UPSC MAINS ANSWER WRITING

8. In order to capture the huge opportunity in biotech sector, the government of India needs to fine-tune the production linked incentive scheme to fit the unique needs of the industry. Discuss.

Ans: Biotechnology is also characterized by long development lead times. It can take a decade to get a new drug from the test tube to the pharmacy shelf.

Necessary steps needs to take for India is as follows:-

(i) The Indian Biotech industry comprises of over 5000 companies (760 more companies and 4240 start-ups) and is aligned around five major segments:- Bio Pharma, Bio-Agriculture, BioIndustrial, and combined segment of Bioservices comprising of Bio-IT CROs and Research services.

(ii) The Indian Biotechnology industry that was valued at \$70 bn in 2020 will reach \$150 bn target by 2025.

(iii) The percentage share of its biotechnology segment is:-

(a) Bio - Pharmaceuticals : 62%.

(b) CRO / BioIT / Research : 15%.
(c) Bio agriculture : 16%.
(d) Bio industrial : 7%.
(iv) Rising public health expenditure government expenditure on healthcare upto 1.6% in FY20 from 1.3 in FY16, with a target of 2.5% of the country's GDP by 2025.
(v) Capacity building initiatives Bolstered by the 'National Biopharma Mission', an Industry - Academia mission to skill the workforce.
(vi) Government acting as an enabler to improve EODB critical Policy initiative such as 'Make in India', 'Startup India' and 'Atmanirbhar Bharat Abhiyan' (boosting domestic manufacturing capacity)

(A) Therefore instead of a one-sized-fits all approach, the government needs to finetune the PLI scheme to fit the unique needs of the biopharmaceutical industry.