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Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

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Q16

**What is the basic principle behind vaccine development? How do vaccines work? What approaches were adopted by the Indian vaccine manufacturers to produce COVID-19 vaccines ?**

UPSC Civil Services Mains 2022 · GS III · 15 marks · Indian Economy

Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Facts & figures for this PYQ only.

Numbers move. Confirm the latest Budget, Economic Survey or census round. This sheet is for revision, not a substitute for the model answer.

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**Covishield**

Serum Institute production of Oxford-AstraZeneca ChAdOx1 nCoV-19 adenoviral vector vaccine.

**Covaxin**

Bharat Biotech BBV152 inactivated SARS-CoV-2 vaccine developed with ICMR-National Institute of Virology.

**ZyCoV-D**

Zydus plasmid DNA COVID-19 vaccine; India authorised this platform during the pandemic.

**CoWIN**

Digital registration and certificate system for India's COVID vaccination programme.

**Adjuvant**

Substance added to some vaccines (including inactivated ones) to strengthen innate recognition of the antigen.

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