## FEDERAL UNIVERSITY OF TECHNOLOGY MINNA

DEPARTMENT OF SURVEYING & GEOINFORMATICS (B. Tech. Surveying & Geoinformatics Examination)

First Semester 2019/2020, SVG 512: Marine Surveying & Coastal Management, TIME: 2 Hours

## INSTRUCTIONS: Answer QUESTION No.1 & ANY OTHER TWO Questions

- 1. (a) What is the mean depth of the ocean? (1 mark)
  - (b) Define the term 'Continental Shelf' (3 marks)
  - (c) Name the three primary forces that produce a disturbance of the sea surface (3 marks)
  - (d) What is the difference between vertical and horizontal tides? Explain in detail the concept of the vertical tide (13 marks)
- 2. Write short notes on the following terms:
  - (a) Estuaries
  - (b) Tidal flats
  - (c) Deltas
    - (d) Lagoons
    - (e) Barrier coasts (20 marks)
- 3. (a) State the main purpose of Coastal Zone Management (1 mark)
  - (b) Discuss the five factors that put pressure on the coastal zone (10 marks)
  - (c) Discuss in detail the stepwise approach of Coastal Zone Management (9 marks)
- 4. (a) Explain the main tasks involved in a dredging project (6 marks)
  - (b) Discuss in detail the main elements in the cost of equipment deployed for dredging projects (14 marks)