	UNIVERSITY OF RUHUNA **FACULTY OF MANAGEMENT AND FINANCE**	No. of Pages : 07 No. of Questions: 06 Total Marks :70
BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE		*Three Hours*
1000 LEVEL SECOND SEMESTER END EXAMINATION - FEB / MARCH 2023		

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BBA 12043- Introductory Finance Academic Year 2021/2022

Instructions

- The question paper contains 06 questions.
- Answer only five (05) questions.
- Calculators are permitted.

01 (a) " Traditional approach restricts the scope of financial management to arrangement of Funds"

Do you agree with the above statement? Illustrate your views.

(03 marks)

(b) Briefly explain three reasons for money to have a time value.

(03 marks)

(c) Nayani has recently won a lottery and she has decided to invest her winning cash price in her friend's business. The investment will incur cash flows during the below mentioned timelines. The interest rate per annum being 12% and it is compounded on a quarterly basis. Calculate the future value of this investment after 5 years.

Year	Cash Flow (Rs.)
1	25.,000 (Beginning of the year)
2	15,000 (Middle of the year)
3	10,000 (End of the year)
4	35,000 (End of the year)

(02 marks)

12

(d) Kamal receives Rs. 250,000 at the end of each year for 4 years. If the rate of interest is 15%, Calculate the present value of this cash flow stream.

(01 mark)

(e) If he received the same amount as above at beginning of each year for 4 years at the rate of interest is 12%, Calculate how the present value of the cash flow stream.

(01 mark)

(f) Sammani obtained a loan of Rs. 3 million at 12% interest rate from a bank to buy a land. The bank requires her to repay this in five equal installments at the end of each year. Calculate the annual installment and prepare the loan amortization schedule.

(04 marks)

(Total 14 marks)

(02). (a) Discuss how working capital management policies affect both the liquidity and profitability of a business. Give examples.

(03 marks)

(b) The following information is given relating to Star PLC.

	(Rs. 000')
Raw materials consumed	8,800
Total production cost	21,000
Total cost of sales	22,000
Sales for the year	34,560
Overhead cost	6,000
Trade Payables period	16 days
Trade receivables period	10 days
Overhead costs deferred period	6 days

Value of average stock maintained:

	(Rs.000')
Raw materials	660
Work-in-progress	700
Finished goods	550

The number of working days for the year is 360 days.

The cash balance is expected to be Rs. 200,000.

All sales are assumed on credit.

Required:

i) Compute the Gross Operating Cycle (GOC) and Net Operating Cycle (NOC) in days.

(05 marks)

ii) Calculate the number of operating cycles in a year.

(01 mark)

iii) Prepare a statement showing the working capital requirement of the company.

(05 marks)

(Total 14 marks)

(03)

(a) Briefly explain the two factors that contribute to the operating/business risk.

(02 marks)

(b) You are given the following information relating to the existing capital structure of Skyline PLC as at 31st March 2022.

	Rs.
Equity capital	3,000,000
10% Debentures	1,500,000
Reserves & Surplus	1,000,000
Total	5,500,000

Skyline Software company is considering a new project involving a cost of Rs.3,000,000. The Finance Manager has suggested the following alternative plans for financing the new project.

	Rs.000'		
	Plan A	**Plan B**	**Plan C**
Equity Shares (Rs.)	3,000	2,000	1,000
12% Debentures (Rs.)	-	1,000	1,000
10% Preferences shares (Rs.)	-	-	1,000

The face value of all the shares and debentures is Rs.100 each. But if the new project is financed entirely by equity, the new shares can be sold at Rs.120.

The company's Earnings before Interest and Taxes (EBIT) is Rs.850, 000

Assume a tax rate of a 30%.

You are required

(i) Calculate the Earnings Per Share (EPS) under each of the three financing plans and interpret the results.

(03 marks)

(ii) Calculate the indifference point for financing plans A and B.

(03 marks)

(c) Briefly explain the factors for determining the capital structure.

(02 marks)

(d) The finance manager of Ruchiranga Company wants to take a decision regarding the Capital structure. After study of capital market, he is attempting to evaluate three Capital structures given below.

Capital Structure	**Value of debt capital (Rs.)**	**Cost of equity capital rate (Ke - %)**	**Cost of debt capital rate (Kd - %)**
CPS – 101	750,000	15.0	12.0
CPS – 102	790,000	17.0	11.0
CPS – 103	880,000	18.0	16.0

Required

If the expected earnings before interest and taxes (EBIT) of the company was Rs 180,000. Which of these capital structures will you recommend? Justify your answer.

