

**B.E./ B Tech ( Full Time) END SEMESTER EXAMINATIONS Nov/Dec 2012  
Geoinformatics Branch- R 2008**

**VIII semester**

**GI 9301 GI 9031 RS and GIS for Meteorology**

**Time: 3hrs**

**Max Marks: 100**

**Answer ALL Questions**

**Part - A (10 x 2 = 20 Marks)**

**Part - A**

- (1) What are the types of Clouds?
- (2) What is Composition of atmosphere?
- (3) Explain TRMM and GPM?
- (4) What do you mean by aviation meteorology?
- (5) Explain about Absorption bands of atmospheric gases?
- (6) Explain few application of AVHRR.
- (7) Explain Normalized Digitized Vegetation index.
- (8) Explain about atmospheric aerosols.
- (9) What do you mean by Dvorak's technique?
- (10) What do you mean by storm surge models?

**Part - B**

- (11) a (i) Explain temperature and pressure distribution and winds over earth atmosphere **(8 Marks)**
- (ii) Explain precipitation processes and warm and cold cloud concepts. **(8 Marks)**
- (12) a (i) Explain the principles and classification of Radar. **(8 Marks)**
- (ii) Explain the concept of wind estimation using RADAR **(8 Marks)**
- (or)**
- b (i) Explain ozone sounding and explain how will you measure it using satellite sensors? **(8 Marks)**
- (ii) Explain how you will track tropical cyclones? **(8 Marks)**
- (13) a (i) Explain about any two Geo stationary weather satellites **(8 Marks)**
- (ii) Explain different types of sounders in meteorological satellites **(8 Marks)**
- (or)**
- b (i) What do you mean by Meteorological Data processing system (MDPS) **(8 Marks)**
- (ii) What do you mean by Numerical weather prediction **(8 Marks)**
- (14) a (i) Explain sea surface Temperature (SST) estimation and their applications **(8 Marks)**
- (ii) Explain the technique and use of ocean colour monitoring **(8 Marks)**
- (or)**
- b (i) Explain about cyclone warning and dissemination system **(8 Marks)**
- (ii) Explain about automatic weather station **(8 Marks)**
- (15) a (i) Explain some application of TIROS operational and vertical sounds and also explain retrieval methods **(16 Marks)**
- (or)**
- b (i) Explain the concept of Tracking – identification of weather system **(8 Marks)**
- (ii) Explain some technique to estimate cyclone intensity estimation **(8 Marks)**