

**AGRICULTURE**

Time Allowed: 50 Mins.

Max. Marks: 70

Q.	Marks	Instructions to Candidate
1.		<ul style="list-style-type: none"> <li>• There are <b>05</b> questions.</li> <li>• All questions are compulsory.</li> <li>• The marks carried by a question is indicated against it.</li> <li>• Keep the word limit indicated in the questions in mind.</li> <li>• Answers must be written within the space provided.</li> <li>• Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.</li> </ul>
2.		
3.		
4.		
5.		
	<u>24</u>	

1. Invigilator Signature \_\_\_\_\_

2. Invigilator Signature \_\_\_\_\_

Name UtamRoll No. 57128

Mobile No. \_\_\_\_\_

Date 2 Dec. 2021Signature Utam

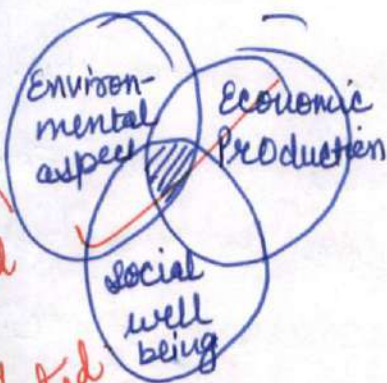
# REMARKS

**GS** SCORE

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Q1. What is postmodern agriculture? Discuss the need for a postmodern agriculture and enumerate ways in which it can be achieved. (10 Marks) (150 Words)

Post-modern agriculture is also known as sustainable agriculture. Where economic production, health of environment and societal well being is taken care of.



In 21st century sustainable agriculture is need of hour. Reasons are mentioned as follows:-

(1) Soil Health is declining and according to UNCED report every year millions of land is becoming acid desert.

(2) Modern agriculture (where technology is used but not in sustainable way)- Productivity is declining and Population of world is on rise. So, to eradicate malthusian fear this agriculture is needed. *for example?*

(3) Economically, also Post-modern agriculture is viable as with use of technology cost of input required is reduced drastically.

Remarks

\* good example

For instance, using drones for mapping the need for pesticide can reduce use of pesticides.

So, it can be concluded that due to environmental, social, economical and food security purposes, the post-modern agriculture is need of hour.

Let us discuss the ways to achieve this.

(1) Integration of technology at every stage. For example - Kisan App is used for getting information about weather, seed requirement etc.

(2) For rejuvenation of land - the organic method can be used. Like Sikkim is a beautiful example where the economy, environment are balanced.

(3) Using artificial intelligence and big data for making decisions w.r.t. productivity.

Government of India should take bottom-up approach for adoption of these farming technologies by proper application of nudge theory.

04

Remarks

\* nice analysis with examples

\* integrate with pt 1  
\* add more ways.

- Q2. 'Smart Farming' is an emerging concept that is poised to transform the future of agriculture. Assess the statement laying due emphasis on merits of Artificial Intelligence and precision farming in agriculture. (15 Marks) (250 Words)

*give relevant and specific definition*  
SMART Farming has become widely discussed concept to reduce distress of farming sector. This tech farming is technology based.

Use of Precision farming, Artificial intelligence may help to reduce various problems associated.

### Merits

*\* discusses merits of smart farming with example*  
 ① Input cost will be reduced - which is beneficial both economically as well as ecologically.

For instance the drip irrigation is example of precision farming much better than the traditional farming.

② Output of crops would rise.

③ With help of technology more informed decision can be taken

Remarks

by farmer

④ Prediction can be done about  
Production level, ~~disease~~ etc.

⑤ Government can also make policies  
for ~~education~~ in mapping the cropping  
Pattern. etc.

S M A R T

Sustainable Farming

This farming can transform future  
by :

- Boosting productivity
- Ensuring food security
- Attracting talent to sector

\*  
Example  
answer address  
question properly

09

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*Remarks*

Q3. While farm mechanisation is a promising answer to most agricultural pressing issues, it is certainly not a panacea and needs to be sustainable. Analyse. Also, state the objectives of Sub-Mission on Agricultural Mechanization. (15 Marks) (250 Words)

Farm mechanisation is defined in literal words as ~~adoption~~ of machinery for carry out farming functions. In USA, more than 95% of farming activities are mechanised and in India - this data is only 40%. ? source.

