

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF GEOGRAPHY

FIRST SEMESTER 2013/2014 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: MET 513

COURSE TITLE: Course Marine Meteorology

INSTRUCTIONS: Answer any Four Question

Time allowed: 2hours 30mins

1. The Occurrence of tides is as a result of many factors. Attempt an explanation of any two of those factors.
2. Discuss the wind-driven and meridional overturning circulation of the ocean
3.
 - a. Explain the physical characteristics of oceans
 - b. Justify the need for the study of Marine Meteorology
4.
 - a. Explain the concept of oceanic heat budget
 - b. In oceanic heat budget the conservation of heat requires:
$$Q = Q_{sw} + Q_{lw} + Q_s + Q_1 + Q_v$$
 Write explanatory note on each term in the equation
5. Discuss the importance of upwelling to the fishing industry especially in the Pacific Ocean.
6. With the aid of appropriate diagram, examine the various components of the ocean basin structure.