| <b>Total No. of Questions</b> | : | <b>6</b> ] |  |
|-------------------------------|---|------------|--|
|-------------------------------|---|------------|--|

| SEAT No.: |  |
|-----------|--|
|-----------|--|

P10 [Total No. of Pages: 1

## APR.-17/B.E./Insem.-11 B.E. (Civil)

PLUMBING ENGINEERING (2012 Pattern) (Elective - IV) Time: 1 Hour] IMax. Marks: 30 Instructions to the candidates: Answer Q.1 & 2, Q.3 or 4 and Q.5 or 6. 2) Neat diagrams must be drawn wherever necessary. 3) Figures to the right side indicate full marks. Assume Suitable data if necessary. 4) **Q1**) a) Explain GPCS-I. [5] State water quality norms and alternate water sources. [5] b) Describe the job of plumbing consultant. [5] **Q2**) a) b) Explain coordination of mason and painter for execution of plumbing work. [5] **Q3**) a) What are the design guidelines for Rainwater harvesting (RWH). [8] Define conductor and leader in Rainwater harvesting (RWH). [2] b) OR How does solar water heater works? **Q4**) a) [2] Explain flat plate and evacuated tube collectors. [8] b) Explain bidets with sketch. [5] **Q5**) a) b) Explain urinals with sketch. [5] OR **Q6**) a) Explain copper pipes in plumbing industry and state their advantages.[5] Explain CPVC pipes in plumbing industry and state their advantages.[5] b)

## ಹಿಹಿಹ