Risk management

Based on the following information, answer the following questions

Rating Migration of Loan Accounts based on their Internal Rating Module of Fair Growth Bank Ltd. between 31.03.2005 to 31.03.2006 are given in the following Tables.

<table>
<thead>
<tr>
<th>Last Rating</th>
<th>No of Accounts</th>
<th>Present Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>50</td>
<td>AAA 35, AA+ 8, AA 2, A+ 2, A 1, BBB 1, C 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Rating</th>
<th>No of Accounts</th>
<th>Present Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA+</td>
<td>50</td>
<td>AAA 5, AA+ 30, AA 7, A+ 5, BBB 1, C 1, Default 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Rating</th>
<th>No of Accounts</th>
<th>Present Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>A+ 10, A 80, BBB 6, C 2, Default 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Rating</th>
<th>No of Accounts</th>
<th>Present Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBB</td>
<td>200</td>
<td>A+ 10, BBB 120, C 30, Default 40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Rating</th>
<th>No of Accounts</th>
<th>Present Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>30</td>
<td>BBB 5, C 20, Default 5</td>
</tr>
</tbody>
</table>

Standard Migration pattern for ‘A’ rated Borrowers shows a default probability of 0.2% and ‘BBB’ rated Borrowers shows a default probability of 20%. Based on the given data, answer the following five questions.

1. Find out the percentage of ‘AAA’ rated borrowers which remained at the same rating level for the observation period.
   a)35%
   b)50%
   c)70%
   d)10%

2. At the end of the observation period, the number of ‘AAA’ rated borrowers remained at -----
   a)40
   b)55
   c)35
   d)100

3. The percentage (%) of migration of borrowers from ‘A’ and “BBB” category to default category (category ‘D’) are ---- and ---- respectively.
4. Going by the Standard Migration Rating, which type of rating module the regulator will advise the bank to follow?

   a) Both ‘A’ and ‘BBB’ rated borrowers
   b) only ‘A’ rated borrowers
   c) ‘BBB’ rated borrowers
   d) None of the above

5. At the end of the observation period the number of default category (‘D’) rated borrowers remained at -----. 

   a) 40
   b) 54
   c) 133
   d) 48

Based on the following information, answer questions 6 to 10

ABC Bank Ltd. analyzed the Operating Profits of five zones for last five years. The Standard Deviation and Standard Deviation to Mean for the five years are given in the following table.

<table>
<thead>
<tr>
<th>Name of Zones</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
<th>Mean</th>
<th>S.D. to Mean</th>
<th>(Rupees in Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmedabad</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>36</td>
<td>7.20</td>
<td>3.56</td>
<td>0.49</td>
</tr>
<tr>
<td>Chennai</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>22</td>
<td>4.40</td>
<td>2.70</td>
<td>0.61</td>
</tr>
<tr>
<td>Delhi</td>
<td>12</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>35</td>
<td>7.00</td>
<td>4.00</td>
<td>0.57</td>
</tr>
<tr>
<td>Kolkata</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>25</td>
<td>5.00</td>
<td>2.74</td>
<td>0.55</td>
</tr>
<tr>
<td>Mumbai</td>
<td>7</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>38</td>
<td>7.60</td>
<td>2.70</td>
<td>0.36</td>
</tr>
<tr>
<td>Total of Zones</td>
<td>38</td>
<td>40</td>
<td>21</td>
<td>27</td>
<td>30</td>
<td>156</td>
<td>31.20</td>
<td>7.85</td>
<td></td>
</tr>
</tbody>
</table>

From the above data, answer the following questions assuming that the bank’s credit exposure is at equal levels for each zone:

6. From business risk point of view, the performance of the zone which is subjected to maximum risk exposure appears to be -----. 

   a) Ahmedabad
   b) Mumbai
   c) Chennai
   d) Kolkata

7. From business risk point of view, the performance of the zone which is subjected least risk exposure appears to be -----. 

