VISION IAS™

www.visionias.in
www.visionias.wordpress.com

Subject: Essay 2014 Mock Test (1)

Name of Candidate	Bhavesh Mishra	Test Code	488
Schedule		Registration No.	5604
Place	ORN	Time	1:30
Module			

Classroom ✓ Distance Learning [ ] Classroom & Distance Learning [ ]

EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

INDEX TABLE

Q.No.	Page No.	Maximum Marks	Marks Obtained
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

Total Marks Obtained

Remarks:

Signature of Examiner

INSTRUCTIONS:

1. Do furnish the appropriate details in the answer sheet (viz. Name, ID Number and Test Code) The Candidate should fill the index table, especially for him/her.
2. In the left margin, she/he should write only question number and in the right margin, nothing should be written.
3. The page number should be coded by the candidate himself and the range of page number related to the answer of the question should be used to complete the index table.
4. All Parts of the questions should be written at one place.
5. No Supplementary sheet shall be provided by the management. So the candidate is advised to accommodate required information within the space provided.
6. The candidate need not write anything in his/her answer that derogates the dignity of an individual or an organization.
7. The candidate should respect the instructions, given be the invigilator.
8. The Examinee has to submit the answer sheet to the invigilator after completion of examination.
9. However, he/she is allowed the take away the question paper.

ESSAY - 1

3. We do not inherit the earth from our ancestors ; we borrow it from our children.

In ancient India once a king was walking on a road when he saw an ~~young~~ old man planting a mango tree. The king asked - "Old Man ! Are you aware that you'll not be able to taste the fruit in your lifetime. Then why are you planting it ?" The old man said 'I have eaten fruits from trees planted by our forefathers and therefore it's now my duty to leave plants for our next generation !"

The above simple story essentially captures what the relationship of humans should be with nature. If the old man had abstained from his duty it would have been likely that next generation would have been left with less fruits to eat.

The fundamental law of nature is that every living organism is there for only finite span of time. Everybody comes here empty handed and no one has the luxury of taking even a blade of grass with him. Ideally we should treat our lives as a guest on this planet appropriating only what is required for our needs.

Gandhiji had said 'There's enough for man's need but not for man's greeds'. The above message can't be more relevant than in the present context. The population of the world has crossed 7 billion now and with each addition in the number we are straining the resources of this earth.

Now if we take into account the availability of resources per human then it has been declining substantially over the decades. Because the resources of the earth are finite. What is interesting however, is the fact that

human greed has increased substantially and it knows no bounds. These two trends are mutually incompatible and have precipitated into number of crisis.

Let's have a brief look over the kind of situation our greed has created. A human being for a decent life requires access to water, clean air, house, electricity, education, social security and employment. Today we face tension in all these spheres of life.

If we take the case of our own country then we have 16% of world's population and only 4% of freshwater resources. Besides this there is a huge variation in the amount of rainfall received with drought and flood being registered at the same time of the year. This naturally calls for judicious use of water and practice of environmentally sustainable methods like watershed management. However, throwing all cautions to the wind we have overdrawn our

groundwater resources, polluted our rivers which are lifeline for the millions of population. Today over half of the country lacks access to clean drinking water in the absence of which outbreak of diseases like cholera, diarrhoea are frequent.

Taking another case of air and environment pollution, we see today that the emissions of Greenhouse gases like CO_2 have threatened the very existence of human being on earth. According to an estimate by International Panel for Climate Change it has been estimated that if rise in temperature of earth goes beyond 2° degrees then it would be catastrophe for the earth as millions of populations and their livelihood would threatened and low lying coastal areas which have more than 50% population would get submerged.

It will not be thus wrong to say that we are cutting the same tree on which are sitting. Now the question is since nature

has endowed us with a mental faculty that has the unique capacity to take rational decision then why are we behaving so irrationally?

A reason for above stems from the fact we all have joined the bandwagon of 'growth at any cost'. All countries want to outdo each other in terms of GDP growth. GDP growth is fundamental and sole barometer on which we are judging a country's success or failure. Little thought is put over how sustainable the growth is. Problem also lies in the fact that it's very difficult to compute the losses to the environment in monetary terms. If in future we are able to factor in then it would dawn upon us that we are actually taking 1 step forward and 2 step backward.

