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Final Exam :- Ramshajed 12974

Q2) a) Discuss the concept of time values of money with an example.

Ans) TIME VALUE OF MONEY:-

- This is, the earlier a sum of money is received, the more it is worth, because over time money can earn more money, or interest.
- There are three reasons why a dollar tomorrow is worth less than a dollar today:
 - Individuals prefer present consumption to future consumption. To induce people to give up present consumption, you have to offer them more in the future.
 - When there is monetary inflation, the value of currency decays over the time. The greater the inflation, the greater the difference in values between a dollar today and a dollar tomorrow.

(2)

- If there is any uncertainty (risk) associated with the cash flow in the future, the less that cash flow will be valued.

EXAMPLE:-

If you invest \$100 (the present value) for 1 year at a 5% interest rate (the discount rate), then at the end of the year, you would have \$105 (the future value). So, according to this example, \$100 today is worth \$105 a year from today.

b) Given :-

$$P = \text{Present value} = 1200$$

$$R = \text{Interest rate} = 10\% = 0.10$$

$$T = \text{Time in year} = \frac{9 \text{ months}}{12 \text{ months}} = \frac{9}{12}$$

Sol:-

$$F = P(1+RT)$$

Putting values

$$F = 1200 \left(1 + 0.10 \times \frac{9}{12}\right)$$

$$F = \$1290 \text{ As.}$$

(3)

Q2) Prepare the balance sheet.....
..... guitar shop.

Ans) :- Balance sheet of Paul's Guitar shop.

Assets

Current Assets

Cash	32,800
Accounts Receivable	300
Prepaid Rent	1,000
Inventory	<u>39,800</u>
Total current Assets	73,900

Long-term Assets

Leashold Improvement	100,000
Accumulated Depreciation	(2,000)
Total Long-term Assets	<u>98,000</u>
Total Assets	171,900

Liabilities

Current Liabilities

Account Payable	49,000
Accrued Expenses	450
Unearned Revenue	<u>1,000</u>
Total Current Liabilities	50,450
Long-term Liabilities	99,500
Total Liabilities	<u>149,950</u>

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Owner's Equity

Owner's Equity

Retained Earnings
Common stock
Total Owner's Equity
Total Liabilities and
Owner's Equity

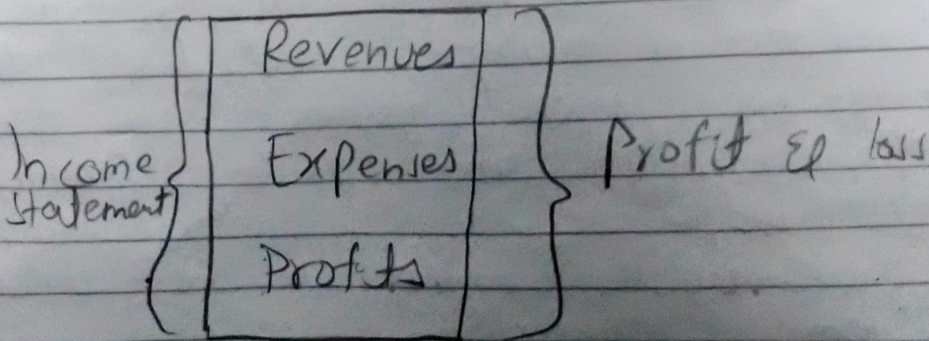
	11,950
	<u>10,000</u>
	<u>21,950</u>
	171,900

Q3) Discuss the important component of Income statement give example with each component if necessary.

Ans

The Income statement is one of a company's core financial statements that shows their profit and loss over a period of time. The profit or loss is determined by taking all revenues and subtracting all expenses from both operating and non-operating activities.

The statement displays the company's revenue, costs, gross profit, selling and administrative expenses, other expenses and income, taxes paid, and net profit, in a coherent and logical manner.



The statement is divided into time periods that logically follow the company operations. The most common periodic division is monthly (for internal reporting) although certain companies may use a thirteen-period cycle.

This statement is a great place to begin a financial model as it requires the least amount of information from the balance sheet and cash flow statement. Thus in terms of information, the income statement is a predecessor to the other two core statements.

Components of an Income Statement

The income statement may have minor variations between different companies, as expenses and income will be dependent on the type of operation or business conducted. However there are several generic line items that are commonly seen in any income statement.

The most common income statement items include:

Revenue/Sales

Sales Revenue: Sale revenue is the company's revenue from sales or services, displayed at the very

top of the statement. This value will be the gross of costs associated with creating the goods sold or in providing services.

Cost of Goods Sold:- COGS is a line-item that aggregates the direct costs associated with selling products to generate revenue. Direct cost can include labor, parts materials and other expenses.

Gross Profit:- Gross profit is calculated by subtracting cost of goods sold from sales revenue.

