INSTRUCTION: This question paper contains four questions. Answer All FOUR questions

## QUESTION 1

(a) What is the difference between money market and capital markets? Give an example of one financial security under each.
(b) Explain the three forms of market efficiency, differentiating amongst them.
(c) What is the basic cause of a Business Cycle? Draw and explain four phases of the Business Cycle.

## QUESTION 2

a) Suppose you buy some stock in Ark Investment for $\$ 35$ per share. After one year, the price is $\$ 49$ per share. During the year, you received a $\$ 1.40$ dividend per share.
i) What is the dividend yield? (5)
ii) The capital gains yield? (5)
b) Draw and explain the four stages of the Industry Life Cycle, and give an example of an industry or company in each stage.

## QUESTION 3

(a) What will 1,000 be worth at the end of one 3 years when the annual interest rate is $12 \%$ and the interest is;
i) Compounded quarterly
ii) Compounded Semi-annually
iii) Compounded Annually
(b) How much should you invest today in a bank account paying interest compounded quarterly:
i) if you wish to have 100,000 at the end of 6 years, if the bank pays $8.0 \%$ Annual Percentage Rate?
ii) if you plan to have 800,000 at the end of 12 years, if you earn $11.5 \%$ annually
(c) Calculate the expected periodic payment for an annuity that costs 240,000 and produces cash flows over 20 years with a rate of $11 \%$.
(5)
(d) An investment promises the following cash flows;

$$
\begin{array}{llllll}
\text { Year 1: } 300 & \text { Year 2: } 500 & \text { 3: } 700 & \text { 4: } & 1000 & 5: 1250
\end{array}
$$

i) Assuming an interest rate of $8 \%$ for all cash flows, what is the value of the investment today.

## QUESTION 4

(i) Define mutual funds in your own words.
(ii) Mention two broad types of mutual funds and how they are differentiated from each other.
(iii) What are the three advantages and the two disadvantages of investing in mutual funds?(5)
(iv) What are the two available tools that are used to investors to assess or compare the performance of mutual funds.

## Formulae Sheet

1. $]^{2}=\sqrt{\frac{\sum\left(r_{i}-\text { average } \text { ret }\right)^{2}}{\mathrm{n}-1}}$
2. $\quad P=\frac{F}{\left(1+\left(\frac{r}{m}\right)^{n \times m}\right.}$
3. $\mathrm{FV}=P V\left(1+\frac{r}{m}\right)^{n x m}$
4. $F V_{A D}=(1+\mathrm{i}) \times \operatorname{PMT}\left[\frac{\left(1+\frac{r}{m}\right)^{n x m}-1}{r / m}\right]$
5. $\quad F V=P M T\left[\frac{(1+r / m)^{n x m}-1}{r / m}\right]$
6. $\operatorname{EAR}=(1+\text { holding period percentage return })^{m}-1$
