Nirma University

University Elective Course

Semester End Examination (IR), April - 2022

B. Pharm. in Bachelor of Pharmacy, Semester - VIII

B. Tech. in IC / EC / CSE, Semester - VI

UEIM007 Financial Management

Roll / Exam No. [ ] Supervisor's initial with date [ ]

Time: 3 Hours Max. Marks: 100

Instructions:
1. Attempt all questions.
2. Internal options available in few questions
3. Figures to right indicate full marks.
4. Use only black/blue coloured pen only.
5. Marks are reserved for neatness, presentation and format.
6. Attach the Question Paper along with the Answer sheet.

Section – I

Q-1. (A) Ayan Ltd. Co. borrows Rs. 50,00,000 from a commercial bank for a period of 5 years at 15 percent rate of interest to be paid in equal annual end-of-year instalments. Determine the amount of instalments and draw the loan amortization schedule. **(10)**

OR

Q-1. (A) Explain the functions of financial management. **(10)**

Q-1. (B) A firm whose cost of capital is 14% is considering two mutually exclusive projects X and Y, the details of which are:

	Cash flows	
Year	**Project X**	**Project Y**
0	(-12,00,000)	(-12,00,000)
1	90,000	1,00,000
2	8,00,000	9,00,000
3	7,00,000	6,00,000
4	9,00,000	5,00,000
5	7,50,000	9,00,000
6	8,60,000	9,00,000

Compute the Net present Value at 14% and Internal Rate of Return for the two projects and suggest which project should be selected & why? **(20)**

Q-2 (A) A firm requires Rs. 50 million in cash for meeting its transaction needs over the next three months, its planning horizon for liquidity decisions. It currently has the amount in the form of marketable securities that earn 8 percent annual yield. The cash payments will be made evenly over the planning period. The conversion of marketable securities into cash entails a fixed cost of Rs. 1000 per transaction. What is the optimal conversion size as per Baumol model? **(5)**

Q-2 (B) The capital structure of CSK Ltd. in book value terms is as follows:

Equity capital (20 million shares, Rs. 10 par)	Rs. 200 million
Preference capital, 12 percent (500,000 shares, Rs. 100 par)	Rs. 50 million
Retained earnings	Rs. 350 million
Debentures 14 percent (1,200,000 debentures, Rs. 100 par)	Rs. 120 million
Term loans, 13 percent	Rs. 80 million

The next expected dividend per share is Rs. 2.00. The dividend per share is expected to grow at the rate of 12 percent. The market price per share is Rs. 50.00. Preference stock, redeemable after 10 years, is currently selling for Rs. 85.00 per share. Debentures, redeemable after 5 years, are selling for Rs. 90.00 per debenture. The tax rate for the company is 30 percent. The cost of retained earnings is assumed to be equal to cost of equity. Calculate the average cost of capital. **(15)**

Section – II

Q-1. The present credit terms of a company are: '1/10, net 30'. Its entire sale is on credit which amounts to Rs. 1400 crore. Its variable cost ratio is 0.55 and post-tax cost of capital is 20 percent. The proportion of sales on which customers currently take cash discount is 0.5. The customers are disciplined in making the payment; hence the average collection period works out to be 20 days. The corporate tax is 30% The Company is considering the following two alternative policy changes.

Proposed Policy-1: The Company wants to extend its credit period (keeping discount terms same) by relaxing its credit terms to '1/10, net 60'. Such relaxation is expected to increase sales by 20% and decrease the proportion of credit sales on which cash discount was offered to 0.3. Bad debt loss is expected to be 5% of the additional sales. However, the remaining customers are expected to continue observing the payment discipline.

Proposed Policy-2:
Relaxing its credit terms to '2/10, net 30'. Such relaxation is expected to increase sales by 10% and increase the proportion of cash discount sales to 0.6. The customers are expected to continue observing the payment discipline. No additional bad debt loss is expected.

Required: Answer the following questions examining the impact of each policy change one at a time, and assuming 360 days in a year.
(i) Compute the net gain/loss under the Proposed Policy-1.
(ii) Compute the net gain/loss under the Proposed Policy-2. **(15)**

OR

Q-1. A newly formed company has applied to the commercial bank for the first time for financing its working capital requirements. The following information is available about the projections for the current year. Add 10% to your computed figure to allow for contingencies. Estimated level of activity: 1,04,000 units of production per annum. Estimated cost per unit is as follows:

Raw material	Rs80 per unit
Direct wages	Rs 30 per unit
Overhead	Rs60 per unit
Total cost	Rs 170 per unit
Selling price	Rs 200 per unit

Raw materials in stock - average 4 weeks consumption
Work-in-progress (assume 100% completion stage in respect of materials and 50% completion stage in respect of conversion cost) - average 2 weeks
Finished goods in stock - average 4 weeks consumption
Credit allowed by suppliers - Average 4 weeks
Credit allowed to debtors/receivables - Average 8 weeks
Lag in payment of wages and overheads - Average 1½ weeks

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Cash at bank (for smooth operation) is expected to be Rs 25,000.
Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only. Find out the net working capital required. **(15)**

Q-2. LSG Brothers have requested you to prepare their cash budget for the period January 20X2 through April 20X2. The following information is available:

The estimated sales for the period of January 20X1 through June 20X1 are as follows: 150,000 per month from January through March, and 200,000 per month from April through June. The sales for the months of November and December of 20X0 have been 120,000 each.

The division of sales between cash and credit sales is as follows: 30 percent cash and 70 percent credit. Credit collection pattern is: 40 and 60 percent after one and two months respectively.

Other anticipated receipts are: (i) 70,000 from the sale of a machine in April, (ii) 3,000 interest on securities in June.

The estimated purchases of materials are: 60,000 per month from January to March and 80,000 per month from April to June. The payments for purchases are made approximately a month after the purchase.

The purchases for the months of December, 20X0 have been 60,000 for which payments will be made in January 20X1.

Miscellaneous cash purchases of 3,000 per month are planned, January through June.
Wage payments are expected to be 25,000 per month, January through June.

Manufacturing expenses are expected to be 32,000 per month, January through June.

General administrative and selling expenses are expected to be 15,000 per month.

Dividend payment of 30,000 and tax payment of 35,000 are scheduled in June 20X1.

A machine worth 80,000 is planned to be purchased on cash in March 20X1.

The cash balance as on 1st January 20X1 is 28,000. The minimum cash balance required by the firm is 30,000. Prepare a statement showing the surplus/ deficit in relation to the minimum cash balance required. **(20)**

Q-3. A company needs Rs. 5,00,000 for construction of a new plant. The following three financial plans are available: (i) The company may issue 50,000 equity shares of Rs. 10 each or (ii) The company may issue 25,000 equity shares of Rs. 10. Each and 2,500 debentures of Rs. 100 each carrying 8% rate of interest (iii) The company may issue 25,000 equity shares of Rs. 10 each and 2,500 preference shares of Rs. 100 each carrying 8% dividend. If the company's EBIT is Rs. 60,000, what will be the EPS under each alternative? Which alternative would you select in order to achieve EPS maximization? Assume a tax rate of 50%. **(15)**

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