* Marketing, Advertising, and Promotion Expenses.

Most businesses have some expenses related to selling goods and/or services. Marketing, advertising and promotion expenses are often grouped together as they are similar expenses, all related to selling.

General and Administrative Expenses.

G&A Expenses:- G&A expenses include selling, general and the administrative section that contains all the indirect costs associated with running the business. This includes salaries and wages, rent and office expenses, insurance, travel expenses, and sometimes depreciation and along with other operational expenses.

EBIT:- Ebit while not present in all income statements, stands for earnings before interest, Tax. It is calculated by subtracting SGA expenses from gross profit.

Operating Income :- Operating income represents what's earned from regular business operations. EBIT is a term commonly used in finance and stands for earnings before interest and taxes.

Interest Expense: It is common for companies to split out interest expens. and interest income as a separate line item in the income

statement. This is done in order to reconcile the difference between EBIT and EBT

* EBT (Pre-tax Income)

EBT stands for earnings before tax, also known as pre-tax income and is found by subtracting interest expense from operating income. That is the final subtotal before arriving at net income

* Income Taxes: Income taxes refer to the relevant taxes charged on pre-tax income. The total tax expense can consist of both current taxes and future taxes.

* Net Income: - Net income is calculated by deducting income taxes from pre-tax income. This is the amount that flows into retained earnings on the balance sheet, after deductions for any dividends.

Q4) Define proportion and ratio with Example :-

Q3) Ratio :-
A ratio is a comparison between two quantities.

We use ratios everyday; one Pepsi costs 50 cents describes a ratio. On a map, the legend might tell us one inch is equivalent to 50 miles or we might notice one hand has five fingers. Those are all examples of comparisons - ratios.

A ~~ratio~~ ratio can be written three different ways. If we wanted to show the comparison of one in representing 50 miles on a map, we could write that as;

1 to 50

using a colon $1:50$

using a fraction $\frac{1}{50}$ As

PROPORTION:-

That leads us to a new definition
A Proportion is a statement of equality between 2 ratios.

Look at a proportion like $\frac{1}{2} = \frac{3}{6}$, we

might see some relationships that exists if we take time and manipulate the numbers.

for instance, what would happen if we tipped both ratio up side down?

$\frac{2}{1}$ and $\frac{6}{3}$, notice they are also equal

so $\frac{2}{1} = \frac{6}{3}$

How about writing the original proportion side-ways, will we get another equality?

$\frac{1}{3}$ and $\frac{2}{6}$, notice they are equal also so $\frac{1}{3} = \frac{2}{6}$

(12)

Q. b) Given:-
num of boys = 3
num of girls = 7

total num of students = 440

Req, num of boys attending the school = ?

Sol:-

$$\frac{\text{boys}}{\text{girls}} = \frac{\text{boys}}{\text{girls}}$$

we have proportion

$$\frac{b}{g} = \frac{b}{g} \quad \text{then}$$

$$\frac{b}{b+g} = \frac{b}{b+g} \quad \text{would be true}$$

from our problem, we ~~can~~ now can see $b+g$ would be the total of the boys and girls.

Filling in this proportion, we have

$$\frac{3}{3+7} = \frac{b}{440} \quad \Rightarrow \quad \frac{3}{10} = \frac{b}{440}$$

(13)

$$\begin{aligned} \text{solving, } 10b &= 3 \times 440 \\ 10b &= 1320 \\ b &= 132 \end{aligned}$$

There would be 132 boys, to
And the num of girls we could
subtract from 440.

Using the ratio
 $\frac{b}{g}$ or $\frac{3}{7}$ we now know we have

3x boys and 7x girls. So the ratio
of $\frac{b}{g} = \frac{3x}{7x}$

total num of student is 440,
therefore we have
boy + girls = 440

$$3x + 7x = 440$$

$$10x = 440$$

$$x = 44$$

The ratio of boys = $3x$
 $= 3(44)$
 $= 132$ Ans

(5a) Ans)

Capital Budgeting :-

Capital budgeting refers to the process we use to make decisions concerning investments in the long-term assets of the firm. The general idea is that the capital, or long-term funds, raised by the firms are used to invest in assets that will enable the firm to generate revenues ~~the~~ several years into the future.

IMPORTANCE :-

Capital budgeting decisions impact the firm for several years, they must be carefully planned. A bad decision can ~~to~~ have a significant effect on the firm's ~~the~~ future operations. In addition, the timing of the decisions is important. Many capital budgeting projects take years to implement. If firms do not plan accordingly

(15)

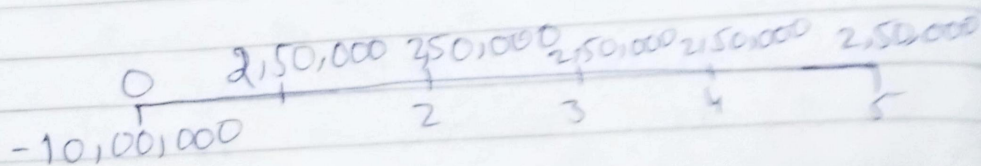
They might find that the timing of the capital budgeting decision is too late, thus costly with respect to competition.

