

Time: 2.30 Hrs

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 State whether the following statements are true or false (any 8)

(08)

- i. Beta measures volatility or risk
- ii. If Jensen's Alpha is positive, it reflects that the Mutual fund has exceeded the expectations and outperformed the Market portfolio and vice versa
- iii. Transaction exposure in Exchange rate risk impacts the future cash flows of a firm.
- iv. Exercise price is a price at which the option buyer is eligible to buy or sell the underlying asset
- v. APT is an asset pricing model based on the idea that an asset's return cannot be predicted using the relationship between that asset and many common risk factors
- vi. The third line of Defense includes Operational Management
- vii. An end user of the project's outcome is one of the internal stakeholder to the organization
- viii. At the money Option leads to negative cash flows to the holder if it were exercised immediately
- ix. Enterprise Risk Management has one dimensional assessment (potential impact)
- x. Risk Measurement is the collective responsibility of different people in the organization

Q.1B) Match the following (Any 7)

(07)

| | Column A | | Column B |
|------|---|---|---|
| i | Transaction Exposure and Translation Exposure | a | Call and Put |
| ii | Arbitrage | b | Futures |
| iii | Options | c | Risk Return theory |
| iv | Standardized exchange traded contracts | d | Exchange of cash flows between two parties |
| v | Forwards | e | Higher risk higher returns |
| vi | Swaps | f | Currency Risk |
| vii | Modern Portfolio Theory | g | Less Risky project |
| viii | Risk return trade-off | h | Profit from price difference in two markets |
| ix | Beta < 1 | i | Credit Risk |
| x | Default Risk | j | No standardized contract |
| | | k | Risk |

Q.2) A) Define the term Risk? Explain the Risk Management Process

(08)

B) Explain Arbitrage theory and Techniques

(07)

OR

C) Calculate the expected returns and Standard deviation of Stock A and Stock B

(08)

The following is the information of stock A and Stock B under the possible states of nature

| State of Nature | Probability | Return 'A' | Return 'B' |
|-----------------|-------------|------------|------------|
| 1 | 0.10 | 5% | 0% |
| 2 | 0.30 | 10% | 8% |
| 3 | 0.50 | 15% | 18% |
| 4 | 0.10 | 20% | 26% |

D) Write note on Risk Register

(07)

- Q.3) A) Explain Risk and the three lines of Defense (08)
 B) Explain the challenges of Risk assurance in an organization (07)

OR

- C) Calculate Beta for each of the following two securities from the given information (15)

| Year | A.Ltd (%) | B.Ltd (%) | Market Portfolio (%) |
|------|-----------|-----------|----------------------|
| 1 | 10 | 14 | 12 |
| 2 | 6 | 2 | 5 |
| 3 | 13 | 19 | 18 |
| 4 | -4 | -12 | -8 |
| 5 | 13 | 11 | 10 |
| 6 | 14 | 19 | 16 |
| 7 | 4 | 3 | 7 |
| 8 | 18 | 20 | 15 |
| 9 | 24 | 28 | 30 |
| 10 | 22 | 16 | 25 |

- Q.4) A) What are the good practice principles for risk assurance? (08)
 B) Define Stakeholder and explain the types of project stakeholders (07)

OR

- C) Explain the powers, functions and duties of IRDA (08)
 D) What is Actuaries? Explain the role, duties and obligations of Actuaries (07)

- Q.5) A) Suppose an insurer estimates that an insurance contract exposure has the following loss distribution: (08)

| Loss (in Rs.) | Probability |
|---------------|-------------|
| 20,00,000 | 0.003 |
| 8,00,000 | 0.010 |
| 2,00,000 | 0.050 |
| 50,000 | 0.847 |

Assume that administrative expenses, which are paid immediately, equal 20% of the expected claim cost. Further assume that this type of policy requires a profit loading equal to 11% of the expected claim cost. Calculate the fair premium

- B) What is Reinsurance? State its types (07)

OR

- Q.5) Write short notes on (Any three) (15)

- Risk Exposure Analysis
- Derivatives
- Risk Governance
- Bancassurance
- Enterprise Risk Management Matrix
