

SECTION-A

Write notes on the following in about 150 words each: ($10 \times 5 = 50$)

Q.1

(a) Explain the impact of socialist planning on industrial development in India.

Ans

Indian planning post independence was based on socialist principles of "state ownership of resources" and "maximum involvement of state" in economic activities to promote growth.

positive impact of socialist planning on industrial development → public sector acted as the provider of thrust to economic planning as it played the role at "commanding heights".

↳ The five year plan (FYP) based on Mahalanobis model saw an industrial growth rate of 9% p.a.

↳ The 1st FYP for the first time

provided double digit growth to the industries at 12% p.a

↳ It led to diversification of industries
— textiles, mining, chemicals,
automobiles.

Negative impact
of socialist planning
on Industrial
development

→ closed and highly
controlled markets
restricted private
sector and foreign
investment
→ administrative
prices, licensing,
restrictions of expansion.
MRTP Act, FEMA Act
prevented economies of
scale

↳ led to
the under development
and excess capacity in industries.

Though initially beneficial,
it caused structural retrogression
during 1969-1980s with per capita
income growth less than
1%.

Q.1

(b) What was Ranade's drain of wealth theory?

Ans

Indian nationalists provided the theory of 'Drain of wealth' as a major cause for poverty in India. The term for the first time used by "Dadabai Naoroji" in his book 'Poverty and the unbritish rule in India'.

The theory was later propounded by Ranade in the following manner:

Phase I

1757-1800

→ EIC forced Indian artisans to produce at uneconomic costs to extract surplus

→ Subsidiary alliance that made possible to use

the finances of princely states
to expand territory.

→ Land Revenue Systems that
imposed heavy burden on Indian
peasantry to extract surplus.

phase I

1800-1900

Industrial
Capital exploitation

→ One way free trade

↳ Made India the
primary market for
export of British manu-
factured goods.

↳ Manipulative tariff rates

↳ Manipulative exchange rates
that kept Indian rupee over-
valued.

reinvestment of plundered

Capital back to
India to extract profits

→ Railways, gate mills

using Banks to
extract interest on
loans

"Home charges"

phase II

1900-1947

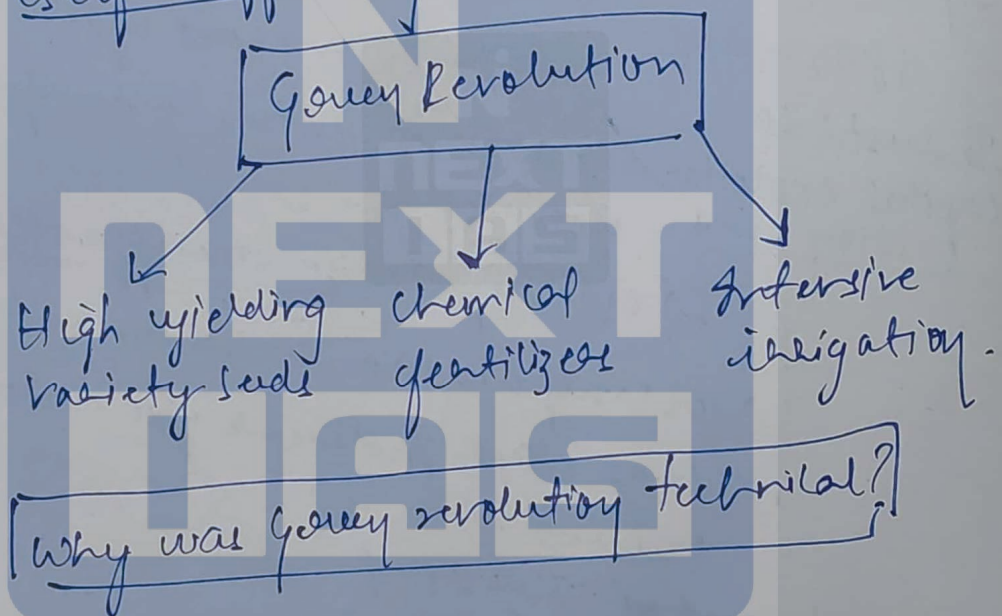
Exploitation
through
financial
Capital

Q.1

(c) "India's agricultural development was technical and not institutional during green revolution". Analyse this statement.