Ans 5 b) [EXAMPLE::

Mr XYZ owns a car rental company planning to start a new route.

XYZ think the project should have PBP of 5 years.

Let he buy a car at Rs 10,00,000

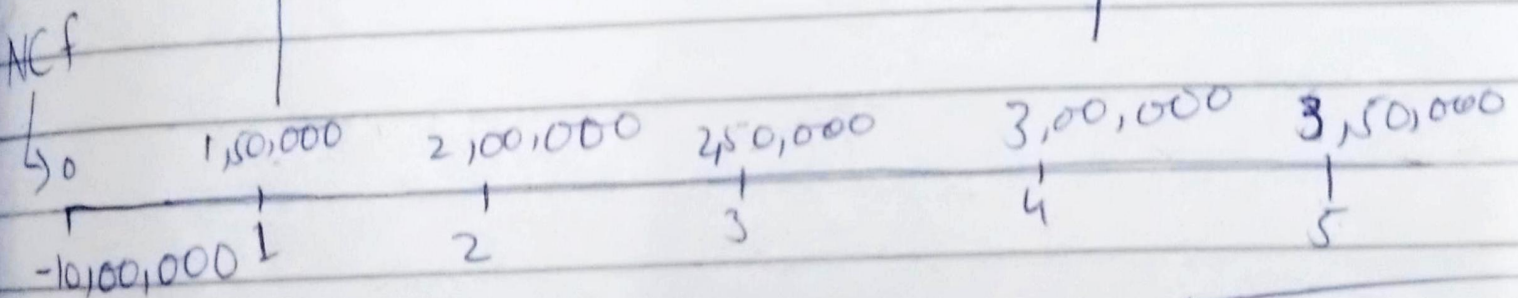
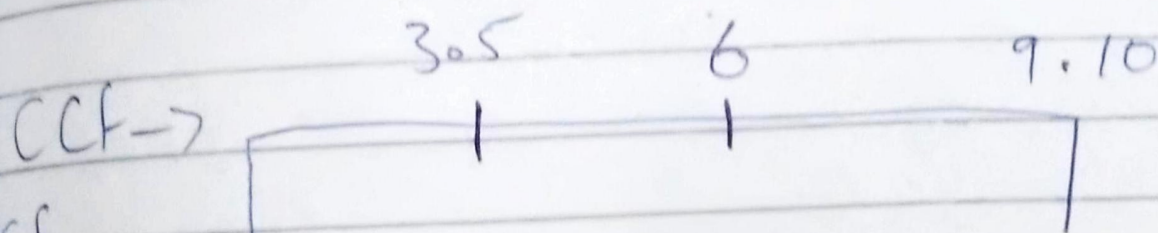
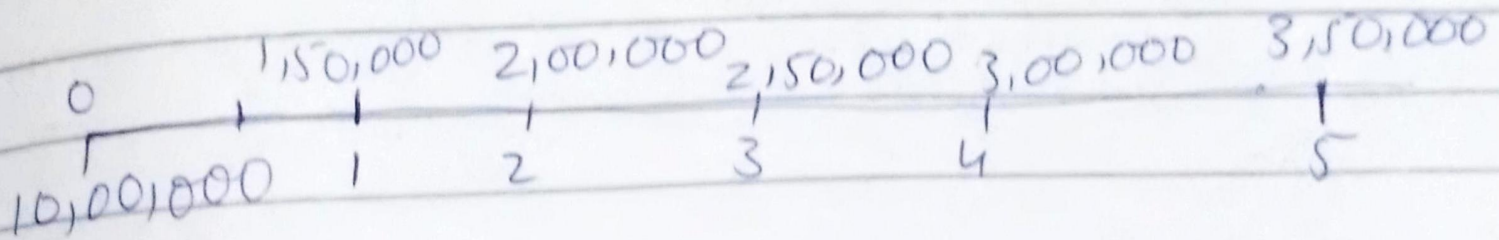


In this case the cash flows are uniform so, we can simply calculate the PBP

$$\text{Pay back} = \frac{10,00,000}{2,50,000} = 4 \text{ years}$$

(16)

In case CF are not uniform
then i.e.



$$\text{Pay back} = 4 + 0.29$$
$$= 4.29 \text{ years}$$

$$\begin{aligned} & \text{P.W} \\ & 3.5 \text{ l} \rightarrow 1 \\ & 1 \text{ l} \rightarrow 1 \text{ y} \\ & \frac{3.5}{3.5} \text{ y} \\ & = 0.29 \text{ y} \end{aligned}$$