

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF PHYSICAL SCIENCES
DEPARTMENT OF GEOLOGY

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BTech GEOLOGY
2017/2018 SESSION

COURSE CODE: GEL 315

UNIT: 2

COURSE TITLE: STRUCTURAL GEOLOGY

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO OTHERS

TIME ALLOWED: 2 HOURS

DATE: 4TH MAY, 2018

1. Below are joint values collected by 300L students.

331	098	309	035	024	330	328
322	070	341	300	026	320	052
281	110	327	60	030	030	030
040	033	252	333	040	027	327
211	021	041	058	052	077	305
087	225	030	322	031	081	300
022	060	026	038	170	090	225
024	060	027	324	342	035	210
048	323	091	298	207	342	209
013	120	054	025	229	021	145

- a. Use the joint values to construct a Rosette Diagram.
 - b. Determine the principle joint direction and comment on its importance.
2. What are folds and how are they classified?
3. (a) State the economic important of joints
(b). How are faults recognized in the field?
4. (a) What are unconformities?
(b). State the importance of primary structures
5. (a) Name the various scales under which structures are studied
(b) With the aid of diagram, discuss pre-depositional, syn-depositional and post-depositional structures