

| | | | | | Debt (kd) | |
|---------|--|--|------|--|--------------|--|
| 0 | | | 1.00 | | | |
| 1000000 | | | 1.09 | | 7.8% | |
| 1500000 | | | 1.20 | | 8.5% | |
| 2000000 | | | 1.36 | | 10.5% | |
| 2500000 | | | 1.60 | | 13.2% | |

The risk free rate is 6.5% and average annual market rate of return is 11.5% pa. The tax rate is 25 percent. **(CLO 2; BT Level II, V; Marks: 2x5=10)**

- Estimate the missing figures in the above table
- Recommend the optimum capital structure for financing the project.
- Explain the reason for the increase in beta and before-tax cost of debt with rising level of debt financing.

Q3. A share of stock is now selling for Rs.100. It will pay a dividend of Rs 9 per share at the end of the year. Its beta is 1. Analyze do the investors expect the stock to sell after 1 year- if risk free rate is 8% and rate of return of the market is 18%. **(CLO 2; BT Level IV; Marks: 6)**

Q4. Singhania Automobile Ltd. (SAL) has an average accounts receivable balance of Rs 1250000/- an average inventory balance of Rs. 1750000, and an average accounts payable balance of Rs. 800000. Its annual sales are Rs. 12000000 and its cost of goods sold represents 80 percent of annual sales. Assume there are 365 days in a year. **(CLO 3; BT Level IV, V)**

- Analyse the operating and cash conversion cycle of SAL? **(Marks 6)**
- Justify why shortening of cash conversion cycle considered beneficial for the firm? **(Marks 2)**
- Justify your answer in the context of SAL. **(Marks 2)**

Q5. You plan to make a total of yearly 5 deposits of Rs.100,000.00 each with the first payment being made today. The bank pays a nominal interest of 10% with annual compounding.

(CLO 3; BT Level I; Marks: 2 X 3=6)

- What will be the total balance at the beginning of the 5th year?
- What will be the balance at the end of 5th year if you allow the deposit to stay?