

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
 2018/2019 HARMATTAN SEMESTER EXAMINATION

MEE 305

MACHINE DRAWING

TIME ALLOWED 3HRS

INSTRUCTIONS: PREPARE THE **TITLE BLOCK FIRST**, WRITE YOUR NAME AND REGISTRATION NUMBER
 ANSWER ALL QUESTIONS

- Q1** Explain the machine symbols and the quality of surface texture on the machine part shown in **FIG 2**
 List 5 factors that are considered when designing machine parts. **(18 Marks)**
- Q2 (i)** Define the following; Computer Aided Design (**CAD**), **EDA** and **MDA**
(ii) Explain what CAD software for mechanical engineering design uses.
(iii) List and explain the 2 types of solid modeling **(18 Marks)**
- Q3** With a suitable dimension draw an isometric drawing of machine part in **FIG 2.** **(18 Marks)**
- Q4 (i)** Draw three views each of collar, ratchet wheel/panel and spring shown in **fig 1**
(ii) Draw a labeled assembly drawing of the ratchet feed mechanism shown in **fig 1** **(18 Marks)**

FIG 1

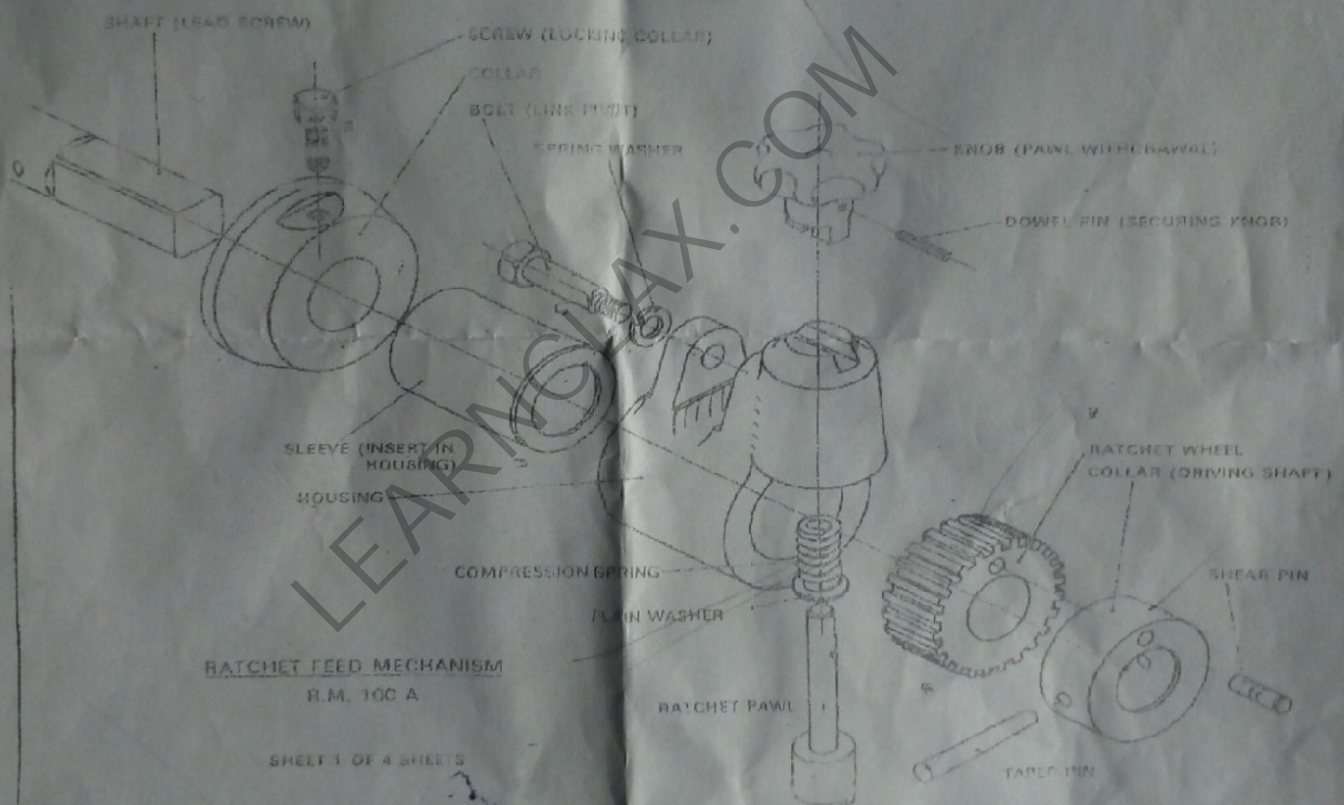


FIG 2

