II Semester M.Com. Degree Examination, June/July 2018  
(CBCS) 
COMMERCE  
Paper – 2.2 : Risk Management  

Time : 3 Hours  
Max. Marks : 70  

SECTION – A  

1. Answer any seven questions out of ten. Each question carries two marks.  
(7x2=14)  
a) Define risk.  
b) What is Risk Mapping?  
c) Differentiate between Risk and Uncertainty.  
d) What is prospective risk?  
e) What do you mean by absolute risk?  
f) What is Back-to-Back loan in derivatives market?  
g) What do you mean by open cover in ECGC?  
h) Define risk audit.  
i) What do you mean by back testing?  
j) What is RAROC?  

SECTION – B  

2. Discuss the techniques of Risk Control.  

3. Explain the causes for technology risk in a business.  

4. Explain the importance of “SARA – A Risk Management Strategy” in business.  

5. Discuss the functionality of good credit in credit risk management.  

6. State the various options for risk mitigation.  

7. State the types of natural and human perils in risk management.  

P.T.O.
Answer any three questions out of five. Each question carries twelve marks. \((3 \times 12 = 36)\)

8. Discuss the techniques used in estimating both loss frequency and severity.

9. State the framework of credit risk management process in commercial banks.

10. What is meant by an efficient market? What are the benefits to the economy from an efficient market in the context of CAPM model?

11. Consider a six month call option on XYZ Company's stock with an exercise price of Rs. 49.68. If XYZ is currently selling at Rs. 60.82 and the risk-free interest rate is 6.75%. What will be the price of the option? Apply the Black-Scholes model to find call option value by assuming the standard deviation of the rate of return of XYZ stock to be 0.45.

12. The current price of gold is Rs. 842/Troy Ounce. Assume that you initiate a long position in 10 MCX Gold Futures Contracts at this price on 14th Jan., 2018. The initial margin is 8% of the initial price of the futures, and the maintenance margin is 4% of the initial price. Assume the following evolution of gold prices over the next 09 days, and compute the margin account assuming that you meet all the margin calls on time to hedge the risk.

<table>
<thead>
<tr>
<th>Date</th>
<th>Price per Troy Ounce</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th Jan. 18</td>
<td>Rs. 842</td>
</tr>
<tr>
<td>15th Jan. 18</td>
<td>Rs. 900</td>
</tr>
<tr>
<td>16th Jan. 18</td>
<td>Rs. 910</td>
</tr>
<tr>
<td>17th Jan. 18</td>
<td>Rs. 880</td>
</tr>
<tr>
<td>18th Jan. 18</td>
<td>Rs. 860</td>
</tr>
<tr>
<td>20th Jan. 18</td>
<td>Rs. 812</td>
</tr>
<tr>
<td>21st Jan. 18</td>
<td>Rs. 769</td>
</tr>
<tr>
<td>22nd Jan. 18</td>
<td>Rs. 711</td>
</tr>
<tr>
<td>23rd Jan. 18</td>
<td>Rs. 789</td>
</tr>
<tr>
<td>24th Jan. 18</td>
<td>Rs. 864</td>
</tr>
</tbody>
</table>
II Semester M.Com. Examination, July 2017
(CBCS)
COMMERCE
Paper – 2.2 : Risk Management

Time : 3 Hours
Max. Marks : 70

SECTION – A

1. Answer any seven questions out of ten. Each question carries two marks. *(7x2=14)*
   a) Define Risk.
   b) What do you mean by Sovereign Risk ?
   c) Define volatility.
   d) Define Credit Spread Risk.
   e) Define expected return.
   f) What do you understand by Fidelity Risk ?
   g) What is Loan Review Mechanism ?
   h) Define Operational Risk Management.
   i) Differentiate between options and futures contract.
   j) What do you mean by intrinsic value of an option ?

SECTION – B

Answer any four questions out of six. Each question carries five marks. *(4x5=20)*

2. What are the major Personal Risks and Commercial Risks ?
3. State the features of Risk Management.
4. “Without risk taking and the prudent management of those risks ... the rewards will not materialize.” Substantiate.
5. Compare and discuss the relationship between risk managers and shareholders.
7. Is futures market leading the spot market or does the reverse occur ? Explain.

P.T.O.
SECTION – C

Answer any three questions out of five. Each question carries twelve marks. (3×12=36)

8. Explain the quantitative approaches adopted by banks to compute expected and unexpected losses in operations.

9. From the following information find Call Option Value by using Black-Scholes Model for XYZ company share.
   Spot rate: Rs. 1,640, strike rate: Rs. 1,600, Maturity Period: 6 months, continuous compounding interest rate: 10% p.a.; standard deviation: 15%.

