Unique Paper Code	**:**	**61017928**
Name of the Paper	**:**	**Business Analysis and Valuation**
Name of the Course	**:**	**Bachelor of Management Studies (CBCS)**
Semester	**:**	**V**
Duration	**:**	**3 hours**
Maximum Marks	**:**	**75 Marks**

Instructions for Candidates

1. This is an Open Book Examination.
2. Attempt any four out of six questions.
3. All questions carry equal marks.

Q1. On the basis of following information about Nestle India Ltd for period from financial year 2013-1to 20107, you are required to:

(a) Analyse the company's financial results using any 3 key ratios each on the basis of profitability and solvency.

(b) Comment on the overall financial health of the company using Du Pont Analysis and explain the findings.

(c) "Annual Reports meet not only compliance requirements but also serve as an important tool for qualitative analysis." In the light of this statement, explain how Annual Report contributes in financial analysis and valuation of a company.

Nestle - Balance Sheet					
Year	**Dec 17**	**Dec 16**	**Dec 15**	**Dec 14**	**Dec 13**
SOURCES OF FUNDS:					
Share Capital	96.42	96.42	96.42	96.42	96.42
Reserves Total	3,324.17	3,185.91	2,721.42	2,740.79	2,272.33
Equity Share Warrants	0	0	0	0	0
Equity Application Money	0	0	0	0	0
Total Shareholders' Funds	**3,420.59**	**3,282.33**	**2,817.84**	**2,837.21**	**2,368.75**
Secured Loans	0	0	0.9	4.11	0.01
Unsecured Loans	35.14	33.15	16.83	15.46	1,189.48
Total Debt	**35.14**	**33.15**	**17.73**	**19.57**	**1,189.49**
Deferred Tax Liability	275.46	293.29	288.96	327.1	307.22
Other Liabilities	2,292.19	1,972.89	1,597.17	1,388.66	1,193.39
Current Liabilities	1,405.25	1,312.95	1,215.34	1,138.28	1,133.29

Acceptances	0.00	0.00	0.00	0.00	0.00
Other Liabilities	0.00	0.00	0.00	0.00	0.00
Provisions	87.46	53.8	265.32	213.06	213.88
Total Current Liabilities	**1,492.71**	**1,366.75**	**1,480.66**	**1,351.34**	**1,347.17**
Total Liabilities	**5,747.92**	**5,288.37**	**4,432.74**	**4,245.44**	**4,751.63**
APPLICATION OF FUNDS:					
Gross Block	3,358.43	3,095.12	5,117.36	5,008.98	4,903.16
Less: Accumulated Depreciation	742.25	364.98	2,219.51	1,832.34	1,533.85
Less: Impairment of Assets	0	0	0	0	0
Net Block	2,616.18	2,730.14	2,897.85	3,176.64	3,369.31
Lease Adjustment	0	0	0	0	0
Capital Work in Progress	94.16	188.17	230.79	244.78	294.71
Producing Properties	0	0	0	0	0
Investments	1,978.87	1,755.66	1,324.92	811.82	851.08
Deferred Tax Assets	153.5	137.95	116.03	104.38	91.75
-					
Current Assets, Loans & Advances					
Inventories	902.47	940.06	820.81	844.1	735.93
Sundry Debtors	88.97	97.93	78.42	99.1	84.27
Cash and Bank	1,457.42	880	499.55	445.82	749.36
Loans and Advances	94.94	83.46	103.56	67.29	105.2
Total Current Assets	2,543.80	2,001.45	1,502.34	1,456.31	1,674.76
Total Assets	**5,747.92**	**5,288.37**	**4,432.74**	**4,245.44**	**4,751.63**

