



**Assessment Details (both CIE and SEE)**

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 35% ( 18 Marks out of 50)in the semester-end examination(SEE), and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together

**Continuous Internal Evaluation:**

Three Unit Tests each of **20 Marks (duration 01 hour)**

1. First test at the end of 5<sup>th</sup> week of the semester
2. Second test at the end of the 10<sup>th</sup> week of the semester
3. Third test at the end of the 15<sup>th</sup> week of the semester

Two assignments each of **10 Marks**

4. First assignment at the end of 4<sup>th</sup> week of the semester
5. Second assignment at the end of 9<sup>th</sup> week of the semester

Group discussion/Seminar/quiz any one of three suitably planned to attain the COs and POs for **20 Marks (duration 01 hours)**

6. At the end of the 13<sup>th</sup> week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be scaled down to 50 marks

**Total CIE : IA 20\*3=60, Assignment 10+10=20, Quiz 20 = 100 /2 = 50**

(to have less stressed CIE, the portion of the syllabus should not be common /repeated for any of the methods of the CIE. Each method of CIE should have a different syllabus portion of the course).

**CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.**

**Semester End Examination:**

SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject **(duration 02 hours)**

1. The question paper will have 50 questions. Each question is set for 01 mark.
2. Semester End Exam (SEE) Pattern will be in MCQ Model (Multiple Choice Questions) for 50 marks (60 minutes duration).

**Suggested Learning Resources:****Textbook:**

1. **“Constitution of India” (for Competitive Exams)** - Published by Naidhruva Edutech Learning Solutions, Bengaluru. – 2022.
2. **“Engineering Ethics”,** M.Govindarajan, S.Natarajan, V.S.Senthilkumar, Prentice –Hall, 2004.

**Reference Books:**

1. **“Samvidhana Odu” - for Students & Youths by Justice HN Nagamohan Dhas, Sahayana, kerekon.**
2. **“Constitution of India, Professional Ethics and Human Rights”** by Shubham Singles, Charles E. Haries, and et al: published by Cengage Learning India, Latest Edition – 2019.
3. **“Introduction to the Constitution of India”,** (Students Edition.) by Durga Das Basu (**DD Basu**): Prentice –Hall, 2008.
4. **“The Constitution of India”** by Merunandan K B: published by Merugu Publication, Second Edition, Bengaluru.

**IV Semester**

**UNIVERSAL HUMAN VALUES-II: UNDERSTANDING HARMONY and ETHICAL HUMAN CONDUCT**

**Title of the subject**

Course Code	<b>21UHV49</b>	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:0:0	SEE Marks	50
Total Hours of Pedagogy	20	Total Marks	100
Credits	01	Exam Hours	01

**Course objectives:**

This introductory course input is intended:

1. To help the students appreciate the essential complementarity between 'VALUES' and 'SKILLS' to ensure sustained happiness and prosperity which are the core aspirations of all human beings.
2. To facilitate the development of a Holistic perspective among students towards life and profession as well as towards happiness and prosperity based on a correct understanding of the Human reality and the rest of existence. Such a holistic perspective forms the basis of Universal Human Values and movement towards value-based living in a natural way.
3. To highlight plausible implications of such a Holistic understanding in terms of ethical human conduct, trustful and mutually fulfilling human behaviour and mutually enriching interaction with Nature.

This course is intended to provide a much-needed orientational input in value education to the young enquiring minds.

**Teaching-Learning Process (General Instructions)**

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.

1. The methodology of this course is explorational and thus universally adaptable. It involves a systematic and rational study of the human being vis-à-vis the rest of existence.
2. The course is in the form of 20 lectures (discussions)
3. It is free from any dogma or value prescriptions.
4. It is a process of self-investigation and self-exploration, and not of giving sermons. Whatever is found as truth or reality is stated as a proposal and the students are facilitated to verify it in their own right, based on their Natural Acceptance and subsequent Experiential Validation – the whole existence is the lab and every activity is a source of reflection.
5. This process of self-exploration takes the form of a dialogue between the teacher and the students to begin with, and then to continue within the student in every activity, leading to continuous self-evolution.
6. This self-exploration also enables them to critically evaluate their pre-conditionings and present beliefs.

