## JAIPURIA INSTITUTE OF MANAGEMENT，NOIDA PGDM／PGDM（M）／PGDM（SM） <br> THIRD TRIMESTER（Batch 2021－23） <br> END TERM EXAMINATIONS，April 2022 <br> Set－2（Re－appear）

| Course Name | ADVANCED <br> CORPORATE <br> FINANCE | Course Code | FIN20221 |
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| Max．Time | 2 hours | Max．Marks | $\mathbf{4 0}$ |

1．This question paper is to be attempted on Moodle，with each question on a separate excel sheet in this files only．
2．Answer each question below the data provided duly marking beginning and end of the answer．
3．Answers to the questions will be plagiarism checked on assignment basis in moodle with limit of 10\％．
Every additional 10\％will attract a penalty of 5 marks．

| Roll number |  |
| :--- | :--- |


| Q No． | 1 | 2 | 3 | 4 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Maximum marks | 12 | 11 | 8 | 9 | 40 |
| Marks obtained |  |  |  |  | 0 |

Asia Brown Corporation（ ABC ）is currently evaluating a capital project，involving a fixed asset with a purchase price of Rs． $21,50,000$ ．ABC will have to bear the freight of Rs．30，000 to bring the asset to its premises．The asset has to be customized as per the purchase order of $A B C$ ，which would cost an additional Rs．220，000．The useful life of the asset is estimated to be 5 years．$A B C$ will depreciate the asset according to the provisions of the Companies Act， 2013 using straight line method． The fixed asset runs on a sophisticated software and $A B C$ will have to arrange for a training programme for its employees at a cost of Rs．100，000．ABC Plans to use the fixed asset to manufacture and sell a new product．Few months ago，$A B C$ hired a market research firm to conduct a market survey on the feasibility of launching the new product．The firm submitted its report and ABC paid Rs．200，000 as the survey fees to the market research firm．In each of the first two years of the project，$A B C$ expects to sell 50，000 units of the new product at a price of Rs． 38 per unit in the first year and Rs． 44 per unit in the second year．The expected sales in the $3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ year of the project are， respectively， 58,$000 ; 56,000$ and 52,000 units，with unit sale prices of Rs． 45 ；Rs． 42 and Rs． 40 in each of those years．The cash operating charges are expected to be $60 \%$ of revenue in the first year， $55 \%$ of revenue in the $2^{\text {nd }}$ year and $50 \%$ of revenue in the last three years of the project．The asset will occupy a space in the factory premises that is currently let out at an annual rental of Rs．50，000．ABC is in the $34 \%$ corporate tax bracket．It will have to infuse working capital of Rs． 40,000 and Rs． 60,000 in the beginning of $2^{\text {nd }}$ and $4^{\text {th }}$ year respectively．It can realize Rs．50，000 as scrap value from the capital asset at the end of useful life．$A B C$ plans to use debt and equity to finance the project，with $30 \%$ debt and the balance equity．The borrowing is arranged with SBI at a negotiated rate of $12.65 \%$ ．The company＇s beta value is 0.93 ；the current price of its common stock is Rs．150．The risk－free and market portfolio returns are，respectively， $7.5 \%$ and $14 \%$ ．
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Roll Number

| Q 2 | 11 marks |
| :--- | :--- |

Satnam Overses, a large size export oriented company, is evaluating the possible acquisition of Miracle Exports, a regional firm indulged in export of value added products. Satnam's analysts project the following post-merger free cash flows of the target (assume all the cash flows occur at the end of the

| Free cash flow to firm of target in upcoming years (in Crore Rupees) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ | $\mathbf{2 0 2 5}$ |
| FCFF or FCF | 14 | 16 | 21 | 27 |

The other required data for the valuation of equity of the target are as follows:

| Key inputs of the target firm |  |
| :--- | :---: |
| Initial debt, Rs. | 30 |
| Pre-merger book value of equity (book | 60 |
| Crores |  |
| Pre-merger value of equity (market vali | 80 |
| Number of shares outstanding | 16 |
| Tax rate (For the valuation period) | $35 \%$ |
| Longterm growth rate (2025 till infinity | $7.5 \%$ |
| Risk-free rate of return | $7.0 \%$ |
| Market risk-premium (Rm - Rf) | $8.5 \%$ |
| Cost of Debt (before tax) | $12.5 \%$ |
| Beta | 1.20 |

Determine, for use and application of discounting free cash flow to firm (FCFF) method:
i) Cost of equity, cost of debt after-tax, and Weighted Average Cost of Capital (WACC) (3 Marks)
ii) Horizon / Terminal value of target at the end of 2025.

## (2 Marks)



Roll Number $\square$

The current market price of Tata Motors share is hovering around Rs.260.
You have bought a call option for 300 shares of RIL expiring in May 2022, at the premium of Rs. 5 for each share at the strike price of Rs.258.
Evaluate your (a) net payoff (after deducting option premium) if the price of Tata Motors share on the expiry date turns out to be Rs.250, Rs.260, Rs.270, or Rs. 280 and (b) draw the profit profile of the call option.
Show your calculations in details.
====================your answer should start below this line ==================

Roll Number

| Q 4 | 9 Marks |
| :--- | :--- |
| Explain with examples (in around $\mathbf{1 5 0}$ words) | $\left(\mathbf{3}^{*} \mathbf{3 = 0 9}\right.$ |
| Marks) |  |
| i). Sensitivity analysis in capital budgeting |  |
| ii). Demerger |  |
| iii). Foreign exchange fluctuations and firm's profitability |  |

Roll Number

