FINAL EXAMINATION

December 2017

P–20(FABV)
Syllabus 2012

Financial Analysis & Business Valuation

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

Answer Question No. 1, *which is compulsory and carries 20 marks.*

Answer any five *questions from Q. Nos. 2 to 8, each of which shall carry 16 marks.*

1. (a) State whether the following statements are true or false: 1×10=10

(i) There is an indirect relationship between inputs and outputs in financial model.

(ii) Analyzing revenue of Banks and Investment companies, assets and liabilities are essential value drivers.

(iii) The goal of financial analysis is to assess the performance of a firm in the context of its stated goals and strategy.

(iv) Under-capitalization is indicated by low current ratio.

(v) Low production capacity utilization is not an indicator of financial distress of a firm.

(vi) Production of goods without market survey is an internal factor responsible for corporate distress.

(vii) Issue of equity shares in lieu of some machinery will affect the current ratio.

(viii) Cash flow statement is based upon accrual basis of accounting.

(ix) Vertical financial statement analysis is useful to inter-firm comparison.

(x) The difference between the intrinsic value and the purchase price in the context of mergers and acquisition is known as synergy value.

(b) Selected data from ABC Co.'s balance sheet at the end of the year are as follows:

Investment in XYZ Co., at fair value	₹ 1,50,000
Deferred taxes	₹ 86,000
Equity share capital, ₹ 1 par value	₹ 5,50,000
Preference share capital, ₹ 100 par value	₹ 1,75,00
Retained earnings	₹ 8,93,000
Accumulated other comprehensive income	₹ 46,000

The investment in XYZ Co. had an original cost of ₹ 1,20,000. Assuming the investment in XYZ is classified as available-for-sale, ABC's total owner's equity at the year-end is closer to:

(i) ₹ 16,18,000 (ii) ₹ 16,64,000 (iii) ₹ 17,14,000

Which one among (i), (ii) and (iii) is correct? 4

(c) The Operating and Cost data of ABC Ltd., are:

Sales	₹ 20,00,000
Variable Costs	₹ 14,00,000
Fixed Costs (including 15% interest on ₹ 10,00,000)	₹ 4,00,000

You are required to calculate its operating, financial and combined leverage? 6

2. (a) M/S Roy Brothers Co., has ₹ 3,00,000 to invest. The following proposals are under consideration. The Cost of Capital for the company is estimated to be 15%.

Project	Initial Outlay (₹)	Annual Cash (₹)	Life of Project (Years)
P	1,50,000	30,000	10
Q	80,000	20,000	8
R	70,000	15,000	20
S	50,000	15,000	10
T	50,000	12,000	20

Rank the above projects on the basis of Profitability Index Method.

Given : Present value of annuity of ₹ 1 received in steady stream discounted @ 15% :

8 years = 4·487

10 years = 5·019

20 years = 6·259 10

(b) You are given the following information about Sandeep Ltd.,

(i) Beta for the year 2016-17	1·05
(ii) Risk free rate	12%
(iii) Long range Market Rate (based on Sensex)	15·14%

(iv) Extracts from the liabilities side of balance sheet as at 31st March, 2017:

	₹
Equity	29,160
Reserves and Surplus	43,740
Shareholders' Fund	72,900
Loan funds	8,100
Total funds (long-term)	81,000

(v) Profit after tax ₹ 20,394·16 Lakhs

(vi) Interest deducted from profit ₹ 487·00 Lakhs

(vii) Effective tax rate (i.e., Provision for Tax/PBT × 100) 24·45%

Calculate 1. NOPAT 2. Cost of Equity 3. Cost of Debt 2×3=6

3. (a) Hall Corporation paid ₹ 600 million for the outstanding share of Triple C Corporation. At the acquisition date, Triple C Corporation reported the following Condensed Balance Sheet:

Triple C Corporation—Condensed Balance Sheet

	Book Value (₹ in millions)
Current Assets	80
Plant and Equipment-Net	760
Goodwill	30
Liabilities	400
Shareholders' Equity	470

The fair value of the Plant and Equipment was ₹ 120 million more than its recorded book value. The fair values of all other identifiable assets and liabilities were equal to their recorded book values. Calculate the amount of Goodwill that Hall Corporation should report on its Consolidated Balance Sheet. 8

(b) During the past year, M & N Ltd., had net income of ₹ 1,00,000, paid dividends of ₹ 50,000 to its preference shareholders and paid ₹ 30,000 in dividends to its equity shareholders. M & N's Equity Share Account showed the following:

January 1	Shares issued and outstanding at the beginning of the year	10,000
April 1	Shares issued	4,000
July 1	10% dividend on shares	
September 1	Shares repurchased for the treasury	3,000

Compute the weighted average number of equity shares outstanding during the year and compute EPS. 8

4. (a) G. Co. Ltd. is studying the possible acquisition of K. Company Ltd., by way of merger. The following data are available in respect of the companies:

Particulars	G. Co. Ltd.	K. Co. Ltd.
EAT (₹)	80,00,000	24,00,000
No. of Equity Shares	16,00,000	4,00,000
Market Value per Share (₹)	200	160

(i) If the merger goes through by exchange of equity and the exchange ratio is based on the current market price, what is the new earning per share for G. Co. Ltd.?

