



# LUKMAAN IAS

*...Lead with edge...*

Do not write  
in this space

## SPACE FOR TEACHER'S REMARKS

1. Understanding of questions:

2. Structure of answer:

3. Content of answer:

4. Presentation:

5. Any other remarks:

# LUKMAAN IAS

*...Lead with edge...*

Write TWO Essays, choosing ONE from each of the Section A and B, in about 1000-1200 words each:

2 x 125 = 250

Do not write  
in this space

## ESSAY TEST - V

### Section - A

1. But for Indian culture and civilization all ancient cultures declined in course of time.
2. Should India engage or confront with China.
3. Reaching the decreasing prices of hydrocarbon rates to the people.
4. Now is the time of Eastern India: M S Swaminathan.

### Section - B

1. Women out numbering men in voting percentage.
2. Drug menace: the possible way out.
3. The declining bird population: would we go to the jungles to see the sparrows.
4. Indian efforts in unconventional energy.

## LUKMAAN IAS

...Lead with edge...

SHOULD INDIA ENGAGE OR  
CONFRONT WITH CHINA

Do not write  
in this space

Diplomacy is one of the most dynamic fields in the world. It has been correctly said that nothing is off the table in diplomacy. Engagement and confrontation are fundamental tools of diplomats.

As famously suggested by Chanakya *Chanakya* in Arthashastra, "Saam, Daam, Dandh, Bhedh," all methods should be openly used to preserve national interests.

The question of engagement and confrontation as policy tools is especially important for India. It has a unique geopolitical location,

# LUKMAAN IAS

...Lead with edge...

Sandwiched by large and unpredictable neighbours — Pakistan and China.

China has emerged as a point of critical concern due to its ~~sub~~ <sup>unique</sup> economic,

military, strategic and geopolitical position vis-a-vis India. These various

factors govern that India must follow an engagement policy rather than any diplomatic confrontation with this neighbour.

China has emerged as an influential economic power. It has the second largest economy in the world with over \$10 trillion in GDP (2015). This makes it almost

Do not write in this space

Write it in the kind of your own way.

## LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

5 times larger than India in dollar terms. China ~~also~~ commands a healthy trade surplus, also largest in the world. This provides China with tremendous "hard buying or purchasing power." Any small changes in the Chinese economy have cascading effects on the world <sup>small</sup> economies. The recent <sup>small</sup> devaluation of Yuan had led to falling of share markets in India by over 2% in ✓ a single day!

This economic power also extends far beyond its borders, in places where India has strategic

## LUKMAAN IAS

...Lead with edge...

and economic interests. For instance, China has large investments and trade agreements with Africa, West Asia, Sri Lanka, Australia & South East Asia. India has purchased oil fields & agricultural lands in Africa. It has investments in mines in Australia, and in ports in Indo-China (Myanmar).

Clearly, Indian & Chinese economic interests overlap at multiple levels across the world.

In addition China commands a position of larger bargain due to its deep pockets. This calls for a

Do not write  
in this space

# LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

policy of engagement. After all, economy thrives in stability, & a confrontational approach will threaten such stability.

China has <sup>also</sup> emerged as the <sup>country with</sup> largest military force in the world. It has second largest

defence budget, after the US. China is also pioneering military technologies such as satellite warfare and stealth submarines.

India has, on the other hand, fifth largest military force in the world. ~~Its~~ <sup>Its</sup> defence budget is seventh largest, far behind that of China. A military

Change  
Porta  
graph



# LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

Confrontation could lead to heavy losses for both the countries. However, the bitter truth is that with greater military budget, larger army & better technology, ~~at~~ China could have an upper-hand. In fact, military stand-off would derail economics of the two countries in an irreversible manner.

Conversely, Indian and Chinese military engagement carries a huge potential for both countries to gain. India & China both face the problem of terrorism in their territories. India has witnessed attacks

# LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

in Mumbai (2011), Hyderabad (2014),  
and more recently in Pathankot  
and Uri. China also faces hostile  
terrorism in its Digihyu region  
in Xinxiang province. Much of terrorism  
in both countries is financed &  
operated from foreign countries.  
An engagement regarding <sup>plugging such</sup> financial  
transactions and common policy on  
exterminating training camps of  
terrorists could benefit both countries  
tremendously.

