Birla Institute of Technology and Science, Pilani

First Semester 2017-2018

Comprehensive Examination-Regular (PART B)

Course Name: Fundamentals of Finance and Accounting (ECON F212/FIN F212)

Total Marks: 80 **Date: 06/12/2017**

Duration: 120Min. **Type: Open Book**

<u>Instructions for the students</u>

1. All questions are compulsory. (Note that combined weight of PART A and PART B is 40%)

2. All parts of a question should be answered consecutively. Answers will be **<u>not evaluated</u>** if all parts of a question are not in consecutive form.

Section A: Short Answer Questions

*(**Q1-Q5**: Each question carries 6 marks. Show only necessary steps to arrive at your solution. The final answer of each question must be specified clearly)*

Q1. While going through the adjusted trail balance of the Adhunik Industries Limited, December 31, 2016, we found the following financial information: Net sales 2050; Purchase returns and allowances Rs70; Sales returns and allowances Rs100; Transportation-in Rs80; Cash discounts on sales Rs30; Beginning inventory Rs300; Gross purchases Rs750; Cash discounts on purchases Rs20; Transportation-out Rs 60; Ending inventory Rs350; total general expense Rs70. The company uses periodic inventory system. Given the above information, find gross profit?

Q2. Indian Pipe Company Limited reported the following accounting details for March 2017. Using periodic inventory system, the company's physical inventory count on March 31 shows 600 units on hand. How much would be the difference in cost of goods sold on March 31 under Average Cost Method and FIFO method?

March 1	Beginning inventory	200 units @ Rs 10 each
March 4	Purchased	1200 units @ Rs 12 each
March 13	Purchased	600 units @ Rs 16 each
March 20	Purchased	800 units @ Rs 18 each
March 12	Sold	800 units
March 18	Sold	1000 units
March 28	Sold	400 units

Q3. Hubtown limited ordered to buy 500 units of inventory from Skipper Limited on January 23, 2017. The inventories were delivered for credit on February 17, subject to a 3% discount if Skipper limited receive payment by March 17. Each unit was priced Rs 53. However, the Skipper limited received the payment from the Hubtown on March 13. On June 16, Hubtown limited retuned 30 units of inventory to Skipper limited for a full cash. Calculate the net sales of the Skipper Limited for the period?

Q4. Bhusan Steel Limited, the largest manufacturer of auto-grade steel in India, reported the following financial information: Inventory turnover is 5 times; Ending inventory stock is Rs 30,000 more than the beginning inventory; Sales (all credit) are Rs700,000; Rate of Gross profit on cost 25%; Current liabilities Rs220,000; Quick ratio 0.75. Given the financial ratios, compute the current assets of the company using ending inventory?

Q5. Nagarjuna Oil Refining Limited is planning to borrow money at an 16% annual interest rate in order to pay a Rs60,000 invoice within the discount period. The credit term is 3/10, n/30. Suppose, if the company borrow the money, what will be the net savings?

Section B:

*(**Q6-Q8:** Your answer will be evaluated if you strictly follow the format for answering each question)*

Q6. On December 31, 2014, ABC Ltd. issues 5,000 debentures to raise capital for financing its project. The features of the instrument are as follows:

Coupon Rate (annual)	Market Interest Rate (annual)	Interest Payment Frequency	No. of Debentures Issued	Par (Face) Value of each bond (Rs.)	Maturity (years)
11%	8.5%	Semiannual	5,000	100	2

On account of this bond issue there will be corresponding Journal Entries (JE) that you have to identify and prepare on the dates sequentially that are given below. Assume that the company prepares financial statements on every month-end. You must also show the calculations done for arriving at the final answers separately.

Prepare the journal entries on the following dates and list them in the General Journal in the format given below - 31 Dec 2014; 30 Apr 2015; 31 May 2015; and 30 Jun 2015 [**16 Marks]**

Format of Journal Entries

	Journal Entries			
Date	**Debit account**	**Credit account**	**Debit amount**	**Credit amount**

Q7. The financial statements of ABC Ltd. for consecutive years ended 31 March is given below. Other information about the current year's financial ratios is also provided. Use the data to prepare the profit and loss (Income) statement of the company for the year 2005 in the same format as given below. Only report the Income Statement for the year 2005. Also, note that wherever required the average of balance sheet amounts are used for calculating the financial ratios. [**18 Marks**]

ABC Limited			
Balance Sheets as on March, 31			
Assets		**2005**	**2004**
Current assets			
	Cash and Cash Equivalents	219.10	417.40
	Accounts receivable (net)	879.10	776.40
	Inventories	717.00	681.00
	Other current assets	381.30	247.00
Total current assets		2,196.50	2,121.80
Property (net)		2,648.40	2,715.10
Other assets		5,729.60	5,725.00
Total assets		**10,574.50**	**10,561.90**
Liabilities and Stockholder's Equity			
Current liabilities		3,162.80	2,846.00
Long-term liabilities		5,128.00	5,458.70
Stockholder's equity - common		2,283.70	2,257.20
Total liabilities and stockholder's equity		**10,574.50**	**10,561.90**

ABC Limited		
Income Statement for the year ended March 31 (in $ million)		
	2005	**2004**
Net sales	??	9,613.90
Cost of goods sold	??	5,298.70
Gross profit	??	4,315.20
Selling and administrative expenses	??	2,634.10
Income from operations	??	1,681.10
Other income (expenses), net	??	-6.60
Interest expense	??	308.60
Income before income taxes	??	1,365.90
Income tax expense	??	475.30
Net Income	??	890.60

At the end of year 2005 following ratios were calculated:
a. Inventory turnover ratio is 8.03
b. Return on common stockholder's equity is 43%
c. The net profit marging is 9.63%
d. Times Interest Earned Ratio is 5.75
e. Firm pays interest at the rate of 5.67% per annum on average long-term liabilities
f. Other income (expense), net for the year were negative $ 24.9 million

Note: Times Interest Ratio is also known as Interest Coverage Ratio.

Q8. The following table describes certain financial results for three companies during 20X2, 20X3 and 20X4: [**16 Marks**]

Income Before Interest and Taxes

20X2	Oneida Company	$50,000
	Thebes Company	50,000
	Albany Company	50,000
20X3	Oneida Company	$30,000
	Thebes Company	30,000
	Albany Company	30,000
20X4	Oneida Company	$15,000
	Thebes Company	15,000
	Albany Company	15,000

Each company has total assets of $250,000 in each year. Oneida Company has no debt, Thebes Company has $100,000 of debt at an interest rate of 10%, and Albany Company has $150,000 of debt at a 14% interest rate. Thebes and Albany have no other debt or liabilities. Assume no taxes. For each company, and for each year, determine:

1. The rate of return on total assets.
2. The rate of return on stockholders' equity.
3. For each company, and for each year, state whether the company's use of debt leverage is favorable (F), unfavorable (U), or not applicable (NA) to shareholders.

To answer the above questions **tabulate your final answers** in the given format:

	20X2		**20X3**		**20X4**	
	ROA(%)	ROE (%)	ROA(%)	ROE (%)	ROA(%)	ROE (%)
Oneida Co.						
Thebes Co.						
Albany Co.						
Analysis						
	20X2		**20X3**		**20X4**	
Oneida Co.	F or U or NA		F or U or NA		F or U or NA	
Thebes Co.	F or U or NA		F or U or NA		F or U or NA	
Albany Co.	F or U or NA		F or U or NA		F or U or NA	