**Unique Paper Code  :  52417608**
**Name of the Paper    :   Fundamentals of Investment**
**Name of the Course  :  B.Com (P). (CBCS)**
**Semester              :  VI**
**Duration              : 02 hours**
**Maximum Marks    : 75 Marks**

Attempt any <u>four</u> Questions. All Questions Carry equal marks.

Q1.   "There is no such thing as a risk-free investment." Comment.

There are two securities A & B for which the following data is available:

| Probability | R$_A$ (%) | R$_B$ (%) |
|---|---|---|
| 0.20 | 25 | 5 |
| 0.50 | 17 | 13 |
| 0.30 | 5 | 25 |

Calculate the expected risk and return of each security. If an investor having ₹1, 00,000 wishes to invest ₹40,000 in Security A and the balance money in Security B. What will be his expected risk and return of the portfolio?

Q2.   Explain the relationship between time to maturity and bond valuation with the help of a diagram.

An investor is considering the purchase of the bond with the face value of ₹1000 with the coupon rate of 12% and maturity period of 5 years. If the investor wants a yield of 14%, What is the maximum price he should be ready to pay for this bond? If the bond is selling for ₹990 What would be his yield?

Q3.   "Technical Analysis is based on the hypothesis that the future behavior of the system is determined by its past behavior." Comment on this statement.

Ms. K wants to invest in a company that has just given a current dividend of ₹10 per share. The face value of the share is ₹100. Dividends are expected to grow at 7% for 5 years, at 5% for the next 3 years and at 3% thereafter perpetually. Find out the intrinsic value of the share at the end of 4$^{th}$ year if the required rate of return of Ms. K is 10%.

Q4. Draw a properly labeled graph of the Capital market line (CML) and indicate where you would expect two portfolios viz. one portfolio with 100% funds invested in government treasury bill and the second portfolio with 50% invested in market index and 50% invested in government treasury bill would lie   to fall along that line. Explain your reasoning.

Suppose that the Capital Asset Pricing Model holds. The market portfolio has an expected return of 0.14 and a standard deviation of 0.35. The risk free rate is 0.05. How could you construct a portfolio having an expected return of 0.20? What are the beta and standard deviation of this portfolio?  What is the risk premium?

Q5.  How can financial derivatives be used for risk management in Indian Scenario?

The 3-months call option premium is ₹20 and three months put option premium is ₹30. Assume that the exercise price for both the cases is ₹500, Find out the net payoffs of call option buyer, call option writer, put option buyer and put option writer along with the graph when the spot price of the shares on the exercise day ₹470, ₹490, ₹500, ₹520, ₹530 , ₹550 and ₹600. Also identify breakeven point (B.E.P.) and moneyness status of the option on the graph.

Q6. "Securities and Exchange Board of India (SEBI) is a statutory regulatory body entrusted with the responsibility to regulate the Indian Capital Market and protects the interest of investors." In the light of this statement explain the reforms introduced by SEBI in primary and secondary market in India.

Ms.A expects a return of 14% by investing on her own in equity shares. She is considering a mutual fund scheme which has the issue expenses of 5.2% and is expected to earn a return 16%. How much should be the recurring expenses of mutual fund to provide a return of 14% to Ms. A.

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