## DEPARTMENT OF ENTERPRENEURSHIP EDUCATION

## FINANCIAL MANAGEMENT FORMULAE

1. Net purchases = *purchases - purchases returns*

   OR

   Net purchases = *purchases + carriage inwards - purchases returns (returns out wards )*

   OR

   Net purchases = *purchases*

   OR

   Net purchases = *purchases + carriage inwards*

   OR

   Net purchases = *Purchases + Wages + Carriage inwards - Return outwards*

2. Cost of goods available for sale /*Goods available for sale = Opening stock + Net purchases*

   OR

   Cost of goods available for sale = *Opening stock + Purchases*

3. Cost of sales/Cost of goods sold/cost price = *Opening stock + (Net)purchases - Closing stock*

   OR

   Cost of sales = *Goods available for sale - Closing stock*

4. Net sales/turnover = *sales-sales returns (returns inwards)*
5. *Gross profit = Net sales – cost of sales*
6. *Gross loss = Cost of sales-(Net) sales*
7. *Net profit = Gross profit- Operating expenses*

   OR

   Net profit = *Gross profit + other incomes – expenses*

8. Net loss = *Expenses- gross profit/gross income*

9. Capital owned/Owner's equity /equity capital= *Total assets - total liabilities*

OR

Capital owned = *Capital +Net profit- Drawings*

10. Borrowed capital/Loaned capital= *Total long term liabilities*
11. Fixed capital = *Total fixed Assets*
12. Circulating capital /Floating/Circulatory Capital= *Total current Assets*
13. Liquid Capital = *Total current assets- closing stock*
14. Working capital = *Current assets – Current liabilities*
15. Capital employed/Net worth = *Fixed Assets + Working capital*

OR

Capital employed = *Capital owned + borrowed capital*

**LIQUIDITY RATIOS**

16. Working capital/Current ratio = $\frac{Current\ assets}{Current\ liabilities}$

Interpretation: ***The business is /was….. times able to pay /clear all current liabilities using Current assets.***

17. Quick asset ratio /Acid test ratio/liquidity ratio = $\frac{Current\ Assets - Closing\ Stock}{Current\ liabilities}$

Interpretation: ***The business was/is….. times able to clear/pay /meet its current liabilities using quick assets.***

18. Cash ratio/cash position ratio = $\frac{Cash + Bank}{Current\ liabilities}$

**PROFITABILITY RATIOS**

19. Margin /Gross profit margin/gross profit ratio = $\frac{Gross\ profit}{(Net)Sales}$ x 100

Interpretation: ***For every Shs. 100 of the sales revenue realized, Shs…. was/is gross profit***

OR: ***The business got a gross profit of Shs……… for every sales / net sale of sh of 100***

20. Mark up/Profit markup/Gross profit markup = $\frac{Gross\ profit}{Cost\ \ of\ sales}$ x 100

Interpretation: ***For every shs 100 of Cost of sales, the business generates/generated Shs….as gross profit.***

21. Net profit margin/Net profit ratio = $\frac{Net\ profit}{(Net)\ sales}$ x 100

Interpretation: ***For every Shs. 100 of sales made, Shs…….was/is Net Profit.***

OR: ***The business got/gets a net profit of Shs….for every sales of Shs. 100***

22. Rate of return on capital invested/return on equity = $\frac{Net\ profit}{Owner's\ equity/Capital\ \ owned}$ x 100

Interpretation: **For every Shs 100 of owner's equity,Shs….was/is Net profit**

23. Rate of return on Capital employed = $\frac{Net\ profit}{Capital\ employed}$ x 100

Interpretation: ***For every Shs 100 of capital employed, Shs….. was/is Net profit.***

**EFFECIENCY RATIOS**

24. Average stock = $\frac{opening\ Stock + Closing\ stock}{2}$

25. Rate of stock turn over/Stock turn over/ Stock turnover ratio/Inventory turnover ratio

$$= \frac{Cost\ of\ sales}{Average\ stock}$$

Interpretation: **The business sells and replaces its stock… times in a trading period**

26. Stock turn over period = $\frac{Average\ stock}{Cost\ \ of\ sales}$ x **number of days/months/weeks in a year**

*Interpretation*: ***The business holds/held stock for ….days/months/weeks before being sold/selling it.***

27. Rate of debtor's turnover = $\frac{Sales/Turnover}{Debtors}$ x 100

28. Debtor's turn over period/ Average debt collection period/Debtor's days

$= \frac{Debtors}{Net\ sales}$ x Number of days/ months/weeks in a year.

Interpretation: ***The business takes/ took an average of …. Days/weeks/months to collect money/debts from debtors.***

29. Debtors to sales ratio = $\frac{Debtors}{Net\ sales}$ x 100

Interpretation: ***Out of every Shs 100 obtained by the business as net sales, credit sales (debtors) were Shs………***

30. Rate of Creditor's turnover = $\frac{Net\ purchases}{Creditors}$ x 100

31. Ratio of creditor's to purchases/ Creditor's ratio = $\frac{Creditors}{Net\ purchases}$ x 100

Interpretation: ***Out of every Shs 100 of net Purchases, Shs…. Were credit purchases.***

32. Creditor's turnover period /Average payment period/ Average credit period/Creditor' days = $\frac{Creditors}{Net\ purchases}$ x number of days/months /weeks in a year

Interpretation: ***The creditors were paid on average after/in …days/weeks/months during the trading*** period.