After the big bang event of 'Industrial Revolution' in 18th & 19th century in Europe and America the gulf between developed and developing

countries have widened at an alarming pace. Many of the countries that were colonised in Africa, South America and Asia have very poor economic and social indicators. The burden gets doubled when the region has more than 80% of world's population. It's but natural that people of this region would aspire to become like their counterparts in USA and Europe. Thus, the desire to narrow down this gap is further leading to exploitation of resources in an unsustainable way.

World Bank has calculated that if only India and China were to have same level of income as that of US then we would require atleast 7 earth like planet. So definitely the idea to replicate the west and falling prey to consumerist culture is not the way out of this quagmire.

Although late, but world community today has started recognising the futility of our reckless behaviour and thanks to sustained campaigns from environmentalist, scientists, civil society the concept of sustainable development has found its due place in public discourse and in our policy making. Starting from 1972 Stockholm Conference, the landmark Rio summit of 1992, Kyoto protocal and increased emphasis on renewable energy the world has started to learn from its mistakes and is now willing to trade off growth with environment.

However, several contentious issues remains to be addressed at the global level. First developing countries like India see it unfair that they have to cut their emission level since the per capita levels of US are 10 times more than India. On the other hand developed

countries owning to their less population argue that in absolute terms China and India are the biggest polluters. we have to concede that both sides have ~~their~~ some justification in their standings.

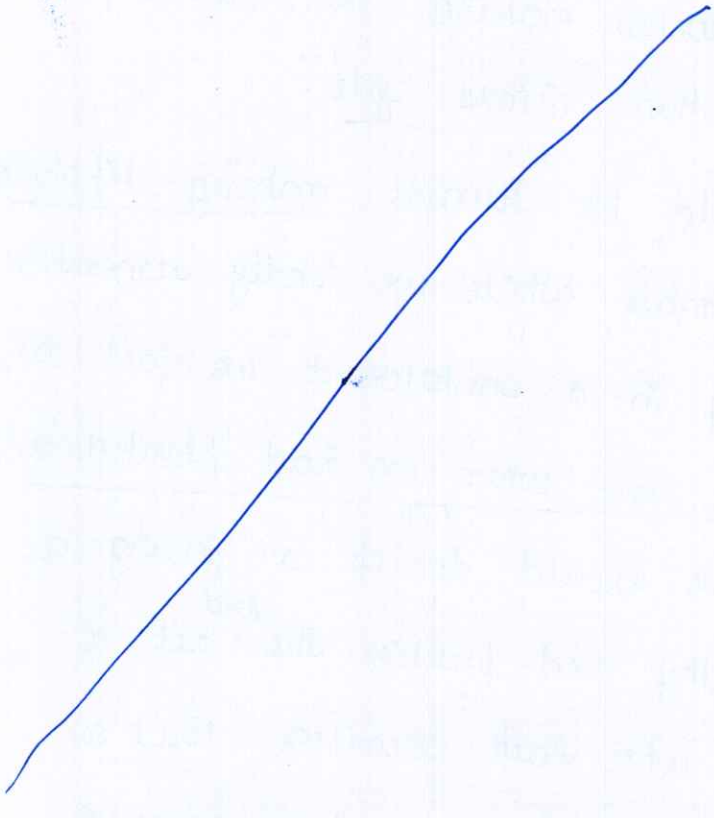
So having discussed why? and what? of our reluctance to leave it for our future generation, now we discuss how to bequeath more to ~~the~~ ~~next~~ our children while ensuring that our current needs are met without conflict.

The first and foremost should be use of nature in sustainable way. Today, fortunately nature has endowed with inexhaustible resource of energy in the form of solar, wind, hydel energy and technology although expensive exists that can harness these. With increasing investment in Research & Development the cost could be further brought down. Success in this regard would be like winning the half battle.

For the rest part we should have a strong value education framework in our schools. What other good way than to learn from nature itself where except humans all other species collect only what they can consume and even a polar bear stores energy for 6 months only !. Almost all our religious texts have highlighted this fact that from excessive greed ~~leads to~~ emerges ~~emerges~~ anger which leads to conflict, delusion and irrational decision making. We need to put a full stop to this vicious cycle.

Another step would be towards making lifestyle changes. For example while we fondly remember our last outing in a restaurant we fail to recall the last time when we had planted a tree. Moreover, we should develop a feeling of compassion, sympathy and practise the kind act of giving to people who lack resources. Focus on equity and justice would go a long way in

reducing the conflicts. Let's ~~each~~ emulate the practice of the old man in our lives so that our children our proud of us like we are proud of our forefathers.



ESSAY - 2

6: Mangalyaan vs Poverty: Where Should India Focus?

