JAIPURIA INSTITUTE OF MANAGEMENT

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

PGDM / PGDM (M) / PGDM (SM)

FOURTH TRIMESTER (Batch 2016-18)

Re. **END TERM EXAMINATIONS, SEPTEMBER 2017**

SET - 2

Course Name	**Corporate Valuation**	Course Code	**FIN 401**
Max. Time	**2 hours**	Max. Marks	**40 MM**

INSTRUCTIONS: Attempt all questions.

Qs1 (3+3+3+7)
C&D, a large producer of sodium nitrate, reported earnings per share of Rs 1.50 in 2015 and paid dividends per share of Rs0.42. In 2015, the firm also reported the following:

Net income = Rs 3 crore
Interest expense = Rs 8 lakh
Book value of debt = Rs 76 lakh
Book value of equity = Rs 16 crore

The firm faced a corporate tax rate of 38.5%. (The market value debt-to-equity ratio is 5%. The treasury bond rate is 7%.)
The firm expected to maintain these financial fundamentals from 2016 to 2020, after which it was expected to become a stable firm, with an earnings growth rate of 6%. The firm's financial characteristics were expected to approach industry averages after 2020. The industry averages were as follows:

Return on capital = 12.5%
Debt/equity ratio = 25%
Interest rate on debt = 7%

C&D had a beta of 0.85 in 2015, and the unlevered beta was not expected to change over time.
Required:

(a) What is the expected growth rate in earnings, based on fundamentals, for the high-growth period (2016 to 2020)?
(b) What is the expected payout ratio after 2020?
(c) What is the expected beta after 2020?
(d) What is the value of the stock, using the two-stage dividend discount model?

Qs2 (8 marks)
Estimate the PBV ratio for a firm that is expected to be in high growth for the next five years. The firm has the following characteristics:

EPS growth rate in first five years	20%
EPS growth rate after five years	8%
Beta	1.0
Return on equity	25%

Payout ratio in first five years	20%
Payout ratio after five years	68%
Risk-free rate	6%

Qs3 (4+4)

The following are the projected cash flows to equity and to the firm over the next five years:

Year	CF to Equity	Int (1-t)	CF to Firm
1	Rs 250.00	Rs 90.00	Rs 340.00
2	Rs 262.50	Rs 94.50	Rs 357.00
3	Rs 275.63	Rs 99.23	Rs 374.85
4	Rs 289.41	Rs 104.19	Rs 393.59
5	Rs 303.88	Rs 109.40	Rs 413.27
Terminal Value	Rs 3,946.50		Rs 6,000.00

The firm has a cost of equity of 12% and a cost of capital of 9.94%. Answer the following questions:

(a) What is the value of the equity in this firm?
(b) What is the value of the firm?

Qs4 (8 marks)

XYZ limited reported earnings per share of Rs2.40 in 2015, and paid dividends per share of Rs1.06. The earnings had grown 7.5% a year over the prior five years, and were expected to grow 6% a year in the long term (starting in 2016). The stock had a beta of 1.05 and traded for 10 times earnings. The 10-year Government bond rate was 7% and the risk premium is 5.5%.

(a) Estimate the PE ratio for XYZ limited.
(b) What long-term growth rate is implied in the firm's current PE ratio?