FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF GEOGRAPHY

SECOND SEMESTER 2012/2013 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: REM 522 (2 Units)
COURSE TITLE: Planetary Atmospheres
INSTRUCTIONS: Answer any 4 questions

TIME ALLOWED: 2½ Hours

1. Discuss the nature and the physical characteristics of the planet Mercury, as being observed by space probes.

2. Venus is far away from the Sun than Mercury. Explain why it is hotter than Mercury.

3. Discuss the differences between the near-side and the far-side of the moon, as observed by sensors aboard remote sensing platforms.

4. (i) Write on the physical nature of the Solar Atmosphere, Chromosphere and Corona.
   (ii) Explain how Galileo was able to establish that the different latitudinal regions of the Sun have different rotation rates.

5. Explain why the Jovian planets may not be considered potential candidates for future space settlements.

6. Discuss how future space programmes are expected to revolutionize energy sources for rocket propulsion in terms of the following:
   (i) The Role of Nuclear Power and Nuclear Propulsion.
   (ii) Antimatter Rockets.