Chapter 6

Multiple-Choice Questions

1. **D**
2. **C**
3. **D**
4. **B**
5. **C**
6. **D**
7. **A**
8. **C**
9. **D**
10. **C**

Short-Answer Questions

Question 1

Amount available for investment after sales charges = RM50,000/ (1 +0.055) = RM47,393.36
Average rate of return net of annual management fees = (9% - 1.5%) = 7.5%
Value of investment after 5 years = 47,393.96 $(1 + 0.075)^5$ = RM68,039.44

Suggested advice to Chacko includes:

- Past returns are not guarantee of future returns
- To read the prospectus to endure that the fund selected meets his investment objective
- To compare the fees and charges of the fund with other similar funds in the market
- Any other relevant answer.

Question 2

Total number of units sold in January 2017 = 78,868.84/0.92 = 85, 727 units
Total number of purchased in December 2015 = 85,727 – 25000 = 65,727 units

Total amount of initial investment (December 2015) = 65,727 × 0.85 = RM 55,867.95

Question 3

Number of units after the share split = 4/3 x 24,000 = 32,000 units

There should be no change in the value of the total investment of RM6,600 after the unit split.

NAV per unit before the unit split = 6,600/24,000 = RM0.2750
NAV per unit after the unit split = RM0.275 × ¾ = RM0.20625

Total value of investment = 32,000 units × 0.20625 = RM6,600

Question 4

(a) NAV after the dividend = Cum dividend NAV – Dividend
= 355,000,000 – (562,000,000 × 0.04) = RM332,520,000

NAV per unit after the dividend distribution (ex-dividend) = 332,520,000/562,000,000 = RM0.5916

(b) Amount invested after initial service charge = 23,000/(1+0.05) = RM 21,904.76
Number of units that can be purchased (ex-dividend) = 21,904.76/0.5916 = 37,026 (nearest round number)

Question 5
Suggested answers include:
- Dividend income distributions paid to the investor
- Capital Gains Distribution (unrealised) - Distributions when the fund buys and sells securities
- Capital gains (or losses) when the investor sells shares at a price different than price you originally paid (realised)

Discussion Questions

Question 1
Suggested answers include:

- Determine his/her risk profile to make sure he/she is comfortable with the fund's risk. Match the fund(s) chosen with your financial goals. Funds that focus on shares are riskier but offer higher returns
- Keep track of fund's performance and change in focus (if any)
- Before purchase - Review the funds performance for at least 5 to 10 years and against the relevant benchmark index and against similar funds from different UTCs.
- Compare fund fees (e.g. sales charges, management fees, trustee fees, exit fees, switching fees) with other funds in the same category
- Beware of unit splits especially for smaller funds
- Be aware of the different types of risk of the fund (e.g. credit risk, management risk, forex risk, interest rate risk etc)
- Review your investment at least once a year or if your financial situation has changed
- Any other relevant answer.
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Question 2

ETF are a special type of closed end fund that pool funds from shareholders/investors to buy shares that replicate the composition of a specific equity index. Foe instance the Dow Jones Index, S&P Index, Nikkei Index.

Advantages:
- Can be easily bought and sold throughout the trading day on the share exchange.
- In some countries, short and margin trading may be allowed. In Malaysia, this may not yet be allowed.
- Allows the investor to take an immediate position in a particular industry or country that he/she may not have direct access to ordinarily.
- Passive management → Lower annual expenses
- Any other relevant answer.

Disadvantages:
- ETF do not always trade at their Net Asset Values unlike unit trusts
- Unlike unit trusts, with one NAV per unit per day, ETF have are subject to a bid-ask spread.
- High trading may result in high brokerage charges.
- Any other relevant answer.

Question 3
Suggested answers should include:

- In the practice of dollar cost averaging (DCA) as the cost of periodic investments are spread out and averaged over time. In addition, DCA instills the discipline to invest whether the market is on the rising or downtrend. In other words, there is no need to time the market. DCA benefits are maximized over the long term which may be the case of unit trust investing,

- However, as in all types of investments, there are no guarantees that investors will always make the best results or make profits over all periods of time using DCA. DCA helps in spreading out the cost and enhancing performance in periods of market fluctuation and the real value is realized if DCA is supported with systematic and regular investments over the long term.

Question 4

(a) Even though a Shariah unit trust fund prohibits activities that involve the charging of usury/interest through interest bearing instruments, the general interest rate of the country may still affect the value of an investment and assessment of performance of unit trust funds whether it is a Syariah-based UTS or otherwise.

Possible reasons for this include:

- Supply and demand shifts between Shariah funds and Conventional funds due to market expectations may be affected by interest rate changes. This may have an impact on the fund NAV.
- Based on the interest rate parity theory, forward exchange rates are set based on interest rates between countries. This may affect funds that have foreign asset portfolio holdings.
- Benchmark indices may be impacted by general interest changes
- Based on the shariah stock screening rules, a certain limit of non Shariah compliant company shares may be allowed (including financial institutions(Shamasundari, 2016; Adam and Abu Bakar, 2014)
- Any other relevant answer.

