

Part - II

Explain Nuclear Program of Pak, its safety -----

1. Introduction:-

Nuclear program of Pakistan.

2- **Safety and Security of Pakistan's Nuclear Program:-**

i- Strategic Command and Control

a- National Command Authority (NCA)

b- Strategic Plans Division (SPD)

ii- Physical security of Nuclear sites

i- Surveillance Systems

ii- Restricted access protocols

3- **International Concerns:-**

i- International Atomic Energy Agency (IAEA)

ii- Nuclear Non-Proliferation Treaty (NPT)

4- **Pak adoptance in Region:-**

i- Counter Terrorism.

ii- Balance of Power security.

Nuclear Program of Pakistan

Pakistan became a nuclear weapon state in 1998 following nuclear tests in response to India in order to maintain balance of power within the region. The program had begun in 1970s under Prime Minister Zulfikar Ali Bhutto after India's first nuclear test in 1974. This test was done to prove India is not the hegemon of South Asia but now there is deterrence ability in the region. In 1974 when Pakistan decided to work on nuclear program then Zulfikar Ali Bhutto said

"We will eat grass or go hungry but will make nuclear weapons, we have no other choice."

In 1983 nuclear technology

M T W T F S

but not DATE: announced

was developed in Pakistan. ↑
In 1998, India conducted
5 nuclear test and Pakistan
responded back by conducting
6 successful nuclear tests.

These nuclear test were performed
just to maintain national
security of Pakistan and to
create deterrence against India.

2- Safety and Security:-

a- Strategic Command and Control :-

Pakistan has established a
robust strategic command
and control system to ensure
the safety, security and
effective deployment of its
nuclear arsenal. This system was
developed in response to
both regional security
challenges and international
expectations regarding nuclear
responsibility. Today there are 8

states which hold nuclear weapon. Pakistan ranked 19 out of 22 states in handling of hazardous material. The nuclear command and control of Pakistan is handled by following bodies:

i- NCA

ii- SPD

i- National Command Authority (NCA) :-

The National Command Authority is the apex body that exercises command and control over Pakistan's nuclear assets and strategic forces.

Established in 2000

Chaired by PM of Pak.

Responsibilities:-

- 1- Policy formulation for nuclear strategy.
- 2- Authorizing the use of nuclear weapons.
- 3- Overseeing development and

ii deployment of strategic forces **Strategic Plans Division (SPD):**

SPD is the secretariat and operational arm of the NEA, responsible for managing and securing nuclear assets.

Headed by:

A three star general from Pak Army.

Functions:-

- 1- Operational planning and implementation
- 2- Managing nuclear research and development
- 3- Human resource development through training institutions like the Pakistan Centre of Excellence for Nuclear Security (PCENS)

Physical Security of Nuclear Sites :-

Physical security of Nuclear sites in Pakistan is a top national priority, managed with multi-layered protection protocols to prevent sabotage, unauthorized access or theft of nuclear materials.

Surveillance System:-

P- Multilayered Security System:-

Pak uses a "defense in depth" model that includes:-

a- Outer Perimeter Security:-

Secured by armed military guards and elite nuclear security forces, surrounded by fence and barriers.

b- Inner Perimeter Security:-

- Guards from Special Response Forces (SRF) of SPD can access with biometric verification.

- Multiple secure zones with intrusion detection system (IDS).

- Blast proof walls, underground bunkers and EMP-resistant communication systems are part of infrastructure designs.

3- International Concerns:-

i- IAEA:-

It International Atomic Energy Agency (IAEA) is the world's central intergovernmental forum for cooperation in the peaceful use of nuclear energy. It plays a key role in ensuring nuclear safety, security and non proliferation world wide.

Objectives of IAEA:-

- 1- Promote peaceful use of nuclear technology.
- 2- Prevent nuclear weapons Proliferation.
- 3- Ensure Nuclear Safety and Security

Pakistan joined IAEA in 1957 but not a signatory of the NPT.

NPT :-

use specific and self explanatory headings.

Nuclear Non Proliferation Treaty (NPT) is a landmark international agreement aimed at preventing the spread of nuclear weapons, promoting peaceful uses of nuclear energy, and furthering nuclear disarmament. However Pak is not a signatory to the NPT. The international community acknowledges Pakistan as a de facto nuclear state, though it is not legally recognized as such under the NPT. Pakistan continues to seek access to nuclear technology for peaceful purpose, but faces restrictions due to its non NPT status.