33. Fixed Assets turnover = $\frac{Net\ sales}{Fixed\ Assets}$ *x 100*

Interpretation: ***Out of every Shs 100 fixed assets employed, the business was able to make net sales of Shs……..***

34. Total Assets turnover = $\frac{Net\ sales}{Total\ Assets}$ *x 100*

Interpretation: ***Out of every Shs 100 of total assets employed, the business was able to make net sales of Shs…..***

35. Percentage of expenses to turnover/net sales = $\frac{Total\ expenses}{Net\ sales}$ x 100

Interpretation: ***Out of every Shs 100 of Net sales made by the business, Shs…. Was spent on total expenses.***

36. Ratio of operating expenses to turn over/net sales = $\frac{Operationg\ expenses}{Turn\ over/\ Net\ sales}$ x 100

Interpretation: ***Out of every Shs. 100 of Net sales made by the business, Shs…. Is/was spent on operating expenses.***

**LEVERAGE RATIOS**

37. Debt to equity ratio = $\frac{Long\ term\ liabilities}{Total\ equity\ (\ Owner'\ equity)}$x 100

Interpretation: ***………% of the funds used in the business are in the form of long term liabilities***

OR

***Out of every Shs 100 of capital used in the business, Shs….. are in the form of long term liabilities.***

38. Debt to total assets/Debt ratio/solvency ratio = $\frac{Total\ long\ term\ liabilities}{Total\ assets}$ x 100

***OTHER RATIOS***

39. Interest cover = $\frac{Net\ profit\ before\ interest\ and\ tax}{Interest\ Expenses}$

Interpretation: ***The net profit available for the year before paying interest and tax can settle interest payments …. times.***

40. Non-Current Assets turn over = $\frac{Sales\ for\ the\ period}{Fixed\ Assets\ (Non\ current\ assets)}$

Interpretation: ***The non-current assets generate (d) a sales revenue of Shs…….***

41. Days Inventory outstanding = $\frac{365days}{Inventory\ turn\ over}\ \frac{No.of\ days\ in\ a\ year}{Inventory\ turn\ over}$

42. Times interest earned = $\frac{Earnings\ before\ interest\ and\ tax}{Interest\ expense}$

***(No. of times interest is converted into income, and if the company can pay its interest expense using the profits generated).***

43. Earnings per share = $\dfrac{Net\ profit\ /\ Net\ income - prefered\ dividend}{Average\ common\ shares}$

44. Price – Earnings ratio = $\dfrac{Market\ price\ per\ share}{Earnings\ per\ share}$

Dividend payment ratio = $\dfrac{Dividend\ per\ share}{Earning\ per\ share}$

*(Part of Net Income/net profit that is distributed to owners).*

45. Dividend yield ratio = $\dfrac{Dividend\ per\ share}{Market\ price\ per\ share}$

## TAXATION

### RENTAL INCOME TAX

1. Gross rental income = *Rental income from all immovable property*
2. Chargeable rental income = *Gross income – Expenditure – Threshold and losses*
3. Rental income tax = 20*%x chargeable rental income.*

### INDIVIDUAL INCOME TAX

4. Gross income = *(Business income + Employment Income + Property Income)- Tax Exempt income*
5. Chargeable Income = *Gross Income – Expenses and losses.*
6. **Income tax is calculated from the PAYE Income tax structure**.

### EMPLOYMENT INCOME

Sources: Wages, Salaries, Leave pay, Gratuity, Bonus, Allowances, Value of any benefit granted to an employee e.g. Car, House, Gift etc. and compensation for termination of contract of employment.

| No | Chargeable (Monthly) Income | Tax rate |
|---|---|---|
| 1 | *Not exceeding Shs.* ***235,000*** | Nil |
| 2 | *Exceeding Shs.* ***235,000*** *but not exceeding Shs.* ***335,000*** | *10% of the amount by which chargeable income exceeds shs. 235,000* |

| | | |
|---|---|---|
| 3 | *not exceeding Shs.* ***335,000*** *but not exceeding* ***410,000*** | *Shs. 10,000 plus 20% of the amount by which chargeable income exceeds shs. 335,000* |
| 4 | *Shs* ***410, 000*** *and above* | *Shs. 25,000 plus 30% of the amount by which chargeable income exceeds shs. 410, 000 and / plus 10% of the amount by which chargeable income exceeds shs. 10,000,000* |

NB: ***For annual; multiply all the above figures by 12 e.g. 235,000 x 12= apart from the rates (Percentages)***

## VALUE ADDED TAX

7. *VAT Liability* = VAT rate x value added
   = 18 %( Sales – Purchases)

OR *VAT Liability* = Output tax – Input tax

= 18% X Sales - 18% X Purchases

OR *VAT liability* = VAT on sales - VAT on Purchases

8. *VAT Exclusive* = $\frac{18}{110}$x( VAT Exclusive value).

9. ***VAT Inclusive*** **=** $\frac{18}{118}x$ **(VAT Inclusive value)**

## INTERNATIONAL TRADE TAXES:

10. *Customs value (C.V)*= CIF x Exchange rate
    *Where CIF* = Cost + Insurance + Freight
11. *Import Duty* = Import Duty rate x Customs Value
12. *Excise duty* = Excise Duty rate x (Customs Value + Import Duty)
13. *VAT*= VAT rate x (Customs Value +Import Duty +Excise Duty)
14. *Withholding Tax* = Withholding Tax rate X Customs Value

15. *Environmental Levy* = Environmental Levy rate x Customs Value

END