Semester – V
Subject Name: Design and Analysis of Algorithm (01CT0512)
Academic Year: 2024-2025

Teaching Scheme:

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE	IA	CSE	Viva	Term Work (TW)	
3	0	2	4	50	30	20	25	25	150

Teaching methodology:

- There will be three theory sessions and one lab session in a week to conduct course. Theory session will be of one hour and lab will be of two hours.
- Students will be given PCs individually and each student has to understand the algorithm and the codes. Optimize it and implement it using their preferred language on respective IDEs.

Major Assessment Methods:

Close Book Exam
- Open Book Exam
- Competitive Programming based Assessments
- Gate and Govt exam based Assessments
- Quizzes
- Lab Experiment

Assessment scheme:

- **Internal Assessment (IA)**
  Total: 100 Marks (will be mapped to 30 Marks)
  2 Close Book Written Exams of 50 marks each will be taken

- **Continuous Semester Evaluation (CSE)**
  Total: 40 Marks (will be mapped to 20 Marks)
  30 Marks: 3-Quizzes (each of 10 marks) will be taken
  10 Marks: Long Hour Coding will be taken

- **Term work (TW)**
  Total: 25 Marks
  10 Marks: Assignment
  10 Marks: Gate and Government based questions
  05 Marks: Post-Lab Exercises

- **End Semester Exam (ESE)**
  Total: 100 Marks
  60 Marks: Open Book Written Exam
  40 Marks: Open Book Practical Exam

- **Viva**
  Total: 25 Marks
  End Sem viva will be taken. This will include coding over online platforms

Consolidate chart for assessment scheme:

Scheme	ESE	IA	CSE	Viva	Term work(TW)
Marks	50	30	20	25	25
Component	E	I		P	
Evaluation pattern	**60 Marks:** Open Book Written Exam **40 Marks:** Open Book Practical Exam	**100 Marks:** 1 Close Book Written Exams 1 Close Book Practical Exams	**30 Marks:** 3-Quizzes (each of 10 marks) will be taken **10 Marks:** 1-Long Hour Coding will be taken	**25 marks:** End Sem viva	**10 Marks:** Assignment **10 Marks:** Gate and Government based questions **05 Marks:** Post-Lab Exercises

Relative grading will be applicable for assessment of the course. Failure in the subject will lead to remedial exam of all assessment components.

Students would need to attend at least 75% of the sessions to pass this course.
*Note: Any Type of Copying/Plagiarism in any component would result in an 'F' Grade.

Prof. Nishith Kotak
Subject Coordinator

Prof. C D Parmar
Head of the department

Date: 28-06-2024