CA FINAL – Nov'19

SUBJECT- SFM

Test Code – FNJ 7177

(Date :)

(Marks - 100)

Question 1 is compulsory and attempt any four out of remaining five questions

Question 1:

(A)

TMC Holding Ltd. has a portfolio of shares of diversified companies valued at Rs. 400 crore enters into a swap arrangement with None Bank on the terms that it will get 1.15% quarterly on notional principal of Rs. 400 crore in exchange of return on portfolio which is exactly tracking the Sensex which is presently 21600.

CALCULATE the net payment to be received/ paid at the end of each quarter if Sensex turns out to be 21,860, 21,780, 22,080 and 21,960. **(5 marks)**

(B)

R Ltd. and S Ltd. are companies that operate in the same industry. The financial statements of both the companies for the current financial year are as follows:

Balance Sheet

Particulars	R. Ltd. (Rs.)	S. Ltd (Rs.)
Equity & Liabilities		
Shareholders Fund		
Equity Capital (**Rs.** 10 each)	20,00,000	16,00,000
Retained earnings	4,00,000	-
Non-current Liabilities		
16% Long term Debt	10,00,000	6,00,000
Current Liabilities	14,00,000	8,00,000
Total	**48,00,000**	**30,00,000**
Assets		
Non-current Assets	20,00,000	10,00,000
Current Assets	28,00,000	20,00,000
Total	**48,00,000**	**30,00,000**

Income Statement

	Particulars	R. Ltd. (Rs.)	S. Ltd. (Rs.)
A.	Net Sales	69,00,000	34,00,000
B.	Cost of Goods sold	55,20,000	27,20,000
C.	**Gross Profit (A-B)**	13,80,000	6,80,00
D.	Operating Expenses	4,00,000	2,00,000
E.	Interest	1,60,000	96,000
F.	**Earnings before taxes [C-(D+E)]**	8,20,000	3,84,000
G.	Taxes @ 35%	2,87,000	1,34,400
H.	Earnings After Tax (EAT)	5,33,000	2,49,600

Additional Information:

No. of equity shares	2,00,000	1,60,000
Dividend payment Ratio (D/P)	20%	30%
Market price per share	**Rs.** 50	**Rs.** 20

Assume that both companies are in the process of negotiating a merger through exchange of Equity shares:

You are required to:

(i) **Decompose the share price of both the companies** into **EPS & P/E** components. Also segregate their **EPS figures into Return On Equity (ROE) and Book Value/Intrinsic Value** per share components. **(4 marks)**

(ii) Estimate **future EPS growth rates** for both the companies. **(2 marks)**

(iii) Based on expected operating synergies, R Ltd. estimated that the intrinsic value of S Ltd. Equity share would be **Rs.** 25 per share on its acquisition. You are required to develop a **range of justifiable Equity Share Exchange ratios that can be offered by R Ltd.** to the shareholders of S Ltd. Based on your analysis on parts (i) and (ii), would you expect the negotiated terms to be closer to the upper or the lower exchange ratio limits and why? **(2 marks)**

(C)

A Ltd. of U.K. has imported some chemical worth of USD 3,64,897 from one of the U.S. suppliers. The amount is payable in six months time. The relevant spot and forward rates are:

Spot rate	USD 1.5617-1.5673
6 months' forward rate	USD 1.5455 –1.5609

The borrowing rates in U.K. and U.S. are 7% and 6% respectively and the deposit rates are 5.5% and 4.5% respectively.

Currency options are available under which one option contract is for GBP 12,500. The option premium for GBP at a strike price of USD 1.70/GBP is USD 0.037 (call option) and USD 0.096 (put option) for 6 months period.

The company has 3 choices:

(i) Forward cover

(ii) Money market cover, and

(iii) Currency option

Recommend which of the alternatives is preferable by the company?

(7 marks)

Question 2:

(A)

XYZ Limited borrows £ 15 Million of six months LIBOR + 10.00% for a period of 24 months. The company anticipates a rise in LIBOR, hence it proposes to buy a Cap Option from its Bankers at the strike rate of 8.00%. The lump sum premium is 1.00% for the entire reset periods and the fixed rate of interest is 7.00% per annum. The actual position of LIBOR during the forthcoming reset period is as under:

Reset Period	LIBOR
1	9.00%
2	9.50%
3	10.00%

You are required to show how far **interest rate risk is hedged through Cap Option**. For calculation, work out figures at **each stage up to four decimal points and amount nearest to £**. It should be part of working notes. **(8 marks)**

(B)

ABC Limited's shares are currently selling at Rs. 13 per share. There are 10,00,000 shares outstanding. The firm is planning to raise Rs. 20 lakhs to Finance a new project.

