Paper-12: FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE

Time Allowed: 3 Hours **Full Marks: 100**

Answer Question No. 1 from Part A which is compulsory and any five questions from Part B.
Working notes should form a part of the answer
"Wherever necessary, suitable assumptions should be made and indicated in answers by the candidates"

PART A (25 Marks)

1. (a) (i) The dividend decisions are concerned with: [10 x 2 = 20]
(a) determination of quantum of profits to be distribute to the owners
(b) the frequency of such payments
(c) the amounts to be retained by the firm
(d) all of the above

(ii) The shares of B Ltd. are trading at ₹370. If put option with a strike price of ₹380 are priced at ₹20, the intrinsic value and time value of the options respectively are:
(a) ₹ 8, ₹ 8
(b) ₹ 10, ₹ 10
(c) ₹ 8, ₹ 10
(d) Incomplete information

(iii) The dollar is currently trading at ₹40. If rupee depreciates by 10%, what will be the spot rate?
(a) ₹0.0525
(b) ₹0.0552
(c) ₹0.0225
(d) ₹0.0522

(iv) A company issue commercial paper for ₹ 3 crores with a maturity period of 90 days. The interest rate is 11% p.a. The net amount received by the company will be :
(a) ₹2.94 crores
(b) ₹2.92 crores
(c) ₹2.85 crores
(d) ₹3.08 crores

(v) The NAV of each unit of a close-end fund at the beginning of the year was ₹18. By the end of the year its NAV equals ₹18.50. At the beginning of the year each unit was selling at a 2% premium to NAV and by the end of the year each unit is selling at a 4% discount to NAV.
If the closed-end fund paid year end distribution of income of ₹2.50 on each unit,the rate of return to the investor in the fund during the year would be
(a) 10.35%
(b) 11.51%
(c) 11.95%
(d) None of the above

(vi) The face value of a 364-day T-bill is ₹100. If the purchase price is ₹86 then the yield on such a bill is
(a) 12.45%

(b) 13.36%
(c) 16.32%
(d) 16.56%

(vii) A financial lease is preferred in the situation:
(a) when the long-term stability of asset is uncertain
(b) When the lessee want to own the asset but does not have enough funds to invest
(c) when the asset is subject to rapid obsolescence
(d) none of the above

(viii) About 50 items are required every day for a machine. A fixed cost of ₹ 50 per order is incurred for placing an order. The inventory carrying cost per item amounts to ₹ 0.02 per day. The lead period is 32 days. Compute reorder level.
(a) 1,200 items
(b) 1,400 items
(c) 1,600 items
(d) 1,800 items

(ix) ABC Ltd. has a debt-equity mix of 30/70. If ABC Ltd.'s debt beta for its activity (or projects) is 1.21, what is the beta for its equity ?
(a) 1.65
(b) 1.60
(c) 1.52
(d) None of the above

(x) An Indian company is planning to invest in US. The US inflation rate is expected to be 3% and that of India is expected to be 8% annually. If the spot rate currently is ₹ 45/ US$, what spot rate can you expect after 5 years ?
(a) ₹59.09/US$
(b) ₹57.00/US$
(c) ₹57.04/US$
(d) ₹57.13/US$

(b) State if each of the following sentences is T (=true) or F (= false): [5 x 1=5]

(i) Risk under transaction exposure can be minimized using Money Market Hedge.
(ii) Flexibility is one among the performance indicators of the organisation.
(iii) Swapping from fixed to floating may save the original borrower if interest rates decline.
(iv) Profitability Index is the profit expected in capital budgeting.
(v) In CAPM, systematic risk is the risk that cannot be eliminated by diversification, it being common to all firms.

PART B (75 MARKS)

2. (i) Differentiate between the Capital Market Line and Security Market Line. [5]

(ii) AES Ltd. is an all equity financed company with a market value of ₹25,00,000 and cost of equity K_e = 21%. The company wants to buyback equity shares worth ₹5,00,000 by issuing and raising 15% perpetual debt of the same amount. Rate of tax may be taken as 30%. After the capital restructuring and applying MM Model (with taxes), you are required to calculate:

- **Market value of AES Ltd.**
- **Cost of Equity K_e**
- **Weighted average cost of capital and comment on it.** **[10]**

3. (i) Riho Ltd. currently has an equity share capital of ₹10,00,000 consisting of 1,00,000 Equity share of ₹10 each. The company is going through a major expansion plan requiring to raise funds to the tune of ₹6,00,000. To finance the expansion the management has following plans:

Plan – I: Issue 60,000 Equity shares of ₹10 each.
Plan – II: Issue 40,000 Equity shares of ₹10 each and the balance through long-term borrowing at 12% interest p.a.
Plan – III: Issue 30,000 Equity shares of ₹10 each and 3,000 ₹100, 9% Debentures.
Plan – IV: Issue 30,000 Equity shares of ₹10 each and the balance through 6% preference shares.

The EBIT of the company is expected to be ₹4,00,000 p.a. assume corporate tax rate of 40%.