In the last 2 months India has grabbed world's attention for 2 reasons. First, we have become the only country in the world that has been successful in ~~placing~~ its Mars voyage in the very first attempt. Second, we have once again proven laggard in the field of human development when we occupied a lowly 136 rank in the Human Development Index Report of 2014.

Amidst the euphoria over our successful launch, critics have been quick to point out that ~~use~~ we should first prioritise removal of poverty than conducting such hi-tech space odyssey which 'seemingly' has 'no' socio-economic benefits for our country. They point out that

by giving priority to such projects we are diverting our minds, policy and resources towards non-essential areas. It's pointed out that such hi-tech experiment are only for western countries to undertake.

So, do these above doubts and scepticism have merits? Let's discuss and analyse the implications of these arguments and likely policy discourse of the country.

First, a fundamental fallacy lies in viewing scientific experiments and socio economic progress as two mutually exclusive sets. The truth, however, is far from it. It has been imperically proved that whenever mankind has developed a new insight or developed a pathbreaking technology it has led to a paradigm shift in the development trajectory of humans.

A brief flashback into ~~future~~ history reminds us that with development of iron tools man started living a settled life and practiced agriculture. Similarly with development in the fields of steam engine ~~tools~~ catapulted our society from feudal and backward to a modern society.

Thus scientific development has a feedback effect on overall socio economic development. The gains from research and development have been effectively ploughed back towards tackling seemingly unsurmountable problems.

Second, we've developed a wrong notion that a scientific result ~~if not~~ is useless if it doesn't have immediate benefit. To counter this, let's see what great scientist Einstein had to say about research. He said 'If you know what you are doing then it's not research!'. The above statement is justified in a historical incident.

When Michael Faraday invented electricity, he was asked by the king 'what use is this technology?'

To this Faraday replied - 'what's the use of a new born baby?'. Today billions of dollars are being put towards research and development in the hope that it might not have benefit today but will reap rich dividends in the future.

In 2014, the Nobel prize for physics went to Japanese scientists who invented LED. At the time of inventions even scientific community ridiculed at the idea of developing such device. But today LED has the potential to solve our energy crisis.

Today, the countries that lead in knowledge will be world leaders tomorrow. During 1960's India and South Korea were almost at same level but S.Korea with its increased focus in research surged ahead and has pulled back millions out of poverty while we continued to face the problem of 'brain drain' due to lack of avenues for our trained engineers and scientists

in our country.

Having discussed the merits let's answer whether we are diverting our resources more towards such efforts? The answer is convincingly No!. The Mangalyaan project was funded out of the budget for science and development and it cost us less than 400 crore. The frugality of this project has received appreciation all over the world.

The project has both tangible and untangible benefits. On the visible side it has proved India's capacity to undertake complex space missions. ISRO has an ANTRIX department that focusses on commercialising our space technology by launching ~~rockets and~~ satellites of other countries. It's a competitive domain and our mars success will put us at forefront in this field. On the 'non-visible' front it has come at the right time when we have started 'make-in-India' programme. The project has the potential to act like a catalyst for investment in manufacturing.

Now coming to the issue of poverty we realise that more than 30 crore people in India live below poverty line due to one or more of the following reasons: lack of access to education, poor health, problem of landlessness, lack of employment opportunities. Since our land resources are limited the only way out is to shift people from agriculture towards non-agriculture. which include giving boost to small scale industries and manufacturing. All this requires technical know-how, an innovation friendly ecosystem. Moreover, there exists various schemes for poverty alleviations like NRLM (National Rural Livelihood Mission), Public Distribution System, Food Security Act and Mahatma Gandhi National Rural Employment Guarantee Scheme.

However, the impact of such schemes leave much ~~far~~ to be desired as they are plagued by leakages, corruption, lack of convergence of

schemes. bureaucratic procedures. focus on numbers rather than outcomes, top down approach and lack of people's participation. These also suffer from U (Universalisation) without Q (Quality) syndrome.

Our former PM Rajiv Gandhi had said that 'Out of 100 paisa only 15 paisa reaches the poor'. Even after 30 years the CAG reports suggest that this 15:100 remains valid.

So the solution to the poverty conundrum lies in better targetting of schemes and creating more avenues for employment and imparting skill training to the people. There is also a need to cut down upon unproductive subsidy as it harms the interests of the poor rather than doing good.

