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# SF-255

**January – February 2022**

M. B. A. (Financial Administration) Examination

III Semester

## DERIVATIVES AND RISK MANAGEMENT

Time 3 Hours] [Max. Marks 90

**Note : Attempt any three questions from Section A. Each question carries 22 marks. Section B is compulsory and carries 24 marks.**

### Section A

1. What strategies of option combination will you follow if you think, give examples :
   (a) Market is slightly bullish.
   (b) Market is slightly volatile
2. Discuss with example the process of constructing synthetic stock with the help of options.
3. What do you mean by Basis Risk ? How this risk can be minimized ?
4. What type of risk is associated with over the counter derivative instruments ? How such risks can be dealt with ? Default in swap is more risky than default in bank, true or false, why ?
5. Write short notes on the following :
   (a) Open Interest and Volume of Trade.
   (b) Contango and Backwardation.
   (c) Contingent Claims.

### Section B

6. *A few months ago, futures have been introduced on the senses. An arbitrager is interested in creating a hypothetical index portfolio to understand the concept of stock index arbitrage and how to gain from it. He has collected the following information :*

- *The current index is 3495*
- The dividend yield on the index in 6 month is 4%
- A six month index futures is currently priced at 3700
- The rate on 364 day T-bills is 9.5%
- 70% of the companies included in the index are likely to pay dividend in the next six months.
- Each futures contract is for a value of 100 times the index.

**You are required to : Calculate** the fair price of a six month index futures **contract. How can the information available in (a) above be** used by an arbitrageur ? Calculate the arbitrageur's gain / losses if the index is at 3400 or at 3800 at the end of six months.

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