\* briefly explain these  
Farm mechanisation can resolve many of pressing agriculture issues:-

- ① Reduction in cost of labour.
- ② Reduction in disguised unemployment.
- ③ Shifting people towards more productive sector.

\*  
Avoid this  
⊗ (But, it is also not true that all problems of agriculture can be resolved with mechanisation) ⊗

Mechanisation itself is a problem for India due to following reasons.

Remarks



ISSUES:

Small and marginal farmers.  
86%.

Technology cost is high

Technologies are suitable for the large farms; not for small holdings of India.

\* articulate properly  
\* don't mention separately on some points

Although, mechanisation can solve few of issues, but not all - issues like

① land consolidation - can't be solved by adoption of machinery. ? how? elaborate

② Issues posed by climate change

③ Declining productivity - due to low soil fertility.

④ Investment deficit in the Agriculture is also biggest challenge.

⑤ High cost machinery.

To address challenges government has launched sub-mission on Agricultural

\* Deenshi farm needs to sustainable mechanisation.

explain how stress on issues in mechanisation

Components of mission

creating awareness, performance testing and certification of agri. machines

Provision of custom hiring centre - where rental machinery can be taken

Provision of subsidisation and cheap loans to procure agriculture machinery

These provisions are laudable, but not enough - more steps need to be taken like encouraging investment in developing the technology suitable for conditions of India.

address first part properly

05

Remarks

Q4. A fifth of landless and nearly 10 percent of marginal farmers depend on livestock. Considering the share of the livestock sector for Indian farmers and agriculture, discuss its significance. Enlist the steps taken by the government to boost this sector. (15 Marks) (250 Words)

Livestock sector is bank for landless, marginal farmers, women empowerment. In Indian economy 5.5 crore farmers are dependent on this sector and it contributes 8.8% G.D.P. <sup>4.11%</sup>

Other than one of largest employer and contributor to GDP. some of the significance are listed below.

