



# VISWAJYOTHI

## COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

TM

Vazhakulam P.O., Muvattupuzha  
Ernakulam Dist., Kerala - 686 670  
Tel: 0485 2262211 / 44  
Email: [vcet@vcet.org](mailto:vcet@vcet.org)  
[www.vcet.org](http://www.vcet.org)

### **Criteria 7.1.9-Sensitization of students and employees of the institution to the constitutional obligations (Activity Details).**

<b>Sl.No</b>	<b>Contents</b>	<b>Page No.</b>
<b>1.</b>	<b>Academic Year: 2022-2023</b>	<b>2</b>
<b>2.</b>	<b>Second Year Subject common to all branches</b>	<b>7</b>
<b>3.</b>	<b>First Year Subject common to all branches</b>	<b>13</b>



### Academic Year: 2022-2023

#### 1. Blood Donation Camp

As part of 'RED WINGS' an initiative of Nation Service Scheme unit of college, blood donation camp was conducted by VJCET on 16/06/2023 and 04/07/2023 in association with IMA Thodupuzha. An overwhelming response was obtained from the students, faculties and other people in the nearby locality and 145 donations were done.



Figure 1: Blood Donation Camp



Figure 2: Blood Donation Camp



# VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

TM

Vazhakulam P.O., Muvattupuzha  
Ernakulam Dist., Kerala - 686 670  
Tel: 0485 2262211 / 44  
Email: [vcjet@vcjet.org](mailto:vcjet@vcjet.org)  
[www.vcjet.org](http://www.vcjet.org)

## 2. Environment Day

In association with the department of Hotel Management and Catering Technology, VJCET celebrated World Environment Day on 05-06-2023 by planting tree saplings in the campus. It was inaugurated by principal, Dr. K. K. Rajan.

**Department of HOTEL MANAGEMENT & CATERING TECHNOLOGY (BHMCT)**

**WORLD ENVIRONMENT DAY 2023**

GPS Map Camera

**Vazhakulam, Kerala, India**  
Tinos Software and Security Solutions LLP Viswajyothi College of Engineering and Technology Vazhakulam P.O, Muvattupuzha, WJXJ+V78, Vazhakulam, Kerala 686670, India  
Lat 9.949407°  
Long 76.630903°  
05/06/23 11:40 AM GMT +05:30

Google

**VISWAJYOTHI**  
COLLEGE OF ENGINEERING & TECHNOLOGY  
Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam P.O., Muvattupuzha  
Ernakulam Dist., Kerala - 686 670  
Tel: 0485 2262211 / 44  
Email: [vcjet@vcjet.org](mailto:vcjet@vcjet.org)  
[www.vcjet.org](http://www.vcjet.org)

A-Grade

Figure 3: Environment Day



### 3. Orphanage Visit

On 15<sup>th</sup> June 2023, in association with National Service Scheme, Mary Rani Balika Bhavan was visited and on 17<sup>th</sup> June 2023 Mother Care Home for Specially Abled was visited by selected students and staff of VJCET. School kit distribution was done.



Figure 4:Orphanage Visit



Figure 5:Orphanage Visit



#### 4. Anti-Drugs Day orientation

An awareness programme was conducted in the college on 26/06/2023, to inculcate the importance of International Anti-Drug Day. The resource person of the programme was Mrs. Maya Bastin, Consultant Psychologist, Govt. Taluk Homeo Hospital, Muvattupuzha.



Figure 6: Anti Drug Day Orientation

#### 5. Independence Day Celebration

Viswajyothi College of Engineering and Technology celebrated 75th independence day on 15th august 2022. Rev. Fr. Paul Nedumpurath (director, VJCET) hoisted the flag and shared their spirit of patriotism. The event concluded with the National Anthem.



Figure 7: Independence Day Celebration



# VISWAJYOTHI

## COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

TM

Vazhakulam P.O., Muvattupuzha  
Ernakulam Dist., Kerala - 686 670

Tel: 0485 2262211 / 44

Email: [vjcet@vjcet.org](mailto:vjcet@vjcet.org)

[www.vjcet.org](http://www.vjcet.org)

### 6. Republic Day Celebration

The 74th republic Day of our country was celebrated by VJCET on 26th January at 8 am. The Indian National flag was hoisted by Dr KK Rajan, Principal, Viswajyothi College of Engineering and Technology. He addressed the gathering also.



