

Test No. 10
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Q1 Illustrate the potential use of Nanotechnology in agriculture and defense sector in India. (10 marks, 150 words)

Ans Nano technology is a branch of science that deals with usage of atoms ; sub-atoms for different application at nan level. It is one of the most emerging branch of science due to its usage & efficiency.

Good

Potential use of Nano technology in Agriculture :-

- In spreading pesticides in field
- In developing genetically modified seeds, hybrid seeds etc.
- In accening Soil Health
- For nan production of crops; they can help in increasing efficiency & productivity.

Ex- ICAR is collaborating with Israel

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for making crops more water-resilient &
using nanotechnology to develop alternatives

In defence Sector

→ They are used in drones ; small size
can help in hiding them from RAJAR

→ USA's DRAPA (Defence Research Academy)
is developing small nano-weapons which
are very minuscule in size. Even China
are manufacturing small weapons which are
difficult to detect

Good

→ In Israel ; AWACS system, these technology
are used for UPS purpose to guide the proj

These technology can help
India ; considering the location of Sindh &
geo-strategic importance for India.

Conclusion:
Weak

marks:3.5



Q2. In light of recent Supreme Court order, comment on the challenges in the regulation of crypto currencies in India. (10 marks, 150 words)

crypto currencies are the future of currency market. These currency uses Blockchain & DLT (distributed ledger techniques) and are free from any regulator like central bank. Eg-1 LIBRA : by Facebook.

→ India constituted S.C. VARA committee to review the challenges of crypto currencies which suggested to Ban crypto currencies.

→ RBI subsequently banned crypto currencies in light of the same.

→ However, Supreme court lifted the blanket Ban on all crypto currencies.

Challenges on Regulation of crypto currency :-

→ ~~as~~ they are not under any regulator. Eg. like central bank (RBI)

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→ There is no any need of Bank as 3rd party to confirm or transact any payment or receipt.

→ Every payment is settled by the system itself, hence no any transaction cost, hence cheaper.

→ There is issues related to privacy; data leakages etc.

→ Also, incase of any mishappening; who will regulate?? Eg. Like in Bank, RBI comes into picture as "Last Resort".

→ Still it is in nascent stage; there is no any legal laws/act to regulate it.

Also provide few solutions.

However, Japan has

already sanctioned cryptocurrency. Need of time is a regulation which can accomodate the genuine interest of all stakeholders. **Good**

marks:3



Q3. India's aspiration to become a \$5 trillion economy depends critically on strengthening the invisible hand of markets together with the hand of trust that can support markets. Comment. (10 marks, 150 words)

Economic Survey 2019-20 starts with the importance of market economy with ethical means. It has sought example of "Tsouvler" who had also advocated for an open market with hand of trust among each other.

For India's aspiration to \$5 trillion economy, we need both an open market as well as ethical people. Eg- Modern philosopher "Locke" was a supporter of acquiring property by just mean; state will come only if it is illegal.

India's aspiration & need of market & hand of trust:-

→ It has been observed that, from 2011-12, there is decrease in private investment though there is increase in private savings.



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→ Public Expenditure has been continuously increased i.e. there is lack of trust; sentiments among private investors & hence they are fearful of investment. Investment decreased from 36% in 2011-12 to 30% in 2013-18.

→ Government steps like allowing FDI; privatisation of some railway operations; disinvestment of PSUs are not but letting private to come into it & increase investment.

→ New labour codes; elimination of Red Taping; making government licence process online; short, transparent etc. are to build trust.

Aspiration of becoming \$5 Trillion Economy can't be fulfilled without the investment from private partners; hence government has taken many steps in this direction; even reduction of corporate tax.

marks:2

The content of the answer is not satisfactory.

Please refer to the model answer.



Q4. What do you understand by the term 'Forest-PLUS 2.0'? How can it bolster ecosystem management and harnessing ecosystem services in forest landscape management? (10 marks, 150 words)

Ans Forest-PLUS 2.0 is reforestation drive of government of India to fulfil its mandate (pledge) taken at Paris Climate Summit (2015) & meeting it's soon challenge.

This is not what it is.

