



# Guru Nanak Dev Engineering College

Mailoor Road, Bidar, KA – 585403

Approved by AICTE New Delhi and Affiliated to VTU Belagavi

## Criterion 1: Curricular Aspects

### Key Indicators 1.3: Curriculum Enrichment

**1.3.1: Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum**

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# ***GURU NANAK DEV ENGINEERING COLLEGE, BIDAR***

*(Affiliated to Visveswaraiah Technological University, Belagavi)*

**DEPARTMENT OF ALLIED SCIENCE & HUMANITY**

***Academic Year: 2021-22***

***Semester: ODD***



# ***COURSE FILE***

## ***(PLANNING)***

## ***ENVIRONMENTAL STUDIES***

***Course: BE***

***B.E. in CSE***

***Semester: V***

***Section: CS (A), CS (B)***

***Sub Code: 18CIV59***

***Name of the Subject Teacher: Dr. SHILPA KODGE***



# Guru Nanak Dev Engineering College, Bidar

## Course File ENVIRONMENTAL STUDIES (18 CIV 59)

Hours: 15

### CONTENTS

#### Course Objectives: To

1. Raise consciousness about environmental conditions.
2. Recognize major concepts in environmental science and demonstrate in depth understanding of the environment.
3. Create an environmental ethic.

#### Pre-requisites:

Students must have exposure to conceptual spheres of environment, layers of atmosphere & pollution.

#### Linkages with other Courses:

1. Civil Engineering
2. Mechanical Engineering
3. Electrical Engineering
4. Electronics & communication

#### Course Policies and Procedures:

(Expectations from students, Rules for Student Assignments, Assignment Grading System, CIE and Semester End Examinations.)

#### Expectations from student:

1. Students should have the knowledge of pre-requisite.
2. Students should complete all assignments in a time bound manner.
3. Students should attend the classes regularly.

**Rules for assignments:** At the end of every module, assignments in the form of question answers will be given and students have submit the same before last date

#### Assignment Grading System

Each assignment will be evaluated for 10 marks and final score for assignment will be the average marks scored in all the assignments. ( Similarly other assignments like seminar, model making has to be evaluated using suitable rubrics)

CIE and Semester End Examinations: As per the VTU regulations.

#### Evaluation Policy ( It is only indicative, may vary from course to course):

Level of Question	Approximate % of Question
Understanding	50
Apply	50
Analyze / Solve	-
Design	-

### Lesson Plan

Module wise distribution of Classes	Topics	Class Number	Teaching Methodology
	Overview of course, Course Outcome its linkages with other courses and practical applications, expectations from students, Evaluation Policy etc.	1	Interactive Discussion
3	<b>MODULE 1. Ecosystems &amp; Biodiversity</b>		
	Structure and components Function of ecosystem ,Forest,Desert,wetlands,Reverine,Oceanic and Lake	2	Audio-visual
	Biodiversity: Types,Value: Hot-spots: Threats and conservation of biodiversity,	3	Lecture
	Forest wealth, and Deforestation. Objective questions on module 1.	4	Interactive Discussion
2	<b>Module 2: Advances in Energy Systems Natural Resources Management.</b>		
	Advances in Energy Systems ( Merits, Demerits,Global Status and applications): Hydrogen, Solar,OTEC, Tidal and wind	5	Lecture
	Disaster management, sustainable Mining, cloud seeding, and carbon Trading Objective questions on module 2	6	Interactive Discussion
3	<b>MODULE 3 Environmental Pollution &amp; Waste management&amp; public health Aspects</b>		
	Sources, Impacts, Corrective and preventive measures of Environmental pollution Relevant Environmental Acts, Surface and ground water Pollution.	7	Lecture
	Noise pollution; Soil pollution and air pollution Biomedical wastes	8	Audio-visual
	Solid waste Hazardous wastes; E-wastes; industrial and Municipal Sludge Objective questions on module 3	9	Interactive Discussion
2	<b>MODULE4-Global Environmental Concerns</b>		
	Concepts, policies case studies of Global Environmental Concerns Ground water depletion/ recharging climate change; Acid rain;	10	Lecture



	Ozone Depletion; Radon and fluoride problem in drinking water; Resettlement and rehabilitation of people , Environmental Toxicology Objective questions on module 4	11	Interactive Discussion
2	<b>MODULE 5 latest Developments in Environmental pollution Mitigation Tools( concepts and Applications)</b>		
	G.I.S & Remote Sensing , Environment Impact Assessment, Environmental Management systems, ISO14001; Environmental Stewardship-NGOs. Field work Objective questions on module 5	12	Lecture
		13	Interactive Discussion

#### Course Teaching Materials:

Teaching materials such as Notes, PPT, Videos, etc. to be attached

Module No.	Course Teaching Materials
1,2,3,4 & 5	Notes
	PPT
	Videos

### **Text Books:**

- 1) Environmental Studies Benny Joseph Tata Mc Graw – Hill. 2<sup>nd</sup> Edition, 2012  
Mangalore 3<sup>rd</sup> Edition' 2018
2. Environmental Studies S M Prakash Pristine Publishing House, 3<sup>rd</sup> Edition' 2018
1. Environmental Studies – From Crisis to Cure R Rajagopalan Oxford Publisher 2005

### **Reference Books:**

- 1 . Principals of Environmental Science and Engineering Raman Sivakumar Cengage learning, Singapur 2<sup>nd</sup> Edition, 2005
2. Environmental Science – working with the Earth G.Tyler Miller Jr. Thomson Brooks /Cole 11<sup>th</sup> Edition, 2006
3. Text Book of Environmental and Ecology Pratiba Sing, AnoopSingh & PiyushMalaviya Acme Learning Pvt. Ltd. New Delhi. 1<sup>st</sup> Edition

### **Journals:**

1. Journal of Integrate Environmental Sciences, Volume 2, Issue 1, 2007 Taylor & Francis Online

### **Web Resources:**

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**Blogs: ----**

**NPTEL/MOOCs:**

**Software: ---**

**Research Organizations / Industries in the field: -----**

### Course Outcomes:

**CO1: Explain structure & function of various ecosystems and types, value, Sustainable development & EIA**

**CO2 Compare various energy sources and explain concept of natural resources & Water Resources**

**CO3: Summarize environmental pollution & Land, waste Water management issues.**

**CO4:. Outline the concept, policies of Global environmental concerns such as Air Pollution, ozone depletion, Acid Rain and E-Waste & Biomedical waste management**

**CO5: Explain concept and application of latest development in environmental pollution mitigation tools such as GIS, Remote Sensing , & Role of NGO's in Environmental Education**

### CO-PO Matrix:

Environmental Studies 18CIV59	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3					1	1					1		
CO2	3					1	1					1		
CO3	3					1	1					1		
CO4	3					1	1					1		
C05	3					1	1					1		



# **GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

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### **VISION OF THE INSTITUTE**

To be a premier technological institution that fosters humanity, ethics and excellence in education and research towards inspiring and developing future torch bearers/leaders.

### **MISSION OF THE INSTITUTE**

<b>M1</b>	To impart quality educational experience and technical skills to students that enables them to become leaders in their chosen professions.
<b>M2</b>	To nurture scientific temperament and promote research and development activities among faculty and students.
<b>M3</b>	To inculcate students with an ethical and human approach, so as to have big picture of societal development in their future career.
<b>M4</b>	To provide service to industries and communities through educational, technical, and professional activities.



## **GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

### **Department of Computer Science and Engineering**

#### **VISION**

To be a destination of choice for the aspiring students in the field of Computer Science and Engineering known for its quality teaching and learning process, research and contribution to the society.

#### **MISSION**

The mission of Department of Computer Science and Engineering, Guru Nanak Dev Engineering College, Bidar are to:

- M1:** Provide state-of-art education in the field of Computer Science and Engineering.
- M2:** Promote research culture and life-long learning attitude to meet the challenges of rapid technological change in their chosen professional field.
- M3:** Inculcate professionalism, ethical attitude and humanitarian approach amongst students towards a responsible citizen.
- M4:** Encourage students to address societal problems through IT solutions.

#### **PROGRAM EDUCATIONAL OBJECTIVES**

The undergraduate curriculum of Computer Science & Engineering at Guru Nanak Dev Engineering College strives to produce graduates that:

- PEO 1:** Provide fundamental knowledge of Computer Science & Engineering for an IT professional and equipped with proficiency of mathematical foundations, computer fundamentals and algorithmic principles and inculcate competent problem-solving ability.
- PEO 2:** Provide skills needed to analyze, design, test and implement various hardware and software systems.
- PEO 3:** Inculcate professional-social ethics, teamwork in students and acquaint them with requisite technical and managerial skills for a successful career.

#### **PROGRAM SPECIFIC OUTCOMES**

- PSO 1:** Develop a suitable computing environment using fundamental knowledge of computer architecture, organization, embedded systems and networking.
- PSO 2:** Develop Software Systems using good software engineering and database design principles.



## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

### PROGRAM OUTCOMES(POs)

#### **Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning Informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**B.E. IN CIVIL ENGINEERING(CV-2018-19)**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**  
**SEMESTER – V**

**ENVIRONMENTAL STUDIES**

Course Code	<b>18CIV59</b>	CIE Marks	40
Teaching Hours / Week (L:T:P)	(1:0:0)	SEE Marks	60
Credits	01	Exam Hours	02

**Module - 1**

**Ecosystems** (Structure and Function): Forest, Desert, Wetlands, Riverine, Oceanic and Lake.  
**Biodiversity:** Types, Value; Hot-spots; Threats and Conservation of biodiversity, Forest Wealth, and Deforestation.

**Module - 2**

**Advances in Energy Systems** (Merits, Demerits, Global Status and Applications): Hydrogen, Solar, OTEC, Tidal and Wind.  
**Natural Resource Management** (Concept and case-studies): Disaster Management, Sustainable Mining, Cloud Seeding, and Carbon Trading.

**Module - 3**

**Environmental Pollution** (Sources, Impacts, Corrective and Preventive measures, Relevant Environmental Acts, Case-studies): Surface and Ground Water Pollution; Noise pollution; Soil Pollution and Air Pollution. **Waste Management & Public Health Aspects:** Bio-medical Wastes; Solid waste; Hazardous wastes; E-wastes; Industrial and Municipal Sludge.

**Module - 4**

**Global Environmental Concerns** (Concept, policies and case-studies): Ground water depletion/recharging, Climate Change; Acid Rain; Ozone Depletion; Radon and Fluoride problem in drinking water; Resettlement and rehabilitation of people, Environmental Toxicology.

**Module - 5**

**Latest Developments in Environmental Pollution Mitigation Tools (Concept and Applications):** G.I.S. & Remote Sensing, Environment Impact Assessment, Environmental Management Systems, ISO14001; Environmental Stewardship- NGOs.

**Field work:** Visit to an Environmental Engineering Laboratory or Green Building or Water Treatment Plant or Waste water treatment Plant; ought to be Followed by understanding of process and its brief documentation.

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

- CO1: Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale,
- CO2: Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment.
- CO3: Demonstrate ecology knowledge of a complex relationship between biotic and a biotic components.
- CO4: Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues.

**Question paper pattern:**

- The Question paper will have 100 objective questions.
- Each question will be for 01 marks
- Student will have to answer all the questions in an OMR Sheet.
- The Duration of Exam will be 2 hours.

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher	Edition and Year
<b>Textbook/s</b>				
1	Environmental Studies	Benny Joseph	Tata Mc Graw – Hill.	2 <sup>nd</sup> Edition, 2012



2.	Environmental Studies	S M Prakash	Pristine Publishing House, Mangalore	3 <sup>rd</sup> Edition' 2018
3	Environmental Studies – From Crisis to Cure	R Rajagopalan	Oxford Publisher	2005
<b>Reference Books</b>				
1	Principals of Environmental Science and Engineering	Raman Sivakumar	Cengage learning, Singapur.	2 <sup>nd</sup> Edition, 2005
2	Environmental Science – working with the Earth	G.Tyler Miller Jr.	Thomson Brooks /Cole,	11 <sup>th</sup> Edition, 2006
3	Text Book of Environmental and Ecology	Pratiba Sing, AnoopSingh& PiyushMalaviya	Acme Learning Pvt. Ltd. New Delhi.	1 <sup>st</sup> Edition

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*(Affiliated to Visveswararaja Technological University, Belagavi)*

**DEPARTMENT OF ALLIED SCIENCE & HUMANITY**

**Academic Year: 2021-22**

**Semester: ODD**



## ***COURSE FILE***

***(EXECUTION)***

## ***ENVIRONMENTAL STUDIES***

**Course: BE**

**Semester: V**

**B.E. in CSE**

**Section: CS (A), CS (B)**

**Sub Code: 18CIV59**

**Name of the Subject Teacher: Dr. SHILPA KODGE**



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 15	Department of Computer Science and Engineering	Academic Year:2021-22
Rev : 00	Class Time table	Semester: V
Date: 1/02/2016		Section: A
Name of the Teacher: Shilpa Kodge		Subject: Environmental Studies
Name of the Reviewer: Dr.Raghunandan Kumar	Room No.106	W.E.F: 01-10-2021

Time/ Days	9:00AM- 10:100AM	10: 00AM- 11: 00AM	11: 00AM- 12: 00PM	12: 00PM- 1: 00PM				
Period	1	2	3	4	L	5	6	7
Monday	DBMS(T) AM/SMC	PAP MB	USP RK	ATC GP	U	CNS	DBMS	ME(T)
Tuesday	CN/DBMS LAB/ SL A1/A2/A3			USP	N	AS	AM	VSP/GP
Wednesday	DBMS(T) AM/SMC	ATC GP	ME(T) VSP/GP	CNS(T) AS/DJ	C	ES	PAP	CLUB ACTIVITY
Thursday	CNS AS	PAP MB	USP RK	ATC GP	H	SK	MB	
Friday	CNS(T) AS/DJ	ATC GB	DBMS AM	ME VSP	B	CN/DBMS LAB/ SL A2/A3/A1		
Saturday	USP RK	PAP MB	ME VSP	ATC GP	R	CN/DBMS LAB/ SL A3/A1/A2		
					E	DBMS	CNS	PAP
					A	AM	AS	MB
					K			


Time-table Co-Ordinator

Shilpa Kodge  
10.10.21

# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 16	<b>Department of Applied Sciences &amp; Humanities</b>	Academic Year: 2020-21
Rev : 00		Semester: <u>V</u>
Date: 1/02/2016	Faculty time table	Section: <u>A</u>
Name of the Teacher: <u>Shilpa Kodge</u>		Subject: <u>Engg Chemistry Environmental St</u>
Name of the Reviewer: <u>Dr. Raghunandan</u>		W.E.F. <u>01/02/2021</u>

Time/ Days	9:00AM- 10:100AM	10: 00AM-11: 00AM	11: 00AM-12: 00PM	12: 00PM- 1: 00PM	L U N C H	2: 00 PM-3: 00 PM	3: 00PM- 4: 00 PM	4: 00 PM-5: 00 PM
Period	1	2	3	4		5	6	7
Monday								
Tuesday						ES(CS-A)		
Wednesday	ES(IS-A)					SK		
Thursday							ES(CS-B)	
Friday	ES(EEE-A)						SK	
Saturday								

  
 HOD

Time-table Co-Ordinator





## Vision and Mission of the Department

## Vision:

To be a destination of choice for the aspiring students in the field of Computer Science and Engineering known for its quality teaching and learning process, research and contribution to the society

## Mission:

1. Provide state-of-art education in the field of Computer Science and Engineering. (Knowledge and Skills)
2. Promote the research culture and Lifelong learning attitude to meet the changing needs of Industry. (Research and Life-long Learning)
3. Inculcate professionalism and ethical values among the students to become a responsible citizen. (Professionalism and Ethics)
4. Provide IT solutions to the common societal problems (Contribution to the society)

## ACADEMIC CALENDAR

ACA/R/01

REV : 00

Date : 01.02.2019

Commencement Date :

Vth and VII Semester: 01.10.2021

For III Semester: 18.10.2021

Academic Year : 2021-22

Semester : ODD

B.E. III, V and VII SEMESTER

Last Working Day :

Vth and VII Semester: 31.01.2022

For III Semester: 19.02.2022

Week No.	DAY							No. of Working Days	ACTIVITIES/EVENTS	DATES
	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
<b>OCTOBER</b>										
I					1	2	3	1	Commencement of Session for V and VII semester Gandhi Jayanti	1/10/2021 2/10/2021
II	4	5	6	7	8	9	10	5	Mahalaya Amavasya	6/10/2021
III	11	12	13	14	15	16	17	4	Maha Navami / Vijaya Dashami	14/10/2021, 15/10/2021
IV	18	19	20	21	22	23	24	5	Eid - Meelad / Maharshi Valmiki Jayanti	19/10/2021, 20/10/2021
V	25	26	27	28	29	30	31	6	Commencement of Session for III semester	18/10/2021
<b>NOVEMBER</b>										
VI		2	3	4	5	6	7	3	Rajyotsava Day Naraka Chaturthi Balipadyami	1/11/2021 3/11/2021 5/11/2021
VII	8	9	10	11	12	13	14	6	Project Review - I	
VIII	15	16	17	18	19	20	21	5	CIE-I (V and VII Semester)	15/11/2021 to 21/11/2021
									CIE-I Result declaration	25/11/2021
									Guru Nanak Jayanthi	19/11/2021
IX	22	23	24	25	26	27	28	3	Kanakadasa Jayanti, IEC Event for Freshers Party	23,24,25/11/2021
									First Parent - Teacher meeting	22/11/2021
									E-Buzz	29/11/2021
X	29	30						2	Alumni Talk(IEC)	26 and 27/11/2021
										29/11/2021
<b>DECEMBER</b>										
X			1	2	3	4	5	4	CIE-I (III semester)	29/11/2021 to 04/12/2021
									Quiz for V sem(IEC)	11/12/2021
XI	6	7	8	9	10	11	12	6	CIE-I Result declaration	9/12/2021
									First Parent - Teacher meeting (III sem)	11/12/2021
XII	13	14	15	16	17	18	19	6	Quiz for III sem	18/12/2021
									Project Review -II	
XIII	20	21	22	23	24	25	26	5	CIE-II (V and VII semester)	19/12/2021 to 24/12/2021
									Christmas	25/12/2021
XIV	27	28	29	30	31			5	Group Discussion for VII sem (IEC)	30/12/2021
									CIE -II Result Declaration	29/12/2021
									Second Parent - Teachers meet	31/12/2021
<b>JANUARY</b>										
XIV						1	2	1		
XV	3	4	5	6	7	8	9	6		
XVI	10	11	12	13	14	15	16	5	Project Review-III	
									CIE-II (III semester)	10/01/2022 to 16/02/2022
									Makar Sankranti	14/01/2022
XVII	17	18	19	20	21	22	23	6	CIE-III (V and VII semester)	23/01/2022 to 25/01/2022
									CIE -II Result declaration (III semester)	20/01/2022
XVIII	24	25	26	27	28	29	30	5	Second Parent - Teacher meeting (III semester)	22/01/2022
XIX	31							1	Republic Day	26/01/2022
<b>FEBRUARY</b>										
XIX		1	2	3	4	5	6	5		
XX	7	8	9	10	11	12	13	6		
XXI	14	15	16	17	18	19		6	CIE-III (III semester)	14/02/2022 to 16/02/2022
Total No. of Working Days V & VII - 84 Days									For V and VII Semester 01.02.2022 to 10.02.2022 for III semester 21.02.2022 to 04.03.2022	
Total No. of Working Days III Sem - 97 Days									Practical Examinations	
Commencement of VI and VIII Semester: 04.04.2022 and IV semester 11.04.2022									Semester End Theory Examinations	
									For V and VII Semester 11.02.2022 to 25.03.2022 for III semester 07.03.2022 to 25.03.2022	

Note: 1. Lab CIE to be conducted in last laboratory class.

2. Any unexpected holiday classes to be compensated on Immediate next Sunday

*Spand*  
Academics

*W.D. Myranda*



GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

Course delivery details

CS (A)

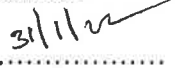
Period Number	Topic / Experiment	Executed Date	Remarks
1	Overview of course, Course Outcome its linkages with other courses and practical applications, expectations from students, Evaluation Policy etc.	5/10/21	
	<b>MODULE 1.</b> <b>Ecosystems &amp; Biodiversity</b>		
2	Structure and components Function of ecosystem ,Forest,Desert,wetlands,Reverine,Oceanic and Lake	12/10/21	Audio - Visual
3	Biodiversity: Types, Value; Hot-spots: Threats and conservation of biodiversity,	19/10/21	Lecture
4	Forest wealth, and Deforestation. Objective questions on module 1.	26/10/21	Interactive discussion
	<b>Module 2: Advances in Energy Systems Natural Resources Management.</b>		
5	Advances in Energy Systems ( Merits, Demerits,Global Status and applications): Hydrogen, Solar,OTEC, Tidal and wind	2/11/21	Lecture
6	Disaster management, sustainable Mining, cloud seeding, and carbon Trading Objective questions on module 2	9/11/21	Interactive discussion .
7	<b>MODULE3: Environmental Pollution&amp; waste management &amp; public health aspects</b> Sources, Impacts, Corrective and preventive measures of Environmental pollution Relevant Environmental Acts, Surface and ground water Pollution.	30/11/21	Lecture
8	Solid waste Hazardous wastes; E-wastes; industrial and Municipal Sludge Objective questions on module 3	7/12/21	Interactive Discussion
	<b>MODULE4-Global Environmental Concerns</b>		
9	Concepts,policies case studies of Global Environmental Concerns Ground water depletion/ recharging climate change; Acid rain;	14/12/21	Lecture
10	Ozone Depletion; Radon and fluoride problem in drinking water; Resettlement and rehabilitation of people , Environmental Toxicology Objective	28/12/21	Interactive discussion

Period Number	Topic / Experiment	Executed Date	Remarks
	questions on module 4		
	<b>MODULE 5</b> latest Developments in Environmental pollution Mitigation Tools( concepts and Applications)		
18	G.I.S & Remote Sensing , Environment Impact Assessment, Environmental Management systems,	4/11/21	Lecture
19	ISO14001; Environmental Stewardship-NGOs. Field work Objective questions on module 5	11/11/21	Interactive discussion.

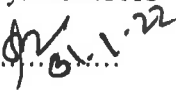
Course Teacher:

Date & Sign. 

Course Coordinator:

Date & Sign.  31/11/21

Approved by: HOD/PAC

Date & Sign.  01.1.22



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 18	Department of <u>ES</u> Engineering	Academic Year: 2021-22
Rev: 00		Semester / section: V/A
Date:	Review of Lesson Plan	Subject: Environmental Studies

Review of lesson plan

Review - I	5 <sup>th</sup> Week	Date of Review: 28.10.2020
Report by Subject Teacher <u>one module is completed.</u>		Remarks by HOD <u>Confirmed</u>

Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	5 <sup>th</sup> Week	Date: 28/10/2020 Time: 5:00 pm			
			2. Self-Realized Points	Action Required	Remarks by HOD
			Students are satisfied with study materials provided as there is no suggestion from students.		

