UPSC

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
(Specimen Answer Booklet - For Practice Purpose Only)

Q. Account for the huge flooding of million cities in India including the smart ones like Hyderabad and Pune. Suggest lasting remedial measures(150 words). (2020)

Flooding is a major issue in India, has become more frequent than before due to Several Artificial factors & Climate Change also.

> · Govt- Efforts to modernize urban cities cause other issues related to poor → Planning & water management

⟳ ① Urban flooding as Key factor:
→ Rapid Urbanization has Led to poor water management e.g as witness in Guwahati natural wetlands replaced by building results to pool in streets during moonsoon

② Drainage System Overload:
• Encroachment on Natural Waterways & Construction on river bed, Lakes & ponds disrupted natural flow of rain water. e.g Hyderabad face Severe flooding in 2020 due to encroachment on lakes used to act as natural resvoir

③ Climate Change: Erratic rainfull pattern as Seen in cities like Hydrabad, increase the frequency and intensity of the flood

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④ <u>Smart Cities Struggling</u>: Even <u>Pune</u> a smart city under Smart City Mission saw major water logging in <u>2021</u> during heavy rains.

<u>Way forward</u> :

① <u>Upgrading flooding</u>: Cities must invest in modern <u>drainage</u> & <u>stormwater System</u> example - <u>China Sponge city</u>, <u>Replacing</u> artificial infrastruce with <u>natural System</u> like <u>sewage</u> & <u>roads</u>.

② <u>Restoration of wetlands</u>: Protect natural <u>flood</u> buffer like Guwahati's wetlands to migitate flooding <u>NWCP</u> (National wetland Conservation Program) should expedite its wetland restoration efforts.

③ <u>Smart flood Management</u>: Integrated flood monitoring and <u>early warning</u> Systems in Smart cities. e.g <u>Copenhagen, Demmark</u> impliment advance climate adaptation plan, Including <u>monitoring</u> automated - flood <u>gates</u>, which improved the city flooding issues. & <u>Uk, London thames Barrier</u>

Urbanization changes habitat removal of vegitation alters hydrology, <u>from china example</u> we can learn that ~~keep~~ By incorporating natural infrastructure into city design we can create more resilient & Sustainable urban Environment