**Module-1**

**Introduction to Value Education (4 hours)**

Right Understanding, Relationship and Physical Facility (Holistic Development and the Role of Education)

Understanding Value Education, Self-exploration as the Process for Value Education, Continuous Happiness and Prosperity – the Basic Human Aspirations, Happiness and Prosperity – Current Scenario, Method to Fulfil the Basic Human Aspirations

**Teaching-Learning Process**

Introduction to Value Education- Chalk and talk method, Discussion, Sharing of experiences, Live Examples and videos

<b>Module-2</b>	
<p><b>Harmony in the Human Being (4 hours)</b></p> <p>Understanding Human being as the Co-existence of the Self and the Body, Distinguishing between the Needs of the Self and the Body, The Body as an Instrument of the Self, Understanding Harmony in the Self, Harmony of the Self with the Body, Programme to ensure self-regulation and Health</p>	
<b>Teaching-Learning Process</b>	Introduction to the concepts- Chalk and talk method, Discussion, Sharing of experiences, Live Examples and videos
<b>Module-3</b>	
<p><b>Harmony in the Family and Society (4 hours)</b></p> <p>Harmony in the Family – the Basic Unit of Human Interaction, 'Trust' – the Foundational Value in Relationship, 'Respect' – as the Right Evaluation, Other Feelings, Justice in Human-to-Human Relationship, Understanding Harmony in the Society, Vision for the Universal Human Order</p>	
<b>Teaching-Learning Process</b>	Introduction to the concepts- Chalk and talk method, Discussion, Sharing of experiences, Live Examples and videos
<b>Module-4</b>	
<p><b>Harmony in the Nature/Existence (4 hours)</b></p> <p>Understanding Harmony in the Nature, Interconnectedness, self-regulation and Mutual Fulfilment among the Four Orders of Nature, Realizing Existence as Co-existence at All Levels, The Holistic Perception of Harmony in Existence</p>	
<b>Teaching-Learning Process</b>	Introduction to the concepts- Chalk and talk method, Discussion, Sharing of experiences, Live Examples and videos
<b>Module-5</b>	
<p><b>Implications of the Holistic Understanding – a Look at Professional Ethics (4 hours)</b></p> <p>Natural Acceptance of Human Values, Definitiveness of (Ethical) Human Conduct, A Basis for Humanistic Education, Humanistic Constitution and Universal Human Order, Competence in Professional Ethics Holistic Technologies, Production Systems and Management Models-Typical Case Studies, Strategies for Transition towards Value-based Life and Profession</p>	
<b>Teaching-Learning Process</b>	Introduction to the concepts- Chalk and talk method, Discussion, Sharing of experiences, Live Examples and videos
<p><b>Course outcome (Course Skill Set)</b></p> <p>By the end of the course, students are expected to become more aware of themselves, and their surroundings (family, society, nature); they would become more responsible in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind.</p> <p>They would have better critical ability. They would also become sensitive to their commitment towards what they have understood (human values, human relationship and human society). It is hoped that they would be able to apply what they have learnt to their own self in different day-to-day settings in real life, at least a beginning would be made in this direction.</p>	

Therefore, the course and further follow up is expected to positively impact common graduate attributes like:

1. Holistic vision of life
2. Socially responsible behaviour
3. Environmentally responsible work
4. Ethical human conduct
5. Having Competence and Capabilities for Maintaining Health and Hygiene
6. Appreciation and aspiration for excellence (merit) and gratitude for all

**Assessment Details (both CIE and SEE)**

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**Continuous Internal Evaluation:**

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2. Second test at the end of the 10<sup>th</sup> week of the semester
3. Third test at the end of the 15<sup>th</sup> week of the semester

**Two assignments each of 10 Marks**

4. First assignment at the end of 4<sup>th</sup> week of the semester
5. Second assignment at the end of 9<sup>th</sup> week of the semester

Group discussion/Seminar/quiz any one of three suitably planned to attain the COs and POs for **20 Marks (duration 01 hours)**

6. At the end of the 13<sup>th</sup> week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

(to have less stressed CIE, the portion of the syllabus should not be common /repeated for any of the methods of the CIE. Each method of CIE should have a different syllabus portion of the course).

**CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.**

**Semester End Examination:**

Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject (**duration 01 hours**)

1. The question paper will have 50 questions. Each question is set for 01 marks.
2. The students have to answer all the questions, selecting one full question from each module

**Suggested Learning Resources:**

**Books**

**-READINGS:**

**Text Book and Teachers Manual**

- a. The Textbook

*A Foundation Course in Human Values and Professional Ethics*, R R Gaur, R Asthana, G P Bagaria, 2<sup>nd</sup> Revised Edition, Excel Books, New Delhi, 2019. ISBN 978-93-87034-47-1

- b. The Teacher"s Manual

Teachers' Manual for *A Foundation Course in Human Values and Professional Ethics*, R R Gaur, R Asthana, G

**Reference Books**

1. JeevanVidya: EkParichaya, A Nagaraj, JeevanVidyaPrakashan, Amarkantak, 1999.
2. Human Values, A.N. Tripathi, New Age Intl. Publishers, New Delhi, 2004.
3. The Story of Stuff (Book).
4. The Story of My Experiments with Truth - by Mohandas Karamchand Gandhi
5. Small is Beautiful - E. F Schumacher.
6. Slow is Beautiful - Cecile Andrews
7. Economy of Permanence - J C Kumarappa
8. Bharat Mein Angreji Raj – Pandit Sunderlal
9. Rediscovering India - by Dharampal
10. Hind Swaraj or Indian Home Rule - by Mohandas K. Gandhi
11. India Wins Freedom - Maulana Abdul Kalam Azad
12. Vivekananda - Romain Rolland (English)
13. Gandhi - Romain Rolland (English)
14. Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
15. Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome's report, Universe Books.
16. A Nagaraj, 1998, Jeevan Vidya Ek Parichay, Divya Path Sansthan, Amarkantak.
17. P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
18. A N Tripathy, 2003, Human Values, New Age International Publishers.
19. SubhasPalekar, 2000, How to practice Natural Farming, Pracheen (Vaidik) KrishiTantraShodh, Amravati.
20. E G Seebauer & Robert L. Berry, 2000, Fundamentals of Ethics for Scientists & Engineers , Oxford University Press
21. M Govindrajran, S Natrajan & V.S. Senthil Kumar, Engineering Ethics (including Human Values), Eastern Economy Edition, Prentice Hall of India Ltd.
22. B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books.
23. B L Bajpai, 2004, Indian Ethos and Modern Management, New Royal Book Co., Lucknow. Reprinted 2008.

**Web links and Video Lectures (e-Resources):**

1. Value Education websites, <https://www.uhv.org.in/uhv-ii>, <http://uhv.ac.in>, <http://www.uptu.ac.in>
2. **Story of Stuff**, <http://www.storyofstuff.com>
3. **Al Gore, An Inconvenient Truth, Paramount Classics, USA**
4. **Charlie Chaplin, Modern Times, United Artists, USA**
5. **IIT Delhi, Modern Technology – the Untold Story**
6. Gandhi A., Right Here Right Now, Cyclewala Productions
7. [https://www.youtube.com/channel/UCQxWr5QB\\_eZUnwxSwxXEKQw](https://www.youtube.com/channel/UCQxWr5QB_eZUnwxSwxXEKQw)
8. [https://fdp-si.aicte-india.org/8dayUHV\\_download.php](https://fdp-si.aicte-india.org/8dayUHV_download.php)
9. <https://www.youtube.com/watch?v=8ovkLRYXijE>
10. <https://www.youtube.com/watch?v=OgdNx0X923I>
11. <https://www.youtube.com/watch?v=nGRcbRpvGoU>
12. <https://www.youtube.com/watch?v=sDxGXOgYEKM>

**Activity Based Learning (Suggested Activities in Class)/ Practical Based learning**

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# ENVIRONMENTAL STUDIES

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2017 -2018)

## SEMESTER - I/II

Subject Code	17CIV18/17CIV28	IA Marks	20
Number of Lecture Hours/Week	02	Exam Marks	30
Total Number of Lecture Hours	25	Exam Hours	02

### Course Objectives:

1. To identify the major challenges in environmental issues and evaluate possible solutions.
2. Develop analytical skills, critical thinking and demonstrate socio-economic skills for sustainable development.
3. To analyze an overall impact of specific issues and develop environmental management plan.