→ India has pledged to reduce its GHG Emission by a tune of 33% - 35% of 2005 under Paris Climate Summit.

Not required

→ under SONH CHALLENGE, India has committed for reforestation of 8 million hectare by 2022 & additional 8 million hectare by 2030.

How it can bolster Ecosystem health & harness Ecosystem services :-

→ It will increase the percentage of forest cover which will ultimately helps in better



Management of Ecosystem

- The Environment provides many Ecosystem services like Food, Timber, Fresh Air etc.
- This Forest Plus 2.0 drive will increase the productivity & efficiency of these services.
- It will help in maintaining or re-balancing the need of development with Environment.
- Also, it will help us in achieving Sustainable Development Goals (SDG 15 & SDG 11).

Forest-Plus 2.0 drive will help India to show world; its commitment towards mother nature as a country which doesn't only talk but also act.

The answer is out of context.
Again, try not wasting your
precious time on questions
that you are not aware of.

marks:nil



Q5. Big Data presents the opportunity to implement effective disaster management strategy. Discuss how Big Data can help in disaster management. (10 marks, 150 words)

Big Data Technology are one of the most emerging technology of Industrial Revolution 4.0, which is mainly concentrated with usage; analysis of data to find-out a solution for any problem.

eg- in marketing, using Big Data;
One can find out the choices of consumer in last 2-3 yrs can plan inventory accordingly

How Big Data can help in disaster management :-

→ Disaster are defined as the "catastrophe which ~~the~~ can do unprecedented damage to human & environment which is beyond the ability of society to cope-up with". eg- Chennai Flood 2015

→ Big Data can help ~~the~~ step to analyse in many different ways :-

a) what are types of disaster that created havoc in last 10-15 yrs. in India



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b) Identification of Areas:- Which area is prone to which types of disaster

c) Timing :- Help to calculate the timing weather in which they had maximum impact

d) Group :- which group suffered most

e) Solution:- How world's other countries are fighting with similar disasters

→ what could be the probable / Pre-planning

Steps required to handle the crisis

→ what arrangement could be done in advance

Hence, GIS DATA Technology can help in all 3 stages of disaster like;

Pre-disaster; During disaster & Post-disaster -

This can strengthen our efforts to minimise the impact of disaster.

Well attempted.

marks:4.5

Good!



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Q6. What is Carbon Pricing and Carbon Tax? Discuss the feasibility of carbon tax in developing countries like India. (10 marks, 150 words)

Carbon Pricing is an outcome of Kyoto Protocol; when it was decided that each & every country would have fixed quota of carbon emission. If someone emits below the fixed quota; it can sell it to the country which has exceeded their quota. Eg-^{India} China India are major seller
Carbon Tax is applied

when a person buy coal; this is generally 2-4%. This tax is utilized in making green efforts.

Feasibility of Carbon Tax :-

→ Generally, it is applied when someone buys any product which is source of CO₂ emission. Eg-1 Coal product; buying vehicle

→ India is a developing countries; which have neither much fund nor much advanced



technology ; hence to meet the aspirations
of its heavy population it has to develop

→ trying to develop in more sustainable way would
be difficult in lack of technology & fund

→ Imposing carbon tax, would reduce the
consumption; it would make its product
expensive in world's market & hence export
would be affected.

This will act as a barrier in
development.

There is a need to balance
development as well as Environment with
rising aspirations of people. Hence, a blanket carbon
tax will be adverse to it. There is need
of delicate balance & focus on different
section.

Well written.

marks:3.5



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Q7. Actual vulnerability to disaster is dependent on socio-economic conditions, civic and social empowerment, and access to resources. Illustrate. Also, explain the National Disaster Management Guidelines on Disability Inclusive Disaster Risk Reduction (DiDRR). (10 marks, 150 words)

Vulnerability to disaster is about how a section is exposed to a disaster & his/her ability to face it. Eg. scholar Plumper has argued that more than 70% of disaster victims are women; this highlights the role of socio-economic conditions (marginalised).

Actual vulnerability depends on many factors:-

→ Socio-economic conditions plays an important role as people who are better off in society in terms of economy & social status manage to take early actions Eg. if any politician is living, they can use helicopter to come out.

