**ICE Task: Bond, P/E ratio and Dividend growth model**

Part A

Q 1. Briefly discus the market segmentation theory. (4)

Part B

Mr Dyanti, a professional rugby player, has received R325 000 from his man of the match performances during the Super Rugby season. He would like to invest the money for his retirement and his financial advisor, Mr De Bruin, has advised him that with the current uncertainty in the global market and rising bond yields, he should consider investing in Sharks Limited.

Sharks Limited offers R20 000 par value bonds, with 30 years to the maturity date. The bonds pay a coupon rate of 18% per annum. Interest on the bonds is paid bi-annually. The current annual required rate of return is two-thirds (⅔) of the coupon percentage (%) per annum.

Required:

Q 2. Calculate the number of bonds Mr Dyanti could purchase today with the money he has available to invest. (6)

Six years later Mr Dyanti has been offered a business opportunity to open a rugby academy in Pretoria where he will be one of the backline coaches. He has instructed Mr De Bruin to sell the bonds so that he can use the money to invest in the academy.

Required:

Q 3. Calculate the selling price per bond that he would be able to obtain assuming that the annual required rate of return has increased by 3% from when he purchased the bonds six years ago. (5)

Question 4

You are considering investing in Maximum Ltd, a company listed on the JSE. You have extracted the following information relating to the company for the 2018 year:

|  |  |
| --- | --- |
| Number of ordinary shares | 1 750 000 |
| Current market share price (ex-dividend) | R725 |
| Dividend per share (current) | R16,50 |
| Proposed retention ratio for 2018 | 75% |
| Equity beta | Three quarters (¾) of the market beta |
| Average industry P/E ratio | 8 |
| Risk-Free rate of return | 7,50% |
| Market rate of return | 16% |
| Market Beta | 1 |
| Expected future constant dividend growth rate | 10,74% |

A downward adjustment of two needs to be made to the industry P/E ratio for company-specific risks.

Required

Calculate the value of Maximum Ltd using the following business valuation models:

Q 4.1 P/E ratio (5)

Q 4.2 Dividend growth model (9)

Q 4.3 Briefly explain the different type of preference shares available to investors (6)

 Total (35)