Any amendments to the lesson plan required

Details of action taken: Both hard & soft copy of structured notes of module 1 & 2, previous university question papers & question banks with answers are provided to students.

Signature of the faculty with date: [Signature]  
28/10/2020

Signature of the HOD with date  
[Signature]  
28.10.21





# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 18	Department of <u>CS</u> Engineering	Academic Year: <u>2021-22</u>
Rev: 00		Semester / section: <u>V/Q</u>
Date:	Review of Lesson Plan	Subject: <u>Environmental Studies</u>

Review of lesson plan

Review - I	5 <sup>th</sup> Week	Date of Review: <u>20.10.2021</u>
Report by Subject Teacher <u>One more class is require First module get completed in upcoming class.</u>		Remarks by HOD <u>Complete it</u>

Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	5 <sup>th</sup> Week	Date: Time:	<u>provide short notes &amp; question bank -</u>		
			2. Self-Realized Points	Action Required	Remarks by HOD
			<u>Structured notes &amp; question bank with university</u>		

Any amendments to the lesson plan required

question papers should be provided.

Details of action taken:

Previous university question papers are provided to students.

Signature of the faculty with date: Dr. Kavya

30/10/21

Signature of the HOD with date

Dr. 30/10.21

Department of Applied Sciences & Humanities

ACA/R / 18  
Rev : 00

Department of Applied Science

Academic Year: 2021-22  
Branch/Sem / Section: S/V/A  
Subject: Environmental Studies

Date:

List of Students and their Performance in CIE and corrective action taken

Date of CIE Test I: 15/11/2021 II: 24/12/2021 III: 22/01/22

Sl. No	Univ Seat No.	Name of the student	CIE Marks scored (Max. Marks : 30)				Marks scored in activity Assignment 10 (b)	Total Max. Marks : 40 (a + b)	Remarks on performance at the end of CIE test CIE-1, CIE-2, CIE-3 Remarks	Action taken as per remarks
			CIE 1	CIE 2	CIE 3	Avg (a)				
1	3GN18CS002	ACHARI SANTOSH	25	24	26	25	9	34	All students	No action
2	3GN18CS008	AKHILESH	25	24	24	25	9	34	have scored	required
3	3GN18CS012	AMBIKA	27	24	29	27	9	36	more than	
4	3GN18CS039	KALYAN KUMAR	28	26	30	28	10	38	60% in	
5	3GN18CS047	M AKASHKUMAR	20	21	30	24	8	32	test - 1	
6	3GN18CS059	MD SHAGHILL AMAAN	29	23	26	26	9	35		
7	3GN18CS061	MD SOHEL	27	23	26	26	8	34		

**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
Department of Applied Sciences & Humanities

8	3GN18CS062	MD WAHED ALI PATEL	<del>28</del> 23	11	21	9	30	
9	3GN19CS001	ABDUL ANAS UMAIR	27 <del>24</del>	16	17	8	<del>25</del>	
10	3GN19CS002	AISHWARYA	22 <del>25</del>	26	25	9	34	
11	3GN19CS003	AKANKSHA	25 <del>24</del>	29	26	9	35	
12	3GN19CS004	AKASH JADHAV	20 <del>20</del>	27	23	8	31	
13	3GN19CS005	AKHILESH	27 <del>20</del>	27	25	9	34	
14	3GN19CS006	AKSHATA	Ab <del>27</del>	23	26	9	<del>35</del>	
15	3GN19CS007	AKSHATA BHALKE	27 <del>23</del>	28	26	10	39	
16	3GN19CS008	ALEENA JOY	28 <del>28</del>	29	29	9	34	
17	3GN19CS009	AMAN PATIL	27 <del>18</del>	28	25	9	<del>36</del> 40	
18	3GN19CS010	AMISH BEMELKHEDKAR	27 <del>24</del>	30	27	9	35	
19	3GN19CS011	AMULYA RATNA	27 <del>20</del>	30	26	9		

20	3GN19CS012	ANAMIKA	26	20	30	26	9	35		
21	3GN19CS013	ANJALI JAINAPUR	27	23	29	27	9	36	All students	No action
22	3GN19CS014	ANKUSH KANJIAR	29	26	30	29	10	39	have scored	required.
23	3GN19CS015	ARUN	26	24	30	27	9	36	more than	
24	3GN19CS016	ASFA SHARIYA	27	26	30	28	10	38	60% in	
25	3GN19CS018	B SHIVANI	24	18	26	23	8	31	CIE-2.	
26	3GN19CS019	BHAVANA	25	23	29	26	9	35		
27	3GN19CS020	BHAVANESHWAR I	27	26	29	28	10	<del>38</del> 40		
28	3GN19CS021	BHAVANI	27	21	<del>30</del> 30	<del>28</del> 28	9	<del>35</del> 37		
29	3GN19CS022	BOROLE ABHIJEET	21	21	26	23	8	31		
30	3GN19CS023	CHAITANYA CHAPTE	25	26	30	27	10	37		
31	3GN19CS024	CHETAN	27	26	29	28	10	38		

GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

Department of Applied Sciences & Humanities

32	3GN19CS025	DAIVASHALA	27	24	29	27	9	36	
33	3GN19CS026	FAIZA MUNAM	26	27	30	28	10	38	
34	3GN19CS027	GANESH	26	24	26	26	9	35	
35	3GN19CS028	GOLDEN KUMAR	27	24	27	26	9	35	
36	3GN19CS029	GURPREET SINGH	30	24	24	26	10	36	
37	3GN19CS030	HASAN	30	24	24	26	9	35	
38	3GN19CS031	ISHPREET KAUR	23	26	29	26	9	35	
39	3GN19CS032	JASMEET SINGH	27	24	28	27	9	36	
40	3GN19CS033	KRUPA DHANASHREE	23	23	29	25	9	34	
41	3GN19CS034	M A MUQTADIR	24	24	26	25	8	33	
42	3GN19CS035	MAHEK SULTANA	26	24	30	27	9	36	
43	3GN19CS036	MAKRAND SINGH BAL	29	24	24	26	9	35	

44	3GN19CS037	MALIHA NISHAT	25	24	23	24	8	32		
45	3GN19CS038	MASROOR FATIMA	27	26	30	28	10	38	Sl. NO. 8 has	Advised him
46	3GN19CS039	MD IRSHAD HUSSAIN	27	25	30	28	10	38	scored less	not to ignore
47	3GN19CS040	MD MAQSOOD ALI	30	24	27	27	9	36	than 60% -	this subject.
48	3GN19CS041	MD NOUMAN ALI KHAN	23	24	30	26	9	35	in CIE-3.	ke-
49	3GN19CS042	MD SAQLAIN SAEED	30	25	30	29	10	39		
50	3GN19CS043	MD SHAKEEL AHMED	29	24	25	26	9	35		
51	3GN19CS044	MD SOHEB ALI	29	23	30	28	9	37		
52	3GN19CS045	MD WAJID ALI	29	26	29	28	10	38		
53	3GN19CS046	MEGHA MAKTEDAR	26	23	28	26	10	40		
54	3GN19CS047	MEGHARANI	29	28	29	29	10	39		
55	3GN19CS048	MIRZA MAAZ BAIG	26	24	30	27	9	36		



56	3GN19CS049	MOHD AKIFUDDIN	30	24	30	28	10	<del>38</del> 40	
57	3GN19CS050	MOHD ARBAZ	25	24	30	27	9	36	
58	3GN19CS051	MOHD. MAHROOF ALI	29	24	30	28	10	38	
59	3GN19CS052	MOHAMMED SAQLAIN MUSHTAQ	<del>26</del>						
60	3GN19CS053	NABISHAB	26	24	30	27	10	37	
61	3GN19CS054	NAGESH	29	24	27	27	9	36	
62	3GN19CS055	NAGESHWARI	23	24	29	26	10	36	
63	3GN19CS056	NAGMA SHAHEEN	27	26	30	28	10	38	
64	3GN19CS057	NAJIMA BEGUM	27	27	29	28	10	38	
65	3GN19CS058	NAZIYA SAHER	23	24	29	26	<del>10</del>	36	
66	3GN19CS059	NEHA MASHETTY	23	21	30	25	<del>9</del>	34	
67	3GN19CS060	NIKITA	26	23	29	26	9	35	

**GURUNAK DEV ENGINEERING COLLEGE BIDAR**  
Department of Applied Sciences & Humanities

68	3GN19CS082	SANJANA	23	26	29	26	10	36	
69	3GN19CS084	SHABNAM FATIMA	21	26	29	26	09	35	
70	3GN19CS101	SOWMYA BHOOSA	23	27	29	27	10	27 40	
71	3GN19CS107	SYEDA RUMANA SHIREEN	28	26	30	28	10	38	
76	18CS069	Shagunika	27						

Signature of Faculty

Date 31/1/22

Signature of HOD

Date

31/1/22





# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 19	Academic Year: 2020-21
Rev : 00	Semester / section: 1 <sup>st</sup> / B
Date: 01.02.2016	Subject: CALCULUS&L.A

## Department of Applied Sciences & Humanities

### List of Students and their Performance in CIE and corrective action taken

Date of CIE Test I- 11/11/2024 II- 24/12/24 III- 21/2/25

Sl. No	Univ. Seat No.	Name of the student	CIE Marks scored (Max. Marks : )				Marks scored in activity / Assignment (Max. Marks : )	Total Marks : ( )	Remarks on performance at the end of CIE test CIE-1, CIE-2, CIE-3/ Remarks	Action taken as per remarks
			CIE 1	CIE 2	CIE 3	Avg. Marks ( ) a				
1	3GN18CS110	<sup>Junaid</sup> Syed Jubaid Ahmed	27	24	30	27	10	37	All students	No action
2	3GN18CS063	Mohammed Mohiuddin Kaif	27	29	29	29	10	39	have scored	required.
3	3GN18CS067	Nishchay Patil	27	29	27	28	10	38	more than	
4	3GN18CS074	Revansiddesh Sharnarathi	AB	AB	AB	AB		AB	60% in	
5	3GN18CS088	Sarbjeeet Singh	29	24	29	28	10	38	CIE-1	
6	3GN18CS101	Shweta Gare	26	24	26	26	9	35		
7	3GN18CS104	Sneha	29	26	30	29	10	39		

8	3GN18CS123	Vishal	17	24	28	23	9	32		
9	3GN19CS017	Azharuddin Shaik	29	30	30	30	10	49		
10	3GN19CS061	Nimra Mubeen	29	24	28	27	9	36		
11	3GN19CS062	Pallavi	29	26	30	29	10	39		
12	3GN19CS063	Pavan-J- Nirgude	29	27	27	28	10	38		
13	3GN19CS064	Pawankumar	28	27	29	28	10	38		
14	3GN19CS065	Pooja	29	26	30	29	10	39		
15	3GN19CS066	Pooja	27	24	28	27	9	36		
16	3GN19CS067	Pooja Andoor	29	26	30	29	10	39		
17	3GN19CS068	Prarthana Thore	27	23	29	27	10	37		
18	3GN19CS069	Pratiksha Ullagaddi	29	25	29	28	10	38		
19	3GN19CS070	Praveenkumar	27	25	30	28	10	38		
20	3GN19CS071	Priya	29	24	30	28	10	38		

21	3GN19CS072	Priyanka											
22	3GN19CS073	Priyanka B	28	19	29	26	9	35	All students	No action			
23	3GN19CS074	Punit	28	27	27	28	10	38	have scored	required			
24	3GN19CS075	Rajat Kumar	28	27	30	29	10	39	more than				
25	3GN19CS076	Ramkumar	24	27	30	27	9	36	60% in				
26	3GN19CS077	Revathi	29	26	30	29	10	39	CCE-2				
27	3GN19CS078	Rohan	24	21	24	23	8	31					
28	3GN19CS079	Saikiran	27	26	28	27	9	36					
29	3GN19CS080	Sana Banu	29	24	26	27	<del>10</del> 9	36					

30	3GN19CS081	Sangamesh	29	25	29	28	10	38		
31	3GN19CS083	Sarabjyot Kaur	28	54 25	58 30	30	10	40 38		
32	3GN19CS085	Shah Ali Quadri	29	58 26	58 29	28	9	37		
33	3GN19CS086	Shah Kamran Quadri	29	51 22	54 30	27	9	36		
34	3GN19CS087	Shah Viqar Mohiuddin Quadri	29	58 26	30 29	28	9	37		
35	3GN19CS088	Shaikh Humaira Mehnaaz	29	54 26	30 30	29	10	39		
36	3GN19CS089	Shambhavi	28	54 26	30 29	28	10	38		
37	3GN19CS090	Shantveer	27	54 24	54 24	25	9	34		
38	3GN19CS091	Shazeeb Talha	26	26	29	27	10	37		

39	3GN19CS092	Shivani Chapté	28	26	30	28	10	38		
40	3GN19CS093	Shivani Mahindrakar	28	59	30	26	10	36	All students	No action
41	3GN19CS094	Shivshant	26	59	30	26	9	35	have scored	is required.
42	3GN19CS095	Shradha	28	54	30	28	10	38	more than	
43	3GN19CS096	Shreya Mahajan	29	50	30	29	10	39	60% in	
44	3GN19CS097	Shweta	28	51	55	28	10	38	CPE-3.	
45	3GN19CS098	Siddeshwar Jeerge	21	52	50	25	9	34		
46	3GN19CS099	Sindolu Akash	25	54	55	28	10	38		
47	3GN19CS100	Soundarya Alli	27	54	58	26	10	36		

54 58

48	3GN19CS102	Supriya Rao	29	24	26	27	9	36		
49	3GN19CS103	Sushmita	27	24	28	27	10	37		
50	3GN19CS104	Sushmita	27	24	27	26	9	35		
51	3GN19CS105	Swati	27	25	29	27	10	37		
52	3GN19CS106	Syed Zeeshan Hashmi	27	21	27	25	8	33		
53	3GN19CS108	Tajinder Singh	29	29	30	30	10	40		
54	3GN19CS109	Tanzeel Maryam	28	24	30	28	10	38		
55	3GN19CS110	Trayoudh	26	26	30	28	9	37		
56	3GN19CS111	Ubaid Kashif	28	26	30	28	9	37		

[illegible]

66	3GN19CS121	Vinay Kumar S. Jaboor	24	22	29	25	9	34		
67	3GN19CS122	Zeenath Fatima	28	25	30	28	10	38		
68	3GN19CS123	Darshan Rampure	25	23	29	26	9	35		
69	<del>19CS082</del>	<del>Sanjaya</del>	<del>23</del>							
70	19CS084	Shabnam Fatima	24							
71	19CS101	Sowmya Bhose	23							
72	19CS107	Syeda <del>Rumana</del>	<del>28</del>							
73	19CS111	Ubaid Kashif	28							
74	19CS059	Md Shaghi Amaan	29							

18CS061 Md Sahel 27

82  
37.1.22





# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 20	Department of .... <i>C.S.</i> .....Engineering	Academic Year: <i>2021-22</i>
Rev: 00		Semester / section: <i>V/A</i>
Date:		Subject: <i>Environmental Studies</i>

## Second Review of Lesson Plan

Review – II <sup>11</sup> <sup>th</sup> Week	Date of Review: <i>11/12/2021</i>
Report by Subject Teacher <i>60% Syllabus is covered</i>	Remarks by HOD <i>Confirmed</i>

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	11 <sup>th</sup> Week	Date: <i>11/12/2021</i> Time: <i>5:00pm</i>	<i>No suggestion</i>	<i>—</i>	<i>—</i>
			2. Self-Realized Points	Action Required	Remarks by HOD
				<i>—</i>	<i>—</i>

Any amendments to the lesson plan required

Details of action taken: *Module -2 & 3 notes with question bank is provided to students.*

Signature of the faculty with date.....*11/12/2021*

Signature of the HOD with date.....*11/12/21*



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 21

Rev: 00

Date:

Department of ..... CS ..... Engineering

Third Review of Lesson Plan

Academic Year: 2021-22

Semester / section: V / A

Subject: Environmental Studies.

## Third Review of Lesson Plan

Review – III 16 <sup>th</sup> Week	Date of Review: 15/1/2022
Report by Subject Teacher	Remarks by HOD
Syllabus completed.	

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	16 <sup>th</sup> Week	Date: 15/1/2022 Time: 12:30 pm	2. Self Realized Points	Action Required	Remarks by HOD

Details of action taken: module 4 & 5 notes, question bank with answers provided to students.

Signature of the faculty with date: .....  
15/1/2022

Signature of the HOD with date: .....  
15/1/2022



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 20	Department of ....CS.....Engineering	Academic Year: 2021-22
Rev: 00		Semester / section: V / B
Date:		Subject: Environmental Studies

## Second Review of Lesson Plan

Review - II 11 <sup>th</sup> Week	Date of Review: 11/12/2021
Report by Subject Teacher 60% syllabus is covered.	Remarks by HOD Confirmed

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	11 <sup>th</sup> Week	Date: Time:			
			2. Self-Realized Points	Action Required	Remarks by HOD
			more short notes should be provided to students	Structured notes, Question bank should be given.	—

Any amendments to the lesson plan required

Details of action taken: Structured notes of modules 1, 2 & 3, Question bank with answers are provided to students.

Signature of the faculty with date.....  
11/12/2021

Signature of the HOD with date.....  
11/12/21



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R/21

Rev: 00

Date:

Department of C.S. Engineering

Third Review of Lesson Plan

Academic Year: 2021-22

Semester / section:

Subject:

## Third Review of Lesson Plan

Review - III 16 <sup>th</sup> Week	Date of Review: <u>15/01/2022</u>
Report by Subject Teacher  <u>Syllabus covered</u>	Remarks by HOD  <u>—</u>

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	16 <sup>th</sup> Week	Date: <u>15/1/21</u> Time: <u>1:00pm</u>	<u>—</u>		
			2. Self Realized Points	Action Required	Remarks by HOD
			<u>—</u>		

Details of action taken: Module 4 & 5 notes, question bank with answer, university question papers are provided to students

Signature of the faculty with date: Ashtay - 15/1/22

Signature of the HOD with date 16/1/22



**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 22

Rev: 00

Date:

Department of ...*C.S.*.....Engineering

Lesson plan final review

Academic Year: *2021-22*

Semester / section: *V / A*

Subject: *Environmental Studies*

(After University Exam)

1. Adequacy of time for coverage of syllabus.

*Adequate time got for coverage of syllabus.*

2. Suggestions regarding change in syllabus including updating as per latest Technology

3. Suggestions regarding change of books.

4. Suggestions regarding more emphasis on certain topics.

Date...*31/01/22*...

*Dulay*  
Signature of Faculty

Remarks by HOD

Date:.....

*Dr. 31.1.22*  
Signature of HOD



**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 22

Rev: 00

Date:

Department of ... CS ..... Engineering

Lesson plan final review

Academic Year: 2021-22

Semester / section: V / B

Subject: Environmental Studies

(After University Exam)

1. Adequacy of time for coverage of syllabus.

Adequate time for coverage of syllabus

2. Suggestions regarding change in syllabus including updating as per latest Technology

—

3. Suggestions regarding change of books.

—

4. Suggestions regarding more emphasis on certain topics.

—

Date: 31/1/22

Remarks by HOD

Date: .....

Deekay

Signature of Faculty

Signature of HOD

31.1.22

15CIV18/28

**First/Second Semester B.E Degree Examination, June/July 2019**

**Environmental Studies**

**(COMMON TO ALL BRANCHES)**

Time: 2 hrs.]

