What is depleted uranium?

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<u>In news-</u> The U.K has said that it would provide Ukraine with armour-piercing rounds containing depleted uranium.

About Depleted uranium-

- It is a **byproduct of the process of creating enriched uranium**, which is used in nuclear reactors and nuclear weapons.
- In comparison to enriched uranium, depleted uranium is much less radioactive and is incapable of generating a nuclear reaction.
- However, due to its high density, it's more dense than lead – depleted uranium is widely used in weapons as it can easily penetrate armour plating.
- It's so dense and it's got so much momentum that it just keeps going through the armour – and it heats it up so much that it catches on fire.
- The US began manufacturing armour-piercing rounds with depleted uranium in the 1970s and has since added it to composite tank armour to strengthen it.
- Apart from the US, Britain, Russia, China, France and Pakistan produce uranium weapons, which are not classified as nuclear weapons, as per the International Coalition to Ban Uranium Weapons.

The risks of using such weapons-

- Even though depleted uranium munitions aren't considered nuclear weapons, experts suggest that such weapons must be used with caution because they emit low levels of radiation and can cause severe diseases.
- Ingesting or inhaling quantities of uranium even depleted uranium – is dangerous: it depresses renal function and raises the risk of developing a range of cancers

 Moreover, according to the International Coalition to Ban Uranium Weapons, depleted uranium munitions which miss their target can poison groundwater and soil.

Where have depleted uranium munitions been used?

- Depleted uranium munitions were used in the 1991 Gulf War to destroy T-72 tanks in Iraq. These weapons were again used in the 1999 NATO bombing of Yugoslavia and then during the 2003 invasion of Iraq.
- According to the Royal Society, a London-based fellowship of scientists, about 340 tons of depleted uranium were used in munitions during the 1991 Gulf War, and an estimated 11 tons in the Balkans in the late 1990s.

Further reading: https://journalsofindia.com/huge-deposits-of-uranium-found-inrajasthan/