words of Indian Prime Minister Narendra Modi, "Nobody is safe untill everybody is safe." has led to global reflected in

lockdowns. Perhaps for the first time, the mighty businessman, sports persons, actors, common men all over the world were within the doors of the home. ~~for the first time.~~

To add in the health sector, Anti Microbial Resistance is an emerging health threat, already taken a toll of 60,000 people globally (WHO) transcends the national boundaries due to increase in edible imports and exports.

The next such global problem could arise with globalization and economic integration. The 1st decade of 21st century has seen the global meltdown and tapper tantrums spreaded with

the light's speed due to contagion effect. The recent bank failure of silicon valley also poses the threat of slowdowns in major parts of the world.

In line with this, whole world suffers from the 'myth of gender equality' reflected in the criminalisation of abortion in America, marital rape cases in Asian countries and ~~consider~~ even animals have better living conditions than women in Afghanistan. It shows that women are subjugated all over the world. There are other such

grave problems which attracts more focus in contemporary times.

Firstly, 'war in Ukraine' (as Russia says) ^{has} disrupted the supply chains, shortages of food, fertilizers and caused inflation all over the world. The recent breakdown of Black Sea Grain Deal can inflate food grain prices by 15-1% globally and God forbids, if any of them uses nuclear weapons. Our future is highly uncertain. Isn't it?

Secondly, 'unsustainable rise of China and its hegemony over Indo Pacific region' is detrimental to world trade as 2/3rd trade

उम्मीदवारों को इस मार्ग में लिखना नहीं है।
Candidates must not write on this margin

by volume passes from Indo Pacific. Therefore the most important aim of QUAD and QCAD+ is "free and fair Indo Pacific".

Thirdly, poverty is a burning issue in south-east Asian countries. As per multi-dimensional poverty index '64% of global poor reside in ~~Indo~~ south-East Asian countries. And other such issues are terrorism, infiltration, drug trafficking, organised crimes, oil seepages^{etc.} And space war can attract focus in near future.

Now, the question arises, that mere identification of these

problems is sufficient? As the nature of the problem is a GLOBAL, so the solution also lies in the global collaboration as a famous story highlights that a single wooden stick is very easy to break, but a bundle of sticks resists the breaking force easily. And the world has taken certain initiatives also like Indian Solar Alliance and 'Living in harmony with nature' proposed by India, Doctors Sans Frontiers highlights global nature of health threats, proposal of African countries ^{to be included in} ~~in~~ G20 can make the actions more focused.

This value of collaborated and global action is very well reflected in the essence of VASUDEV KUTUMBAKAM and of Maha Upanishad and

India possess a fantastic opportunity in the final summit of G20, to be held in September this year to propose solutions of global problem with the advocacy of

"ONE EARTH, ONE FAMILY, ONE FUTURE"

खण्ड-B / Section-B

उम्मीदवारों को
इस भाग में
लिखना पना है।
Candidates
must not
write on
this margin

- Q.5 Our Tryst with Space
अंतरिक्ष के साथ हमारा मिलन
- Q.6 Is Internal Security always an Internal Challenge?
क्या आंतरिक सुरक्षा को हमेशा एक आंतरिक चुनौती माना जा सकता है?
- Q.7 Sports, the toy of humanity
खेल, मानवता का खिलौना है।
- Q.8 Is Economy becoming the end rather than the means?
क्या अर्थव्यवस्था साधन के बजाय साध्य बनती जा रही है?

Q.5)

OUR TRYST WITH SPACE

"Years ago, earth was the only reality,
then, space was uncovered, emerged duality,
Earlier, touching sky was next to impossible,
Today, globe soars in space, it's plausible."
- self.

One fine day, a question was raised
by some intellectuals that what
is the relevance of space related
activities in a developing country
and shouldn't we focus more

on national and human development?

But, Vikram Sarabhai, pioneer of Indian Space Programme had a different vision and he silenced all the queries about space activities in the following answer:

"We are convinced that if India is to play a meaningful role in the nation and comity of nations, we must be second to none in the application of advanced technologies in human and national development."

In this write up, we will try to explore the dimensions like what is space and its relevance? who are major space

powers and their space missions?
what are different domains of
space? India's trust with space
and emerging challenges as world
focuses on the space.

Very firstly, we will decode
the meaning of space. SPACE refers
to ~~with~~ the presence of dark energy
and dark matter at the places
other than occupied by physical
objects. look, the distance between
your eyes and this copy is
also space. So space is everywhere.

But in the 20th and 21st
^{only,} century the term SPACE has
got much limelight, despite its
immemorial presence. It is

because of the advancements of science and technology, research about Earth's history and its formation, to find the presence of life on other planets. These goals have inspired the nations to work tirelessly in the field of space research and as a result America, China, Russia, UK have emerged major space powers in the world and India is all set to emerge as a new space power very soon. Isn't it?

These countries' missions like James Webb and Hubble Telescope have found the presence of dark matter in Eagle Nebula and

explored different dimensions of space like black hole, neutron stars, pulsar, Higg's bosons, gravitational waves etc. which have become the interest topics of modern day research.

Now, we will try to comprehend "India's journey towards space".

Whenever India completes a ~~stee~~ successful launch of any space mission, a years old photo of two men carrying parts of a spacecraft flows on the internet.