Required:
(i) Calculate EPS in each of the above plans.
Ascertain the degree of financial leverage in each plan. **[10]**

(ii) Venture Capital is considered to be a high risk capital. Do you agree? Enumerate the main features of Venture Capital investment. **[5]**

4.(i) The following corporate bonds are considered for investment by the portfolio manager. His aim is to immunize the liability due in six years. All bonds have face value of ₹ 1000.

Bond	Maturity (Years)	Coupon %	Duration Years
Arvind Mills	10	8	7.35
BILT	8	9	6.45
Cipla	5	7	4.30

If the portfolio manager wishes to invest 50% in Arvind Mills, what is the percentage of total amount that can be invested in the other two bonds to immunize the portfolio? **[7]**

(ii) B Ltd. is foreseeing a growth rate of 12% per annum in the next 2 years. The growth rate is likely to fall to 10% for the third and the fourth year. After that the growth rate is expected to stabilize at 8% per annum. If the last dividend paid was ₹1.50 per share and the investors' required rate of return is 16%, find out the intrinsic value per share of B Ltd. as of date. You may use the following table:

Years	0	1	2	3	4	5
Disc. Factor at 16%	1.00	0.86	0.74	0.64	0.55	0.48

[8]

5. AS Ltd. a textile unit in Ahmedabad has a annual turnover of ₹ 4 Crores, all sold at credit. The average collection period is 30 days. The variable cost to sales ratio is 0.6 and bad debts to sales

ratio is 0.01. The company currently incurs Sales ledger administration cost of ₹ 4 lakhs. Its receivables are financed through short term bank finance at 20% p.a. to the extent of 75% and the balance through its own funding whose cost is 22%.

AS Ltd. to increase its sales level is planning to do either of the following:

a. Modify the existing credit arrangement
b. Seek factoring service from XY Factors

Modification proposed in existing credit arrangement:
Increase the average credit period to 40 days owing to which the sales would increase by ₹ 40 lakhs. Sales ledger administration cost would increase by ₹ 0.80 lakhs and bad debts to sales ratio would increase to 0.02. Amount by way of discount owing to change in credit terms is ₹ 3.52 lakhs.

Factoring Proposal of XY Factors:
Reserve of 20%; Balance payable by the factor in 30 days; A bank is willing to fund 50% of the reserve at an interest rate of 19% p.a.; Interest charge of 18% p.a.; Commission of 2.5%. Under this option sales ledger administration cost would decrease to ₹ 2.50 lakhs and sales are expected to increase by ₹ 20 lakhs.
Which of the two options AS Ltd. need to consider?
[Assume 360 days in a year] [15]

6. The initial investment outlay for a Capital Investment Project consists of ₹100 lakhs for Plant & Machinery and ₹ 40 lakhs for Working Capital. Other details are summarized below:

Sales	1 lakhs units for years 1-5
Selling price	₹ 120per units of output
Variable Cost	₹ 60 per units of output
Fixed Overheads (excluding depreciation)	₹ 15 lakhs per year for years 1 to 5
Rate of Depreciation on Plant & Machinery	25% on WDV method
Salvage Value of Plant & Machinery	Equal to the WDV at the end of year 5
Applicable Tax Rate	40%
Time horizon	5 years
Post-tax cut off rate	12%

Required

a. Indicate the financial viability of the project by calculating the Net Present Value.
b. Determine the Sensitivity of the project's NPV under each of the following condition
   - **Increase in cost of Plant & Machinery by 10% [15]**

7. (i) On January 28, 2014 an importer customer requested a Bank to remit Singapore Dollar (SGD) 25,00,000 under an irrevocable Letter of Credit(LC). However, due to unavoidable factors, the Bank could effect the remittances only on February 4, 2014.

The inter-bank market rates were as follows:

	January 28, 2014	February 4,2014
US$ 1=	₹45.85/45.90	₹45.91/45.97
GBP £ 1=	US$ 1.7840/1.7850	US$ 1.7765/1.7775
GBP £ 1=	SGD 3.1575/3.1590	SGD 3.1380/3.1390

The bank wishes to retain an exchange margin of 0.125%

Required:
How much does the customer stand to gain or lose due to the delay ?
(Note: Calculate the rate in multiples of 0.0001) **[7]**

(ii) **A UK Company expects to receive 500,000 Canadian Dollars. The actual due date, falls exactly six months from now. The finance manager decides to hedge the transaction, using forward contracts. Interest rate in Canada is 15%, while that in UK is 12%. Current spot rate is Pd. Sterling 1 = Can $ 2.5. Evaluate the situation after UK Company hedged its transaction, and if sterling was to :**

i. **Gain 4%**
ii. **Lose 2% or**
iii. **Remain stable at present level**

Assume that the forward exchange rate differential reflects the Interest Rate Parity analysis of forward rates. **[8]**

8. Write short notes on (any three): **[3 x 5 =15]**

(i) Zero working capital concept
(ii) Foreign Currency Convertible Bonds (FCCBs)
(iii) Cross border leasing
(iv) Capital Rationing