

GUJARAT TECHNOLOGICAL UNIVERSITY**DIPLOMA ENGG.- Vth SEMESTER-EXAMINATION – JUNE- 2012****Subject code: 351905/2351905****Date: 08/06/2012****Subject Name: Estimating costing and contracting****Time: 10:30 am – 01:00 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) Explain the importance of costing and cost estimating in an industry. **07**
(b) List and explain different elements of cost **07**

- Q.2** (a) What is overhead? Describe fixed and variable overhead with suitable example. **07**
(b) Define Depreciation and Obsolescence. State types of depreciation in detail. **07**

OR

- Q.3** (b) Draw and explain block diagram of selling price and catalogue price. **07**
(a) Describe procedure of cost estimation in arc welding. **07**
(b) 250 No. M.S. Pins of 4 cm. diameter and 15 cm. length are to be drop forged from a bar stock of 5 cm. diameter. Calculate the material cost, if bar is available at Rs. 80/meter length. Assume all possible losses. **07**

OR

- Q.3** (a) Define the following terms **07**
1) Net weight 2) Shape weight 3) Gross weight
4) Tong loss 5) Scale loss 6) Shear loss 7) Flash loss
(b) Estimate the time required to drill 4 holes in C.I Flange from the following data **07**
Hole length:- 20 mm Hole dia:- 12 mm
Cutting speed:- 15 mm/min. Feed:- 0.2 mm/rev.

- Q.4** (a) Define pattern. List and explain types of pattern allowance. **07**
(b) Calculate the total milling time required to cut 60 teeth on a gear blank having length of cut and feed are 60 mm and 35 mm/min. respectively. Take over all set-up time is 10 min. **07**

OR

- Q. 4** (a) Discuss the types of sheet metal joints in brief. **07**
(b) A conical body of base 10 cm. diameters and attitude 20 cm. is to be covered by a sheet. Find the area of surface to be covered. **07**

- Q.5** (a) Define Break Even Point. Derive an equation for BEP analytically. **07**
(b) What are the areas of cost reduction? Explain in brief. **07**

OR

- Q.5** (a) Define budget and budgetary control. State the benefits of budget. **07**
(b) List and explain the documents required in an engineering contract. **07**
