**TU/CDOE**

**TEZPUR UNIVERSITY**

**SEMESTER END EXAMINATION (AUTUMN) 2020**

**DEM 103: URBAN WATER MANAGEMENT**

Time: **3 Hours** Total Marks: **70**

*The figures in the right-hand margin indicate marks for the individual question.*

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1. Give one example for each of the following: 1x4=4

1. Point source of water pollution.
2. Non-point source of water pollution
3. Water-borne disease
4. Coagulant used in water treatment.

2. State True or False: 1x6=6

1. The Urban Heat Island Effect (UHI) is a phenomenon whereby the air over the rural areas results is slightly warmer compared to surrounding urban areas.
2. Increased urban water demand generates pressure on existing infrastructure and the problem is more severe in developing countries.
3. Solid waste management also includes agricultural waste.
4. In the osmosis process, demineralization water is produced by forcing water through semi permeable membranes at high pressure.
5. Agricultural runoff is an example of point source of pollution.
6. Continuous sources introduce contaminants to the streams for extended periods of time.

3. Explain the factors that aggravate water scarcity. 10

4. What is greywater and blackwater? 5

5. What is rainwater harvesting? Discuss its benefits. 10+5=15

6. Discuss the classification criteria and regulatory norms of 3R’s for a

sound material-cycle society. 15

7. What is urban flood? Discuss the cause and counter measures of

urban flooding.5+5+5=15

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