(GI-7 & GI-8, VDI-3 & FMT)

DATE: 16.04.2023 **MAXIMUM MARKS : 100** **TIMING: 3¼ Hours**

PAPER: FM + ECO

SECTION - A
Q. No. 1 is compulsory.
Candidates are also required to answer any four questions from the remaining five questions.
In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions top answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.
Working Notes should form part of the respective answer.

Question 1:

(a) A company wants to invest in a machinery that would cost Rs. 50,000 at the beginning of year 1. It is estimated that the net cash inflows from operations will be Rs. 18,000 per annum for 3 years, if the company opts to service a part of the machine at the end of year 1 at Rs. 10,000. In such a case, the scrap value at the end of year 3 will be Rs. 12,500. However, if the company decides not to service the part, then it will have to be replaced at the end of year 2 at Rs. 15,400. But in this case, the machine will work for the 4th year also and get operational cash inflow of Rs. 18,000 for the 4th year. It will have to be scrapped at the end of year 4 at Rs. 9,000. Assuming cost of capital at 10% and ignoring taxes, will you recommend the purchase of this machine based on the net present value of its cash flows?
If the supplier gives a discount of Rs. 5,000 for purchase, what would be your decision? (The present value factors at the end of years 0, 1, 2, 3, 4, 5 and 6 are respectively 1, 0.9091, 0.8264, 0.7513, 0.6830, 0.6209 and 0.5644).

(7 Marks)

(b) A&R Ltd. is considering one of two mutually exclusive proposals, Projects - X and Y, which require cash outlays of Rs. 42,50,000 and Rs. 41,25,000 respectively. The certainty-equivalent (C.E) approach is used in incorporating risk in capital budgeting decisions. The current yield on government bonds is 5.5% and this is used as the risk-free rate. The expected net cash flows and their certainty equivalents are as follows:

	Project X		Project Y	
Year-end	**Cash Flow (Rs.)**	**C.E.**	**Cash Flow (Rs.)**	**C.E.**
1	16,50,000	0.8	16,50,000	0.9
2	15,00,000	0.7	16,50,000	0.8
3	15,00,000	0.5	15,00,000	0.7
4	20,00,000	0.4	10,00,000	0.8
5	21,00,000	0.6	8,00,000	0.9

The Present value (PV) factor @ 5.5% is as follows:

Year	0	1	2	3	4	5
PV factor	1	0.947	0.898	0.851	0.807	0.765

Required:
DETERMINE the project that should be accepted?

(7 Marks)

(c) XYZ Ltd. has Owner's equity of Rs. 2,00,000 and the ratios of the company are as follows:

Current debt to total debt	0.3
Total debt to Owner's equity	0.5
Fixed assets to Owner's equity	0.6
Total assets turnover	2 times
Inventory turnover	10 times

COMPLETE the following Balance Sheet from the information given above:

Liabilities	(Rs.)	Assets	(Rs.)
Current Debt	-	Cash	-
Long-term Debt	-	Inventory	-
Total Debt	-	Total Current Assets	-
Owner's Equity	-	Fixed Assets	-

(6 Marks)

Question 2:
A 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:

	Per unit
Elements of cost:	(Rs.)
Raw material	40
Direct labour	15
Overhead	30
Total cost	85
Profit	15
Sales	100

Other information:
Raw material in stock: average 4 weeks consumption, Work – in progress (completion stage, 50 per cent), on an average half a month. Finished goods in stock: on an average, one month.
Credit allowed by suppliers is one month. Credit allowed to debtors is two months.
Average time lag in payment of wages is 1½ weeks and 4 weeks in overhead expenses. Cash in hand and at bank is desired to be maintained at Rs. 50,000.
All Sales are on credit basis only. Required:
Prepare statement showing estimate of working capital needed to finance an activity level of 96,000 units of production. Assume that production is carried on evenly throughout the year, and wages and overhead accrue similarly. For the calculation purpose 4 weeks may be taken as equivalent to a month and 52 weeks in a year.

(10 Marks)

Question 3:
Akash Limited provides you the following information:

	(Rs)
Profit (EBIT)	2,80,000
Less: Interest on Debenture @ 10%	(40,000)
EBT	2,40,000
Less Income Tax @ 50%	(1,20,000)
	1,20,000
No. of Equity Shares (Rs. 10 each)	30,000
Earnings per share (EPS)	4
Price /EPS (PE) Ratio	10

The company has reserves and surplus of Rs. 7,00,000 and required Rs. 4,00,000 further for modernisation. Return on Capital Employed (ROCE) is constant. Debt (Debt/Debt + Equity) Ratio higher than 40% will bring the P/E Ratio down to 8 and increase the interest rate on additional debts to 12%. You are required to ASCERTAIN the probable price of the share.

(i) If the additional capital are raised as debt; and
(ii) If the amount is raised by issuing equity shares at ruling market price.