Ans

On the face of acute food crisis India launched a revolution in its agricultural sector through the "1966" Green revolution strategy with an aim to achieve food self sufficiency.



→ Technological revolution

↳ usage of HYV seeds increased the productivity of land

↳ Chemical fertilizers increased resilience of crops to pest attacks.

- ↳ use of canal irrigation enabled higher availability of water per crop.
- ↳ Expanded the net sown area

Why did Green revolution didn't completely succeed?

- ↳ It increased inequalities among farmers
 - ↳ led to fragmentation of land holdings
 - ↳ changed the cropping pattern in unsustainable ways.
 - ↳ led to degradation of environment
- All of this could have been avoided with structural & institutional reform
 - proper credit for farmers, extension services, labor reforms, better institutions to enable diffusion of technology.

Hence, Green revolution failed to bring any institutional change.

Q.1

(d) What were the industrial changes of 20th century during British rule?

Ans

In the 20th century, specially in the interwar period, the economic growth in national income was almost less than 1% due to stagnation in agriculture.

However, Industries, especially the modern small scale industries grew during this period.

Industrial changes.

⇒ changes in the mode of production

△ household firms to wage workshops

△ Cottage industries to modern small scale.

Ex) shift from chardloom to textile mills.
Cotton → Bombay
Jute → Bengal.

⇒ changes in pattern of wage.

Δ from family wage (based on average product) to casual wage (based on marginal product).

⇒ Indianisation of industries.

↳ especially cotton mills in Bombay, tanning and mining industries.

↳ high growth due to increased demand as a result of world war.

⇒ fall in female employment

↳ increased casual labour work was more suitable for male adults.

⇒ Integration of industries with regional and global markets
↳ Railways

Hence, the above changes led to growth of industries post 1900s.

Q.1

(e) Explain the criticism of Keynesian multiplier by Prof. Rao. Does it hold true in today's India?

Ans

Prof. Rao criticised the "Keynesian" multiplier, as according to him, it is not applicable to underdeveloped countries like India.

Keynesian multiplier

$$\alpha_g = \frac{1}{1 - c(1-t)}$$

any change in government spending will have multiplier effect on Output.

$$[\Delta G \Rightarrow \alpha_g \Delta G = \Delta Y]$$

According to "Prof. Rao" " α_g " is weak in under-developed countries and fails to bring any real changes in Output [brings only changes in nominal income] because

underdeveloped countries do not fulfil basic assumptions of Keynesian theory.

- (1) Existence of disguised unemployment instead of involuntary unemployment
- (2) Supply curve of "agricultural goods" [The major component of underdeveloped countries] is inelastic and doesn't respond to price incentives.
- (3) Absence of excess capacity to increase production in consumer goods.
- (4) Lack of capital for investment.

Hence the Keynesian multiplier is ineffective for underdeveloped countries.

Q.3

(a) Explain Mahalanobis model.

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Ans

Mahalanobis Model of Industrialization is based on the concept of "Import Substituting industrialization".

The II five year plan (FYP) was designed based on this model.

features of Mahalanobis model

→ focus on Basic

↳ mining.

heavy → capital goods and like machinery

key → Iron & steel industries

→ public sector at "commanding heights"

features

→ closed external trade

↳ heavy import duties & import quotas to provide protection to domestic industries.

→ Licensing to restrict private

sector involvement.

↳ To ensure planned and strategic private investment and prevent wastage of resources.

Equal focus on consumer goods also to prevent inflation.

features

Rapid industrialization in

diverse sectors to

increase self sufficiency of Indian manufacturing.

Impact of Mahalanobis model

- Industrial growth rate per annum in 1956-1961 reached 9%.
- Overall GDP growth rate was also close to 4%.
- public investment increased upto 16% of GDP.
- led to diversification and expansion of industrial base.
 - ↳ automobile, chemical industries.

Shortcomings

- ↳ ignored agriculture, which caused food shortage and led to 'famines'.
- ↳ led to recession in 1957-1958 as economy was not resilient.

