**17CE21P2 - ENGINEERING GEOLOGY LABORATORY**

**(Civil Engineering)**

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| **Course Category** | Professional Core | **Credits** | 2 |
| **Course Type** | Theory | **Lecture - Tutorial - Practical** | 0-0-3 |
| **Prerequisite** | None | **Sessional Evaluation** | 40 |
| **Semester End Exam Evaluation** | 60 |
| **Total Marks** | 100 |

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| **Course Objective(s)** | To gain sufficient knowledge in various aspects of rocks and minerals, basic geomorphology and structural geology along with map interpolation. | |
| **Course Outcomes** | CO1 | Categorize the various landforms of the Earth surface. |
| CO2 | Identify the minerals using basic geologic classification systems. |
| CO3 | Identify the rocks using basic geologic classification systems. |
| CO4 | Comprehend the elements of structural geology. |
| CO5 | Study the structural elements of subsurface strata. |
| CO6 | Interpret various types of geological maps. |
| **Course Content** | **LIST OF EXPERIMENTS.**   1. Study of( physical) properties of minerals 2. Identification of minerals 3. Identification of Rocks 4. Study of Dipping beds and their thickness 5. Study of true dip, apparent dip and strike direction of beds 6. Three point problem or Borehole problem 7. Study of geological maps of    1. Horizontal beds    2. Dipping beds    3. Dipping beds with dyke    4. Folded beds    5. Faulted beds    6. Beds with unconformity    7. Completion of outcrop 8. Study of geological models 9. Aqua meter - Demonstration | |
| **Textbooks**  **and Reference books** | **TEXTBOOKS/LAB MANUALS/ REFERENCE BOOKS:**   1. A Laboratory manual of Engineering Geology by N.Chennakesavulu   Geological Maps. Gokale.   1. Fundamentals of Engineering Geology by F.H.Bell. 2. Principles of general & engineering Geology by K.M. Bangar. | |