

**B. E. ELECTRICAL ENGINEERING FOURTH YEAR SECOND SEMESTER (OLD) EXAM 2017****SUBJECT : ENGINEERING ECONOMICS AND COSTING      Time : Three Hours      Full Marks : 100**Answer any five questions

1. a) State the Law of Demand and the Law of Supply. Do you think that the Law of Demand always holds good in a perfectly competitive market? Give reasons to support your answer. 4+5
- b) Define price elasticity of demand. What are the factors affecting the price elasticity of demand? 2+7
- c) Define income elasticity of demand and cross-elasticity of demand. 2
2. Distinguish between Direct tax and Indirect tax. What are the merits and demerits of these two kinds of taxes? 4+16
3. What is a Joint Stock Company? How does the Joint Stock Company raise their finance? What are the advantages and disadvantages of a Joint Stock Company? 4+4+12
4. a) How do you derive the selling price of a product? 5
- b) From the following information prepare a Cost Sheet of Magnum & Co. for 50000 units of goods.
- |  |   |                      |
|--|---|----------------------|
| Opening Stock of Finished Goods ( 5000 units ) | - | ₹ 45,000             |
| Purchase of raw materials                      | - | ₹ 2,57,100           |
| Direct wages                                   | - | ₹ 1,05,000           |
| Factory wages                                  | - | 100% of Direct wages |
| Administrative overhead                        | - | ₹ 1 per unit         |
| Selling and Distribution overhead              | - | 10% of sales         |
| Sales ( 45000 units )                          | - | ₹ 6,60,000           |
| Closing stock ( 10000 units )                  | - | ?                    |
- Find the total profit and percentage of profit on sales. 15
5. a) What is an Account? State what are the different types of accounts giving examples? 2+ 3
- b) Define a Journal and a Ledger? Distinguish between a Journal and a Ledger? 4+6
- c) What do you mean by a Trading Account and a Profit and Loss Account? Why is the preparation of Profit and Loss Account important? 2+3

## 6. Journalise the following transactions

- a) Mr. A. Gupta started a business with cash ₹ 2,90,000 and furniture of ₹ 1,00,000 on 01-03-2017.
- b) Opened a Bank Account of ₹ 40,000 with SBI on 02-03-2017.
- c) Purchased goods by cash ₹ 60,000 on 03-03-2017.
- d) Purchased goods from Sen & Co. on credit ₹ 50,000 on 05-03-2017.
- e) Sold goods to B. Brothers on credit ₹ 60,000 on 06-03-2017.
- f) Withdrew ₹ 5,000 for personal use on 08-03-2017.
- g) Cheque received from B. Brothers ₹ 40,000 on 10-03-2017.
- h) Sold goods for cash ₹ 65,000 on 15-03-2017.
- i) Paid rent by cash ₹ 25,000 on 20-03-2017.
- j) Paid salary ₹ 70,000 on 31-03-2017.

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## 7. The following Trial Balance of A. Sarkar &amp; Co. is not correct. Prepare the Trial Balance correctly stating reasons in brief.

**Trial Balance of A. Sarkar & Co. for the year ended 31<sup>st</sup> March, 2017**

Particulars	Debit (₹)	Credit (₹)
1. Capital		2,50,000
2. Purchases	7,00,000	
3. Opening Stock	2,25,000	
4. Bills Payable		1,50,000
5. Wages	7,500	
6. Sales		8,00,000
7. Advertisement	6,250	
8. Closing Stock		5,92,500
9. Bills receivable	3,00,000	
10. Debtors		3,25,000
11. Creditors	6,75,000	
12. Bank Balance	1,55,000	
13. General Expenses	1,500	
14. Bad Debts	1,000	
15. Buildings	1,25,000	
16. Income Tax		50,000
17. Loan Taken		25,000
18. Interest on Loan Taken		3,750
19. Sales Returns		1,500
20. Rent received	1,500	
<b>Total</b>	<b>21,97,750</b>	<b>21,97,750</b>

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8. Prepare a Trading and Profit & Loss Account and a Balance Sheet from the following data of Gupta & Company for the year ended on 31<sup>st</sup> March, 2017 after considering the necessary adjustments.

Cash at Bank	₹ 2,630	Carriage Inward	₹ 2,040
Cash	₹ 540	Inventory (1 <sup>st</sup> April 2016)	₹ 5,760
Sales	₹ 98,780	Buildings	₹ 32,000
Purchases	₹ 40,675	Freehold Land	₹ 10,000
Returns Inward	₹ 680	Machinery	₹ 20,000
Returns Outward	₹ 500	Patents	₹ 7,500
Capital	₹ 62,000	Salaries	₹ 15,000
Accounts Payable	₹ 6,300	General expenses	₹ 3,000
Wages	₹ 8,480	Insurance	₹ 600
Rent received	₹ 9,000	Drawings	₹ 5,245
Factory fuel & power	₹ 4,730	Accounts receivable	₹ 14,500
Carriage Outward	₹ 3,200		

**Adjustments:**

1. Inventory on 31<sup>st</sup> March, 2017 was valued at ₹ 6,800.
2. Depreciate Machinery at 10% and Patents at 20%.
3. Salary outstanding to the amount of ₹ 1,500.
4. Insurance was prepaid to the extent of ₹ 85.
5. Bad debts to be written off are ₹ 725.
6. Rent receivable ₹ 1,000.