

## ANNEXURE-A

### Refrigerated High Speed Bench Top Centrifuge With the Following Specifications:

- Temperature range of -11°C- + 40°C.
- Should come with short-spin key, fast pre-cooling and stand-by/ continuous cooling option.
- With high centrifugation speed 30,000 x g (17,000rpm) or more, adjustable from 100rpm upwards.
- Must have a standby cooling. And a programming function to shutoff/deactivate the compressor after inactivity in user defined period of 1/2/4/8 hrs. which will save energy and extend compressor life.
- Timer for run can be set up to 99minutes/ continuous.
- Must have “At set rpm” function which enables timer countdown to be started only when selected speed is achieved.
- Digital display of time, speed and temperature. Programmable time and speed using Key pad.
- Must be able to store atleast 50 routine procedures with minimum 5 programmable buttons for frequently used programs in the first level.
- Able to switch display between rcf and rpm speed setting, Separate short spin key.
- Acceleration time to max rpm  $\leq$  14 sec, Braking time to max rpm  $\leq$  14 s.
- Low noise levels less than 56db at max speed.
- The centrifuge must be CE & IEC 1010-2-020 certified.
- Stainless steel chamber, Brushless maintenance free drive, Automatic motorised locking when lid almost closed.
- Versatility with 12 different rotors option: 10 fixed angle rotors and 2 swing out rotors.
- Fixed angle rotor: - 30x1.5/2ml, high speed rotor 24x1.5/2ml with 30000xg, 48x1.5/2ml with 18000xg, 16x5.0ml with 21000xg, 6x15/50ml falcon with 7500xg, 18x1-2ml cryo tubes, 24 spin column tubes, 8x8- PCR strips.
- Swing-bucket rotors for 24x1.5/2.0 ml tubes with 16,000xg and for 2 x DWP or MTP not higher than 29 mm with 2,200xg or more.

#### **Following rotors and accessories should be supplied along with the centrifuge:**

- Fixed angle rotor 24x1.5/2.0ml tubes with least 30,000xg & 17500 rpm.
- Fixed angle rotor 6x15/50ml tubes with least 7,500xg & 7000rpm.
- Plate rotor 2xMTP, PCR & deep well plates (max height 29mm) at 2200xg 4000rpm
  
- Rotors and lids should be made of anodised aluminium to ensure chemical resistance, Automatic imbalance and rotor recognition
- Rotor must be autoclavable at 121°C for 20min to eliminate any contaminating material
- It should come with 12 months comprehensive warranty

