COURSE PLAN

Department

Humanities and Management

Course Name & code

Engineering Economics & Financial Management & HUM 4002

Semester & branch

VI Semester & Common to All

Name of the faculty

Dr. Gopalakrishna, Mr. Lidwin, Mr. Sunith, Mr. Mahesh, Mr. Sumukh, Ms. Geethalakshmi and Ms. Anasuya

.

No of contact hours/week:

3 hours

ASSESSMENT PLAN:

| 50% |
|-----|
| 30% |
| 20% |
| 50% |
| |

| | Portions for Assignment/Quiz/Seminar etc | | | |
|----------|--|--|--|--|
| SI. no. | Topics/Lessons | | | |
| 1 | L1 to L12 | | | |
| 2 | L 13 to L 24 | | | |
| 3 | L 25 to L 36 | | | |
| 4 | Click or tap here to enter text. | | | |
| 5 | Click or tap here to enter text. | | | |
| | Portions for Sessional Test | | | |
| Test no. | Topics/Lessons | | | |
| 1 | L1 to L 15 | | | |
| 2 | L 16 to L 30 | | | |

Course Outcomes (COs)

At the end of this course, the student should be able to:

| CO1: Understand the concepts of demand and supply CO2: Understand the appropriate engineering economics analysis method(s) used in problem solving | 03 | POs POs |
|--|----|------------|
| | 16 | POs |
| | | 100 |
| CO3: Compute the depreciation of an asset using standard depreciation techniques | 03 | POs |
| CO4: Describe and apply the basic techniques of financial statement analysis | 06 | POs |
| CO5: Apply all mathematical approach models covered in solving engineering economics problems | 08 | POs |

Course Plan

| L. No. | Topics | Course Outcome Addressed |
|--------|--|--------------------------------|
| LO | Introduction to the course and the evaluation criterion | CO |
| L1 | Introduction to engineering economics and Economic decision making | CO1 |
| L2 | Micro economics and Macro economics, Demand and Law of demand | CO1 |
| L3 | Supply and Law of supply, Equilibrium of demand and supply | CO1 |
| L4 | Time value of money meaning and importance, Interest meaning and types | CO2 |
| L5 | Interest factors for discrete compounding, Problems | CO2 |
| L6 | Interest factors for discrete compounding, Problems | CO2 |
| L7 | Interest factors for discrete compounding, Problems | CO2 |
| L8 | Arithmetic gradient series factor, Problems | CO2 |
| L9 | Application numerical on seven interest factors | CO5 |
| L 10 | Nominal and effective interest rate, Problems | CO2 |
| L11 | Nominal and effective interest rate, Problems | CO2 |

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| L12 | Application numerical with nominal and effective interest rate | CO5 |
|--------|---|--------------------------------|
| L. No. | Topics | Course Outcome Addressed |
| L 13 | Economic evaluation of alternatives: Bases for comparison of alternatives, Importance and assumptions, Problems | |
| L 14 | Economic evaluation of alternatives: Present Worth Method - LCM method and Study period method, Problems | CO2 |
| L 15 | Economic evaluation of alternatives: Application numerical on present worth method | CO5 |
| L16 | Economic evaluation of alternatives: Capitalized equivalent amount | CO2 |
| L 17 | Economic evaluation of alternatives: Annual worth method and its importance, Determining Annual equivalent amount, Problems | CO2 |
| L18 | Economic evaluation of alternatives: Capital recovery with return, Application numerical on annual worth method | CO5 |
| L19 | Economic evaluation of alternatives: Rate of return method | CO2 |
| L 20 | Economic evaluation of alternatives: Rate of return method | CO2 |
| L 21 | Economic evaluation of alternatives: Rate of return method, Application based numerical | CO5 |
| L 22 | Replacement Analysis: Reasons, Evaluation of replacement alternatives | CO2 |
| L23 | Replacement Analysis: Evaluation of replacement alternatives with unequal lives | CO2 |
| L 24 | Replacement Analysis: Economic life of an asset, Application based numerical | CO5 |
| L25 | Depreciation: Meaning and significance, Physical and functional depreciation | CO3 |
| L 26 | Depreciation: Methods of depreciation with numerical | CO3 |
| L27 | Depreciation: Methods of depreciation with numerical | CO3 |
| L 28 | Financial Management: Nature and objectives, Scope and functions | CO4 |
| L29 | Financial Statement Analysis: Introduction, Types and importance | CO4 |
| L 30 | Financial Statement Analysis: Understanding the financial statement | CO4 |
| L31 | Financial Statement Analysis: Ratio analysis, Problems | CO4 |
| L32 | Financial Statement Analysis: Ratio analysis, Problems | CO4 |
| L33 | Financial Statement Analysis: Ratio analysis, Problems | CO4 |
| L 34 | Break-even Analysis (B.E.A.): Meaning, Assumptions and Applications, Estimation of breakeven point | CO2 |
| L 35 | Break-even Analysis: Break even analysis for evaluation of investment alternatives. | CO5 |
| L 36 | Application based numericals on evaluation of investment alternatives using B.E.A. | CO5 |

References:

- 1. Thuesen G. J, "Engineering Economics", Prentice Hall of India, New Delhi, 2005.
- Blank Leland T. and Tarquin Anthony J., "Engineering Economy", McGraw Hill, Delhi, 2002. 2.
- 3. Chan S. Park, "Contemporary Engineering Economics", 4th Edition, Pearson Prentice Hall, 2007.
- Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill, Delhi, 2006. 4.
- 5. Maheshwari S.N, "Financial Management", Sultan Chand & Co., Delhi, 2002.
- T. Ramachandran, "Accounting and Financial Management", Scitech Publications Pvt. Ltd. India, 6. 2001.
- 7. I M Pandey, "Financial Management", Vikas Publishing house, Delhi, 2007.

Submitted by: Dr. B Gopalakrishna

(Signature of the faculty)

Date: 05-01-2018

Approved by:

Dr. Lewlyn L. R. Rodrigues

(Signature of HOD)

ProPate LE VODY 01 L2018 ODRIGUES B.E., MBA, M. Tech, Ph.D.

HOD, HUMANITIES & MANAGEMENT MIT, MANIPAL - 576 104

Karnataka, India

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FACULTY MEMBERS TEACHING THE COURSE (IF MULTIPLE SECTIONS EXIST):

| FACULTY | SECTION | FACULTY | SECTION |
|----------------------------|---------------------|---------------------|---------|
| Mr. Lidwin Kenneth | CSE-D, ICT-B, EEE-C | Dr. B Gopalakrishna | CSE-C |
| Mr. Sunith Hebbar | CCE-A | | |
| Mr. Mahesh Prabhu | CSE-B, CIV-B, EEE-B | | |
| Mr. Sumukh Hungund | CSE-A, CIV-A, ICE_A | | |
| Lt. Cdr Geetalakshmi PM | CCE-B, EEE-A | | |
| Ms. Anasuya K. L. | ICT-A, CIV-C, ICE-B | | |