However, Mahalanobis strategy provided base for rapid growth in the period 1960-1990.

Q.3

(b) Examine the trend of per capita growth in India after independence.

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Post independence the decade in the per capita income growth were fluctuating. due to frequent external and internal shocks, inefficiency in policy making and increased red tapism due to excessive bureaucratic control.

Five year plan 1951-1956

⇒ The GDP growth rate was 5-2% p.a, and with a stable and growth in population (almost 1%) the per capita growth was close to 3-4% p.a

why?
 ↗ release of pent up demands
 ↘ rapid industrialization especially capital goods.

I five year plan - 1956-1961

⇒ GDP growth rate was lesser and fell to approximately 4% p.a.

⇒ The per capita income growth was 2-3% p.a.

Why did it fall

recession in 1957

droughts & famines.

II five year plan - 1961-1966

⇒ GDP growth fell to 3% per annum for the first time.

⇒ per capita income growth was less than 2% p.a.

Why?

wave in 1961 & 1965
recession in 1965
famines and agricultural crisis.

[1966-1969]

- ↳ period of rolling plans.
- ↳ Green revolution - stabilized the per capita income growth:
↓
- ↳ 2-3% p.a

[1969-1980]

IV and V five year plans.
period of structural
degradation

- ↳ for the first time GDP growth was less than 3% p.a
- ↳ population explosion = 2.5% p.a
- ↳ $\therefore$ the per capita GDP growth fell for the first time post independence to less than 1% p.a

[1980s-1990s]

VI and VII five year plans

- ↳ This period experienced a rebound in growth rates.

↳ GDP growth rate was 5.6% p.a and 6.2% p.a respectively.

↳ The population was in control and per capita GDP growth was above 4% p.a

1990s - 1990s

↳ LPG reforms, the growth rate increased to highest and PCI growth was above than 4-5% p.a

2000s to 2007s

↳ highest growth rate $\rightarrow$ 8-9% p.a

↳ per capita growth was $\rightarrow$ 6-7% p.a

Therefore, the trends in per capita were fluctuating and major determined by the population and also industrial growth till 1990s.

Q.3

(c) Discuss the role of savings in India's development till 1991.

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Savings are crucial to economic development and growth as propounded by "Harrod-domar" model $\rightarrow g = \frac{s}{x}$ and also the classical economists.

In India post 1947, the savings rate were fluctuating.

- Pre of independence $\rightarrow$ 4% of GDP.
- end of 1967 $\rightarrow$ upto 14% of GDP.
- end of 1976 $\rightarrow$ upto 19% of GDP.
- end of 1980s $\rightarrow$ upto 21% of GDP.
- Stagnation till 1985 $\rightarrow$ 19% of GDP.
- post 1985-1991 $\rightarrow$ rebound, above 22% of GDP.

The major source of savings was the economic policies that gave it a thrust.

Household savings } increased due to Green revolution.
Corporate savings } due to improvement in banking and financial markets.

Impact of Savings on Growth

Though savings were high and mobilisation was good, they were, however, "insufficient" to meet the investment demand, especially by the government due to focus on rapid industrialization and poverty alleviation programs.

(1) Inefficient domestic savings
prevented investments.

(2) low capital to Output ratio (ICOR)

↳ not due to improved productivity, but due to usage of lesser capital as a result of insufficient savings.

(3) Investment however increased
 ↳ private investment was above 50%
 ↳ Government investment through borrowings and foreign aid.

(4) Dual gap < shortage of domestic savings
 led to current account deficit and fiscal deficit and prevented growth.

Though savings rate was high in India as compared to inter-national levels, it failed to provide the push to growth and led to low level equilibrium.

Q.4

(a) What were the constraints which led to zero percent per capita income growth in first half of 20th century?

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Ans

The per capita income growth in the colonial period may be analysed based on two trends.

(1) 1800-1900 (pre war period)

- National income growth rate was 3% per annum
- population grew less than 1% and per capita growth was 1.5 to 2.5%.

