

GUJARAT TECHNOLOGICAL UNIVERSITY**B.Arch - SEMESTER– VI EXAMINATION – WINTER 2023****Subject Code:2X65005****Date:12-12-2023****Subject Name: Estimating And Costing****Time:02:30 PM TO 04:30 PM****Total Marks:50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** Find the volume of Following:- **10**
- (a) Sphere of Radius 45mm
 - (b) Cube of Side 50mm
 - (c) Cylinder(radius of base is 25mm and height is 75mm)
 - (d) Cone(radius of base is 35mm and height is 60mm)
- Q.2** Write unit of measurement for following:- **10**
- (a) Sand filling
 - (b) Damp proof course
 - (c) Painting
 - (d) Plastering
- Q.3** Estimate the quantity of brickwork, plastering, pop and painting required in a wall 4m long,3m high and 30 cm thick. Calculate also the cost if the rate of brick work is 700 per cum, rate of plastering is 120 per sqm, rate of pop is 50 per sqm and rate of painting is 30 per sqm. **10**
- Q.4** Write short notes:- **10**
- (a) Schedule of Rates
 - (b) Septic Tank
 - (c) Estimation of plumbing
 - (d) Estimation of electrical work
- OR**
- Q.4** What is the importance of specification in Estimation and Costing. Explain it with neat and clean sketches of civil work. **10**
- Q.5** (a) Write unit of estimation of any five and explain with examples. **05**
- a) Plaster b) Paint c) Brick wall d) RCC e) Excavation f) Water pipeline
- (b) Write short note on SOR. and explain various factors affecting rate analysis. **05**
