

As part of the Atmanirbhar Bharat initiative, Hyderabad-based Svaya Robotics has developed India's first indigenous quadruped (four-legged) robot and exoskeleton for the defence sector. Exoskeletons can be worn over a regular uniform or combat gear so that a soldier's strength is fully augmented. And this helps in ensuring soldiers who are on patrol duty in high altitude terrains wear leg-gear which assists in walking in the snow. This then reduces fatigue and exhaustion which is faced by the soldier in a thin oxygen climate. For the Indian soldiers, such futuristic technology can help in moving around in the minus 30-40 degrees Celsius temperature along the Line of Actual Control (LAC). India currently imports these robots from the US and Switzerland to help strengthen the country's defence capabilities. The indigenous robots and wearable exoskeletons were developed in collaboration with the DRDO Labs, Research and Development Establishment (R&DE), Pune, and the Defence Bioengineering and Electromedical Laboratory (DEBEL), Bengaluru, as technology demonstrators with their design input. Vijay R Seelam, founder and managing director (MD) of Svaya Robotics, said, "Quadruped robots are four-legged robots which can walk or run in uneven and rough terrains. He said the robots can carry 25 kg in payload and walk along with the soldier, and added that these robots can be used in nuclear plants and other industries as well.

Q 1. What is Exoskeleton?

- A. combat gear
- B. recognising terrorist activities Instrument
- C. Drown

D. None of them

Q 2. How much weight it carry?

A. 20 kg

B. 25 kg

C. 50 kg

D. 75 kg

Q 3. Which Company made first indigenous quadruped robot ?

A. IBM

B. TATA

C. Savya Robotics

D. DRDO

Q 4. What is the benefits of Exoskeleton combat gear?

A. Reduce Soldier Tiredness

B. Help to capture unsafe location

C. Useful in low temperature areas

D. All of them

Q 5. Synonym of 'Fatigue'

A. Languor

B. Vigour

C. Zeal

D. Develop

DEFENCE CHAMPIONS