(b) Shariah specific risk relates to the risk that the asset portfolio is exposed to non-compliance of Shariah rules/principles. This could happen for example when a company undertakes a corporate restructuring or merger & acquisition exercise where the nature of the business may include some non-Shariah compliant activities. The company whose securities is being currently invested in may subsequently be reclassified as non-Shariah. In view of this reclassification, the fund manager may need to perform "cleansing" and/or "purification" by disposing all such investments that are non -Shariah compliant. These exercises may cause a lower return or a resulting loss that lowers the total NAV of the Shariah UTS.

Case Study 1

Question 1

Kimberly's main concern would be for her children's education fund and retirement planning.

Based on the information provided:

Current surplus after emergency savings
= 130,689 + (3,000 × 12) – (8,800 × 12) – (15% × 130,689)
= 130,689 + 36,000 – 105,600-19,603 = RM41,486

Education funds:

- For Jason, her share of the education fees is RM20,000, she should be able to meet this if the current surplus is maintained
- For Tommy, she needs to standby RM50,000 in four years' time.
- Concern will be that inflation may raise the tuition fees and/or Tommy may choose to do a course that exceeds the amount planned for.
- Any other relevant answer.

Retirement plans:

- Concern with inflation and increase in the cost of living
- Longevity risk
- Any other relevant answer.

Question 2

Kimberly's risk tolerance would be moderate:

- Her debt to income ratio is 25%, which is less than 40%: Acceptable but still have loans to settle
- She is able to maintain a current cash surplus and has adequate emergency funds.
- Lack of knowledge in investing
- Age of 45, only about 15 years (assume retirement age at 60) to invest.
- Medium term children's education commitment, cannot be too aggressive.
- Any other relevant answer

Question 3

Arguments for the use of external ratings:

- More efficient comparison of different unit trust funds
- Independent party evaluation
- Any other relevant answer

Arguments against over-reliance of external ratings

- Ratings are based on past performance not a guarantee for future performance
- Significant events between rating exercises could affect fund performance
- Ratings are not meant for use as signals to buy or sell.
- Should consider factors such as:
    - Economic condition e.g. economic crisis
    - Quality of firm's professional management
    - Evaluate any changing focus of the fund
    - Evaluate performance of funds on a regular basis

Question 4

Funds that many be suitable for Kimberly given her moderate risk profile are a combination of Balanced Funds (about 60% equity), Dividend Funds and moderate growth equity funds.

Other relevant answers can be considered based on the merits of the justification.

Case Study 2

Question 1

Current monthly surplus = 7,550 – 650 - 1,250 -3,000 = RM2,650

Assessment of emergency funds:

- Total living expenses = 650 + 1,250 + 3,000 = 4,900
- Minimum emergency funds = 4,900 × 3 = 14,700
- Ideal emergency fund = 4,900 × 6 = RM29,400
- Assume that both her current savings and fixed deposits are used for emergency funding

Debt to income ratio = (650+1250)/7,550 = 25% (Acceptable)

Assuming that Janice's income remains stable and that she does not change her spending pattern significantly, her target of RM2,000 per month for regular investment is achievable.

Question 2

Using the annuity formula→ Assuming investments made at the end of each month:

Monthly investment	2,000								
Sales charge	5%			Amount available for investment				1,904.76	
No. of years	20								
		Option 1				Option 2			
	Annualised Return (i)	Weight	Weighted average return	Monthly amount (PMT)	FV (in RM)	Weight	Weighted average return	Monthly amount (PMT)	FV (in RM)
PBX Bond Fund	5%	10%	0.5%	190	78,096.40	10%	0.50%	190	78,096.40
CMB Balance Fund	7%	20%	1.3%	381	198,473.06	40%	2.60%	762	396,946.11
KG Aggressive Growth Fund	12%	60%	7.2%	1,143	1,130,718.88	40%	4.80%	762	753,813.59
HWG Green Fund	4%	10%	0.4%	190	69,687.18	10%	0.40%	190	69,687.18
			9.4%	1,905	1,476,976		8.30%	1,905	1,298,543

Janice would not be able to achieve her retirement nest egg of RM2,000,000.

Janice has a few choices to make:

- She could increase her monthly investment commitment as follows:
    - Option 1 : I = 9.4%/12 = 0.7833 n= 240 FV = 2,000,000
      Solve for PMT = RM2,846
    - Option 2 : I = 8.3%/12 = 0.6916 n= 240 FV = 2,000,000
      Solve for PMT = RM3,270

- She could extend her retirement age beyond 55
- She could lower her expectations on her retirement nest-egg. This could be dangerous due to longevity risk.
- Any other relevant answer.

<u>Question 3</u>

Things to consider before investing:

- Janice is single and healthy now. However, she may have more commitments in future perhaps if she marries and has children. If this happens her risk profile might change and the two investment options above need to be reviewed.
- The stability of her income is uncertain and whether she can sustain her RM2,000 monthly commitment.
- She should also compare similar funds by different UTMC and not just based on friends recommendations and hearsay.
- She should read the prospectus and not invest merely based on articles, friends and hearsay. Option 1 has 60% to be invested in an aggressive fund → Earnings can be very volatile
- Taking annualized returns based on the last 3 years performance may not properly account for share market cycles and fluctuations. Should consider longer term returns.
- Past performance do not guarantee future performance
- Returns need also to be inflation adjusted especially if planning for long term plans such as retirement.
- Any other relevant answer.