

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86**  
**(For candidates admitted from the academic year 2023 – 2024)**

**B.COM DEGREE EXAMINATION, NOVEMBER 2024**  
**ACCOUNTING AND FINANCE**  
**THIRD SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : FINANCIAL MANAGEMENT**  
**SUBJECT CODE : 23AF /MC/FM34**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

| <b>Q. No.</b>          | <b>SECTION A</b><br><b>Answer all the Questions:</b>   | <b>(5x2=10 marks)</b> | <b>CO</b> | <b>KL</b>     |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
|------------------------|--|-----------------------|-----------|---------------|-----------|------------------|-------|----------|-------|------------------------|-------|---------------------|--------|-----------------|-----------|--|---|---|
| 1                      | A person is required to pay four equal annual payments of Rs. 4,000 each in his deposit account that pays 10% per year. Find out future value of annuity at the end of 4 years .   |                       | 1         | 1             |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 2                      | Write a note on Sale and Lease back.   |                       | 1         | 1             |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 3                      | What is the theory of dividend Irrelevancy advocated by Modigliani and Miller?   |                       | 1         | 1             |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 4                      | The following are the operating results of a firm:<br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Sales (units)</td> <td>25,000</td> </tr> <tr> <td>Interest p.a.</td> <td>Rs.30,000</td> </tr> <tr> <td>Selling Per unit</td> <td>Rs.24</td> </tr> <tr> <td>Tax rate</td> <td>50%</td> </tr> <tr> <td>Variable Cost per unit</td> <td>Rs.16</td> </tr> <tr> <td>No.of equity shares</td> <td>10,000</td> </tr> <tr> <td>Fixed cost p.a.</td> <td>Rs.80,000</td> </tr> </table> Find Financial Leverage.               | Sales (units)         | 25,000    | Interest p.a. | Rs.30,000 | Selling Per unit | Rs.24 | Tax rate | 50%   | Variable Cost per unit | Rs.16 | No.of equity shares | 10,000 | Fixed cost p.a. | Rs.80,000 |  | 1 | 1 |
| Sales (units)          | 25,000   |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| Interest p.a.          | Rs.30,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| Selling Per unit       | Rs.24  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| Tax rate               | 50%  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| Variable Cost per unit | Rs.16  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| No.of equity shares    | 10,000   |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| Fixed cost p.a.        | Rs.80,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 5                      | Geeta Ltd. Is implementing a project with an initial capital outlay of Rs.7,600. Its cash inflows are as follows;<br><table border="1" style="width: 100%; border-collapse: collapse; margin: 10px auto;"> <thead> <tr> <th>Year</th> <th>Rs.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>6,000</td> </tr> <tr> <td>2</td> <td>2,000</td> </tr> <tr> <td>3</td> <td>1,000</td> </tr> <tr> <td>4</td> <td>5,000</td> </tr> </tbody> </table> The expected rate of return on the capital invested is 12% p.a. Calculate the discount payback period. | Year                  | Rs.       | 1             | 6,000     | 2                | 2,000 | 3        | 1,000 | 4                      | 5,000 |                     | 1      | 1               |           |  |   |   |
| Year                   | Rs.  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 1                      | 6,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 2                      | 2,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 3                      | 1,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 4                      | 5,000  |                       |           |               |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| <b>Q. No.</b>          | <b>SECTION B</b><br><b>Answer any four questions:</b>  | <b>(4x5=20 marks)</b> | <b>CO</b> | <b>KL</b>     |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |
| 6                      | Consider the following investment opportunity;<br>A machine is available for purchase at a cost of Rs.80,000<br>We expect it to have a life of five years and to have a scrap value of Rs.10,000 at the end of the five years period. We have estimated that it will generate additional profits over its life as follows :  |                       | 2         | 2             |           |                  |       |          |       |                        |       |                     |        |                 |           |  |   |   |

