

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

FIRST SEMESTER 2014/2015 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: MET 524

COURSE TITLE: ADVANCED TOPICS ON TROPICAL METEOROLOGY

INSTRUCTION: Answer any four questions

TIME ALLOWED: 2hrs.30mins

1. Outline and discuss the major common characteristic use in distinguishing tropical region from the rest of the world.
2. (a) Describe how a microburst form  
  
(b) Using appropriate diagram explain why is term wind shear often used in conjunction with a microburst.
3. (a). Mention the major mechanism that causes monsoon circulation  
  
(b) Identify and discuss the characteristics of West African monsoon  
  
(c) Explain the consequences of monsoon failure
4. The Hadley Circulation is one of the primary components of the large scale circulation in the tropics. Discuss
5. (a) Discuss the necessary conditions for the formation of tropical cyclone  
  
(b) List and explain the environmental effects of wind shear on tropical cyclone
6. Using appropriate diagrams, write note on **any three** of the following;
  - (a) Tropical depression
  - (b) Tropical storm
  - (c) Hurricane
  - (d) Thunderstorm