PA-908

[5927]-332

B.E. (Civil)

INTEGRATED WATER RESOURCES PLANNING AND MANAGEMENT

(2019 Pattern) (Elective-III) (Semester-VII) (401003 C)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) **Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.**

2) **Neat diagrams must be drawn wherever necessary.**

3) **Figures to the right side indicate full marks.**

4) **Assume suitable data if necessary.**

Q1) a) Justify importance assessment of river water quality and write a brief note on prevention and control of surface water pollution. **[10]**

b) What is water quality monitoring for basins. **[8]**

OR

Q2) a) What is Environmental Impact Assessment (EIA) and what are its objectives, state methodology to carryout EIA. **[10]**

b) State any four CPCB regulations regarding water pollution control. **[8]**

Q3) a) State and explain principles of planning and financing water of water resources projects. **[10]**

b) Explain how water is economic good. **[7]**

OR

Q4) a) Explain framework for planning a sustainable water future. **[10]**

b) Explain in brief economics and decision making in IWRPM **[7]**

P.T.O.

Q5) a) What are water crises, explain its global and national perspective **[10]**

b) State and explain rural local governing body water laws. **[8]**

OR

Q6) a) State and explain UN laws on non-navigable uses of international water courses **[10]**

b) State any four municipal corporation laws regarding water supply and drainage. **[8]**

Q7) a) Explain in detail role of dam in flood control and power generation and its importance in IWRPM. **[10]**

b) Explain importance of management of flood plains **[7]**

OR

Q8) a) What is flood forecasting, what are the methods to forecast flood. **[10]**

b) Explain application of soft computing in flood control. **[7]**

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