


GS Advanced Program 2023
Generic Booklet

Test Name/Code/No. : .../.../...

Name			
Email ID			
Roll No			
Mobile No		Date	

Allotted Time : 60 Minutes
Instructions to Candidates -

- There are 7 Questions in this Question paper.
- All Questions are Compulsory.
- For all updates, please visit the noticeboard -
<https://noticeboard.forumias.com/gsap-2023/>

Important -

- Answers must be attempted in the QCA Booklet only.
- To upload the Answer Copies please visit to "My Course" section on -
<https://academy.forumias.com/>
- Only those copies will be evaluated which will be submitted before the next class.

Q. No.	Grade/Score
1	
2	
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Overall Grade/Score	

Start Writing Here

Q.1)

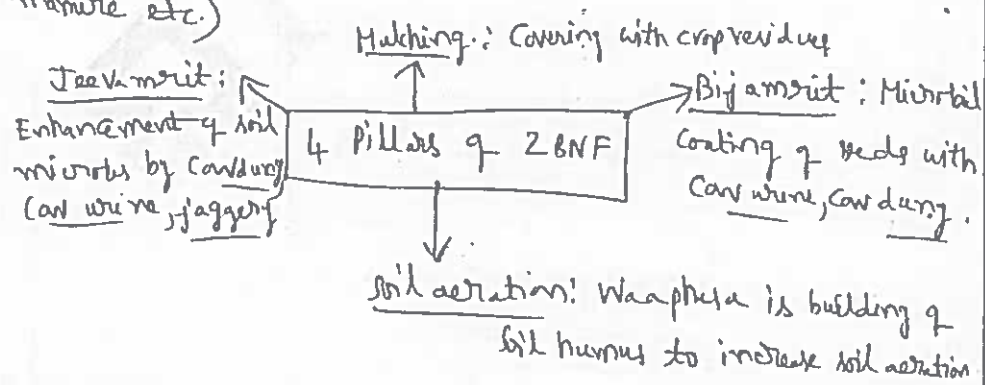
ZBNF is a set of farming methods that involve zero credit for agriculture and no use of chemical fertilizers. In this context, critically analyze the suitability of ZBNF to Indian conditions.

Answer

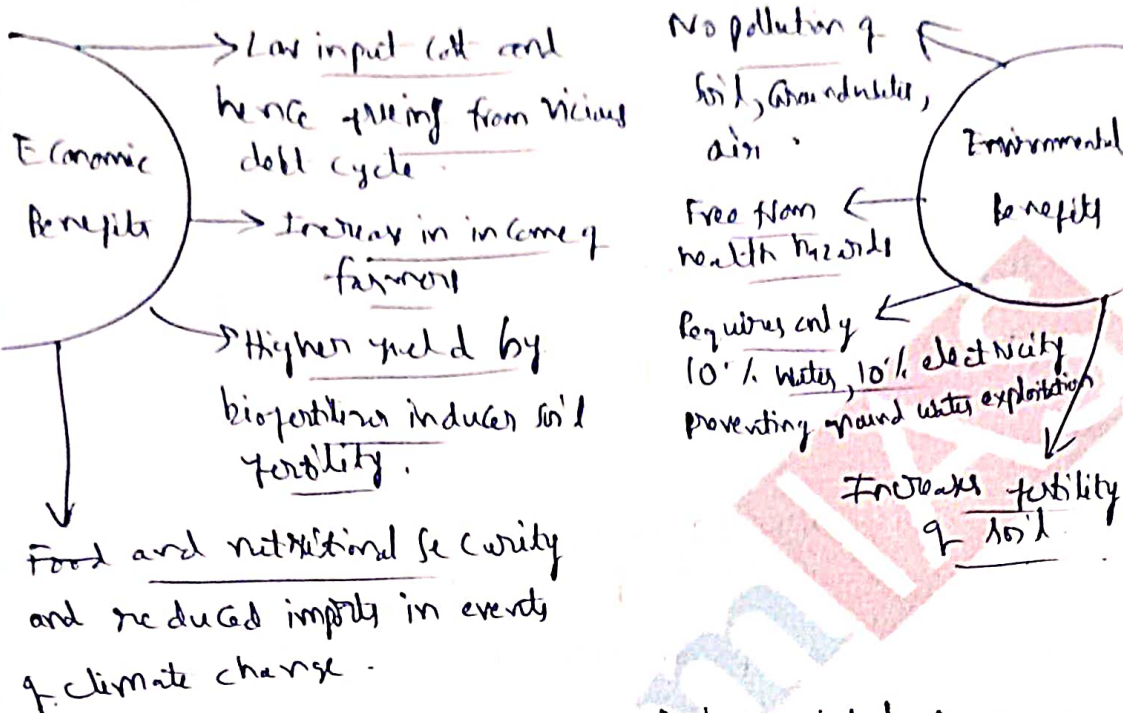
(Zero Budget Natural Farming)