Yes, it is the starting point of our space journey with

the vision of Vikram Ambalal Sarabhai to make India the only major space power in the world. This vision witnessed realization with the establishment of Indian Research Space Organisation (ISRO) in 1969 and the launch of India's first satellite ARYABHATTA, how proud^{would} and fascinated moment it ~~would~~ have been!

Then, there is long legacy of launch vehicle developments also. From single stage launch vehicle to using cryogenic fuel in 4 stages, from PSLV launch vehicle to ASLV to LVM-III taking

Chandrayaan towards moon. With diversified and updated launch vehicles India has become the most favoured cheapest launching destination. And, our further experiments are planned for reusable launch vehicles (expandable vehicle) i.e., LEX, HEX (experiment names) to reduce the fuel cost and revive the lost stages.

But, there were certain challenges in India's space programme. For example, Chandrayaan-1 was launched in 2008 and it ^{made remarkable} success in finding water molecule on moon. But, we had to wait for 11 years for the launch of

Chandrayan-II in 2019 and ahead of this it took only 4 years to launch Chandrayaan-III. We are not sure whether we will have Chandrayaan-IV or not. It highlights that India lacks a Moon doctrine and a Space policy. These should be the priority areas for India so that it could replicate and enhance the success of Mars Orbiter Mission in its upcoming Gaganyaan mission which aims at sending a 3 member human crew in space for seven days. If Gaganyaan mission performs as per the expectations, we can then focus on space station establishment.

which will act as a refuelling
centre
sector for India's space mission,
thereby reducing the cost of space
missions.

If we again focus on global
scenario, we find that the current
SPACE RUSH ^{possesses} possesses potential challenge
towards space exploration which
could be summed up as follows.

Firstly, the phenomena of
space polarisation is seen as the
world has become bi-polar in
terms of ARTEMIS (led by USA) and
International Lunar Research Station
(ILRS) and India joining Artemis
to ensure sustainable presence of
man in space has strengthened

this bipolarity. But overall, it was India's strategic decision.

Secondly, space has become a NEW DOMAIN OF WAR reflected in increasing presence of intelligence satellites and SPACE DEBRIS pose threat to sustainable space missions. To tackle the problem of space debris, SPACE DOCKING experiments are being conducted and NETRA is India's initiative in this regard.

Thirdly, Open Space Treaty, 1968 which obligates the countries to use space only for PEACEFUL USE but this treaty was formulated more than 50 years ago, so,

we need to revise the OST, 1968
and achieve an international
collaboration for research in

PAD ABORT TEST, CREW ESCAPE MODULE

etc and an international
framework to direct all the
countries to make domestic reg
legislations for space regulation
under an international framework
of PEACEFUL SPACE so that the
discoveries from space such as
Helium-3 could be used to achieve
energy security and economic
prosperity and a potential space

war could be averted and in this
regard Mahatma Gandhi's idea
seems relevant that:

"There is enough for everybody's
NEED but not for everybody's GREED"

उम्मीदवारों को
इस भाग में
लिखना नहीं है।
Candidates
must not
write on
this margin



Conclusion → Vaidya Kutumbakam = Maha Upanishad
International collaboration = "One Earth, One Family, One Future"

Doctors without frontier
Reporters without frontier
Space for Rough Work → AOSTS

Essay - 2 (3) → Arctic melting.
→ deforestation → India → law.
Brazil,
→ WS → bodily autonomy. Biodiversity loss
→ Terrorism → Pak, Afghan.

ethnic conflict
vandalism mosque attack, revivalism
Racism → persecution of minorities
Disasters → earthquake
Flood - China - India

space debris
oil seepage

Poverty = 40-1000 people in
↓ last 10-15 years.
Global south.

poverty anywhere is a threat
to prosperity

border security
supply chain
poverty → 15% Black Sea
grain deal
fertilizer

Indo pacific.
2/3 trade
China
Economic slowdown and
mess down → contingency effect.
Wool / silicon valley.

a problem (COVID) knows no barrier
Asian century
Cyber attack - security

Nign
Democracy
coup
Myanmar

Uighurs
Uighurs
Uighurs

To the national boundaries are not know

Those new problems don't know boundaries of nations

A little corner shares the room
"All voices world over rejoice in hays
There is need to find ultimate ways,
collaboration is must, situation orders.
New problems transcend all the borders."

Essay.

Space for Rough Work

OUR TRUST WITH SPACE

- Major space powers. → Need of space operation
- Major space missions. Vikram Sarabhai, RSVN, Somnath.
- what are new dimensions of spaces. → Aagan.
- India's Trust with space → India's journey.
- challenges. Higgs Boson, 2008 - 2019.
Black Hole, gravitational waves, gap (space doctrine)
- Open Space Treaty, 1968
↳ New version
- Artemis and ~~ISRO~~ ILRS
space polarisation → expandable vehicle
↳ LEX, HEX
- space debris → docking experiment, NETRA
- space new domain of war
↳ debris, intelligence satellite

solution → revise OST and MOON Treaty.

private sector in space

PACE, SPACE Space is the new domain of development

strong ideas are nurtured in healthy minds
Years ago, earth was the only reality.

Years ago who knew, we will reach in space

(It is just changing times and with it our pace
space was unwavering, emerged the duality
Earlier touching sky was next to impossible
Today globe soars in space, it's plausible