

**Lecture 08 Worksheet (ECON211), AY 2025-26 [Date: 31 Jul 2025]**

1. Compute the present and the future values of a deposit of ₹10,000 in the coming ten years. Assume that the interest rate is constant and will remain stuck at 5%.

2. You win a state lottery worth ₹10,00,000, but the state will pay you this amount in equal installments of ₹50,000 every year for the next 20 years. What is the present value of the lottery amount? Assume that the interest rate is 6%.

3. Compute the present value of a series of deposits of ₹5000 at the end of each year in perpetuity when the interest rate is 8% per year.

**4. Bond Prices and Yields**

- a) A bond has a face value of ₹1000, is priced at ₹950, and the annual coupon amount is ₹60. What is the current yield?
- b) A bond has a face value of ₹5000, is priced at ₹5500, and the annual coupon amount is ₹300. What is the current yield?
- c) You buy a zero-coupon bond for ₹8000 which matures in 5 years. You receive ₹12000 at maturity. What is the yield to maturity? (assume annual compounding)