(b) The ageing schedule is as follows:

Age Bracket	Quarter I	Quarter II	Quarter III
0 - 30	63.5 percent	52.1 percent	55.6 percent
31 - 60	31.8	37.5	37.0
61 - 90	4.8	10.4	7.4

PROBLEMS

25.1 Credit Standards The present sales of Soumya Enterprises are ₹ 50 million. The firm classifies its customers into 3 credit categories: A, B, and C. The firm extends unlimited credit to customers in category A, limited credit to customers in category B, and no credit to customers in category C. As a result of this credit policy, the firm is foregoing sales to the extent of ₹ 5 million to customers in category B and ₹ 10 million to customers in category C. The firm is considering the adoption of a more liberal credit policy under which customers in category B would be extended unlimited credit and customers in category C would be provided limited credit. Such relaxation would increase the sales by ₹ 10 million on which bad debt losses would be 8 percent. The contribution margin ratio for the firm is 15 percent, the average collection period is 60 days, and the cost of capital is 15 percent. The tax rate for the firm is 40 percent.

What will be the effect of relaxing the credit policy on the residual income of the firm?

25.2 Credit Period The Malabar Corporation currently provides 45 days of credit to its customers. Its present level of sales is ₹ 15 million. The firm's cost of capital is 15 percent and the ratio of variable costs to sales is 0.80. The firm is considering extending its credit period to 60 days. Such an extension is likely to push sales up by ₹ 1.5 million. The bad debt proportion on additional sales would be 5 percent. The tax rate is 45 percent.

What will be the effect of lengthening the credit period on the residual income of the firm?

25.3 Credit Terms The present credit terms of Bharatiya Company are 1/10, net 30. Its sales are ₹ 12 million, its average collection period is 24 days, its variable cost to sales ratio is 0.80, and its cost of funds is 15 percent. The proportion of sales in which customers currently take discount is 0.3. Bharatiya Company is considering relaxing its discount terms to 2/10, net 30. Such relaxation is expected to increase the sales by ₹ 1.2 million, reduce the average collection period to 16 days, and increase the proportion of discount sales to 0.7.

What will be the effect of relaxing the discount policy on residual income? The tax rate of the firm is 50 percent.

25.4 Collection Effort Manish Ventures is considering relaxing its collection efforts. Presently its sales are ₹ 50 million, its average collection period 25 days, its variable costs to sales ratio 0.75, its cost of capital 15 percent, and its bad debt

ratio 0.04. The relaxation in collection efforts is expected to push sales up by ₹ 6 million, increase the average collection period to 40 days, and raise the bad debts ratio to 0.06. The tax rate of the firm is 30 percent.

What will be the effect of relaxing the collection effort on the residual income of the firm?

25.5 Average Collection Period Amit Enterprises sells on terms 2/10, net 45. Total sales for the year are ₹ 40 million. Thirty percent of the customers pay on the tenth day and avail the discount; the remaining 70 percent pay, on average, 50 days after their purchases.

Calculate the average collection period and the average investment in receivables.

25.6 Average Collection Period Sabet Company sells on terms 1/5, net 15. The total sales for the year are ₹ 10 million. The cost of goods sold is ₹ 7.5 million. Customers accounting for 30 percent of sales take discount and pay on the fifth day, while others take an average of 25 days to pay.

Calculate:

- (a) the average collection period, and
- (b) the average investment in receivables.
- **25.7 Credit Terms** Udar Limited is considering a change in its credit terms from 2/10, net 30 to 3/10, net 45. This change is expected to
 - (a) increase the total sales from ₹ 50 million to ₹ 60 million
 - (b) decrease the proportion of customers taking discount from 0.70 to 0.60
 - (c) increase the average collection period from 20 days to 24 days.

The gross profit margin for the firm is 15 percent and the cost of capital is 12 percent. The tax rate is 40 percent.

Calculate the expected change in residual income.

- 25.8 Credit Granting The financial manager of a firm is wondering whether credit should be granted to a new customer who is expected to make a repeat purchase. On the basis of credit evaluation, the financial manager feels that the probability that the customer will pay is 0.85 and the probability that the customer will default is 0.15. Once the customer pays for the first purchase, the probability that he will pay for the repeat purchase increases to 0.95. The revenues from the sale will be ₹ 10,000 and the cost of sale would be ₹ 8,500—these figures apply to both the initial and repeat purchase. Should credit be granted?
- **25.9 Credit Granting** A firm is wondering whether to sell goods to a customer on credit or not. The revenues from sale will be ₹ 10,000 and the cost of sale will be ₹ 8,000. What should be the minimum probability that the customer will pay, in order to sell profitably?