PG Even Semester Examination, May 2025

BUSINESS ADMINISTRATION

(2nd Semester)

Course No.: CP-202

(Financial Management and Planning)

Full Marks: 70

Pass Marks: 28

Time: 3 hours

The figures in the right margin indicate full marks for the question.

1. (a) Differentiate between ordinary annuity, annuity due and deferred annuity. 4

   (b) (i) You need to have ₹50,000 at the end of 10 years. To accumulate this sum, you have decided to save a certain amount at the end of each year for the next 10 years and deposit it in the bank. The bank pays 8 percent interest compounded annually for long term deposits. How much will you have to save each year? 5

   (ii) If you deposit the amount (as in case (b) at the beginning of each of the next 10 years, instead of at the end of each of the year, how much will you have to save each year? 5

Or

2. (a) Differentiate between annuity and perpetuity. 4

(b) Ramendu has decided to start saving for the retirement. Beginning on his twenty first birthday, the plans to invest ₹2000 each birthday into a savings investment earning a 7 percent compound annual rate of interest. He will continue this saving program for a total of 10 years and then stop making payment. But his savings will continue to compound at 7 percent for 35 more years, until he retires at age 65. Shyamendu also plans to invest ₹2000 a year, on each birthday, at 7 percent, and will do so for a total of 35 years. However, he will not begin his contribution until his thirty-first birthday.

How much will Ramendu's and Syamendu's saving programs be worth at the retirement age of 65? Who is better of financially at retirement and by how much? 8+2=10

3. (a) Contrast the internal rate of return methods of project evaluation and selection with the net present value method. 4

(b) Calculate the net present value and internet rate of return of each project:

Period	Project A (₹)	Project B (₹)	Project C (₹)
0	(5000)	(5000)	(5000
1	900	700	20000
2	900	800	2000
3	900	900	2000
4	900	1000	1000

consideration : zero, ₹5 lakhs, and ₹10 lakhs. All traditional funds requirements will be borrowed under the company's bank line of credit.

(i) Determine the total borrowing costs for short and intermediate term debt under each of the three alternatives for the coming year. 8

(Assume that there are no changes in current liabilities other than borrowings). Which alternative is lowest in cost?

(ii) Is there a consideration other than expected cost deserves your attention? 2

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(i) Reformulate the shareholder's equity account if the company pays a 15 percent stock dividend. 4

(iii) Reformulate the shareholder's equity account if the company declares a 5 for 4 stock split. 2

8. (a) Distinguish between 'temporary' and 'permanent' working capital. 4

(b) Reliance Industries has a seasonal pattern to its business. It borrows under a line of credit form Central Bank at 1 percent over prime. Its total asset requirements now (at year end) and estimated requirements for the coming year are (in 10 lakhs) :

	Now	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Total Requirements	₹4.5	₹4.5	₹5.5	₹5.9	₹5.0

Assume that these requirements are level throughout the quarter. At present the company has ₹45 lakhs in quity capital plus long-term debt plus the permanent component of current liabilities and this amount will remain constant throughout the year.

The prime rate currently is 11 percent and the company expects no change in this rate for the next year. Reliance Industries is also considering issuing intermediate term debt at an interest rate of 13.5 percent. In this regard, three alternative amounts are under

5	900	1100	
6	900	1200	
7	900	1300	
8	900	1400	
9	900	1500	
10	900	1600	

The cost of capital for each project is 10 percent. 4+6=10

Or

4. (a) Under what circumstances is it appropriate to use the weighted average cost of capital as an acceptance criterion? 4

(b) (i) Adity Enterprises is financed by two sources of funds : bonds and common stock. The cost of capital for funds provided by bonds is k_i and k_e is the cost of capital for equity funds. The capital structure consists of ₹B worth of bonds and ₹S worth of stock, where the amount represent market values. Compute the overall weighted average of cost of capital, k_0. 3

(ii) Assume that B in problem (i) is ₹30 lakhs and S is ₹70 lakhs. The bonds have 14 percent yield to maturity and the stock is expected to pay ₹5,00,000 in dividends this year. The growth rate of dividends has been 11 percent and is expected to continue at the same rate. Find the cost of capital if the corporation tax rate on income is 40 percent. 5

(c) Distinguish between Book Value and Market Value of Shares. 2

5. (a) Elucidate the long-term impact of financial leverage on capital structure. 4

(b) A company expects a net operating income of ₹1,00,000. It has ₹5,00,000, 6% debentures. The overall capitalization rate is 10%. Calculate the value of the firm and the equity capitalization rate (cost of equity) according to the net operating income approach. If the debenture debt is increaed to ₹7,50,000, what will be the effect on the value of the firm and equity capitalization rate? 5+5=10

6. (a) Contrast a passive dividend policy with an active one. 4

(b) A company expects with some degree of certainty to generate the following net income and to have the following capital expenditures during the next five years (₹ in thousand)

	Year				
	1	2	3	4	5
Net Income	₹2000	₹1500	₹2500	₹2300	₹1800
Capital Expenditure	1000	1500	2000	1500	2000

The company currently has 10 lakh shares of common stock outstanding and pays annual dividends of ₹1 per share.

(i) Determine dividends per share and external financing required in each year if dividend policy is treated as a residual decision. 3

(ii) Determine the amount of external financing that will be necessary in each year if the present annual dividend per share is maintained. 3

(iii) Determine dividends per share and the amount of external financing that will be necessary if a dividend payout ratio of 50 percent is maintained. 3

(iv) Under which of the three dividend policies are aggregate dividends (total dividends over five years) maximised? External required financing (total financing over five years) minimised? 1

Or

7. (a) Discuss in brief the factors influencing a company's dividend policy. 4

(b) A company's shareholder's equity account (bool value) as of December 31, 2024 is as follows :

Common stock (₹5 per value, 1,00,000 share)	₹50,00,000
Additional paid up capital	50,00,000
Retained earnings	1,50,00,000
Total shareholder's equity	₹2,50,00,000

Currently the company is under pressure from shareholders to pay some dividends. The company's cash balance is ₹5,00,000 all of which is needed for transaction purposes.

The stock is trading for ₹7 a shares.