10. Explain the following concepts in detail:
    a) KMV Approach – Credit Risk Management Model
    b) Monte Carlo simulation model – VAR analysis
    c) Expected Monetary Value Analysis – Quantitative Risk Analysis Technique.


12. Explain the types and process of risk management associated with finance in detail.
II Semester M.Com. Examination, June 2016
(CBCS Scheme)
COMMERCE
Paper - 2.2 : Risk Management

Time : 3 Hours
Max. Marks : 70

SECTION – A

1. Answer any seven questions out of ten. Each question carries two marks. (7x2=14)
   a) What do you mean by Risk Management?
   b) Define Uncertainty.
   c) What do you mean by an Undesirable Event?
   d) What is Retrospective Risk?
   e) What is Back-to-Back loan in Derivative Market?
   f) What is Pay-Off in futures contracts?
   g) What do you mean by Restricted Cover in ECGC?
   h) Differentiate between Commodity Futures and Financial Futures.
   i) What do you mean by Stress Testing?
   j) State any two forms of credit risk.

SECTION – B

Answer any four questions out of six. Each question carries five marks. (4x5=20)

2. What are the features of Financial Asset Exposure?

3. Explain the importance of LIBOR and MIBOR in Swap Contracts.

4. What are Credit Risk Derivative Instruments? Explain its types.

5. Explain the concept of 5M model in detail.

P.T.O.
6. Consider a 6 months Forward Contract on 100 shares with a price of Rs. 50 each. The Risk-free rate of interest (continuously compounded) is 12% per annum. The share is expected to yield a return (dividend) of Rs. 2.50 in 4 months from now. Determine the value of the Forward Contract.

7. A US based company that exports goods to Switzerland and expects to receive payment or a shipment of goods in two months. Because the payment will be in Swiss-Francs, the exporter wants to hedge against a decline in the value of the Swiss franc over the next two months. The risk free rate in US 2 percent and 5 percent in Swiss. Assume that interest rates are expected to remain fixed over the next six months. The current spot rate is $0.5984. State whether the US company should use a long or short forward contract to hedge currency risk.

SECTION – C

Answer any three questions out of five. Each question carries twelve marks. (3×12=36)

8. In terms of the Harry Markowitz Portfolio Model, explain how an investor identifies his/her optimal portfolio. What specific information does an investor need to identify to arrive at optimal portfolio?

9. Briefly explain the Risk Modeling Methods adopted in ORM.

10. Reliance has a market price of Rs. 900. The volatility on the share is 0.34; the risk-free interest rate is 6%. What would be the price of the call with a strike price of Rs. 950, if the expiry date were 18 days ahead and assume there is no dividend announcement so far. Calculate the Price of Call Option using Black-Scholes Model.

11. What is Altman’s Z Score Management Model? Measure the “Financial Fitness” of ABC Private Bank using Altman Z-Score Model from the following information:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Market value of equity</td>
<td>44,000</td>
</tr>
<tr>
<td>Total Book Value of Assets</td>
<td>2,33,500</td>
</tr>
<tr>
<td>Total Book Value of Liabilities</td>
<td>2,33,500</td>
</tr>
<tr>
<td>Current Year Profit</td>
<td>27,500</td>
</tr>
</tbody>
</table>
Sales for the year 40,000
Earnings after interest and taxes 75,000
Tax @ 30% 13,000
Interest 15,000
Reserves and Surplus 33,000
Creditors 13,800
Working Capital 24,000

12. You plan to visit Geneva, Switzerland in three months to attend an international business conference. You expect to incur the total cost of SF 10,000 for lodging, meals and transportation during your stay. As of today, the spot exchange rate is $0.60/SF and the three month forward rate is $0.63/SF. You can buy the three month call option on SF with the exercise rate of $0.64/SF for the premium of $0.05 per SF.

Assume that your expected futures spot exchange rate is the same as the forward rate. The three-month interest rate is 6% P.A. in the United States and 4% in Switzerland.

1) Calculate your expected dollar cost of buying SF 10,000 if you choose to hedge via call option on SF.

2) Calculate the future dollar cost of meeting this SF obligation if you decide to hedge using a forward contract.

3) At what future spot exchange rate will you be indifferent between the forward and option market hedges?

4) Illustrate the future dollar costs of meeting the SF payable against the future spot exchange rate under both the options and forward market hedges.