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China develops artificial heart with rocket technology

What in news:

- Chinese scientists have developed an artificial heart using rocket technology

About news:

- The heart was developed jointly by the China Academy of Launch Vehicle Technology (CALT) and the Teda International Cardiovascular Hospital in North China's Tianjin.
- The artificial heart has been sent for testing and inspection after thorough experiments on animals.
- The artificial heart uses magnetic and fluid levitation technology can reduce the friction in the device to increase the working efficiency and extend the life span of the power generator.
- This technology used can reduce damage to the blood and enable the blood pump to work longer.
- "An imported artificial heart could cost 100,000 euros (USD 152,800). If China could produce its own artificial heart at a lower cost, that will definitely benefit heart patients in China.
- Fuwai Cardiovascular Hospital also developed an artificial heart using magnetic levitation, and the man-made hearts have been planted in three of the patients from June to October 2017, state-run Xinhua News Agency reported on March 9.
- Artificial hearts were typically used while waiting for a heart transplant, or to permanently replace the heart in case heart transplants are not possible.
- In 2013, scientists planted a man-made heart in a sheep, which survived for 120 days in good health.
- The hearts were then placed in six other sheep and all survived 100 days or longer, which proved that the heart is qualified for batch production

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Expected prelims question

Consider the following statements

1. Recently Chinese scientists have developed an artificial heart using rocket technology.
2. artificial heart uses magnetic and fluid levitation technology can reduce the friction in the device

Which of the following statements are correct?

a) Only 1
b) Only 2
c) Both 1 and 2
d) None of above

Ans – c

Expected mains question

Recently Chinese scientists have developed an artificial heart using rocket technology. Discuss themagnetic and fluid levitation technology used in artificial heart and add a note on its progress.