(i) CALCULATE the **ex-right price of shares** and the value of a right, if the firm offers one right share for every two shares held. **(2 marks)**

(ii) CALCULATE the **ex-right price of shares** and the value of a right, if the firm offers one right share for every four shares held. **(2 marks)**

(iii) ANALYSE how does the **shareholders' wealth change** from (i) to (ii) above and right issue increases shareholders' wealth? **(2 marks)**

(C)

Mr. Fed Up wants to invest an amount of Rs. 520 lakhs and had approached his Portfolio Manager. The Portfolio Manager had advised Mr. FedUp to invest in the following manner:

Security	Moderate	Better	Good	Very Good	Best
Amount (in Rs. Lakhs)	60	80	100	120	160
Beta	0.5	1.00	0.80	1.20	1.50

Advise Mr. FedUp in regard to the following, using Capital Asset Pricing Methodology:

(i) **Expected return on the portfolio**, if the Government Securities are at 8% and the NIFTY is yielding 10%.

(ii) **Replacing Security** 'Better' with NIFTY. **(6 marks)**

Question 3:

(A) XY Limited is engaged in large retail business in India. It is contemplating for expansion into a country of Africa by acquiring a group of stores having the same line of operation as that of India.

The exchange rate for the currency of the proposed African country is extremely volatile. Rate of inflation is presently 40% a year. Inflation in India is currently 10% a year. Management of XY Limited expects these rates likely to continue for the foreseeable future.

Estimated projected cash flows, in real terms, in India as well as African country for the first three years of the project are as follows:

	Year – 0	Year – 1	Year – 2	Year - 3
Cash flows in Indian Rs. ('000)	-50,000	-1,500	-2,000	-2,500
Cash flows in African Rands ('000)	2,00,000	+50,000	+70,000	+90,000

XY Ltd. assumes the year 3 nominal cash flows will continue to be earned each year indefinitely. It evaluates all investments using nominal cash flows and a nominal discounting rate. The present exchange rate is African Rand 6 to Rs. 1.

You are required to **calculate the net present value of the proposed investment** considering the following:

(i) African Rand cash flows are converted into rupees and discounted at a risk adjusted rate.

(ii) All cash flows for these projects will be discounted at a rate of 20% to reflect its high risk.

(iii) Ignore taxation.

	Year - 1	Year - 2	Year - 3
PVIF @ 20%	.833	.694	.579

(8 marks)

(B)

Explain some of the innovative ways to finance a startup. **(6 marks)**

(C)

A foreign based company is planning to set up a software development unit in India. Software developed at the Indian unit will be bought back by the foreign parent company at a transfer price of US $10 millions. The unit will remain in existence in India for one year; the software is expected to get developed within this time frame.

The foreign based company will be subject to corporate tax of 30 per cent and a withholding tax of 10 per cent in India and will not be eligible for tax credit. The software developed will be sold in the international market for US $ 12.0 millions.

Other estimates are as follows:

Rent for fully furnished unit with necessary hardware in India Rs. 20,00,000

Man power cost (80 software professional will be working for 10 hours each day) Rs.540 per man hour

Administrative and other costs Rs. 16,20,000

The rupee-dollar rate is Rs.65/$.

ADVISE the foreign company on the financial viability of the project.

Assumption: 365 days in a year. **(6 marks)**

Question 4:

(A)

Omega Ltd. is interested in expanding its operation and planning to install manufacturing plant at US. For the proposed project, it requires a fund of $10 million (net of issue expenses or floatation cost). The estimated floatation cost is 2%. To finance this project, it proposes to issue GDRs.

As a financial consultant, you are requested to **compute the number of GDRs to be issued** and **cost of the GDR** with the help of following additional information:

(i) Expected market price of share at the time of issue of GDR is Rs. 250 (Face Value being Rs. 100).

(ii) 2 shares shall underlay each GDR and shall be priced at 4% discount to market price.

(iii) Expected exchange rate Rs. 64/$.

(iv) Dividend expected to be paid is 15% with growth rate 12%. **(6 marks)**

(B)

Gibralater Limited has imported 5000 bottles of shampoo at landed cost in Mumbai, of US $ 20 each. The company has the choice for paying for the goods immediately or in 3 months' time. It has a clean overdraft limited where 14% p.a. rate of interest is charged.

Calculate which of the following method would be cheaper to Gibralter Limited.

(i) Pay in 3 months' time with interest @ 10% and cover risk forward for 3 months.

(ii) Settle now at a current spot rate and pay interest of the overdraft for 3 months.

The rates are as follows:

Mumbai Rs. / $ spot	:	60.25-60.55
3 months swap	:	35 / 25

(5 marks)

(C)

Laxman buys 10,000 shares of X Ltd. at a price of Rs. 22 per share whose beta value is 1.5 and sells 5,000 shares of A Ltd. at a price of Rs. 40 per share having a beta value of 2. He obtains a complete hedge by Nifty futures at Rs. 1,000 each. He closes out his position at the closing price of the next day when the share of X Ltd. dropped by 2%, share of A Ltd. appreciated by 3% and Nifty futures dropped by 1.5%.

