## FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF NATURAL AND APPLIED SCIENCES DEPARTMENT OF GEOGRAPHY

## FIRST SEMESTER 2012/2013 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: GRY 215(2 units)

COURSE TITLE: Atmospheric Processes, Weather and Climate

INSTRUCTIONS: Answer Three questions .Credit will be given for the use

of appropriate illustrations and specific examples

## Time allowed: 2hrs

- 1. (a) Discuss a typical weather associated with the Inter-tropical Discontinuity (ITD) over West Africa.
- 2. Write short notes on any **FOUR** of the following
  - (i) Harmattan Haze
  - (ii) Line Squall
  - (iii) Monsoon
  - (iv) Little Dry Season (LDS)
  - (v) Trade winds
  - (vi) Land and Sea Breeze
- 3. (a) State three of the requirements for cloud formation
  - b) Write a simplified weather station model using appropriate symbols and explain each of the symbols
  - (a) Discuss the major types of clouds and the precipitation forms associated with them.
- 4 (a) Hurricanes undergo **Four** stages before maturity. Explain in detail each of the stages.
  - (b) Categorise the various scales in the Fujita Damage scale and state the basis for each category.
- 5 (a) Discuss the relevance of a weather station in monitoring the weather.
  - (b) Make a sketch of the Stevenson Screen and name the instruments housed in it.
  - (c) Identify Five weather variables, the Instruments used in measuring them and the various units of measurement.