ZBNF is a method of chemical free agriculture drawing from traditional Indian practices developed in mid 1990s by agriculturist Subhash Palekar.

It involves no external input costs for farming and hence zero credit for agriculture (Use farm cow, farm manure etc.)



Benefits and suitability of ZBNF to Indian conditions



Challenges

- less yield to feed population rising (Food insecurity)
- Shelf life and productivity, colour, texture is less than hybrid crops
- Low Awareness among farmers
- off season crops can't be produced
- Farmers in Sikkim switching back to conventional farming as the yield is lower.

ZBNF with Pilot projects and further improvement phase wise is need of hour to achieve SDG-13 (Climate Action)

(Andhra Pradesh with KfW Germany MoU)

Overall Grading (✓)

Poor			Average				Good		
1	2	3	4	5	6	7	8	9	

Q.2) Explain the various benefits and challenges of promoting organic farming in India.

Answer

Organic farming is a technique of cultivation of plants and rearing of animals in a natural way.

Various benefits of promoting organic farming in India

[Economic]:

→ Reducing input costs to farmers. Hence help in doubling farmer's income.

→ Reduction in subsidy burden to Government

→ Reduction of import cost of Government and save FOREX

[Environmental]:

→ Improves soil health, productivity.

→ It encourages biodiversity.

→ Prevents water pollution and eutrophication of near by streams

→ Prevents air pollution by release of NOx etc. by

Chemical fertilizers

Social : → Prevents social unrest and migration

→ ^{Food and} Nutrition benefits with no health effects

as against use of chemical fertilizers

→ Upliftment of socially backward farming community

However, there are
Challenges like

certification may
for export

Low productivity leading
to food security
problem

If some crops cannot
be cultivated

→ Low a warranty to farmers

→ Small landholding and no
Economies of scale.

→ Less shelf life, less appealing
Colours

→ Reverse transition to chemical
farming from organic inscription

Less use of chemicals, mix of Conventional and
Organic farming is need of hour for SDG-14, 15, 2

Overall Grading (✓)

Poor			Average			Good		
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Q.3) Throw light on the Agricultural Insurance held in India and discuss about Pradhan Mantri Fasal Bima Yojana (PMFBY). Also, what are the various risks which are covered under the scheme.

Answer

Agricultural Insurance is the protection of farmers from financial losses of their produce from various risks through the payment of premium to the insurer.

PMFBY was launched in 2016 and is being administered by the Ministry of Agriculture and Farmers Welfare.

→ It replaced National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS)

Objective: To provide a comprehensive insurance cover against the failure of the crop thus

helping in the stabilising the income of the farmers.

Premium: by farmers
 2% for kharif crops. Remaining premium
 1.5% for rabi crops. paid by
 5% for horticulture Centre and State
 crops.

Implementation: By expanded General Insurance Companies.