(2) 1920 to 1940 (inter war phase)

- National income growth was just 1% p.a
- population for the first time grew at higher than 1% p.a
- Hence, per capita income growth was almost zero percent

why? The major reason was ag-
structure: India was heavily
dependent on agricultural sector and
almost 70-80% of its workforce was
employed in the agriculture and
 allied sector.

post 1900s and in the first
half of 20th century, the agri-
culture growth was almost
stagnant.

Reasons for stagnant growth in
agriculture

⇒ fall in export demand:

↳ Indian agriculture was export
oriented, and due to fall in demand
from global markets the prices
crashed drastically.

⇒ crisis came domestically

↳ due to de-industrialization
artisans migrated to rural areas

↳ increased pressure on the
land and caused inefficiency

in production.

⇒ Land Settlement policies

↳ during war periods there was
higher burden of land revenue on
peasants

⇒ Great depression

↳ adversely impacted the
agriculture sector due to fall in both
domestic & global demand.

hence stagnation in agri-
culture and de-industrialization accom-
panied by external shocks was
the reason behind 0% per capita
growth in first half of 20th
century

Q.4

- (b) Explain the contribution on industrial development by Gadgil. How did he differ from Vakil? 15

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Ans Prof. Gadgil provided alternative to the Mahalanobis model of industrialization during the first and second five year plans.

Views of Prof Gadgil

- ⇒ Stressed the importance of self sufficiency in agriculture before industrialization
- ⇒ considered investment in agriculture as "Key" to mobilization of resources and increase in the potential of Indian domestic market

⇒ professor Godse focused on the demand side. He considered that with enough purchasing power with the consumers the industrial output will rise in inventories.

Views of prof. Kaldor

⇒ He considered that shifting of labor from agriculture to manufacturing sector a necessary condition for industrialisation.

⇒ To consider the disguised unemployment in agriculture sector as "divine savings".

⇒ He provided the alternative model to "Mahalanobis Strategy".

and laid importance of "wage goods" → include consumer goods like eatables, oil/food processing, agro based.

⇒ Development of wage goods industries which shift labor from agriculture and increase the demand for industrial products due to increased purchasing power.

Comparison

→ Both of them focussed on agriculture sector, however, Godgil wanted investment directly in the agriculture and sidelined the industrial sector. whereas, prof Vakil through wage goods model provided a balanced strategy that can improve growth in both sectors.

Q.4

(c) Critically analyse the steps taken to achieve food security in India.

Ans.

Food security and self sufficiency in food production was primary concern of the Government of India since 1960s due to frequent instances of famine, droughts and fluctuations in foreign food aid.

Steps taken to promote food security.

Green revolution

- ↳ first major policy attack on the problem of food insecurity
- ↳ It was a technological revolution using high yielding

variety of seeds, chemical fertilizers and intensive mode of irrigation.

Other technological missions

- ↳ yellow revolution → oil seeds and edible oil production.
- ↳ white revolution
↳ milk and dairy products.
- ↳ pink revolution
↳ meat and other poultry.
- ↳ Blue revolution
↳ fisheries and aquaculture.

Impact of technological missions

⇒ Increased the production of food

grains drastically

Ex) 58 MT in 1966 to 102 MT in 1971.

- ⇒ India is the largest producer of milk in the world.
- ⇒ production & export of fisheries has increased.

Public distribution system and food security Act

- ↳ To reduce hunger and improve access of food grains to below poverty line and other weaker sections of population by providing food grains at subsidised rates.

Mid-day-meal scheme

- ↳ To ensure appropriate nutrition availability to children and prevent child mortality, child wastings and child stunting.

Pradhan Mantri Garib Kalyan Yojana

↳ launched in COVID-19 pandemic that provides direct benefit transfer and also increased quantities of food grains under PDS.

PM Kisan Sinchai Yojana

↳ "chaal chet pani" and improved irrigation facilities to increase productivity of farms.

other steps

Soil health card scheme
PM Fasal Bhima Yojana
food processing MITRA scheme
e-NAM and e-Santa
minimum support price.
extension services to farmers.

The above steps taken increase food production and food productivity in the country hence achieving food security.

SECTION-B

Write notes on the following in about 150 words each:

(10 × 5 = 50)

Q.5

(a) Explain the Pillars of Gatishakti program.

