Engineering Economics Assignment mandatory for terminology

Engineering Economics (COMSATS University Islamabad)

COMSATS UNIVERSITY ISLAMABAD WAH CAMPUS

ASSIGNMENT NO.01

Subject: Engineering Economics

Section: 5B

Date: 5th Oct 2021

Submitted to: Dr Hassan Ashraf

Submitted By:

- Hammad Ali Shahzad (**FA19- CVE- 043)**

Differentiate between three concepts of Interest Rate, Discount Rate, and MARR?

Interest Rate:

The interest rate is calculated as a proportion of the amount borrowed, deposited, or lent. The total interest on an amount borrowed depends on the terms of the loan and the length of time it must be paid. The interest rate is the portion of a loan that a bank or other financial institution charges as interest to its depositors. It is usually expressed as an annual rate.

Example: A company borrows money from a bank to purchase assets for its business. The company then charges the bank interest. The bank will use the capital it gets from the deposits to lend to its clients. The bank pays the individuals who deposited the capital interest.

Discount Rate:

The discount rate is a fee charged to commercial banks and financial institutions when they provide short-term loans to the Federal Reserve. It's used to determine the present worth of future cash flows.

Example: A $100 put today in a reserve funds conspire that offers a 10% financing cost will develop to $110. At the end of the day, $110 (future worth) when limited by the pace of 10% is valued at $100 (present worth) starting today.

Minimum Attractive Rate of Return (MAAR):

The minimum attractive rate of return, frequently condensed MARR, or obstacle rate is the base pace of return on a task a chief or organization will acknowledge prior to beginning an undertaking, given its danger and the chance expense of swearing off other projects. An equivalent seen in numerous settings is least alluring pace of return. The MARR is the minimum benefit a depositor assumes to make from a financing, bringing into bank account the perils of the savings and the opportunity cost of accepting it instead of other savings.

Example: Imagine a manager realizes that investment in a conventional development, being as a pledge financing or an alternative development with no danger, generates a well-known rate of return. When evaluating a new project, the manager may use **the conventional development's rate of return** as the MARR.

Interest Rate	Discount Rate	MARR
The interest rate is the sum charged on top of the head by a bank to a borrower for the utilization of resources.	The term discount rate can also refer to the rate used to discount future cash flows in discounted cash flow analysis (DCF).	The hurdle rate is the minimum rate of return on an investment that will offset its costs.
An Interest rate additionally applies to the sum procured at a bank or credit association from a store account.	In discounted cash flow analysis, the discount rate expresses the time value of money and can make the difference between whether an investment project is financially viable or not.	Hurdle rate (MARR) give companies insight into whether they should pursue a specific project.
Buyer loans ordinarily utilize an APR, which doesn't utilize accumulate interest.		

THANK YOU