Birla Institute of Technology & Science, Pilani (Rajasthan) 333031
Business Analysis and Valuation (MBA G593/ECON F355/BITS F493)
Comprehensive Term Examination (1st Semester 2017 – 18)
Faculty Incharge: Dr. Saurabh Chadha

Date: 08 December 2017 **Time Allotted:** 3 hours **MM:** 80 Marks
(All Questions are compulsory, Closed Book)

Name: **ID No:**

Q1: Case Study **(60 Marks)**
ABC Ltd. is a major hotel chain of India. The company operates various hotels of which some are owned by it and the rest are owned by others but managed by ABC.
ABC's financial information for the year just concluded (year 0) were as follows:

Operating Revenues	**Rupees (in million)**
Room rent	1043
Food and beverages	678
Management fees for managed properties	73
Operating Expenses	
Materials	258
Personnel	258
Upkeep and services	350
Sales and administration	350
Assets (Beginning of Year 1)	
Net Fixed Assets	1510
Gross Block:	2110
Accumulated depreciation:	600
Net Current Assets	516

ABC had no non-operating assets.
Currently, ABC owned 2190 rooms. It has planned the following additions for the next seven years.

Years	1	2	3	4	5	6	7
Rooms	90	130	80	130	186	355	150
Investment (in million rupees)	200	300	240	500	800	1400	1300

For the sake of simplicity assume that the addition will take place at the beginning of the year.
For developing the financial projections of ABC, the following assumptions may be made.

- The occupancy rate will be 60% for year 1. Thereafter, it will increase by 1% per year for the next six years.
- The average room rent per day will be Rs 2500 for year 1. It is expected to increase at the rate of 15% per year till year 7.
- Food and beverage revenues are expected to be 65% of the room rent.
- Material expenses, personnel expenses, Upkeep and services expenses, and sales administration expenses will be respectively 15, 15, 18, and 18 percent of the revenues (excluding the management fees).
- Net current assets is expected to be 30% of the revenues (excluding the management fees).
- The management fees of the managed properties will be 7% of room rent. The room rent from managed properties will be equal to the room rent from owned properties.
- The depreciation is expected to be 7% of the net fixed assets.
- The tax rate for ABC will be 20%.

- The value of equity of ABC is Rs 3050 million and the value of debt is Rs 900 million.
- ABC stock has a beta of 0.921.
- The risk free rate is 12% and the market risk premium 8%.
- The post-tax cost of debt is 9%.
- The free-cash flow is expected to grow at a rate of 10% per annum after 7 years.

From the above information, Calculate the enterprise value of ABC Ltd?

Q2: Relative Valuation **(10 Marks)**

The following information is available for Company D, an unlisted pharmaceutical company, which is being valued. EBITDA: 400 million, Book Value of Assets: 1,000 million and Sales: 2,500 million.

Based on peer search of a number of listed pharmaceutical companies A, B and C have been found to be close competitor to company D. The financial information for these companies is given below:

Financials (millions)	A	B	C
Sales	1600	2000	3200
EBITDA	280	360	480
Book value of Assets	800	1000	1400
Enterprise Value (EV)	2000	3500	4200

Calculate EV of the company D using relative valuation method applied on EBITDA basis, Book value basis, and Sales basis.

Q3: Consider the following information of two companies:

Particulars	X Ltd	Y Ltd
Cash	210,000	320,000
Debtors	330,000	630,000
Inventory	1,230,000	950,000
Plant and Equipment	1,695,000	2,400,000
Total Assets	**3,465,000**	**4,300,000**
Creditors	900,000	1,050,000
8% Debentures	500,000	1,000,000
Equity Share Capital	2,065,000	2,250,000
Total Liabilities	**3,465,000**	**4,300,000**
Sales	5,600,000	8,200,000
COGS	4,000,000	6,480,000
Other operating expenses	800,000	860,000
Interest Expenses	40,000	80,000
Income taxes	266,000	273,000

Answer each of the following questions by making a comparison of relevant ratios:

a) Which company is using the equity shareholder's money more profitably? **(2 marks)**

b) Which company is better able to meet its current obligations? **(2 marks)**

c) If you were to purchase the debentures of one company, which company debentures would you buy? **(2 marks)**

d) How long does it take each company to convert an investment in inventory to cash? **(4 marks)**