Ans

Gatishakti program was launched in 2021, to improve multimodal connectivity, remove bottlenecks in transportation, coordinate and improve the overall logistical sector in the country.

Pillars of Gatishakti program

Comprehensive

↳ It enables coordination of various departments and ministries to ensure comprehensive and wider collaboration to complete infra-structural projects.

Prioritization

↳ The ministries based on the information available on "Ghati Shakti" portal can prioritise their projects.

Optimization

↳ Intersectoral collaboration may enable the departments to choose best mode of transportation to reduce inefficiency.

Synchronisation

↳ All the ministries will be updated with the project status of other ministries.

Analytical → a lot of information through GIS is available at one place to enable policy analysis

Dynamic → real time update of projects through satellite

imagery. Hence through Ghati Shakti the Government plans to reduce the logistical cost to 9-10% of GDP.

Q.5

(b) What are Indian objections to provision of TRIPS at WTO?

Ans

Trade related intellectual property rights agreement is one of the crucial WTO agreements signed in 1994 to bring uniformity of IPRs.

Since the formulation India had several objections, specially in relation to its pharmaceutical sector.

Objections by India.

→ Strict patent laws discourages Indian pharma industries to invest in innovation. There has been increased rejection rate of patent proposals in India.

→ dilution in the "compulsory licensing" clause hampers the

Generic medicines industry in India → leading to increased prices of medicines and unaffordability to common man.

- ⇒ Mandatory patent duration of 20 years also prohibits the growth of Indian pharma industries as it restricts the transfer of technology.
- ⇒ There has been contention regarding the IPRs of biological and genetic resources and concerns about the rights of traditional farmers related to indigenous varieties.

The above objections to TRIPS were put forward by India in the Doha round and till date remains unresolved impacting the countries domestic pharma industry.

Q.5

(c) How is agricultural infrastructure development program going to benefit farmers?

Ans

Agriculture infrastructure development fund was introduced in 2022 with a corpus amount of "1 lakh crore" and with the objective of improving the backward and forward agricultural infrastructure needs of farmers.

Objectives:

- Reduce food wastage by providing better connectivity and marketing.
- Reduce distress sales of the farmers by providing better prices to their produce
- Developing storage and warehousing facilities

- ↳ providing primary processing services like grading and packaging
- ↳ providing extension services like → weather forecast, soil health status, farm mechanisation equipment.

How? → 3% interest subvention to farm loans upto 1 crore and maximum 7 years.

- Benefits
- ⇒ Incentivizes farmers to form cooperatives, farmer producer organisations
 - ⇒ Improves farm productivity due to extension services.
 - ⇒ Improves farmers income due to reduced food wastage and improved marketing.

The ultimate impact, however, depends on the implementation of the program.

Q.5

(d) Describe the impact of Bharatmala on development.

Ans

Bharatmala pariksha was launched to reduce the congestion at choke points and bottlenecks on national highways, Golden quadrilateral and North-south & East-west corridors.

Objectives

- development of economic corridors to improve seamless connectivity.
- Green field national highways connecting ports, airports and other prominent industrial clusters
- Connecting all districts of India through national highways.

Impact on development

- ⇒ Improved the passenger and freight activity on the road.
- ⇒ Reduced delays caused on National highways due to "city traffic" thereby facilitating seamless movement of cargo.
- ⇒ Border and international connectivity improved the monitoring and patrolling activities
- ⇒ connecting all district headquarters has enabled inter state & intra state trade
- ⇒ Increased connectivity across the country.