Figure 8: Republic Day Celebration



### Second year subject common to all branches

CODE	COURSE NAME	CATEGORY	L	T	P	CREDIT
MCN202	CONSTITUTION OF INDIA		2	0	0	NIL

#### Preamble:

The study of their own country constitution and studying the importance environment as well as understanding their own human rights help the students to concentrate on their day to day discipline. It also gives the knowledge and strength to face the society and people.

**Prerequisite:** Nil

**Course Outcomes:** After the completion of the course the student will be able to

CO 1	Explain the background of the present constitution of India and features.
CO 2	Utilize the fundamental rights and duties.
CO 3	Understand the working of the union executive, parliament and judiciary.
CO 4	Understand the working of the state executive, legislature and judiciary.
CO 5	Utilize the special provisions and statutory institutions.
CO 6	Show national and patriotic spirit as responsible citizens of the country

#### Mapping of course outcomes with program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1						2	2	2		2		
CO 2						3	3	3		3		
CO 3						3	2	3		3		
CO 4						3	2	3		3		
CO 5						3	2	3		3		
CO 6						3	3	3		2		

#### Assessment Pattern

Bloom's Category	Continuous Assessment Tests		End Semester Examination
	1	2	
Remember	20	20	40
Understand	20	20	40
Apply	10	10	20
Analyse			



Evaluate			
Create			

### Mark distribution

Total Marks	CIE	ESE	ESE Duration
150	50	100	3 hours

### Continuous Internal Evaluation Pattern:

Attendance	: 10 marks
Continuous Assessment Test (2 numbers)	: 25 marks
Assignment/Quiz/Course project	: 15 marks

**End Semester Examination Pattern:** There will be two parts; Part A and Part B. Part A contain 10 questions with 2 questions from each module, having 3 marks for each question. Students should answer all questions. Part B contains 2 questions from each module of which student should answer any one. Each question can have maximum 2 sub-divisions and carry 14 marks.

### Course Level Assessment Questions

#### Course Outcome 1 (CO1):

- 1 Discuss the historical background of the Indian constitution.
- 2 Explain the salient features of the Indian constitution.
- 3 Discuss the importance of preamble in the implementation of constitution.

#### Course Outcome 2 (CO2)

- 1 What are fundamental rights ? Examine each of them.
- 2 Examine the scope of freedom of speech and expression underlying the constitution.
- 3 The thumb impression of an accused is taken by the police against his will. He contends that this is a violation of his rights under Art 20(3) of the constitution. Decide.

#### Course Outcome 3(CO3):

- 1 Explain the powers of the President to suspend the fundamental rights during emergency.





2 Explain the salient features of appeal by special leave.

3. List the constitutional powers of President.

#### Course Outcome 4 (CO4):

1 Discuss the constitutional powers of Governor.

2 Examine the writ jurisdiction of High court.

3 Discuss the qualification and disqualification of membership of state legislature.

#### Course Outcome 5 (CO5):

1 Discuss the duties and powers of comptroller of auditor general.

2 Discuss the proclamation of emergency.

3 A state levies tax on motor vehicles used in the state, for the purpose of maintaining roads in the state. X challenges the levy of the tax on the ground that it violates the freedom of interstate commerce guaranteed under Art 301. Decide.

#### Course Outcome 6 (CO6):

1 Explain the advantages of citizenship.

2 List the important principles contained in the directive principles of state policy.

3 Discuss the various aspects contained in the preamble of the constitution

### Model Question paper

#### PART A

(Answer all questions. Each question carries 3 marks)

1 Define and explain the term constitution.

2 Explain the need and importance of Preamble.

3 What is directive principle of state policy?

4 Define the State.

5 List the functions of Attorney general of India.



- 6 Explain the review power of Supreme court.
- 7 List the qualifications of Governor.
- 8 Explain the term and removal of Judges in High court.
- 9 Explain the powers of public service commission.
- 10 List three types of emergency under Indian constitution.

(10X3=30marks)

### PART B

(Answer on question from each module. Each question carries 14 marks)

#### Module 1

- 11 Discuss the various methods of acquiring Indian citizenship.
- 12 Examine the salient features of the Indian constitution.

#### Module 2

- 13 A high court passes a judgement against X. X desires to file a writ petition in the supreme court under Art32, on the ground that the judgement violates his fundamental rights. Advise him whether he can do so.
- 14 What is meant by directive principles of State policy? List the directives.

#### Module3

- 15 Describe the procedure of election and removal of the President of India.
- 16 Supreme court may in its discretion grant special leave to appeal. Examine the situation.

