PART - A

Answer ALL questions: (10 x 2 = 20 marks)

1. What is an 'Annuity'?

2. Distinguish between 'gross' and 'net working capital'?

3. Define 'Internal Rate of Return.'

4. What is the cost of retained earnings?

5. Define Earnings per share.

6. A project costs Rs.20 lakhs and yields annually a profit of Rs.3,00,000 after depreciation at 12 1/2% per annum but before tax at 50%. Calculate the pay back period.

7. M Ltd issued 15000 12% Debentures of Rs.100 each at a discount of 10%. The debentures are redeemable after 10 years at a premium of 10%. Calculate the cost of Debentures after tax, if the tax rate is 40%.

8. Profit before interest and tax is Rs.20,000. Interest is Rs.5000 and tax is 40%. Calculate the EPS if the no. of equity shares are 4500.

9. Cost of equity is 15%. Market price of equity share is Rs.50. The next expected dividend is Rs.5. Calculate the growth rate of dividend.

10. Sales Rs.50,000; Variable cost is 60% of sales; Operating leverage is 2. Calculate fixed cost.

PART - B

Answer ANY FOUR questions: (4 x 10 = 40 marks)

11. Evaluate Debentures and Equity as sources of funds for a company.

12. What do you mean by Operating Cycle? How do you compute the net operating cycle of a manufacturing concern?


14. A company has a sale of Rs.100000. Variable cost are 40% of sales; Fixed costs amount to Rs.30000; 10% debentures Rs.100000; Equity capital 7000 shares of Rs.10 each. Calculate Operating Leverage, Financial Leverage, Combined Leverage and Earnings per share.
15. A limited company has the following capital structure:

<table>
<thead>
<tr>
<th>Capital Structure</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity capital</td>
<td>Rs.400000</td>
</tr>
<tr>
<td>6% Preference shares</td>
<td>Rs.100000</td>
</tr>
<tr>
<td>8% debentures</td>
<td>Rs.300000</td>
</tr>
</tbody>
</table>

The market price of the Equity share is Rs.20.
The company is expected to declare a dividend of Rs.2 per share, which will grow at 7% forever. Assuming a tax rate of 50% compute the weighted average cost of capital.

If the company raises an additional Rs.200000 loan at 10% p.a in the next year, what will be the revised weighted average cost of capital, assuming the new borrowing will increase the dividend to Rs.3 per share, but reduce its market price to Rs.15 per share.

16. a) X invests Rs.40000 in a bank which offers 10% interest per annum. What will be the value of the deposit at the end of 8 years?
b) A finance company offers to pay Rs.40000 at the end of 12 years, if you deposit Rs.10000 today. What rate of interest is the company offering?
c) You make a recurring deposit of Rs.5000 per annum in Canara Bank which offers 9% interest per annum. What will be the value of your deposit at the end of 5 years?
d) Canara Bank offers to give you Rs.10000 per annum starting one year from now for a period of 5 years. How much are you prepared to pay now for this annuity, if your expected rate of interest is 12% per annum?
e) You borrow Rs.400000 from your employer at 12% interest per annum. The loan and interest is repayable in 5 equal, annual instalments. Calculate the amount of instalment to be paid.

17. A Ltd plans to buy a machine to replace manual labour. Two models X and Y have been identified, details of which are as follows:

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost machine</td>
<td>Rs.9000</td>
<td>Rs.18000</td>
</tr>
<tr>
<td>Savings in scrap</td>
<td>Rs.500</td>
<td>Rs.800</td>
</tr>
<tr>
<td>Saving in wages</td>
<td>Rs.6000</td>
<td>Rs.8000</td>
</tr>
<tr>
<td>Maintenance cost</td>
<td>Rs.800</td>
<td>Rs.1000</td>
</tr>
<tr>
<td>Supervision charges</td>
<td>Rs.1200</td>
<td>Rs.1800</td>
</tr>
</tbody>
</table>

Ignore taxation.
Calculate the payback period and determine which machine should be purchased.

**PART – C**

**Answer ANY TWO questions (2x20=40 marks)**

18. A company is considering purchase of a machine which will cost Rs.50000 and have a life of 5 years with no salvage value. The company expects to earn the following profits before depreciation and tax.

<table>
<thead>
<tr>
<th>Year</th>
<th>PBDT (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>2</td>
<td>11000</td>
</tr>
<tr>
<td>3</td>
<td>14000</td>
</tr>
<tr>
<td>4</td>
<td>15000</td>
</tr>
<tr>
<td>5</td>
<td>25000</td>
</tr>
</tbody>
</table>

Depreciation is provided under Straight Line Method and Tax rate is 50%.
Compute:

i) Payback period
ii) Net present value
iii) Discount Rate 10%
iv) Profitability index
v) Return on average investment
19. A company plans the production of 52000 units in the coming year. The cost of the product comprises of material Rs.5 per unit, Labour Rs.3 per unit and Overheads Rs.2 per unit, Selling price per unit Rs.12. Raw material will be in stock for 2 weeks. Work in progress 50% complete will be in stock for 1 week. Finished goods are in stock for 4 weeks. Debtors are given 2 weeks credit and creditors allowed 1 week credit. Lag in payment of wages is 2 weeks and overheads 1 week. Cash is to be maintained at 50% of current liabilities. 20% of sales are for cash. Compute the working capital required at cash cost.

20. A Ltd has a share capital of Rs.100000 divided into shares of Rs.10 each. It plans an expansion programme which requires an investment of Rs.50000. The management is considering the following alternatives to raise this amount:
   a) Issue of 5000 equity shares of Rs.10 each.
   b) Issue 5000 12% preference shares of Rs.10 each.
   c) Issue 10% debentures of Rs.50000.
Assuming the company's earnings before interest and tax after expansion is Rs.50000, which financing option will you recommend? Also calculate the indifference point EBIT between options (a) and (c).

21. Define Working Capital. What are the factors which will determine the Working Capital of a manufacturing concern?