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M-161100020407 Seat No. ________

M. B. A. (Sem. IV) (CBCS) Examination

March / April - 2018

Risk Management

Time : **3** Hours] [Total Marks : **70**

Instructions : All questions carry equal marks.

1 Explain the features of option. What are the advantages of options over futures contract?

2 (A) What are the merits and demerits of Futures contract?

(B) A call option with an exercise price of Rs. 150 can be bought at a premium of Rs. 9. A put option with an exercise price of Rs. 132 is available at a premium of Rs. 12. How can you combine these options to form a portfolio? What will be your pay-off at expiration?

OR

2 From the following data for certain stock, find the value of call option using Black Scholes Model.

Current price of stock Rs. 50,

Exercise price Rs. 47,

Standard deviation 0.40

Maturity Period 6 months,

Annual Interest Rate 10%

$e^{0.10 \times 0.5} = 1.0513$

Ln $1.0638 = 0.0618$

The following is the extract of table entries representing area under the standard normal curve from 0 to the specified value of z.

z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224

3 What is a derivative? Which type of derivatives are popular in India and explain them briefly.

OR

3 What do you understand by risk and what are the different ways of classifying and managing them?

4 (A) What do you understand by a forward contract? Illustrate with an example.

(B) Describe the features of an Interest rate swap.

OR

4 A stock is currently priced at Rs. 50. It is known that in the first 3 months from now the prices can either go up by 20% or fall by 20%. Further in the next 3 months again the prices may either go up by 20% or fall by 20%. If the risk-free interest rate is 8% p.a., find the value of a European Call and Put option with an exercise price or Rs. 45 and a maturity of 6 months.

5 Write Short Notes on : (Any **Two**)

(a) Binomial Model

(b) Swaps

(c) Commodity Futures.