|               | <table border="1"> <thead> <tr> <th>Year</th> <th>Amount (Rs.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20,000</td> </tr> <tr> <td>2</td> <td>40,000</td> </tr> <tr> <td>3</td> <td>30,000</td> </tr> <tr> <td>4</td> <td>15,000</td> </tr> <tr> <td>5</td> <td>5,000</td> </tr> </tbody> </table> <p>Can the proposal be accepted?</p>                                  | Year      | Amount (Rs.) | 1 | 20,000 | 2 | 40,000 | 3 | 30,000 | 4 | 15,000 | 5 | 5,000 |  |  |
|---------------|---|-----------|--------------|---|--------|---|--------|---|--------|---|--------|---|-------|--|--|
| Year          | Amount (Rs.)  |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 1             | 20,000  |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 2             | 40,000  |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 3             | 30,000  |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 4             | 15,000  |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 5             | 5,000   |           |              |   |        |   |        |   |        |   |        |   |       |  |  |
| 7             | Explain how the wealth maximization objective is superior to the profit maximization objective.   | 2         | 2            |   |        |   |        |   |        |   |        |   |       |  |  |
| 8             | Calculate the cost of capital :<br>X ltd. Issues 12% debentures of face value Rs.100 each and realizes Rs.95 per debenture. The debentures are redeemable after 10 years at a premium of 10%.Companies paying tax at 50%.   | 2         | 2            |   |        |   |        |   |        |   |        |   |       |  |  |
| 9             | Explain different types of long-term debt and equity finance.   | 2         | 2            |   |        |   |        |   |        |   |        |   |       |  |  |
| 10            | A machine cost Rs.3,00,000 and its effective life is estimated to be 6 years . A sinking fund is created for replacing the machine at the end of its effective life time when its scrap realizes a sum of Rs.20,000 only. Calculate the amount which should be provided , every year , for sinking fund if it accumulates at 8% p.a. compounded annually.                       | 2         | 2            |   |        |   |        |   |        |   |        |   |       |  |  |
| 11            | Glamour Ltd. Earned a profit of Rs.20,00,000 before providing for interest and tax . The company's capital structure is as follows:<br>(i) 4,00,000 equity shares of Rs.10 each and its market capitalization rate is 16%.<br>(ii) 25,000 14% Secured redeemable debenture of Rs.150 each .<br>You are required to calculate the value of firm under the 'Net Income Approach'. | 2         | 2            |   |        |   |        |   |        |   |        |   |       |  |  |
| <b>Q. No.</b> | <b>SECTION C (4x10=40 marks)</b><br><b>Answer the following:</b>  | <b>CO</b> | <b>KL</b>    |   |        |   |        |   |        |   |        |   |       |  |  |
| 12 (a)        | Mr. Balu has borrowed a loan of Rs.5,00,000 to construct his house which is repayable in 12 equal annual installments the first being paid at the end of first year. The rate of interest chargeable on this loan is @4% p.a. compounded. How much of equal annual installments payable to amortise the said loan. Prepare amortization table.<br><br>(OR)                      | 3         | 3            |   |        |   |        |   |        |   |        |   |       |  |  |
| (b)           | The cost of project is Rs.32,400. It is expected to generate cash inflow of Rs.16,000 Rs.14,000 and Rs.12,000 through its three year life period .Calculate the IRR of the project.   |           |              |   |        |   |        |   |        |   |        |   |       |  |  |

| 13 (a)                             | <p>Calculate the operating cycle of a company which gives the following details:</p> <table border="1"> <thead> <tr> <th></th> <th style="text-align: right;">Rs.</th> </tr> </thead> <tbody> <tr> <td>Raw material consumption per annum</td> <td style="text-align: right;">8,42,000</td> </tr> <tr> <td>Annual cost of production</td> <td style="text-align: right;">14,25,000</td> </tr> <tr> <td>Annual cost of sales</td> <td style="text-align: right;">15,30,000</td> </tr> <tr> <td>Annual sales</td> <td style="text-align: right;">19,50,000</td> </tr> <tr> <td>Average :</td> <td></td> </tr> <tr> <td>Raw material</td> <td style="text-align: right;">1,24,000</td> </tr> <tr> <td>Work – in progress</td> <td style="text-align: right;">72,000</td> </tr> <tr> <td>Finished goods</td> <td style="text-align: right;">1,22,000</td> </tr> <tr> <td>Debtors</td> <td style="text-align: right;">2,60,000</td> </tr> </tbody> </table> <p style="text-align: center;">(OR)</p> <p>The capital structure of Willim corporation Ltd . consist of an ordinary share capital of Rs.20,00,000 (shares of Rs.100 per value) and Rs.20,00,000 of 10% debentures. The unit sales increased by 20% from 2,00,000 units to 2,40,000 units, the selling price is Rs.10 per unit variable cost amounts to Rs.6 per unit and fixed expenses amount to Rs.2,00,000 .The income tax rate is assumed to be 50%.