Department of Civil and Environmental Engineering New Jersey Institute of Technology

Qualifying Examination Ph.D. Environmental Engineering

<u>Content of Exam</u> Environmental Engineering Major

<u>Part 1A</u> –Graduate Level in the area of specialization. To provide some guidance to the Ph.D. candidate, the subject areas to be covered by area of specialization follow. In the morning session, the student selects any two questions from three questions posed, each from one of the courses listed below.

Physical Principles of Environmental Engineering (EnE 630)

Environmental Microbiology (EnE 661)

Environmental (water) Chemistry (EnE 663)

In the afternoon session, the student selects any two questions from three questions posed based on the courses taken by the student and their research focus. These questions will be selected by the Graduate Director and the Dissertation Adviser.

<u>Part 1B</u> –Undergraduate Mathematics Two questions from Calculus, two questions from Ordinary Differential Equations, and two questions from Statistics and Probability. Students select any two.

<u>**Part 1C**</u> – **Essay** on topic of general interest, typically in the area of the student's specialization.

For passing, the student needs to obtain at a grade of 70/100 on each part of the exam (Part1A, Part1B, and Part1C).