DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA 2012/2013 SECOND SEMESTER EXAMINATION

CC JRSE CODE: - MWT 521

CC JRSE TITLE: MECHANICAL ENGINEERING DESING

TI IE ALLOWED: 2HRS 30 MIN

IN TRUCTION: Answer all questions

- 1. Explain the difference between MOCK UPS and PROTO TYPES
- 2. Discuss 3 steps in design problem solving.
- Design a system of clamping two machine tool components to a milling machine for a keyway operation.
- 4. List and discuss 3 ways mechanical properties in machine components are expressed.
- 5. Explain the use of i. codes ii. Chards iii. Tables and iv. Standards in engineering drawing