(ii) K. Co. Ltd. wants to be sure that the earnings equitable to its shareholders will not be diminished by the merger. What should be the exchange ratio in that case? 8

(b) The following financial share data pertaining to TECHNO Ltd., an IT company is made available to you:

Year ended March 31st	2016	2015	2014
EBIT (₹)	696·03	325·65	155·86
Non-branded Income (₹)	53·43	35·23	3·46
Inflation compound factor @ 8%	1·000	1·087	1·181
Remuneration of Capital	5% of Average Capital Employed		

Average Capital Employed (₹)	1112·00		
Corporate Tax Rate	35%		
Capitalization Factor	16%		

You are required to calculate the Brand Value for Techno Ltd. 8

5. (a) Shyam Ltd., has announced issue of warrants on 1:1 basis for its equity shareholders. The current price of the stock is ₹ 10 and warrants are convertible at an exercise price of ₹ 11·71 per share. Warrants are detachable and are trading at ₹ 3.

(i) What is the minimum price of the warrant?

(ii) What is the warrant premium?

(iii) Had the current price now had been ₹ 16·375, what is the minimum price and the warrant premium? (Consider warrants are tradable at ₹ 9·75) 2×3=6

(b) R Ltd., is intending to acquire S Ltd., (by merger) and the following information are available in respect of both the companies:

Particulars	R Ltd.	S Ltd.
Total Current Earnings (₹)	2,50,000	90,000
No. of Outstanding Shares	50,000	30,000
Market Price per Share (₹)	21	14

(i) What is the present EPS of both the companies?

(ii) If the proposed merger takes place, what would be the new earnings per share for R Ltd., (assuming the merger takes place by exchange of equity shares and the exchange ratio is based on the current market price)?

(iii) What should be the exchange ratio if S Ltd., wants to ensure the same earnings to members as before the merger took place? 2+4+4=10

6. (a) From the following information given below relating to Unfortunate Ltd., calculate Altman's Z-score and comment on the state of its financial position:

Working Capital / Total Assets	=	45%
Retained Earnings / Total Assets	=	25%
Earnings before Interest and Taxes / Total Assets	=	30%
Market Value of Equity / Book Value of total debt	=	250%
Sales/Total Assets	=	3 times

6

(b) A Ltd., is considering the acquisition of B Ltd., with stock. Relevant financial information is given below:

Particulars	A Ltd.,	B Ltd.,
Present Earnings (₹)	7·5 Lakhs	2·5 Lakhs
Equity (No. of shares)	4·0 Lakhs	2·0 Lakhs
EPS (₹)	1·875	1·25
P/E Ratio	10	5

You are required to answer the following questions: 2×5=10

(i) What is the Market Price of each company?

(ii) What is the Market Capitalization of each company?

(iii) If the P/E of A Ltd., changes to 7·5, what is the Market Price of A Ltd.?

(iv) Does Market Value of A Ltd. change?

(v) What would be the exchange ratio based on Market Price? (Take revised price of A Ltd.,)

7. (a) The following information are furnished in respect of a certain firm:

Earnings per Share	= ₹ 3·15
Capital Expenditure per Share	= ₹ 3·15
Depreciation per Share	= ₹ 2·78
Change in Working Capital per Share	= ₹ 0·50
Debt Financing Ratio	= 25%

Earnings, Capital Expenditure, Depreciation and Working Capital are all expected to grow at 6% per year. The beta for stock is 0·90. Treasury bond rate is 7·50%. A premium of 5·5% is used for the market.

Calculate the value of stock. 8

(b) Assume that the following details are given for a company:

Sales	₹ 1,00,000
Cash	₹ 75,000
Depreciation	₹ 20,000
Tax rate	35%
Change in the Net Working Capital	₹ 1,000
Change in Capital Spending	₹ 10,000

Calculate the Free Cash Flow to Firm (FCFF) for the given data. 8

8. Write short notes on *any four* out of the following: 4×4=16

   (a) Bridge Finance

   (b) Capital Rationing

   (c) Operating Income

   (d) Off-Balance Sheet Financing

   (e) Conglomerate Merger