

Topic 3

Question:

The 21st century great game is fought over technology. Critically evaluate Pakistan's strategic options as it navigates the Sino-US tech rivalry (AI, 5G, Semiconductors).

Answer:

Introduction:

The defining geopolitical contest of the 21st century is the escalating rivalry between US and China as competition on traditional battle-grounds but in the digital domain.

The "New Great Game" is centered on technological supremacy in areas like artificial intelligence (AI), 5G telecommunications and software manufacturing. For Pakistan,

a nation with deep-rooted strategic ties to both countries, navigating the tech war presents a formidable challenge. Islamabad is caught between its "all-weather" partnership with Beijing, a architect of CPEC and long-standing, albeit transactional relations with US.

give the main heading first and relate your headings to the qs statement.

Through the Strait of Dilemmas:

Pakistan's strategic calculus is complicated by its unique dependencies on both powers. China is its largest economic partner and a crucial defense supplier while US remains a key export market, a source of high-tech equipment and an influential actor in global financial institutions. A simple alignment with either side is fraught with peril.

Full

Option 1: Full alignment with China

This path offers the allure of seamless integration with China's Digital Silk Road. Adopting China's technology, collaborating on AI research and relying on Chinese tech infrastructure would accelerate Pakistan's digitization goal under CPEC.

⇒ **Advantages:** This strategy promises rapid infrastructure development, affordable technology and a strengthened strategic partnership with neighbouring superpower. It aligns with the existing trajectory of CPEC and could foster a domestic tech ecosystem.

⇒ **Disadvantages:** This would place Pakistan behind a "digital iron curtain", isolating it from the Western tech ecosystem. It would risk of invoking US sanctions, jeopardize access to Western technological markets (especially

discuss these by giving subheadings.

in the sensitive semiconductor sector, where US and its allies dominate) and raise concerns about data sovereignty and cybersecurity. Over-reliance on one partner would reduce Pakistan's strategic autonomy.

add and highlight references/examples against these arguments.

Option 2: Balancing act / Holding the Middle Ground

This approach would involve selectively engagement with both powers, a "pick and choose" model based on national interest. Pakistan could use Chinese technology for domestic 5G rollout while seeking US and European collaboration in areas like AI ethics, software development and semiconductors for its defence industry.

⇒ **Advantages:** This is an ideal scenario, allows maximum diplomatic flexibility and allowing Pakistan to

benefit from both worlds. It would prevent reliance on single power and keep channels open for technology transfer from multiple sources.

⇒ **Disadvantages:** This strategy would not sustain as the rivalry intensifies. Both China and US pressures to choose sides. US ~~don't~~ supply technology to the countries that uses China's 5G infrastructure, citing security risks and (Pak) China will see Pakistan's engagement with US in tech sectors as betrayal of trust. This path requires exceptional diplomatic skills.

Option 3: Building within, Standing Apart - Focusing on Indigenous Capacity and Non-alignment

This approach would prioritize developing Pakistan's own technological capabilities. It ~~would~~ reduce By investing heavily in R and D, STEM education

and creating a robust regulatory environment, Pakistan could aim for a degree of self-reliance in specific niches (e.g. software development and AI applications for agriculture and healthcare).

⇒ **Advantages:** This is the most sustainable path to true strategic autonomy. It would reduce vulnerabilities to external pressures and create a resilient, knowledge-base economy. It would also allow Pakistan to portray itself as a neutral player.

⇒ **Disadvantages:** This is capital intensive and time-consuming strategy. Pakistan's currently lacks financial resources, human capital and industrial base to compete at the cutting edge of AI, 5G tech and semiconductors. While this not a immediate short-term strategy to as a solution to pressures

by US-China rivalry.

Conclusion:

Hybrid Model

For Pakistan, strategic calculus must be a hybrid one, combining elements of balance and indigenous development. Pakistan should continue its economic cooperation with China, particularly aligned with CPEC and Digital Silk Road, as it is essential for its survival and development. It should also simultaneously work to reduce risks by maximizing data protection and reduction in use of Chinese technology in national security infrastructure, while seeking cooperation with US and Europe in areas like fintech, green technologies.

With it, Pakistan should also focus on developing its own software

discuss this part in more detail.

Day: _____

Date: _____

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and AI applications to create its value and reduce its dependence on foreign technology. Navigating the tech war is not about choosing a side, its about to build the resilience to not to be forced to choose.

work on the structure, references and the paper presentation part.