

Total No. of Questions : 8]

PD4553

SEAT No. :

[Total No. of Pages : 2

[6404]-57

B.E. (Civil)

**INTEGRATED WATER RESOURCES PLANNING AND
MANAGEMENT**

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) **Answers 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 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) Explain polluters pay principle. **[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 water pricing. **[7]**

OR

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

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

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

P.T.O.

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 plain. **[7]**

OR

Q8) a) Explain in detail Use of QGIS in IWRPM. **[10]**

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

* * *