

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING - SEMESTER-VIII • EXAMINATION-SUMMER • 2014

Subject Code: 385501**Date: 22/05/2014****Subject Name: Costing Estimation & Management****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1** (a) Define the term “COSTING”. Describe its need in Fabrication Industries. **07**
(b) Explain Uses of Estimation & Costing in Fabrication Industries. **07**
- Q.2** (a) Give Classification of Costs and describe Costing method. **07**
(b) Describe Procedure of Material Costing calculation for Pressure Vessel with suitable example. **07**
- OR
- (b) Describe Procedure of Labour Costing calculation for Heat Exchanger with suitable example. **07**
- Q.3** (a) Draw Organization Chart of Estimation Department and state its functions. **07**
(b) Estimate the machining time to turn a M.S. bar of 3 cm dia. to 2 cm for a length of 6 cm in a single cut. Assume Cutting speed as 60 m/min. and Feed rate as 0.2 mm per rev. **07**
- OR
- Q.3** (a) Describe Function of PPC Department in Fabrication Industries. **07**
(b) Find the time required to drill 4 holes in a flange each of 1.5 cm depth, if the hole dia. is 3 cm. Assume cutting speed as 30 m/min and feed as 0.1 cm/ rev. **07**
- Q.4** (a) Describe Stop Watch Time Study method with suitable Example. **07**
(b) Draw neat sketch of a Hexagonal headed Bolt having Head Dimensions 4cm across flat × 2.5cm length and Thread portion Dimensions Ø2cm × 20cm length. Estimate the size of stock and weight of material required to forge 50 mild steel bolts from the bar stock Diameter is 3 Cm. **07**
- OR
- Q.4** (a) Draw Product Type Plant Layout suitable for a Fabrication Shop and Explain. **07**
(b) Calculate Arc Welding Cost for Joining TWO steel plates 200mm length having 20 mm Thickness by Double V Joint. **07**
- Q.5** (a) Write Short note on Value Analysis. **07**
(b) Write meaning of KAIZEN. State its application. **07**
- OR
- Q.5** (a) Describe Steps of Designing a Storage Tank. **07**
(b) State application of Modern Management Techniques. **07**
