

Heaven's Light is Our Guide
Rajshahi University of Engineering & Technology
Department of Mechanical Engineering
B. Sc. Engineering 2nd Year Even Semester Examination, 2016

Course No: Hum 2205
 Full Marks: 72

Course Title: Accounts & Industrial Law
 Time: Three Hours

- NOTE** - (i) Answer *3x* questions taking *Three* from each section.
 (ii) Figures in the margin indicate full marks.
 (iii) Use separate answer script for each section.

SECTION-A

- Q.1 (a) Distinguish between Financial Accounting and Cost Accounting. 02
 (b) The following data are related to the manufacturing companies of its product during the month 05
 January 2016:

Inventories	At the beginning	At the end
Raw materials	Tk 25,000	Tk 15,000
Work-in process	Tk 18,000	Tk 10,000
Finished product	20 units	10 units
	Tk 30,000	Tk?

Raw materials purchased Tk 2,30,000; Direct labor costs Tk 1,80,000; Factory overhead 60% of direct labor cost; Administrative office expenses Tk 28,000; Selling & distribution expenses Tk 12,000; During the month 300 units were produced. Profit 25% on total cost of goods sold.
 Prepare a statement of cost.

- (c) The following information is obtained from the records of a transport company: 05

Number of buses	04
Seating capacity of each	50
Working days in a month	25
Distance covered in a trip	50 kms
Number of trips per day -	one round trip
Normal operating capacity	80%
The following costs were incurred: (Tk)	
Repairs & Maintenance	Tk 5,900 p.m
Insurance and taxes	Tk 7,200 p.a
Depreciation	Tk 28,800 p.a
Salaries and wages	Tk 18,600 p.m
Interest and other charges	Tk 3,600 p.m
Diesel, oil etc per day	Tk 900 per bus.
Find out the cost per passenger in km.	

- Q.2 (a) What is meant by relevant cost? What are its characteristics? 02
 (b) Toshiba Ltd. manufactures 5000 units of a product during a year. Cost of the product are as 05
 follows:

Direct materials Tk. 1, 08,000, Direct labour Tk. 62,500, Factory overheads Tk. 54,000 (60% of overhead are fixed); Administrative and selling expenses are Tk. 30,000 and Tk. 25,000 respectively. Administrative expenses are entirely fixed but selling expenses are 20% variable. A foreign customer has given a proposal to the company to buy 2,000 units. The company sells the product at Tk. 65 per unit but the foreign buyers offers Tk. 52 as the price of the product. Should the offer of the foreign customer be accepted?

- (c) Rupsa Ltd. wants to buy one of the two available machines. Both the machines are equally useful 05
 to the production operation of the company. In both the cases the unit cost of material would be Tk. 15. Other costs related to the two machines would be as follows:

	Machine A	Machine B
Direct labour per unit	Tk. 20	Tk. 18
Factory overhead variable	Tk. 10	Tk. 07
Total fixed cost	Tk. 48,000	Tk. 90,000

Cost of the two machines differ. For machine B additional invest of Tk. 40,000 would be needed. The company expects 10% return on average investment.

Required-

- Which machine should be bought for annual production of 6,000 units?
- Which machine should be bought if annual production is 12,000 units?

- Q.3 (a) What is meant by cost statement? What are its elements?
 (b) Define the terms 'fixed costs', 'variable costs', 'semi-variable costs', and give some example of each one.
 (c) The following data are related to the manufacture of a product during the month of February 2016:
 Raw material used Tk. 50,00,000; Direct wages Tk. 30,00,000. Factory overhead 75% of direct wages; Administrative expenses 20% of work cost; selling expenses Tk. 2,00,000; Profit 25% on sales; Unit produced 5,00,000. The company plans to sell 6,00,000 units next month. Wages rate and material price are expected to increase by 20% and 15% respectively. Factory overhead is applied on the basis of direct labor cost. Other costs will remain unchanged. Selling price will increase by 18%, prepare a statement of cost for the month of March 2016.
- Q.4 From the following Trial Balance of M/S Hazi and Sons prepare a Trading Account and Profit & loss Account for the year ended 31st December 2015 and a Balance Sheet as at that date: 12

Trial Balance			
Dr			Cr
Debit Items	Amount	Credit Items	Amount
Drawings	20,000	Sales	5,30,000
Purchases	3,55,000	Sundry creditors	20,000
Investment	1,00,000	Purchase Return	10,000
Wages	20,000	Discount	5,000
Salaries	15,000	Bank overdraft	30,000
Return inward	5,000	Interest	10,000
Carriage out	8,000	Capital	5,00,000
Import duty	12,000		
Buildings	2,50,000		
Furniture	80,000		
Machineries	1,50,000		
Cash in hand	25,000		
Sundry Debtors	40,000		
Stationary	4,000		
Carriage out	6,000		
Bad debts	3,000		
Rent	7,000		
Insurance	5,000		
Office expenses	6,000		
Advertisement	12,000		
Commission	2,000		
Total	11,25,000		11,25,000

Adjustments:

- Closing stock was valued at Tk. 75,000
- Salaries outstanding Tk. 8,000 and advertisement prepaid Tk. 4,000.
- Make a reserve for bad debt or sundry debtors at 5%.
- Depreciate furniture and Machine by 10% and Building by 5%.