This will also open  
opportunities for India to open  
negotiations conversations on border disputes

High  
reperc  
Ethnic  
group

Linking

## LUKMAAN IAS

...Lead with edge...

with China. Chinese claims on Arunachal Pradesh, Chinese occupied Kashmir and sectors in Uttarakhand could be better discussed & resolved through engagement. Cooperation on ~~the~~ Strategic fronts such as the military is a powerful tool of engagement. Contrarily, confrontation would only worsen Beijing's hostility and rigid stance on these border disputes.

China controls some  
of the major rivers passing through  
India. It has built multiple dams over Brahmaputra, and poses a direct threat to water security of the North east region, and even

# LUKMAAN IAS

...Lead with edge...

Bangladesh. India's Brahmaputra basin provides livelihood to millions of farmers, fisherman & forms a critical life line of the region. It also hosts a wide array of wildlife, ecology, directly dependent on the river for its survival. ✓

Do not write in this space

While international water treaties are in place, India must be wary of China's position with respect to ~~its~~ its water from Brahmaputra. An engagement ~~with~~ with China ~~on~~ on water policy, and infrastructural plans on Brahmaputra is the only way to gain information and stay alert. Confrontation could lead to

## LUKMAAN IAS

...Lead with edge...

an aggressive approach by China on water issues, which India stands to lose more from.

Do not write  
in this space

Most importantly, it is ~~is~~ critical to notice that India's internal peace depends largely on peace on its borders. Having ~~two~~ two aggressive and confrontational neighbours - China & Pakistan, would directly hamper India's overall political, economic, military as well as peace-sustaining interests. Field Marshal Manekshaw once remarked that we should deal with 'menaces' one at a time. Therefore, an engaging and constructive approach towards

China will better serve our national interests.

It is also important to highlight that Chinese policy also thinks of India in terms of engagement and not confrontation.

The Chinese State owned newspapers have routinely published various editorials about common interests that Indians and Chinese share in the 21st century. Infact, scholars at Tsinghua University have indicated that the "Asian Century" can only come ~~to~~ to fruition if Chinese & Indians collaborate,

# LUKMAAN IAS

...Lead with edge...

cooperate and coordinate at all levels.

Do not write in this space

The Chinese economic interests are deeply aligned with that of India.

China can address large emerging consumer demand in India, while India can help develop the Chinese software markets. Additionally, the new economic institutions - New Development Bank (NDB) and AIIB have India & China as largest stakeholders. This makes it imperative for both sides to engage rather than confront.

Moreover, the new international pet projects of China, such as the Silk route and [OBOR] one-belt-one-road rely heavily on

have along

Do not write  
in this space

Indian support to be successful.  
Further, there ~~are~~ are ~~various~~ platforms for  
engagement in energy exploration,  
space technology development, education,  
& most importantly poverty eradication.

Various convergence points

between India & China make it  
imperative that India engage with  
its large neighbour. Chinese interests  
are highly aligned with that of  
India in the globalized world today.  
China would find it only a win-  
win situation to cooperate & work  
with India on such multitudes of  
issues. This also means that India  
must not be blinded by its

sent  
reply

you  
are  
Don't  
reply.



# LUKMAAN IAS

...Lead with edge...

engagement policy. It must freely build its military & economic power to ensure self-reliance. After all, one that commands rules of engagement is one with the bigger stick. India must use multidimensional diplomatic efforts to discuss all issues with China. Better communication would dissolve misunderstandings of the past and enhance engagement. A better India and a better China would lead to a powerful & friendship that could define the 21st century. The key to this lies in holistic engagement.

Do not write in this space

54

1) You can write good. Make a plan

2) See the model paper for UPSC  
3) Write your views & on advice with the candidate.

INDIAN EFFORTS IN  
UNCONVENTIONAL ENERGY

Do not write  
in this space

Energy is the most valuable resource in the 21st century. Without energy, the entire world economy would come to an immediate halt. However, questions have been raised over production of energy from conventional sources, such as coal, <sup>gas</sup> and nuclear power. Exploitation of fossil fuels such as coal & natural gas is threatening human existence due to climate change. <sup>Despite being clean,</sup> Nuclear power has shown to be a dangerous source due to

## LUKMAAN IAS

...Lead with edge...

damage caused in leaks such as that in Fukushima (Japan). Do not write in this space

The world is fast shifting to unconventional or renewable sources such as solar, hydro & wind energy.