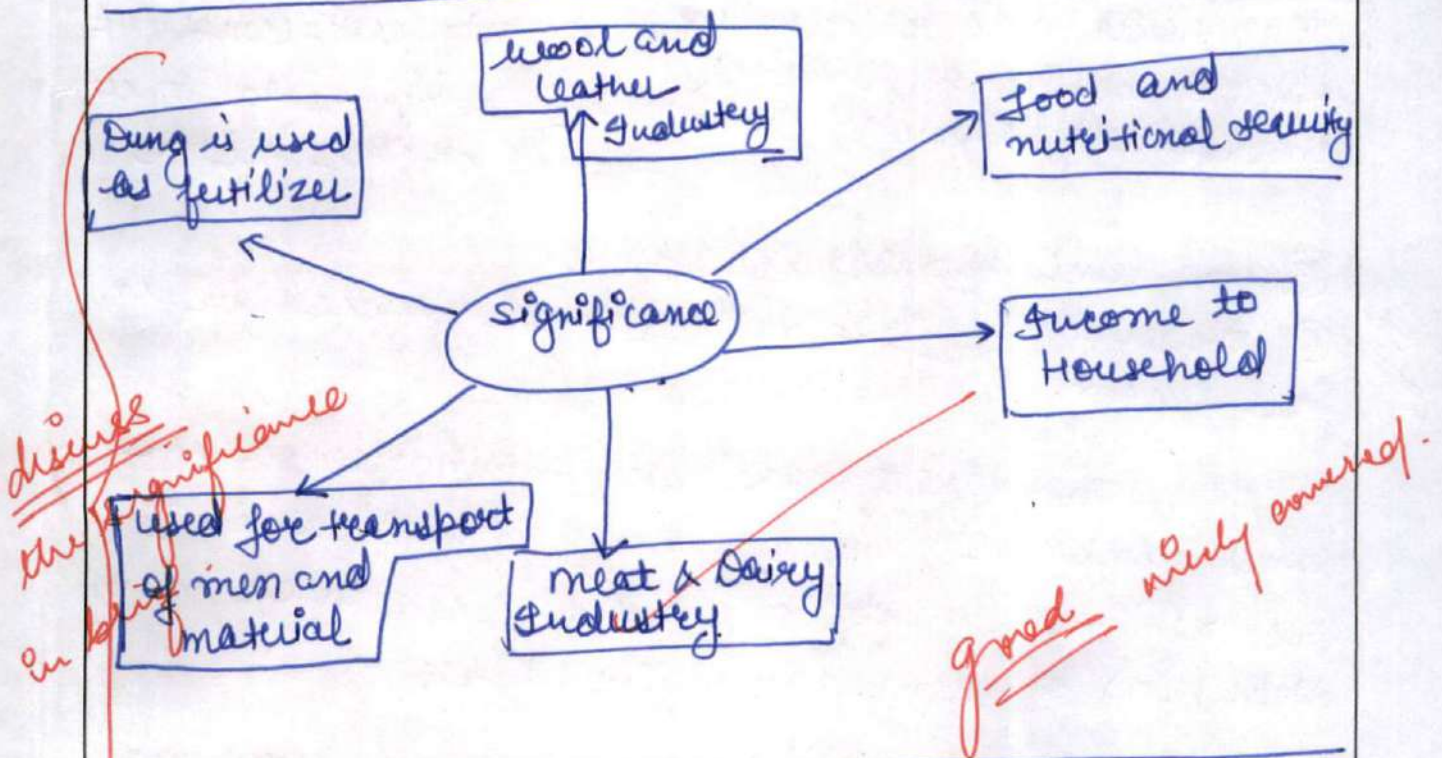
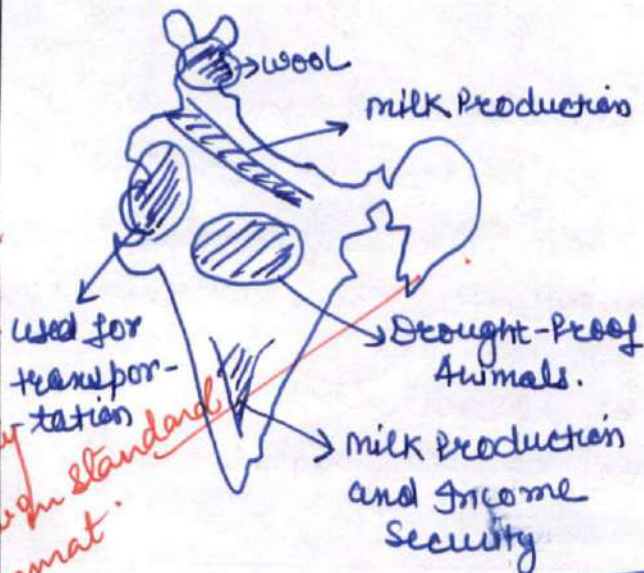


Fig: Significance of livestock sector.

- India is largest milk producer in world.

Remarks



\* needs more clarity  
\* draw in standard format.

Fig: India map representing different benefits of livestock in different region of India.

Significance is immense but challenges are also present in this sector.

- ① low productivity of cattle.
- ② Indigenous breeds are reducing.
- ③ Dairy industry is not cost-competitive.
- ④ Environmental concern - GHG emitter sector.

- good
- ⑤ low level of mechanisation.
  - ⑥ Co-operatives are not formed | successful in this sector.

To address challenges mentioned above and improve more upon significance of sector: Government of India has taken many steps few of them are listed as:

① Rashtriya Gokul Mission - for increasing quality of genes of indigenous breed.

② SUTRA-PIC - to do research in indigenous low milk-medical benefits.

Remarks

③ Livestock farmers. all now eligible for getting the Kisan Credit Card and can get low rate / interest free loan.

④ Dairy research Boards have been established.

⑤ Government has withdrawn from the RCEP for addressing concerns of dairy farmers.

⑥ Cooperative society formation in livestock sector by state as well as central government.

Livestock in India can prove as important as it was during early Vedic period. For ensuring reliable and continuous income of farmer, this sector should be promoted. India can learn from New Zealand and Australia for boosting productivity.