SECTION-B

- Q.5 (a) Define contract according to the contract Act of Bangladesh. 02
 (b) What do you mean by capacity to parties and free consent? Under which circumstances consent will not be treated as free? Give examples. 06
 (c) In which situations a contract can be terminated by subsequent impossibility. Also discuss the exceptional cases in which a contract can not be discharged on account of impossibility. 04
- Q.6 (a) Define (i) Factory, (ii) Manufacturing process, and (iii) Worker according to Bangladesh labor law. 03
 (b) State the provisions regarding working conditions, deductions of wages, and leaves and benefits of workers in a Factory. 07
 (c) Discuss the issues related to fire safety according to Bangladesh labor law 02
- Q.7 (a) What is industrial dispute? Discuss the various industrial disputes arises from the part of both employers and workers. 05
 (b) Discuss the methods of settling industrial dispute. 03
 (c) State the unfair trade's practices on the part of both workers and employers. 04
- Q.8 (a) Define wages. What are the deductions which can be made from the wages of employed persons? 06
 (b) Discuss the rules regarding the safety of works under factories Act in Bangladesh. 06

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Rajshahi University of Engineering & Technology
 Department of Mechanical Engineering
 B.Sc. Engineering 2nd Year Even Semester Examination 2015

Course No.: Hum 2205
 Full Marks: 72

Course Title: Accounts and Industrial Law
 Time: Three hours

- N.B.: i) Answer six questions taking *three* from each section.
 ii) Figures in the margin indicate full marks.
 iii) Use separate answer scripts for each section.

SECTION - A

- Q.1(a) "Assets=Owner's equity +Liabilities"-Explain. ✓
 (b) What is meant by Journal? State its functions.
 (c) Give Journal entries from the following transactions:

02
 03
 07

2015 Jan 1 Mr. Rakib started business with cash Tk. 5,00,000 as his capital.
 Jan 3 Purchased a machine for cash Tk. 3,00,000 from Mitra Ltd.
 Jan 8 Purchased goods for cash Tk. 1,00,000.
 Jan 10 Opened a current account with Rupali Bank Tk. 50,000.
 Jan 12 Rent paid Tk. 15,000.
 Jan 18 Sold goods to M/S Hasib & sons Tk. 2,50,000.
 Jan 20 Depreciate machine by Tk. 5,000.

- Q.2(a) What do you understand by operating costing? State its objectives.
 (b) What steps would you take in controlling operating cost of vehicles?
 (c) A transport company is operating 5 buses each of which has a capacity of 50 seats. The buses are operated 6 days in a week between two cities 100 km's apart. Each bus makes two round trips daily and on an average 80% of the capacity is actually used. Costs running the busses during the week were:
 Petrol Tk. 16,000. Lubricant Tk. 2,500. Repair and maintenance Tk. 15,000. Depreciation Tk. 6,000. Supervision cost Tk. 2,000. Taxes Tk. 1,500. Garage rent Tk. 1,500. Driver salary Tk. 2,500. Assistants salary Tk. 1,200 and other expense Tk. 1,300.
 Calculate the cost per passenger km.

03
 03
 06

- Q.3(a) What is meant by cost statement?
 (b) What are the elements of cost?-Explain.
 (c) The following data are related to the manufacture of a standard product during the month of December 2010. Raw material consumed Tk. 1,50,000. Direct wages Tk. 1,20,000. Factory overhead was 60% of direct wages. Administrative overhead was Tk. 25,000. Selling overheads were 15,000. Profit 20% on total cost of goods sold. During the month production and sales were 4,000 units.

02
 04
 06

The company plans to sell 5,000 units in the next month. Wage rates and materials prices are expected to increase by 10% and 5% respectively. Factory overhead is applied on the basis of direct wage cost. Other costs will remain unchanged. Profit 25% on total cost of goods sold. You are required to prepare a statement of cost from the above.

- Q.4(a) State the formula for the future value of a single cash flow (amount).
 (b) If you deposit Tk. 5,000 today at 15% rate of interest in how many years will the amount grow to Tk. 30,000?
 (c) Luna Manufacturing Company manufactures a component part of its product but an outside supplier wants to sell the same part at Tk. 36 per unit. 5,000 parts are required annually. Product cost per unit are: Materials Tk. 21, Labour Tk. 12 and overheads Tk. 11 of which Tk. 5 per unit is allocated fixed cost. If the company bought the component parts from outside fixed cost would be reduced by Tk. 7,000.
 Should the component parts be bought.
 (d) What is meant by relevant cost?

02
 03
 05
 02

SECTION - B

- Q.5(a) Define contract according to contract Act in Bangladesh.
 (b) "No consideration no contract"-State the exceptions to this rule.
 (c) Discuss the essential elements of contract with examples.

