MANICALAND STATE UNIVERSITY

OF

APPLIED SCIENCES

FACULTY OF AGRIBUSINESS AND COMMERCE

DEPARTMENT OF BUSINESS MANAGEMENT

BUSINESS INVESTMENT ANALYSIS

MODULE CODE: HBM 223

SESSIONAL EXAMINATIONS

SEPT/OCT 2021

DURATION: 3 HOURS

EXAMINER: MR. S. MUPARANGI

INSTRUCTIONS

1. *Answer all questions in Section A and any three questions in Section B.*
2. *Section A carries 40 marks whilst Section B carries 60 marks.*
3. *Total marks 100.*
4. *Credit will be given for appropriate use of examples.*
5. ***Additional materials:** Non-programmable scientific calculator*

SECTION A: COMPULSORY

(Answer all questions in this section. Section A carries 40 marks)

Question 1. Read the following case study and answer the questions that follow

The rise of Igwee's Palace

A recently founded company Igwee's Palace aims to offer vehicle tracking services to car owners in Mutare. At the moment the existing capital is divided equally among the 4 founding entrepreneurs who own 125 000 shares each. Igwee's place seeks to raise external capital and pitch their idea to the early stage venture capitalist called Mari Kuvanhu Finance. According to their forecasts they state that at the end of a 4-year investment horizon they will be able to earn revenues of $20 million per year. To reach their goals and get their company started they need $800 000. Existing companies, whose business model comes nearest to the one of Igwee's Place get typically valued with a sales multiple of around 1.5. The Management of Mari Kuvanhu came to the conclusion that the market and the business model are undoubtedly attractive, but due to the lack of experience within the team and a couple of other reasons this is considered to be very risky business. As a result, discount rate of 70% per year seems to be appropriate to them.

Required

a). Define the following terms in the context of investment vehicles

i. Hedge funds (3 marks)
ii. Common stock. (3 marks)
iii. Speculative investment. (3 marks)
iv. Preferred stock. (3 marks)

b) Using general case method, perform the following:

i. Estimate terminal value of the venture. (4 marks)

ii. Determine the present value of the venture. (5 marks)

iii. Calculate demanded ownership fraction. (5 marks)

iv. Calculate the number and price of new shares. (6 marks)

c) If Igwee's palace are to be perennial players in the financial market, advise them on 4 important functions of financial markets. (8 marks)

[Total marks:40]

SECTION B

(Answer <u>any 3 questions</u> from this section. Each question carries 20 marks)

Question 2

Machisi Enterprise, an engineering company specializing in electric motor manufacturing. During their strategic management meeting, the management came up with a policy that they will not accept investments with less than 10% ARR. During the same meeting, the Managing director disclosed that the company is considering the purchase of a new state of the art machine that will cost $465,000. Once installed, the machine is expected to generate a total of $580,000 in additional net profits over a period of 8 years. After that time, it will be at the end of its useful life. Its residual value will be equal to 10% of the total investment.

a) Using ARR, advise Machisi on whether to proceed with the investment or not. (6 marks)

b) Suppose Machisi enterprise has offered to pay in cash in return for a 30% discount and a much more improved version of the machine which will last for 10 years. What will be the new decision regarding purchase of the machine if other parameters remain the same. Support your answer with calculations. (6 marks)

c) Justify Machisi's use of ARR for investment appraisal ahead of other methods. (8 marks)

[Total Marks: 20]

Question 3

The following table presents forecasted data on expected returns for the two investments over a 5-year period.

Year	**Investment A %**	**Investment B %**
1	29	33
2	35	33
3	34	35
4	37	35
5	40	40

a) Calculate Expected Rate of Return for the two investments and advise on the appropriate investment to take. (4 marks).

b) Calculate risk for the investments using standard deviation and advise investors on appropriate investment to take considering risk and expected return all together. (6 marks).

b) Identify and evaluate non-diversifiable risks which may affect institutional and individual investors in Zimbabwe. (10 marks).

[Total marks: 20]

Question 4

a) Explain any four (4) short term investment vehicles which are applicable to any business of your choice. (10 marks)

b) Evaluate the relevance of the Capital Asset Pricing Model in determining portfolio risks in today's business environment. (10 marks)

[Total marks: 20]

Question 5

You have been appointed Financial director of Telecop Investments. The telecoms giant is considering which of the two mutually exclusive projects it should undertake. The company policy has given you the green light to assess the suitability of the projects using multiple investment appraisal techniques. The Managing director has informed you that you will be presenting your findings during the next board meeting. The company anticipates a cost of capital of 10%, and the net after tax cash flows of the projects are as follows:

Year	**Project A**	**Project B**
	$	**$**
0	(346 000)	(400 000)
1	54 000	10 000
2	86 000	30 000
3	120 000	52 000
4	146 000	156 000
5	20 000	196 000
6	10 000	200 000

a) Calculate the following and comment on the outcome.

   i. Net Present Value (NPV). (5 marks)

   ii. Equivalent Annuity. (4 marks)

   iii. Profitability Index (PI). (3 marks)

b) Which one of the techniques from (a) will you recommend to Telecop investments? Justify your choice. (8 marks)

[Total marks: 20]

Question 6

Discuss the risk minimisation measures of the Securities and Exchange Commission of Zimbabwe. **[20 marks]**

END OF EXAM