SOLUTION 1

(a) **Disadvantages of listing**

(i) Time and cost spent preparing a floatation
- Management time and effort for at least 6 months processing the necessary documents to meet floatation requirements
- Consultants fee to be paid for floatation documentation

(ii) Cost of maintaining a listing
- Annual fees paid to the stock exchange
- Cost of communicating to investors

(iii) Satisfying needs of shareholders
- Income or Capital growth

(iv) Accountability and lack of secrecy
- Directors who may not be part of the initial team brought on board
- Public interest and other regulatory disclosures

(v) Risk of takeover
- Unsatisfactory performance might lead to a takeover by a hostile bidder leading to a loss of family business.

EXTRA
Different culture

(b) **Advantages of Listing**

(1) Immediate source of long term capital for the business. This will enable the company pursue growth and reduce gearing levels.

(2) Gives company ongoing source of capital opportunity to issue new shares in the future or to issue listed debt giving the company flexibility in its financing options

(3) Easier Acquisition Opportunity
Able to issue shares as a consideration when making an acquisition

(4) Image Advantage
Credibility with suppliers and customers. Able to negotiate favourable terms with bankers

(5) Share Inventive Schemes
Easier to implement motivating schemes for both directors ad employees

(6) Personal Factors
Will be an honour to be a director of a listed company

(c) Interest = Effective annual rate x principal
= 0.06168 x 2000 = GHC123.26

Monthly Compounding is irrelevant when the effective rate is known.

(d) Optimal sale = $\sqrt{\frac{2 \times D \times T}{C}}$

D = 30,000 x 52 weeks = GHC1,560,000
T = GHC20
I = 15%

$$\sqrt{\frac{2 \times 1{,}560{,}000 \times 20}{0.15}} = \text{GHC}20{,}396$$

SOLUTION 2

(a) (i) Net Asset Value (NAV)

NAV = Value attributable to equity / Number of equity issued and outstanding

NAV for A = $\frac{1{,}400{,}000}{1{,}000{,}000}$ = GHC1.40

NAV for B = $\frac{550{,}000}{500{,}000}$ = GHC1.10

A Ltd is to issue 110 of its shares in exchange for every 140 of those in B Ltd.
To acquire the whole of the issued share capital of B Ltd, A Ltd should issue

$\frac{500{,}000}{140} \times 110 = 392{,}857$ new shares

(ii) Market Value

The current market price of A Ltd's shares is GHC2.40 and of B Ltd's shares is GHC2.70.
To maintain the market value of any individual's holding, A Ltd should issue 9 new shares for each 8 of B Ltd's shares (270 for 240). The total number to be issued is

$\frac{500{,}000 \times 9}{8} = 562{,}000$ new shares

(b) APR $= (1 + r/m)^m - 1$

Where: APR is Annual Percentage Rate
r is the nominal rate of interest per year
m is the number of compounding periods in a year (m = 1/TIME). Assume 360 days in a year

Now $r = \frac{\text{Interest (I)}}{\text{Principal (P)}} \times \frac{1}{\text{Time (T)}}$

Given Interest = GHC5,000,
Principal = GHC100,000
Time = 90/260

$\Rightarrow r = \frac{\text{GHC5,000}}{\text{GHC100,000}} \times 1/90/360$

$= 0.2$ or 20%

$\Rightarrow$ APR $= (1 + 0.2/4)^4 - 1$

$= \underline{\underline{21.55\%}}$

SOLUTION 3

(a) i. Calculation of size of overdraft

Inventory Period = Operating Cycle + Payables Period – Receivables Period
= 90 + 30 – 60 = 60 days

Inventory $= \frac{60}{365} \times$ GHC1,800,000 = GHC295,890

Accounts Receivable $\frac{60}{365} \times$ GHC5,000,000 = GHC821,918

Current Assets = GHC295,890 + 821,918 = GHC1,117,808

Current Liabilities $= \frac{\text{Current Asset}}{\text{Current Ratio}} = \frac{1{,}117{,}808}{1.50}$ = GHC745,205