[Max. Marks: 40

**INSTRUCTIONS TO THE CANDIDATES**

1. Answer all the forty questions, each question carries **ONE** mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

- 
1. Which of the following conceptual spheres of the environmental is having the least storage capacity  
a) Atmosphere      b) Lithosphere      c) Hydrosphere      d) Biosphere
  2. In a Food chain humans are  
a) Primary consumers      b) Secondary consumers  
c) Primary and Secondary consumers      d) Producers
  3. The two major components of Ecosystem are  
a) Adiabatic and Isotropic      b) Ecologic and Climatologic  
c) Cyclic and Biologic      d) Abiotic and Biotic
  4. Percentage of Nitrogen in Earth's atmosphere is  
a) 98%      b) 78%      c) 21%      d) 12%
  5. A Food web consists of  
a) A portion of food chain      b) Producers, Consumers and Decomposers  
c) Interlocking of food chains      d) A set of similar consumers
  6. EIA is  
a) Environmental and Industrial Activities      b) Environment Impact Activities  
c) Environmental Impact Assessment      d) Environmental Internal Activities

For More Question Papers Visit - [www.pediawikiblog.com](http://www.pediawikiblog.com)

7. India has the World's largest share of  
a) Manganese      b) Copper      c) Mica      d) None of these
8. The pH value of the acid rain water is less than  
a) 5.6      b) 7.0      c) 8.5      d) 9.5
9. Bhopal Gas tragedy caused due to leakage of  
a) Methyl Iso Cyanate (MIC)      b) Sulfur dioxide  
c) Mustard Gas      d) Methane
10. What is the maximum allowable concentration of fluorides in drinking water  
a) 1.0 mg/L      b) 1.25 mg/L      c) 1.5 mg/L      d) 1.75 mg/L
11. Excess fluorides in drinking water is likely to cause  
a) Blue babies      b) Fluorosis      c) Taste and odour      d) Cholera
12. Excess Nitrates in drinking water leads to  
a) Blue babies      b) Dental caries      c) Typhoid      d) dysentery
13. The adverse effect of modern agriculture is  
a) Water pollution      b) Soil degradation      c) Water logging      d) All of above
14. Noise is  
a) Loud sound      b) Unwanted sound      c) Constant sound      d) None of these
15. Forest rich area in Karnataka is found in  
a) Western Ghats      b) Bandipur      c) Nagarhole      d) Mangalore
16. Access of food is mainly determined by  
a) Household Income      b) Food Assistance programmes  
c) Human resources      d) Society / Community
17. \_\_\_\_\_ are referred as Earth's lungs  
a) Forest      b) Carbon cycle      c) Water sources      d) Mines
18. Geothermal energy is a  
a) Heat energy      b) Wind energy      c) Current energy      d) Solar energy
19. World Environmental day is celebrated every year on  
a) 5<sup>th</sup> June      b) 5<sup>th</sup> May      c) 10<sup>th</sup> June      d) 10<sup>th</sup> May
20. The diesel vehicles pollute Environmental largely through  
a) NO      b) CO      c) Hydro Carbons      d) All of these
21. Global atmospheric temperature likely to be increased due to  
a) Water pollution      b) Burning fossil fuels  
c) Soil erosion      d) Noise pollution

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22. Biogas is produced by  
a) Microbial activity    b) Harvesting crop    c) Both (a) & (b)    d) None of these
23. Which green house gas is known as colourless non – flammable sweetish odor and laughing gas  
a) Methane    b) CO<sub>2</sub>    c) Nitrous oxide    d) Ethane
24. Carbon cycle involves  
a) Ammonia, Nitrate & Proteins    b) CO<sub>2</sub>, Water & Energy  
c) Sulphur dioxide, Sulphate    d) All of these
25. Direct conversion of solar energy is attained by  
a) Solar photo voltaic system    b) Galvanic cells  
c) Electrolytic cells    d) Hydrogen cells
26. Plant use \_\_\_\_\_ has for photosynthesis  
a) Oxygen    b) Methane    c) Nitrogen    d) Carbon dioxide
27. The major objectives of family welfare programs in India is  
a) Disease control    b) Population growth rate control  
c) Employment generation    d) None of these
28. Which of the following is not a renewable source for energy  
a) Fossil fuel    b) Solar energy    c) Tidal wave energy    d) Wind energy
29. Major compound responsible for the destruction of stratospheric ozone layer is  
a) CFC    b) Oxygen    c) Methane    d) Carbon dioxide
30. Ozone layer thickness is measured in  
a) Dobson unit    b) PPM    c) NTU    d) BTU
31. Remote sensing is a  
a) Sensor system    b) Satellite system    c) Ground segment    d) All of these
32. Environmental (protection) Act was enacted in the year  
a) 1986    b) 1996    c) 2006    d) 2016
33. GIS can be expanded as  
a) Geological Information system    b) Geographic Information system  
c) Geological Internet system    d) Geodynamic Internet system
34. Global warming could affect  
a) Climate    b) Increase in sea level  
c) Melting of Glaciers    d) All of the above
35. Which of the following is NGO?  
a) Narmada Bachao Andolan    b) CPCB  
c) KSPCB    d) None of these

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36. Ozone layer is present in  
a) Troposphere      b) Stratosphere      c) Meososphere      d) Thermosphere
37. Environmental protection is the fundamental duties of the citizen of India under the article  
a) 51 - A(g)      b) 48 - A      c) 47      d) 25
38. The Air (prevention and control of pollution) Act was enacted in the year  
a) 1981      b) 1991      c) 1996      d) 1999.
39. Wind energy generation depends on  
a) Direction of wind      b) Velocity of wind      c) Humidity      d) Precipitation
40. Sustainable development requires change in  
a) Utilization of natural resources      b) Consumption of energy  
c) Elimination of waste      d) All of these



## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

Rev : 00	Common to all Branches  CIE - I	Academic Year: 2021-2022
Date: 15.11.2021		Semester: V
Test No: I		Subject: 18CIV59
Duration : 1 Hr		Max. Marks: 50

**NOTE: 1. Answer all questions. Each question carries 1 mark.**

**2. Use only black ball point pen for darkening the circles on OMR sheet.**

**3. Darkening two circles for the same question makes the answer invalid.**

- World Environment Day is celebrated on  
(a) 5<sup>th</sup> May (b) 5<sup>th</sup> June (c) 18<sup>th</sup> July (d) 16<sup>th</sup> August
- Word environment is derived from  
(a) English (b) German (c) French (d) Italy
- Environment means  
(a) surrounding (biotic + abiotic) in which organisms live (b) atmosphere around oneself  
(c) sum total of social, economical, biological behaviour of animals (d) sum total of developmental activities around
- The term Ecosystem was first proposed by  
(a) Jacob Van Vekul (b) A.G. Tansley (c) Costanza (d) Marie Gibbs
- Which of the following is an ecosystem  
(a) forest (b) desert (c) mountain (d) All
- Which of the following is not an example of ecosystem  
(a) forest (b) desert (c) water (d) grassland
- The objective of environmental education is  
(a) Raise consciousness about environmental conditions (b) To teach environmentally appropriate behaviour  
(c) Create an environmental ethics (d) All the above
- In an ecosystem the flow of energy is  
(a) Unidirectional (b) Bidirectional (c) Cyclic (d) Multidirectional
- Which of the following is a biotic component of an ecosystem  
(a) Fungi (b) solar light (c) temperature (d) Humidity
- Abiotic component includes  
(a) Soil (b) temperature (c) water (d) all of these
- In an ecosystem biological cycling of materials is maintained by  
(a) Producer (b) Consumer (c) Decomposer (d) all of these
- Which of the following is a producer in an ecosystem  
(a) Plants and some bacteria capable of producing their own food (b) Animals  
(c) Human beings (d) Fish
- Organisms which feed directly or indirectly on producers are called



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- (a) Prey (b) Consumers (c) Decomposers (d) Detritus
14. Factors responsible for balanced ecosystem are  
(a) balance between Predator and prey (b) balance between vegetation, herbivorous and carnivorous  
(c) balance between competing species and biotic factors (d) all the above
15. Habitat refers to  
(a) physical conditions of the place where organisms live (b) chemical conditions of the place where organisms live  
(c) both (a) & (b) (d) nither (a) nor (b)
16. The sequence of eating and being eaten in an ecosystem is known as  
(a) food chain (b) food web (c) carbon cycle (d) water cycle
17. A trophic level refers to  
(a) area in the tropics (b) an organism's position in a food chain  
(c) an organisms position in an ecosystem (d) an organisms position in a biome
18. Tendency of pollutants to become concentrated in successive trophic levels is known as  
(a) bioremediation (b) biomagnification (c) biopiracy (d) biorhythm
19. The largest reservoir of Nitrogen on our planet is  
(a) oceans (b) atmosphere (c) biosphere (d) fossil fuels
20. Eutropication is  
(a) an improved water quality status of lakes (b) the result of accumulation of plant nutrients in water bodies  
(c) a process in carbon cycle (d) a water purification technique
21. Which of the following terminologies is not associated with the vertical structure of forest  
(a) canopy (b) understory (c) forest floor (d) first floor
22. Biodiversity is a measure of variation at the ----- level.  
(a) genetic (b) species (c) ecosystem (d) all of the above
23. A biodiversity hotspot  
(a) is a region with a high level of endemic species (b) that have experienced great habitat loss  
(c) both (a) and (b) (d) none of the above
24. The loss in biodiversity is not attributed to:  
a) Explosion in the human population b) Transforming earth's surface  
c) Destruction of natural habitats d) Use of sustainable products
25. Genetic variation between distinct populations of the same species is known as  
(a) species diversity (b) Ecosystem diversity (c) Genetic diversity (d) Bio diversity
26. Following step(s) can conserve the forest cover  
(a) prevent forest fire (b) prevention of overgrazing by cattle  
(c) hunting and poaching should be banned (d) all of the above
27. Biodiversity is of importance as it offers:  
a) Stability of ecosystems b) Stability of atmosphere  
c) Stability of species d) Stability of research



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28. Which of the following is an endemic species of India  
(a) Asian elephant (b) Lion-tailed macaque (c) whales (d) Panda
29. Which of the following is a biodiversity hotspot in India  
(a) Gulf of Mannar (b) Western Ghats (c) Pachmarhi (d) Sunderbans
30. The device that can directly convert hydrogen energy to electrical energy by reaction with oxygen is known as  
(a) electric cell (b) hydrogen cell (c) oxygen cell (d) fuel cell
31. Hydrogen energy can be tapped through  
(a) heat pump (b) fuel cells (c) photovoltaic cells (d) gasifiers
32. Which of the following is not a renewable source of energy  
(a) fossil fuels (b) solar energy (c) tidal wave energy (d) wind energy
33. OTEC (Ocean Thermal Energy conversion) is an energy technology that converts  
(a) energy in large tides of ocean to generate electricity (b) energy in Ocean waves to generate electricity  
(c) energy in ocean due to thermal gradient to generate electricity (d) energy in the fast moving ocean currents to generate electricity
34. Harnessing the wind energy is done by  
(a) wind mill (b) ball mill (c) flour mill (d) pig mill
35. Wind farms are located in  
(a) river basin (b) plain area (c) hilly area (d) valley area
36. Which place in India, the tidal energy has been experimented  
(a) Goa (b) Karnataka (c) Kerala (d) Tamilnadu
37. Under which Ministry National Disaster Management Authority comes?  
a) Ministry of Environment b) Ministry of Foreign Affairs c) Ministry of Pollution d) Ministry of Home Affairs
38. Disaster Management refers to manage disaster response in the country.  
a) True b) False
39. Who heads the National Crisis Management Committee?  
a) Prime Minister b) President c) Cabinet Secretary d) Ministry of Environment
40. What is called for the manuals that identify the role of each officer in State for managing the natural disasters?  
a) State Relief Manuals b) State Environmental Protection Manuals  
c) State Disaster Manuals d) State Protection Manuals
41. Disasters can be broadly termed as \_\_\_\_ types.  
a) 2 b) 4 c) 5 d) 3
42. Which of the below is an example of slow-onset disaster?  
a) Earthquake b) Tsunami c) Cyclone d) Draught

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43. Which one among the following doesn't come under disaster management  
a) Earthquake b) Landslide c) Tsunami d) Riots
44. Hydrogen can be produced commercially by  
(a) cracking of ammonia (b) electrolysis of water (c) both a and b (d) gasification
45. One joule of energy is equivalent to  
(a) 0.2389 calories (b) 23.89 calories (c) 238.9 calories (d) 2389 calories
46. Who released the first Disaster Management Plan of India?  
a) H. D. Deve Gowda b) Atal Bihari Vajpayee c) Manmohan Singh d) Narendra Modi
47. A food web consists of  
(a) a portion of a food chain (b) producers, consumers and decomposers  
(c) interlocking food chains (d) a set of similar consumers
48. Which one of the following is not an in-situ conservation method?  
a) Zoo b) National Parks c) Biosphere Reserves d) Sanctuaries
49. Thar desert is situated in  
(a) Rajasthan (b) Africa (c) Nainital (d) none of these
50. The term environment derived from the French word which means to encircle or surround is  
(a) Environ (b) Oikos (c) Geo (d) Aqua

*Atkaly*  
Course coordinator

*HOD*

# Guru Nanak Dev Engg. College, Bidar

Sub. - Environmental studies

Date of CIE - 15/11/2021

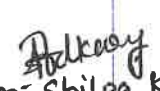
Sub. Code - 18 CIEV 59 CIE-1

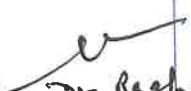
Max. marks - 50


## Scheme of Evaluation.

Each question carries 1 mark.

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1) b  | 11) d | 21) d | 31) b | 41) a |
| 2) c  | 12) a | 22) d | 32) a | 42) d |
| 3) a  | 13) b | 23) c | 33) c | 43) d |
| 4) b  | 14) d | 24) d | 34) a | 44) c |
| 5) d  | 15) c | 25) c | 35) c | 45) a |
| 6) c  | 16) a | 26) d | 36) c | 46) d |
| 7) d  | 17) b | 27) a | 37) d | 47) c |
| 8) a  | 18) b | 28) b | 38) a | 48) a |
| 9) a  | 19) b | 29) b | 39) c | 49) a |
| 10) d | 20) b | 30) d | 40) a | 50) a |

  
Dr. Shilpa Kodge.  
Name & Sign of faculty

  
Dr. Raghunada  
Name & Sign  
of  
Course Co-ordinator

  
Name & Sign  
of  
HOD / PAC

GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

Rev : 00

Common To All Branches

Academic Year : 2021-22

Date: 24/12/21

Semester : V

Test No: II

CIE- II

Subject Code: 18CIV59

Duration : 1Hr

Subject : EVS

Max marks: 50

NOTE: 1. Answer all questions. Each question carries 1 mark.

2. Use only black ball point pen for darkening the circles on OMR sheet.

3. Darkening two circles for the same question makes the answer invalid.

1. Sustainable development means

- a) Meeting present needs without compromising on the future needs
- b) Progress in human well beings
- c) Balance between human needs and the ability of earth to provide the resources
- ☒ d) All of the above

2. Cloud seeding is a type of

- a) Sustainable development
- ☒ b) Weather modification process
- c) Industrial development
- d) None of these

3. Importance of carbon trading

- a) A dividend project in developing country
- b) May be used to partially fund the projects to lessen carbon emission
- c) Investment in cleaner or more efficient technology
- ☒ d) Both (b) and (c)

4. Identify the correctly matched pair

- a) Basal convention- Biodiversity conservation
- ☒ b) Kyoto protocol – Climatic change
- c) Montereal protocol- global warming.
- d) Ramsar convention-Ground water pollution

5. The chemicals used as dispersing substances are

- a) Silver iodide
- b) Dry ice
- ☒ c) Both (a) and (b)
- d) None of these

6. The concept of carbon credit originated from

- a) Earth summit
- ☒ b) Kyoto protocol
- c) montreal protocol
- d) None of these

7. Ozone layer is present in

- a) Troposphere
- b) mesosphere
- ☒ c) Stratosphere
- d) Thermosphere



8. The Major compound responsible for the ozone layer destruction is  
☒ a) CFC    b) Oxygen    c) Methane    d) Carbon dioxide
- 9) The ozone layer is located up to ----- km above the earth surface  
a) 10    ☒ b) 50    c) 80    d) 100
- 10 Ozone layer thickness is measured in  
a) Centimeters    b) Millimeter    ☒ c) Dobson Unit    d) Decibels
- 11 Which of the following is one of the classifications of Noise?  
a) Noise from animals    ☒ b) Occupational noise    c) Noise at public place    d) None of these.
- 12 Noise is  
a) Loud sound    ☒ b) Unwanted sound    c) Constant sound    d) Sound of high frequency
13. The sound beyond which of the following level can be regarded as a pollutant.  
a) 40 dB    ☒ b) 80 dB    c) 120 dB    d) 150 dB
14. Which of the following type of noise is least serious?  
☒ a) Rail traffic noise    b) Aircraft noise    c) Road traffic noise    d) Industrial noise
15. Water (prevention and control of pollution) Act in India was passed in  
☒ a) 1974    b) 1982    c) 1986    d) 1990
- 16) Air (prevention and control of pollution) Act in India was passed in  
a) 1970    b) 1975    ☒ c) 1981    d) 1990
- 17) Which of the following is the best suitable method for disposal of E- Waste  
☒ a) Reuse and Recycle    b) Incineration    c) Buried under ground    d) None of these
- 18) High level radioactive waste can be managed in which of the following ways?  
a) Composting    b) store indefinitely    c) Incineration    d) Neutralization
- 19 Which of the following industry produces inorganic process wastes?  
a) Hotel industry    b) Cola manufacturing industry    c) Metallurgical plant    d) None of these
- 20 Which of the following industries are primarily responsible for the production of organic wastes  
a) Food processing    b) Breweries    c) Distilleries    d) All of these
- 21 Chlorine can be used  
a) To kill pathogenic microorganisms    b) to increase the pH    c) to clear turbidity    d) All of these
- 22 Water pollution can be minimized by  
a) Releasing sewage to ocean    b) Releasing effluent to waste land  
c) Treating waste water    d) None of these

23. What is the permissible range of pH for drinking water as per the Indian standards?  
 a) 6 to 9    b) 6.5 to 8.5    c) 6 to 8.5    d) 6.5 to 7.5
- 24 Biomedical waste may be disposed off by?  
 a) Incineration    b) Autoclaving and land filling    c) Both a and b    d) None of the above
- 25) One of the major reasons for the accumulation of e-waste in recent years is  
 a) Lack of technologies for recycling    b) rapid technology obsolescence  
 b) Lack of strict regulations    d) all of the above.
- 26) Blurring Sounds Known To Cause  
 A) Mental Distress    B) High Cholesterol  
 C) Neurological Problems    D) All Of The Above
- 27) Bod Means  
 A) Biochemical Oxygen Demand    B) Chemical Oxygen Demand  
 C) Biophysical Oxygen Demand    D) All
- 28) Physical pollution of water is due to,  
 a) Dissolved oxygen    b) Turbidity    c) pH    d) None of these
- 29) Which of the following industry generates coloured wastes?  
 a) Software Industry    b) Textile industry    c) Biomedical industry    d) None of these
- 30 ) Polluted ground water is the major cause for the spread of epidemic and chronic diseases in man .it may cause.  
 a) Arthritis    b) Diarrhea    C) Anemia    d) All
- 31) Odour in water can be eliminated by  
 a) Changing pH    b) Increasing dissolved solids    c) Aeration    d) None of these
- 32) Bacteriological pollution of water is due to the presence of  
 a) Silt and grit    b) Parasitic worms    c) Suspended particles    d) Floating materials
- 33) The effluents from urban areas contain  
 a) Oils and greases    b) Detergents    c) Nutrients    d) All
- 34) Turbidity in water mainly arises from,  
 a) pH    b) Dissolved solids    c) Colloidal matter    d) None of these
- 35) Which of the following is a major cause of soil pollution?  
 a) Accidents involving the vehicles that are transporting waste material  
 b) Pesticides and chemical fertilizers from agricultural lands  
 c) Improper solid waste disposal  
 d) All of the above
- 36). Which of the following is not a method for water conservation?  
 a) Rainwater harvesting    b) Ground water extraction  
 c) Improving irrigation efficiency    d) Avoiding water wastage
- 37) Soils play an important role as environmental agent. They are key links in global.  
 a) carbon cycle    b) Nitrogen cycle    c) Phosphorus cycle    d) All
- 38) The most abundant element in the earth's crust is

a) Oxygen b) Silicon c) Sodium d) Iron

39) The primary source of organic matter in soil is

- a) Plant tissues such as growing and dead plants
- b) Litter such as leaves and branches that have fallen on the surface
- c) Both a) & b)
- d) None of the above

40) The extent of leaching depends on

- a) Rainfall b) irrigation c) soil texture d) All of these

41) which of the following is not a component of soil?

- a) Mineral matter b) organic matter c) Ozone d) soil air

42) Soil samples should be collected and analyzed for the suggested parameters at least \_\_\_\_\_ in a year.

- a) Once b) Twice c) Thrice d) Quarter

43). which of the following cannot be recycled?

- a) Water b) Scrap Iron c) Plastic d) None of these

44) Deforestation can,

- a) Increase the rainfall b) increase soil fertility c) Introduce silt in rivers d) None of these

45) Environmental pollution is due to

- a) Rapid Urbanization b) deforestation c) Afforestation d) a & b

46) Which of the following is air pollutant

- a) CO b) O<sub>2</sub> c) N<sub>2</sub> d) all

47.) Which of the following are natural sources of air pollution

- a) Volcanic eruption b) solar flare c) earth quake d) all

48. Which of the following are biodegradable pollutants

- a) Plastics b) Domestic sewage c) detergent d) all

49) Smog is

- a) A natural phenomenon b) combination of smoke and fog
- c) Colourless d) all of the above

50) Which of the following statement about pesticide is wrong?

- a) They pollute the air through volatilization
- b) They do not pollute the aquatic ecosystem because they are carried there by rain water
- c) They are toxic to human beings d) None of these.

*Atul*  
*Teacher*

*92*  
*HOD*

24-12-21

Handwritten  
23/12/21

EVS

18CIV59

CIE-II

KEY ANSWERS

① D  
② B  
③ D  
④ B  
⑤ C  
⑥ B  
⑦ C  
⑧ A  
⑨ B  
⑩ C

⑪ B  
⑫ B  
⑬ B  
⑭ A  
⑮ A  
⑯ C  
⑰ A  
⑱ B  
⑲ C  
⑳ D

㉑ A  
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GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

Rev : 00

Common To All Branches

Academic Year : 2021-22

Date: 28-01-2022

Semester : V

Test No: III

CIE- III

Subject Code: 18CIV59

Duration : 1Hr

Subject : EVS

Max marks: 50

NOTE: 1. Answer all questions. Each question carries 1 mark.

2. Use only black ball point pen for darkening the circles on OMR sheet.

3. Darkening two circles for the same question makes the answer invalid.

1. The pH of Acid Rain Water Is

A) Less Than 5.2    B) Less Than 5.6    C) Less Than 6.2    D) Less Than 5.8

2. The Major Source of SO<sub>2</sub> Is

A) Smelter    B) Power Station    C) Both A And B    D) Refineries

3. Acid Rain has been increasing day by day due To

A) Urbanization    B) Industrialization    C) Increase in vehicle population    D) None

4. Acid rain effects On

A) Material    B) Plants    C) Solid    D) All

5. Fluoride though Is an effective agent in Preventing dental caries has a Permissible Limits Of

A) 0.5 Mg/Liter Of Water    B) 1.5 Mg/Liter Of Water    C) 5 Mg/Liter Of Water    D) 15 Mg/Liter Of Water

6. Skeletal Fluorosis Is Characterised By

A) Severe And Permanent Bone Joint Deformation    B) Discolored Blackened, Mottled Teeth

C) Nervous Breakdown

D) Anemic

7. Fluorosis Is Caused due to

A) No Fluoride Intake    B) Low Fluoride Intake    C) Excessive Fluoride Intake    D) None Of The Above

8. Radon is a Gas which comes From

A) Dissociation Of Impurities Present In Water    B) Natural Radioactive Break Down Of Uranium  
In The Ground    C) Breaking Of Carbon Containing Species In Water    D) None Of These

9. Radon in drinking water Presents the risk developing primarily

A) Lung Cancer    B) Stomach Cancer    C) Brain Cancer    D) None Of These

10. Two Types of Point Of Entry device that remove radon from water

A) Granular Activated Carbon (GAC) Filter    B) The Aeration Device    C) Both (A And B)    D) None Of These

11. According to National Academy Of Science reports EPA Estimates Radon In Drinking Water Causes

A) 89% For Lung Cancer    B) 168 Cancer Death Per Year    C) 11 % Of Stomach Cancer    D) All

12. Ground Water Is A Source Of Trouble At Which Place?

- A) Planes      B) Slopes      C) River      D) Lakes

13. Excessive Pumping In Relation To Recharge Can Cause?

- A) Water Table To Decline      B) A Cone Of Depression To Form  
C) The Well To Go Dry      D) All Of These

14. Ground Water Represents How Much Of World's Fresh Water Supply

- A) About 1%      B) About 5%      C) About 20%      D) About 50%

15. Which Of The Following Rocks Has The Highest Permeability?

- A) An Unfractured Cell      B) A Cemented Sandstone      C) An Uncemented Sandstone  
D) All Of These Rocks Have Approximately The Same Permeability

16. Which Of The Following Materials Has The Lowest Porosity?

- A) Shale      B) Gravel      C) Granite      D) Sandstone

17. Remote Sensing Usage Which Of The Following Waves In Its Procedure

- a) Electric Field      B) Sonar Waves      C) Gamma Rays      D) Electromagnetic Waves

18. Which Of The Following Is Not The Principal Of Remote Sensing

- A) Interaction Of Energy With Satellite      B) Electromagnetic Energy  
C) Electromagnetic Spectram      D) Interaction With Atmoshpere

19. GIS Stands For

- A) Geographic Information System      B) Generic Information System      C) Geological Information System  
D) Geographic Information Sharing

20. GIS Deals With Which Kind Of Data

- A) Numeric Data      B) Binary Data      C) Spatial Data      D) Complex Data

21. Which Of The Following Statements Are True About Capabilities Of GIS

- A) Data Capture And Preparation      B) Data Management Including Storage And Maintenances      C) Data Manipulation And Analysis      D) All Of These

22. By "Spatial Data" We Mean Data That Has

- A) Complex Values      B) Positional Values      C) Graphic Values      D) Decimal Values

23. "Spatial Data Bases" Are Also Known As

- A) Geo Data Bases      B) Mono Data Bases      C) Concurrent Data Bases      D) None Of The Above

24. The Instrument Which Provides Electromagnetic Radiation Of A Specified Wave Length Or A Band Of Wave Length To Illuminate The Earth Surface Are Called

- A) Sensors      B) Passive Sensors      C) Active Sensors      D) None Of These

25. The Altitudinal Distance Of Geostationary Satellites From The Earth Is About

- A) 26000 K.M      B) 30000 K.M.      C) 36000 K.M      D) 44000 K.M.