→ civic & social empowerment:- As stated above, women are most vulnerable due to lower economic empowerment; lower social values



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→ Access to Resources :- Even DEVKATHI people are 2nd most vulnerable ; they can't access the resources ; can't help themselves .

Ham guidelines on DEAR :- This area need improvement.

- Nation's Disaster Management Authority has given Special priority to most vulnerable section like women, disabled etc.
- Their actions are inclusive & considering the every section of society
- Different devices, help are extended to disabled people to cope-up with same.

Disaster has no boundary; no religion; it doesn't differentiate citizens; community based approach is Good best to mitigate the impact of disaster as per NDMA.

marks:3



Q8. Evaluate the need for a stronger industrial-military complex for India in light of growing economic and security needs. (10 marks, 150 words)

* As India is moving upwards in the existing world order ; now it is one of the superpower who can shape the international agenda. It necessitates the need for a stronger Industrial-military complex for strategic as well as Economic needs.

Need of Industrial-Military Complex :-

→ Presently Industry & Military are not working in synchronization with each other

→ Eg- ordnance factories; even DRDO; Hindustan Aeronautics Limited good

→ Their offices are at different locations; & there is lack of co-ordination; sometimes major delay happens due to procedural issue

(Eg) delay in delivery of Light Air Combat fighter by HAL to Airforce

also talk about the planned defence corridors.

Dependency on imports etc



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Benefit of Industrial-Military Complex:-

- Close co-ordination
- Better understanding of need
- Faster delivery of services
- Many times even defense people should know ~~how~~ about Technicalities as well as Industrial people should also know the exact demand; this will help in better collaborative approach

Refer to model
ans for more
points

in the era of multi-polar world order; for any superpower; Security is of utmost priority & this Industrial-Military complex can play a major role in it.

marks:3



Q9. In the light of current challenge of jobless growth and rural distress, examine the relevance of food processing sector in India. (10 marks, 150 words)

Ans. Jobless growth is defined as growth which is not able to generate employment in the same time. 'Montek Singh Ahluwalia' in his book: Indian Economy: The Retrospective has talked about Jobless growth & Rural Distress.

	NDP Growth	Agricultural	Employment
1992 - 2000	4.7%	0.7%	2.8%
2001-2011	7.2%	2.1%	1.9%

After 1992 liberalisation, there is increase in NDP growth (mainly due to service) at cost of Agricultural Distress; whereas it has not generated Jobs in commensurate with growth. In 2019, still 49% people are in Agriculture though its NDP share is only 16%. Service Sector has more



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than 50%. Share but employment is less than 25%.
This is jobless growth.

How Food Processing Sector can help :-

You need
to add
more
points.

→ Food Processing can help in backward or
forward Integration of Industry with
Agriculture

→ It will help in reducing misguised
employment as people will shift towards
working in these FPI

→ Whole Supply Chain of FPI; have potential
to employ many rural people. Ex-
Ruhrup Station; Cashier, Storekeeper etc.

→ More SAMPADA

Scheme is very much in right direction to
realise the benefit of FPI & eliminate
the rural stress as well as jobless growth.

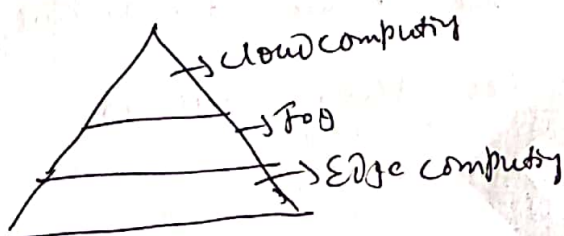
marks:2.5

Potatoes sold for 20 per kg, french fries 200
per packet.



Q10. What is Edge Computing? Highlight its benefits. (10 marks, 150 words)

Edge computing is ~~then~~ defined as techniques in computing where data is stored at the edge rather than in cloud.



good

Benefits of Edge computing :-

- Since it is stored in EDGE, it helps in DATA LOCALISATION
- It reduces the latency as it is close to the computer network.
- It can increase the productivity; Net Speed; help in AR VR Reality



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- It can help in SI Techniques, usage of Artificial Intelligence; tele medicine; E-governance
- Also helps COVID-19; now many professionals are working from home; hence it is useful
- Data is more safer than cloud as it is stored locally

Challenges:-

- Cost Expensive
- Not unlimited like cloud computing
- One copy can be stored in cloud (not more safer)

With the advent of Industry 4.0; A emergence of new technology like SI, AI etc. demand of Edge Computing has increased.

