

Total No. of Questions : 8]

SEAT No. :

PA-908

[Total No. of Pages : 2

[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]