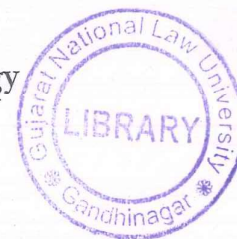


**GUJARAT NATIONAL LAW UNIVERSITY  
GANDHINAGAR**

Course: Space Science and Communication Technology  
Semester-VI (Batch: 2013-18)

Mid Semester Test: Feb-Mar. 2016



**Date: 05<sup>th</sup> March 2016**

**Duration: 1 ½ hours**

**Max. Marks: 20**

**Instructions:**

- Read the questions properly and write the answers in the given answer book.
- The respective marks for each question are indicated in-line.
- Do not write any thing on the question paper.
- Draw the diagrams only with pencil.
- Indicate correct question numbers in front of the answers.
- No questions or clarifications can be sought during the exam period, answer as it is, giving reason, if any.

	<b>Marks</b>
Q.1 Fill in the blanks: 1 parsec = ..... light years The central bright spherical region of the spiral galaxy is known as .....	(2x1 =02)
Q.2 Write four differences between gravitational force and electrostatic force.	(02)
Q.3 Explain any two constellations: Orion, Ursa Major, Scorpio.	(02)
Q.4 Draw the circuit diagram of bridge wave rectifier and explain its working.	(03)
Q.5 Draw the circuit diagram of Maxwell-Wien Bridge and explain its working.	(03)
Q.6 Draw the flowchart of the life cycle of a star and explain the same.	(04)
Q.7 What is the 'Maximum Power Transfer theorem'? Draw the circuit diagram and explain the same.	(04)

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