

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 6th
Subject Code: 03609355
Subject Name: Estimating Costing

Date: 20/1/2023
Time: 7:50 to 9:20 am
Total Marks: 40

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	Answer any six out of Ten. (2 Marks Each)	(12)	Co/Po Name	Blooms Taxonomy Words
	1. Define Estimating			Knowledge
	2. Describe Depreciation			Understand
	3. Define Costing			Knowledge
	4. Define Obsolescence			Knowledge
	5. Define needs of Estimating			Knowledge
	6. Write down benefits of costing and estimating.			Apply
	7. Write cost element of Arc welding.			Create
	8. Express different elements of cost.			Create
	9. What is Overhead cost?			Create
	10. Enlist cost elements in Gas cutting.			Knowledge
Q.2	A) Describe method of calculating Overhead allocation and explain any one	(03)		Understand
	OR			
	A) Describe estimating and state good quality of estimator at least seven.	(03)		Understand
	B) Evaluate total profit and safety margin when total production is 18,000 units. The fixed cost of a company is Rs. 8,00,000. Selling price of unit is Rs.500 and variable cost of unit is Rs. 300.	(03)		Evaluate
	OR			
	B) Evaluate profit of manufacturer. The market price of a machine is Rs. 90,000 and 20% discount is given to distributor. If material cost, labor cost & factory over heads are in the ratio of 2:1:3 & factory over heads is Rs. 18,000, office over heads are 5% of prime cost & selling over heads are 10% of factory cost.	(03)		Evaluate
	C) Evaluate the rate of depreciation/year by straight line & sinking fund method. A machine was purchased at Rs. 3, 00,000 the transportation and installation charges were Rs. 4,000 & 6,000 respectively & useful life is 20 years. The scrap value was estimated Rs. 40,000. Rate of interest is 18%.	(04)		Evaluate
	OR			
	C) Write name of different method of calculating depreciation and explain any one.	(04)		Create
	D) Differentiate estimating and costing.	(04)		Analyze
Q.3	A) The prime cost of 600 laptop bags is 2,40,000 Rs. Factory overhead are 40% of prime cost, Administrative overheads are 20% of FC. For 30% profit, Prepare selling price of one laptop bag.	(03)		Create
	OR			
	A) Explain importance of BEP(Break Even Point) in industry.	(03)		Create
	B) Four plates each of 1000 x 500 x 5 mm are to be gas cut from a M.S. plate of size 2000 x 1000 x 5 mm find the cutting cost from the followings. 1. O ₂ consumption = 5 m ³ /hr. 2. C ₂ H ₂ consumption = 2	(03)		Analyze

	m ³ /hr.3. Cutting speed = 12 m/hr. 4. Cost of O ₂ = 30 Rs. /m ³ .5. Cost of C ₂ H ₂ = 100 Rs. / m ³ . 6. Labor = 40 Rs./hr.			
	OR			
	B) Fixed cost in a factory is Rs 10,000 per year, the variable costs are 2.00 Rs per unit and the selling price is Rs 4.00 per unit, Calculate Breakeven point.	(03)		Evaluate
	C) A lathe machine is purchased at a price of Rs.60,000 has its useful life of 15 years. Its scrap value is Rs.10,000. Calculate the depreciation per year by sinking fund method. Rate of interest for depreciation fund is 12 percent.	(04)		Analyze
	OR			
	C) Two 1 meter long M.S. plate of 1 cm thickness are to be welded by a lap joint with 6mm electrode. Calculate the cost of welding. Consider current used = 250 Amp. , voltage = 30 volts, welding speed = 10 m /hr, electrode used = 0.1 kg/m of welding, labour charges = Rs. 5/hr, power charges = Rs. 10/ kW h , cost of electrode = Rs. 40 / Kg , Efficiency of machine = 60 %	(04)		Create
	D) Explain procedure of cost estimation in Arc welding.	(04)		Understand