They provide safe alternative to nuclear & do not threaten climate change like burning of oil & coal. do. In fact Japan & Germany have closed down all their nuclear plants & majority of coal thermal plants. They are rapidly moving to 100% unconventional energy driven societies.

~~India~~ As world's fastest growing economy, India has large energy

## LUKMAAN IAS

...Lead with edge...

needs of its own. In fact, India is the fourth largest producer & consumer of energy in the world. This has also led to India becoming 3<sup>rd</sup> largest emitter of carbon in the world (absolute terms) due to heavy dependency on coal power. 85% of energy production in India is done with coal-fired power plants.

This massive carbon emission is having irreversible effects on its environment, and health of its people. Indian

Do not write  
in this space

## LUKMAAN IAS

...Lead with edge...

Cities are highly polluted & it has emerged as a top cause of early deaths as per Medical Council of India (MCI). This has caused India to rethink its National Energy Policy.

India has ambitious plans with regards to energy production from unconventional sources.

In the recently concluded Paris Climate Summit, India has highlighted its efforts in achieving large demand of energy from unconventional sources. It has committed to achieving

Do not write  
in this space

## LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

at least 40% of its energy-mix  
from unconventional sources. ~~Set~~

The first target is a massive  
175 GW of energy from unconventional

Sources by 2022. Solar energy  
dominates in this at 100 GW  
production by 2022.

Solar energy is a  
natural choice for India. India's  
Bhadkal village in Rajasthan gets  
highest solar ray intensity in the  
world. The Tropic of Cancer passes  
through India, and it receives  
uninterrupted solar energy 365

20 days a year in most parts. India has identified this & made many strides & efforts to tap this potential.

The National Solar Mission

has been launched to guide solar energy development in India. It focuses on various aspects — design & manufacturing of solar cells & modules, installation, service, repair, human resource development, grid connection and incentives for various stakeholders.

The Mission has provided grants for setting-up of solar design & manufacturing units across the country.

It has envisioned an entire ecosystem

Do not write in this space

# LUKMAAN IAS

...Lead with edge...

of Research & Development in solar technologies in existing and new institutions. Various tax benefits have been outlined for solar power plants and manufacturers as well. Excise & custom duties have been waived off on a line of

Do not write in this space

items.

Moreover, solar parks where human resources could be developed

are set-up. This has boosted employment potential as well.

Design, development & hands-on manufacture by this new talent pool will help develop large solar power fields in India.



## LUKMAAN IAS

...Lead with edge...

Government has also poured much funds & incentive plans in grid development for solar power. ~~Conventional power plants~~ are

Distributors of electricity are required to purchase a minimum amount of energy from renewable sources. Additionally, home owners with solar-roof installations will be given electric bill subsidies and tax benefits.

A new smart grid is also envisaged to enable conventional & unconventional energy to flow without interruptions.

Above all, India has

Do not write  
in this space

# LUKMAAN IAS

...Lead with edge...

taken on ~~international~~ <sup>global</sup> stage by  
establishing International Solar Alliance  
(ISA) at the Paris Summit 2015.

Do not write  
in this space

The new alliance will include hundreds  
of tropical, solar-rich countries.

It is based in India & will  
spearhead international funding,  
research & expansion of solar  
power. This has combined ~~domestic~~  
efforts ~~with~~ <sup>of</sup> the National Solar

~~mission~~ Mission with international  
footprint of the ISA. India's

solar efforts have thus propelled  
it at the forefront of ~~the~~ the

~~the~~ unconventional energy movement.

Write small  
paragraphs  
One idea: One  
paragraph

# LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

India also has ambitious plans in the wind energy sector. India already produces a large amount of energy from wind turbines in Gujarat, Maharashtra, Karnataka and Rajasthan. However, large capital costs, environmental hazards such as deaths of birds due to tall wind turbines & land acquisition have put hold on fast development.

of ~~the~~ wind power.

India is now pushing efforts in off-shore wind power generation, which addresses ~~the~~

## LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

above mentioned difficulties of wind power. The Wind Energy Institute (WEI) has estimated wind energy potential of over 650 GW in India just from off-shore development.

