

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2017 - 18 Examination

Semester: 1**Subject Code: 03214133****Subject Name: Climate Change Impacts on Water Resources Systems****Date: 02/01/2018****Time: 2:00 pm to 4:30 pm****Total Marks: 60**

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 A) Define and differentiate between Climate and Weather. **(05)**

B) Recommend some solutions to control Climate Variability. **(05)**

C) Define: Adaptation, Exposure, Mitigation, Risk and Sensitivity. **(05)**

Q.2 Answer the following questions. (Attempt any three) **(15)**

A) Elaborate the impact of climate change on hydrological cycle.

B) Explain about detection and attribution of climate change.

C) Give a brief on assessment of climate change impacts on irrigation water requirement.

D) Describe the hierarchy of decisions in risk management in water utility sector.

Q.3 A) Explain global climate system components, their processes and interactions with diagram. **(07)**

B) What are the assessment methodologies for uncertainties in vulnerability assessment? **(08)**

OR

B) What are uncertainties in hydrological impacts? **(08)**

Q.4 A) Write a short note on assessment of climate change impacts on flood hazards. **(07)**

OR

A) Describe the climate change impacts on reservoir in flows. **(07)**

B) Explain the concept of Vulnerability. **(08)**