CALCULATE the overall profit/loss to Ram. **(6 marks)**

(D)

Name the **steps of securitization mechanism**. **(3 marks)**

Question 5:

(A)

Mr. Tamarind intends to invest in equity shares of a company the value of which depends upon various parameters as mentioned below:

Factor	Beta	Expected value in %	Actual value in %
GNP	1.20	7.70	7.70
Inflation	1.75	5.50	7.00
Interest rate	1.30	7.75	9.00
Stock market index	1.70	10.00	12.00
Industrial production	1.00	7.00	7.50

If the risk free rate of interest be 9.25%, how much is the **return of the share under Arbitrage Pricing Theory**? **(5 marks)**

(B)

Following information is related to **XYZ Regular Income Fund**:

Particulars	Rs. Crores
Listed shares at Cost (ex-dividend)	20
Cash in hand	1.23
Bonds and debentures at cost	4.3
Of these, bonds not listed and quoted	1
Other fixed interest securities at cost	4.5
Dividend accrued	0.8
Amount payable on shares	6.32
Expenditure accrued	0.75
Number of units (Rs. 10 face value)	20 lacs
Current realizable value of fixed income securities of face value of Rs. 100	106.5
The listed shares were purchased when Index was	1,000
Present index is	2,300
Value of listed bonds and debentures at NAV date	8

CALCULATE the **NAV of scheme on per unit basis** if there has been a diminution of 20% in unlisted bonds and debentures and Other fixed interest securities are valued at cost. **(6 marks)**

(C) GHI Ltd., AAA rated company has issued, fully convertible bonds on the following terms, a year ago:

Face value of bond	Rs. 1000
Coupon (interest rate)	8.5%
Time to Maturity (remaining)	3 years
Interest Payment	Annual, at the end of year
Principal Repayment	At the end of bond maturity

Conversion ratio (Number of shares per bond)	25
Current market price per share	Rs. 45
Market price of convertible bond	Rs. 1175

AAA rated company can issue plain vanilla bonds without conversion option at an interest rate of 9.5%.

Required: Calculate as of today:

(i) Straight Value of bond.

(ii) Conversion Value of the bond.

(iii) Conversion Premium.

(iv) Percentage of downside risk.

(v) Conversion Parity Price.

t	1	2	3
PVIF0.095, t	0.9132	0.8340	0.7617

(9 marks)

Question 6:

(A)

Short Note : Characteristics of **Venture Capital Financing.** **(4 marks)**

(B)

Mr. X, who has established the following spread on the Delta Corporation's stock :

(i) Purchased one 3-month call option with a premium of Rs. 30 and an exercise price of Rs. 550.

(ii) Purchased one 3-month put option with a premium of Rs. 5 and an exercise price of Rs. 450.

Delta Corporation's stock is currently selling at Rs. 500. **ADVICE Mr. X about profit or loss**, if the price of Delta Corporation's:

(i) remains at Rs.500 after 3 months.

(ii) falls at Rs.350 after 3 months.

(iii) rises to Rs.600.

Note: Assume the size option is 100 shares of Delta Corporation. **(6 marks)**

(C)

The following is the Balance-sheet of Grape Fruit Company Ltd as at March 31^{st}, 2011.

Liabilities	(Rs. in lakhs)	Assets	(Rs. in lakhs)
Equity shares of Rs. 100 each	600	Land and Building	200
14% preference shares of Rs. 100/- each	200	Plant and Machinery	300
13% Debentures	200	Furniture and Fixtures	50
Debenture interest accrued and payable	26	Inventory	150
Loan from bank	74	Sundry debtors	70
Trade creditors	340	Cash at bank	130
		Preliminary expenses	10
		Cost of issue of debentures	5
		Profit and Loss account	525
	1440		1440

The Company did not perform well and has suffered sizable losses during the last few years. However, it is felt that the company could be nursed back to health by proper **financial restructuring**. Consequently the following scheme of reconstruction has been drawn up :

(1) Equity shares are to be reduced to Rs. 25/- per share, fully paid up;

(2) Preference shares are to be reduced (with coupon rate of 10%) to equal number of shares of Rs. 50 each, fully paid up.

(3) Debenture holders have agreed to forgo the accrued interest due to them. In the future, the rate of interest on debentures is to be reduced to 9 percent.

(4) Trade creditors will forego 25 percent of the amount due to them.

(5) The company issues 6 lakh of equity shares at Rs. 25 each and the entire sum was to be paid on application. The entire amount was fully subscribed by promoters.

(6) Land and Building was to be revalued at Rs. 450 lakhs, Plant and Machinery was to be written down by Rs. 120 lakhs and a provision of Rs.15 lakhs had to be made for bad and doubtful debts.

Required:

(i) Show the **impact of financial restructuring** on the company's activities.

(5 marks)

(ii) Prepare the **fresh balance sheet after the reconstructions** is completed on the basis of the above proposals. **(5 marks)**