Nestle - Consolidated Profit and Loss					
Year	**Dec 17**	**Dec-16**	**Dec-15**	**Dec 14**	**Dec-13**
INCOME:					
Sales Turnover	10,192.18	9,474.57	8,482.48	10,178.07	9,419.02
Excise Duty	182.58	333.23	307.17	323.23	317.97
Net Sales	10,009.60	9,141.34	8,175.31	9,854.84	9,101.05
Other Income	176.92	172.12	110.09	94.32	96.9
Stock Adjustments	79.56	7.66	-11.97	67.43	-105.32
Total Income	**10,266.08**	**9,321.12**	**8,273.43**	**10,016.59**	**9,092.63**
EXPENDITURE:					
Raw Materials	3,696.99	3,227.26	3,456.94	4,591.39	3,313.68
Power & Fuel Cost	288.44	232.79	221.99	384.33	385.38
Employee Cost	1,017.45	901.57	912.75	837.05	741.5
Other Manufacturing Expenses	897.84	850.85	170.61	197.11	895.68
Selling and Administration Expenses	1,823.98	1,751.78	1,636.02	1,688.99	1,528.64
Miscellaneous Expenses	267.93	366.91	710.94	191.6	183.27
Less: Pre-operative Expenses Capitalized	0	0	0	0	0
Total Expenditure	7,992.63	7,331.16	7,109.25	7,890.47	7,048.15
Operating Profit	2,273.45	1,989.96	1,164.18	2,126.12	2,044.48
Interest	91.9	90.91	3.29	14.23	36.51
Gross Profit	2,181.55	1,899.05	1,160.89	2,111.89	2,007.97
Depreciation	342.25	353.67	347.26	337.54	329.95
Profit Before Tax	1,839.30	1,545.38	813.63	1,774.35	1,678.02
Tax	649.17	561.19	289.89	582.41	507.5
Deferred Tax	-35.06	-17.17	-39.53	7.25	53.39

Reported Net Profit	1,225.19	1,001.36	563.27	1,184.69	1,117.13
Extraordinary Items	0	-6.87	-322.39	-0.19	9.19
Adjusted Net Profit	1,225.19	1,008.23	885.66	1,184.88	1,107.94
Adjst. below Net Profit	-259.49	-170	0	0	0
P & L Balance brought forward	2,368.93	2,101.60	1,882.52	1,532.88	1,074.55
Statutory Appropriations	0	0	0	0	0
Appropriations	829.18	564.03	563.25	835.05	658.8
P & L Balance carried down	2,505.45	2,368.93	1,882.54	1,882.52	1,532.88
Dividend	0	0	467.62	607.42	467.62
Preference Dividend	0	0	0	0	0
Equity Dividend %	860	630	485	630	485
Dividend Per Share (Rs)	86	63	48.5	63	48.5
Earnings Per Share-Unit Curr	127.07	103.85	48.5	111.55	107.62
Earnings Per Share (Adj)-Unit	127.07	103.85	48.5	111.55	107.62
Book Value-Unit Curr	354.76	340.42	292.25	294.26	245.67
Book Value (Adj)-Unit Curr	354.76	340.42	292.25	294.26	245.67
Weighted Avg Number of Equity Shares Outstanding	46	49	50	50	50

Q2. FNK Corporation is expected to grow at a higher rate for years; thereafter the growth rate will fall and stabilize at a lower level. Calculate the value of the firm using DCF valuation method

Base Year Information (All figures are Million)

Revenue= 320, EBIT= 90, Capex= 100, Depreciation = 60, Working Capital= 20% of Revenue and Tax Rate – 0 Percent

High Growth Stage (Length 3 years)

Growth in Revenues, Capex, EBIT & Depreciation = 40%, Working Capital= 20% of Revenues, D/E Ratio= 1:1, Risk free rate= 12%, Market Risk Premium=7%. Equity Beta= 1.3, Kd (Pretax)= 15% and Tax rate will increase to 30% in linear increments of 6%

Inputs for the Transition Period (Length 3 years)

Growth in Rev/Dep/EBIT and Capex will decline from 40 % in year 5 to 10% in year 10 in linear movements of 6 % each year, Working Capital= 20% of Revenues, D/E Ratio= 0.8 :1, Risk free rate= 11%, Market Risk Premium=6%. Equity Beta= 1.1, Kd (Pretax)= 14% and Tax Rate = 30%

Stable Growth Period

Terminal Growth in FCFF=10%, Risk free rate= 11%, Market Risk premium=5%, Equity Beta=1, D/E Ratio= 0.5 :1, Kd (Pretax)= 13%, Corporate Tax Rate= 30%
.

