Time: 2.30 Hours **Marks: 75**

NOTE: 1.Q1 is compulsory

2. Q2 to Q5 having internal options
3. Figures to the right indicate full marks.
4. State your assumptions clearly

Q1.A <u>State True or False (any 8).</u> **(08)**

1. Risk Measurement involves tactical and Strategic decisions to control risk
2. Credit Risk is alternatively called as Default Risk
3. Beta less than 1 indicates that the security is theoretically more volatile than the market
4. Basis= Future price – Spot Price
5. In the money Option leads to negative cash flows to the holder if it were exercised immediately
6. Markowitz Risk Return Model is also called as Modern Portfolio Theory
7. Value at risk measures the potential loss in value of a risky asset or a portfolio
8. Option Premium is paid by Option seller to the Option buyer
9. Actuaries are professionals who apply mathematics to financial problems
10. Translation exposure in Exchange rate risk impacts the future cash flows of a firm.

Q1.B <u>Match the column (any 7)</u> **(07)**

	Column A		Column B
i	Risk Register	a	Call and Put
ii	Arbitrage	b	Futures
iii	Options	c	Pure risk
iv	Standardized exchange traded contracts	d	Exchange of cash flows between two parties
v	Forwards	e	Higher risk higher returns
vi	Swaps	f	Master document that captures all the possible risk in a project
vii	Modern Portfolio Theory	g	More Risky project
viii	Systematic Risk	h	Profit from price difference in two markets
ix	Beta ≥1	i	Risk of failure of systems, processes and people in the organization
x	Operational Risk	j	No standardized contract

Q.2) a) Distinguish between Risk Measurement and Risk Management. (08)
Q.2) b) Explain Diversification? State the techniques used for Diversification. (07)

OR

Q.2) c) What is Derivatives? Explain the types of Derivatives. (08)
Q.2) d) Explain Arbitrage? State the techniques of Arbitrage. (07)

Q.3) a) Explain the challenges of Risk assurance in an organization. (08)
Q.3) b) Define Stakeholder? How stakeholders can be managed. (07)

OR

Q.3) c) The following is the information of Stock A and Stock B under the possible states of nature: (15)

State of nature	Probability	Returns A (%)	Returns B (%)
1	0.10	5%	0%
2	0.30	10%	8%
3	0.50	15%	18%
4	0.10	20%	26%

(i) Calculate the expected return of A and B
(ii) Calculate the Standard deviation of Stock A and B
(iii) If you want to invest in any one stock, which stock would you prefer

Q.4) a) Explain the powers, functions and duties of IRDA (08)
Q.4) b) what is Actuaries? Explain the role of Actuaries (07)

OR

Q.4) c) From the following information, calculate Beta (β) of a security (08)

Year	Return on security (%)	Return on Market Portfolio (%)
1	18	11
2	19	13
3	17	12
4	20	14
5	21	15

Q.4) d) Expected losses are given in the table below: (07)

Loss Value (in Rs.)	Probability
50,000	0.30
10,000	0.60
0	0.10

Find the fair premium if:
(a) Policy provides full coverage
(b) Underwriting cost = 12% of pure premium
(c) Claims are paid at the end of the year
(d) Interest rate = 8%
(e) Expected claim cost = Rs.900
(f) Fair profit = 10% of pure premium

Q.5) a) Explain Risk and the three lines of Defense. (08)

Q.5) b) Explain Enterprise Risk Management Matrix. (07)

OR

Q.5) c) Write Short notes on (Any Three) (15)

i) Reinsurance

ii) Bancassurance

iii) Expected Claim cost

iv) Enterprise Risk Management

v) Quantitative Risk Measurement