## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE Pilani (Rajasthan)

## Second Semester 2016-2017 Mid Test (Open Book) CE G520 Infrastructure Planning and Management

Date: 10 <sup>th</sup> March 2017	Time: 4.00– 5.30 PM	Maximum Marks: 20	

## ✓ Answer to all the questions

1. A industry is planning to expand the production operation. It has identified two different technologies for meeting the goal. The initial outlay and annual revenues with respect to each of the technologies are summarized in table. Suggest best technology which is to be implemented based on present value method of comparison assuming 20 % interest rate.

	Initial outlay (Rs.)	Annual revenue (Rs.)	Life (years)
Technology 1	12,00,000	4,00,000	10
Technology 2	20,00,000	6,00,000	10

[3]

- Differentiate between goals and objectives. You have been asked to prepare the project feasibility report for establishing railway station at Pilani. What goals and objectives you would set for the project? [4]
- While planning the construction of a waste-water treatment plant, the goal was set as reuse of water for non-potable applications. Develop a value tree to represent the goal with measurable objectives. [5]
- 4. Write notes on sustainable development [3]
- Why baseline data is necessary for any infrastructure project? What kind of base-line data you would look for, if you have been asked to submit a feasibility report on the possibility of set up of a thermal power plant in Pilani. [5]