DEPARTMENT OF GEOGRAPHY
SCHOOL OF SCIENCE AND SCIENCE EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
First Semester Examination, 2011/2012

MET 311 – ATMOSPHERIC CIRCULATION

Time: 2hrs

Instruction: Answer any 4 questions

The use of illustrative diagrams with specific and relevant examples will be rewarded

1. List and explain the components of general pattern of atmospheric circulation. 15Mrks.

2. Write short notes on the following:-

a. Middle Latitude Cyclone. 5Mrks.

b.Tropical Cyclone. 5Mrks.

C.Fohn Wind. 5Mrks.

3. a Enumerate the laws of horizontal motion in the atmosphere. 5Mrks.

b. Distinguish between divergence and convergence and describe the condition that favours each of them. 10Mrks.

4. Explain why the average amount of energy the earth absorbs from the sun each year is equal to the average amount of energy the earth loses to space. 15Mrks

5 Places along the coast of West Africa experience two period of maximum rainfall in the years, whereas further North has one peak period of rainfall. Discuss. 15Mrks.

6.Write short notes any three of the following:-

a.Intertropical convergence zone (ITCZ). 5Mrks

b.Ferrels law of deflection. 5Mrks

c. Katabatic Winds. 5Mrks

d.Adiabatic process. 5Mrks