Daffodil International University
Faculty of Science & Information Technology
Department of Information Technology and Management
Final Examination, SUM 25

Course Code: ITM- 307,. Course Title: Introduction to Finance

Level: 3 Term: 2 Instructor: NI Marks: 40 Time: 2hr

Instructions: *You may answer the question (1,2 or 3) randomly, but the sections (a, b and c) should be answered sequentially. Be respectful to the Exam ethics. Use own Stationary.*

1) Finance concept. [Total - 10]

a) Explain Non non-systematic risk and systematic risk [Marks-2]

b) Briefly **explain** the Steps in the capital budgeting process. [Marks- 2]

c) **Test** when the Economic Order Quantity (EOQ) model can work properly. **Prove** mathematically [Marks- 2]

d) **Compare** NPV and PI methods. Suggest the better System of evaluation. **Prove** mathematically [Marks-2] [CLO-1 L-5]

e) **Define** with **Example** (any two): Yield to Call, Book Value, Par Value. [Marks-2]

2. Choose the best among the options based on Risk and Return calculation. [total- 10]

	Probability	Return Blockbuster Cinema hall	netflix
1	10%	- 5,485	6,418
2	30%	- 1,564	45,895
3	25%	65,865	34,478
4	15%	44,185	- 45,865
5	20%	15,416	56,543

i) Find Expected return, [Marks-3] CLO 2 L 5

ii)Standard Deviation and [Marks-3]

iii)CV of Blockbuster Cinema hall [Marks-2]

ii) if you want to give loan to any mutually exclusive project ***Recommand*** *which one you will give* [Marks-2]

3) Working capital – Inventory Management [total-5]

Matadoor Pen uses 540000 units of a product per year on a continuous basis. The product has a fixed processing fee BDT 1200 per order, a transport cost BDT 6000 per order, a per-unit labor cost of BDT 1 (transport to the warehouse) and the company bought a 5 lac BDT machine. It takes 7 days to receive a shipment after an order is placed, and the firm wishes to hold 10 days' usage in inventory as a safety stock.

a. **Calculate** the EOQ. [Marks-1]
b. **Determine** the average level of inventory. (Note: Use a 320 -day year to calculate daily usage. [Marks-2] [CLO 3,
c. **Determine** the reorder point. [Marks-2] L-3]

4) Solve Capital Budgeting Problems [Total - 15]
Amin Muhammad Group is in the process of choosing the better of two equal-risk, mutually exclusive capital expenditure projects—Alo and Ola. The relevant cash flows for each project are shown in the following table. The firm's cost of capital is 30%.

	Alo	Ola
0	- $105000	- $95000
1	$15754	$42,545
2	$36,435	$54,143
3	$72422	$28432
4	$31000	$17143

a) **Calculate** each project's *payback period (PBP)* and **recommend** the best project with reason. [Marks-5]

b) **Calculate** the *net present value (NPV)* for each project and **recommend** the best project with reason. [Marks-5]

c) **Calculate** the *internal rate of return (IRR)* for each project and **recommend** the best project with reason. [Marks-5] [CLO 3, L-5]