

FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE
DEPARTMENT OF METEOROLOGY
MET 411 - AERONAUTICAL METEOROLOGY
1ST SEMESTER 2013/2014 EXAM MARKING SCHEME

1a. TAF is Terminal Aerodrome Forecast. It is important in that it gives forecast of wind direction and speed, visibility, weather, cloud cover for a period of 30 hours to enable pilots plan their flights.

1b (i) Terminal Aerodrome Forecast issued from Murtala Muhammed International Airport, Ikeja, Lagos on 26 day of the month at 0330 GMT to take effect from 0600 GMT of the same day 26th through 1200GMT of the next day 27th. The wind direction and speed are expected to be variable and 2 knots respectively. The visibility is expected to be 5km in mist and with few cloud cover with base at 270meters. Temporary on 26th day within the period 0700 - 0800 GMT the visibility to be 3km and becoming on the same day 26th within 0800 - 1000 GMT 8km and wind direction and speed being from 260 degrees and 8 knots respectively with scattered cloud cover with base at 360meters. From 1100 GMT on the 26th wind direction and speed are expected to be from 240 degrees and 12 knots respectively with visibility of 10km and above with broken cloud cover with base at 420m temporary within the period 1300-1800 GMT with few cumulonimbus cloud with base at 630m becoming within 1900-2100 GMT with wind direction and speed being from 180 degrees and 5 knots respectively in visibility of 8km with scattered cloud cover with base at 300meters. (15 marks)

(ii) Terminal Aerodrome Forecast issued from Akure Airport, on 28th day of the month at 0955 GMT to take effect from 1200 GMT of the same day 28th through 1800 GMT of the next day 29th. The wind direction and speed are expected to be from 240 degrees and 9 knots respectively in visibility 10km and above with scattered cloud cover with base at 450meters becoming within the period 1800-2000 GMT few cloud cover with base at 300meters with wind direction and speed from 230 degrees and 4 knots temporary within the period 0500-0700 GMT of the following day 29th, wind direction and speed expected to be variable and 2 knots respectively and visibility of 5km in mist and few cloud cover with base at 270 meters and with 40% probability with visibility of 2km becoming within the period 0800-1000 GMT of 29th day 10km and above with wind direction from 230 degrees and wind speed 9 knots and scattered cloud cover with base at 390 meters. (10 marks)

