

**INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**

**REQUEST FOR QUOTATION**

**Tender No.: IITK/DIC/jrk/2016-2017/01**

**Date: 10/11/2016**

**Tender Opening date: 11/11/2016**

**Tender Closing Date: 22/11/2016**

**Tender Document for 3-D printer.**

Sealed two bid system type tender are invited for 3-D printer as per details given below.

1. Imported polymer bushings and linear bearings for high quality movement.
2. Stainless steel 316 grade (rust-free, hardened steel) nozzle with support for both 0.3 mm and 0.5 mm extrusion.
3. Stainless steel 316 grade (rust-free, hardened steel) extruder teeth to ensure robust operations.
3. Stand-alone printing support without computer or tablet connectivity, through a removable SD card slot.
4. Ability to support a wide range of ABS, PLA and thermoplastic filaments of diameter 1.75 mm freely available in the open market from multiple vendors. Minimum filament weight in filament cartridge to be 1 kg for continuous print of large parts. No proprietary cartridge or RFID restriction on filament sourcing for printer.
5. Resolution of 12.5 micron in Z-axis and minimum accuracy of 100 micron for 3D prints.
6. Support build sizes of at least 210 mm x 190 mm x 130 mm.
7. Build surface to have PCB heated bed and heat spreader to ensure uniform heating to ensure parts do not warp.
8. Provision of bed adhesive solution to ensure that ABS/PLA parts stick on bed 100%.
9. Minimum building speed of 30cm/s and deposition rate of 30 cm<sup>3</sup>/hr
10. Machine interface to computer system to be through USB to allow maximum compatibility on Windows XP-Win10, Linux, Mac.
11. Ability to support standard STL, OBJ files for 3D printing.
12. Open source software for machine control and converting 3D image to 3D print. No proprietary software. Support for both Windows and Linux based operating systems.
13. At least 1 year warranty for 3D printer
14. Comprehensive hands-on training to be provided to staff for operation of 3D printer, along with complete manual for 3D printer construction, operation, maintenance. Complete design of machine to be given so that spare parts can be procured / manufactured easily.

**Other Terms & Conditions.**

- 1 –Tender to be submitted in two separate envelopes each for Technical & Price bid, kept in single envelope addressed to under sign.
- 2 -Tender must reach before date 22/11/2016 to the mentioned ADDRESS.
- 3 –Maximum Discount to be offered keeping in view IIT's being nonprofit making organizations.
- 4– Only authorized dealers need to participate. Certificate submission with tender is mandatory.
- 5 –Institute reserves the right to reject offer/tender without assigning any reason.
- 6- Bidder must mention tender number on envelope.

**All Quotation to be send:**

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