ALL FOUR questions are compulsory and MUST be attempted 1 CJ Co is a profitable company which is financed by equity with a market value of $180 million and by debt with a market value of $45 million.The company is considering two investment projects,as follows. Project A This project is an expansion of existing business costing $35 million,payable at the start of the project,which will increase annual sales by 750,000 units.Information on unit selling price and costs is as follows: Selling price:$200 per unit（current price terms） Selling costs:$004 per unit（current price terms） Variable costs:$080 per unit（current price terms） Selling price inflation and selling cost inflation are expected to be 5% per year and variable cost inflation is expected to be 4% per year. Additional initial investment in working capital of $250，000 will also be needed and this is expected to increase in line with general inflation. Project B This project is a diversification into a new business area that will cost $4 million.A company that already operates in the new business area,GZ Co,has an equity beta of 15.GZ Co is financed 75% by equity with a market value of $90 million and 25% by debt with a market value of $30 million. Other information CJ Co has a nominal weighted average after-tax cost of capital of 10% and pays profit tax one year in arrears at an annual rate of 30%. The company can claim capital allowances （tax-allowable depreciation） on a 25% reducing balance basis on the initial investment in both projects. Risk-free rate of return:4% Equity risk premium:6% General rate of inflation:45% per year Directors ‘ views on investment appraisal The directors of CJ Co require that all investment projects should be evaluated using either payback period or return on capital employed （accounting rate of return）.The target payback period of the company is two years and the target return on capital employed is 20%,which is the current return on capital employed of CJ Co.A project is accepted if it satisfies either of these investment criteria.The directors also require all investment projects to be evaluated over a four-year planning period,ignoring any scrap value or working capital recovery,with a balancing allowance（if any）being claimed at the end of the fourth year of operation. Required： （a ）Calculate the net present value of Project A and advise on its acceptability if the project were to be appraised using this method. （12 marks） （b）Critically discuss the directors ‘ views on investment appraisal. （7 marks） （c）Calculate a project-specific cost of equity for Project B and explain the stages of your calculation. （6 marks） （25 marks） 2 The following financial position statement as at 30 November 2010 refers to Nugfer Co,a stock exchange-listed company,which wishes to raise $200m in cash in order to acquire a competitor. $m $m $mAssetsNon-current assets 300Current assets211----Total assets 511----Equity and liabilities Share capital 100Retained earnings 121----Total equity221Non-current liabilitiesLong-term borrowings 100Current liabilitiesTrade payables 30Short-term borrowings 160----Total current liabilities 190----Total liabilities 290----Total equity and liabilities 511---- The recent performance of Nugfer Co in profitability terms is as follows：Year ending 30 November2007 200820092010mmmmRevenue122.6127.3156.6189.3Operating profit 41.743.350.156.7Finance charges（interest）6.06.212.518.8Profit before tax 35.737.137.6 37.9Profit after tax 25.026.026.326.5