Well Written .

Marks:4

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Q11. Illustrate the linkages between drug trafficking, organised crime and terrorism. In this regard, mention the steps that have been taken to arrest the availability of drugs in India. (15 marks, 250 words)

Drug Trafficking :- It is defined as the illegal trade of narcotics drugs across the borders
Eg -> Cannabis from Nepal
Heroin from Myanmar, Sri Lanka

Organised crime :- An अपराध; organised crime is defined as the crime by a group of 5 or more people for a certain common goal.
Eg -> Human Trafficking
-> Slave Tourism
-> Sex Tourism

Terrorism :- This is a contested topic; there is no fixed definition or universally adopted definition as many times even state also involved in similar crime.

In general language, Terrorism is defined as Unauthorised & Illegal act where



there is ^{an} intimidation among people for achieving certain political goals,

eg → ① ISIS; For making a new territory of ISIS & their rule.

② Taliban group

Linkage between all 3

→ ~~any~~ there is an interest link among all 3

→ any mafias & organised crime are source of fund for carrying out terrorism & doing their business

→ As per Scholar Hirst & Thomson, now they have ORGANISATION; they compete with each other & for their recruitment they look for similar people & activities

→ For Slavery; Sex Tourism also; Terrorist use them.



Steps taken by government to control the availability of drugs :-

- Anti-narcotics & Psychotropic Act; 1986
- Operation SUDARSHAN : At Myanmar border
- Banning of opium farms (licence is required)
- Discussion with neighbouring countries during bilateral talks
- Fencing of border

Refer to the model ans for more points.

Government of India has taken a lot of steps to curb the menace of drug trafficking. Several legislations & steps with neighbouring countries are in that direction.

marks:7

All the aspects of the question covered well.

Good that you're preparation is well projected in ans.



Q12. Discuss the reasons behind the agricultural commodity price fluctuation in India. Comment on the measures taken by Government to reduce price fluctuation. (15 marks, 250 words)

As per Economic Survey 2017-18, approx. 50% population of India is still dependent on agriculture & hence fluctuation of prices of commodities plays an important role in their income.

Good

Reason behind Agricultural commodity price fluctuation:

There are two aspect of it

- 1) When there is higher production :- Market settles down in such a low price that farmers throw away their produce in road.
Ex- In 2018: Tomatoes were thrown away in Maharashtra

Intead write in form of supply side and demand side factors.

Reason :- There is lack of storage

→ There is lack of Infrastructure & transportation.

→ Comodities cost is as high as 16%.



in India.

→ Lack of Export infrastructure

~~It is then~~

ii) When there is lower production:- there is high price in market; but mainly middlemen gets benefit. Also government import from

outside & restrict export

Eg-1 Onion prices in 2019 (Sept-October)

so again farmer loses. After import prices comes down again.

Measures taken by government:-

→ Government has identified the crops whose prices fluctuate much

Eg-1 Tomato; Onion; Potato

→ Operation "URGENT"; when prices of Tomato; Onion; Potato are checked

Good

→ Price Stabilization Fund; This is used to



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- Support farmers in case they losses out due to prices fluctuation
- Increase in storage facility on PPP model
 - online e-NAM; so that farmer can review the prices from anywhere & in any mode
 - MSP support to 23 crops
 - Market Intervention Scheme for Horticulture & perishable product
 - PM-KISAN : Rs. 6000/ yearly

Government is trying to build-up infrastructure as well as concentrating on areas where there is need of intervention to support them through DBT.

Could be improved.

marks:6.5



Q13. What are Technical textiles? Discuss the prospects of technical textile sector in India. (15 marks, 250 words)

Technical Textiles are kind of textiles made from re-engineering of different products like Polymers; ceramics; nanobles etc. These are not formed from Agricultural products rather Industrial products.