#### Module 4

- 17 Discuss the powers of Governor.
- 18 X filed a writ petition under Art 226 which was dismissed. Subsequently, he filed a writ petition under Art 32 of the constitution, seeking the same remedy. The Government argued that the writ petition should be dismissed, on the ground of res judicata. Decide.

#### Module 5



19 Examine the scope of the financial relations between the union and the states.

20 Discuss the effects of proclamation of emergency.

(14X5=70marks)

### Syllabus

**Module 1** Definition, historical back ground, features, preamble, territory, citizenship.

**Module 2** State, fundamental rights, directive principles, duties.

**Module 3** The machinery of the union government.

**Module 4** Government machinery in the states

**Module 5** The federal system, Statutory Institutions, miscellaneous provisions.

### Text Books

1 D D Basu, Introduction to the constitution of India, Lexis Nexis, New Delhi, 24e, 2019

2 PM Bhakshi, The constitution of India, Universal Law, 14e, 2017

### Reference Books

1 Ministry of law and justice, The constitution of India, Govt of India, New Delhi, 2019.

2 JN Pandey, The constitutional law of India, Central Law agency, Allahabad, 51e, 2019

3 MV Pylee, India's Constitution, S Chand and company, New Delhi, 16e, 2016

### Course Contents and Lecture Schedule

No	Topic	No. of Lectures
1	<b>Module 1</b>	
1.1	Definition of constitution, historical back ground, salient features of the constitution.	1
1.2	Preamble of the constitution, union and its territory.	1
1.3	Meaning of citizenship, types, termination of citizenship.	2
2	<b>Module 2</b>	
2.1	Definition of state, fundamental rights, general nature, classification, right to equality, right to freedom, right against exploitation	2



# VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

TM

Vazhakulam P.O., Muvattupuzha  
Ernakulam Dist., Kerala - 686 670  
Tel: 0485 2262211 / 44  
Email: vjcet@vjcet.org  
www.vjcet.org

2.2	Right to freedom of religion, cultural and educational rights, right to constitutional remedies. Protection in respect of conviction for offences.	2
2.3	Directive principles of state policy, classification of directives, fundamental duties.	2
3	<b>Module 3</b>	
3.1	The Union executive, the President, the vice President, the council of ministers, the Prime minister, Attorney-General, functions.	2
3.2	The parliament, composition, Rajya sabha, Lok sabha, qualification and disqualification of membership, functions of parliament.	2
3.3	Union judiciary, the supreme court, jurisdiction, appeal by special leave.	1
4	<b>Module 4</b>	
4.1	The State executive, the Governor, the council of ministers, the Chief minister, advocate general, union Territories.	2
4.2	The State Legislature, composition, qualification and disqualification of membership, functions.	2
4.3	The state judiciary, the high court, jurisdiction, writs jurisdiction.	1
5	<b>Module 5</b>	
5.1	Relations between the Union and the States, legislative relation, administrative relation, financial Relations, Inter State council, finance commission.	1
5.2	Emergency provision, freedom of trade commerce and inter course, comptroller and auditor general of India, public Services, public service commission, administrative Tribunals.	2
5.3	Official language, elections, special provisions relating to certain classes, amendment of the Constitution.	2



### First year subject common to all branches

Course No.	Course Name	L-T-P-Credits	Year of Introduction
BE103	INTRODUCTION TO SUSTAINABLE ENGINEERING	2-0-1-3	2016

#### Course Objectives

- To have an increased awareness among students on issues in areas of sustainability
- To understand the role of engineering and technology within sustainable development;
- To know the methods, tools, and incentives for sustainable product-service system development
- To establish a clear understanding of the role and impact of various aspects of engineering and engineering decisions on environmental, societal, and economic problems.

#### Syllabus

Sustainability- need and concept, challenges, Environment acts and protocols, Global, Regional and Local environmental issues, Natural resources and their pollution, Carbon credits, Zero waste concept ISO 14000, Life Cycle Analysis, Environmental Impact Assessment studies, Sustainable habitat, Green buildings, green materials, Energy, Conventional and renewable sources, Technology and sustainable development, Sustainable urbanization, Industrial Ecology.