   a) Ahmedabad
   b) Mumbai
   c) Chennai
   d) Kolkata
a) Delhi
b) Mumbai
c) Chennai
d) Kolkata

8. The ratio of Standard Deviation to Mean for all zones put together for ABC Bank Limited is ----.

   a) 7.85 
b) 31.20 
c) 0.516 
d) 0.25

9. Performance of which Zone shows a positive co-relation with the performance of all Zones put together?

   a) Chennai
   b) Delhi
   c) Kolkata
   d) Mumbai

10. The Zones having wide variance of results from year to year is ----.

   a) Ahmedabad
   b) Kolkata
   c) Chennai
   d) Delhi

**Financial management**

Answer Question based on the following information

The Variable cost structure of a product manufactured by a company during the year is as under:

(Rs. per Unit)

<table>
<thead>
<tr>
<th>Material</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour</td>
<td>30</td>
</tr>
<tr>
<td>Overheads</td>
<td>12</td>
</tr>
</tbody>
</table>

The selling price per unit is Rs.270 and the fixed costs and sales during the current year are Rs.14 lakh and Rs.40.5 lakh respectively.

During the forthcoming year direct workers will be entitled to a wage increase of 10% and the material cost, variable overheads and fixed overhead are expected to increase by 7.5%, 5% and 3% respectively.

11. The total contribution and profit for 15,000 units based on present costs is ----- and ----- respectively.

   a) Rs.15,20,000, Rs.1,20,000
   b) Rs.15,80,000, Rs.1,80,000
   c) Rs.16,00,000, Rs.2,00,000
   d) Rs.16,20,000, Rs.2,20,000

12. Find sale price to be fixed in the forthcoming year if the current P/V Ratio is to be maintained.
13 Assuming that selling price per unit will not be increased, ----- would be required to be sold during the forthcoming year so as to yield the same amount of profit in the current year.

a) 15,621 units  
b) 16,431 units  
c) 17,421 units  
d) 18,321 units

14 Revised Variable cost per unit will be ----- 

a) Rs.154.50  
b) Rs.161.30  
c) Rs.174.60  
d) Rs.181.50

Answer Question based on the following information

The Balance Sheet of STV Ltd. is given below:

<table>
<thead>
<tr>
<th>LIABILITIES</th>
<th>Rs. in Lakh</th>
<th>ASSETS</th>
<th>Rs. in Lakh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Capital(Equity Share of Rs. 10 Each)</td>
<td>3.50</td>
<td>Plant &amp; Machinery</td>
<td>7.50</td>
</tr>
<tr>
<td>Preference Capital (10% Preference Shares of Rs. 10 each)</td>
<td>2.00</td>
<td>Goodwill</td>
<td>1.40</td>
</tr>
<tr>
<td>Reserves &amp; surplus</td>
<td>2.00</td>
<td>Stock</td>
<td>1.50</td>
</tr>
<tr>
<td>Long term Loans(11%)</td>
<td>1.00</td>
<td>Debtors</td>
<td>1.00</td>
</tr>
<tr>
<td>9% Debentures</td>
<td>2.50</td>
<td>Pre-Paid Expenses</td>
<td>0.25</td>
</tr>
<tr>
<td>Creditors</td>
<td>0.60</td>
<td>Marketable Securities</td>
<td>0.75</td>
</tr>
<tr>
<td>Bills Payable</td>
<td>0.20</td>
<td>Cash</td>
<td>0.25</td>
</tr>
<tr>
<td>Accrued Expenses</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for tax</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.65</td>
<td></td>
<td>12.65</td>
<td></td>
</tr>
</tbody>
</table>

15 The Current ratio of STV Ltd. is ----- 

a) 3.75 : 1  
b) 2.27 : 1  
c) 1.81 : 1  
d) 1.66 : 1

16 The Quick ratio of STV Ltd. is ----- 

a) 2.25 : 1  
b) 1.36 : 1  
c) 1.21 : 1  
d) 2.00 : 1

17 The Debt : Equity ratio of STV Ltd. is-----

a) 1 : 1  
b) 0.467 : 1  
c) 0.636 : 1  
d) 0.553 : 1

Answer Question based on the following information.
How much time do students spend to prepare for a Statistics final exam? To answer this question, a random sample of 40 students was selected. The sample revealed an average of 5.5 hrs, and a standard deviation of 3.5 hrs.