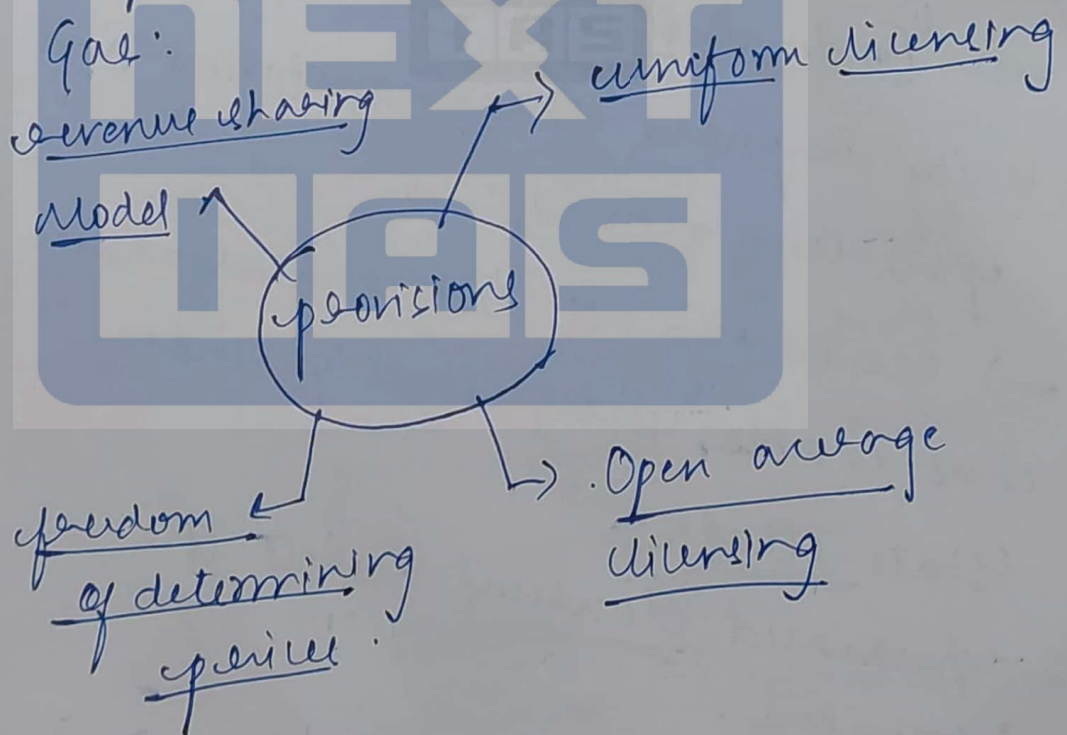
Therefore, Bharatmala has positive impact on development by reducing the transportation & logistical costs //

Q.5

(e) Critically examine HELP or OALP.

Ans.

Hydrocarbons exploration and licensing policy was introduced to bring in transparency, marketing freedom and autonomy to the oil & Gas industries and improve the production of oil and Gas.



Measures of HELP

⇒ Single license for oil, CBG,

shale gas...etc enables higher choice to the firms and reduces delays.

⇒ open acreage licensing provides opportunity to the firms to choose their ~~own~~ ^{key self} blocks for exploration

⇒ removal of market control and price regulation provides freedom & improves competition

⇒ revenue sharing model:- Government is not concerned about the costs.

Demerits → failed to attract any interests of major players.

↳ failed to attract foreign investment.

↳ didn't address the issue of obtaining environmental clearance

Hence, though limitations,

HELP is a positive step towards "minimum government and maximum governance"

Q.6

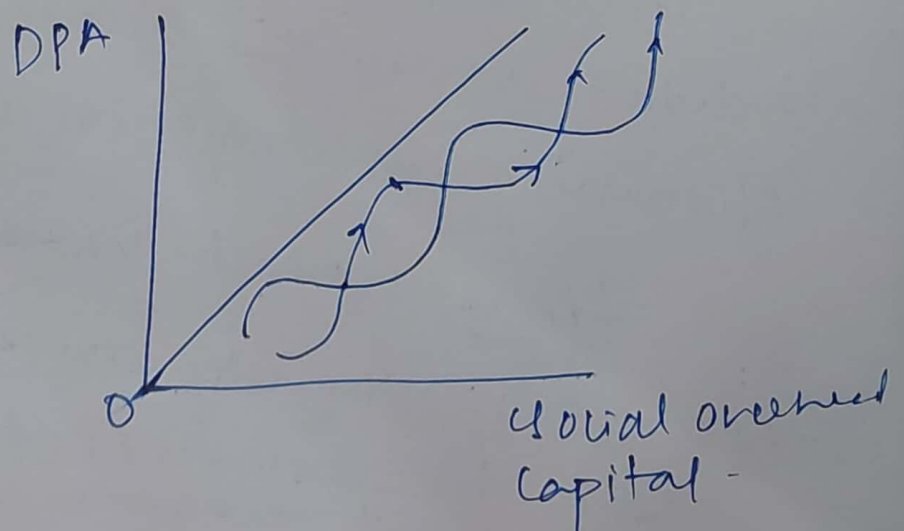
- (a) Examine the impact of infrastructure development on equity and efficiency, highlighting some of the recent initiatives.

