CA INTERMEDIATE

SUBJECT-F.M. AND ECONOMICS

Test Code – PIN 5073

(Date :)

(Marks - 100)

SECTION – A (60 MARKS)

QUESTION NO.1 is compulsory and attempt any four out of remaining five questions.

Working notes should form part of the answer

QUESTION NO.1 **(5 MARKS X 4 = 20 MARKS)**

A. A Ltd. and B Ltd. are identical in every respect except capital structure. A Ltd. does not employ debt in its capital structure, whereas B Ltd. employs 12% debentures amounting to Rs. 10 lakh. Assuming that-

(i) All assumptions of MM model are met

(ii) The income tax rate is30%

(iii) EBIT is Rs. 2,50,000and

(iv) The equity capitalization rate of A Ltd. is 20%.

CALCULATE the average Value of both the companies.

B. Following figures and information were extracted from the company A Ltd.

Earnings of the company	` 10,00,000
Dividend paid	` 6,00,000
No. of shares outstanding	2,00,000
Price Earnings Ratio	10
Rate of return on investment	20%

You are required to calculate:

(i) Current Market price of the share

(ii) Capitalisation rate of its risk class

(iii) What should be the optimum pay-out ratio?

(iv) What should be the market price per share at optimal pay-out ratio?
(use Walter's Model)

C. ABC Ltd. is examining the question of relaxing its credit policy. It sells at present 20,000 units at a price of Rs. 100 per unit, the variable cost per unit is Rs. 88 and average cost per unit at the current sales volume is Rs. 92. All the sales are on credit, the average collection period being 36 days.

A relaxed credit policy is expected to increase sales by 10% and the average age of receivables to 60 days. Assuming 15% return, should the firm relax its credit policy ?

D. Determine the risk adjusted net present value of the following projects:

	X	Y	Z
Net cash outlays (Rs.)	2,10,000	1,20,000	1,00,000
Project life	5 years	5 years	5 years
Annual Cash inflow (Rs.)	70,000	42,000	30,000
Coefficient of variation	1.2	0.8	0.4

The Company selects the risk-adjusted rate of discount on the basis of the coefficient of variation:

Coefficient of Variation	Risk-Adjusted Rate of Return	P.V. Factor 1 to 5 years At risk adjusted rate of discount
0.0	10%	3.791
0.4	12%	3.605
0.8	14%	3.433
1.2	16%	3.274
1.6	18%	3.127
2.0	22%	2.864
More than 2.0	25%	2.689

QUESTION NO.2 **(10 MARKS)**

M/s. Navya Corporation has a capital structure of 40% debt and 60% equity. The company is presently considering several alternative investment proposals costing less than Rs. 20 lakhs. The corporation always raises the required funds without disturbing its present debt equity ratio.

The cost of raising the debt and equity are as under :

Project cost	Cost of debt	Cost of equity
Upto Rs. 2 lakhs	10%	12%
Above Rs. 2 lakhs & upto to Rs. 5 lakhs	11%	13%
Above Rs. 5 lakhs & upto Rs. 10 lakhs	12%	14%
Above Rs. 10 lakhs & upto Rs. 20 lakhs	13%	14.5%

Assuming the tax rate at 50%, **CALCULATE :**

(i) Cost of Capital to two projects X and Y whose fund requirements are Rs. 6.5 lakhs and Rs. 14 lakhs respectively.

(ii) If a project is expected to give after tax return of 10%, DETERMINE under what conditions it would be acceptable ?

QUESTION NO.3 **(10 MARKS)**

Consider the following mutually exclusive projects:

Cash flows (Rs.)					
Projects	C_0	C_1	C_2	C_3	C_4
A	-10,000	6,000	2,000	2,000	12,000
B	-10,000	2,500	2,500	5,000	7,500
C	-3,500	1,500	2,500	500	5,000
D	-3,000	0	0	3,000	6,000

Required:

(i) Calculate the payback period for each project.

(ii) If the standard payback period is 2 years, which project will you select? Will your answer differ, if standard payback period is 3 years?

(iii) If the cost of capital is 10%, compute the discounted payback period for each project. Which projects will you recommend, if standard discounted payback period is (i) 2 years; (ii) 3 years?

(iv) Compute NPV of each project. Which project will you recommend on the NPV criterion? The cost of capital is 10%.What will be the appropriate choice criteria in this case? The PV factors at 10% are:

Year	**1**	**2**	**3**	**4**
PV factor at 10%(PV/F 0.10, t)	0.9091	0.8264	0.7513	0.6830

QUESTION NO.4 **(10 MARKS)**

A company is considering its working capital investment and financial policies for the next year. Estimated fixed assets and current liabilities for the next year are Rs. 2.60 crores and Rs. 2.34 crores respectively. Estimated Sales and EBIT depend on current assets investment, particularly inventories and book-debts. The Financial Controller of the company is examining the following alternative Working Capital Policies:

(Rs. in crore)

Working Capital Policy	**Investment in Current Assets**	**Estimated Sales**	**EBIT**
Conservative	4.50	12.30	1.23
Moderate	3.90	11.50	1.15
Aggressive	2.60	10.00	1.00

After evaluating the working capital policy, the Financial Controller has advised the adoption of the moderate working capital policy. The company is now examining the use of long-term and short-term borrowings for financing its assets. The company will use Rs. 2.50 crores of the equity funds. The corporate tax rate is 35%. The company is considering the following debt alternatives.