(04 marks)

(Total 14 marks)

04.(a) Define the cost of capital and list out its significances for making decisions in an organization.

(03 marks)

(b) The following is the statement of financial position extracts as at 31st March 2022 of New Lanka Company.

	Rs. Million
Ordinary Shares at Rs.10 per share	260
Retained Earnings	200
14%, Preference shares at Rs.10 per share	180
8%, Debentures at Rs.100 per debenture	160

The ordinary shares of the company have a cum- dividend market value of Rs.32.50 per share and the dividend for per ordinary share is Rs.5.00 which is expected to grow at 10% constant rate. The irredeemable preference shares of the company have a cum dividend market value of Rs. 15.40 per share. The 8% debentures are redeemable at a 10% premium after 5 years. The cum interest market value of debenture is Rs.113. The company pays tax at an annual rate of 12.5%.

Required

Calculate the weighted average cost of capital (WACC) of the company.

(08 marks)

(c) The following information relate to the debentures of P, Q and R companies.

Company	Face value of debenture	Annual rate of interest	Required rate of return	Interest payable period (months)	Maturity Period (Years)
P	400,000	12%	14%	06	08
Q	700.000	12%	15%	04	10
R	600.000	10%	12%	03	05

Required

Calculate the present value of each debenture.

(03 marks)

(Total 14 marks)

14

05. (a) Briefly explain systematic and unsystematic risk using examples

(04 marks)

(b) A portfolio consists two investment as R and S with the following information.

1. Expected rate of return of portfolio is 21%.
2. Investment R and S are weighted 40% and 60% respectively.
3. Investment R has the following rate of returns with their probabilities.

Rate of Return (k) - %	20	10	30	40
Probabilities (P) - %	20	30	30	20

Required

(i) Calculate the expected rate of return of the investment R and S.

(02 marks)

(ii) Calculate the standard deviation of investment R.

(02 marks)

(iii) If the standard deviation of investment S is 30% and co-variance between investment R and S is 50%, calculate the standard deviation of the portfolio.

(02 marks)

(iv) Calculate coefficient of variation of the portfolio. (01 mark)

(c) Standard deviations of investment R and market M are 36% and 42% respectively. Correlation Coefficient between investment R and market M is 0.8.

Required

(i) Calculate the co-variance between investment R and market M.

(ii) Calculate the beta coefficient for investment R.

(03 marks)

(Total 14 marks)

06. (a) In making capital budgeting decision certain types of costs are not considered. Explain three (03) types of costs that are not considered in capital budgeting decisions.

(03 marks)

(b) NMK Manufacturing Pvt Limited is a company which produces personal care products. During the COVID 19 pandemic period they invested in Research and Development and developed a new hand sanitizer using Alovera and some other hurbs. They planned to purchase a new machine which can produce more hand sanitizers than the existing machine they have. The new machine costs Rs. 2 million and has a useful life of 5 years. By the end of it's life time the machine can be sold for Rs. 1.5 million. The new machine is depreciated using straight line method. The purchase of this new machine will incur additional working capital for the company of Rs. 01 million at the start of the project.

The new machine will generate following sales (in units) over the five years. Selling price per unit during the first two years is Rs.1200 and then increase by Rs.300 for the rest of the years.

Year	1	2	3	4	5
Sales (Units)	1000	1400	1500	1600	1650

The variable cost per unit is Rs.650 during the first three years and increase by Rs.100 for the next few years. The selling price and variable costs are affected by the high inflation rate. The applicable inflation rate for the selling price and variable cost is 12% and 10% respectively. The relative selling prices and variable costs remain the same without any impact of inflation during the first year and start to be influenced by inflation from 2nd year onwards. The total fixed cost per annum is Rs.500,000 excluding depreciation. The company's Finance Manager has provided the following additional information.

- Tax rate is 30% of taxable profits and tax is payable in the year in which it arises.
- The cost of capital of 10% per annum is used to evaluate projects of this type and this cost of capital is considered as adjusted for inflation.

Required

Evaluate whether the company should go ahead with the investment project. You should use NPV as the basis of your evaluation.

(11 marks)

(Total 14 marks)

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15