

Roll No. _____

Time Allowed: 3 Hrs.

Max. Marks: 250

Instructions to Candidate

- Attempt both essays
- The test carries 250 marks.
- Write each essay in about 1000-1200 words.
- Any page left blank in the answer-book must be crossed out clearly.

(Examiner will pay special attention to the candidate's grasp of his/her material, its relevance to the subject chosen, and to his/her ability to think constructively and to present his/her ideas concisely, logically and effectively).

59+58
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Name Sarank Mahajan

Mobile No. _____

Date _____

Signature [Signature]

1. Invigilator Signature _____

Remarks

When we cannot make life better on earth, what is the guarantee would make it any better?

Consider these for a second.

- (i) 'Climate change wreaks havoc in the world' &
- (ii) 'NASA all set to colonize the moon'.

These two headlines are from the Washington Post - written by the same author & published just within a span of few days. While scrolling through these articles, the paradox apparent really got me wondering. about the futility of all scientific endeavours. Is man really making earth a better place? What is the point of talking about the moon when we can't get our own house in order?

A great deal of personal introspection followed and I can say that things are not as black & white as these headlines say.

Yes, mankind is a great source of power packed with enormous energy. ~~But~~ this can be a life changer and at the same time a perpetrator too.

And as we move by leaps & bounds in different walks of life, it is important for us as a society to pause and think of our future ahead.

During the course of this essay we will

Very good introduction
well addressed

Science

talk about how we've ~~slowed~~ ^{overcome} ~~so far,~~ ^{the challenges} that we face and how best to respond to them. ✓ good

MAN: THE GENIUS

We call this the 'modern age' but not before modern changes to old & old to ancient. ✓ Each day brings with it a promise of progress. ✓

The world is forever indebted to the genius of Charles Darwin, Kepler and others. But they had their own struggles with the orthodox and the hackneyed views. ✓

Galileo ~~was~~ ^{was} did a blind man, for his ideas were considered too radical, a heresy and likely to put the society into disorder. ✓

The reality is for all of us to see.

Jones talk invented the polio vaccine. ✓ Thanks to him nearly

a billion newborn children worldwide

great inventions

GS SCORE

are able to walk freely!

How can we forget the young Isabella de Silva who as a four year old was given just a few months to live. ✓ She is now a healthy forty year old. ✓ Thanks to the gene therapy treatment she received. ✓

~~the AIDS epidemic~~ The AIDS epidemic of the nineties is a thing of the past, all because of mankind's collective endeavours. ✓

great news of mine

And this impact can be seen across all walks of life, not just health. In the field of education, MOOCs and smartclassrooms are leading to better learning outcomes. ✓

In the financial arena, Aadhaar and biometric devices are deepening financial inclusion

simple & Tech helping poor in gov schemes

& bringing the fruits of development to the needy. ✓ In the agriculture

satellite based monitoring like CHAMAN

with transp...

apps like m-kisan are helping the farmers. Digital services and digital products are completely altering the way world works. Not ~~even~~ ^{just} digital connectivity even physical connectivity has received a boost because of human endeavours - metro trains, the Vande Bharat express, high speed bullet trains are all the gifts of man's genius. But as Paulo Coelho says 'every thing ignored becomes a weed', there is much that has been destroyed or harmed by the same man kind.

MAN: THE PERPETRATOR

Stories like Jurassic Park & Frankenstein were enough to show how our knowledge is a double-edged sword. Climate change, that the Washington Post article talks about

Damark

ES SCORE

is a reality we can no longer ignore. The causes are entirely anthropogenic. Andlers consumerism and innovative products have also led to problems of waste, plastic menace and pollution. In the social sphere, it is the same man and his genius that has given way to newer diseases - SARS, Zika, more virulent forms, antibiotic resistance are the products.

In the economic sphere, we see a rise in financial frauds, ransomware, etc. In the technological arena it has given a genesis to firms like the Cambridge Analytica - that is being probed for its alleged meddling in US & Indian electoral processes. Facebook & social media are becoming tools of propaganda breeding a culture of intolerance. cyber theft,

good and bad of social media

Damark

pornography, hating and online
abuse are dangerous trends.
which are the effects of our
own creations.

