NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
OCTOBER 2013 EXAMINATION

COURSE CODE: BHM 713

CREDIT UNIT: 2

COURSE TITLE: CAPITAL INVESTMENT AND FINANCIAL DECISIONS

TIME ALLOWED: 2 hrs

Instructions: 1. Attempt question Number one (1) and any other two (2) questions.
2. Question number 1 carries 30 marks, while the other questions carry 20 marks each
3. Present all your points in coherent and orderly manner

QUESTION 1

Modern Tech Services Ltd is considering two alternative projects for a business expansion programme in the Northern part of the country. The projects have the following naira cash flow profiles according to the data supplied by the company's accountant:

Year	**Project I (₦)**	**Project II (₦)**
0	-1 Million	-3 Million
1	-2 Million	0.20 Million
2	-95 Million	-50 Million
3	0.85 Million	0.65 Million
4	0.78 Million	0.75 Million
5	0.62 Million	0.80 Million
6	0.40 Million	1.90 Million
7	0.10 Million	0.20 Million

Required:
a. Calculate the payback period for each project
8 marks

b. Based on payback periods, advice which of the two projects should be chosen
1 mark
c. State 3 advantages and 2 disadvantages of the payback period criterion on investment appraisal
5 marks

1b) Find the accumulated amount of the following:

- N250, 000 after a period of 3 years at J = 6% and M = 2
4 marks
- N325, 000 at the end of 6 years and 3 months at J4 = 0.10
4 marks
- N275, 000 after the period of 31/2 years at J4 = 8%
4 marks
- N250, 000 after the period of 10 years at 6% converted quarterly
4 marks

QUESTION 2

List and explain properly the basis for classifying investments
20 marks

QUESTION 3

3a) List and explain the further classifications of investments.
10 marks

3b) Decisions could be loosely grouped into five, discuss the
10 marks

QUESTION 4

4a) What is NPV and what are the 3 decision rules?
5 marks

4b) Ayodele Engineering Co. is trying to decide which type of machine tool to buy, of the two types available. Type A costs N10,000,000 and the net annual income from the first three years of its life will N3 , 000,000, N4,000,000 and N5,000,000 respectively. At the end of this period, it will be worthless except for scrap value of N1,000,000.
To buy a type A tool, the company would need to borrow from a Finance Group at 9%. Type B will last for three years too, but will give a constant net annual cash flow if N3,000,000 it costs N6,000,000 but credit can be obtained from its manufacturer at 6% interest. It has no ultimate scrap value.

Calculate the NPV for both projects, which of the machines should the company go for? **9 marks**

4c) Femi Nig. Ltd is proposing to purchase a new machine for N20, 000,000 which will have a life of 6 years. The cash inflows estimated to be generated by the machine are as follows: Year 1 = N12,400,000; Year 2 = N6,000,000; Year 3 = N7,100,000; Year 4 = N2,203,000 and Year 5 = N2,774,000 and removed in year 6 an estimated net cash outflow of N1,477,000.
The company's cost of capital is 15%. Should investment be proceeded with?
6 marks

QUESTION 5

5a) What is inflation? **(2 marks)**
5b) Explain synchronised and differential Inflation **(4 Marks)**
5c) list 9 methods of Incorporating uncertainty and risk when appraising projects? **(9 Marks)**
5d) what is the main distinction between dependent and independent investment? **(2 marks)**