To harness this, India is engaging in technology transfer efforts to

locate off-shore wind turbines across coastal areas. Germany

and India have signed definitive agreements to achieve this. ✓

Finally, India has pushed tremendous efforts towards hydro-energy generation. The down-sloping rivers in the Himalayas offer

## LUKMAAN IAS

...Lead with edge...

large untapped potential. In addition, India is working on capitalizing on wave-energy across 7500 km long coast line.

India is already building multiple dams with 50 MW - 1000 MW capacity in North-East. It has also signed agreements with Nepal & Bhutan for hydro-power development.

These projects face some difficulties due to their ecological impacts. In this regard, comprehensive rehabilitation and resettlement policy has been developed for people impacted.

Wave energy from the

Do not write  
in this space

## LUKMAAN IAS

...Lead with edge...

Sea offers an innovative way to harness the power of the sea without impacting the environment. Indian research efforts with Israeli start-ups & government sponsored research institutions are opening new arenas in this cutting-edge field. /

The multiplicity of Indian efforts in the unconventional energy fields is apparent. The real challenge lies in quick implementation of these efforts to fruitify into tangible outcomes. India's thirst for energy is only going to increase.

Do not write in this space

# LUKMAAN IAS

...Lead with edge...

Do not write  
in this space

with greater economic developments, higher living standards & industrialization. The key is in developing private partnerships as well as efficient institutions to carry-out the various plans outlined so far. This will ensure energy security of India & reduce its overdependence on fossil fuels. It will also free it from worries of climate change, which can adversely impact India's ~~society~~ <sup>society</sup> & economy. Efforts are undeniably strong; a concerted action by citizens

58

A) Structural  
your energy  
the by which  
of production  
to the  
and policy  
your suggestions

# LUKMAAN IAS

...Lead with edge...

Should India engage or confront with China?

Do not write in this space

meaning of engagement & confrontation  
 ↓  
 diplomatic discussion, talks, forums, academic exchanges to find points of common benefit.

↓  
 direct & hostile approach to resolve various issues.

- can lead to great economic benefits
- security benefits
- resolve border issues amicably
- discuss issues such as water, trade deficit,

↓  
 greater military strength  
 better infra.  
 control over water supply in NE  
 NSG

International issues →  
 CPEC, South China Sea

how to engage

- ③ Chinese culture & mindset
- hierarchical
- secretive
- very respectful
- ~~very~~ however CLOSED culture
- however open to change & new ideas
- responsive.

① Show them multiple areas of common interest  
 Environment.

② Renewed Partnership

- 35 → partnership in infra building
- partnership in OROR, Silk Route
- partnership in resolving terrorism
- partnership in energy exploration
- partnership in poverty & removal



# LUKMAAN IAS

...Lead with edge...

Do not write in this space

"Nothing is off the table in diplomacy"

→ Sam, daam, dand; bhed  
→ National interest

Last point-

① Chinese culture (hierarchical)

② Greater military power, better infra

③ Control over water supply

④ Economic imbalance \$10 trill econ, \$2 trill.

⑤ → China has a much larger economy, huge ~~balance~~ trade surplus, massive purchasing power.

→ Enables it to exercise great sway in other parts of the world such as Africa, West Asia

eg: CPEC

→ hence cannot confront, but engage to find points of common econ. interest.

Complementarities → Infra projects in India  
POINB later. = Software abilities of India  
NDB, AIIB

③ Water Supply

→ NE & lower riparian States

"3rd world war over water"

④ Cannot afford two hostile neighbours at the same time

engage Chinese is a mutual benefits. Showcase opportunities offered by India & complementarities of India & China

② Military power of China is huge

→ 2nd largest defence budget

→ largest army in world (India 5th largest)

→ Confrontation could lead to a standoff. that no one will gain from.

→ SOUTH China sea

→ Indian Ocean region<sup>34</sup>

→ India should bolster its position.

Indian efforts in unconventional energy <sup>35 GW</sup>

Do not write in this space

India produces 95% of its energy needs from conv. sources such as coal & nuclear.  
85% → coal  
→ pollution, climate change, health hazards, depletion of natural resources.

- Solar →
- Hydro → 50 GW
- Wind → 10 GW
- Biomass

175 GW by 2022  
30% of elec. by unconv. renewable means  
40% lower carbon emission intensity.

Paris Agreement

Int'l Solar Alliance

→ world Wind Energy Institute

→ offshore wind

- ↓
- taxes
- depreciation
- subsidies
- land acquisition
- regulatory approvals
- protection

Hydro