

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – VIII • EXAMINATION – SUMMER 2016

Subject Code: 3385501**Date: 10 /05/2016****Subject Name: C. E. & P. M.****Time: 10:30 AM to 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. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** (a) Describe Meaning of Capital, Estimating, Costing and Bill of Material. **07**
 (b) Give Classification of costs. Describe costing procedure. **07**

- Q.2** (a) Describe method study with objectives. **07**
 (b) Describe Simplification, Standardization, and Rationalisation. **07**

OR

- (b) Define Wages and Incentives. Describe method of wage payment. **07**

- Q.3** (a) Differentiate between Costing and Estimation with suitable example. **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 Various types of sheet metal joint design prepared for sheet metal product. **07**
 (b) Find the time required to drill 6 holes in a flange each of dia. 1cm × 2.5 cm depth. Assume cutting speed as 35 m/min and feed as 0.15 mm/ rev. **07**

- Q.4** (a) Describe scope of Production, Planning and Control. **07**
 (b) A small scale industrial unit consists of six activities as given below: **07**

Activity	A	B	C	D	E	F
Times in day	5	4	4	3	2	6
Pre-operation	-	A	B	A	D	C,E

Draw the network diagram and Calculate EST, LST, EFT, LFT, and Float, mark the critical path and find total project duration.

OR

- Q. 4** (a) List different types of Plant Layout. Describe any ONE of them. **07**
 (b) Draw the network diagram for a given activities. Find Out Critical path and Calculate the critical time for project completion. Also calculate EST, LST, EFT, LFT, and Float. **07**

Activity	A	B	C	D	E	F
Duration in Days	7	6	5	9	8	5
Immediate preceding Activity	-	A	A	B	C,D	C

- Q.5** (a) Define the term “Inventory”. Describe function of inventory control. **07**
 (b) Describe different factors to be considered in manufacturing process selection. **07**

OR

- Q.5** (a) Describe ABC analysis with neat sketch. **07**
 (b) Describe Quality circle with neat sketch. **07**