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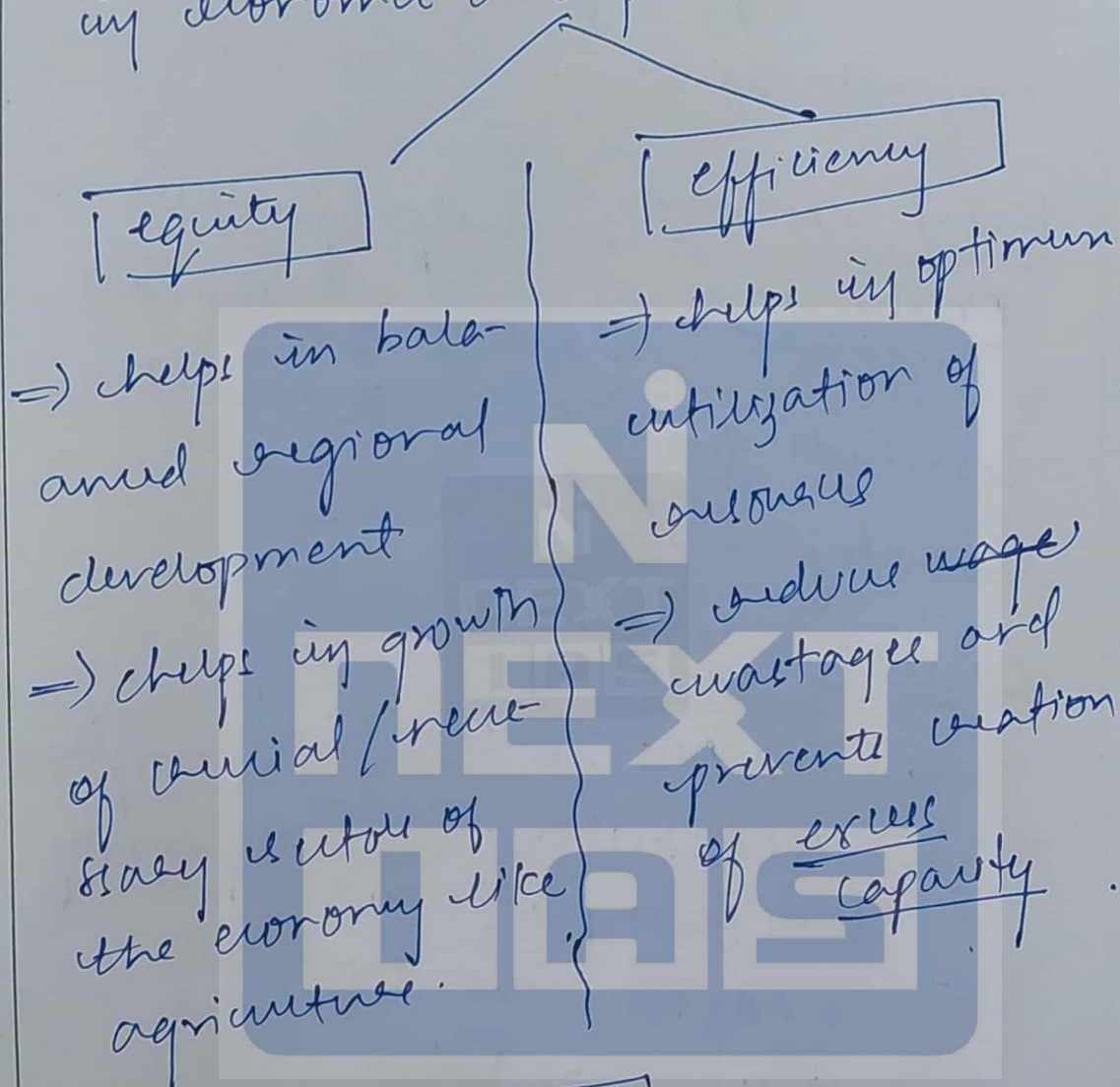
Ans

Infrastructure development is key to push economy above the "low level equilibrium trap".

