TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MATHEMATICS & PHYSICS

UNIVERSITY EXAMINATION FOR:

MATHEMATICS AND FINANCE

BFI 4150: PRINCIPLES OF FINANCE

END OF SEMESTER EXAMINATION

SERIES:DECEMBER2016

TIME:2HOURS

DATE: Pick DateDec2016

<u>Instructions to Candidates</u>

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attemptquestion ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

a) How does the nature of a business affect its sources of financing? 7MARKS

b) How is debt different from equity? 7MARKS

c) Explain the three trade-offs that guide the choice between debt financing and equity financing 7MARKS

d) Assume that you are starting a business for the first time. What do you believe are the greatest personal obstacles to obtaining funds for the new venture? Why? 9MARKS

Question TWO

The following net cash flows relate to two projects:

NET CASH FLOWS (IN $ 1,000)

YEAR	0	1	2	3	4	5	6
PROJECT A	-60	20	20	20	20	20	20
PROJECT B	-72	45	22	20	13	13	13

(i) Calculate the NPVs for each project, assuming 10% cost of capital. 5MARKS

(ii) Assuming that the two projects are independent, would you accept them if the cost of capital is 15%? 5MARKS

(iii) What is the IRR of each project? 5 MARKS

(iv) Which of the two projects would you prefer if they are mutually exclusive, given a 15% discount rate? 5MARKS

Question THREE

a)Given the cash flows of the four projects, A, B, C, and D, and using the Payback Period decision model, which projects do you accept and which projects do you reject with a three year cut-off period for recapturing the initial cash outflow? Assume that the cash flows are equally distributed over the year for Payback Period calculations. 8MARKS

Projects	***A***	***B***	***C***	***D***
Cost	$10,000	$25,000	$45,000	$100,000
Cash Flow Year One	$4,000	$2,000	$10,000	$40,000
Cash Flow Year Two	$4,000	$8,000	$15,000	$30,000
Cash Flow Year Three	$4,000	$14,000	$20,000	$20,000
Cash Flow Year Four	$4,000	$20,000	$20,000	$10,000
Cash Flow year Five	$4,000	$26,000	$15,000	$0
Cash Flow Year Six	$4,000	$32,000	$10,000	$0

b) Explain the agency conflicts in a firm and how the conflict can be minimized 12 MARKS

Question FOUR

Explain any five types of loans and their limitations. 20 MARKS

Question FIVE

Explain the role of Capital Markets Authority of Kenya 20 MARKS