

**B.M.S COLLEGE FOR WOMEN AUTONOMOUS
BENGALURU – 560004**

**END SEMESTER EXAMINATION – OCTOBER 2022
M.Com – II Semester**

Financial Modelling for Business

**Course Code: MCM207S
Duration: 3 Hours**

**QP Code: 21018
Max marks: 70**

SECTION-A

1. Answer any SEVEN of the following. Each question carries TWO marks. (7x2=14)

- What is the use of time value of money in financial modelling?
- What is the application of Leveraged Buy Out concept in financial modelling?
- If everything else is same for two companies, will you prefer the one with a high P/E ratio or the one with the low P/E ratio? Why?
- Who uses financial modelling?
- Rs 1million investment in a project will result into Rs 1.5 million in two years then what is the compounding rate?
- What is consolidation model? Give an example.
- What is the meaning of 'Budget Model'?
- What is an incubator? Give an example.
- Name any two characteristics of a financial model.
- What is Credit rating model?

SECTION-B

Answer any FOUR of the following. Each question carries FIVE marks. (4x5=20)

- What are the different types of incubators? Explain briefly.
- Black and Company plans to acquire White and Company. The relevant financial details of the two firms prior to the merger announcement are:

	Black & Co	White & Co
Market price per share	Rs 70	Rs 32
Number of outstanding shares	20 million	15 million

The merger is expected to generate gains which have a present value of Rs 200 million. The exchange ratio agreed to is 0.5. Calculate NPVs to both the companies.

- What are the different steps in the creation of financial model for start-ups.
- What are the different challenges in the creation of a sound financial modelling?

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6. What is the role of a template while creating a financial model?

7. Mr.X wishes to determine the present value of the annuity consisting of cash inflows of Rs 1,000 per year for 5 years. The rate of interest he can earn from his investment is 10%. What will be your answer if (a) Annual cashflows increase by 10%, time period changes to 7 years and interest rate comes down by 8%. (b) Annual cashflows decrease by 10%, time period changes to 12 years and interest rate increases by 5%.

SECTION-C

Answer any TWO of the following. Each question carries TWELVE marks. (2x12=24)

8. Beta Limited requires funds for the purpose of a new project and approached the investors for investment. The investor of the company requires you to value the company. For the said purpose the following data is given below:

Base Year

Particulars	Details
Revenues	16000 million
EBIT(12.5% of revenue)	2000 million
Capital Expenditure	1200 million
Depreciation	800 million
Working capital as a percentage of revenue	30%
Corporate Tax Rate (for all time)	40%

Input for High Growth Period

Particulars	Details
Length of the high growth phase	5 years
Growth rate in revenues, depreciation, EBIT and capital expenditure	10%
Working capital as a percentage of revenues	30%
WACC (weightage average cost of capital)	15%

Input for Stable Growth Period

Particulars	Details
Expected growth rate in revenues and EBIT	6%
Capital Expenditure are off set by depreciation	
Working Capital as a percentage of revenues	30%
WACC (weightage average cost of capital)	15%

Given the above information, calculate the value of the firm.

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9. What are the different objectives and functions of financial modelling?

10. Chalk out a financial plan template for an electric vehicle start-up in Bengaluru assuming the required details.

11. The sales of the product and its advertising expenditure for the past 6 years are as follows.

Sales (Rs lakhs)	2	3	2.5	2	2	3.5
Advertising (Rs lakhs)	1	3	4	2	1	7

Determine the sales for the next 2 years if the advertising expenditure is Rs 6 & 7 lakhs also determine to what extent advertising expenditure can boost the sales.

SECTION-D

Compulsory question carries twelve marks.

(1x12=12)

12. In 1980, Julian Hart Robertson Jr. launched one of the earliest hedge funds, 'The Tiger Management', with \$8 million raised from friends and family. Based on his brilliant stock-picking prowess, the fund enjoyed success very early. By the early 1990s, he came to be known as the 'Wizard of Wall Street' and his fund became the largest hedge in the world managing \$22 billion in assets by 1998.

Tiger Management had a value tilt and the fund used to run long and short positions. In 1999, Robertson had turned bearish on tech stocks and refused to buy into the internet bubble. He was quite vocal, about the over-valuation in this segment in his communication to investors as well as media. The fund had built short positions in internet stocks by the first quarter of 1999.

The stock prices continued to rally as new investors were flooding into internet stocks. Tiger fund was faced with deteriorating performance and investor redemptions. In October 1999, the fund increased the redemption period from three to six months. Amidst mounting losses, Robertson finally announced the fund's liquidation in March, 2000.

He wrote to his investors, "As you have heard me say on many occasions, the key to Tiger's success over the years has been a steady commitment to buying the best stocks and shorting the worst. In a rational environment, this strategy functions well. But in an irrational market, where earnings and price considerations take a back seat to mouse clicks and momentum, such logic, as we have learnt, does not count for much." The crash that Robertson was betting on began within a month of the closure of Tiger Management.

- a) What are hedge funds? Give an example for an Indian hedge fund. (2M)
- b) What are the different financial models that a hedge fund manager might use? (5M)
- c) How a financial model would help the manager to overcome emotional decisions and related mistakes? Explain with relevant examples. (5M)
