



THE CO-OPERATIVE UNIVERSITY OF KENYA
SPECIAL / SUPPLEMENTARY EXAMINATION NOVEMBER -2022
EXAMINATION FOR BACHELORS DEGREE
UNIT CODE: HCOB 2407

UNIT TITLE: PORTFOLIO AND INVESTMENT ANALYSIS

DATE: WEDNESDAY 16TH NOVEMBER, 2022

TIME: 11:00 AM – 1:00PM

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- a) Distinguish between technical analysis and fundamental analysis. (4 marks)
- b) Explain any TWO Passive bond and any Two Active Equity portfolio management strategies (4 marks)
- c) A portfolio manager generated a rate of return of 15.5% on a portfolio with beta of 1.2. If the risk-free rate of return is 2.5% and the market return is 11.8%, Calculate the portfolio Jensen's alpha (4 marks)
- d) Mr. Kirie the financial manager of Friends-With-Benefit Ltd is considering investing in a risky project which would be added to an existing portfolio. Securities D, E and F have the following characteristics with respect to expected return, standard deviation and correlation coefficients.

Security	Expected	Standard	Correlation Coefficient		
			D - E	D - F	E-F
D	0.08	0.02	0.4	0.6	
E	0.15	0.16	0.4		0.8
F	0.12	0.08	0.6	0.8	

REQUIRED: Compute the Risk and return of a portfolio comprised of equal investment in each security. (12 marks)

- e) Proof that the value of a perpetual bond is simply the coupon divided by the investors required rate of return (*i.e.* $\frac{I}{K}$). (6 marks)

QUESTION TWO

“A step by a drunkard is unrelated to the past or previous steps much as a flip of a coin is unrelated to the previous tosses” **Anonymous**. Discuss the above statement with regards to Efficient Market Hypothesis (20 marks)

QUESTION THREE

a) Thaddaeus had Sh 2 Million to invest in the below two projects

Probability	Project Nice	Project Fair
0.1	12	21
0.4	18	24
0.5	14	22

Required: If He invested Sh 400,000 on Project Nice Calculate

- i). The expected return of the portfolio formed from the two projects (2 marks)
 - ii). The coefficient correlation between the two projects (3 marks)
 - iii). The risk of the portfolio and comments on the total risk of the portfolio (5 marks)
- b) Discuss the factors that determine the valuation of Bonds in the market (6 marks)
- c) Explain the investment process in portfolio and investment analysis (4 marks)

QUESTION FOUR

The Arbitrage Pricing Theory (APT) and the Capital Asset Pricing Model (CAPM) have received much attention from practitioners and academicians for use in asset pricing and valuation

REQUIRED:

- a) Explain the conceptual difference between the Arbitrage Pricing Theory (APT) and Capital Asset Pricing Model (CAPM). (10 marks)
- b) The following are the historical returns for the Anita Computer Company Ltd

Year	Anita Computer Ltd	General Index
1	37	15
2	9	13
3	-11	14
4	8	-9
5	11	12
6	4	9

Required:

- i). Compute the correlation coefficient between Anita Computer Company Ltd and the general index. (8 marks)
- ii). Compute the beta for the Anita Computer Company Ltd. (2 marks)