BTM. Dpt.

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BBA in TM, 2nd Sem. Date: September 10, 2025

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Semester Final Examination — Summer Semester, A. Y. 2023-2024
Course No. : BTM 4201 — Time : 2 hours
Course Title : Financial Management I — Full Marks : 120

Answer **all 4 (four)** questions. All questions carry equal marks. Marks of each question and the corresponding CO and PO are written in the right margin with brackets.

1. a) Discuss common types of bonds with specific characteristics and priority of lender's claim. 12 (CO3) (PO1)

   b) Define conversion feature, the call feature and stock purchase warrants. 09 (CO3) (PO1)

   c) AKS Industries has outstanding $1,000 par-value bond with a 9% coupon interest rate. The bond has 10 years remaining until its maturity date. Using the 10% required return, find the bond's value when interest is paid *semiannually.* 09 (CO3) (PO2)

2. a) Ukong is considering building an investment portfolio containing two stocks, A and B. Stock A will represent 40% of the dollar value of the portfolio, and stock B will account for the other 60%. The expected returns over the next 6 years, 2019–2024, for each of these stocks are shown in the following table. 20 (CO2) (PO2)

Year	Stock A	Stock B
2019	14%	20%
2020	14	18
2021	16	16
2022	17	14
2023	17	12
2024	19	10

   Requirements:

   i. Calculate the expected portfolio return, for each of the 6 years.
   ii. Calculate the expected value of portfolio returns over the 6-year period.
   iii. Calculate the standard deviation of expected portfolio returns, over the 6-year period.
   iv. How would you characterize the correlation of returns of the two stocks A and B?
   v. Discuss any benefits of diversification achieved by Ukong through creation of the portfolio.

   b) How are total risk, nondiversifiable risk, and diversifiable risk related? Why is nondiversifiable risk the only relevant risk? 10 (CO2) (PO1)

3. a)	What are the key differences between debt and equity? Explain the relationships among authorized shares, outstanding shares, treasury stock, and issued shares.	12	(CO3) (PO1)
b)	Explain the cumulative feature of preferred stock. What is the purpose of a call feature in a preferred stock issue?	10	(CO3) (PO1)
c)	Compare, and contrast the following common stock dividend valuation models: i. Zero growth ii. Constant growth iii. Variable growth.	08	(CO3) (PO1)
4. a)	How does a rights offering protect a firm's stockholders against the dilution of ownership?	08	(CO3) (PO1)
b)	Sanders' common stock just paid its annual dividend of \$2.80 per share. The required return on the common stock is 13%. Estimate the value of the common stock under each of the following assumptions about the dividend.	22	(CO3) (PO2)

Requirements:

i. Dividends are expected to grow at an annual rate of 0% to infinity.
ii. Dividends are expected to grow at an annual rate of 5% to infinity.
iii. Dividends are expected to grow at an annual rate of 5% for each of the next 3 years, followed by a constant annual growth rate of 4% in years 4 to infinity.