Theories like big push and critical minimum effort give considerable emphasis on the infrastructural development due to its role in crowding in direct productive activities (DPA).



Infrastructure plays a dual role
in economic development



Recent initiative

Equity :

=> UDAN: "Inde deek ke har ek Nagrik Scheme" to enable

common man to experience
the benefits of civil aviation
infrastructure.

KUAN RAC and Krushi Udan: helps farmers in
marketing double

products from farm across the
country.

Digital infrastructure

↳ e-NAM, e-Santa,
GEM portal.

UKIL India platform

Jan-adhar-mobile triptych

e-Shram portal

e-Chanjeevini

improves
equity.

Efficiency

Bharatmala: → improves
efficiency of road
transport.

Ulagamala

↳ Improves efficiency of connectivity between towns, industrial sector with the ports.

Ghati Shakti portal

↳ Reduces logistics costs and improves efficiency in implementation of projects.

Green Energy infrastructure

- Solar parks, wind-solar hybrid parks, Green hydrogen mission → improves environmental efficiency.

Communication

infrastructure: → roll out of 5G, Bharat Net and PM-WiFi

Hence, Infrastructure is key in providing Big push to the economy. It creates spread effects that are both equitable and efficient.

(b) Examine the role of RBI in monetary management of India in post COVID world.

15

The role of RBI has been changed since 2016, due to official adoption of inflation targeting as the primary objective of monetary policy.

Despite inflation targeting, RBI must also focus on the growth and employment generation in the country.

Role of RBI post-COVID

COVID pandemic led to recession in India, especially in the manufacturing and services sector due to stagnation and

fall in production.

⇒ RBI played a crucial role in revival of the economy through "expansionary monetary policy" that enabled easy access to credit and provided boost to investment.

⇒ RBI was also at the centre of financial inclusion and "digitalization of economy", by ensuring seamless provision of digital payment services.

⇒ Hence, it played crucial role in helping "rebound of demand" back to the pre-COVID phase.

⇒ However, post COVID period provided RBI another major challenge, especially since the

last few years. why?

⇒ recession in western countries and successive reduction of interest rates by Fed.

⇒ domestic inflation due to fluctuation in food prices and external shock due to Russia - Ukraine

war

⇒ However RBI was successful in controlling the inflation in India unlike other major economies

How? contractionary monetary policy & operation twist.

Post-COVID world poses complex challenge to monetary management that RBI must resolve considering both inflation and growth

Q.6

(c) Critically analyse the Production linked incentive scheme.

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Ans Production linked Incentive
was launched to boost domestic
manufacturing in the country.

It guarantees "post facto" benefits
to firms in form of "rebate" of
upto "3-6%" on the total value
based on the kind and
type of industry.

PLI scheme is the tool of
"Indicative" planning where the
state only through incentives
directs private investments in
desire desired sectors.

Merits of PLI

⇒ Boosts domestic manufacturing and local value addition to the products.

⇒ provides employment opportunities by increasing production of industrial output

⇒ channelises investment in desired sectors

Ex) Semiconductor
Electric Vehicle

thereby helps in green growth.

⇒ Guaranteed results as benefits are provided "post facto" at the end of 4

⇒ encourages foreign investment in domestic industries.

Demerits of PLI

⇒ Acts as subsidies to private sector and increases burden on tax paying consumers.

⇒ Certain incentives are provided with^{out} the requirement of domestic value addition.

⇒ Lack of transparency may promote "crony capitalism", corruption and etc.

⇒ The guarantee of benefits may restrict private firms from giving push to production beyond the divided limit.

Despite limitations, PLI scheme has huge potential in contributing to manufacturing sector growth and successful utilization of demographic potential by creating employment.