

TEXT BOOKS:

1. **Automotive mechanics**, William H Crouse & Donald L Anglin, 10th Edition Tata McGraw Hill Publishing Company Ltd., 2007
2. **Automotive Mechanics**, S. Srinivasan, 2nd Ed., Tata McGraw Hill 2003.

REFERENCE BOOKS:

1. **Automotive mechanics: Principles and Practices**, Joseph Heitner, D Van Nostrand Company, Inc
2. **Fundamentals of Automobile Engineering**, K.K.Ramalingam, Scitech Publications (India) Pvt. Ltd.
3. **Automobile Engineering**, R. B. Gupta, Satya Prakashan, 4th edn. 1984.
4. **Automobile engineering**, Kirpal Singh. Vol I and II 2002.

DATABASE MANAGEMETN SYSTEM

Subject Code	: 10ME845	IA Marks	: 25
Hours/Week	: 04	Exam Hours	: 03
Total Hours	: 52	Exam Marks	: 100

PART – A**UNIT - 1**

Database And Database Users: Introduction, characteristics of database approach, intended uses of a DBMS, advantages and implementation of database approach.

06 Hours

UNIT - 2

Database Systems Concepts And Architecture: Data models, schemes and instances, DBMS architecture and data independence, database languages and interfaces, database system environment, classification of database management systems.

06 Hours

UNIT - 3

Data Modeling: High level conceptual data models for database design. Entity types, entity sets, attributes and keys, Relationships, relationship types, roles and structural constraints. Weak entity types, ER diagram and design issue.

08 Hours

UNIT - 4

Record Storage And Primary File Organizations: Secondary storage devices, buffering of the blocks, placing file records on the disk, operations on files, heap files and sorted files, hashing techniques.

06 Hours

PART – B

UNIT - 5

Relational Data Model And Relational Algebra: Brief discussion on code rules, relational model concepts, constraints and schemas. Update operation on relations, basic and additional relational algebra operations, queries in relational algebra.

07 Hours

UNIT - 6

Structural Query Language (Sql): Data definition etc., in SQL2. Basic and complex queries in SQL, Inset, Delete; Update statements, and views in SQL, embedded SQL.

07 Hours

UNIT - 7

Database Design: Design guidelines for relational schemas, functional dependencies, normalization 1st, 2nd, 3rd, 4th and 5th; normal forms. Database design process, factors influencing physical database design guidelines, and guidelines for relational systems.

07 Hours

UNIT - 8

System Implementation: System catalogue for RDBMSs, transaction processing, and system concepts, properties of transaction, brief discussion on concurrency control and recovery techniques, database security and authorization.

05 Hours

TEXT BOOKS:

1. **Fundamentals of Database Systems**, Ramez Elmasri and Shanmkanth B. Navathe, 3rd Edition, Addison Pearson.
2. **Database Management System**, Raghu Ramakrishnan, Tata Mc Graw Hill, 3rd Edn. 2002.

REFERENCE BOOKS:

1. **Database Management and Design**, Gray W.hansen and James V. Hansen, 2nd Edn. Printice Hall India Pvt. Ltd., 2002.
2. **Database Management Systems**, Designing and Building business applications by Gerald V. Post, 3rd Edition, Tata Mc Graw Hill Publishing company Ltd.,- 2005
3. **Project Mangment with PERT and CPM**, Moder Joseph J and Phillips cerel, R., VAN Noserand, Reinhold, 2nd Edn., 1976.

ARTIFICIAL INTELLIGENCE

Subject Code	: 10ME846	IA Marks	: 25
Hours/Week	: 04	Exam Hours	: 03
Total Hours	: 52	Exam Marks	: 100

PART – A**UNIT - 1**

Artificial Intelligence: Introduction, definition, underlying assumption, importance of AI & AI related fields.

06 Hours

UNIT - 2

Space Representation: Defining a problem. Production systems and its characteristics, Search and Control strategies – Generate and Test, Hill Climbing, Best – first Search, Problem reduction, Constraint Satisfaction, Means – Ends Analysis.

07 Hours

UNIT - 3

Knowledge Representation Issues: Representations and Mappings, Types of knowledge – Procedural Vs Declarative, Logic programming. Forward Vs Backward reasoning, Matching.

07 Hours