#### Expected outcome

The student will be

- Able to understand the different types of environmental pollution problems and their sustainable solutions
- Able to work in the area of sustainability for research and education
- Having a broader perspective in thinking for sustainable practices by utilizing the engineering knowledge and principles gained from this course

#### Reference Books:

- Allen, D. T. and Shonnard, D. R., Sustainability Engineering: Concepts, Design and Case Studies, Prentice Hall.
- Bradley, A.S; Adebayo, A.O., Maria, P. Engineering applications in sustainable design and development, Cengage learning
- Environment Impact Assessment Guidelines, Notification of Government of India, 2006
- Mackenthun, K.M., Basic Concepts in Environmental Management, Lewis Publication, London, 1998
- ECBC Code 2007, Bureau of Energy Efficiency, New Delhi Bureau of Energy Efficiency Publications-Rating System, TERI Publications - GRIHA Rating System
- Ni bin Chang, Systems Analysis for Sustainable Engineering: Theory and Applications, McGraw-Hill Professional.
- Twidell, J. W. and Weir, A. D., Renewable Energy Resources, English Language Book Society (ELBS).



<ul style="list-style-type: none"> <li>Purohit, S. S., Green Technology - An approach for sustainable environment, Agrobios publication</li> </ul>			
<b>Course Plan</b>			
Module	Contents	Hours	Sem. Exam Marks
<b>I</b>	Sustainability - Introduction, Need and concept of sustainability, Social-environmental and economic sustainability concepts. Sustainable development, Nexus between Technology and Sustainable development, Challenges for Sustainable Development. Multilateral environmental agreements and Protocols - Clean Development Mechanism (CDM), Environmental legislations in India - Water Act, Air Act.	L4	15%
	Students may be assigned to do at least one project eg: a) Identifying/assessment of sustainability in your neighbourhood in education, housing, water resources, energy resources, food supplies, land use, environmental protection etc. b) Identify the threats for sustainability in any selected area and explore solutions for the same	P1	
<b>II</b>	Air Pollution, Effects of Air Pollution; Water pollution- sources, Sustainable wastewater treatment, Solid waste - sources, impacts of solid waste, Zero waste concept, 3 R concept. Global environmental issues- Resource degradation, Climate change, Global warming, Ozone layer depletion, Regional and Local Environmental Issues. Carbon credits and carbon trading, carbon foot print.	L6	15%
	Students may be assigned to do at least one project for eg: a) Assessing the pollution status of a small area b) Programmes for enhancing public environmental awareness c) Observe a pond nearby and think about the different measures that can be adopted for its conservation	P3	
<b>FIRST INTERNAL EXAM</b>			
<b>III</b>	Environmental management standards, ISO 14000 series, Life Cycle Analysis (LCA) - Scope and Goal, Bio-mimicking, Environment Impact Assessment (EIA) - Procedures of EIA in India.	L4	15%
	Students may be assigned to do at least one project eg: a) Conducting LCA of products (eg. Aluminium cans, PVC bottles, cars etc. or activities (Comparison of land filling and open burning) b) Conducting an EIA study of a small project (eg. Construction of a building)	P2	



<b>IV</b>	Basic concepts of sustainable habitat, Green buildings, green materials for building construction, material selection for sustainable design, green building certification, Methods for increasing energy efficiency of buildings. Sustainable cities, Sustainable transport.	L5	15%
	Students may be assigned to do at least one project eg: a) Consider the design aspects of a sustainable building for your campus b) Explore the different methods that can be adopted for maintaining a sustainable transport system in your city.	P2	
<b>SECOND INTERNAL EXAM</b>			
<b>V</b>	Energy sources: Basic concepts-Conventional and non-conventional, solar energy, Fuel cells, Wind energy, Small hydro plants, bio-fuels, Energy derived from oceans, Geothermal energy.	L5	20%
	Students may be assigned to do at least one project eg: a) Find out the energy savings that can be achieved by the installation of a solar water heater b) Conduct a feasibility study for the installation of wind mills in Kerala	P2	
<b>VI</b>	Green Engineering, Sustainable Urbanisation, industrialisation and poverty reduction; Social and technological change, Industrial Processes: Material selection, Pollution Prevention, Industrial Ecology, Industrial symbiosis.	L5	20%
	Students may be assigned to do a group project eg: a) Collect details for instances of climate change in your locality b) Find out the carbon credits you can gain by using a sustainable transport system (travelling in a cycle or car pooling from college to home) c) Have a debate on the topics like: Industrial Ecology is a Boon or Bane for Industries?/Are we scaring the people on Climate Change unnecessarily?/Technology enables Development sustainable or the root cause of unsustainability?	P3	
<b>END SEMESTER EXAM</b>			