In percentage terms our spending on research is to half of that of China and in absolute terms it is almost 1/5th. Therefore, we have to take cognizance of the direct

Correlationship between level of R&D and the poverty alleviation. A major problem in research today is lack of private investment. A majority of investment is done by government and industry academia linkage is still in nascent stage.

At the time of independence too we faced a similar level of criticism when our attempts to set up BARC, IITs, IIM, ISRO, CSIR etc were seen to be mismatch for a poor country like India. But over the years these institutions have proved these criticisms wrong. From snake charmers we have moved ahead to mouse movers thanks to IT revolution despite vehement opposition from various quarters against computerisation. We are today one of the giants in software industry.

Similarly, our persistence in the field of biotechnology and pharmaceuticals have made us the generic

drug capital of the world. Today we supply more than 70% of drugs in poor countries of Latin America, Africa and Asia.

Through efforts in these we've pioneered the concept of 'frugal engineering' which for a resource constrained country like India is a boon. Lessons from these hi-tech experiment have been used in daily life e.g. Aravind Netralaya, Jaipur Foot etc have eased the lives of millions of poor in India.

Thus we need to shift our debate from Mangalyaan vs Poverty to Mangalyaan and Poverty. Doing away with projects like Mangalyaan would be a classic case of 'Penny wise, Pound foolish'. Let's not fall into this trap!

Don't write anything in this margin

Don't write anything in this margin

Don't write anything in this margin

① September launch – contrast with HDI report.

② What do critics say?

③ Ancient India example:
- Science & Technology → growth
  * iron tools – agriculture, settlement
  * discovery of fire
  * industrial revolution.

④ BARC, Nuclear Technology -

⑤ Einstein: "If you know what you are doing then ____."

⑥ Boolean Research → Computer

⑦ LED bulb

Space
- GIS → predicting monsoon
- resource mapping
- disaster management
- Kisan TV
- communication
- education
- Prestige
- investment
- Space launch

⊙ We were reluctant for Computerisation.
↓
from snake charmers to mouse movers.

→

✓ Poverty and development → not mutually exclusive.
Feedback mechanism

✓ What's the % of R&D. → one of the least in the world.
↳ countries like South Korea ~ India in 1960s have come out of this trap by following science & tech.

✓

Brahmagupta.

own inherent benefits.

Baudhayan.

The discovery of zero ⇒ had no intrinsic value in an ancient time.

Why Poverty?
- lack of employment opp.
- access to resources
  - education
  - health
  - water
  - electricity

* I.I.T
* Pharmaceuticals
  - generic drug capital of the world
* IT superhouse.

✓ Improve poverty alleviation programmes
✓ Remove corruption
✓ Shift from agri → manufacturing
✓ skill development
✓ reaping demographic dividend.

- Brain drain.
- tapping of talent

China maiden launch mean:
- * euphoria
- is there a trade off?
- or over harming / injustice to poor?

Industrial Revolution

* Frugal engineering.
  - Jaipur foot

* Sustainable Development

Don't write anything in this margin

King vs old man example.

end with,

* Gandhiji's quotation

Greenhouse gas emission ← * Climate change

* Sustainable development

- We are a guest on this planet for short span.
- We are today enjoying benefits because of elders.
- ~~Posco~~ Niyamgiri Hills example Vedanta
- Rig veda, Man, harmony example.
- learnings from animals and birds.
- frugal living.
- our present generation may be threatened.

- even polar bears share food for 1 cycle.
- why is this?
  - increasing greed
  - fear

* Current Scenario:
  - overexploitation
  - threatening ecosystem.

* → we are already facing ~~dep~~ lack of water, water crisis.
* war over natural resources
* disaster management

* law of nature
* If earth were to have its Supreme court → human beings would be first to go to prison

- water
- Air
- Land resources
- River
- Ocean

Population.

- fallacy that we are here forever.
- skyscrapers.

* Today we have started to blame our ancestors for causing — CO_2 emissions.

* Climate talks:
  1972: Stockholm Conference
* Developing vs developed world → CBDR
  - technology transfer.
* harmony with nature.
  * Development vs Environment
* Science and Technology → used for further exploitation

- Control of population
- every year hundreds of plants and animals get extinct.

Suggestions
- Plant a tree
- Limit to consumerism

- Growth at any cost.
- Let us not lead to a situation

- indiscriminate use of fertilisers.

* Forest Rights Acts are violated

Question of both duty and heritage

Likely future.

Don't write anything in this margin

- Vulnerable sections will be impacted most.