**GANPAT UNIVERSITY**

**U.V PATEL COLLEGE OF ENGINEERING**

**COMPUTER ENGINEERING / INFORMATION TECHNOLOGY DEPARTMENT**

**Second Internal Exam Syllabus of 2CE/IT601: Theory of Computation**

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|  | * **Properties of Regular Language** * **Pumping Lemma for Regular Language** * **Formal Grammar & its Type** * **Formal Grammar to Language** * **Language to Grammar** * **Simplification of Formal Grammar** * **Normal form of Grammar** * **Conversion of Grammar to CNF** * **Push down automata** * **Construction of PDA** |  |
|  | * **Construction of NPDA** * **Properties of Context Free Language** * **Pumping Lemma for Context Free Language** * **Turing Machine & its Type and Variation** |  |
|  | * **Construction of Turing Machine** * **Recursive Language and Recursive Enumerable Language** |  |
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**Textbook to refer:**

1. Introduction To Languages and The Theory of Computation Third edition, , John C Martin

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| **Prof. Bhavin Joshi** | **Prof. Ritesh Upadhyay** | **Prof. Paresh Solanki** | **Prof. Rakesh Vanzara** |
| Assistant Professor, IT | Assistant Professor, C.E | Head of the Dept., C.E | Head of the Dept., IT |