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

Undergraduate Examination for First Semester 2015/2016 Session.

Course Title: Observation methods and Analysis (MET 313P) Course **Unit:** 3

Instructions: Answer **question 1** and **any other Three (3)** questions. **Four (4)** questions in all. The use of relevant illustrations will be rewarded.

Time allowed: 2 hrs 30minutes

1. (a) Prepare a detailed surface station report and explain each term of the report.

   (b) Use the station report in (a) to plot a surface station model.

2. (a) Discuss the importance of kinematic analysis to a weather forecaster

   (b) Analyze the chart supplied and identify each of the following

   (i) Vortices (ii) Waves (iii) Asymptotes (iv) troughs (v) saddles

3. (a) Discuss the three primary types of meteorological observations

   (b) Examine five important meteorological properties that are observed at the surface.

4. Write short note on any three of the following

   (i) Dryline

   (ii) Intertropical Convergence Zone

   (iii) High pressure system

   (iv) Monsoon Trough

   (v) Low pressure system

5. (a) Examine the characteristics of air masses and fronts.

   (b) List 5 criteria used in locating fronts on a surface weather chart

6. (a) Define an isopleth.

   (b) Enumerate five guidelines used in isopleth analysis.

GET /DevMgmt/DiscoveryTree.xml HTTP/1.1
Host: 127.0.0.1:8080