

M.Phil 1st Semester Examination, 2019

COMMERCE

(Recent Advances in Finance)

PAPER – COM-113

Full Marks : 50

Time : 2 hours

Answer **all** questions

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

1. Answer any *four* questions of the following : 5 × 4

(a) What do you mean by financial engineering ?

Distinguish between financial analysis and financial engineering.

2 + 3

- (b) Briefly explain the uses of VAR in risk measurement. 5
- (c) Write a note on Geometric Brownian Motion for modelling stock prices. 5
- (d) Show derivation of the daily continuous compounded rate of return of a stock. 5
- (e) State the salient features of repo transactions. 5
- (f) Discuss the scope of Behavioral Finance in Corporate Financial Management. 5
- (g) How to identify market bubble ? 5
- (h) What are the different types and biasness ?
What is confirmation bias ? $2\frac{1}{2} + 2\frac{1}{2}$

2. Answer any *two* questions of the following : 10×2

- (a) Discuss the external factors that influence financial engineering. 10
- (b) (i) State the assumptions of the Black-Scholes model for option pricing.

- (ii) Calculate the value of a call option using the B-S model given the following information :

Current market price of the share	: Rs. 75
Volatility	: 0.45
Exercise price	: Rs. 80
Risk-free rate	: 0.12
Time to expiration	: 0.5 years

If an investor wants to buy a put with same exercise price and expiration date as call option, what will be the value of put? 4 + 6

- (c) Discuss in brief the Prospect Theory. What is the difference between Prospect Theory and Expected Utility Theory. 7 + 3
- (d) Write short notes on : 6 + 4
- (i) Fundamental Anomaly
- (ii) Calender Anomaly.

[Internal Assessment—10 Marks]