Q3. Sundaram paints is a large privately held decorative paints company which has been in existence for nearly three decades. Founded by Shankar Sundaram, it is presently managed by Ravi Sundaram, the only son of the founder. Ravi Sundaram wants to expand the business and take it global. For this, the firm needs access to evaluate its worth in the market. So, Ravi has engaged the services of Integral Capital Services, a merchant banking firm. Amit Kumar, the CEO of Integral Capital Services, has entrusted you with the task of doing a preliminary valuation of Sundaram paints. You have asked your analyst to gather relevant financial information on International paints Company, Elegant paints Limited, and Modern Paints Corporation (the three largest listed companies in the decorative paints industry) as well as on Sundaram paints. The following information is available.

Financial Information (in millions)	**International**	**Elegant**	**Modern**	**Sundaram**
Revenues	19600	15400	12400	10800
EBITDA	2840	2520	1675	1890
PAT	1588	1098	791	886
Shareholders' Funds	8750	7540	6260	4820
Loan Funds	5060	5150	4500	2880
Total Assets	13810	12690	10760	7700
Net Profit Margin	8.1%	7.1%	6.2%	8.2%

Debt Equity Ratio	57.8%	68.3%	71.9%	59.8%
Paid up Equity Share Capital (FV – Rs 10 each)	2400	2000	1800	1440
Expected EPS growth	14%	12%	10.2%	15%
Market Price per Share	96.8	68.4	43.2	
Beta	1.1	1.2	1.28	

Assume that the market value of debt is the same as its book value.

(a) What is the Enterprise value/EBITDA of International, Elegant, and Modern Paints Corporation?

(b) What factors do you think explain the differences in the valuation ratios of the three firms?

(c) Considering equal weightage for all the three firms, and using EV/EBITDA, EV/Sales and EV/ Book Value as base, find the value of Sundaram Paints.

Q4. In April 2020, Angel Ltd announced its plan to acquire Delta Co. for Rs 4.8 cr. At the time of the acquisition, the relevant information about the two companies was as follows:

	Angel	**Delta**
Revenues	Rs. 4800	Rs. 2400
Cost of goods sold (without depreciation)	57%	75%
Depreciation	Rs. 168	Rs.100
Tax rate	35%	35%
Capital spending	Rs. 300	Rs. 160
Working capital (as % of revenue)	40%	30%
Beta	1.45	1.25
Expected growth rate in revenues/EBIT	25%	15%
Expected period of high growth	10 years	10years
Growth rate after high growth period	6%	6%
Beta after high growth period	1.10	1.10

Capital spending will be 115% of depreciation after the high-growth period. Neither firm has any debt outstanding. The Treasury bond rate is 7%. Risk Premium 5.5%

(a) Estimate the value of the combined firm, with no synergy. As a result of the merger, the combined firm is expected to grow 24% a year for the high growth period. Estimate the value of the combined firm with the higher growth.

(b) What is the synergy worth? What is the maximum price Angel can pay for Delta Co.?

Q5. The Risk-free rate of return is 8%, the expected rate of return on the market portfolio is 15%, and stock of Xyrong Corporation has a beta coefficient of 1.2. Xyrong pays out 40% of its earnings in dividends, and the latest earnings announced were Rs 10per share. Dividends were just paid and are expected to be paid annually. You expect that Xyrong will earn an ROE of 20% per year on all reinvested earnings forever.

(a)What is the intrinsic value of a share of Xyrong?

(b) If the market price of a share is currently Rs 100, and you expect the market price to be equal to the intrinsic value 1 year from now, what is your expected 1 -year holding – period return on Xyrong stock?

Q6. Write a short note on the following (Any Three)

(a) Liquidity and Turnover ratios.

(b) "The discounted cash flow valuation is preferred over relative valuation in theory. But in practice, it's the opposite." Compare and contrast the suitability of the two approaches.

(c) "Option to delay can make a difference in valuing the assets or firms." State and explain some examples in support of the same.

(d) P/E ratio.