

**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**  
**SCHOOL OF PHYSICAL SCIENCES**  
**DEPARTMENT OF GEOGRAPHY**

**SECOND SEMESTER 2014/2015 SESSION UNDERGRADUATE EXAMINATIONS**

**COURSE CODE:** MET 326

**COURSE TITLE:** ATMOSPHERIC BOUNDARY LAYER

**INSTRUCTIONS:** ANSWER ANY FOUR (4) QUESTIONS OF YOUR CHOICE

**TIME ALLOWED:** 3 Hours

1. With the aid of a well labeled diagram, describe the Atmospheric Boundary Layer.
2. Write explanatory note on the pattern of Convection and Atmospheric circulation within the Boundary Layer
3. Write explanatory note on any three of the following:
  - a) The Jet Stream
  - b) Wind generated turbulence
  - c) Factors governing the distribution of heat from the Sun
  - d) Evolution of Extra tropical Cyclones
4. With the aid of a good diagram, explain the global distribution of atmospheric pressure.
5. Account for the causes of Surface Wind Gradient within the Troposphere
6. Give a descriptive explanation of cloud types and the processes involved in their formation within the Troposphere