

Total No. of Questions : 6]

SEAT No. :

P5179

[6188]-131

[Total No. of Pages : 1

B.E. (Civil) (Insem)

**INTEGRATED WATER RESOURCES PLANNING AND
MANAGEMENT**

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw neat diagram wherever necessary.*
- 4) *Use of logarithmic table, slide rule and electronic pocket calculator are allowed.*
- 5) *Assume suitable data if necessary, stating it clearly.*

- Q1)** a) Explain in detail objectives of Integrated Resource Planning and Management. [5]
b) State components of IWRPM. Explain any one in detail. [5]
- Q2)** a) Describe in detail Challenges of IWRPM. [5]
b) Explain National Water Policy (NWP) in short. [5]
- Q3)** a) What are the various roles and functions of Central Water Commission (CWC)? [5]
b) State goals and objectives of Global Water Partnership (GWP). [5]
- Q4)** a) Explain in detail the concept of blue and green water in IWRPM. [5]
b) Explain in detail the challenges to achieve Global Water Security. [5]
- Q5)** a) Explain in detail virtual water trade with examples. [5]
b) Explain in detail various categories of methods of charging irrigation water prices in India. [5]
- Q6)** a) What are the various types of irrigation systems? Explain any one. [5]
b) The depths of penetration along the length of boarder strip at points of 30 meters apart were probed. Their observed values are 2.2, 2.0, 1.9, 1.8 and 1.6 meters. Calculate the water distribution efficiency. [5]