Risks Covered by PMFBY:

Natural fire and lightning, storm, hailstorm, cyclone, Typhoon, tempest, hurricane, tornado, landslide, drought, flood, inundation.

Way forward: → Awareness Generation to farmers.

→ Bringing behavioural change in farmers

→ Role of Technology: Weather forecasting
Drones etc.

"Beed Model" which restricted insurers' potential losses can be adopted for further expansion of PMFBY 2.0.

Overall Grading (✓)

Poor			Average			Good		
1	2	3	4	5	6	7	8	9

Q.4)

There has been a clear shift towards indicators such as (green) GDP to measure the sustainable growth. Critically Analyze

Answer

Green GDP is a term for expressing GDP after adjusting for environmental degradation.

It is obtained after subtracting the cost of environmental damage and ecological degradation from the GDP.

Green GDP as indicator to measure sustainable growth

- As per recent world bank report, air pollution costs India \$50 Bⁿ i.e. 8.5% of GDP
- Negative externalities of land degradation due to intensive chemical farming
- Green GDP accounts for natural Capital (qualitative & quantitative) in spatial and

Temporal terms

- Monetary valuation to determine its tangible and intangible components (looking productivity of ecosystem)
- Then net change in monetary terms is integrated into GDP to achieve sustainable living and strive for sustainable growth.

Challenges :

- Difficult to monetize intangible products
- Assumption made in calculating the value of ecosystem services leads to complexity and non standardization in estimation.

Given GDP to achieve sustainable living, and sustainable growth is need of the hour in estimation of growth in the present times of climate change

Overall Grading (✓)

Poor			Average			Good		
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Q.5) IP rights such as patents should not become a barrier in scaling up the production of medical products like vaccines, diagnostics, therapeutics essential to combat Covid-19. In this context, discuss the various provisions in the TRIPS providing for patent waivers and the fight of developing countries to achieve the same.

Answer]

Recently, in the 12th Ministerial Conference of WTO members agreed to temporarily waive IP rights on Covid-19 vaccines without the consent of the patent holder for 5 years to manufacture them domestically.

Various provisions in the TRIPS providing for patent waivers:

[Article-31(f) of TRIPS Agreement]:
 - Compulsory licensing (CL) allows governments to licence third parties to produce, use and sell a.

~~Patent~~ patented product (or) may without the consent of the patent owner. in the event of a public health emergency.

→ TRIPS Council gives waiver for any waiver request from multilateral trade agreements under TRIPS

Fight of the developing countries :

India and South Africa advocated for waiver of patents in WTO TRIPS Agreement to manufacture Covid-19 vaccines.

The temporary waiver obtained @ 12th MC of WTO, 2020 was watered down form of agreement which ^{originally was} sought by India, South Africa ^{in 2020} for broader IP waiver on vaccines, tests and treatments.

→ Rich Pharma Companies opposed this saying that

defusion of IP rights will disincentivize and
send a negative message to researchers.

→ Also, the waiver did not cover all the
medical tools like diagnostics and treatments
and also it does not apply to all the
countries

→ As per UNDP, still more than 2.5Bⁿ people are yet
to be vaccinated by July, 2022.
(1st dose)

→ Developing Countries fought against Vaccine inequality

→ G-7 are 7 times more likely to be vaccinated than
the poorest countries.

→ They advocated for right to life as Basic human
right as per UDHR, 1948 and for justice.

In this interconnected world, "No one is safe till
everyone is safe." So, Vaccine equity to be promoted

Overall Grading (✓)

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Q.6)

Critically examine the various issues plaguing the fertilizer sector in India & also suggest measures to reform.

Answer:

Fertilizers are any material of natural (or) synthetic origin that is applied to soil (or) to plant tissues to supply plant nutrients.

[Eg]: Urea, Diammonium phosphate (DAP),
Muriate of Potash (MOP)

Challenges / Issues Plaguing the fertilizer sector in India

→ Rise in global prices due to Russia - Ukraine war where natural gas supply is disrupted which is used in the Urea production.

