

M.B.A. (CBCS Pattern) Semester - III  
**PCB3EB2 - Risk Management and Derivatives**

P. Pages : 2

Time : Three Hours



**GUG/S/23/10708**

Max. Marks : 70

- Notes :
1. Attempt **any five** questions.
  2. All questions carry equal marks.

1. What is stock index? Explain economic significance of index movements. Discuss index construction issues in details. **14**
2. Explain in brief the history of financial derivative market. Discuss its participants and economic functions. **14**
3. Write a detailed note on 'clearing mechanism' and 'settlement procedure'. **14**
4. Briefly discuss the option pricing model developed by Black and Scholes. **14**
5. Briefly discuss about futures pricing cost of carry model. **14**
6. Explain various types of foreign exchange risk. Discuss risk management techniques in detail. **14**
7. Discuss the concept of swaps. Explain the characteristics and types of swaps. **14**
8. Write short notes on **any two**. **14**
  - a) Free float market capitalization.
  - b) Trading strategies using futures.
  - c) Risk Management Practices in India.
  - d) Concept of credit Derivatives.
9. The equity share of ABC Ltd. is present selling at Rs. 250. A call option with a period of 4 months and strike price Rs. 45 is available for Rs. 6 per share. is the option correctly priced if. **14**
  - i) A dividend of Rs. 2 is expected in 2 months time,
  - ii) The variance of share price is 0.06 and
  - iii) The risk free rate of interest is 3%

Year	Return (%)	
	S	M
2001	18	15
2002	9	7
2003	20	16
2004	-10	-13
2005	5	4
2006	12	7

- Calculate the covariance and correlation coefficient of returns.
- Determine the beta coefficient for S.
- What is S's total risk? How much is systematic risk?

Year	Return%				
	S	M	$S^2$	$M^2$	SM
2001	18	15	324	225	270
2002	9	7	81	49	63
2003	20	16	400	256	320
2004	-10	-13	100	169	130
2005	5	4	25	16	20
2006	12	7	144	49	84
SUM	54	36	1074	764	887
Average	9	6		225	270

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