

Indian Institute of Technology, Kharagpur

Date FN/AN

Time: 2 hours

Full Marks: 30

No of Students: 57

Mid-Spring Semester 2023

Deptt: HSS

Sub No: HS41004

5-Year Integrated M.Sc in Economics

Sub Name: Banking Theory and Practice

Answer all the questions.

Q1: Commercial banks are special among intermediaries. Justify this statement. How do you classify the functions of commercial banks and why the banks are regulated? Briefly explain the reasons of the failure of the banks? (6 Marks)

Q2: (i) Highlight the factors affecting bank deposits with reasons. (ii) Define the risk management process of commercial bank and what are the major sources of credit risk, operational risk and liquidity risk of commercial banks. (6 Marks)

Q3: How do you measure the stability, asset quality, liquidity and productivity of the commercial banks? What is the significance of customer profitability analysis and what are the steps involved in customer profitability analysis? (6 Marks)

Q4: (i) An investor buys a 7-year, 11% coupon bond, paying coupons annually, market interest rate 10%, and a par value of ₹1,000. Immediately after the purchase, the yields on such bonds decrease to 9.50% on all maturities and remains the same until the investor sells the bond on the horizon date. Assume the investor needs cash at the end of year 5 ($HD = 5$), is certain he can reinvest the coupons during the period in securities yielding 9.50% and expects to sell the bond at his HD at a rate of 9.50%. What will be the total return of the investor? (4 Marks)

(ii) Find the Macaulay's duration of a 5-year, 10% semiannual coupon bond with bond's yield to maturity at 11% and of INR 100 par value? \rightarrow weighted avg (t_{pva}) (2 Marks)

Q5: (i) The market price of ABC Limited is Rs 80. The current EPS is Rs. 7 and is expected to grow at the rate of 3% per year. The present dividend retention ratio is 40% and is expected to stay at this level in the future. If an investor decides to buy and hold it for four years, what should be the ending P/E ratio if the investor's required return is 13 % during the holding period? (3 Marks)

(ii) A company earned Rs. 7 per share during the last year and paid a dividend of Rs. 2.50 per share. Its earnings were expected to grow at a rate of 10% for the next three years and thereafter stabilize at 3%. The pay-out ratio is expected to remain at the same level during the three years and then increases to 60%. If the required rate of return is 16%, compute (i) the expected price of share at the end of the third year and (ii) current price of the stock. (3 Marks)