

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, K.K. BIRLA GOA CAMPUS
MID- SEM EXAMINATION, SECOND SEMESTER 2022-23**

Course - Title: FINANCIAL MANAGEMENT (ECON FIN 315)

Maximum marks: 35

Date: 17-03-2023

Duration: 90 Minutes

Time: 4:00 -5:30 PM

SECTION - A (25 Marks)

Answer all questions

Q.1.) From the following particulars prepare the Balance sheet

Sales for the year (All Credit)	Rs 30,00,000
GP ratio	25%
Fixed Asset turn over (based on COGS)	1.5
Inventory turnover (based on COGS)	6
Liquid Ratio	1:1
Current Ratio	1.5 : 1
Receivable collection period	2 Months
Reserve to Share capital	0.6 : 1
Capital Gearing ratio (Long-term debt/shareholders fund)	0.5
Fixed assets to net worth	1.2 : 1

(8 Marks)

Q.2 a.)

A company produces product B which is sold at a price of Rs. 80. Its variable cost is Rs.32 per unit. The company's fixed cost is Rs. 11, 52,000 per annum. The company operates at a margin of safety of 40 %. Find the profit per annum.

The company proposes to add another product Q whose selling price is Rs. 50 and the variable cost is Rs. 10 per unit. The company's fixed cost will, in that event, increase to Rs. 13, 33,200. The sales mix of B and Q will be 7:3. Calculate the break –even point of B and Q in value and units.

(5 Marks)

Q.2 b.) A machine is hired for 4 years at annual lease rental of Rs 6,00,000 payable at the beginning of the year with the stipulation that rent will be increased by 10% in every year. If the required rate of return is 12% p.a what is the PV of the expected annuity. **(3 Marks)**

Q.3.)

The following is the combined Balance sheet of X Ltd

Liabilities	31.03.21 Rs	31.03.22 RS	Assets	31.03.21 Rs	31.03.22 RS
Equity Share capital	14,40,000	19,20,000	Fixed Assets	38,40,000	45,60,000
Capital Reserve	0	48,000	Less: Provision for depreciation	(11,04,000)	(13,92,000)
General Reserve	8,16,000	9,60,000		27,36,000	31,68,000
P & L a/c	2,88,000	3,60,000	Investments	4,80,000	3,84,000
9% Debentures – (Face Value Rs 100)	9,60,000	6,72,000	Debtors	12,00,000	14,00,000
Creditors	5,50,000	5,90,000	Inventory	1,40,000	1,84,000
Bills Payable	26,000	34,000	Cash in hand	4,000	0
Proposed Dividend	1,44,000	1,72,800	Intangibles assets	96,000	48,000
Provision for tax	4,32,000	4,08,000			
Unpaid dividend	0	19,200			
	46,56,000	51,84,000		46,56,000	51,84,000

Additional information:

During the year ended 31st March 22 the company :

- i. Sold a machine for Rs 1,20,000, the cost of the machine was Rs 2,40,000 and depreciation provided on it was Rs 84,000
- ii. Sold some investment and profit credited to the Capital reserve
- iii. 30% of the debentures were redeemed at the beginning of the year at 105 per debenture
- iv. Paid interest on the balance of debentures(Consider this as financial item)
- v. Discarded one machine costing Rs 60,000 on which depreciation of Rs 48,000. Scrap realised nothing
- vi. Paid income tax of Rs 4,40,000.

From the above prepare a Cash flow statement in the prescribe format.

(9 Marks)

SECTION - B (10 Marks)

Q.4.)

Consider the following projects for the below points:

Project	C_0	C_1	C_2	C_3	C_4
A	-5000	+1000	+1000	+3000	0
B	-1000	0	+1000	+2000	+3000
C	-5000	+1000	+1000	+3000	+5000

- a) What is the payback period on each of the following projects? Given that you wish to use the payback rule with a cutoff period of two years, which projects would you accept? If you use a cutoff period of three years, which projects would you accept?
- b) If the opportunity cost of capital is 10%, which projects have positive NPVs?
- c) If the firm uses the discounted-payback rule, will it accept any negative-NPV projects? Will it turn down positive-NPV projects? Explain.

(3+2+2=7 Marks)

Q.5.)

Cost of project is 45 lakhs. Risk free rate is 5%. Calculate Net Present Value under Certainty Equivalent Method:

Year	Expected Cash Flows (in lakhs)	Certainty Equivalent Coefficient
1	20	0.92
2	25	0.87
3	30	0.85
4	35	0.75

(3 Marks)
