FEDRAL UNIVERSITY OF TECHNOLOGY, MINNA
DEPARTMENT OF PLANT BIOLOGY
SECOND SEMESTER BTECH EXAMINATIONS, 2018/2019 SESSION

COURSE CODE: PLB 221
COURSE TITLE: PLANT FORMS AND FUNCTION
COURSE UNIT: 3
TIME ALLOWED: 2 HOURS

INSTRUCTION: ***ANSWER FOUR (4) QUESTIONS AT LEAST ONE QUESTION FROM EACH SECTION***

SECTION A

1. a. How does the vascular tissue system enables Leaves and roots to function together in supporting growth and development of the whole plant?
   b. Charaterize the role of each of the three tissue system in leaf.
   c. When you eat the following, what plant part are you consuming
      i. Onions ii. Carrot sticks iii. Yam tubers iv. Cucumber v. Sesame

2. a. Describe the anatomy of photoautotroph
   b. Enumerate any three specializations in plant cells and organs for adaptation to life on land.

SECTION B

3. a. Attempt a classification of plants on the basis of their water requirements, naming two examples each.
   b. i. Make a fully labelled diagram of the structure of a typical vacillated plant cell.
      ii. List the main mechanisms that have been proposed as been responsible for upward movement of water in plants.

4. a i. Define photosynthesis
      ii. Write notes on the importance of photosynthesis to all living things.
   b i. Discuss the features of leaves that particularly make them most suitable as the site of photosynthesis.
      ii. List the main factors affecting Photosynthesis.

SECTION C

5. a. Differentiate between transpiration and translocation
   b. Highlight the processes of transpiration in plants.

6. a. Explain the importance of transpiration in plants
   b. Highlight the processes of translocation in plants.