

Divya Nayan

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In news- DivyaNayan, a personal reading machine for the visually impaired was unveiled recently.

About the device-

- It is developed by CSIR-Central Scientific Instruments Organisation (CSIO), Chandigarh.
- Using the device, **any printed or digital document can be accessed in the form of speech output.**
- Users can place the device over the document to be read and manually scan it.
- The **device uses language-dependent optical character recognition to convert the image into text and a text to speech converter, further converts the text into audio.**
- Audio files are stored in the machine and can be listened back.
- The device is handheld, standalone, portable, completely wireless and IoT enabled.
- It is currently available in Hindi, English, Bengali, Telugu, Tamil, Kannada, and Punjabi but is further compatible with other Indian and foreign languages.
- It has interfaces such as USB, Bluetooth, Wifi, LAN, Headphone etc.
- It has a **rechargeable lithium ion battery and Internal memory of 32 GB** for document storage.

Other significant devices developed by CSIR for the benefit of the common man are-

- Myoelectric Hand for the persons having below elbow amputation;
- Electronic Knee for the persons having above knee amputation;
- Electronic Control Module for powered wheelchair;
- 3D Printed Orthosis for children with congenital

hemiparesis.