18) The 95% Confidence Interval for the average number of hours that students spend preparing for a Statistics exam is -----.

a). (4.00, 7.00)
b). (5.42, 6.36)
c). (4.42, 6.58)
d). (3.45, 5.57)

19) If we recalculate the above interval using a 98% confidence level, the margin of error will -----.

a). Increase to 1.29
b) Decrease by 1.29
c). Remain as it is
d) None of these

Answer Question based on the following information.
The cash flow in respect of one project is given below. The Cost of Capital is 12%.

<table>
<thead>
<tr>
<th>Year</th>
<th>Project A Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>(200)</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
</tr>
</tbody>
</table>

20) What is the NPV of Project A (in Rs.)?
a) 216.29
b) 16.29
c) 200
d) 182.24

21) What is the Profitability Index of Project A?
a) 1.30
b) 1.08
c) 1
d) 0.91

22) What is IRR of Project A?
b) 15.24%
c) 14.24%
d) 16.24%
e) 14.50%
Technology Management

Read the following case carefully and choose the answer which you consider to be the most appropriate to the issues raised therein.

Information System (IS) Audit was going on in a fully computerized branch of a nationalised bank. In the preliminary check during the day begin one of the IS auditor found that number of users active in the system are more than the staff strength of the branch as per the attendance register. The auditor was informed by the Database Administrator (DBA) that one of the user-id is for software engineer, who is required to do maintenance work in case of need. One more user-id is of ex-DBA of the branch who was in the branch since the beginning of computerization but has been transferred from the branch to the Regional Office in the previous week. The Regional Office was very close by and in case of need, ex-DBA unofficially visits and carries out the required operation with his old user-id and password and helps the recently posted DBA. Further the auditor found that the server room is kept open and is being accessed by all.

The DBA appraised the auditor about the co-operation extended by every staff for computerized environment. During IS Audit, auditor found that the computerized operations are very smooth and even CTO can do the day begin or day end, if DBA is busy in some other work.

33 User-id and password of software engineer should be -----
   a) Generated and kept for maintenance purpose.
   b) Generated in case of need and deleted when job is over.
   c) Non-system generated.
   d) That of DBA because software engineer requires high level access.

34 Server room should be accessed by -----
   a) DBA only.
   b) DBA and Branch Manager only.
   c) Only those staff, who are working on computer.
   d) Only those staff who enter every access in a log book.

35 day begin and day end activity should be done by -----
   a) DBA only.
   b) Authenticated CTO only.
   c) Branch Manager.
   d) Software engineer who has been assigned the Annual Maintenance Contract.

36 To prevent possibility of the fraud at the branch -----
   a) The duties of the staff should be segregated.
   b) No additional users other than staff of the branch should be allowed access to the system.
   c) Ex-DBA should be stopped from operating on the branch system with his old user ID.
   d) All of the above.

37 Ex-DBA should be -----
   a) Continued to operate with his old user-id and password till the present DBA is accustomed with new assignment
   b) Disallowed to operate since he has been transferred
   c) Allowed to keep his user-id and password, but should work in absence of present DBA
   d) None of these
Answers the Questions.

1  C  2  A  3  C  4  C  5  D  6  C
7  B  8  D  9  C  10  D  11  D  12  C
13  C  14  C  15  B  16  C  17  B  18  C
19  A  20  B  21  B  22  A  23  D  24  B
25  B  26  C  27  D  28  A  29  B  30  D
31  B  32  C  33  B  34  D  35  A  36  D
37  B  38  B  39  B  40  A  41  A  42  A