Roll No.

Time allowed : 3 hours
Maximum marks : 100

Total number of questions : 6
Total number of printed pages : 7

NOTE : 1. Answer ALL Questions.
2. Working notes should form part of answer.

## PART-A

1. A Private Limited Company has already in the business of manufacture and sale of imitation jewellery, is planning to take over the business of a similar Company (Target Company). Before take over the Management has approached you as Valuation consultant, to suggest on future profitability and valuation. Following information is obtained from the existing Management :
(i) The Target Company is doing business in 2 Segments i.e., wholesale and Retail. In Retail Segment there are two categories of products-budget and premium.
(ii) In the Retail Segment, the estimated Annual sale in the next financial period for the budget category is ₹ 200 Lakh and premium category is ₹ 100 Lakh. The sales for budget category is expected to grow by $20 \%$ year on year. Premium category is expected to grow $10 \%$ year on year.
(iii) In the Wholesale Segment-Company is having Annual orders for ₹ 200 Lakh. (Credit period allowed to Debtors is 2 months). The demand in this segment is expected to grow by $25 \%$ year on year.
(iv) Raw materials form $35 \%$ of the sale value for budget category and the Wholesale Segment, while they form $45 \%$ for the premium category. Creditors give one month credit for raw material purchased.
(v) The variable processing cost is $25 \%$ of the sale value for budget category and $15 \%$ of the sale value for premium category while it is $25 \%$ of the sale value in the case of Wholesale Segment.
(vi) Fixed costs are expected as follows : Rent ₹ 3,00,000 per month for processing and storage unit and ₹ 15,000 per month each for Ten showrooms. In third year $10 \%$ addition is expected for rent and thereafter there will be no change in rent for next 3 years. Administration overheads are expected at $10 \%$ of Sales for next 3 years. Rent of storage unit is to be apportioned between budget, premium and wholesale in their respective sales ratio and Rent for showroom is to be apportioned only to budget and premium categories in their respective sales ratio.
(vii) $10 \%$ of raw material requirements for all categories/segments are to be maintained as inventory.
(viii) The Equity Capital of the Company is ₹ 100 Lakh ( $10,00,000$ Equity shares of $₹ 10$ each) and the Company has a Term loan of ₹ 200 Lakh which is to be repaid in next 5 years with an interest of $10 \%$, per annum (Interest is to be apportioned between budget, premium and wholesale in their respective sales ratio). Further, the Company has overdraft facility which carries an interest of $12 \%$ per annum, which will be availed in case of negative cash flows. (Interest on overdraft also to be apportioned between budget, premium and wholesale in their respective sales ratio).
(ix) The Company has the policy of maintaining minimum Bank Balance of ₹ 25 Lakh.
(x) The investment in plant and machinery is ₹ 200 Lakh and $15 \%$ per annum Depreciation is charged on straight line basis. Depreciation is to be apportioned between budget, premium and wholesale in their respective sales ratio.
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(xi) Company has Furniture, Fittings, Computers and other assets of ₹ 100 Lakh and it is depreciated at $10 \%$ per annum on straight line basis. Depreciation is to be apportioned between budget, premium and wholesale in their respective sales ratio.
(xii) Tax rate to be assumed at $25 \%$.
(xiii) Discount Rate can be considered as $10 \%$ (Discount factors are as below) :

| Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: |
| 0.9091 | 0.8264 | 0.7513 |

(xiv) The risk free rate of return is $6 \%$ and the Market risk premium is $9 \%$. Industry Beta is 1.125 . Beginning period debt and equity value can be considered for Debt Equity Ratio (Overdraft can be ignored; for debt equity ratio). Growth to perpetuity can be assumed at $3 \%$.

Based on the above information on Target Company, answer the following questions :
(a) Prepare projected Income Statement for 3 years (Category-wise and total)
(b) (i) Prepare projected Balance Sheets for 3 years and also calculate (ii) cost of Equity using CAPM model and (iii) Weighted Average Cost of Capital (WACC).
(c) Find out (i) Free Cash Flows to the Firm (FCFF) and (ii) Free Cash Flows to Equity (FCFE) (iii) Find out which category has highest EBITDA/Sales Ratio and PAT/Sales Ratio over the 3 years.
(d) (i) The Management would like to know the expected Value of the Target Company and the share price it can offer to buy the Company. (ii) What are the types of companies where management may find difficulties in using Discounted cash Flow Technique for Valuation?
2. (a) "There are a number of factors both macro-economic and micro-economic which have an impact on business. Valuation of a business involves making forecasts for the future".