</p> <p>You required to calculate the following:</p> <ol style="list-style-type: none"> <li>The percentage increase in EPS</li> <li>The degree of financial leverage at 2,00,000 units and 2,40,000 units</li> <li>The degree of operating leverage at 2,00,000 units and 2,40,000 units</li> </ol> |      | Rs. | Raw material consumption per annum | 8,42,000 | Annual cost of production | 14,25,000 | Annual cost of sales | 15,30,000 | Annual sales | 19,50,000 | Average : |       | Raw material | 1,24,000 | Work – in progress | 72,000 | Finished goods | 1,22,000 | Debtors | 2,60,000 | 3 | 3 |
|------------------------------------|---|------|-----|------------------------------------|----------|---------------------------|-----------|----------------------|-----------|--------------|-----------|-----------|-------|--------------|----------|--------------------|--------|----------------|----------|---------|----------|---|---|
|                                    | Rs.   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Raw material consumption per annum | 8,42,000  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Annual cost of production          | 14,25,000   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Annual cost of sales               | 15,30,000   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Annual sales                       | 19,50,000   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Average :                          |   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Raw material                       | 1,24,000  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Work – in progress                 | 72,000  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Finished goods                     | 1,22,000  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| Debtors                            | 2,60,000  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 14 (a)                             | <p>The company equity shares are currently selling at Rs.120 per share. Dividend paid during the previous years is given below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Rs.</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>8.50</td> </tr> <tr> <td>2012</td> <td>9.01</td> </tr> <tr> <td>2013</td> <td>9.55</td> </tr> <tr> <td>2014</td> <td>10.12</td> </tr> <tr> <td>2015</td> <td>10.73</td> </tr> <tr> <td>2016</td> <td>11.38</td> </tr> </tbody> </table> <ol style="list-style-type: none"> <li>Calculate the growth rate of dividend</li> <li>Calculate cost of equity (a) if there is no flotation cost<br/>(b) if the flotation cost is 3%</li> </ol> <p style="text-align: center;">(OR)</p> <p>PPP Ltd. Expects a net income of Rs.80,00,000. It has 2 crore of 8% debentures. The equity capitalization rate of the company is 10%.You are required to calculate (1) Value of the firm and (2) overall capitalization rate according to the Net Income Approach.</p>  | Year | Rs. | 2011                               | 8.50     | 2012                      | 9.01      | 2013                 | 9.55      | 2014         | 10.12     | 2015      | 10.73 | 2016         | 11.38    | 4                  | 4      |                |          |         |          |   |   |
| Year                               | Rs.   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2011                               | 8.50  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2012                               | 9.01  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2013                               | 9.55  |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2014                               | 10.12   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2015                               | 10.73   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
| 2016                               | 11.38   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |
|                                    | (b)   |      |     |                                    |          |                           |           |                      |           |              |           |           |       |              |          |                    |        |                |          |         |          |   |   |

