

**ST JOSEPH’S UNIVERSITY, BENGALURU -27**

**M.COM – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2023**

**(Examination conducted in May 2023)**

**MCO 8220: ADVANCED CORPORATE FINANCE**

**(For current batch students only)**

**Time-2 hours Max Marks-50**

**This paper contains two printed pages and three parts**

**PART A**

**Answer any TWO of the following. Each question carries five marks. (2x5=10)**

1. Rupa Ltd.’s EBIT is Rs.5,00,000. The company has 10%, Rs.20,00,000 debentures. The Equity capitalization rate is 16%. Calculate:
   1. Market value of Equity and value of firm
   2. Overall cost of capital
2. Write a note on MM valuation approach of capital structure
3. The following figures are collected from the annual report of XYZ Ltd:

| Net profit | Rs. 30,00,000 |
| --- | --- |
| Outstanding 12% preference shares | Rs.100,00,000 |
| Number of Equity shares | Rs.3,00,000 |
| Return on Investment | 20% |
| Cost of capital (Ke) | 16% |

Compute the approximate dividend pay-out ratio so as to keep the share price at Rs.42 by using Walter’s Model.

**PART B**

**Answer any TWO of the following. Each question carries ten marks. (2x15=30)**

1. A machine used on a production line must be replaced at least every 4 years. The cost incurred in running the machine according to its age are:

| Particulars | Age of Machines (years) | | | | |
| --- | --- | --- | --- | --- | --- |
|  | 0 | 1 | 2 | 3 | 4 |
| Purchase price | 30,000 |  |  |  |  |
| Maintenance |  | 8,000 | 9,000 | 10,000 | 10,000 |
| Repairs |  |  | 2,000 | 4,000 | 8,000 |
| Net Realisable Value |  | 16,000 | 12,000 | 8,000 | 4,000 |

Future replacement will be identical machines with the same costs. Revenue is unaffected by the age of the machine.

Assume there is no inflation and ignore taxation.

The cost of capital is 15%. Determine the optimum replacement cycle.

Present value factor at 15% for years 1,2, 3 and 4 are 0.8696, 0.7561, 0.6575 and 0.5717 respectively. Present value of annuity at 15% for years 1,2,3 and 4 are 0.8696, 1.6257, 2.2832 and 2.8550 respectively.

1. MS Engineering Limited belongs to a risk class for which the capitalisation rate is 10%. It currently has 10,000 outstanding shares selling at Rs.100 each. The company is contemplating declaring a dividend of Rs.5 per share at the end of the current financial year. It expects to have a net income of Rs.1,00,000 and has a proposal of making new investments of Rs.2,00,000. CALCULATE the value of the firm when:
2. Dividends are not paid
3. Dividend are paid.
4. Write explanatory notes on the forms and types of Mergers and Acquisitions.

**PART C**

**Answer the following compulsory question. The question carries ten marks. (1x10=10)**

1. A company has made following estimates of the CFAT of the proposed project. The company use decision tree analysis to get clear picture of project’s cash inflow. The project cost Rs.80,000 and the expected life of the project is 2 years. The net cash inflows are:

In year 1, there is 0.4 probability that CFAT will be Rs.50,000 and 0.6 probability that CFAT will be Rs.60,000. The probabilities assigned to CFAT for the year 2 are as follows:

| If CFAT is Rs.50,000 | | If CFAT is rs.60,000 | |
| --- | --- | --- | --- |
| Rs. | probability | Rs. | probability |
| 24,000 | 0.2 | 40,000 | 0.4 |
| 32,000 | 0.3 | 50,000 | 0.5 |
| 44,000 | 0.5 | 60,000 | 0.1 |

The firm uses 10% discount rate for this type of investments.

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