

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, K.K. BIRLA GOA CAMPUS**

**FIRST SEMESTER (2019-20)- MID- SEM EXAMINATION**

**Course No.: FIN F315/ECO 315**

**Course - Title: FINANCIAL MANAGEMENT**

**Maximum marks: 30**

**Date: 30-09-2019**

**Duration: 90 Minutes**

**Time: 4:00 PM -5:30 PM**

**Q.1.** The projected Income statement of **XYZ Ltd.** for the year 2019-20 is under. (All figures Rs. Crores)

Gross Sales		900
Raw material consumed	360	
Wages	162	
Other conversion cost	90	
Administrative expenses	42	
Selling expenses on domestic sales	24	
Depreciation	20	
Primary Packing charges	30	
Packing and other exp for export	10	
GST @ 8% on domestic sales	48	
Income tax	60	846
Profit after tax		54

Assume that raw material and all expenses (other than specific) are incurred proportionately for domestic and export sales

Your are informed that:

1. Account receivable both export and domestic are valued at actual cost
2. WIP is valued at factory cost assuming the consumption 100 % of raw material and other expenses being incurred evenly.
3. Credit allowed on domestic sale is 2 months and export sales is 4 months.
4. Finished goods remain in stock for one month, raw material remains in stock for one and half months and WIP remains in stock for half a month.
5. Credit allowed by suppliers is half a month. Lag in payment of all expenses including GST (other than packing and other charges for export) is one month.
6. Minimum required cash balance is Rs 2 crores.

You are required to :

- a) Estimate the net working capital requirement for the company for the year 2019-20
- b) Calculate the **Maximum permissible bank finance**, if the stipulated margin is 25% on net raw material holding and total finished goods holding and 40% on domestic receivable and zero margin on export receivable. **( 10 Marks )**

## Either

**Q.2.)** Board of Directors of Modern Rice Mill Ltd has been considering the proposal to replace the existing coal-fired furnace in the paddy boiling section by a new furnace cyclone type husk-fired furnace. The capital cost of the new furnace is expected to be \$ 120 thousands. It will have a useful life of 6 years at the end of which period its residual value will be negligible. The present furnace has a book value of \$15,000 and can be used for another 3 years with only minor repairs. If scrapped now, it can fetch \$ 10,000 but it cannot fetch any amount if scrapped after two more years of use. The basic advantage of the new furnace is that it does not depend on the coal whose supplies are becoming increasingly erratic in recent years. On a conservative estimate, the new furnace will result in a saving of \$ 30,000 per annum on account of eliminated coal cost. However, the cost of electricity and other operating expenses are likely to go up by \$ 8,000 and \$ 4,000 per annum respectively. The husk which results as a by-product during the normal milling operations at 3,000 metric ton of paddy milled per year is considered adequate for operating the new furnace. On an average, for every metric ton of paddy milled, the husk content is 20 per cent. At present, the husk resulting during the milling operations is sold at a price of \$ 100 per metric ton. Once the new furnace is installed, the husk will be diverted for own use. 'White Ash' which constitutes about 5 percent of the husk burnt in the new furnace, will be collected in a separate ash-pit as it has considerable demand in the refractory industry. It can be sold very easily at a price of \$ 200 per metric ton. The new furnace will require a motor of 15 HP, whose cost is not included in \$ 120 thousands, the capital cost of the furnace. A 15 HP motor is lying idle with the polishing section of the Mill which can fetch an amount of \$ 3,000 on sale. It has a net book value of \$ 6,000. The motor can be used for the new furnace. At the end of the ten years, it can be scrapped at zero residual value. All the assets of the company are in the same block. Depreciation will be on straight line basis and the same is assumed to be acceptable for tax purpose as well. 20% of the cost of the furnace will be received as subsidy at the end of second year. Applicable tax rate is 35 per cent and cost of capital is 12 per cent.

*Required:*

(i) Formulate the incremental net after-tax cash flows associated with the replacement project. (ii) Also calculate the project's NPV. (iii) Give your recommendation.

**( 10 Marks )**

**OR**

**Q.2.)**

From the following Balance Sheet and additional information prepare a cash flow statement in the prescribed format

Liabilities	31 March		Assets	31 March	
	2018 Rs	2019 Rs		2018 Rs	2019 Rs
Equity Share Capital	3,00,000	5,00,000	Intangibles	1,15,000	90,000
Security Premium		50,000	Land & Buildings	2,00,000	1,70,000
Preference Share Capital	1,50,000	1,00,000	Plant& Mach	80,000	2,50,000
General Reserve	45,000	70,000	Investment	10,000	58,000
Profit and Loss A/C	25,000	48,000	A/C receivable	1,60,000	2,30,000
Proposed Dividends	55,000	50,000	Stock	77,000	1,29,000
Creditors	42,000	83,000	Bills Receivable	20,000	30,000
Accounts Payable	25,000	18,000	Cash at Bank	15,000	10,000
Prov. for Taxation	<u>35,000</u>	<u>48,000</u>			
	<b><u>6,77,000</u></b>	<b><u>9,67,000</u></b>		<b><u>6,77,000</u></b>	<b><u>9,67,000</u></b>

Additional Information

- (i) Depreciation of Rs 40,000 and 30,000 have been charged on Plant& Mach and Land and Buildings respectively in 2019.
- (ii) An interim dividend of Rs 30,000 has been paid in 2019.
- (iii) Income Tax of Rs 52,000 has been paid in 2019.
- (iv) Preference Shares are redeemed at 20% premium.
- (v) Equity shares worth Rs 1,00,000 have been issued to acquire a machine
- (vi) An investment costing Rs 7,000 was sold for Rs 12,000

**( 10 Marks )**

**Q.3.a).** The following details of Midcap Company listed in NSE are available .

Capital Block:

12% 5- year Redeemable Preference shares of Rs100 each	200 lacs
15% 6- year Debentures of face value Rs 1000	300 lacs
Equity shares of Rs 10 each	400 lacs
Retained earnings	300 lacs

Additional information

Beta company's share is 0.80, Corporate tax rate is 30%, Dividend distribution Tax is 15%. Average return on Company's equity shares is 20%. Risk free return is 8.5%. The floatation cost for share and debenture is 2% Assume cost of retained earnings as one percent less than the cost of equity. Use YTM formula wherever required.

Calculate the approximate Weighted Average Cost of Capital.

**( 5 Marks )**

**Q.3.b).** Following details of X Ltd as of 31<sup>st</sup> March 2019 are available

Equity shares capital - 20,00,000 shares @ Rs. 10/- each fully paid

(8,00,000 fully paid shares were issued on 1<sup>st</sup> October 2018)

10% preference shares - 10,00,000 shares @ Rs. 20/- each

( Each Convertible into 2 equity shares @ Rs. 10/- each)

Profit Before Tax - Rs. 50,00,000/-

Tax Rate - 30%.

Calculate the Basic EPS & Diluted EPS

**( 3 Marks )**

**Q.3.b).** Mr.Needy takes a loan of Rs 5,00,000 which is to be repaid in 12 equal monthly installments at an interest of 15% p.a and EMI, being payable at the end of each month. Determine the equated monthly installment

**( 2 Marks)**

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