26. Pickup The Correct Statements From The Following

- A) In Remote Sensing Technique, The Observation Place Is Called Platform  
B) Platform May Be Either Stationary Or Mobile C) Spatial Resolution Of The Imaging System Become Poorer With Increase Of Platform Height D) All Of These.

27. The Object Of Photo Interpretation Is

- A) Identification B) Recognition Of Objects C) Judging The Significance Of Object D) All Of These

28. For Interpolation Of Satellite Data Used For Monitoring Changes That Occurs On Earth Surfaces, The Most Suitable Orbit For Satellite Is

- A) Circular Orbit B) Sun Synchronous Orbit C) Near Polar Orbit D) None Of These

29. The Important Goal Of EIA Is

- A) Control Pollution Level B) Resource Conservation C) Stock Development Activities D) Provisions Of Basic Need Of Life.

30. EIA Can Be Expanded To

- A) Environment And Industrial Act B) Environment And Impact Activities C) Environmental Impact Assessment D) Environment For Important Activity.

31. EIA Is Related To

- A) Resource Conservation B) Efficient Equipment/Process C) Waste Minimization D) All Of The Above

32. EIA Has Been Used As A Tool For Decision Making Regarding Development Proposals Since

- A) 1947 B) 1990 C) 1970 D) 1865

33. EIA Is Necessary Because

- A) Development Is Bad For Environment B) There Is Growing Interest In Sustainability C) Environmental Impact Of Development Are Of Public Interest D) None Of The Above

34. In EIA The Base Line Data Describes

- A) The Environmental Consequence By Mapping B) Existing Environmental Status Of The Identified Study Area C) Assessment Of Risk On The Basis Proposal D) Demographic And Socio-Economic Data.

35. Which Of The Following Does Not Belong To EIA Methods Used For Assessing Impact Of Development Activities On The Environment

- A) Checklist B) Adhoc C) Network D) Flexible

36. The EIA Report Of A Hydropower Project Would Be Valued Up To How Many Years After The Environmental Clearness

- A) 5 Years B) 6 Years C) 30 Years D) 10 Years

37. The Committee Which Reviews The EIA And EIM Plans Reports Of A Development Project In Ministry Of Environment And Forest Is Called

- A) Project Assessment Committee B) Project Appraisal Committee C) Project Evaluation Committee D) Project Estimation Committee

38. The EMS Can Be Expanded To

- A) Environment Monetary System B) Environment Management System C) Environment Impact Management System D) None Of These

39. The Goals Of EMS Is

- A) To Increase Compliances B) To Reduce Waste C) Both (A&B) D) None Of These

40. Environmental Stewardship Refers To Responsible Use And Protection Of Natural Environmental Through

- A) Environmental Protection Act B) Environment Information System C) Conservative And Sustainable Practice D) None Of These

41. In Environmental Stewardship, Donor Is A Person Is That

- A) Help The Cause By Taking Action B) Financially Help The Cause C) Work On Day To Day Basis To Steer D) None Of These

42. ISO 14001 Is The International Standard That Specifies Requirement For

- A) Effective Environmental Management System B) Environmental Act C) Environmental Impact D) None Of These

43. Which One Among The Following Is Not A ISO 14001 Requirement

- A) Environmental Objective And Plan For Achieving Them B) Environmental Policy C) Operational Control Procedure D) None Of These.

44. The Most Widely Used Standard On Which EMS Is Based

- A) ISO9002 B) ISO 1402 C) ISO14001 D) ISO 9001

45. Remote Sensing Generally Refers As

- A) Use Of Satellite Or Aircraft Based Sensor Technology B) Use Of Electrical Radiation C) Use Of Geography Data D) None Of These.

46. Who Is Acknowledged As Father Of GIS

- A) Ernt Hockel B) Roger Tomlinson C) Roger Fadrics D) None Of These

47. Nongovernmental Organization (NGO) Making Essentials Contribution To

- A) Environment B) Society C) Sustainability D) All Of These

48. Which Of The Following Is Not In The List Of NGO Working For Environment And Society

- A) Oxfam B) Ceres C) Green Peace D) None Of These

49. Ground Water Depletion Raises The Sea Level By

- A) 5mm Per Year B) 1mm Per Year C) 10mm Per Year D) 20mm Per Year

50. Who Is Considered As Mother Of Environmental Toxicology?

- A) Rachel Carson B) Ernt Hockel C) T. Roosevelt D) Barry Commoner

*Dr. H. K. H. K.*  
*S. K. H. K.*

*Dr. H. K. H. K.*



# Scheme of Valuation

2-2-22

\* B.E. IVth All branches

Sub: - EVS Code - 18CEV59

CIE-III held on 2-2-22

Q.1 (A)

Q.2 (C)

Q.3 (B)

Q.4 (D)

Q.5 (B)

Q.6 (A)

Q.7 (C)

Q.8 (B)

Q.9 (B)

Q.10 (C)

Q.11 (D)

Q.12 (B)

Q.13 (D)

Q.14 (C)

Q.15 (C)

Q.16 (C)

Q.17 (D)

Q.18 (A)

Q.19 (A)

Q.20 (C)

Q.21 (D)

Q.22 (B)

Q.23 (A)

Q.24 (C)

Q.25 (C)

Q.26 (D)

Q.27 (D)

Q.28 (B)

Q.29

Q.29 (B)

Q.30 (C)

Q.31 (D)

Q.32 (C)

Q.33 (C)

Q.34 (B)

Q.35 (D)

Q.36 (D)

Q.37 (B)

Q.38 (B)

Q.39 (C)

Q.40 (C)

Q.41 (B)

Q.42 (A)

Q.43 (D)

Q.44 (C)

Q.45 (A)

Q.46 (B)

Q.47 (D)

Q.48 (D)

Q.49 (B)

Q.50 (A)

for  
HOD

(Dr Raghunandan Kumar)  
Applied Science Dept.

1-4	A C B D	D B A C	20-24
5-8	B A C B	C B D A	25-28
9-12	B C D B	B C D C	29-32
13-16	D C C C	C B D D	33-36
17-20	D A A C	B B C C	37-40
21-24	B A D C	B A D C	41-44
25-28	A B D D	A B D D	45-48



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**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

**ASSIGNMENT 1**

**SUB: EVS CODE : 18CIV59 AY: 2021-22 SEM : V**

**COMMON TO ALL BRANCHES**

**Module 1**

1. World Environment Day is celebrated on  
(a) 5<sup>th</sup> May (b) 5<sup>th</sup> June (c) 18<sup>th</sup> July (d) 16<sup>th</sup> August
2. Environment means  
(a) surrounding (biotic + abiotic) in which organisms live  
(b) atmosphere around oneself  
(c) sum total of social, economical, biological behaviour of animals  
(d) sum total of developmental activities around
3. The term environment derived from the French word which means to encircle or surround is  
(a) Environ (b) Oikos (c) Geo (d) Aqua
4. The term Ecosystem was first proposed by  
(a) Jacob Van Vekul (b) A.G. Tansley (c) Costanza (d) Marie Gibbs
5. Which of the following is an ecosystem  
(a) forest (b) desert (c) mountain (d) All
6. Which of the following is not an ecosystem  
(a) Lake (b) River (c) temperature (d) All
7. Abiotic component includes  
(a) Soil (b) temperature (c) water (d) all of these
8. In an ecosystem biological cycling of materials is maintained by  
(a) Producer (b) Consumer (c) Decomposer (d) all of these
9. Which of the following is a producer in an ecosystem  
(a) Plants and some bacteria capable of producing their own food (b) Animals



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- (c) Human beings                      (d) Fish
10. Organisms which feed directly on producers are called
- (a) Herbivores (b) Carnivores (c) Decomposer (d) Saprophytes
11. A food web consists of
- (a) a portion of a food chain                      (b) producers, consumers and decomposers
- (c) interlocking food chains                      (d) a set of similar consumers
12. A trophic level refers to
- (a) area in the tropics                      (b) an organism's position in a food chain
- (c) an organism's position in an ecosystem                      (d) an organism's position in a biome
13. Tendency of pollutants to become concentrated in successive trophic levels is known as
- (a) bioremediation (b) biomagnification (c) biopiracy                      (d) biorhythm
14. The concentration of carbon in living matter is almost 100 times greater than its concentration in the earth because
- (a) carbon is produced by the living cell
- (b) living things extract carbon from their non living environment
- (c) carbon is biomagnified in living cells
- (d) carbon can not be recycled
15. The largest reservoir of Nitrogen on our planet is
- (a) oceans (b) atmosphere (c) biosphere (d) fossil fuels
16. Lion-tailed macaque is found in
- (a) Western Ghats (b) Eastern Ghats (c) Caucasus                      (d) Western Himalaya
17. Which of the following is an in situ conservation measure taken by India
- (a) Project Elephant (b) Project Lion (c) Project Rhino                      (d) All of these
18. Genetic variation between distinct populations of the same species is known as
- (a) species diversity (b) Ecosystem diversity (c) Genetic diversity                      (d) Bio diversity



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19. Which of the following is not a World Heritage site

- (a) Manas Wildlife Sanctuary (b) Nanda Devi National Park  
(c) Kaziranga National Park (d) Periyar National Park

20. Which of the following is an endemic species of India

(endemic species means species having restricted distribution)

- (a) Asian elephant (b) Lion-tailed macaque (c) whales (d) Panda



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**ASSIGNMENT 2**

SUB: EVS CODE : 18CIV59 AY: 2021-22 SEM : V

**COMMON TO ALL BRANCHES**

**MODULE-II: Natural resources, water resource and energy**

- 1 One joule of energy is equivalent to  
(a) 0.2389 calories (b) 23.89 calories (c) 238.9 calories (d) 2.389 calories
2. What is the limitation of solar energy?  
(a) cost of conversion is very high (b) storage of energy is essential energy  
(c) Energy density is low (d) all
3. Wind energy potential of India is around  
(a) 45,000MW (b) 75,000MW (c) 25,000MW (d) 1,00,000 MW
4. The sources of Hydrogen are  
(a) Biomass (b) coal (c) water (d) all
5. Hydrogen can be produced commercially by  
(a) cracking of ammonia (b) electrolysis of water  
(c) Both a and b (d) gasification
6. The device that can directly convert hydrogen energy to electrical energy by reaction with oxygen is known as  
(a) electric cell (b) hydrogen cell (c) oxygen cell (d) fuel cell
7. Solar radiation consists of  
(a) UV (b) visible light (c) infrared (d) all of these
8. Which of the following is not a renewable source of energy  
(a) fossil fuels (b) solar energy (c) tidal wave energy (d) wind energy  
(a) highly polluting (b) high waste disposal cost
9. OTEC (Ocean Thermal Energy conversion ) is an energy technology that converts  
(a) energy in large tides of ocean to generate electricity



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- (b) energy in Ocean waves to generate electricity  
(c) energy in ocean due to thermal gradient to generate electricity  
(d) energy in the fast moving ocean currents to generate electricity
10. Identify the non- renewable source of energy from the following  
a) coal (b) fuel cells (c) wind power (d) wave power
11. Harnessing the wind energy is done by  
(a) wind mill (b) ball mill (c) flour mill (d) pig mill
12. Wind energy generation depends on  
(a) direction of wind (b) velocity of wind (c) humidity (d) precipitation
13. Direct conversion of solar energy is attained by  
(a) Solar photo voltaic System (b) Solar diesel hybrid System  
(c) Solar thermal system (d) solar air heater
14. Hydrogen energy can be tapped through  
(a) heat pumps (b) fuel cells (c) photovoltaic cells (d) gasifiers
15. Which place in India, the tidal energy has been experimented  
(a) Goa (b) Karnataka (c) Kerala (d) Tamilnadu
16. The concept of carbon credit originated from  
summit (b) Kyoto protocol (c) montreal protocol  
d) None of these.
17. The united nation frame work convention on climate change (UNFCCC) is Known as  
a) Kyoto protocol  
b) Vienna convention  
c) Earth summit  
d) None of these.
18. Carbon trading is the process of  
a) Buying and selling permits to emit carbon dioxide  
b) Buying and selling credits to emit carbon dioxide  
c) Both (a) and (b)  
d) None of these
19. The chemicals used as dispersing substances are  
a) Silver iodide
- a) Earth



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- b) Dry ice
  - c) Both (a) and (b)
  - d) None of these
20. Cloud seeding is a type of
- a) Sustainable development
  - b) Weather modification process
  - c) Industrial development
  - d) None of these



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**ASSIGNMENT 3**

SUB: EVS CODE : 18CIV59 AY: 2021-22 SEM : V

**COMMON TO ALL BRANCHES**

**MODULE-III: Environmental Pollution , Waste water Management & Public Health Aspects**

1. Which of the following is a major cause of soil pollution?
  - a) Accidents involving the vehicles that are transporting waste material
  - b) Pesticides and chemical fertilizers from agricultural lands
  - c) Improper solid waste disposal
  - d) All of the above
2. The sound beyond which of the following level can be regarded as a pollutant.
  - a) 40 dB   b) 80 dB   c) 120 dB   d) 150 dB
3. Blaring sounds are known to cause
  - a) Mental distress   b) High cholesterol   c) Neurological problems   d) All of these
4. Noise is
  - a) Loud sound   b) Unwanted sound   c) Constant sound   d) Sound of high frequency
5. Environmental pollution is due to
  - a) Rapid urbanization   b) Deforestation   c) Afforestation   d) A&b
6. Which of the following is air pollutant?
  - a) CO   b) O<sub>2</sub>   c) N<sub>2</sub>   d) All
7. Which of the following are biodegradable pollutants?
  - a) Plastics   b) Domestic sewage   c) Detergent   d) All
8. Which of the following is the source of fly ash?
  - a) Vehicular exhaust   b) Sewage   c) Thermal power plant   d) all
9. Smog is
  - a) Natural Phenomenon   b) Combination of smoke and fog   c) Colorless   d) All of the above
10. Air pollution from automobiles can be controlled by fitting
  - a) Electrostatic precipitator   b) Wet scrubber   c) Catalytic converter   d) All of the above
11. Which of the following statements about carbon monoxide is true?
  - a) Forms complex with hemoglobin   b) Forms complex with leg-hemoglobin
  - b) Form by the incomplete combustion of fossil fuels   d) A and c
12. Which of the following is a secondary air pollutant?





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- a) Carbon Monoxide   b) Sulphur dioxide   c) Ozone   d) Carbon dioxide
13. Which of the following compounds may be toxic to human beings?  
a) Amino acids   b) Polychlorinated bi phenyls   c) Vitamins   d) Proteins
14. The deterioration of life supporting qualities of natural lakes and estuaries is generally caused by excessive fertilization due to effluents rich in,  
a) Toxic metals   b) Nitrogen   c) Silt and grit   d) None of these
15. Water bodies may be deteriorated by,  
a) Aquatic animals   b) Phytoplankton   c) Decomposed vegetables   d) None of these
16. Which of the following processes are anthropogenic source of water pollution?  
a) Industrial processes   b) Use of fertilizers and pesticides in agriculture  
b) Mining processes   d) All of these
17. Which of the following industry generates coloured wastes?  
a) Software Industry   b) Textile industry   c) Biomedical industry   d) None of these
18. Turbidity in water mainly arises from,  
a) pH   b) Dissolved solids   c) Colloidal matter   d) None of these
19. Which of the following is important for the process of eutrophication?  
a) Nitrogen   b) Chlorine   c) Sodium   d) None of these
20. Lead poisoning may cause  
a) Reduction in haemoglobin   b) Kidney damage   c) mental retardation   d) All of these



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**ASSIGNMENT 4**

SUB: EVS CODE : 18CIV59 AY: 2021-22 SEM : V

**COMMON TO ALL BRANCHES**

**MODULE IV: Environmental Pollution and waste management**

1. The pH of acid rain water is  
a) Less than 5.2    b) less than 5.6    c) less than 6.2    d) less than 5.8
2. Acid rain has been increasing day by day due to  
a)Urbanization    b) Industrialization    c) increase in vehicle population    d) None
3. Acid rain effects on  
a)Material    b) plants    c) solid    d) All
4. Which is responsible for ozone depletion?  
a)Methyl bromide    b) CFC's    c) Hydro chlorofluorocarbons    d) All
5. Ozone layer is present in  
a)Troposphere    b) mesosphere    c) Stratosphere    d) Thermosphere
6. Ozone layer thickness is measured in  
a)Centimeters    b) Millimeter    c) Dobson Unit    d) Decibels
7. The international protocol to protect the ozone layer is  
a)Kyoto protocol    b) Basal protocol    c) Montreal protocol    d) Vienna Protocol
8. The Major compound responsible for the ozone layer destruction is  
a)CFC    b) Oxygen    c) Methane    d) Carbon dioxide
9. The steady decline of ozone in the stratosphere is called  
a)Ozone destruction    b) Ozone hole    c)Ozone thinning    d) None



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10. Fluoride though is an effective agent to preventing dental caries has a permissible limits of  
a) 0.5 mg/liter of water b) 1.5 mg/liter of water c) 5 mg/liter of water d) 15 mg/liter of water
11. Skeletal fluorosis is characterised by  
a) Severe and permanent bone joint deformation b) Discolored blackened, mottled teeth  
b) Nervous breakdown d) Anemic
12. Fluorosis is caused due to  
a) No fluoride intake b) Low fluoride intake c) Excessive fluoride intake d) None of the above
13. Two types of point of entry device that remove radon from water  
a) Granular activated carbon (GAC) filter b) The Aeration device c) Both (a and b) d) None of these
14. Effect of toxins on human being results in  
a) Kidney damage b) Liver damage c) Both a and b d) None of these
15. Government of India rejected the draft policy on rehabilitation and approved the land acquisition bill in  
a) 1996 b) 1993 c) 1998 d) 2002
16. Two public sector companies have formulated policies on resettlement and rehabilitation  
a) NTPC and NHPC b) NHPC and Coal India Ltd c) NTPC and BHEL d) NTPC and ONGC
17. The Indian constitution dictates that of resettlement and rehabilitation  
a) Central Government b) Both central and state govt c) Individual union states  
d) None of these
18. Three states which have separate law of rehabilitation



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a) Maharastra.,Madhya Pradesh, and Karnataka

b) Maharastra.,Bihar and Tamil Nadu

c) Maharastra.,Jarkhand and Skkim

d) Maharastra.,Goa and Karnataka

19)Bio accumulation occurs when

A) Heavy metal found in food

b) Organism stores toxicant in fatty issues

C) Organic chemical present in aquatic system d) none of these

20) Which of the following Heavy metal found in food sources such fish can have harmful effects

a) Copper

b) Iron

c) Mercury

d) Tungsten



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**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

**ASSIGNMENT 5**

SUB: EVS CODE : 18CIV59 AY: 2021-22 SEM : V

**COMMON TO ALL BRANCHES**

**Module V: Introduction to GIS and remote sensing and its applications.**

- Q 1). Remote sensing usage which of the following waves in its procedure
- a) Electric field b) sonar waves c) gama rays d) electromagnetic waves
- 2). which of the following is not the principal of remote sensing
- a) interaction of energy with satellite b) electromagnetic energy c) electromagnetic sepctram
  - d) interaction with atmoshpre
- 3). GIS stands for
- a) Geographic information system b) Generic information system
  - c) geological information system d) geographic information sharing
- 4). which of the following statements are true about capabilities of GIS
- a) data capture and preparation b) data management including storage and maintenances
  - c) data manipulation and analysis d) All of these
- 5). "spatial data bases " are also known as
- a) Geo data bases b) Mono data bases c) Concurrent data bases d) None of the above
- 6) The altitudinal distance of Geostationary sattalites from the earth is about
- a) 26000 K.m b) 30000 K.m. c) 36000 K.M d) 44000 K.M.
- 7). the object of photo interpretation is
- a) Identification b) Recognition of objects c) Judging the significance of object d) all of these
- 8). the important goal of EIA is



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- A) Control pollution level b) Resource conservation c) Stock development activities d) provisions of basic need of life.
- 9). EIA can be expanded to  
a) Environment and industrial act b) Environment and impact activities c) Environmental impact assessment d) Environment for important activity.
- 10). EIA is related to  
a) Resource conservation b) Efficient equipment/Process c) Waste minimization d) All of the above
11. EIA is necessary because  
a) development is bad for environment b) There is growing interest in sustainability c) Environmental impact of development are of public interest d) None of the above
- 12). In EIA the base line data describes  
a) the environmental consequence by mapping b) existing Environmental status of the identified study area c) Assessment of risk on the basis proposal d) Demographic and socio-economic data.
- 13). the committee which reviews the EIA and EIM plans reports of a development project in ministry of environment and forest is called  
a) Project assessment committee b) Project Appraisal committee c) Project evaluation committee d) Project estimation committee
- 14). the EMS can be expanded to  
a) environment monetary system b) environment management system c) Environment impact management system d) None of these
- 15). The goals of EMS is  
a) to increase compliances b) to reduce waste c) both (a&b) d) None of these
- 16). Environmental stewardship refers to responsible use and protection of natural environmental through  
a) environmental protection act b) environment information system c) Conservative and sustainable practice d) None of these
- 17). in environmental stewardship, donor is a person is that  
a) help the cause by taking action b) financially help the cause c) work on day to day basis to steer d) None of these



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18). ISO 14001 is the international standard that specifies requirement for

a) Effective environmental management system b) environmental act c) environmental impact

d) None of these

19). which one among the following is not a ISO 14001 requirement

a) Environmental objective and plan for achieving them b) Environmental policy c) Operational control procedure d) None of these.

