UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021

COURSE NAME   : REAL ESTATE FINANCE

COURSE CODE   : BPE 23402

PROGRAMME CODE   : BPD

EXAMINATION DATE   : JANUARY / FEBRUARY 2021

DURATION   : 2 HOURS

INSTRUCTION   : ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

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Q1 Viva Group has prepared the following estimates for a long-term expansion project. The initial investment is RM248,250, and the project is expected to yield after-tax cash inflows of RM65,000 per year for five years. The firm has an 8% cost of capital.

(a) Determine the net present value (NPV) for the project.

(5 marks)

(b) Calculate the internal rate of return (IRR) for the project.

(10 marks)

Q2 Maya is currently a Financial Controller of a listed company and has studied the financial pros and cons of enrolling in a 1-year Executive MBA (EMBA) program at her local university. The tuition fees and books expenses for the program will involve an up-front cost of RM67,000. If she enrolls in the EMBA program, Maya will need to quit her current job, which pays RM86,000 per year after taxes (for simplicity, treat any lost earnings as part of the up-front cost) On average, a person with an EMBA degree earns an extra RM48,000 per year (after taxes) over a business career of 40 years Maya believes that her opportunity cost of capital is 5%.

(a) Compute the net present value (NPV) of enrolling the EMBA program.

(5 marks)

(b) Justify Maya's decision to furthering her study, in accordance with the associated cost

(5 marks)

Q3 Currently, Demo Industries can sell 15-year, RM1,000-par-value bonds paying annual interest at a 12% coupon rate. As a result of current interest rates, the bonds can be sold for RM1,010 each; flotation costs of RM30 per bond will is incurred in this process. The firm is in the 40% tax bracket.

(a) Compute the net proceeds from the sale of the bond.

(5 marks)

(b) Calculate the before-tax and after-tax costs of debt.

(10 marks)

(c) Calculate the before tax and after-tax costs of debt using the approximation formula.

(10 marks)

Q4   You have credit card debt amounting to RM50,000. The card charges you a 32% interest rate with monthly compounding. You believe that the interest rate of the existing debt is too high, so decide to switch cards and transfer the outstanding balance to the new card. After doing some research, you find Cards B and C as alternatives. If you transfer the existing debt to Card B or Card C, there will be extra charges (handling fees). Card B will charge RM500, and Card C will charge RM1,000 handling fees.

Table Q4: Credit Card Debt

Card	Interest Rate	Outstanding Amount (RM)
B	29	50,500
C	28	51,000

(a)   Calculate the amount of interest saved using card B and C, if you pay off the debt in one year with equal monthly amounts.

(20 marks)

(b)   Justify the chosen card, with appropriate reasons

(5 marks)

Q5   (a)   You want to borrow RM24,000 to settle the tax outstanding. Your friend offers you a loan, and he claims that he will only charge you 10% interest. He calculates that the total interest of the loan will be RM24,000 x 10% = RM2,400, so he deducts this amount from the loan, gives you RM21,600, and tells you to repay RM24,000 in one year.

Calculate the real interest rate charged on loan.

(10 marks)

(b)   You have decided to endow your favourite university with a scholarship. It is expected to cost RM6,000 per year to attend the university into perpetuity. You expect to give the university the endowment in 10 years and will accumulate it by making equal annual (end-of-year) deposits into an account. The rate of interest is expected to be 10% for all future time periods.

(i)   Calculate the endowment amount.

(5 marks)

(ii)   Compute the annual end of the year deposit for the next 10 years to accumulate the required amount.

(10 marks)

-END OF QUESTIONS-

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