

## Date: JULY 2018

## Duration: 3 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions
Q1. a) Using an organisation of your choice discuss any two managerial decisions that a financial manager is responsible for. Give an example in each case
(6 marks)
b) i) The possible future returns on stock $X$ are $26 \%$ and $-8 \%$. The probability that any of these returns will be realized is $50 \%$. Calculate the expected return on this stock?
(5 marks)
ii) Portifolio $Y$ has a beta of 2 while the market portfolio has a beta of 1. Compare the level of risk of Portifolio $Y$ with the market portfolio (2 marks)
c) A firm is considering a project whose initial cost is sh 90,000. The project is expected to generate uncertain cash inflows of sh 30,000, sh 35000, sh 50,000 , sh 40,000 and sh 100,000 in years one to five respectively. The risk free rate of return is $11 \%$ while the risk adjusted discount rate is $16 \%$.

Required:
i) Which discount rate is appropriate for this project and why
(2 marks)
ii) Using the appropriate discount rate identified in (i) above should this project be accepted?
(7 marks)
d) Assume an investment with the possible NPVs and their probabilities as follows:

| Scenario | Possible NPV (Sh) | Probability |
| :--- | :--- | :--- |
| Worst case | $-20,000$ | 0.1 |
| Base case | 60,000 | 0.5 |
| Best case | 200,000 | 0.4 |

Required:
Computed the expected NPV
e) Explain the meaning of the following terms
i) Capital markets
(2 marks)
ii) Agency problem

Q2. a) Ms. Jane has holdings in assets $R$ and $T$ of firms in two different sectors. The following information relates to the two assets.

|  | $X$ | $Y$ |
| :--- | :---: | :---: |
| Expected return | $15 \%$ | $20 \%$ |
| Beta | 0.9 | 2 |
| Standard deviation | 0.2 | 0.58 |

The amount of wealth invested in X is sh150,000 while sh 450,000 is invested in $Y$

## Required:

i) Calculate the expected portfolio return
ii) Calculate the portifolio beta
b) Explain what happens to the portfolio risk if the returns of the two assets are:
i) Perfectly positively correlated
(2 marks)
ii) Perfectly negatively correlated.
(2 marks)
c) If Ms. Jane wants to minimize her portifolio risk should she go for assets whose returns are positively or negatively correlated? Explain your answer.
(3 marks)
Q3. a) ABC Ltd has 20 m shares currently selling at sh 45 each in the stock market. It wants to raise capital through a rights offer by selling 5 m new ordinary shares. The additional shares will be sold at sh 40 each. Existing shareholders have one right for each share currently held.
i) How much additional capital will ABC Ltd be raise?
ii) How many rights will be required to buy one new share?
iii) Calculate the market capitalization before the rights issue
b) ABC Ltd's most recent financial results comprise of sh 600 m in sales revenue and net profit of sh 100 m . On average the firm has adopted a retention ratio of $75 \%$.

## Required: Calculate

i) Total dividends paid
(2 marks)
ii) Earnings per share
c) Explain any three users of financial statements

Q4. a) PLC Ltd is listed at the local stock exchange with 10 m shares currently trading at sh 15 each. The beta of PLC's stock is 2 . The most recent dividend paid by PLC Ltd is sh 1.60 per share. The firm finances its long term projects using debt and equity at ratios of $30 \%$ and $70 \%$ respectively. The corporate income tax rate is $30 \%$. The risk free rate of return is $11 \%$ while the return on the market portfolio is $16 \%$. The firm is considering two options of raising sh 60 m in additional capital.

The finance manager is considering raising the funds as follows:
i) Sell 1800 bonds with a coupon rate of $15 \%$ p.a. at a market price of sh 10,000 per bond. The current yield to maturity on similar bonds is $12 \%$ p.a.
ii) Sell 3m ordinary shares through private placement at a price of sh 14 per share.

## Required:

## a) Calculate PLC's

i) Effective cost of debt
ii) Cost of equity
iii) Weighted average cost of capital.
b) Discuss any two advantages of raising equity capital through private placement compared to public offering.

## Present value interest factors

i) $\quad$ For single Amount $=(1+r)^{-n}$
ii) For an Annuity $=\frac{1-(1+r)^{-n}}{r}$

