Nepal College of Information Technology

**Unit Test**

Fall 2012

Program : BE Time : 2 hrs

Semester : (VI) FM : 70

Subject : Engineering Economics PM : 35

* *Candidates are requested to give their answer as far as practicable in their own words.*
* *The figure in the margin indicates the full marks*
* ***Attempt ALL question***

1. a) What is Engineering Economics? What are the principles of engineering economics? Describe briefly. (7)

b) What will be the maturity amount of Rs.15,000 after 5 years for nominal rate of interest rate of 9% per year ,when compounded i)yearly ii)quarterly (8)

2. a) Describe briefly the present worth and future worth method for the evaluation of project. (8)

b) Determine whether the project is feasible or not. Use the PW method. If MARR=15% (7)

|  |  |
| --- | --- |
| End of year | Net cash flow |
| 0 | -75,000 |
| 1 | 24,400 |
| 2 | 27,340 |
| 3 | 55,760 |

3. a) Mr. X receives a loan of Rs.1, 20,000 from a bank at an interest rate of 12% per year. He wishes to repay the loan in monthly installment rate with 3,000 per month. How many installments are necessary to complete his payment? (7)

b) Find the Value of G if i=10% (8)

4G

5,000

0 1 2 3 4 5

50,000

4. Write Short notes on (any three) (5x3=15)

a) Risk Premium

b) Cash flow diagram

c) Discount

d) Comparison of simple and compound interest