| 15 (a)   | <p>An executive is about to retire at age of 60. His employer has offered him two post- retirement options: (i) Rs.20, 00,000 lump sum, (ii) Rs.2, 50,000 for 10 years. Assuming 10% interest, which is better option?</p> <p>Find out the compound interest on Rs.5000 invested for 5 years @ 8% interest compounded quarterly?</p> <p>Find out the present value of Rs.8000 to be received after 6 years at 12% rate of interest?</p> <p>If Arun deposits at the end of each years. 4000, 6000, 9000, 7000, 2000 in SB account at 14% interest. Ascertain the present value of cash flow.</p> <p style="text-align: center;">(OR)</p> <p>(b) ITC Ltd. has decided to purchase a machine to augment the company's installed capacity to meet the growing demand for products. The relevant details including estimated yearly expenditure and sales are given below. All sales are on cash. Corporate Income Tax rate is 40%.</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Machine</th> </tr> </thead> <tbody> <tr> <td>Initial Investment required</td> <td>Rs.3,00,000</td> </tr> <tr> <td>Estimated Annual sales</td> <td>Rs.4,00,000</td> </tr> <tr> <td>Cost of production (estimated)</td> <td></td> </tr> <tr> <td>Direct Labour</td> <td>Rs. 30,000</td> </tr> <tr> <td>Direct Material</td> <td>Rs. 50,000</td> </tr> <tr> <td>Factory overheads</td> <td>Rs. 50,000</td> </tr> <tr> <td>Administrative Costs</td> <td>Rs. 10,000</td> </tr> <tr> <td>Selling and Distribution Costs</td> <td>Rs. 10,000</td> </tr> </tbody> </table> <p>The economic life of Machine is 3 years. The scrap value is Rs.25,000. You are required to find out Pay-Back method</p> | Particulars           | Machine   | Initial Investment required                      | Rs.3,00,000 | Estimated Annual sales  | Rs.4,00,000 | Cost of production (estimated) |         | Direct Labour             | Rs. 30,000 | Direct Material         | Rs. 50,000 | Factory overheads | Rs. 50,000 | Administrative Costs | Rs. 10,000 | Selling and Distribution Costs | Rs. 10,000 | 4 | 4 |
|--|--|-----------------------|-----------|--|-------------|-------------------------|-------------|--------------------------------|---------|---------------------------|------------|-------------------------|------------|-------------------|------------|----------------------|------------|--------------------------------|------------|---|---|
| Particulars                                      | Machine  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Initial Investment required                      | Rs.3,00,000  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Estimated Annual sales                           | Rs.4,00,000  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Cost of production (estimated)                   |  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Direct Labour                                    | Rs. 30,000   |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Direct Material                                  | Rs. 50,000   |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Factory overheads                                | Rs. 50,000   |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Administrative Costs                             | Rs. 10,000   |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Selling and Distribution Costs                   | Rs. 10,000   |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| <b>Q. No.</b>                                    | <b>SECTION D</b> <span style="float: right;"><b>(2x15=30 marks)</b></span><br><b>Answer any two questions:</b>   | <b>CO</b>             | <b>KL</b> |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| 16   | <p>Prepare an estimate of working capital requirement for WCM Ltd. Adding 10% for contingencies from the information given below:</p> <p>Estimated cost per unit of production Rs.170 includes raw material Rs.80, Direct Labour Rs.30 and overheads (exclusive of depreciation ) Rs.60.</p> <p>Selling price is Rs.200 per unit.</p> <p>Level of activity per annum 1,04,000 units</p> <table border="1"> <tbody> <tr> <td>Raw material in stock</td> <td>4 weeks</td> </tr> <tr> <td>Work -in progress (assume 50% completion stage )</td> <td>2 weeks</td> </tr> <tr> <td>Finished goods in stock</td> <td>4 weeks</td> </tr> <tr> <td>Credit allowed by suppliers</td> <td>4 weeks</td> </tr> <tr> <td>Credit allowed to debtors</td> <td>8 weeks</td> </tr> <tr> <td>Lag in payment of wages</td> <td>1.5 weeks</td> </tr> </tbody> </table>   | Raw material in stock | 4 weeks   | Work -in progress (assume 50% completion stage ) | 2 weeks     | Finished goods in stock | 4 weeks     | Credit allowed by suppliers    | 4 weeks | Credit allowed to debtors | 8 weeks    | Lag in payment of wages | 1.5 weeks  | 5                 | 5          |                      |            |                                |            |   |   |
