FUNDAMENTALS OF CIVIL ENGINEERING 3-0-2

COURSE OBJECTIVE:

- 1. To Familiarize Students with Various Branches of Civil Engineering
- 2. To Familiarize Students With Civil Engineering Materials
- 3. To Familiarize Students With Building Construction
- 4. To Familiarize Students With Surveying
- 5. To Familiarize Students With Disaster Management

COURSE CONTENT:

Introduction: Scope of Civil Engineering, Necessity of Civil Engineering, History of Civil Engineering, Brief Introduction of Branches of Civil Engineering.

Properties, Uses and of Tests of Construction Materials: Cement, Coarse Aggregate, Fine Aggregate, Water, Bricks, Stone, Steel, Plastic, Cement Mortar, Cement Concrete, Reinforced Cement Concrete, Timber, Paint, Distemper, Lime.

Building Construction: Types of Buildings, Requirements of Good Building, and Components of a Building. Bricks Masonry, Stone Masonry, Doors, Windows, Staircases, Lifts & Escalators, Floors, Roofs.

Surveying: Types of Surveying, Linear Measurements, Vertical Measurements & Angular

Measurements- General Information.

Disaster Management: Types of Disaster, Disaster Resistant Buildings, Disaster Mitigation & Management.

LABORATORY

Experiments as suggested by the course coordinator.

COURSE OUTCOMES

- 1. Student would have General Idea of Various Branches of Civil Engineering
- 2. Students would be Acquainted with Construction Materials
- 3. Student would have Knowledge of Various Types of Surveying and Survey Equipments
- 4. Students would come to Know about Disaster Mitigation and Management

EVALUATION

Evaluation will be continuous an integral part of the class followed by final examination.

REFERENCES

- 1. Satheesh Gopi, Basic Civil Engineering, Pearson Education.
- 2. M S Palanichamy, Basic Civil Engineering, McGraw Hill Education.
- 3. Mimi Das Saikia, Bhargab Mohan Das, Madan Mohan Das, Elements of Civil Engineering, PHI Learning Private Limited