



SPRIHG END SEMESTER EXAMINATIOJ’J-2024

ú"' Semester D.Tech (Opea Elec i\*e- ßfi\*\*^ )

# FINANCIALMANAGEMENT

BM30202

(ëor 2021 A Previous ùdmİttcd Batches)

Tiiiie: 2 I-Ioui‘s 30 Minutes

*Aitswer iiiíy Five çfles’lit›iis.*

Full Marks: 50

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*z1ll pm-ts of[n c/iiestion should bc•* a/›a›re/’t‹! *‹!! \*\*!\*° p!^\*\*\* \*n!\*''*

1. (a) What is yorlr undeistanding aborit the impoitanGe of [5] financial management foi the success of your startup as

an hśpiiing tech entrepieiieiH? Explain llOw the

objectives of’ financial management will influence your financial decision making iegarding your business?

(b) "Considei lhree investment projects:

Project A: Offers a luiiip sum payment of $l0,000 at the end of 5 years. Project B: Provides aiuiual cash flows of

## $3,000 for the next 5 years. Project C: Offers uneven

cash flows of $2,000 at the end of year 1, $4,000 at the end of year 3, and $6,000 at the end of year 5.

Assuming a discoilnt rate of 8%, calculate the present value of each project and determine which pioject you would recommend for investment. Show your calculations and justify your choice."

[5]

## ž. (a) "Yorli firm is considering the following cash flows:

investing in a new pioject with ț3]

Jnitial investment: $50,000 Year l: $15,000 Yeai 2:

## 520,000 Yeaf 3: $25,000 Yea1 4: $30,000 Year 5:

535,000



Assuming a discount rate of 10%, calculate the Net Present Value (NPV) of the project and detexmine if it is a financially viable opportunity.

(h) Assuming a discount rate of 10%, calculate the Discounted Payback Period to assess how long it will take for the project's discountedcash hows to recoup the initial investment."

# (a)

"Imagine you aie a BTecli student launching a tech [1+2+2] startup. Outline a comprehensive cash and inventory

c)•cle to effectively manage working capital. Consider

IdCtois like pi'octlienient, pioduction, sales, and payment cycles. Demonstrate how optimizing these processes enhances liqrlidity, minimizes stockouts, and maximizes piofitabili\,y.. Utilize real-world examples to illustrate youi strategy and its impact on sustaining your startup's growth iii the coiupetitive market landscape."

## (h) Constiuct an income flow statement for your startup firm, detailing the journey from gross sales to the calculation of earnings per share (EPS).Explain each step and its significance in assessing your startup's financial perfon»ance and profitability.

[3+2]

1. {y)

"Consider two assets in your investment portfolio:

Asset 1 lias an expected ietum of 8% and a standard Jeviation of lż%. Asset z has an expected retum of 1?% alid a standard deviation of 18%.

# "flie correlation coef”ficient between the two assets is 0.5.

## calculate the portfolio expected return and standard

devi«iion włien:

gj You invest 40% of your pońfolio in Asset 1 and 60% in Asset ź. b) You invest 60% oć your portfolio in ›4sset 1 and 4fl°/• ip Asset 2.

[5]

Discurs the made-off’ f etivec‘n 1’isk aud i'ct\* i'n eacl scenario and evaÎuate the divet‘sifcatio be e ' \* “ coiiil›iiiing the t›vo assets in yoin poitfollo "

b) "Consider two assets in your investrnent port%lÍO.

Asset 1 has an expected return ot‘ 12'/« alld 8 Stitlidard de 'iation of 20%. Asset 2 has an expected rettii'n of )0% and a standaid deviation of 15%.

The co •ariance belween the two assets is 0.02.

Calculate the portfolio expected return and standai'd tieviotion »•1ien you invest 50% of yoiH poi tfolio in

.Asset 1 and 50% in Assct 2.

Discuss hoc tliC cO1 al’iiJlJCC t4) CtS 3C l“ÌSk and return of the portfol io. and iinalyse the tliveisi fication benelits of in 'estin\* in lliese assets."

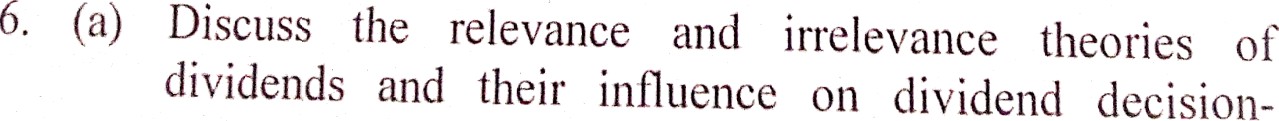
1. (a) As the CFO of a growing tech firm, you're tasked with [5] optimizing llie company's capital structure. Given the

olatile market, your firm seeks a balance between debt and equity financing.

Explaili the factors influencing your decision betv•een debt and eqiiity, considei ing costs, risks, and tax irnplicatioris.

(b) Discuss the irripact of capital structtne decisions on the sliaieliolder valiie. Elaborate on sti'ategies to mitigatc fii al Sks wllÍle ll7axlrlllziilg iettlins.





(b) In a government-funded healthcare sector, as CFO of a pharmaceutical company, decide between dividend distribution and retained earnings. With increased governlxient spending bolstering sectoi growth, balance between rewaiding shareholders and reinvesting profits for R&D and expansion. Justify yoilr choice considering long-tenTl sustainability and shareholder value maximization.

[1+4