Comment on the sources of uncertainties in business valuation in the light of the above.
(b) State under what conditions/assumptions the following statements are true (state only one important condition/assumption for each) :
(i) Fair Value of an asset is always equal to its Market Value.
(ii) Gordon's Dividend Growth Model provides a good estimate of intrinsic value of a share.
(iii) A Company can show Goodwill in its Balance Sheet.
(5 marks each)
3. (a) (i) What should be the contents of Valuation Report as per International Valuation Standards (IVS) and (ii) What is the difference between 'Valuation date' and 'date of the Valuation Report'.
(b) A Registered Valuer has been asked to determine the combined level of valuation discounts for a small equity interest in a private company. The Valuer concluded that an appropriate control premium is 15 percent. A discount for lack of Marketability was estimated at 25 percent. Given these factors, what is the combined discount?
(5 marks each)
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## 447

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4. (a) 'Combined Value $=$ Stand alone value of acquiring firm $\left(\mathrm{V}_{a}\right)+$ Stand alone value of acquired target firm $\left(\mathrm{V}_{t}\right)+$ Value of synergy $\Delta \mathrm{V}_{a t}$ " -Discuss this equation with reference to Synergy benefits in Merger of Companies.
(b) Why do Companies want to measure intellectual capital and what are the pitfalls in valuation of such assets.
(5 marks each)

## PART-B

5. (a) 'Business Model defines how a Company provide value to customer and transfer payments to profits'.

Elucidate the above statement by highlighting the key components of a business model.
(b) Sandeep, an IT graduate, has developed an e-platform to assist farmers to sell their produce directly to the bulk customers in the nearby cities, was unsure of selecting a suitable business model and has approached you to suggest one. As a Business Model consultant, select a suitable business model to Sandeep for his e-platform Application, and explain its features, advantages and drawbacks.
(c) (i) Using Excel function, calculate the future value of an investment of ₹ $1,00,000$ / over 5 years. The investment earns interest of $8 \%$ during the first two years, $6.5 \%$ in third year and $6 \%$ during $4^{\text {th }}$ and $5^{\text {th }}$ years, and also answer the following :
(ii) Which excel function is used for this calculation?
(iii) Show how this function is used in excel spread sheet.
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6. (a) ABC Limited is engaged in the business of Manufacturing alloy components. The CFO of the Company estimates that the Turnover of Company for the forthcoming Financial Year will be ₹ 100 Crore and thereafter year on year the Company can achieve $10 \%$ growth. He has also estimated that Earnings Before Interest, Tax, Depreciation and Amortisations (EBITDA) for the forthcoming Financial Year will be $25 \%$ on Turnover. He also informs the Management that the Company can maintain the $25 \%$ EBITDA, provided there is not much change in the expenditure, as the $80 \%$ of expenditure of the Company is variable in nature. However, the purchase head of the Company comes out with the information that price for one of important Raw Material-'A', which forms $50 \%$ of the total raw materials is likely to rise upto $30 \%$ during the next Financial Year. (Raw Material Cost is estimated to be $60 \%$ of the Total Variable Cost). An alternate Raw Material-' $P$ ' is available, however it is costlier and it will bring down present EBITDA margin to $20 \%$. It is expected that price of Material' P ' will be stable in the next Financial Year. Assume there is no change in fixed
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## 447

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or other variable expenses except change in Material 'A's price, as a part of the management you are required to :
(i) Find out the impact on profitability by preparing a Sensitivity Analysis table, if the price of the Raw Material-' A ' is increases by $10 \%, 20 \%$ and $30 \%$ for the next Financial Year.
(5 marks)
(ii) Find out \% of Variable and Raw Material cost on Sales if Material ' P ' is used and also find out at what levels of increase in Material-'A's price, the Company can opt for use of Raw Material-' P '.
(5 marks)
(b) Explain Working Capital Management through business modeling with practical example.
(5 marks)