03
 03
 06

- Q.6(a) Define 'goods' and state the different types of 'goods'. 04
- (b) Explain the difference between a condition and warranty. Under what circumstances can a breach of condition be treated as a breach of warranty. 04
- (c) What do you understand by 'Caveat Emptor'? Are there any exceptions to its application to sale of goods? 04
- Q.7(a) Define partnership. What are the consequences of insolvency of a partner? 04
- (b) Can a minor become a member of a partnership firm? 04
- (c) What are the rights and duties of a partner in a partnership firm? 04
- Q.8(a) What is a 'Company'? What are the essential features of a company? 04
- (b) Briefly discuss the difference between a private company and a public company. 04
- (c) State the difference between Memorandum and Articles of Association. 04

Rajshahi University of Engineering & Technology

Department of Mechanical Engineering

B. Sc. Engineering 2nd Year 3rd Semester Examination 2014

Course No.: Hum-230

Full Marks: 70

- N.B.: i) Answer SP questions taking Three from each section.
ii) Figures in the margin indicate full marks.
iii) Use separate answer script for each section.

Course Title: Accounts & Industrial Law
Time: Three Hours

SECTION-A

- Q.1(a) What do you mean by the term Accounting? State its objectives. 04
(b) Explain the utilities of studying accounting to an engineer. 02
(c) What is meant by the term "Transaction"? What are its main characteristics? 3½
(d) What is meant by double entry system? 02
- Q.2 From the following trial balance of M/S Rabbi & Sons, prepare a Trading Account and Profit & Loss Account for the year ended 31st December 2013 and Balance Sheet as on that date: 11½

Dr		Cr	
Particulars	Amount	Particulars	Amount
Drawings 6000	10,000	Loan from Bank 40,000	40,000
Buildings 8000	50,000	Bank overdraft 30,000	30,000
Furniture 8000	20,000	S/Creditors 23,000	23,000
Purchases 1,25,000	1,25,000	Discount 2,000	2,000
S/Debtors 30,000	30,000	Return out 4,000	4,000
Opening Stock 25,000	25,000	Sales 2,04,000	2,04,000
Cash at Bank 10,000	10,000	Capital 1,00,000	1,00,000
Wages 15,000	15,000		
Carriage in 5,000	5,000		
Carriage out 7,000	7,000		
Salaries 12,000	12,000		
Motors & Car 50,000	50,000		
Insurance 6,000	6,000		
Bad debts 2,000	2,000		
Return in 1,000	1,000		
Good will 30,000	30,000		
Stationery 3,000	3,000		
Interest on loan 2,000	2,000		
Total 4,03,000	4,03,000	Total 4,03,000	4,03,000

Adjustments:

- (i) Closing stock was valued at Tk 73,000
(ii) Salary outstanding Tk 3,000 and Insurance paid Tk 2,000
(iii) Make a reserve for bad debts 5% on Sundry debtors
(iv) Depreciate furniture by 10% building by 5% and motors & car by 7.5%.

- Q.3(a) Cash book is both Journal and Ledger - Explain. 3½
(b) Discuss the golden rules for debit and credit. 04
(c) "Every debit must have its corresponding credit" - Explain 04
- Q.4(a) What is meant by operating costing? What are its objectives? 4½
(b) The following details are available in respect of a 5 ton truck maintained by a transport company: 07

Cost of truck	Tk 12,00,000
Estimated life	20 years
Petrol, oil, grease etc	Tk 2,000 per trip
Driver's wages	Tk 6,000 p. m.
Assistant's wages	Tk 4,000 p. m.
Repairs & Maintenance	Tk 2,500 p. m.
Insurance	Tk 24,000 p. a.
Tax	Tk 12,000 p. a.
General supervision	Tk 24,000 p. a.

The truck carries goods to and from a town covering a distance of 50 km. On the return journey, freight is available only up to 25% of capacity. Assuming that the truck runs on an average 25 days a month. Find out operating cost per ton km.

SECTION-B

- Q.5(a) What is Contract? Discuss the methods of termination of contract by mutual agreement. 5 $\frac{1}{2}$
- (b) "All contracts are agreement but all agreement are not contract". Discuss according all essential elements of contract. 06
- Q.6 (a) Define (i) Factory (ii) Worker (iii) Adult (iv) Minor. 05
- (b) State the provisions regarding payment of wages, leaves, and welfare of workers. 6 $\frac{1}{2}$
- Q.7 (a) What do you mean by the term "Trade Union"? State the procedures for registration of a trade union. 07
- (b) What is meant by industrial dispute? Explain the method of settlement of dispute. 4 $\frac{1}{2}$
- Q.8 Write short notes on the following: 11 $\frac{1}{2}$
- Void and voidable agreement;
 - Capacity to parties of a contract;
 - Illegal strike and lockout;
 - Manufacturing process according to Factory Act;
 - Provisions regarding rest and working hours according to Factory Act.

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