Incorrect

Prospects of Technical Textile:

→ As India is growing; need of Economy can't be met through a single source. Technical textile; Neo-Textiles are the advanced products which have very long durability & stability.

→ They are strong & can withstand more load

→ They are safe; cheaper compare to



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Conventional textiles

- These are the emerging industry; which can support the employment requirement of youth or country.
- Export Potential :- India can realise its export potential in technical textile; it can help in reduction of current trade deficit.
- There can be established anywhere in the country. Location is not much important for these sunrise industry; only they need to assess the demand prospective of location.
- This textiles can enhance the aesthetic beauty of building ?



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→ They have multiple application

Ex-1 In construction industry

→ In tiles ; finishing

→ In industrial application

→ In walling pipes , joint etc.

→ In toy industry ; they can

reduce the price & Indian can
compete with china

Technical textile has multiple application
It can help growing need of Indian
economy in multiple ways.

Out of context content.

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Q14. No nation transitions from middle income to high income without robust research and development ecosystem in the country. In this context, discuss the challenges and solutions for development of research and development ecosystem in India. (15 marks, 250 words)

Q. India's Research & Development Budget is approx 0.70% of its GDP, whereas for China & USA; it is more than 2.5% of their GDP.

Good

Examples from other countries :-

- No any middle income country can grow without robust R&D Ecosystem
- Rise of Japan; after 1950s is based on its emphasis on R&D; military & defence Advancement etc.
- Similar rise of South Korea revolves around Research & Development around NETWORK PRODUCTS
- Chinese development too is driven



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from R & D in military; Defense;
Manufacturing; Assembly Hubs etc.

Challenges for R & D development in India :-

- Lack of Budgetary Support
- Lack of Private Investment
- Lack of Infrastructure
- Longevity involved in R & D Ecosystem
- ^{Lack of} Dedicated Universities in India
- Lack of collaboration among Industry & University
- People's Enrolment in Higher Education
Still 24% whereas in China it is 51%.

Faulty education system.

Solution :-

- Increase R & D Budget
- Promote Private Investment (By some Tax



- incentive)
- Venerate Awareness among student
 - Programmes, Events; Study etc.
 - Dedicated universities for R&D

Steps by Government:-

- AATY Innovation Mission
- NITI Aayog's "Hackathon" Event
- PRISM (Promoting Research in Startups & MSME) Scheme
- Structuring IPR Laws
- Protection to innovation; IDFEX (Defense Summit for Innovation) in UP, 2020

Long term promotion of R&D backed with budgetary support is need of time to advance the country & come out from middle income trap as per Economy Survey 2017-18.

very well written answer.

marks:7.5

keep this approach for your answers.



Q15. What is Integrated Theatre Command? Analyze the decision to form the Chief of Defence Staff position in India. (15 marks, 250 words)

1. Integrated Theatre Command:- This is integration of services of all defence forces under one head at some strategic location. Eg- India already have Integrated Theatre Command in Andaman & Nicobar.

Good

→ As India is becoming a superpower, it needs to protect its strategic concerns in respect of aggressive China

→ First time's need of Integrated Theatre Command was felt during 1962 war with China when India couldn't utilize its air force

→ Generally all '3' services work under command of different head, their weapons, goods, commander etc. are utilized as per their



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head ; but in strategic location ; we need to combine all these weapons ; services together under one head so that they can be utilized in more effective ways.

India is planning to create many Integrated Theatre Commands by 2022 as per "Bipin Rowat" (CDS).

Chief of defence staff :-

- He is the head of Department of Military Affairs as well as head of all 3 services ; Deus ier.
- However, all 3 head will continue to report directly to "Ministry of Defense"
- CDS will act as a co-ordinating link between government & three services
- His main function will be to bring reforms in structure ; increase co-ordination among services & government and duty period of



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crisis; he will be One-point Contact for Government for taking decisions.

- Post of CAS was recommended by HARSH MENTA COMMITTEE after Kargil War

Challenges :-

→ He would be primus among aequal

→ He might belong to any of the services & any decision by him favoring his earlier services will be seen as biased

- There might be ego-clash among other services
This is the reason why it took so long to form a CDR.

