

## MECHANICAL ENGINEERING DEPARTMENT

I YEAR – I SEMESTER

### Audit Course: CONSTITUTION OF INDIA

Course Code: 23MD118

L	T	P	C
2	0	0	0

**Course Objectives:** Students will be able to:

1. Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.
2. To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional role and entitlement to civil and economic rights as well as the emergence of nationhood in the early years of Indian nationalism.
3. To address the role of socialism in India after the commencement of the Bolshevik Revolution in 1917 and its impact on the initial drafting of the Indian Constitution.

**Course Outcomes:** Students will be able to:

1. Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
2. Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
3. Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.
4. Discuss the passage of the Hindu Code Bill of 1956.

**Unit-1: History of Making of the Indian Constitution:** History Drafting Committee, (Composition & Working)

**Unit-2: Philosophy of the Indian Constitution:** Preamble Salient Features

**Unit-3: Contours of Constitutional Rights & Duties:** Fundamental Rights, Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion, Cultural and Educational Rights, Right to Constitutional Remedies, Directive Principles of State Policy, Fundamental Duties.

**Unit-4: Organs of Governance:** Parliament, Composition, Qualifications and Disqualifications, Powers and Functions, Executive, President, Governor, Council of Ministers, Judiciary, Appointment and Transfer of Judges, Qualifications, Powers and Functions.

**Unit-5: Local Administration:** District's Administration head: Role and Importance, Municipalities: Introduction, Mayor and role of Elected Representative, CEO of Municipal Corporation. Pachayati raj: Introduction, PRI: Zila Pachayat. Elected officials and their roles, CEO Zila Pachayat: Position and role. Block level: Organizational Hierarchy (Different departments), Village level: Role of Elected and Appointed officials, Importance of grass root democracy

**Unit-6: Election Commission:** Election Commission: Role and Functioning. Chief Election Commissioner and Election Commissioners. State Election Commission: Role and Functioning. Institute and Bodies for the welfare of SC/ST/OBC and women.

**Text Books:**

1. The Constitution of India, 1950 (Bare Act), Government Publication.
2. Dr. S. N. Busi, Dr. B. R. Ambedkar framing of Indian Constitution, 1st Edition, 2015.
3. M. P. Jain, Indian Constitution Law, 7th Edn., Lexis Nexis, 2014.
4. D.D. Basu, Introduction to the Constitution of India, Lexis Nexis, 2015.

## MECHANICAL ENGINEERING DEPARTMENT

I YEAR – II SEMESTER

### Audit Course: ENGLISH FOR RESEARCH PAPER WRITING

Course Code: 23MD128

L	T	P	C
2	0	0	0

**Course objectives:** Students will be able to:

1. Understand that how to improve your writing skills and level of readability
2. Learn about what to write in each section
3. Understand the skills needed when writing a Title Ensure the good quality of paper at very first-time submission

**Unit-1:** Planning and Preparation, Word Order, Breaking up long sentences, Structuring Paragraphs and Sentences, Being Concise and Removing Redundancy, Avoiding Ambiguity and Vagueness

**Unit-2:** Clarifying Who Did What, Highlighting Your Findings, Hedging and Criticising, Paraphrasing and Plagiarism, Sections of a Paper, Abstracts. Introduction

**Unit-3:** Review of the Literature, Methods, Results, Discussion, Conclusions, The Final Check.

**Unit-4:** Key skills are needed when writing a Title, key skills are needed when writing an Abstract, key skills are needed when writing an Introduction, skills needed when writing a Review of the Literature

**Unit-5:** Skills are needed when writing the Methods, skills needed when writing the Results, skills are needed when writing the Discussion, skills are needed when writing the Conclusions

**Unit-6:** Useful phrases, how to ensure paper is as good as it could possibly be the first- time submission

**Suggested Studies:**

1. Goldbort R (2006) Writing for Science, Yale University Press (available on Google Books)
2. Day R (2006) How to Write and Publish a Scientific Paper, Cambridge University Press
3. Highman N (1998), Handbook of Writing for the Mathematical Sciences, SIAM. Highman's book .
4. Adrian Wallwork , English for Writing Research Papers, Springer New York Dordrecht Heidelberg London, 2011

## MECHANICAL ENGINEERING DEPARTMENT

II YEAR – I SEMESTER

### DISSERTATION PHASE-I

Course Code: 23MD213

L	T	P	C
0	0	20	10

**Course Outcomes:** At the end of this course, students will be able to

- Ability to synthesize knowledge and skills previously gained and applied to an in-depth study and execution of new technical problem.
- Capable to select from different methodologies, methods and forms of analysis to produce a suitable research design, and justify their design.
- Ability to present the findings of their technical solution in a written report.
- Presenting the work in International/ National conference or reputed journals

**Syllabus Contents:** The dissertation / project topic should be selected / chosen to ensure the satisfaction of the urgent need to establish a direct link between education, national development and productivity and thus reduce the gap between the world of work and the world of study.

The dissertation should have the following

- *Relevance to social needs of society*
- *Relevance to value addition to existing facilities in the institute*
- *Relevance to industry need*
- *Problems of national importance*
- *Research and development in various domain*

The student should complete the following:

- *Literature survey Problem Definition*
- *Motivation for study and Objectives*
- *Preliminary design / feasibility / modular approaches*
- *Implementation and Verification*
- *Report and presentation*

**MECHANICAL ENGINEERING DEPARTMENT**

*II YEAR – II SEMESTER*

**DISSERTATION PHASE-II**

**Course Code: 23MD221**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>

The dissertation stage II is based on a report prepared by the students on dissertation allotted to them.

It may be based on:

- *Experimental verification / Proof of concept.*
- *Design, fabrication, testing of Communication System.*
- *The viva-voce examination will be based on the above report and work.*