Smartphones and digital explosion
are leading to newer addictions.

How can we forget the precious
lives that have been lost to
mindless online trends like the
#KikiChallenge or games like PUBG?

In fact WHO has classified smartphone
addiction as a new mental
disorder.

It is also prudent to mention here
about the weapons of mass
destruction that we have created
for ourselves.

New lethal missiles, chemical
biological, radiological & nuclear
warfare are some examples

that are the key to a mutually
assured destruction.

And this is not limited to earth,
mind you. With anti-satellite
weaponry this mindless quest
for power has even reached space.

All ~~these~~ the above examples of
human kinds skills are together

a recipe for moral & social degradation

- they build impatience, distrust

lack of respect for each other

the environment. A excellent

If we are moving in this direction,
we most certainly are not
making our life better on earth

and promises for colonizing Mars
& moon not only are imperial
but mere illusions.

But as we argued in the beginning,
not all is to despair.

RECONCILING THE DIFFERENCES: Hope for the future

What this diary is that our knowledge is a two-edged sword.

It treads on two parallel roads

- leading to targets of doing good or harm.

Knowledge by itself is value-neutral. Any machine will work the way we want it to.

Here human objectives assume significance. (we have)

to make progress in the direction of good virtues and retreat from the vice - therein lies our better future.

Winston once said - 'two things are infinite, the universe and human stupidity; and I am not sure about the universe.'

We can no longer naively assume that our knowledge and science would be used for

public good. There will always be delusional and wicked members who will use it for the worse.

Recognizing this should be a regular pursuit. The burden can

be shared - scientists can come together and ask for inputs from

ethicists, social scientists and broader public. The credibility crisis in

Mumbai is doing just that.

Parallelly we must return back to the basics - to the teachings of

Sri Swami Vivekananda who argued for the coming together of

knowledge & spiritualism to alleviate human sufferings. This can

create a new world order without confusion, wars, terror & materialism

But this is a quest of a collective human endeavour.

All of us - government, citizens,

civil society, industry, academia has to come together for our actions to promote & bring about a positive change. ~~Research~~ An excerpt from (Ban Ki-Moon's) (ex-UN secretary general) recent speech sums this up perfectly:-

'The old ~~model~~ ^{model} is failing and we need a new one. All of us must unite for a shared vision of the future — a future with a healthy environment, no inequality and enduring economic dynamism.'

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Good conclusion

- Continuity well maintained
 - good arguments
 - good information
- excellent

Skills you need to know

- Micro - cost system
- inequality
- arms race
- corporate frauds
- Threat for science
- promotion of ethics

Dansoko

2. URBANIZATION is not only simply expanding the area of cities.

'Premiere life of your dreams'... 'Play in luxury' -- These are some of the billboards one would see while braving the heaving, traffic-clogged city of Guegoun. This is the same city that ~~also~~ witnesses an embarrassment by the media every year for ~~the~~ frequent flooding of roads during occasional rainfall.

(Thanks to ground water resources link)
This is not the case only with Guegoun but many more places across the country.

With urbanization growing exponentially and with a thrust on affordable housing, A 'smart cities', India is embracing the idea of unbridled, speculative development.

But we often miss the crucial point here — cities don't ~~just~~ exist

Good introduction

increase their boundaries to expand and urbanize. Urbanization needs a much more nuanced approach.

We will understand this aspect by shedding light on the history of the urbanization process, the challenges we face and the correct way to address them against this content.

Development & Debates

Urbanization, as UN defines it is the movement of people from rural to urban areas.

It was the industrial revolution that first brought a dramatic rise in urbanization. People were pulled as labourers to industrial centers.

which mushroomed as urban areas. The lack of planning

& development meant poor living conditions, rise in diseases

chronology

and the social unrest that followed was an inevitable outcome.

Urbanization in India didn't happen the same time for our colonizers did not let it happen. — village

Colonary was destroyed, there weren't any factories / urban centers to

absorb the hapless peasants, artisans & craftsmen. The natural development of a civilization was forcefully stopped

The planned urbanization in certain pockets ~~was~~ (e.g. Delhi, Bombay, Madras) was an exception & not a norm.