20). The most widely used standard on which EMS is based

a) ISO9002 b)ISO 1402 c) ISO14001 d) ISO 9001



**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

**Result Analysis**

Sl. No.	Number of students		Percentage of passing
	Appeared	passed	
1.	139	137	98.56

  
Course Teacher

  
Course Coordinator

  
HOD





**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

***Academic Year: 2022-23***

***Semester: ODD***

# **COURSE FILE**

***Planning Part***

## **ENERGY AND ENVIRONMENT (18ME751)**

***Course: BE***

***B.E. in CSE***

***Semester: VII***

***Section: A***

***Name of the Subject Teacher : SHIVASHANKAR B C***

**PRINCIPAL**

Guru Nanak Dev Eng. College, Bidar



# Guru Nanak Dev Engineering College, Bidar

Department of CSE/ISE/EEE/ECE

## Course File

**Sub: Energy and Environment (18ME751)**

**Sem: 7**

**Credit : 3**

**Teaching Hours /week : 3 Lecture hours**

## CONTENTS

### Course Objectives:

1. To explain the fundamentals of energy sources, energy use, energy efficiency, and resulting environmental implications of various energy supplies.
2. To explain the different energy storage systems, energy management, audit and economic analysis
3. To introduce various aspects of environmental pollution and its control.
4. To discuss the causes and remedies related to social issues like global warming, ozone layer depletion, climate change etc.
5. To explain various acts related to prevention and control of pollution of water and air, forest protection act, wild life protection act etc.

### Pre Requisites:

1. Elements of Mechanical Engineering
2. Environmental Studies

### Linkages with other Courses:

1. Environmental studies

### Course Policies and Procedures:

(Expectations from students, Rules for Student Assignments, Assignment Grading System, CIE and Semester End Examinations.)

#### Expectations from student:

1. Students should have the knowledge of pre-requisite
  2. Students should complete all assignments in a time bound manner
- Rules for assignments:** At the end of every module, assignments in the form of question answers will be given and students have submit the same before last date.

#### Assignment Grading System

Each assignment will be evaluated for 10 marks and final score for assignment will be the average marks scored in all the assignments.( Similarly other assignments like seminar, model making has to be evaluated using suitable rubrics)

CIE and Semester End Examinations: As per the VTU regulations.

### Evaluation Policy (It is only indicative, may vary from course to course):

Level of Question	Approximate % of Question
Understanding	70
Apply	20
Analyze / Solve	10
Design	00

  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

# Lesson Plan

Module wise distribution of Classes	Topics	Class Number	Teaching Methodology
	Overview of course, Course Outcome its linkages with other courses and practical applications, expectations from students, Evaluation Policy etc.	1	Interactive Discussion
08	<b>Module 1: Basic Introduction to Energy: Energy and power, forms of energy</b>	2	Interactive Lecture
	primary energy sources, energy flows, world energy production and consumption	3	Interactive Lecture/PPT
	Key energy trends in India: Demand, Electricity, Access to modern energy.	4	Interactive Lecture
	Energy production and trade, Factors affecting India's energy development	5	Interactive Lecture/PPT
	Economy and demographics, Policy and institutional framework	6	Interactive Lecture/PPT
	Energy prices and affordability	7	Interactive Lecture
	Social and environmental aspects,	8	Interactive Lecture/PPT
	Investment	9	Interactive Lecture
	Revision	10	Revision / Quiz
08	<b>Module 2: Energy storage systems: Thermal energy storage methods, Energy saving</b>	11	Interactive Lecture
	Thermal energy storage systems	12	Interactive Lecture / Animated videos
	<b>Energy Management: Principles of Energy Management,</b>	13	Interactive Lecture/PPT
	Energy demand estimation, Energy pricing	14	Interactive Lecture
	<b>Energy Audit: Purpose, Methodology with respect to process Industries</b>	15	Interactive Lecture

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Guru Nanak Dev

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Guru Nanak Dev Engg. College, P. 101

	Characteristic method employed in Certain Energy Intensive Industries	16	Interactive Lecture
	Economic Analysis: Scope	17	Interactive Lecture
	Characterization of an Investment Project	18	Interactive Lecture
	Revision	19	Revision / Quiz
08	Module 3: Environment: Introduction	20	Interactive Lecture
	Multidisciplinary nature of environmental studies	21	Interactive Lecture/PPT
	Definition, scope and importance, Need for public awareness	22	Interactive Lecture
	Ecosystem Concept, Energy flow	23	Interactive Lecture/PPT
	Structure and function of an ecosystem	24	Interactive Lecture
	Food chains, Food webs and ecological pyramids, Forest ecosystem	25	Interactive Lecture/PPT
	Grassland ecosystem, Desert ecosystem	26	Interactive Lecture / animated videos
	Aquatic ecosystems, Ecological succession	27	Interactive Lecture
	Revision	28	Revision / Quiz
08	Module 4: Environmental Pollution: Definition, Cause, effects of environment	29	Interactive Lecture
	control measures of - Air pollution, Water pollution	30	Interactive Lecture
	Soil pollution, Marine pollution	31	Interactive Lecture/PPT
	Noise pollution, Thermal pollution	32	Interactive Lecture/ Animated videos
	Nuclear hazards, Solid waste Management	33	Interactive Lecture/PPT
	Disaster management	34	Interactive



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	Role of an individual in prevention of pollution	35	Lecture Interactive Lecture/PPT
	Pollution case studies	36	Interactive Lecture/ case study
	Revision	37	Revision / Quiz
08	<b>Module 5: Social Issues and the Environment:</b> Climate change	38	Interactive Lecture
	global warming, acid rain, ozone layer depletion	39	Interactive Lecture/PPT
	Nuclear accidents and holocaust. Case Studies	40	Interactive Lecture/PPT
	Wasteland reclamation, Consumerism	41	Interactive Lecture/ Case study
	Issue of waste products	42	Interactive Lecture
	Environment Protection Act, Air (Prevention and Control of Pollution) Act,	43	Interactive Lecture/PPT
	Water (Prevention and control of Pollution) Act,	44	Interactive Lecture/PPT
	Wildlife Protection Act Issues involved in enforcement of environmental legislation	45	Interactive Lecture/PPT
	Revision	46	Revision / Quiz



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### Course Teaching Materials:

Teaching materials such as Notes, PPT, Videos, etc. to be attached

Module No.	Course Teaching Materials
1	Notes
	PPT
	Videos
2	Notes
	PPT
	Videos
3	Notes
	PPT
	Videos
4	Notes
	PPT
	Videos
5	Notes
	PPT
	Videos

### Virtual Laboratory:


#### Question Bank:


1. Module wise Question bank to be enclosed

#### Text Books:

##### List of text books

1. Textbook for Environmental Studies for Undergraduate Courses of all Branches of Higher Education by University grant commission and Bharathi Vidyapeeth Institute of environment education and Research, Pune
2. De, B. K., Energy Management audit & Conservation, 2nd Edition, Vrinda Publication, 2010.

  
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**Reference Books:**

1. Turner, W. C., Doty, S. and Truner, W. C., Energy Management Hand book, 7th edition, Fairmont Press, 2009.
2. Murphy, W. R., Energy Management, Elsevier, 2007.
3. Smith, C. B., Energy Management Principles, Pergamum, 2007
4. Environment pollution control Engineering by C S Rao, New Age International, 2006, reprint 2015, 2nd edition.
5. Environmental studies, by Benny Joseph, Tata McGraw Hill, 2008, 2nd edition 2008.

**Journals:** 1.Elsevier

2. Environmental Sciences Journals

**Web Resources:** Nil

VTU E-learning Resources

Blogs:Environment System

NPTEL/MOOCs: Environment System

**Software: Research Organizations / Industries in the field:**

**Course Outcomes:**

Students will be able to

CO1: Explain the various forms of energy and sources, energy flows and world energy scenario

CO2: Explain the different energy storage systems, energy management, audit and economic analysis

CO3: Analyse the various environment eco systems and its need for public awareness.

CO4: Explain the various types of environmental pollution and their effects on environment

CO5: Discuss the social issues of the environment pollution with associated acts.



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**CO-PO Matrix:**

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	1				1						1		
CO2	3	1				1						1		
CO3	2	2				1	3					1		
CO4	2					1	3					1		
CO5	2					1	3					1		
Avg.	2.4	1.3				1	3					1		

Prepared by  
Prof Shivashankar C

Verified by

Approved by HOD/PAC Member

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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**MECHANICAL ENGINEERING DEPARTMENT**  
**ENERGY AND ENVIRONMENT (18ME751) VII SEM, MECH. ENGG.**

Course outcome No.	COs with Performance Criteria	Time allotted in hours	PO's	PSO's
C705.1	Explain the various forms of energy and sources, energy flows and world energy scenario.	08	1,2,6,12	--
PC1.1	Explain the concept of primary energy resources, forms of energy and energy flow.	04	1,6	--
PC1.2	Analyze the world energy production and consumption with statistical data.	02	2	--
PC1.3	Explain Key energy trends in India and Factors affecting India's energy development.	02	1	--
C705.2	Explain the different energy storage systems, energy management, energy audit and economic analysis.	08	1,2,6,12	--
PC2.1	Explain the Thermal energy storage methods, Energy saving and Thermal energy storage systems	04	1,6	--
PC2.2	Explain Principles of Energy Management, Energy demand estimation, Energy pricing	02	1,6	--
PC2.3	Explain the purpose of Audit and different methods of energy Audit with respect to different types of industries.	02	1,2,6	--
C705.3	Analyse the various environment eco systems and its need for public awareness.	08	1,2,6,7,12	--
PC3.1	Explain the fundamental aspects and characteristics of environment	03	1,6	--
PC3.2	Justify the need of awareness about environment for public	01	1,7	--
PC3.3	Explain the structure and function of different types of ecosystems	04	1,6	--
C705.4	Explain the various types of environmental pollution and analyze their effects on environment.	08	1,6,7,12	--
PC4.1	Explain the causes, effects and control measures of air pollution, water pollution, and soil pollution on environment.	02	1,6,7	--
PC4.2	Explain the causes, effects and control measures of marine pollution, noise pollution and thermal pollution and nuclear hazards on environment.	02	1,6,7	--
PC4.3	Explain Disaster Management and different methods of solid waste management	02	1,6,7	--

PC4.4	Analyze various case studies on environmental pollution	02	1,7	--
C705.5	Discuss the social issues of the environment pollution with associated acts of prevention and control	08	1,6,7,12	--
PC5.1	Explain the effects of global warming, climate change, acid rain, ozone layer depletion etc.	02	1,6	--
PC5.2	Explain the effects of nuclear accidents and holocaust and discuss various issues like wasteland reclamation, Consumerism and waste products Case Studies.	02	1,6	--
PC5.3	Explain Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act,	02	1,6,7	--
PC5.4	Explain Wildlife Protection Act, Forest Conservation Act and Issues involved in enforcement of environmental legislation.	02	1,6,7	--

#### Course Articulation Matrix:-

ENERGY AND ENVIRONMENT 18ME751	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
C705.1	3	1				1						1		
C705.2	3	1				1						1		
C705.3	2	2				1	3					1		
C705.4	2					1	3					1		
C705.5	2					1	3					1		
Average	2.4	1.3				1	3					1		

Prepared by  
Prof. Shivashankar C

Verified by

Approved by HOD/PAC Member

**Principal**  
Guru Nanak Dev Engg. College, Bidar



## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

### VISION OF THE INSTITUTE

To be a premier technological institution that fosters humanity, ethics and excellence in education and research towards inspiring and developing future torch bearers.

### MISSION OF THE INSTITUTE

<b>M1</b>	To impart quality educational experience and technical skills to students that enables them to become leaders in their chosen professions.
<b>M2</b>	To nurture scientific temperament and promote research and development activities among faculty and students.
<b>M3</b>	To inculcate students with an ethical and human values, so as to have big picture of societal development in their future career.
<b>M4</b>	To provide service to industries and communities through educational, technical, and professional activities.

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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

### VISION OF THE DEPARTMENT

To be a destination of choice for the aspiring students in the field of Computer Science and Engineering known for its **quality teaching and learning process**, research and contribution to the society

### MISSION OF THE DEPARTMENT

M1	Provide state-of-art education in the field of Computer Science and Engineering. ( <b>Knowledge and Skills</b> )
M2	Promote the research culture and Lifelong learning attitude to meet the changing needs of Industry. ( <b>Research and Life-long Learning</b> )
M3	Inculcate professionalism and ethical values among the students to become a responsible citizen. ( <b>Professionalism and Ethics</b> )
M4	Provide IT solutions to the common societal problems ( <b>Contribution to the society</b> ).

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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

### PROGRAM EDUCATIONAL OBJECTIVES

PEO	Statement
PEO1	Will be able to pursue successful career by employing Computer Science and Engineering principles and tools to solve real world problems ( <b>Fundamental Knowledge and Skills</b> ).
PEO2	Will be able to exhibit competent problem-solving ability in contemporary technologies of computer science and engineering to develop suitable software and hardware solutions ( <b>Competency for Real World</b> ).
PEO3	Will be able to use professional skills with human values for prosperity of organization and society at large ( <b>Ethics and Professionalism</b> ).

### PROGRAM SPECIFIC OUTCOMES

PSO's	Program Educational Objectives
PSO 1	Develop a suitable computing environment using fundamental knowledge of computer architecture, organization, embedded systems and networking.
PSO 2	Develop Software Systems using good software Engineering and database design principles.

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# **GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

## **DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

### **PROGRAM OUTCOMES (POs)**

**Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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B. E. MECHANICAL ENGINEERING			
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)			
SEMESTER – VI			
Professional Elective 1			
ENERGY AND ENVIRONMENT			
Course Code	18ME751	CIE Marks	40
Teaching Hours / Week (L:T:P)	3:0:0	SEE Marks	60
Credits	03	Exam Hours	03
<b>Course Learning Objectives:</b> <ul style="list-style-type: none"> <li>To understand the fundamentals of energy sources, energy use, energy efficiency, and resulting environmental implications of various energy supplies.</li> <li>To introduce various aspects of environmental pollution and its control.</li> <li>To understand the causes and remedies related to social issues like global warming, ozone layer depletion, climate change etc.</li> <li>To introduce various acts related to prevention and control of pollution of water and air, forest protection act, wild life protection act etc.</li> </ul>			
<b>Module-1</b>			
Basic Introduction to Energy: Energy and power, forms of energy, primary energy sources, energy flows, world energy production and consumption, Key energy trends in India: Demand, Electricity, Access to modern energy, Energy production and trade, Factors affecting India's energy development: Economy and demographics Policy and institutional framework, Energy prices and affordability, Social and environmental aspects, Investment.			
<b>Module-2</b>			
Energy storage systems: Thermal energy storage methods, Energy saving, Thermal energy storage systems Energy Management: Principles of Energy Management, Energy demand estimation, Energy pricing Energy Audit: Purpose, Methodology with respect to process Industries, Characteristic method employed in <u>Certain Energy Intensive Industries</u>			
<b>Module-3</b>			
Environment: Introduction, Multidisciplinary nature of environmental studies- Definition, scope and importance, Need for public awareness. Ecosystem: Concept, Energy flow, Structure and function of an ecosystem. Food chains, food webs and ecological pyramids, Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystems, Ecological succession.			
<b>Module-4</b>			
Environmental Pollution: Definition, Cause, effects and control measures of - Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards, Solid waste Management, Disaster management Role of an individual in prevention of pollution, Pollution case studies.			
<b>Module-5</b>			
Social Issues and the Environment: Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies. Wasteland reclamation, Consumerism and waste products, Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation.			
<b>Group assignments:</b> Assignments related to e-waste management; Municipal solid waste management; Air pollution control systems; Water treatment systems; Wastewater treatment plants; Solar heating systems; Solar power plants; Thermal power plants; Hydroelectric power plants; Biofuels; Environmental status assessments; Energy status assessments etc.			
<b>Course Outcomes:</b> At the end of the course, the student will be able to:			

  
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- CO1: Understand energy scenario, energy sources and their utilization.  
 CO2: Understand various methods of energy storage, energy management and economic analysis.  
 CO3: Analyse the awareness about environment and eco system.  
 CO4: Understand the environment pollution along with social issues and acts.

**Question paper pattern:**

- The question paper will have ten full questions carrying equal marks.
- Each full question will be for 20 marks.
- There will be two full questions (with a maximum of four sub- questions) from each module.
- Each full question will have sub- question covering all the topics under a module.
- The students will have to answer five full questions, selecting one full question from each module.

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher	Edition and Year
<b>Textbook/s</b>				
1	Textbook for Environmental Studies for Undergraduate Courses of all Branches of Higher Education		University grant commission and Bharathi Vidyapeeth Institute of environment education and Research, Pune	
2	Energy Management Audit & Conservation- for Module 2	Barun Kumar De	Vrinda Publication	2nd Edition 2010
<b>Reference Books</b>				
1	Energy Management Hand book	Turner, W. C., Doty, S. and Truner, W. C	Fairmont Press	7 <sup>th</sup> Edition 2009
2	Energy Management	Murphy, W. R	Elsevier	2007
3	Energy Management Principles	Smith, C. B	Pergamum	2007
4	Environment pollution control Engineering	C S Rao	New Age International	reprint 2015, 2nd edition
5	Environmental studies	Benny Joseph	Tata McGraw Hill	2nd edition 2008

  
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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

***Academic Year: 2022-23***

***Semester: ODD***

# **COURSE FILE**

***Execution Part***

## **ENERGY AND ENVIRONMENT**

**(18EME751)**

***Course: BE***

***B.E. in CSE***

***Semester: VII***

***Section: A***

***Name of the Subject Teacher : SHIVASHANKAR B C***

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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES CSE**

ACA/R / 15  
Rev : 00  
Date: 05-12-2021  
Name of the Teacher Shivashakar DC  
Name of the Reviewer: \_\_\_\_\_

Academic Year: 2022-23  
Semester: 7  
Section: A  
Subject: E&E  
W.E.F: 19/09/2022

**CSE**  
**Department of Applied Sciences & Humanities**  
**Class Time table**

Time/ Days	9:00AM- 10:100AM	10: 00AM- 11: 00AM	11: 00AM- 12: 00PM	12: 00PM- 1: 00PM	2: 00 PM-3: 00 PM	3: 00PM- 4: 00 PM	4: 00 PM- 5: 00 PM
Period	1	2	3	4	5	6	7
Monday	UTD	AIML	cybb graphy	E&E	Big Data	UTD	—
Tuesday	Big Data	AIML	"	E&E	UTD	AIML	—
Wednesday	← AIML	Lab	→	AIML	E&E	cybbgraph	Big Data
Thursday	← AIML	Lab	→	cybbgraph	Big Data	AIML	UTD
Friday	Big Data	UTD	cybbgraph	—	← AIML	Lab	→
Saturday	—	—	—	—	—	—	—

coordinator

Time To Be  
conducted

*Shan*

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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 16	Department of Mechanical Engineering	Academic Year: 2022-23
Rev : 00		Semester: VII
Date: 1/02/2016	Faculty time table	Section: A
Name of the Teacher: Shivashankar B C		Subject: E and E & OM

Time/ Days	9:00AM- 10:100AM	10: 00AM-11: 00AM	11: 00AM-12: 00PM	12: 00PM- 1: 00PM	2: 00 PM-3: 00 PM	3: 00PM- 4: 00 PM	4: 00 PM-5: 00 PM
Period	1	2	3	4	5	6	7
Monday				E&E (VII CSE)			
Tuesday				E&E (VII CSE)		OM	
Wednesday			OM (V ME)		E&E (VII CSE)	(V ME)	
Thursday					ECE LAB		
Friday	OM (V ME)				ECE LAB		
Saturday							

Time-table Co-Ordinator

HOD

Principal

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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR-585403.

(Approved by AICTE, New Delhi; Recognised by Govt. Of Karnataka ; Affiliated to VTU, Belagavi)

## Mechanical Engineering Department

### Vision:

To be recognized as a center for innovative and prominent skill-based education in the field of Mechanical Engineering.

### Mission:

M1: Provide quality education and technical skills in the field of Mechanical Engineering and allied areas at undergraduate and postgraduate level.

M2: Promote and support research culture and life-long learning required for a successful professional career.

M3: Provide students with an environment of excellence, entrepreneurship, leadership, ethics and human approach with focus on common societal problems for a long productive career.