→ Increase in the demand for fertilizers
with increase in the agricultural output
and hence need for fertilizers.

→ Fertilizer Subsidy : Increasing subsidy burden on
Government / \$13.7 Bn. ^{import} _(cost)
Direct subsidy on Urea
Nutrient based subsidy on, non urea fertilizers
(DAP,
MoP)

→ Supply chain disruption due to pandemic

→ Eg : China, the major fertilizer exporter,
reduced their exports due to dip in
production and India imports 40-45% phosphatic
fertilizers from China

→ Change in N:P:K ratio of ideal 4:2:1 to
28:61:2.3 etc. in various parts of the Country
affecting soil health fertility and productivity (wheat, sugarcane)

- Emission of NO_x , NH_3 causing air pollution.
- Health Hazards to biodiversity (E.g. Cancer in Punjab area)
- Inefficiency of PSU NPL in fertilizer production.

Measures for Reform

- | | |
|---|---|
| Adopting Urea and
Nitification to reduce
release of NH_3 , leaching
etc | → Going for Organic, <u>2BNF</u>
<u>farming</u> |
| Reducing urea usage | → Promoting sales of <u>Single Super</u>
<u>Phosphate</u> (SSP with 16% phosphorus
11% sulphur) |
| Restricting DAP to only
rice, wheat (46% phosphorus) | → MOP imported should be
sold with complexes and not
directly used. |
| Moral suasion to
farmers to use less
fertilizers | → Alternatives like potash
derived from spent wash of distillery
seed extract |
| Promoting investment
in urea production | → Use of <u>Space Technology</u> in
resource mapping of potash, rocks.
rock phosphate |

Optimum usage of fertilizers is required to
Atma Nirbhar Bharat and increasing agricultural exports

Overall Grading (✓)

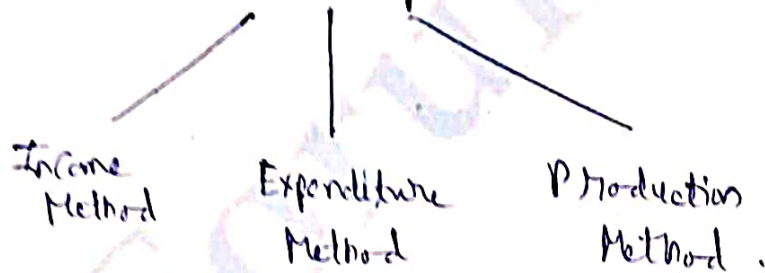
Poor			Average			Good		
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Q.7) Explain the difference between computing methodology of India's GDP before the year 2015 and after the year 2015.

Answer) :

GDP is the final value of goods and services produced in an economy within a geographical territory.

GDP is estimated by



In 2015, Government adopted new method for computation of GDP in line with UNSNA

The difference between GDP computation of India before 2015 and after 2015 are :

Before 2015	After 2015
→ Base year: 2004-05	→ Base year was changed to 2011-12.
→ GDP at <u>factor cost</u> was calculated	→ GDP at <u>Market</u> prices by including
	GVA at Basic price was to be calculated.
	Was calculated
→ Index of Industrial Production (IIP) was used to measure manufacturing and trading activity	→ Valuing industry-wise estimates as GVA at basic prices was adopted.
→ Data from Annual Survey of Industries was used (ASI)	→ Data from MCA-21 was used.

Findings : Analyzed Subramanian paper on
overestimation of GDP by the new method :
 It is not aligned with macro-economic (or)
 high frequency indicators, questionable
 methods of extrapolation etc.

Though GDP is indicative of economic
 development of a country now human development,
 environmental concerns such as Green GDP are
 in the lime light for the ongoing climate
 change and inducing sustainability.

Overall Grading (✓)

Poor			Average			Good		
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