(10 Marks)

Question 4:
You are required to determine the weighted average cost of capital of a firm using (i) book-value weights and (ii) market value weights. The following information is available for your perusal:
Present book value of the firm's capital structure is:

	(Rs.)
Debentures of Rs. 100 each	8,00,000
Preference shares of Rs. 100 each	2,00,000
Equity shares of Rs. 10 each	10,00,000
	20,00,000

All these securities are traded in the capital markets. Recent prices are:
Debentures @ Rs. 110, Preference shares @ Rs. 120 and Equity shares @ Rs. 22. Anticipated external financing opportunities are as follows:
(i) Rs. 100 per debenture redeemable at par : 20 years maturity 8% coupon rate, 4% floatation costs, sale price Rs. 100.
(ii) Rs. 100 preference share redeemable at par : 15 years maturity, 10% dividend rate, 5% floatation costs, sale price Rs. 100.
(iii) Equity shares : Rs. 2 per share floatation costs, sale price Rs. 22.
In addition, the dividend expected on the equity share at the end of the year is Rs. 2 per share; the anticipated growth rate in dividends is 5% and the firm has the practice of paying all its earnings in the form of dividend. The corporate tax rate is 50%.

(10 Marks)

Question 5:
The following details of RST Limited for the year ended 31st March, 2015 are given below:

Operating leverage	1.4
Combined leverage	2.8
Fixed Cost (Excluding interest)	Rs. 2.04 lakhs
Sales	Rs. 30.00 lakhs
12% Debentures of Rs. 100 each	Rs. 21.25 lakhs
Equity Share Capital of Rs. 10 each	Rs. 17.00 lakhs
Income tax rate	30 per cent

Required:
(i) Calculate Financial leverage
(ii) Calculate P/V ratio and Earning per Share (EPS)
(iii) If the company belongs to an industry, whose assets turnover is 1.5, does it have a high or low assets turnover?
(iv) At what level of sales the Earning before Tax (EBT) of the company will be equal to zero?

(10 Marks)

Question 6:
Write short notes on the following:
(a) Functions of Finance Manager.

(4 Marks)

(b) Inter relationship between investment, financing and dividend decisions.

(3 Marks)

(c) Debt securitization.

(3 Marks)

SECTION - B
Q. No. 7 is compulsory.
Answer any three from the rest.
In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions top answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.
Working Notes should form part of the respective answer.

Question 7:

(a) Using the information given in the following table calculate,
(i) Value added by firm A and firm B
(ii) Gross Domestic Product at Market Price
(iii) Net Domestic Product at Factor Cost.

	Particulars	**Rs. crore**
(i)	Sales by firm B to general government	300
(ii)	Sales by firm A	1500
(iii)	Sales by firm B to households	1350
(iv)	Change in stock of firm A	200
(v)	Closing stock of firm B	140
(vi)	Opening stock of firm B	130
(vii)	Purchases by firm A	270
(viii)	Indirect taxes paid by both the firms	375
(ix)	Consumption of fixed capital	720
(x)	Sales by firm A to B	300

(5 Marks)

(b) Explain the nature of changes in exchange rates and their impact on real economy?
(3 Marks)

(c) Describe the term 'Tragedy of Commons'
(2 Marks)

Question 8:

(a) How do foreign direct investments affect human capital in recipient countries?
(3 Marks)

(b) Define consumption function? Examine what would happen if aggregate expenditures were to exceed the economy's production capacity?
(2 Marks)

(c) Mention the Monetary Policy Framework Agreement.
(3 Marks)

(d) Describe the different determinants of money supply in a country.
(2 Marks)

Question 9:

(a) Examine what types of fiscal policy measures are useful for redistribution of income in an economy?
(5 Marks)

(b) Write a note on Cash Reserve Ratio (CRR). Explain the operation of CRR.
(3 Marks)

(c) What is meant by an 'Anti-dumping' measure?
(2 Marks)

Question 10:

(a) What role does Market Stabilization Scheme (MSS) play in our economy?
(3 Marks)

(b) What is local content requirement? How will it affect trade?
(3 Marks)

(c) Why GATT lost its relevance by 1980?
(2 Marks)

(d) Why do pensions and other security payments get excluded while calculating National Income?
(2 Marks)

Question 11:

(a) Many apprehensions have been raised in respect of the WTO and its ability to maintain and extend a system of liberal world trade. Comment.
(3 Marks)

(b) Even if one nation is less efficient than the other nation in the production of all commodities, there is still scope for mutually beneficial trade. Explain in detail.
(3 Marks)

(c) Identify the market outcomes for each of the following situations
(i) A few youngsters play loud music at night. Neighbours may not be able to sleep.
(ii) Ram buys a large SUV which is very heavy.
(2 Marks)

(d) Explain The Mercantilists View of International Trade.
(2 Marks)

__**__