## ACADEMIC CALENDAR

ACA/R/01

REV : 00

Date : 07.09.2022

Academic Year : 2022-23

Semester : ODD

B.E. III, V and VII SEMESTER

Week No.	Mon	Tue	Wed	Thu	Fri	Sat	Sun	ACTIVITIES / EVENTS	DATES	Important Dates
<b>SEPTEMBER</b>										
I	19	20	21	22	23	24	25			Commencement of ODD Semester
II	26	27	28	29	30					VII V III
<b>OCTOBER</b>										
II						1	2	Gandhi Jayanthi	02/10/2022	VII V III
III	3	4	5	6	7	8	9	Mahanavami, Ayudhapooja Vijay Dashmi	4/10/2022 5/10/2022	21.08.2022 to 17.09.2022 11.10.2022 to 30.10.2022
IV	10	11	12	13	14	15	16			Commencement of Classes
V	17	18	19	20	21	22	23	Project Review I	21/10/2022 & 22/10/2022	VII V III
VI	24	25	26	27	28	29	30	Naraka Chaturadashi Bali Padyami Sports Week	24/10/2022 26/10/2022, 25/10/22 to 31/10/22	19.09.2022 10.10.2022 31.10.2022
VII	31							CIE Test -I for semester VII	31/10/2022 to 6/11/2022	Last Working Day of ODD Semester
<b>NOVEMBER</b>										
VII		1	2	3	4	5	6	Kannada Rajyotsava	01/11/2022	VII V III
VIII	7	8	9	10	11	12	13	Project phase I - Review II Guru Nanak Jyanathi Kanakadasa Jayanti Parents meeting - I (VII Sem)	9/11/22 & 10/11/22 8/11/2022 11/11/2022 12/11/2022	Total No. of Working Days
IX	14	15	16	17	18	19	20	CIE Test -I for semester V	14/11/2022 to 19/11/2022	76 82 77
X	21	22	23	24	25	26	27	Parents meeting - I (V Sem)	26/11/2022	Practical Examinations
XI	28	29	30					CIE Test -II for semester VII	28/11/2022 to 3/12/2022	VII V III
<b>DECEMBER</b>										
XI				1	2	3	4	MESA Activity Techno Vision	02/12/22 & 03/12/22 09/12/22 to 10/12/22, 10/12/2022	03.01.2023 to 13.01.2023 30.01.2023 to 09.02.2023 13.02.2023 to 21.02.2023
XII	5	6	7	8	9	10	11	Parents meeting - II (VII Sem)		Theory Examinations
XIII	12	13	14	15	16	17	18			VII V III
XIV	19	20	21	22	23	24	25	{Project phase I - Review III, CIE Test -I for semester III & CIE Test -II for semester V } Christmas	23/12/22 & 24/12/22 {19/12/2022 to 24/12/2022 } 25/12/2022	16.01.2023 to 15.02.2023 13.02.2023 to 18.03.2023 22.02.2023 to 22.03.2023
XV	26	27	28	29	30	31		Founder's Day CIE Test -III for semester VII Parents meeting - II (V Sem) & Parents meeting - I (III Sem)	26/12/2022 27/12/2022 to 29/12/2022 31/12/2022	
<b>JANUARY</b>										
XV							1			Note
XVI	2	3	4	5	6	7	8			1. Lab CIE Test shall be conducted during the last Regular lab class of the semester
XVII	9	10	11	12	13	14	15	Makar Sankranti	15/01/2023	
XVIII	16	17	18	19	20	21	22	CIE Test -III for semester V CIE Test -II for semester III	19/01/2023 to 21/01/2023 16/01/2023 to 21/01/2023	Commencement of Even Semester
XIX	23	24	25	26	27	28	29	Parents meeting - II (III Sem) Republic Day	28/01/2023 26/01/2023	VIII VI IV
XX	30	31								20.02.2023 20.03.2023 17.04.2023
<b>FEBRUARY</b>										
XX			1	2	3	4	5			
XXI	6	7	8	9	10	11	12	CIE Test -III for semester III	06/02/2023 to 08/02/2023	

*[Signature]*

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*[Signature]*



ACA/R / 17

Rev: 00

Date: 01.02.2016

Subject: E and E

Department of Mechanical Engineering

Course Delivery Details

Academic Year: 2022-2023

Semester : VII

Section : A

W.E.F: 19/09/2022

Period Number	Topic / Experiment	Executed Date	Remarks
1	Overview of course, Course Outcome its linkages with other courses and practical applications, expectations from students, Evaluation Policy etc	19/9/2022	Interactive Discussions
2	Module 1: Basic Introduction to Energy: Energy and power, forms of energy	20/9/22	Interactive Lecture
3	primary energy sources, energy flows, world energy production and consumption	21/9/22	Interactive Lecture
4	Key energy trends in India: Demand, Electricity, Access to modern energy.	26/9/22	Interactive Lecture
5	Energy production and trade, Factors affecting India's energy development	27/9/22	Interactive Lecture
6	Economy and demographics, Policy and institutional framework	28/9/22	Animated video on world's energy demand
7	Energy prices and affordability	03/10/22	Interactive Lecture
8	Social and environmental aspects	03/10/22	Interactive Lecture
9	Investment	10/10/22	Interactive Discussion
10	Revision	11/10/22	Interactive Discussion
11	Module 2: Energy storage systems: Thermal energy storage	12/10/22	Interactive Lecture

*[Signature]*

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Period Number	Topic / Experiment	Executed Date	Remarks
12	methods, Energy saving Thermal energy storage systems		
13	<b>Energy Management: Principles of Energy Management</b>	14/10/22	Interactive Lecture
14	Energy demand estimation, Energy pricing	15/10/22	Interactive "
15	<b>Energy Audit: Purpose, Methodology with respect to process Industries</b>	17/10/22	Interactive Discussion
16	Characteristic method employed in Certain Energy Intensive Industries	18/10/22	Interactive Discussion
17	<b>Economic Analysis: Scope</b>	19/10/22	Interactive Lecture
18	Characterization of an Investment Project	19/10/22	Interactive Lecture
19	Revision	21/10/22	Interactive Discussion
20	<b>Module 3: Environment: Introduction</b>	22/10/22	Interactive Discussion
21	Multidisciplinary nature of environmental studies	29/10/22	Interactive Lecture
22	Definition, scope and importance, Need for public awareness	09/11/22	Animated Video on awareness on environment
23	<b>Ecosystem</b> Concept, Energy flow	14/11/22	Interactive Lecture
24	Structure and function of an ecosystem	15/11/22	Interactive Lecture
		16/11/22	Animated video on ecosystem

*Shanvi*

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Period Number	Topic / Experiment	Executed Date	Remarks
25	Food chains, Food webs and ecological pyramids, Forest ecosystem	16/11/22	Animated video on forest ecosystem
26	Grassland ecosystem, Desert ecosystem	18/11/22	Animated video on grassland
27	Aquatic ecosystems, Ecological succession	18/11/22	Animated video on Aquatic ecosystem
28	Revision	21/11/22	Interactive Discussion
29	Module 4: Environmental Pollution: Definition, Cause and effects of environment pollution	22/11/22	Interactive Lecture
30	control measures of - Air pollution, Water pollution	23/11/22	Interactive Lecture
31	Soil pollution, Marine pollution	23/11/22	Interactive Lecture
32	Noise pollution, Thermal pollution	05/12/22	Interactive Lecture
33	Nuclear hazards, Solid waste Management	05/12/22	Interactive Lecture
34	Disaster management	06/12/22	Interactive Lecture
35	Role of an individual in prevention of pollution	06/12/22	Interactive Lecture
36	Pollution case studies	07/12/22	Interactive Discussion on case studies
37	Revision	07/12/22	Interactive Discussion
38	Module 5: Social Issues and the Environment: Climate change	12/12/22	Interactive Lecture

*Sharma*

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Period Number	Topic / Experiment	Executed Date	Remarks
39	global warming, acid rain, ozone layer depletion		
40	Nuclear accidents and holocaust. Case Studies	12/12/22	Interactive Lecture
41	Wasteland reclamation, Consumerism	13/12/22	Interactive Discussion
42	Issue of waste products	13/12/22	Interactive Lecture
43	Environment Protection Act, Air (Prevention and Control of Pollution) Act	14/12/22	Interactive Lecture
44	Water (Prevention and control of Pollution) Act	19/12/22	Interactive Lecture
45	Wildlife Protection Act Issues involved in enforcement of environmental legislation	20/12/22	Interactive Lecture
46	Revision	21/12/22	Interactive Lecture
		28/12/22	Interactive Discussion

Course Teacher : Shivashankar B C

Date & Sign.....  
30/12/22

Course Coordinator: Shivashankar B C

Date & Sign.....  
30/12/22

Approved by: HOD/RAC

Date & Sign.....  
30/12/22



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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 18	Department of Mechanical Engineering	Academic Year: 2022-23
Rev: 00		Semester: VII
Date: 01.02.2016	Review of Lesson Plan	Section: A
		Subject: Eand E

## Review of lesson plan

Review - I	5 <sup>th</sup> Week	Date of Review: 20/10/2022
Report by Subject Teacher	Remarks by HOD	
Syllabus covered as per plan		Verified & Confirmed

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	5 <sup>th</sup> Week	Date: 20/10/2022 Time: 2 to 3pm	Students were asked to provide notes on Module 1 & 2 and VTU Q&A solution & asked to solve problem on Economics	Need to provide notes to students & need to solve problems	Provide notes.
			2. Self-Realized Points	Action Required	Remarks by HOD
			As environment issue is more in India, public awareness among students is essential	Students should read newspaper & try to practice something like group bees, etc.	Make the efforts to sensitise

Any amendments to the lesson plan required

— No —

Details of action taken: Notes of Module 1 & 2 were supplied & solved problems on energy economy

Signature of the faculty with date:.....

29/10/2022

Signature of the HOD with date

20/10/22

  
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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 19 Rev : 00	Department of Computer Science and Engineering	Academic Year: 2022-23
Date: 01.02.2016	List of Students and their Performance in CIE and corrective action taken	Semester: VI Section : A
		Subject: Eand E (18ME751)

Date of CIE Test I: 05/11/2022 II: 02/12/2022 III: 30/12/2022

Sl. No	Univ. Seat No.	Name of the student	CIE Marks scored (Max. Marks : 30 )			Avg. Marks ( ) a	Marks scored in activity / Assignment (Max. Marks) 10	Total Max. Marks : (40 ) a + b	Remarks on performance at the end of CIE test CIE-1, CIE-2, CIE-3/ Remarks	Action taken as per remarks
1	3GN18CS002	ACHARI SANTOSH	CIE 1	CIE 2	CIE 3	22	10	32		
2	3GN18CS008	AKHILESH	19	26	24	23	10	33		
3	3GN18CS012	AMBIKA	23	24	25	24	10	34		
4	3GN18CS039	KALYAN KUMAR	23	24	24	24	7	31		
5	3GN18CS047	M AKASHKUMAR	14	14	15	15	9	24	poor performance in CIE-1, CIE-2, CIE-3	counselling directed to attend class regularly

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15	3GN19CS007	AKSHATA BHALKE	12	20	22	18	07	25	poor performance in CIE-1	directed her to attend class regularly & study hard
16	3GN19CS008	ALEENA JOY	21	27	27	25	10	35		
17	3GN19CS009	AMAN PATIL	10	12	12	12	07	19	poor performance in CIE-1 CIE-2 CIE-3	counselling & asked to be regular for academic activity
18	3GN19CS010	AMISH BEMELKHEDKAR	25	26	27	26	10	36		
19	3GN19CS011	AMULYA RATNA	27	27	27	27	10	37		
20	3GN19CS012	ANAMIKA	15	21	24	20	10	30	poor performance in CIE-1	encouraged to study regular &
21	3GN19CS013	ANJALI JAINAPUR	20	21	24	22	10	32		
22	3GN19CS014	ANKUSH KANJIKAR	23	27	24	25	07	32		
23	3GN19CS015	ARUN	20	27	26	25	08	33		

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24	3GN19CS016	ASFA SHARIYA	23	25	26	25	10	35		
25	3GN19CS018	B SHIVANI	26	24	29	27	10	37		
26	3GN19CS019	BHAVANA	21	23	26	24	10	34		
27	3GN19CS020	BHAVANESHWARI	28	29	29	29	10	39		
28	3GN19CS021	BHAVANI	24	28	28	27	10	37		
29	3GN19CS022	BOROLE ABHIJEET	16	21	23	20	10	30	poor performance in CIE-1	counselled the student & asked to be sincere
30	3GN19CS023	CHAITANYA CHAPTE	28	27	27	28	10	38		
31	3GN19CS024	CHETAN	18	25	26	23	10	33		
32	3GN19CS025	DAIVASHALA	19	26	26	24	10	34		

*Shari*

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33	3GN19CS026	FAIZA MUNAM	15	24	26	22	07	29	poor performance in CIE-1	Asked to study regular
34	3GN19CS027	GANESH	19	24	24	23	10	33		
35	3GN19CS028	GOLDEN KUMAR	24	28	27	27	10	37		
36	3GN19CS029	GURPREET SINGH	18	20	20	20	07	27		
37	3GN19CS030	HASAN	24	24	25	25	10	35		
38	3GN19CS031	ISHPREET KAUR	20	29	30	27	10	37		
39	3GN19CS032	JASMEET SINGH	10	19	17	16	09	25	poor performance in CIE-1 poor performance in CIE-3	Asked to study regular Encouraged student to study hard
40	3GN19CS033	KRUPA DHANASHREE	20	27	26	25	10	35		
41	3GN19CS034	M A MUQTADIR	0	18	12	10	09	19	very poor performance in CIE-1 poor performance in CIE-3	Asked to study hard & attend class regularly. Encouraged student

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42	3GN19CS035	MAHEK SULTANA	26	29	29	28	09	37		
43	3GN19CS036	MAKRAND SINGH BAL	09	26	15	17	07	24	poor performance in CIE-1 poor performance in CIE-1	Asked to study regular Asked to be punished
44	3GN19CS037	MALIHA NISHAT	20	26	25	24	07	31		
45	3GN19CS039	MD IRSHAD HUSSAIN	18	25	21	22	09	31		
46	3GN19CS040	MD MAQSOOD ALI	20	21	00	14	07	21	got zero marks in CIE-3	Encouraged to study hard
47	3GN19CS038	MASROOR FATIMA	28	27	27	28	10	38		
48	3GN19CS041	MD NOUMAN ALI KHAN	28	17	00	15	07	22	got zero marks in CIE-2 CIE-3	counselled student to be sincere
49	3GN19CS042	MD SAQLAIN SAEED	16	21	20	19	07	26	counselled got poor marks in CIE-1	Counselled
50	3GN19CS043	MD SHAKEEL AHMED	06	26	20	18	07	25	poor performance in CIE-1	counselled the student

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51	3GN19CS044	MD SOHEB ALI	18	20	12	17	02	19	poor performance in CIE-1	counselled the student
52	3GN19CS045	MD WAJID ALI	24	26	24	25	10	35		
53	3GN19CS046	MEGHA MAKTEDAR	00	20	27	16	10	26	got zero marks in CIE-1	Encouraged to study hard
54	3GN19CS047	MEGHARANI	26	27	26	27	10	37		
55	3GN19CS048	MIRZA MAAZ BAIG	12	24	23	20	10	30	poor performance in CIE-1	counselled
56	3GN19CS049	MOHD AKIFUDDIN	23	27	25	25	10	15		
57	3GN19CS050	MOHD ARBAZ	17	24	21	21	07	28	poor performance in CIE-1	counselled student to study hard
58	3GN19CS051	MOHD. MAHROOF ALI	18	26	24	23	10	33		
59	3GN19CS053	NABISHAB	24	26	26	26	10	36		

*Shariq*

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60	3GN19CS054	NAGESH	24	21	24	23	10	33		
61	3GN19CS055	NAGESHWARI	17	18	27	21	10	31		
62	3GN19CS056	NAGMA SHAHEEN	26	24	27	26	10	36		
63	3GN19CS057	NAJIMA BEGUM	14	26	26	22	10	32	got poor performance in CIE-1	Encouraged to study hard
64	3GN19CS058	NAZIYA SAHER	20	26	25	24	10	34		
65	3GN19CS059	NEHA MASHETTY	18	28	26	24	07	31		
66	3GN19CS060	NIKITA	24	24	25	25	10	35		
67	3GN19CS082	SANJANA	26	27	29	28	10	38		
68	3GN19CS084	SHABNAM FATIMA	26	27	25	26	10	36		

*Shaw*

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69	3GN19CS101	SOWMYA BHOOSA	24	26	26	26	10	36	
70	3GN19CS107	SYEDA RUMANA SHIREEN	24	25	27	26	10	36	

  
Signature of Faculty

Date 09/01/2023

  
Signature of HOD

Date 01/11/23



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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 20	Department of Mechanical Engineering	Academic Year: 2022-23
Rev: 00		Semester / section: VII/A
Date: 01.02.2016		Subject: Eand E

## Second Review of Lesson Plan

Review – II	11 <sup>th</sup> Week	Date of Review: 30/11/2022
Report by Subject Teacher	Remarks by HOD	
syllabus covered as per plan	Confirmed	

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	11 <sup>th</sup> Week	Date: 30/11/22 Time: 2 to 3 pm	students were asked to explain case studies on pollution & Nuclear hazards	Need to explain case studies	Explain Case studies
			2. Self-Realized Points	Action Required	Remarks by HOD
			As pollution issue is more in India, public awareness among student is essential	students should grow more trees, stop vehicle at signals, keep vehicle in good condition	Make Students aware about importance of environmental protection & Sustainability

Any amendments to the lesson plan required

Details of action taken: explained case studies in detail on pollution & Nuclear hazards

Signature of the faculty with date: 01/12/2022

Signature of the HOD with date

  
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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 21

Rev: 00

Date: 01.02.2016

Department of Mechanical Engineering

Third Review of Lesson Plan

Academic Year: 2022-23

Semester / section: VII/A

Subject: Eand E

## Third Review of Lesson Plan

Review – III	16 <sup>th</sup> Week	Date of Review: 30/12/2022
Report by Subject Teacher	Remarks by HOD	
Syllabus covered as per plan		Syllabus Completely covered as per plan & B confirmed.

## Review by the course teacher with the class

Sl. No.			1. Suggestions from the Students	Action Required	Remarks by HOD
1	16 <sup>th</sup> Week	Date: 30/12/22 Time: 2 to 3 pm	Students were asked to provide notes on module 4 & module-5	Need to supply notes	Supply structured notes.
			2. Self Realized Points	Action Required	Remarks by HOD
			waste disposal is a big problem & issue in India	Asked students give ideas to solve waste management issue	Instructed the students to give ideas for solid waste management

Any amendments to the lesson plan required —

Details of action taken:: supplied notes on module - 4 & 5

31/12/2022

Principal  
Guru Nanak Dev Engg. College Bidar

30/12/22



GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 22	Department of Mechanical Engineering	Academic Year: 2022-23
Rev: 00		Semester / section: VII/A
Date:		Subject: E and E

Lesson plan final review

(After University Exam)

1. Adequacy of time for coverage of syllabus. *Sufficient*
2. Suggestions regarding change in syllabus including updating as per latest Technology  
*NO*
3. Suggestions regarding change of books. *NO*
4. Suggestions regarding more emphasis on certain topics.  
*solid waste management, solar vehicles, Awareness among people about pollution issues*

Date: *01/02/2023*

*[Signature]*  
Signature of Faculty

Remarks by HOD *More emphasis may be given on the topics mentioned above -*

Date: *01/2/23*

*[Signature]*  
Signature of HOD

*[Signature]*

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Guru Nanak Dev



USN

[illegible]

**Seventh Semester B.E. Degree Examination, Jan./Feb. 2023**  
**Energy and Environment**

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions, choosing ONE full question from each module.**

## Module-1

1. a. Differentiate between Energy and Power. (04 Marks)
- b. Explain different forms of Energy. (06 Marks)
- c. Explain the key trend in India Energy Scenario. (10 Marks)

OR

- 2 a. List the factors affecting India's Energy Development. (06 Marks)  
b. Explain the demographic policy of Energy in India. (06 Marks)  
c. Explain Energy process and affordability. (08 Marks)

## Module-2

- 3 a. Explain the necessity of Thermal Energy Storage system with suitable examples. (10 Marks)
- b. Explain any Two Mechanical Energy storage systems with neat diagram. (10 Marks)

OR

4. a. Define Energy Management. Explain the Principles of Energy Management. (10 Marks)  
b. Explain the type of Pre – audit and Detailed audit. (10 Marks)

### Module-3

5. a. What is need for studying Environmental issues? (06 Marks)  
b. What is the scope of Environmental education? (06 Marks)  
c. How would Environmental awareness help to protect our Environment? (08 Marks)

**OR**

- 6 a. Write a short notes on : (10 Marks)  
 i) Tropical rain forest      ii) Savannas      iii) Arctic Tundra.  
 b. What are the Ecological pyramids? Explain why some of these pyramids are upright while others are inverted in different ecosystem. (10 Marks)

## Module-4

7. a. Briefly describe the sources, effects and control of noise pollution. (10 Marks)  
b. What are the natural and man made pollutants that cause Air pollution? (10 Marks)

**OR**

- 8 a. Write a short note on : (10 Marks)  
 i) Bhopal gas tragedy ii) Love canal tragedy.  
 b. How can you as an individual , prevent environmental pollution? Why such an effort at individual level is important? (10 Marks)

1 of 2

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**Important Note :**

1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg,  $42+8=50$ , will be treated as malpractice.

USN

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## Seventh Semester B.E. Degree Examination, Feb./Mar. 2022

### Energy and Environment

Max. Marks: 100

Time: 3 hrs.

**Note: Answer any FIVE full questions, choosing ONE full question from each module.**

#### Module-1

- 1 a. List and explain different forms of Energy. (10 Marks)
- b. Explain briefly the factors affecting India's Energy development. (10 Marks)

**OR**

- 2 a. Discuss briefly the Demand and Consumption of coal in India. (10 Marks)
- b. Explain the various key Energy trends in India. (10 Marks)

#### Module-2

- 3 a. Explain various Thermal Storage Systems. (10 Marks)
- b. Explain the principles of Energy Management System. (10 Marks)

**OR**

- 4 a. Define Energy Audit and explain different phases involved in detailed Energy Audit Methodology. (10 Marks)
- b. What is Energy Management? Explain Energy Management System and Energy Management Clarified Objectives. (10 Marks)

#### Module-3

- 5 a. What is Environment? Explain its Multidisciplinary Nature. (10 Marks)
- b. Explain Scope and importance of Environment for Public awareness. (10 Marks)

**OR**

- 6 a. Explain structure and functions of Ecosystems. (10 Marks)
- b. Write a short note on : i) Ecological Pyramid ii) Forest Ecosystem. (10 Marks)

#### Module-4

- 7 a. Discuss the causes, effects and control measures of Water Pollution. (10 Marks)
- b. Discuss Solid Waste Management Techniques. (10 Marks)

**OR**

- 8 a. Explain the causes, effects and control measures of Soil Pollution. (10 Marks)
- b. Discuss the role of an Individuals in Preventions of Pollutions. (10 Marks)

#### Module-5

- 9 a. Write a note on : Ozone Layer Depletion. (10 Marks)
- b. What are the Regulation governing for Water Pollution Prevention Act? (10 Marks)

**OR**

- 10 a. Write a short note on : i) Global warming ii) Acid rain. (10 Marks)
- b. Explain the needs for Reclaiming the wasteland and its development. (10 Marks)

\* \* \*

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Guru Nanak Dev

Important Note : 1. On completing your answer, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.





# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: I

Duration : 1hr 30minutes

Department of CSE/E&E/ISE/ECE

CIE-I Question paper

Academic Year: 2022-23

Semester: VII

Section: A&B


Subject with code: E&E (18ME751)

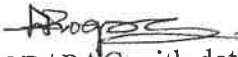
Max.Marks: 50

**INSTRUCTIONS: Answer any one full question from each module.**

Question No	Question Statement	Marks
<b>Module -1</b>		
Q1.a	Interpret world energy scenario with respect to production and consumption using relevant statistics.	10
b	Elaborate the effects of various social and environmental aspects on India's energy development.	10
c	Outline the factors that affect India's energy development.	10
<b>OR</b>		
Q2.a	List and explain the various forms of energy sources.	10
b	Explain the following : i) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) ii) Deen Dayal Upadhyaya Grama Jyoti Yojana (DDUGJY)	10
c	Explain the various key energy trends in India.	10
<b>Module-2</b>		
Q3.a	List and explain various thermal energy storage systems.	10
b	Elaborate the benefits of thermal energy storage.	10
<b>OR</b>		
Q4.a	Discuss the principles of energy management.	10
b	List the various thermal energy storage methods. Explain the working principles of Solar Pond with a neat sketch.	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date

27/10/22

  
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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: I

Department of CSE/E&E/ISE/ECE

Scheme of valuation

Academic Year: 2022-23


Semester: VII

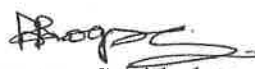
Section: A and B

Subject: E&E (18ME751)

Q No.	Question Statement	Distribution of Marks	Marks
<b>Module-1</b>			
1(a)	Explanation of world energy scenario with respect to production & consumption using relevant statistics.	5+5	10
(b)	Explanation of effects of various social and environmental aspects on India's energy development.	5+5	10
(c)	Explain any five factors that affect the India's energy development.	5x2	10
<b>OR</b>			
2(a)	Explanation of any five various forms of energy sources.	5x2	10
(b)	Explanation of RGGVY and DDUGJY.	5+5	10
(c)	Explain any four key energy trends in India.	4x2.5	10
<b>Module-2</b>			
3(a)	List and explanation of thermal energy storage systems.	2+8	10
(b)	Explanation of benefits of thermal energy storage.	5x2	10
<b>OR</b>			
4(a)	Principles of energy management.	10x1	10
(b)	List, Sketch and explanation.	2+4+4	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date  
27/10/22

  
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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: I

Duration : 1hr 30min

Department of CSE/E&E/ISE/ECE

CIE-I Question paper

Academic Year: 2022-23

Semester: VII

Section: A&B

Subject with code: E&E (18ME751)

Max.marks: 50

**INSTRUCTIONS: Answer any one full question from each module.**

Q No.	Question Statement	Bloom's Taxonomy Level	CO	Marks
<b>Module-1</b>				
1 (a)	Interpret world energy scenario with respect to production and consumption using relevant statistics.	L3	1	10
(b)	Elaborate the effects of various social and environmental aspects on India's energy development.	L2	1	10
(c)	Outline the factors that affect India's energy development.	L2	1	10
<b>OR</b>				
2 (a)	List and explain the various forms of energy sources.	L2	1	10
(b)	Explain the following : i) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) ii) Deen Dayal Upadhyaya Grama Jyoti Yojana (DDUGJY)	L2	1	10
(c)	List and explain the various forms of energy sources.	L2	1	10
<b>Module-2</b>				
3(a)	List and explain various thermal energy storage systems.	L2	2	10
(b)	Elaborate the benefits of thermal energy storage.	L2	2	10
<b>OR</b>				
4(a)	Discuss the principles of energy management.	L2	2	10
(b)	List the various thermal energy storage methods. Explain the working principles of Solar Pond with a neat sketch.	L2	2	10

Signature of Course Teacher with date

Signature of the course coordinator

Signature of HOD/ PAC with date 27/10/22

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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: II

Duration : 1hr 30min.

