## M.Tech. 1st Semester (ME) CBCS Scheme Examination, November–2023 MACHINE TOOL DESIGN Paper–MTME21C4

Time allowed: 3 hours]

[Maximum marks: 100

Note: Question No. 1 is compulsory. Students have to attempt at least one question from each Unit.

- 1. Write short notes on following:
  - (a) Hydraulic transmission
  - (b) Dynamic stiffness
  - (c) Bearing design
  - (d) Manual Control System

## Unit-I

- 2. Explain the layout of machine tools.
- 3. Explain the design of speed box.

## Unit-II

- 4. Discuss about Finite element Method in detail.
- 5. Explain design procedure for the design of columns.

## Unit-III

- 6. Explain the design of Guideways
- 7. Discuss the design of power screws.