Pak adoptance in Region.

i- Counter Terrorism:-

As the Nuclear strategy is undeclared so nuclear program of Pakistan can be used for various purposes within the region. Pakistan's nuclear weapon program, though primarily designed to deter external aggression and had an indirect but significant effects on its ability to counter terrorism and maintain regional security dynamics. In event of WOT Pak was accused of involvement but nuclear capability rejected this pressure that could destabilize the internal security.

add and highlight references/examples against these arguments/

ii- Balance of Power

In the event of cross border terrorist incidents e.g Mumbai security.

2008, Pulwama 2019, Pakistan's nuclear posture serve as deterrent against retaliatory large scale Indian military operations

Conclusion:-

add more arguments in this part.

Pakistan's nuclear program is safeguarded by a comprehensive security architecture and strategic oversight. Despite regional tensions and international scrutiny, Pakistan continues to demonstrate its commitment to the safe and secure management of its nuclear assets. It act as a strategic enabler that has allowed Pakistan to pursue anti terrorism campaigns more effectively by deterring external threats and empowering internal security frameworks.

10

Q3- Pakistan's Role in the Region
has become strategic - - - - - ?

1 Introduction.

2- **Challenges to National
Security of Pakistan :-**

a- Traditional
Military

b- Non Traditional
Social

Economic

Environmental.

3- Conclusion.

Introduction:-

**National Security Plan of
Pakistan. (NSP)**

National Security Policy 2022-
2026 is the first national
security policy document of
Pakistan. The NSP articulates
a citizen centric "comprehensive
National Security" framework.

It recognises that traditional and non-traditional threats and opportunities together impinge on overall national security.

Key Pillars of NSP:-

- a- Economic security.
- b- Military and Defense Security.
- c- Human, Food and Health security.
- d- Internal Security
- e- Foreign Policy and Strategic Stability
- f- Climate and water security

Traditional Challenges:-

1- Military:-

- a- Terrorism and Extremism:-

Pakistan is facing persistent threat from groups like Tehrik

-e- Taliban Pakistan (TTP);

ISIS affiliates and Baluch separatists did frequent

attacks on security forces, civilians and target infrastructure like CPEC. Cross border terrorism always remained an unsolved mystery like Kashmir dispute, Kargil war, Pulwama attack, Balakot crisis, Operation Sindoor, cyber threats. Hybrid warfare increases instability.

Economic Instability:-

High debt burden, currency devaluation and fiscal deficit undermine national resilience. Dependence on external aid and loans limits sovereignty and decision making. Economic weakness restrict defense spending and hampers development needed long term security.

Social :-

Ethnic and sectarian Divides

Tensions among ethnic groups (e.g. Baloch, Pashtun, Sindhi)

and sectarian violence (Shia Sunni clashes) threaten nation

cohesion. Alienation due to economic marginalization and

political exclusion, increases vulnerability to insurgent

recruitment. Long and porous borders with Afghanistan

are exploited by militants which give hue and cry

to the already existing ethnic and sectarian conflicts.

Lack of advanced cyber defense mechanisms exposes govt,

military and critical infrastructure to digital attacks.

Environmental Challenges:-

Climate change and water security :-

Pakistan is among top 10 most climate vulnerable countries.

Glacier melt, flooding and water scarcity threaten

agriculture, energy supply, humans, livestock and essential commodities of life.

Potential inter provincial and international water disputes are making species extinct and endangered. Poor health care, food insecurity and lack of opportunities undermine societal resilience.

add more arguments.

a 20 marks answer should have around 15 arguments and be on 7-9 pages.

Conclusion :-

Pakistan's national security is multidimensional and requires a comprehensive strategy that addresses

military preparedness, internal stability, economic and social reforms and technological advancement. To ensure lasting stability, Pakistan must balance defense needs with human development, strengthen institutions and foster regional co-operation. Pakistan's NSP (2022-2026) marks a paradigm shift by prioritizing economic stability, human development and peaceful diplomacy alongside traditional military defense. It provides a holistic version to achieve national security in the 21st century.

07