05 1/2

\* discuss the first part of question

\* good  
nicely addressed

Remarks

Q5. While all the three farm laws have attracted farmers' ire nationwide, the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act remains the most contentious one. Discuss key provisions and objectives of the act and state the reasons behind farmers' opposition to this Act. (15 Marks) (250 Words)

\* make big

Farm reforms were carried out by Indian government in the wake of doubling farmer incomes, making agriculture post-modern and attracting investment of private sector.

Three laws were passed (Farmer Produce Trade and Commerce Act, Essential commodity Act, Farmers Agreement on prices and assurance act).

x(Farmer produce trade and commerce act attract protest)x

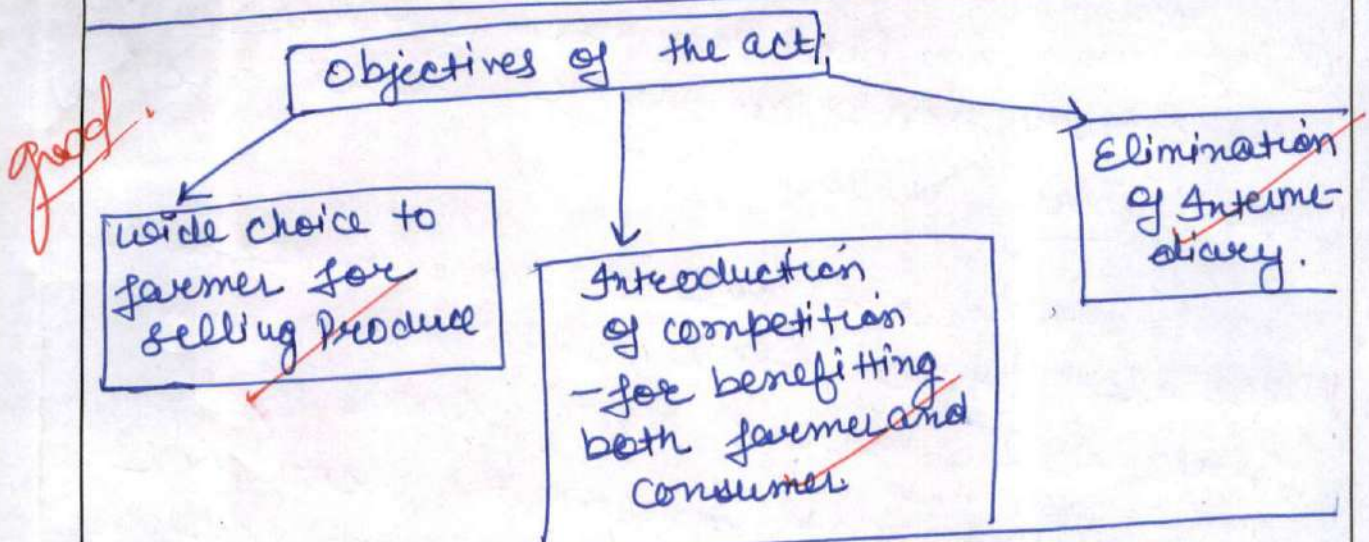
These laws attract protest and contentious one was for Farmer produce trade and commerce Act. Few of Key Provisions are mentioned as:

good

	Key Provision.
AREA.	Area - from farm gate to retail price shop, anywhere farmer can sell his/her produce.
<u>TRADER</u>	Any Person having PAN CARD can become trader, earlier

Remarks

	Condition of taking license from APMC has been done away with
Fee	Removal of fee for selling and purchasing of goods / farm produce



Objectives and provisions of act are beneficial for farmer but farmer raised some issues in this regard.

*good* ① No guaranteed MSP, buyer can exploit the farmer and will end up paying less to farmer.

② APMC gave a stable price, designated area to sell. APMC's should be reformed, because

Remarks

in Bihar, no APMC are functioning since 2006. but prices are much below the mSP provided by government.

③ chances of monopolisation and cartelisation among buyer - which will left farmer on mercy of buyer.

④ Any<sup>body</sup> having Pan Card can become trade, financial capacity and to pay is not checked and fraud may happen.

In view of protest government have repealed these laws and now way forward is making laws again and by consulting state government, Kisan civil societies, FPOs to make it maximum beneficial and minimum harmful.

07 1/2

good attempt