(Rs. in crore)

Financing Policy	Short-term Debt	Long-term Debt
Conservative	0.54	1.12
Moderate	1.00	0.66
Aggressive	1.50	0.16
Interest rate-Average	12%	16%

You are required to CALCULATE the following:

(i) Working Capital Investment for each policy:
- (a) Net Working Capital position
- (b) Rate of Return
- (c) Current ratio

(ii) Financing for each policy:
- (a) Net Working Capital position.
- (b) Rate of Return on Shareholders' equity.
- (c) Current ratio.

QUESTION NO.5 **(10 MARKS)**

The Balance Sheet of Gitashree Ltd. is given below:

Liabilities		(Rs.)
Shareholders' fund		
Equity share capital of Rs. 10 each	Rs. 1,80,000	
Retained earnings	Rs. 60,000	2,40,000
Non-current liabilities 10% debt		2,40,000
Current liabilities		1,20,000
		6,00,000
Assets		
Fixed Assets		4,50,000
Current Assets		1,50,000
		6,00,000

The company's total asset turnover ratio is 4. Its fixed operating cost is Rs. 2,00,000 and its variable operating cost ratio is 60%. The income tax rate is 30%.

Calculate:

(i) (a) Degree of Operating leverage.

(b) Degree of Financial leverage.

(c) Degree of Combined leverage.

(ii) Find out EBIT if EPS is (a) Rs. 1 (b) Rs. 2 and (c) Rs. 0.

QUESTION NO.6

A. EXPLAIN Financial Distress and explain its relationship with Insolvency. **(4 MARKS)**

B. DISCUSS the limitations of financial ratios. **(4 MARKS)**

C. DISCUSS the dividend-price approach to estimate cost of equity capital. **(2 MARKS)**

SECTION – B (40 MARKS)

QUESTION NO.7 is compulsory and attempt any three out of remaining four questions.

QUESTION NO.7

A. Suppose you are given following information-

Consumption function $C = 10 + 0.8Y_d$

Tax $T = 50$

Investment spending $I = 135$

Government Spending $G = 60$

Exports $X = 35$

Imports $M = 0.05\ Y$

Where Y and Y_d are income and personal disposable income respectively.

<u>Find the equilibrium level of income and net exports.</u>

(3 MARKS)

B. Define Foreign Direct Investment (FDI). Mention two arguments made in favour of FDI to developing economies like India? **(5 MARKS)**

C. Explain Monetary Policy Frame work agreement or Inflation targeting by RBI.

(2 MARKS)

QUESTION NO.8

A. Explain the significance of "Public Debt" as an Instrument of Fiscal Policy. **(5 MARKS)**

B. What is the crux of Heckscher-Ohlin theory of International Trade. **(3 MARKS)**

C. Explain the concept of Disposable Income [DI] and its relationship with Personal Income. **(2 MARKS)**

QUESTION NO.9

A. **(5 MARKS)**

Assume that an Economy's Consumption Function is specified by the equation C = 6,000 + 0.75Y. Answer the following –

(a) What will be the Consumption when Disposable Income (Y) is Rs. 20,000, Rs. 25,000 and Rs. 30,000 ?

(b) Find the saving when disposable Income is Rs. 20,000 Rs. 25,000 and Rs. 30,000.

(c) What amount of Consumption for Consumption Function C is autonomous ?

(d) What amount is induced when Disposable Income is Rs. 20,000, Rs. 25,000 and Rs. 30,000 ?

B. Explain the functioning of SLR? **(2 MARKS)**

C. What are the principles governing application of sanitary and phytosanitary measures? **(3 MARKS)**

QUESTION NO.10

A. Explain the concept of "Crowding Out", by which Fiscal Policy is rendered ineffective.

(2 MARKS)

B. Explain the principle motivations of a country seeking FDI?

(5 MARKS)

C. Explain the concept of adverse selection. What are the possible consequences of adverse selection? **(3 MARKS)**

QUESTION NO.11

A. Define aggregate demand .How do you derive the Keynesian aggregate demand schedule? **(3 MARKS)**

B. Explain the term quasi-public goods. **(2 MARKS)**

C. Explain the neo-classical approach to demand for money. **(3 MARKS)**

D. Distinguish between positive and negative externalities. **(2 MARKS)**