CHUKA  **UNIVERSITY**

UNIVERSITY EXAMINATIONS

ODEL

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE AND COOPERATIVE MANAGEMENT

BCOM 435: INVESTMENT AND PORTFOLIO MANAGEMENT

STREAMS:BCOM/BCOOP Y4S2 **TIME: 2 HOURS**

DAY/DATE: TUESDAY 30/03/2021 **8.30 A.M – 10.30 A.M**

INSTRUCTIONS:

Answer question one and any other two questions

QUESTION ONE (30 MARKS)

(a) Distinguish between investment and speculation. [6 marks]

(b) Describe the security analysis stage of investment management process. [6 marks]

(c) The fact that not the entire risk of a portfolio can be diversified away, no matter how many securities are included, makes it possible to classify risk in two categories – systematic and non systematic risk. Distinguish between the categories and explain two sources of each. [6 marks]

(d) The following is data on return risk characteristics of three risky securities P,Q and R.

	P	Q	R	Corr
Expected return %	25	22	20	
Standard deviation %	30	26	24	
Correlation:				
PQ				-0.5
QR				0.4
PR				0.6

An investor is contemplating investing his wealth in a portfolio of two assets which will be weighted equally. Which of the combination PQ, PR and RQ yield lowest risk?

[12 marks]

QUESTION TWO

(a) Explain circumstances under which the investor may find it necessary to undertake revision of his or her portfolio composition. [3 marks]

(b) Consider the following data for a particular sample period

	Fund A	Marketing portfolio (M)
Average return	35%	28%
Beta	1.2	1.0
Standard deviation	42%	30%
Non-systematic risk	18%	0%

The 91 days treasury bill rate during the period was 6%. Calculate and comment on the performance of fund A in relation to the market portfolio under the following measures;

(i) Sharpe [3 marks]

(ii) Treynor [3 marks]

(iii) Information ratio [3 marks]

(c) An investor is evaluating three portfolios with the following characteristics;

Portfolio	Portfolio estimated return %	Portfolio beta
1	10%	1.2
2	14%	0.8
3	13.5%	0.9
4	12.5%	0.6

The expected return on the market portfolio is 14.5%. The risk free rate of interest is 4.5%.

Required;

Basing on a suitable equilibrium model, advice on which among the above portfolios are suitable candidates for buying.

QUESTION THREE

(a) Explain the following terms as used in mutual fund investments

(i) Money market funds [2 marks]

(ii) Exchange traded funded funds [2 marks]

(iii) Balanced fund [2 marks]

(iv) Index fund [2 marks]

(b) Pine bridge Investment (EA) ltd manages an equity mutual fund and would like to calculate the net asset value (NAV) for a single share. The following information is given with regard to the fund.

Portfolio composition ;

Stock	Number of shares (million)	Daily closing price $
X ltd	12	3.75
Y ltd	5	8.55
Z ltd	3	4.50

Cash and cash equivalents $ 15 million

Accrued income $ 24 million

Short term liabilities $ 1 million

Long term liabilities $ 12 million

Accrued expenses for the day $ 5000

Calculate the NAV for the fund and internet your answer. [6 marks]

(c)An investor holds 5000 shares in ICDC Ltd, a listed company at NSE. ICDC has been paying average dividends of ksh 2 per share per annum in recent years. The dividends are expected to grow at a rate of 15% p.a over the coming 3 years, then at a rate of 10% over the next three years and finally at a rate of 5% p.a to perpetuity. The required rate of return is 9%.

Required :

Calculate the current value of the shareholding in ICDC Ltd, using the dividend growth model. [6 marks]

QUESTION FOUR

(a) Explain price risk and reinvestment under bond investment. [4 marks]

(b) Compute the Macaulay duration for a bond with the following status and explain its significance to a bond investor:

- Par value ksh 1000
- Coupon 5%
- Current trading price: ksh 960.27
- Yield to maturity: 6.5%
- Years to maturity: 3
- Coupon pay-out: One per year [8 marks]

(c) Two portfolio were constructed, one consisting of equity shares and the other consisting of debentures. The value of equity shares, at the time of constructing the portfolio was ksh 60,000/- (at the rate of ksh 100/- per share) and that of debentures was ksh 40,000. The investor opts to use constant value plan and fixes a revision point of 10%. The share prices show fluctuations at periodical intervals as under.

Period	Share price (ksh)
1	100(at the time of constructing the portfolio)
2	90

Required ;

Determine the portfolio value at the end of period 2. [8 marks]