Integrated Air Theatre Command;

formation of Chief of Defence Staff has strengthened India's military capability. It will facilitate in taking faster decisions.

Work on
your
conclusions.

Very Good.

marks:8



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Q16. Freebies offered by governments are not really free and ultimately unsustainable. Critically analyze. (15 marks, 250 words)

Ans. There is a concept of "legitimacy crisis" given by scholar "Habermas"; which states that welfare given by democratic society has certain limit"; as people's aspiration will keep on increasing & hence debt of govt will increase in such a way that it will lead to "legitimacy crisis".

Impressive

Ex-1) Ureca.

Freebies are those resources that are offered by any government free of cost to a certain class (section). Ex-1) Delhi Govt:- Free Travel in Delhi (women).

How these are not really free :-

→ These are not really free as these are



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Given from the money of tax-payers

- Taxes are paid for the development of Infrastructure; which will create jobs & ultimately economy will grow with growing income of people
- So; ultimately it is loss to income which ^{future} could have been generated

How it is unsustainable :-

- As mentioned in Legitimisation crisis theory; it can't work indefinitely
- When any govt. will stop it; it will fall next time
- Debt will be so high that it would be unsustainable

However there is another aspect to :-

- Many times subsidies are given to vulnerable section for their upliftment
- eg-1) Right to Free Education; Mid-day Meal etc.



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This helps in increasing literary level,
Nutrition level of marginalised society
→ In future they will enter into employment;
they will earn where economy will grow
→ This aspect supports freebies

Both the school of thought
have their pros & cons; but there must
be some delicate balance i.e. freebies
should be only for marginalised section &
secondly it shouldn't be for infinite time
period.

marks:
7

Both sides of the stories well presented.

Introduction is very good and conclusion is fine.



Q17. Code on Wages, 2019 will transform the obsolete labour laws into more transparent ones and help in achieving the long term objective of inclusive growth. Discuss. (15 marks, 250 words)

As per IMF, Inclusive growth is defined as growth which helps in upliftment of all section of society with contribution of all group. Basic philosophy is that involvement of all section & outcome should also involve all.

Good

Code on wages, 2019 :- Movement has brought 4 Code on wages. Initially it has 44 different different laws in central as well as state ~~is~~.

→ Labour law reform was one of the most desirable reform for enhancing the ease of doing business as well as to support the marginalised section about their rights & security.

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How it can help in making more inclusive growth:-

- Existing structure had so many laws, loopholes which employees used to take benefit, new code is one law & it is clear & transparent in words.
- There is mention of "minimum wage"; below which employer can't pay, the ceiling will be fixed by state above the central minimum wage.
- Earlier any employer employing more than 100 employees need to take permission before laying off; now it has increased to 300.
- There is provision of 12hrs working; but



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there is mention of "overtime charges" which employer needs to pay.

→ Clear guidelines of ~~the~~ "Bonus" is enshrined in the code.

Drawbacks of the bill/ what more needs to be done?

Hence, we can conclude

that new wage code 2019 can play a major role in settling wage rights of employees & making it helpful in economic growth. Weak

marks:6



Q18. Fragmentation of land holdings has created many issues in agriculture in India. Elaborate. What measures can be taken to address the issue of land fragmentation in India? (15 marks, 250 words)

by Land Reform is one of the pending reforms that has not taken place due to lack of Political Will. Only 2 states i.e. West Bengal & Kerala has able to do the same.

As per Economic Agriculture Census 2019's ^{Average} Land size has decreased from 1.13 ha to 1.08 ha for in last 5 yrs. Size of Average land size of Small farmers is 0.38 ha only.

Issues created by fragmentation of land holdings:-

→ It has affected the Agricultural Productivity badly. eg-① Co-operative farming in Kerala has helped in earnings of farmers.

② KOLKHOZ in Russia (co-op. farming)



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- It has increased the poverty of Rural area & enhances the Rural Distress
- Family has been broken in fight of land
- Many suicides are the outcome of these small lands which can't meet their minimum demands.

