

BOWEN UNIVERSITY
DEPARTMENT OF PHYSIOLOGY
COLLEGE OF HEALTH SCIENCES
400 LEVEL B.Sc. EXAMINATION
Second Semester, 2018/2019 SESSION

MEMBRANE TRANSPORT - PHS 411

DATE: 31st May, 2019

TIME: 3 Hours.

INSTRUCTIONS:

- Answer all questions
- Write your matriculation number clearly on every page of the answer booklet

1. Discuss the formation, secretion and modification of bile (20 mks)
2. Write short notes on the following:
 - a. Astrocytic transport mechanisms (10 mks)
 - b. Cell membrane proteins and their functions (10 mks)
 - c. Transportation mechanisms in exocrine glands (10 mks)
3. The amphibian *cyclorana platycephala* survives in the desert. Discuss (20 mks)
4. Write short notes on the following:
 - a. Patch Clamping (10 mks)
 - b. Transport mechanisms involved in the proximal convoluted tubule (10 mks)
 - c. Mechanisms of absorption of saccharides and amino acid in the small intestine (10 mks)