FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA DEPARTMENT OF PLANT BIOLOGY FIRST SEMESTER BTECH. EXAMINATION, 2017/2018 SESSION

COURSE CODE PLB 414 COURSE TITLE: PLANT TRANSFORMATION TECHNOLOGY COURSE UNIT: 3 TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS IN ALL.

- a. With the aid of a large well labeled diagram, describe the structure of plasmid.b. Write notes on 'opine concept'.
- 2. Discuss any four non-vector methods of plant genetic transformation.
- 3. Discuss in details, the phases in agrobacterial-plant interactions.
- 4. Use of herbicides in agriculture has increased in recent years but efforts through plant transformation technology would go a long way to reverse this trend. Explain some of such efforts made so far.
- 5. Explain the main features of relevance that made the plasmid an important tool in gene transfer technology.
- 6. We live in a distressed world (e.g. Food scarcity, poverty, joblessness, increased diseases, etc). In what ways can plant genetic transformation techniques help to check some of these problems. Explain clearly.