



UNIVERSITY OF AGRICULTURE, ABEOKUTA
DEPARTMENT OF WATER RESOURCES MANAGEMENT & AGROMETEOROLOGY

2009/2010 SECOND SEMESTER EXAMINATION

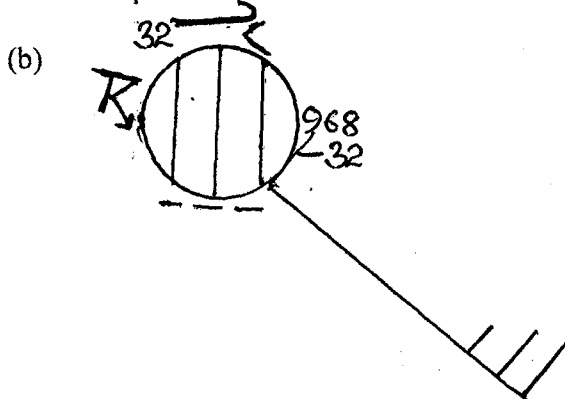
WMA 308: SYNOPTIC METEOROLOGY

Time: 2 Hours

INSTRUCTIONS: Answer FOUR questions in ALL

SECTION A: Answer ALL Questions

- 1) Differentiate between synoptic and numerical forecasting.
- 2) (a) Plot the station model
Windspeed is at 32 knots with pressure 987.5mb, after falling 2.8mb in the past 3 hours. Wind direction is ENE and $\frac{1}{4}$ of the sky is covered with
 - i) Small Cumulus
 - ii) Stratus
 - iii) Alto-Stratus
 - iv) CirrusAir temperature is 28°C and there has been continuous moderate rain



SECTION B: Answer any TWO Questions

- 1) (a) What is a cyclone
(b) Differentiate between tropical and extra-tropical cyclone
- 2) (a) Outline the source regions of extra-tropical cyclone
(b) Describe the size and shape of extra-tropical cyclones
- 3) (a) Define an air mass
(b) Describe how a cold air mass becomes a warm air mass.
(c) Discuss the types of source regions of an air mass