Department of CSE/E&E/ISE/ECE

CIE-II Question paper

Academic Year: 2022-23

Semester: VII

Section: A&B


Subject with code:18ME751

Max.marks: 50

**INSTRUCTIONS: Answer any one full question from each module.**

Question No	Question Statement	Marks
<b>Module-2&amp;4</b>		
Q1.a	Explain 10 steps methodology for detailed energy audit.	10
b	Discuss briefly the causes, effects and control measures of water pollution.	10
<b>OR</b>		
Q2.a	Explain the following; i) Energy demand estimation. ii) Energy Pricing.	10
b	Elaborate the causes, effects and control measures of air pollution.	10
<b>Module-3</b>		
Q3.a	Discuss the scope and importance of environment for public awareness.	10
b	Write a note on: i) Ecological succession ii) Food chain, food web and Ecological pyramid.	10
c	Describe the different types of forest ecosystems in India.	10
<b>OR</b>		
Q4.a	Discuss how carbon is utilized in the ecosystem with the help of a simple flow diagram.	10
b	Explain the following; i) Desert ecosystem. ii) Aquatic ecosystem.	10
c	Discuss how the Oxygen cycle is utilized in the ecosystem.	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date

  
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Guru Nanak Dev Engg. College, Bidar





## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: II

Department of CSE/E&E/ISE/ECE

Scheme of valuation

Academic Year: 2022-23


Semester: VII

Section: A&B

Subject: E&E (18ME751)

Q No.	Question Statement	Distribution of Marks	Marks
<b>Module-2&amp;4</b>			
1.a	10 steps methodology for detailed energy audit.	10x1	10
b	Causes, effects and control measures of water pollution.	3+3+4	10
<b>OR</b>			
2.a	Explanation of; i) Energy demand estimation. ii) Energy Pricing.	5+5	10
b	Causes, effects and control measures of air pollution.	3+3+4	10
<b>Module-3</b>			
3.a	Scope and importance of environment for public awareness.	4+6	10
b	Explanation of Ecological succession. Explanation of Food chain, food web and Ecological pyramid.	3 2.5+2.5+2	10
c	Explanation of different types of forest ecosystem.	4x2.5	10
<b>OR</b>			
4.a	Flow diagram and Explanation of Carbon cycle.	4+6	10
b	Explanation of; i) Desert ecosystem. ii) Aquatic ecosystem.	5+5	10
c	Flow diagram and Explanation of Oxygen cycle.	4+6	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date

  
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Guru Nanak Dev Eng



# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: II

Duration : 1hr 30min

Department of CSE/E&E/ISE/ECE

CIE-II Question paper

Academic Year: 2022-23

Semester: VII


Section: A&B

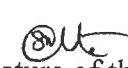
Subject with code:18ME751

Max.marks: 50

INSTRUCTIONS: Answer any one full question from each module.

Question No	Question Statement	RBTL	CO	Marks
<b>Module-2&amp;4</b>				
Q1. a	Explain 10 steps methodology for detailed energy audit.	2	2	10
b	Discuss briefly the causes, effects and control measures of water pollution.	3	4	10
<b>OR</b>				
Q2. a	Explain the following; i) Energy demand estimation. ii) Energy Pricing.	2	2	10
b	Elaborate the causes, effects and control measures of air pollution.	3	4	10
<b>Module-3</b>				
Q3. a	Discuss the scope and importance of environment for public awareness.	3	3	10
b	Write a note on: i) Ecological succession ii) Food chain, food web and Ecological pyramid.	2	3	10
c	Describe the different types of forest ecosystems in India.	3	3	10
<b>OR</b>				
Q4.a	Discuss how carbon is utilized in the ecosystem with the help of a simple flow diagram.	3	3	10
b	Explain the following; i) Desert ecosystem. ii) Aquatic ecosystem.	2	3	10
c	Discuss how the Oxygen cycle is utilized in the ecosystem.	3	3	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date



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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: III

Duration : 1hr 30min

Department of CSE/E&E/ISE/ECE

CIE-III Question paper

Academic Year: 2022-23

Semester: VII

Section: A&B

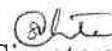
Subject with code: E&E (18ME751)

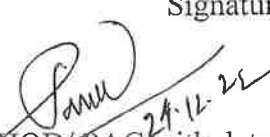
Max.marks: 50

**INSTRUCTIONS: Answer any one full question from each module.**

Question No	Question Statement	Marks
<b>Module-4</b>		
Q1. a	Elaborate the causes, effects and control measures of Soil pollution.	10
b	Discuss any two case studies related to pollution environment in detail.	10
<b>OR</b>		
Q2. a	Discuss strategy and techniques involved in solid waste management.	10
b	Discuss the role of individuals in prevention of pollution.	10
<b>Module-5</b>		
Q3.a	Explain the following; i) Global warming      ii) Ozone layer depletion.	10
b	Explain the needs for reclaiming the waste land and its development.	10
c	Discuss Environmental protection Act and its features.	10
<b>OR</b>		
Q4.a	Explain in detail the prevention and control of water pollution Act.	10
b	Explain the following: i) Wildlife protection Act.   ii) Forest Conservation Act.	10
c	Discuss the role of environment impact Assessment (EIA) in Enforcing Environmental legislation.	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/PAC with date

  
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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: III

Department of CSE/E&E/ISE/ECE

Scheme of valuation

Academic Year: 2022-23

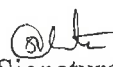
Semester: VII

Section:

Subject: E&E (18ME751)

Q No.	Question Statement	Distribution of Marks	Marks
<b>Module-4</b>			
1.a	Explanation of causes, effects and control measures of Noise pollution.	3+3+4	10
b	Explanation of any two case studies related to pollution environment.	2x5	10
<b>OR</b>			
2.a	Explanation of strategy and techniques involved in solid waste management.	5+5	10
b	Explanation of role of individuals in prevention of pollution.	10	10
<b>Module-5</b>			
3.a	Explanation of Global warming. Explanation of Ozone layer depletion.	5+5	10
b	Explanation of the needs for reclaiming the waste land and its development.	5+5	10
c	Explanation of Environmental protection Act and its features.	5+5	10
<b>OR</b>			
4.a	Explanation of prevention and control of water pollution Act.	5+5	10
b	Explanation of Wildlife protection Act. Explanation of Forest Conservation Act.	5+5	10
c	Explanation of role of environment impact Assessment (EIA) in Enforcing Environmental legislation.	10	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/PAC with date

  
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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46

Rev : 00

Date: 01.02.2016

Test No: III

Duration : 1hr 30min

Department of CSE/E&E/ISE/ECE

CIE-III Question paper

Academic Year: 2022-23

Semester: VII

Section: A&B

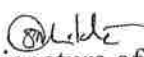
Subject with code: E&E (18ME751)

Max.marks: 50

**INSTRUCTIONS: Answer any one full question from each module.**

Q No.	Question Statement	Bloom's Taxonomy Level	CO	Marks
<b>Module-4</b>				
1.a	Elaborate the causes, effects and control measures of Soil pollution.	L3	4	10
b	Discuss any two case studies related to pollution environment in detail.	L3	4	10
<b>OR</b>				
2.a	Discuss strategy and techniques involved in solid waste management.	L3	4	10
b	Discuss the role of individuals in prevention of pollution.	L3	4	10
<b>Module-5</b>				
3.a	Explain the following; i) Global warming ii) Ozone layer depletion.	L2	5	10
b	Explain the needs for reclaiming the waste land and its development.	L2	5	10
c	Discuss Environmental protection Act and its features.	L3	5	10
<b>OR</b>				
4.a	Explain in detail the prevention and control of water pollution Act.	L2	5	10
b	Explain the following: i) Wildlife protection Act. ii) Forest Conservation Act.	L2	5	10
c	Discuss the role of environment impact Assessment (EIA) in Enforcing Environmental legislation.	L3	5	10

  
Signature of Course Teacher with date

  
Signature of the course coordinator

  
Signature of HOD/ PAC with date

  
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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 46 Rev : 00 Date: 01.02.2016	<b>Department of Mechanical Engineering</b>	Academic Year: 2022-23 Semester : VII Section : A Subject: E&E
	<b>Assignment-I Questions</b>	

Q.No.	Question Statement	CO	Marks
1	Discuss world energy scenario with respect to production and consumption using relevant statistics.	CO1	5
2	List and explain the various forms of energy sources.	CO1	5
3	Outline the factors that affect India's energy development.	CO1	5
4	Explain the various key energy trends in India.	CO1	5
5	Elaborate on how the energy accessed in modern India with a suitable examples.	CO1	5

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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

ACA/R / 46	Department of Mechanical Engineering	Academic Year: 2021-22
Rev : 00		Semester : VII
Date: 01.02.2016	Assignment-II Questions	Section : A
		Subject: E&E

Q.No.	Question Statement	CO	Marks
1	List and explain various thermal storage systems	CO2	5
2	Discuss the principles of energy management.	CO2	5
3	Elaborate the benefits of thermal energy storage.	CO2	5
4	Explain energy audit. Elaborate the different phases involved in detailed energy audit methodology.	CO2	5
5	A thermal power plant of 210 MW capacity has the maximum load of 160 MW. Its annual load factor is 0.6. The coal consumption is 1 kg per kWh of energy generated and the cost of coal is Rs 450.00 per tonne. Calculate (a) the annual revenue earned if energy is sold at Rs 1 per kWh and (b) the capacity factor of the plant.	CO2	5

  
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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 46

Rev : 00

Date: 01.02.2016

**Department of Mechanical Engineering**

**Assignment-III Questions**

Academic Year: 2022-23

Semester : VII

Section : A

Subject: E&E

Q.No.	Question Statement	CO	Marks
1	Explain Environment and Mention its scope. Discuss the need for public awareness.	CO3	5
2	Discuss how carbon cycle and nitrogen cycle is utilized in the ecosystem with the help of a simple flow diagram.	CO3	5
3	Write a note on: i) Ecological succession ii) Food chain, food web and Ecological pyramid.	CO3	5
4	What is an ecosystem? Explain the different types of forest ecosystems in India.	CO3	5
5	Describe grassland ecosystem. What are its types? How conservation of grassland can be made.	CO3	5

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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 46  
Rev : 00  
Date: 01.02.2016

**Department of Mechanical Engineering**

Academic Year: 2022-23

Semester : VII

Section : A

Subject: E&E

**Assignment-IV Questions**

Q.No.	Question Statement	CO	Marks
1	Discuss briefly the causes, effects and control of Air pollution.	CO4	5
2	Elaborate the causes, effects and control measures of i) Soil pollution. ii) Noise pollution.	CO4	5
3	Discuss strategy and techniques involved in solid waste management.	CO4	5
4	Discuss any two case study related to pollution environment in detail.	CO4	5
5	Discuss the role of individuals in prevention of pollution.	CO4	5

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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

ACA/R / 46	<b>Department of Mechanical Engineering</b>	Academic Year: 2022-23
Rev : 00		Semester : VII
Date: 01.02.2016		Section : <b>A</b>
	<b>Assignment-V Questions</b>	Subject: E&E

Q.No.	Question Statement	CO	Marks
1	Write a short note on global warming and ozone layer depletion.	CO5	5
2	What is acid rain? What are its effects, explain in detail.	CO5	5
3	What is the need for wasteland reclamation? Explain the methods for reclaiming wasteland.	CO5	5
4	Discuss: i) Wildlife protection Act. ii) Forest Conservation Act.	CO5	5
5	Explain the role of environment impact Assessment (EIA) in Enforcing Environmental legislation.	CO5	5

  
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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

### Evaluation details of Assignment/ activity

#### ASSIGNMENT EVALUATION DETAILS

Sl. No	Univ. Seat Number	Name of the student	Average Marks scored (10)
1	3GN18CS002	ACHARI SANTOSH	10
2	3GN18CS008	AKHILESH	10
3	3GN18CS012	AMBIKA	10
4	3GN18CS039	KALYAN KUMAR	07
5	3GN18CS047	M AKASHKUMAR	09
6	3GN18CS059	MD SHAGHILL AMAAN	
7	3GN18CS061	MD SOHEL	
8	3GN18CS062	MD WAHED ALI PATEL	
9	3GN19CS001	ABDUL ANAS UMAIR	
10	3GN19CS002	AISHWARYA	10
11	3GN19CS003	AKANKSHA	10
12	3GN19CS004	AKASH JADHAV	7
13	3GN19CS005	AKHILESH	10
14	3GN19CS006	AKSHATA	AB
15	3GN19CS007	AKSHATA BHALKE	1-7
16	3GN19CS008	ALEENA JOY	10
17	3GN19CS009	AMAN PATIL	7
18	3GN19CS010	AMISH BEMELKHEDKAR	10
19	3GN19CS011	AMULYA RATNA	10
20	3GN19CS012	ANAMIKA	10
21	3GN19CS013	ANJALI JAINAPUR	10
22	3GN19CS014	ANKUSH KANJIKAR	7

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# GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

23	3GN19CS015	ARUN	
24	3GN19CS016	ASFA SHARIYA	08
25	3GN19CS018	B SHIVANI	10
26	3GN19CS019	BHAVANA	10
27	3GN19CS020	BHAVANESHWARI	10
28	3GN19CS021	BHAVANI	10
29	3GN19CS022	BOROLE ABHIJEET	10
30	3GN19CS023	CHAITANYA CHAPTE	10
31	3GN19CS024	CHETAN	10
32	3GN19CS025	DAIVASHALA	10
33	3GN19CS026	FAIZA MUNAM	07
34	3GN19CS027	GANESH	10
35	3GN19CS028	GOLDEN KUMAR	10
36	3GN19CS029	GURPREET SINGH	07
37	3GN19CS030	HASAN	10
38	3GN19CS031	ISHPREET KAUR	10
39	3GN19CS032	JASMEET SINGH	09
40	3GN19CS033	KRUPA DHANASHREE	10
41	3GN19CS034	M A MUQTADIR	09
42	3GN19CS035	MAHEK SULTANA	09
43	3GN19CS036	MAKRAND SINGH BAL	07
44	3GN19CS037	MALIHA NISHAT	07
45	3GN19CS039	MD IRSHAD HUSSAIN	10
46	3GN19CS040	MD MAQSOOD ALI	9
47	3GN19CS038	MASROOR FATIMA	7
48	3GN19CS041	MD NOUMAN ALI KHAN	7
49	3GN19CS042	MD SAQLAIN SAEED	7

  
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## GURU NANAK DEV ENGINEERING COLLEGE, BIDAR

50	3GN19CS043	MD SHAKEEL AHMED	7
51	3GN19CS044	MD SOHEB ALI	2
52	3GN19CS045	MD WAJID ALI	10
53	3GN19CS046	MEGHA MAKTEDAR	10
54	3GN19CS047	MEGHARANI	10
55	3GN19CS048	MIRZA MAAZ BAIG	10
56	3GN19CS049	MOHD AKIFUDDIN	10
57	3GN19CS050	MOHD ARBAZ	7
58	3GN19CS051	MOHD. MAHROOF ALI	10
59	3GN19CS053	NABISHAB	10
60	3GN19CS054	NAGESH	10
61	3GN19CS055	NAGESHWARI	10
62	3GN19CS056	NAGMA SHAHEEN	10
63	3GN19CS057	NAJIMA BEGUM	10
64	3GN19CS058	NAZIYA SAHER	10
65	3GN19CS059	NEHA MASHETTY	7
66	3GN19CS060	NIKITA	10
67	3GN19CS082	SANJANA	10
68	3GN19CS084	SHABNAM FATIMA	10
69	3GN19CS101	SOWMYA BHOOSA	10
70	3GN19CS107	SYEDA RUMANA SHIREEN	10

\*Activity rubrics to be attached.

\*Activity Evaluation sheets to be attached.

Signature of Faculty

Date

09/01/2023

Signature of HOD

Date

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**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**DEPARTMENT OF APPLIED SCIENCES & HUMANITIES**

ACA/R / 24	Department of Applied Science	Academic Year: 2022-23
Rev: 00		Semester / section: VII/A
Date: 01.02.2016	Details of Make Up classes	Subject: E and E

Details of Makeup Classes conducted

Sl. No.	Date	Time		Topics	Remarks
		From	To		
01	14/10/22	3 PM	5 PM	Thermal energy storage system	
02	15/10/22	9 AM	10 AM	principles of Energy management	
03	21/10/22	12 PM	1 PM	characteristics of an Investment project	
04	22/10/22	9 AM	10 AM	Energy pricing & revision	
05					
06					

i) Any amendments to the lesson planning required.

— No —

ii) Any other points

Signature of Faculty

Date:.....

@lt  
31/1/2022

Signature of HOD

31/1/22

*Shau..*

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Bidar



**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**

**Result Analysis of E and E 18ME751**

Sl. No.	Number of students		Percentage of passing
	Appeared	passed	
1.	66	66	100%

  
Course Teacher

  
Course Coordinator

  
HOD



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# **GURU NANAK DEV ENGINEERING COLLEGE BIDAR**

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Mailoor Road Bidar-585403, Karnataka, India

## **Circular**

Date: 06-09-2018

All the students of GND Engineering college are hereby informed to participate in the awareness program on "GENDER SENSITIZATION" organized by COLLEGE INTERNAL COMPLAINTS COMMITTEE GNDEC, Bidar on 10-09-2018. Attendance will be recorded.

Venue: Auditorium, GNDEC Bidar

  
Convener, CICC

GNDEC Bidar



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**GURU NANAK DEV ENGINEERING COLLEGE BIDAR**

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Malloor Road Bidar-585403, Karnataka, India

**A**

**Report on**

**“GENDER  
SENSITIZATION”**

**Organized by**

**“COLLEGE INTERNAL COMPLAINTS COMMITTEE”**

**On**

**DATE: 10-09-2018.**

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# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Mailoor Road Bidar-585403, Karnataka, India

**Title- "GENDER SENSITIZATION"**

**Date: 10-09-2018**

**Time of event: 3:00 PM**

**Event Type: Offline**

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# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Mailoor Road Bidar-585403, Karnataka, India

Event Poster: poster attached



# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI AND APPROVED BY AICTE, NEW DELHI

PROGRAM ON

GENDER SENSITIZATION

ORGANIZED BY

COLLEGE INTERNAL COMPLAINTS COMMITTEE

DATE: 10/09/2018

TIME: 03:00 PM

VENUE: @ Auditorium, GNDEC Bidar

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Guru Nanak Dev Engg. College, Bidar





# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Mailoor Road Bidar-585403, Karnataka, India

Invitation to the resource person: (If applicable): NA

## Objective of Program:

The main objectives of the program were

- Create positive values among male and female students as well as staff members.
- Guide to integrate all the genders in all activities of the Institution
- Spread awareness about equality social system, democratic activities and legal aspects of gender equity

Program Schedule: Schedule Attached

<b>NAME OF EVENT</b>	<b>GENDER SENSITIZATION</b>
<b>VENUE</b>	Auditorium, GNDEC Bidar
<b>DATE</b>	10-09-2018
<b>TIME</b>	3:00PM

## Program Outcome:

1. Gender sensitization can induce restructuring of gender roles based on efficiency and can help realize higher productivity of men and women in household and outside work through rational and effective use of resources including available time.
2. Gender sensitization make people understand the difference between sex and gender, how gender is socially constructed and the stereotypes around gender roles It helps them determine which assumptions in matters of gender are valid and which are stereotyped.

Number of Students participated:500

Number of faculty participated: 68

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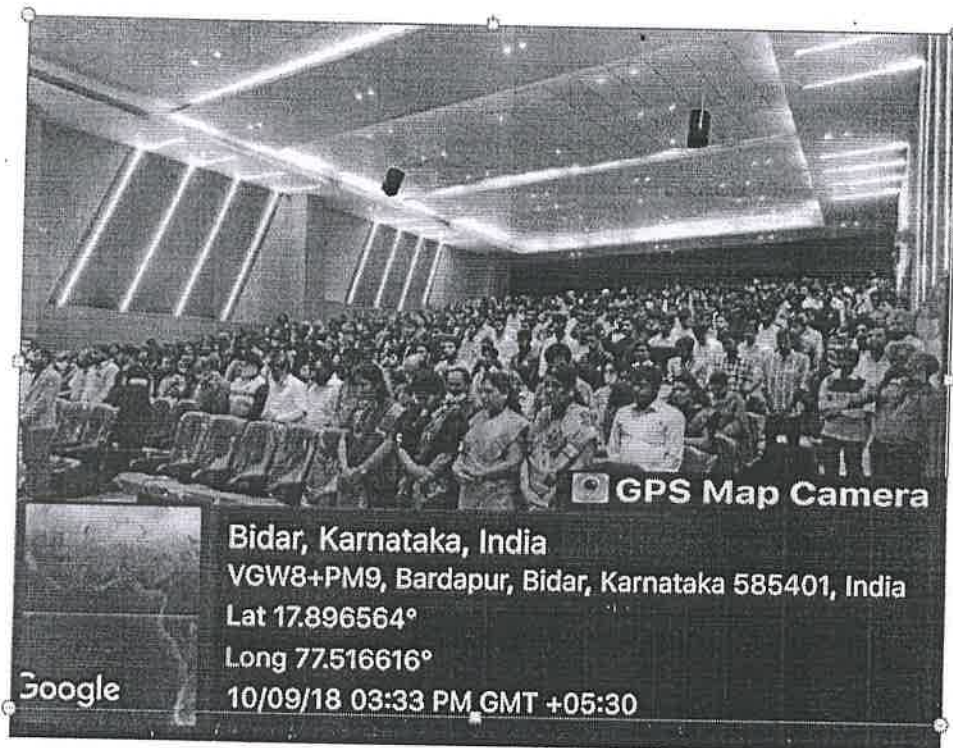
**GURU NANAK DEV ENGINEERING COLLEGE, BIDAR**  
**COLLEGE INTERNAL COMPLAINTS COMMITTEE**

**Date: 11/09/2018**

**AWARENESS PROGRAM ON GENDER SENSITIZATION**  
**FOR B E FIRST YEAR STUDENTS ( AY: 2018-19)**

A gender sensitization awareness program for first year students by the College Internal Complaints Committee (CICC) was conducted in order to promote equality and eliminate discrimination. It involves challenging and transforming societal attitudes, norms, and behaviors that perpetuate gender-based inequalities and discrimination. Through this program individuals and communities are encouraged to critically examine their own beliefs and behaviors, recognize gender-based discrimination, and take action to promote gender equality. It involves educating people about the experiences and challenges faced by different genders, fostering empathy, and promoting a culture of respect and understanding. The program was conducted on 10<sup>th</sup> September at 4 pm in the auditorium. The program was attended by more than 500 students and it could deliver in depth awareness about gender sensitization in the minds of boys and girls students of B E First year.