Accounts Payable $= \frac{30}{365} \times$ GHC1,800,000 = GHC147,945

:. Overdraft = GHC745,205 – 147,.945 = GHC597,260

ii. Net Working Capital = Current Asset – Current Liabilities
= GHC1,117,808 – 745,205
= GHC375,603

iii. Total cost of Financing Current Assets:

		GHC
Short term financing cost 10% @ 597,260	=	59,726
Long term financing cost 12% @ 372,603	=	44,712
		104,438

(b) Capital Structure:

		GHC million
i. Equity shares 5,000,000 @ GHC30	=	150
Preference shares 2,000,000 @ GHC20	=	40
Bonds 2,000 @ GHC500	=	1
		191

The capital structure of the company is in the proportion of 78.5%, 20.9% and 0.6% for equity, preference shares and bonds respectively.

ii. How much the firm should earn annually

		GHC million
Equity holders 25% x 150	=	37.5
Preference shares 20% x 40	=	8.0
Bonds (15% x GHC1m) (1 - .25)	=	0.075
		45.575

(c) Policy Lending rate refers to the rate at which Central bank will lend money to Commercial Banks.

Base Lending Rate refers to the breakeven rate of Commercial Banks.

SOLUTION 4

(a) In Ghana, bank issued 137,376,090 rights (one right for one additional share)
Rights are issued in proportion to existing shares
Thus, the ratio of new shares to old = $\frac{137,376,090}{274,752,180}$ = 2 existing shares

AA owned 2 shares

(b) No she would **not** have exercised on October 15. She should wait until October 23. If on this date existing shares were selling above GHC0.60 then she should exercise. If not she should just buy the shares on the market, if she still wanted (at less than GHC0.60).

(c) BB would buy 3 rights and this will entitle him to pay GHC0.60 for each share.

(d) BB has 3 shares and AA has three shares. All shares have equal value. AA's investment in the bank is 2 shares at GHC0.70 plus one share at 0.60 = 2 x 0.75 + 0.6 = GHC2.1.
BB's 3 shares are also worth GHC2.1
:. BB paid GHC2.1/3 = GHC0.70 per share
This includes the cost of buying the rights.

(e) CC owned 10% of 274,752,180 = 2,747,521.8 shares
New total shares = 274,752,180 + 137,376,090
= 412,128,270 shares

CC proportion = $\frac{2,747,521.8}{412,128,270}$ = 6.67%

(f) She must have sold the rights she received but did not exercise. The value of these rights that she received accounts for the 10% - 6.67% = 3.23%

SOLUTION 5

(a) i. The drawbacks of hedging include the following points

1. A company may find it difficult to find an appropriate swap partner which has equal but opposite requirements to itself.

2. Once engaged in a swap agreement it is not possible to benefit from favourable movements in the exchange rate.

3. The swap partner has to be vetted s as to reduce the possibility of counterparty default.

ii. In distinguishing between international and domestic capital investment decision, the following points should be considered:

1. Difficulties in valuing investments by the parent company.

2. The problem of exchange rates, e.g. estimation difficulties in future exchange rates

3. Taxation due to different tax regimes

4. Restrictions on the repatriation of funds e.g. exchange controls

5. International investment decisions and risk e.g. political risk, exchange rate and interest rate risk.

(b) (i) Dividend growth model

$$Po = \frac{Do\,(i + g)}{R - g}$$

Earnings per share of Staycool = GHC0.50
Proposed payout ratio = 45%
Proposed dividend 0.45 x 0.50 = GH0.225

$$\text{Growth} = \left(\frac{di}{do}\right)^{1/n} - 1 = \left(\frac{0.225}{0.20}\right) - 1 = 6\%$$

Cost of Equity using CAMP = 5 + 1.5 (11 – 5) = 14%

$$\text{Value per share} = \frac{0.225\,(1.06)}{0.14 - 0.06} = \frac{0.2385}{0.08} = \underline{\text{GHC2.98}}$$

Value of Staycool Ltd = GHC2.98 x 10m = GHC29.8m

ii. Price Earning Valuation Method:

Earnings per share = GHC0.50

Avg. P/E ratio = 12

Number of shares = 10m

Value per share = EPS x P/E ratio
GHC0.50 x 12 = GHC6.00

Value of Staycool Ltd = GHC6.00 x 10m = GHC60m