| Raw material in stock                            | 4 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Work -in progress (assume 50% completion stage ) | 2 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Finished goods in stock                          | 4 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Credit allowed by suppliers                      | 4 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Credit allowed to debtors                        | 8 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |
| Lag in payment of wages                          | 1.5 weeks  |                       |           |  |             |                         |             |                                |         |                           |            |                         |            |                   |            |                      |            |                                |            |   |   |

| 17                                    | <p>You are required to determine the weighted average cost capital of the K.C. Ltd using (i) Book Value weights; (ii) market value weights . The following information is available for your persual. The K.C.Ltd's present book value capital structure is:</p> <table border="1"> <tr> <td>Debentures (Rs.100 per debenture)</td> <td>Rs.8,00,000</td> </tr> <tr> <td>Preference shares (Rs. 100 per share)</td> <td>Rs.2,00,000</td> </tr> <tr> <td>Equity Shares ( Rs.10 per share)</td> <td>Rs.10,00,000</td> </tr> </table> <p>All these securities are traded in the capital markets. Recent prices are debentures @Rs.110, preference shares @Rs.120 and equity shares @ Rs.22. Anticipated external financing opportunities are :</p> <ul style="list-style-type: none"> <li>(i) Rs.100 per debenture redeemable at par: 20- year maturity, 8% Coupon rate, 4% flotation costs, Sale price Rs.100.</li> <li>(ii) Rs.100 preference share redeemable at par: 15- year maturity, 10% dividend rate, 5% flotation cost, sale price Rs.100.</li> <li>(iii) Equity shares Rs.2 per flotation costs, sale price Rs.22.</li> </ul> <p>In addition, the dividend expected on the equity share at the end of the year Rs.2 per share, the anticipated growth rate in dividend is 5% and the company has the practice of paying all its earnings in the form of dividends. The corporate tax rate is 50%.</p> | Debentures (Rs.100 per debenture) | Rs.8,00,000 | Preference shares (Rs. 100 per share) | Rs.2,00,000 | Equity Shares ( Rs.10 per share) | Rs.10,00,000 | 5 | 5         |   |           |   |           |   |   |
|---------------------------------------|---|-----------------------------------|-------------|---------------------------------------|-------------|----------------------------------|--------------|---|-----------|---|-----------|---|-----------|---|---|
| Debentures (Rs.100 per debenture)     | Rs.8,00,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| Preference shares (Rs. 100 per share) | Rs.2,00,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| Equity Shares ( Rs.10 per share)      | Rs.10,00,000  |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 18                                    | <p>A project is in the consideration of a firm. The initial outlay of the project is Rs.1,00,000 and have a life of five years . The company pays tax rate at 50% rate and the maximum required rate of the company has been given as 10%.The straight line method of depreciation will be charged on the projects. The projects are expected to generate a net cash inflow before taxes as follows :</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Project X</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Rs.60,000</td> </tr> <tr> <td>2</td> <td>Rs.30,000</td> </tr> <tr> <td>3</td> <td>Rs.20,000</td> </tr> <tr> <td>4</td> <td>Rs.50,000</td> </tr> <tr> <td>5</td> <td>Rs.50,000</td> </tr> </tbody> </table> <p>With the help of above give information you are required to calculate:</p> <ul style="list-style-type: none"> <li>(a) Pay- back period</li> <li>(b) Average rate of return</li> <li>(c) NPV and profitability index</li> <li>(d) IRR</li> </ul>   | Year                              | Project X   | 1                                     | Rs.60,000   | 2                                | Rs.30,000    | 3 | Rs.20,000 | 4 | Rs.50,000 | 5 | Rs.50,000 | 5 | 5 |
| Year                                  | Project X   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 1                                     | Rs.60,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 2                                     | Rs.30,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 3                                     | Rs.20,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 4                                     | Rs.50,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |
| 5                                     | Rs.50,000   |                                   |             |                                       |             |                                  |              |   |           |   |           |   |           |   |   |