Chairperson of CICC, Dr. Sindhu S has delivered the seminar. The program concluded with a vote of thanks by Prof. Dr. Anuradha S, ECE dept.



*Shau..*  
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*Shau..*  
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*Dr. Sindhu S*  
**Dr. Sindhu S**  
Chair Person, CICC



# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

(Affiliated to Visvesvaraya Technological University Belagavi & Approved by AICTE New Delhi)

Mailoor Road Bidar-585403, Karnataka, India

## Awareness Program on Gender Sensitization

Academic Year: 2018-19

Date: 10-09-2018

### Attendance Sheet

S.NO	USN	NAME OF THE STUDENT
1	3GN18CS001	ABHISHEK
2	3GN18CS002	ACHARI SANTOSH
3	3GN18CS003	AFREEN ANJUM
4	3GN18CS004	AISHWARYA
5	3GN18CS005	AISHWARYA
6	3GN18CS006	AISHWARYA CHELVA
7	3GN18CS007	AISHWARYA PATIL
8	3GN18CS008	AKHILESH
9	3GN18CS009	AKSHATA PATIL
10	3GN18CS010	AKSHAY KUMAR
11	3GN18CS011	AMANDEEP KAUR
12	3GN18CS012	AMBIKA
13	3GN18CS013	AMIT SINGH
14	3GN18CS014	AMREEN NAAZNEEN
15	3GN18CS015	ANMOL PREET SINGH
16	3GN18CS016	APOORVA S PATIL
17	3GN18CS017	ASNA KAINATH AMAAN
18	3GN18CS018	AYESHA BEGUM
19	3GN18CS019	BASAVAPRIYA
20	3GN18CS020	BEULAH SHARON
21	3GN18CS021	BHAGYASHREE
22	3GN18CS022	BHAGYAVANTI BIRADAR
23	3GN18CS023	BIRADAR AISHWARYA RAVINDRA
24	3GN18CS024	DEEPIKA B
25	3GN18CS025	DENNIS ARNOLD
26	3GN18CS026	DINESH KALSE
27	3GN18CS027	DIVYA RANI
28	3GN18CS028	FATIMA BEGUM
29	3GN18CS029	GANESH
30	3GN18CS030	GURPREET KAUR
31	3GN18CS031	H MRUTTUNJAY

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33	3GN18CS033	IBTESAM MAHVEEN
34	3GN18CS034	IBTESAM ZARRINE
35	3GN18CS035	IMRAN MUDASIR
36	3GN18CS036	JADHAV KRITIKA KONDU
37	3GN18CS037	K S SHASHANK
38	3GN18CS038	KAILASH
39	3GN18CS039	KALYAN KUMAR
40	3GN18CS040	KAVYA
41	3GN18CS041	KAVYA
42	3GN18CS042	KIRAN
43	3GN18CS043	KIRAN
44	3GN18CS044	KONAPUR ANAND
45	3GN18CS045	KRISHNAKANT RAMRAO SONJI
46	3GN18CS046	LISHA J PATEL
47	3GN18CS047	M AKASHKUMAR
48	3GN18CS048	MAMATA
49	3GN18CS049	MANSEE PATHAK
50	3GN18CS050	MANSI
51	3GN18CS051	MARSHAL KEVIN
52	3GN18CS052	MD AIJAZ MAJEED
53	3GN18CS053	MD HAJI ALI
54	3GN18CS054	MD IMRAN AHMED
55	3GN18CS055	MD IMRANUDDIN
56	3GN18CS056	MD IRFAN HUSSAIN
57	3GN18CS057	MD NASRULLAH KHAN
58	3GN18CS058	MD SAMEER QURESHI
59	3GN18CS059	MD SHAGHILL AMAAN
60	3GN18CS060	MD SHUJAATH KHAN
61	3GN18CS061	MD SOHEL
62	3GN18CS062	MD WAHED ALI PATEL
63	3GN18CS063	MOHAMMED MOHIUDDIN KAIF
64	3GN18CS064	MOHAMMED RUMAN KHAN
65	3GN18CS065	MOHD ZEESHAN KHAN
66	3GN18CS066	NISHA
67	3GN18CS067	NISHCHAY PATIL
68	3GN18CS068	OPHELIA
69	3GN18CS069	PALLAVI

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70	3GN18CS070	PANKAJ
71	3GN18CS071	PRIYA
72	3GN18CS072	RACHAYYA SWAMY
73	3GN18CS073	RASHMI JOSHI
74	3GN18CS074	REVANSIDDESH SHARNARTHI
75	3GN18CS075	RUCHITA METRASKAR
76	3GN18CS076	RUSHIKESH CHAVAN
77	3GN18CS078	SABA SHIREEN
78	3GN18CS079	SAGAL SINGH KHANUJA
79	3GN18CS080	SAIMA SAMREEN
80	3GN18CS081	SAKSHI K DOIJODE
81	3GN18CS082	SAMREEN FATIMA
82	3GN18CS083	SANA MOHAMMADI
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84	3GN18CS085	SANIYA MAHVEEN
85	3GN18CS086	SANJANA
86	3GN18CS087	SANKHLA MUKESH
87	3GN18CS088	SARABJEET SINGH
88	3GN18CS089	SAVITA
89	3GN18CS090	SHABARI
90	3GN18CS091	SHABISTA MEHRISH
91	3GN18CS092	SHAH PASHA MOHIUDDIN QUADRI
92	3GN18CS093	SHARAN SABARWAL
93	3GN18CS094	SHEETAL G
94	3GN18CS095	SHIVAMANGALA
95	3GN18CS096	SHRADHA PATIL
96	3GN18CS097	SHREYA AURADKAR
97	3GN18CS098	SHRUTI SUMAN
98	3GN18CS099	SHWETA SONNA
99	3GN18CS100	SHWETA VAIJINATH
100	3GN18CS101	SHWETA VISHWANATH GAJRE
101	3GN18CS102	SIDDALINGA
102	3GN18CS103	SNEHA
103	3GN18CS104	SNEHA
104	3GN18CS105	SONY
105	3GN18CS106	SUDEEP
106	3GN18CS107	SULUXSHANA
107	3GN18CS108	SUMA

  
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109	3GN18CS110	SYED JUHID AHMED
110	3GN18CS111	SYED UBAID
111	3GN18CS112	SYEDA TASSEEM FATIMA
112	3GN18CS113	TAMMANNA NAGA VENKATA ROHIT
113	3GN18CS114	TRIVENI
114	3GN18CS115	TUFAIL MOHAMMED
115	3GN18CS116	UNSIYA MAHEEN
116	3GN18CS117	VAISHNAVI
117	3GN18CS118	VAISHNAVI
118	3GN18CS119	VAISHNAVI
119	3GN18CS120	VAISHNAVI KATKAM
120	3GN18CS121	VARSHITA KIRAN
121	3GN18CS122	VINAYASHREE
122	3GN18CS123	VISHAL
123	3GN18CS124	YUVRAJ
124	3GN18IS001	ABHISHEK KARBHARI
125	3GN18IS002	ADIL HUSSAIN
126	3GN18IS003	AKASH
127	3GN18IS004	AKSHATA
128	3GN18IS005	AMRAVATI
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130	3GN18IS007	ARJUN SINGH
131	3GN18IS008	FRANKLIN PAUL
132	3GN18IS009	GOURISHANKER
133	3GN18IS010	JASVEENDAR KOUR
134	3GN18IS012	M A ASIM AHMED
135	3GN18IS013	MOHAMMAD MINHAJ AHMED
136	3GN18IS014	MOHAMMED MUSAIB ADNAN ROSHAN
137	3GN18IS015	PRABHAKAR KULKARNI
138	3GN18IS016	PREETI
139	3GN18IS017	PRIYA
140	3GN18IS018	RACHANA
141	3GN18IS019	SAI KIRAN
142	3GN18IS020	SANA NAAZ
143	3GN18IS021	SANKALP RAGA
144	3GN18IS022	SATISH
145	3GN18IS023	SHAZIA NAAZ FATIMA

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147	3GN18IS025	SIDDLING
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150	3GN18IS028	TEJASH
151	3GN18IS029	VANGDALE SAI KRISHNA
152	3GN18IS030	VIKAS
153	3GN18IS031	VINAY CHANDA
154	3GN18IS032	WASEEMA KHANAM
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159	3GN18ME005	AJAYRAJ
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161	3GN18ME007	AKASH
162	3GN18ME008	AKILESH
163	3GN18ME009	AMIT
164	3GN18ME010	ANAND ARDALE
165	3GN18ME011	ARUN BELURE
166	3GN18ME012	AVINASH
167	3GN18ME013	BASVAKIRAN
168	3GN18ME014	CHANDRAKANTH SWAMY
169	3GN18ME015	CYRIL MARADONA
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171	3GN18ME017	DHRAMPAL
172	3GN18ME018	HRITIK KOLI
173	3GN18ME019	J D MOHIT RAJ
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176	3GN18ME022	M A JUNAID
177	3GN18ME023	M A SHAKAIB ANWAR
178	3GN18ME024	MADUSUDHAN
179	3GN18ME025	MAHESH
180	3GN18ME026	MAHMAD KAIF
181	3GN18ME027	MANA SIDDHAROODH
182	3GN18ME028	MANOJ
183	3GN18ME029	MD ABID AZHAR

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185	3GN18ME031	MD FAHAD EHTESHAM
186	3GN18ME032	MD FAHEEMUDDIN
187	3GN18ME033	MD HAMOOD
188	3GN18ME034	MD MASTAN MAHAGОВI
189	3GN18ME035	MD MUDASSIR AHMED
190	3GN18ME036	MD QURAM HUSSAIN
191	3GN18ME037	MD SUMAIRUDDIN
192	3GN18ME038	MD TAREQ ANWAR
193	3GN18ME039	MD YOUNUS
194	3GN18ME040	MOHAMMED AMER IRFAN HUSSAIN
195	3GN18ME041	MOHAMMED IFRAN
196	3GN18ME042	MOHAMMED JABER ALI
197	3GN18ME043	MOHAMMED RIZWAN LADLE
198	3GN18ME044	MOHAMMED SHOAIB MUSHARAF L
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203	3GN18ME049	PRAJWAL DESHMUKH
204	3GN18ME050	RAGHAVENDRA REDDY
205	3GN18ME051	RITIKESH GOKULE
206	3GN18ME052	SACHIN
207	3GN18ME053	SAGAR DHAGE
208	3GN18ME054	SAINATH
209	3GN18ME055	SHAIK ADNAN SAMEER
210	3GN18ME056	SHAIK JUNAID SALIM
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214	3GN18ME060	SIDDHAREDDY
215	3GN18ME061	SRIKANTH
216	3GN18ME062	STANLEY CHRISTOPHER
217	3GN18ME063	SUDHAKAR
218	3GN18ME064	SUNIL
219	3GN18ME065	SUNIL
220	3GN18ME066	SURESH DANDE
221	3GN18ME067	SYED AEJAJ

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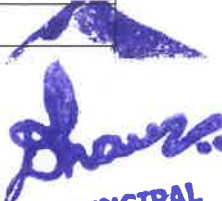


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223	3GN18ME069	SYED ISAMUDDIN
224	3GN18ME070	SYED REZVAN ALI
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226	3GN18ME072	VINAYAK BUKKA
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228	3GN18ME074	VISHNU RAMESH KAWLE
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235	3GN18EE006	AMBRESH
236	3GN18EE007	ASHA D
237	3GN18EE008	ASHWINI
238	3GN18EE009	BHAGYASHREE
239	3GN18EE010	BHAGYASHREE
240	3GN18EE011	BHAGYASHREE PANCHAL
241	3GN18EE012	BHAGYASHRE GAIKWAD
242	3GN18EE013	GAGANDEEP SINGH
243	3GN18EE014	JOHNSON
244	3GN18EE015	KAVYA
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246	3GN18EE017	KRATIK
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249	3GN18EE020	MAHADEV
250	3GN18EE021	MAHESH
251	3GN18EE022	MD MUTAHIR UZAIR
252	3GN18EE023	MD SHAHEBAAZ
253	3GN18EE024	MD SHOEB
254	3GN18EE025	MOHD AZHAR
255	3GN18EE026	NIKITA
256	3GN18EE027	NISHA
257	3GN18EE028	P SHARADHA
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259	3GN18EE030	PRIYA

  
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261	3GN18EE032	RANJITA B R
262	3GN18EE033	SHAIK ADNAN
263	3GN18EE034	SHAILAJA
264	3GN18EE035	SHAMBHAVI MUDDA
265	3GN18EE036	SHARAN KUMAR
266	3GN18EE037	SHARAN RAJASHEKAR SANGOLAGI
267	3GN18EE038	SHARDUL
268	3GN18EE039	SHIVANI
269	3GN18EE040	SHIVKUMAR
270	3GN18EE041	SHWETA
271	3GN18EE042	SIDDHARTH
272	3GN18EE043	SUMAN HOSAMANI
273	3GN18EE044	SWATI
274	3GN18EE045	SYED AHMED ULLA HUSSAINI
275	3GN18EE046	SYED ZEESHAN
276	3GN18EE047	TEJASHWINI
277	3GN18EE048	VAIBHAV VANGAPALLI
278	3GN18EE049	VAISHNAVI KORE
279	3GN18EE050	VARUNKUMAR
280	3GN18EE051	VEERSHETTY
281	3GN18EE052	VIJAYLAXMI
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283	3GN18EC002	ADITYA DUDHANKAR
284	3GN18EC003	AISHWARYA CHIDGUPPIKAR
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286	3GN18EC005	AKSHAY SATISH JADHAV
287	3GN18EC006	AMEETH PARSHETTY
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289	3GN18EC008	ARCHANA
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292	3GN18EC011	BHAVYA
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294	3GN18EC013	GADGI VISHAL
295	3GN18EC014	JYOTHIKA
296	3GN18EC015	KAVYA
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299	3GN18EC018	MAHIMA STARLIN
300	3GN18EC019	MD AFNAN MUSAIB
301	3GN18EC020	MD AZHARUDDIN
302	3GN18EC021	MUZAMMIL BASHARATH
303	3GN18EC022	NAGARAJ BIRADAR
304	3GN18EC023	NISHA
305	3GN18EC024	P GOWRI
306	3GN18EC025	PAHULJEET KAUR
307	3GN18EC026	PALLAVI
308	3GN18EC027	PALLAVI B
309	3GN18EC028	POOJA
310	3GN18EC029	PRIYANKA
311	3GN18EC030	PRIYANKA
312	3GN18EC031	PRUTHVI
313	3GN18EC032	RABIYA BASREEN
314	3GN18EC033	RAHUL SHAMBHU
315	3GN18EC034	REKHA
316	3GN18EC035	ROHINI
317	3GN18EC036	ROHIT
318	3GN18EC037	ROHIT KOTE
319	3GN18EC038	SABA YASMEEN
320	3GN18EC039	SAHIL SARSAR
321	3GN18EC040	SANTOSH MANTHALE
322	3GN18EC041	SHAGUFTA NAAZ
323	3GN18EC042	SHESHADRI A
324	3GN18EC043	SHREELATA
325	3GN18EC044	SHRUTI
326	3GN18EC045	SHWETA
327	3GN18EC046	SHWETA BHALKE
328	3GN18EC047	SIDDRAMAPPA LAMBU
329	3GN18EC048	SNEHA EKLURE
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331	3GN18EC050	SUDEEP
332	3GN18EC051	SUDHARANI
333	3GN18EC052	SUMA
334	3GN18EC053	SUNEETA
335	3GN18EC054	SUPRIYA GAJARE

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338	3GN18EC057	USHA RANI
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370	3GN18CV029	GARAD UTKARSH MANIKRAO
371	3GN18CV030	GAVI SIDDANA GOUDA P P
372	3GN18CV031	GOVIND POLA
373	3GN18CV032	GOVINDREDDY PALATI

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375	3GN18CV034	JOSHIKODCHIRKAR DEVANG
376	3GN18CV035	KAMAL BIKRAM SAH
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380	3GN18CV039	MAGRET
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392	3GN18CV051	MD SHAHE BAZ AHMED
393	3GN18CV052	MD ZUBAIRUDDIN
394	3GN18CV053	MD ZUBER
395	3GN18CV054	MOHAMMAD SOHEL
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399	3GN18CV058	MOHAMMED MIFTAHUDDIN
400	3GN18CV059	MOHAMMED MUNAVAR ALI
401	3GN18CV060	MOHAMMED OWAIS
402	3GN18CV061	MOHAMMED RIZWANUDDIN
403	3GN18CV062	MOHAMMED SAQIB ALI ATTAR
404	3GN18CV063	MOHAMMED TALHA AHMED
405	3GN18CV064	MOHAMMED UBAIDUDDIN
406	3GN18CV065	MOHD ATIF
407	3GN18CV066	MOHD IBRAHIM NOOR UDDIN
408	3GN18CV067	MOHD IMADUDDIN
409	3GN18CV068	MOHD SIRAJUDDIN TANVEER
410	3GN18CV069	MUSTAFA KHAN
411	3GN18CV070	NEELKAMAL BIRADAR

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413	3GN18CV072	NIHAL JADHAV
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417	3GN18CV076	PRANESH
418	3GN18CV077	PRASHANTH
419	3GN18CV078	PRATEEK KUMAR JAGADEV
420	3GN18CV079	PRATHVIRAJ
421	3GN18CV080	PRAVEEN
422	3GN18CV081	PRAVEENA
423	3GN18CV082	PRIYADARSHINI
424	3GN18CV083	REVANASIDDAYYA
425	3GN18CV084	SAIDARSHAN
426	3GN18CV085	SAIF KHAN
427	3GN18CV086	SAMEEKSHA
428	3GN18CV087	SANDESH KUMAR KALEKAR
429	3GN18CV088	SANGAMESH
430	3GN18CV089	SANGAMESH KIRANAGI
431	3GN18CV090	SANGAMESH PATIL
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433	3GN18CV092	SAROJA
434	3GN18CV093	SHAH UMAR AHMED QUADRI
435	3GN18CV094	SHAIK DANISH AHMED
436	3GN18CV095	SHAIK UBAIDULLAH
437	3GN18CV096	SHAIKH AAQHIB KHAJA NIZAMODDIN
438	3GN18CV097	SHARAN BASAVA PATIL
439	3GN18CV098	SHARAN KHANAPURE
440	3GN18CV099	SHIVA KANERI
441	3GN18CV100	SHIVKUMAR
442	3GN18CV101	SNEHA J
443	3GN18CV102	SUDARSHAN JADHAV
444	3GN18CV103	SUJEET MORE
445	3GN18CV104	SUMITH
446	3GN18CV105	SUSHMA
447	3GN18CV106	SUSHMITA JADHAV
448	3GN18CV107	SYED BURHANUDDIN QUADRI
449	3GN18CV108	SYED FURKHAN

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Mailoor Road Bidar-585403, Karnataka, India

450	3GN18CV109	SYED HYDERALI
451	3GN18CV110	SYED MUZAFFAR
452	3GN18CV111	SYED SAHEEL HUSSAIN
453	3GN18CV112	SYED UBAID
454	3GN18CV113	UMESH
455	3GN18CV114	VEENA
456	3GN18CV115	VENKATESH ALURE
457	3GN18CV116	VISHWAJEETH
458	3GN18AU001	CHOUDHARY MOHIT SANJY
459	3GN18AU002	PRAVEEN
460	3GN18MBA01	ABHINAY BAGODI
461	3GN18MBA02	AKASH
462	3GN18MBA03	A.VENKATRESDDY
463	3GN18MBA04	B.SHRUTI
464	3GN18MBA05	BALAJI BIRADAR
465	3GN18MBA06	BHAVYASHREE
466	3GN18MBA07	DEEPA
467	3GN18MBA08	DEEPAK
468	3GN18MBA09	DEEPAK KALE
469	3GN18MBA10	DHANASHREE
470	3GN18MBA11	DIVYA
471	3GN18MBA12	GANESH
472	3GN18MBA13	GOUTAM
473	3GN18MBA14	JERUSHA
474	3GN18MBA15	JYOTI B
475	3GN18MBA16	KIRAN
476	3GN18MBA17	KIRTI VERMA
477	3GN18MBA18	M.RAKESH
478	3GN18MBA19	MD.RASOOL
479	3GN18MBA20	MIRZA AHMED
480	3GN18MBA21	MOBINA GEGUM
481	3GN18MBA22	MD.NADEEM AHMED
482	3GN18MBA23	MOHD NAYEEM .Q
483	3GN18MBA24	NAGESH
484	3GN18MBA25	NAVYA LAKSHMI
485	3GN18MBA26	PATIL NAGSHREE
486	3GN18MBA27	PATIL SAKSHI
487	3GN18MBA28	PAVITRA

*Shauz..*

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488	3GN18MBA29	POOJA KAKNALE
489	3GN18MBA30	POONAM
490	3GN18MBA31	POONAM V
491	3GN18MBA32	PRAKASH
492	3GN18MBA33	PRASHANT
493	3GN18MBA34	PRATIBHA
494	3GN18MBA35	RAJUL BHATEJI
495	3GN18MBA36	RAJVARDAN
496	3GN18MBA37	RANI
497	3GN18MBA38	RASHMI
498	3GN18MBA39	RUDRESEH ASHRURE
499	3GN18MBA40	SALOME
500	3GN18MBA41	SAMIUDDIN

Convener, CICC

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