

PAPER 2- MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS
NOVEMBER, 1998

Answer all Questions
 Working notes should form part of the answer.

Question 1

- (a) Following are the data on a capital project being evaluated by the management of X Ltd., **(12 Marks)**

	Project M
Annual cost of saving	Rs.40,000
Useful life	4 years
I.R.R.	15%
Profitability Index (PI)	1.064
NPV	?
Cost of capital	?
Cost of project	?
Payback	?
Salvage value	0

Find the missing values considering the following table of discount factor only:

Discount factor	15%	14%	13%	12%
1 year	0.869	0.877	0.885	0.893
2 years	0.756	0.769	0.783	0.797
3 years	0.658	0.675	0.693	0.712
4 years	0.572	0.592	0.613	0.636
	2.855	2.913	2.974	3.038

- (b) S Ltd., has Rs.10,00,000 allocated for capital budgeting purposes. The following proposals and associated profitability indexes have been determined:

Project	Amount Rs.	Profitability Index
1	3,00,000	1.22
2	1,50,000	0.95
3	3,50,000	1.20
4	4,50,000	1.18
5	2,00,000	1.20
6	4,00,000	1.05

Which of the above investments should be undertaken? Assume that projects are indivisible and there is no alternative use of the money allocated for capital budgeting.

Question 2

- (a) X Ltd., an Indian Company has an export exposure of 10 million (100 lacs) yen, value September end. Yen is not directly quoted against Rupee. The current spot rates are - USD/INR = 41.79 and USD/JPY = 129.75.

It is estimated that Yen will depreciate to 144 level and Rupee to depreciate against dollar to 43.

Forward rate for September, 1998 USD/Yen = 137.35 and USD/INR = 42.89.

You are required to:

- (i) to calculate the expected loss if hedging is not done. How the position will change with company taking forward cover?
- (ii) If the spot rate on 30th September, 1998 was eventually USD/Yen = 137.85 and USD/INR = 42.78, is the decision to take forward cover justified?

- (b) P Co., has to make payment of Rs.2 million (Rs.20 lacs) on 16th April, 1998. It has a surplus money today i.e., 15th January, 1998 and the company has decided to invest in Certificate of Deposit (CD's) of a leading Nationalized Bank at 8.00 % p.a. What money is required to be invested now? Take year AS 365 DAYS.
- (c) Describe the interface of Financial Policy with Corporate Strategic Management.

Question 3

The following is the Balance Sheet as at 31st March, 1998 of S Co., Ltd.,

(20 Marks)

Share capital	Rs.	Rs.
10,000 equity shares of Rs.100 each fully paid up	10,00,000	
25,000 11% cum. Preference share of Rs.10 each fully paid up	<u>2,50,000</u>	12,50,000
Reserves and surplus		25,00,000
Secured loans		20,00,000
Unsecured loans		12,00,000
Trade creditors		18,00,000
Outstanding expenses		<u>7,50,000</u>
		<u>95,00,000</u>
Represented by		
Fixed assets	55,00,000	
Current assets	37,00,000	
Advances and deposits	<u>3,00,000</u>	<u>95,00,000</u>

The company plans to manufacture a new product in the line with its current production, the capital cost of which is estimated to be Rs.25 lakhs. The company desires to finance the new project to the extent of Rs.16 lakhs by issue of equity shares at a premium of Rs.100 per share and the balance to be raised from internal sources.

Additional informations made available to you are:

- Rate of dividends declared in the past five years i.e. year ended 31st March, 1998, 31st March, 1997, 31st March, 1996, 31st March, 1995 and 31st March, 1994 were 24%,24%,20%,20% and 18% respectively.
- Normal earning capacity (net of tax) of the business is 10%.
- Turnover in the last three years was Rs.80 lakhs (31.3.98) Rs.60 lakhs (31.3.97) and Rs.50 lakhs (31.3.96).
- Anticipated additional sales from the new project Rs.30 lakhs annually.
- Net profit before tax from the existing business which was 10% in the last three years is expected to increase to 12% on account of new product sales.
- Income tax rate is 35%.
- The trend of market price of the equity share of the company, quoted on the Stock Exchange was:

Year	High Rs.	Low Rs.
1997-98	300	190
1996-97	250	180
1995-96	240	180

You are required to examine whether the company's proposal is justified. Do you have any suggestions to offer in this regard? All workings must form part of your answer.

EITHER

Question 4

A company is engaged in the manufacture of specialized sub-assemblies required for certain electronic equipments. The company envisages that in the forthcoming month, December, 1998, the sales will take a pattern in the ration 3:4:2 respectively of sub-assemblies, ACB, MCB and DP.

The following is the schedule of components required for manufacture.

Sub-assembly	Selling price	Component requirements			
		Base Board	IC08	IC12	IC16
ACB	520	1	8	4	2

MCB	500	1	2	10	4
DP	350	1	2	4	8
Purchase Price		Rs.60	20	12	8

The Direct labour time and variable overheads required for each of the sub-assemblies are

Labour hours per sub-assembly Variable overheads per sub-assembly

	Grade A	Grade B	Rs.
ACB	8	16	34
MCB	6	12	24
DP	4	8	24

Direct wage rate per hour Rs.5 4 --

The labourers work 8 hours a day for 25 days a month.

The opening stocks of sub-assemblies and components for December, 1998 are as under:

Sub – assemblies		Components	
ACB	800	Base board	1,600
MCB	1,200	IC08	1,200
DP	2,800	IC12	6,000
		IC26	4,000

Fixed overheads amount to Rs.7,57,200 for the month and a monthly profit target of Rs.12 lacs has been set.

The company is poised for a reduction of closing inventories for December, 1998 of sub-assemblies and components by 10% in quantity as compared to the opening stock.

Prepare the following budgets for December, 1998:

- sales budget in quantity and value.
- Production budget in quantity
- Component usage budget in quantity
- Component purchase in quantity and value
- Manpower budget showing the number of workers and the amount of wages payable.

OR

Question 4

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 :

(20 Marks)

Estimated level of activity : 1,04,000 completed units of production plus 4,000 units of work-in-progress.

Based on the above activity, estimated cost per unit is :

Raw material	Rs. 80 per unit
Direct wages	Rs. 30 per unit
Overheads (exclusive of depreciation)	Rs. 60 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 50% completion stage in respect of conversion cost) (materials issued at the start of the processing)

Finished goods in stock	8,000 units
Credit allowed by suppliers	Average 4 weeks
Credit allowed to debtors / receivables	Average 8 weeks
Lag in payment of wages	Average 1 ½ weeks
Cash at banks (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:

- (i) The net working capital required.

- (ii) The maximum permissible Bank finance under first and second method of Financing as per Tandon Committee Norms.

Question 5**(5×4 = 20 Marks)**

Write short notes on any four of the following:

- (a) Multiple discriminant analysis.
- (b) Packing credit
- (c) Factoring
- (d) Inflation and financial management
- (e) Objectives of portfolio management.