In 1947, we wrested our independence. — we kickstarted the modernization process. Slowly urban centers emerged but unfortunately most of the planning was haphazard.

We needed simultaneous infrastructure. planning - housing, drainage, electricity

had these facts were the lack of growth by improving village. The migration led to this volume

transport which was missing.
we needed politically strong municipal corporations — but they could be given constitutional status only in 1992

Add to it the population boom of the late 20th century and a host of social problems came along —

living slums, traffic, environmental degradation, diseases, aesthetic degradation, crimes, social inequality, etc.

This has made its way well into the 21st century as well.

Last year we saw how the capital city saw a huge mountain of garbage that fell from its grotesque landfill at Ghazipur claim the life of an innocent lady.

1.44 lakh more is the avoidable

social cost of pollution in just four cities (Delhi, Mumbai, Bangalore, Chennai) as per a McKinsey study.

All this occurs while the urban areas grow and expand.

The UN world urbanization prospects reports India to reach an urbanization rate of 35% by 2030, up from the 20% presently.

The government has planned a 2 billion dollar spending blitzkrieg through schemes like the

Smart City Mission, AMRUT, Pradhan Mantri Awas Yojana, and others.

~~But~~ merely expanding the number of urban centers is not the right way. If we

have to plan for the next few decades we need to have a holistic perspective.

The Ideal way to Urbanize

we need not go too far to get some lessons here.

The Indus valley civilization is an embellishment in our civilizational history.

The deft planning, clear proportions and an amazing uniformity are textbook cases for urban planners globally.

It showed how to integrate the local environment, technology and local materials seamlessly together.

By 2030, India will be building nearly 80% new infrastructure and townplanning from

Why not self-sufficient villages? Integrate Purni/Ramban activity to urban migrants? Incentives? Growth in Agriculture? Modern Tech helps in matching recommendations of 2018 Report Economic Survey. The

Indus valley has many lessons to offer.

Broadly, India must look at urbanization from three levels.

The first is Governance & Leadership

It is crucial that planners adopt a participatory approach in designing urban centers of the future. The Gram Sabhas and panchayat institutions have

the most knowledge about the history, culture of that area. Their wisdom can help in creating a sustainable legacy.

The government adopted this approach while acquiring land for Sewer outfalls.

The acquisition process was one of the fastest in recent times

The next level is

City Planning & development that must look at integrated planning - health, water, drainage, energy supply. must be a part of one cohesive plan.

Multiplicity of agencies should be avoided. Planners must also expand their scope to build sustainable, safe and inclusive cities as per the goals of 204-11.

The new urban cities should also be a reflection of their own rich cultural and architectural heritage. This makes a case for integrating the vernacular with the modern.

Unplanned development that disregards local beliefs, culture & values is a recipe for socio-economic imbalances.

Optimizing for BS-11 is good. Under smart cities program, the budget for Road works is at 30 to 50% and only a very good but some of it.

Effects must also be made to build cities resilient to climate vagaries - rainwater harvesting, energy efficient materials must be encouraged.

The third level is that of adequate financing. Geometric survey of 2017-18 showed that majority of municipal corporations are dependant on government grants for their sustenance. It is important to make them self sufficient.

Municipal bonds, land pooling and land monetization, tax devolution & taxation powers are some ways the government can explore.

An ideal way for the greenbelt

After 1980s of new cities created like Chandigarh, New Raipur and Amaravati. But in the instant urban dedicated freight corridors are being set up along them and will provide 1,000 jobs - more but if jointly cities may not be there.

can be to integrate all these
3 levels - governance, planning
and funding together under
the aegis of a National Urban
Policy which is essentially
absolutely missing.

Conclusion

New India's cities must reflect
the hopes aspirations & visions
of the many who make it.

A mere expansion of boundaries
would not only do injustice,
to these aspirations but
will lead to a legacy of chaos.

we are at an important
 juncture in history. The
way we build our cities,
the way we expand it must
display not only a

commitment to these visions but
also our future generations

Continuity
well maintained
good content
good arguments
very convincing