Measures can be taken:-

- 1st step should be Digitisation of Law
- Promote co-operative farming;
Eg- KUDUMASSRAGE MODEL; Kerala
- Aware farmers about big farms' benefits
- collaboration in resources utilisation



→ AMUL Co-operative is also a shining example

Next steps:-

→ Under SWAMIYA scheme, government has started digitisation of land in villages

→ Government is promoting organic farming & co-operative farming

→ Awareness through local panchayat etc.

There is need of multi-pronged approach so that there could be greater implementation of existing programmes & increase in awareness.

Good.

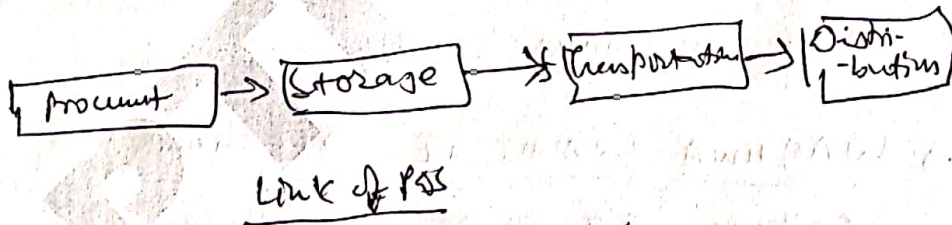
But try including flowcharts or diagrams in some of your questions so that the whole paper does not look monotonous.

marks:7



Q19. Elaborate the measures taken by the government of India to meet the challenges of the Public Distribution System in India. (15 marks, 250 words)

* Public Distribution System :- It is the distribution system run by government to supply essential goods to the needy. Food Corporation of India plays an important role in procurement of food from farmers & distribution of same to needy through state mechanism.



Challenges of PDS system :-

→ Leakage :- Shankar Kumar Committee confirmed that it is sometimes in figure of 40-50%.

→ wastage :- Many goods get wasted



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in transportation ; Eg -> 20-30% goods
are wasted during transportation.

-> Corruption : At every stage, middleman
involved

-> distribution issue

-> Face Ration card

-> Dependency on Rail more for transportation

Govt. measures : - **Bifurcate and write measure
for every stage.**

-> WAAHWA COMMITTEE recommended for
complete IT usage

-> online system has reduced the
bill leakage as well as corruption
Eg -> Chhatishgarh PDS system is
shiny example ; complete tracking



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through online system

→ Linkage with Aadhar Card to remove
duplication

→ Storage capacity (specially gold) enhancement
from PPD model

one nation one card.

Govt. has taken many
steps to remove corruption & leakages ;
many states has implemented this ; however
there is need of accurate seeding
& mapping of Aadhar Card to avoid
any crisis .

Krishi
udan

krishi rail

marks:6.5



Q20. Discuss the need for Wastewater management in India. What steps has the government taken in this regard? (15 marks, 250 words)

Wastewater management revolves around 3R

i.e. Reduce, Recycle & Reuse technique

Waste management As per NITI

ayog report; 60% population in cities

are facing water scarcity & hence waste

water management is very important.

Need of wastewater management:-

→ With increasing pace of urbanisation;
there is growing demand of water in
cities. Eg- water scarcity in
Chennai 2019

→ Lakes, Rivers etc. are now disappearing
due to urbanisation; hence water
needs can't be fulfilled equally.

→ Less / Uneven monsoon has also



imposed the water crisis in India

→ As per NITI Aayog; 20 cities in India would be without groundwater by 2031. They will face similar problem as faced by Johannesburg; South Africa

Steps by government :-

→ Development of sustainable building; infrastructure; which can reuse the water.

→ water-harvesting programme to store water in tanks etc. so that these could be utilized during water scarcity

→ Awareness among people; regarding usage of water

mention govt schemes.



→ Rejuvenation / Restoration of urban lakes eg- Kudankhalei Lake in Bangalore through CSR activities

Government has taken several initiatives which are very helpful. Some international experience can help us in better management of water as Indian cities are facing both situations floods as well as water scarcity.
eg- SPONGE CITY

CONCEPT (HERAEN); CHINA;
where flood water is stored in beneath road (mitigate disaster) & can be used later after recycling.

Good

marks:7

All the very best for exams!