### Module - 1

Introduction: Environment - Components of Environment Ecosystem: Types & Structure of Ecosystem, Balanced ecosystem Human Activities – Food, Shelter, And Economic & Social Security. **2 Hours**

Impacts of Agriculture & Housing Impacts of Industry, Mining & Transportation Environmental Impact Assessment, Sustainable Development. **3 Hours**

### Module - 2

Natural Resources, Water resources – Availability & Quality aspects, Water borne diseases & water induced diseases, Fluoride problem in drinking water Mineral resources, Forest Wealth Material Cycles – Carbon Cycle, Nitrogen Cycle & Sulphur Cycle. **2 Hours**

Energy – Different types of energy, Conventional sources & Non Conventional sources of energy Solar energy, Hydro electric energy, Wind Energy, Nuclear energy, Biomass & Biogas Fossil Fuels, Hydrogen as an alternative energy. **3 Hours**

**Module -3**

Environmental Pollution – Water Pollution, Noise pollution, Land Pollution, Public Health Aspects. **2 Hours**

Global Environmental Issues: Population Growth, Urbanization, Land Management, Water & Waste Water Management. **3 Hours**

**Module -4**

Air Pollution & Automobile Pollution: Definition, Effects – Global Warming, Acid rain & Ozone layer depletion, controlling measures. **3 Hours**

Solid Waste Management, E - Waste Management & Biomedical Waste Management - Sources, Characteristics & Disposal methods. **2 Hours**

**Module - 5**

Introduction to GIS & Remote sensing, Applications of GIS & Remote Sensing in Environmental Engineering Practices. **2 Hours**

Environmental Acts & Regulations, Role of government, Legal aspects, Role of Non-governmental Organizations (NGOs) , Environmental Education & Women Education. **3 Hours**

**Course Outcome:**

Students will be able to,

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

**Text Books:**



1. Benny Joseph (2005), **“Environmental Studies”**, Tata McGraw – Hill Publishing Company Limited.
2. R.J.Ranjit Daniels and Jagadish Krishnaswamy, (2009), **“Environmental Studies”**, Wiley India Private Ltd., New Delhi.
3. R Rajagopalan, **“Environmental Studies – From Crisis to Cure”**, Oxford University Press, 2005,
4. Aloka Debi, **“Environmental Science and Engineering”**, Universities Press (India) Pvt. Ltd. 2012.

**Reference Books:**

1. Raman Sivakumar, **“Principals of Environmental Science and Engineering”**, Second Edition, Cengage learning Singapore, 2005
2. P. Meenakshi, **“Elements of Environmental Science and Engineering”**, Prentice Hall of India Private Limited, New Delhi, 2006
3. S.M. Prakash, **“Environmental Studies”**, Elite Publishers Mangalore, 2007
4. Erach Bharucha, **“Text Book of Environmental Studies”**, for UGC, University press, 2005
5. G.Tyler Miller Jr., **“Environmental Science – working with the Earth”**, Tenth Edition, Thomson Brooks /Cole, 2004
6. G.Tyler Miller Jr., **“Environmental Science – working with the Earth”**, Eleventh Edition, Thomson Brooks /Cole, 2006
7. Dr.Pratiba Sing, Dr.AnoopSingh and Dr.Piyush Malaviya, **“Text Book of Environmental and Ecology”**, Acme Learning Pvt. Ltd. New Delhi.

## II Semester – AEC Course

<b>Scientific Foundations of Health</b>			
Course Code	<b>21SFH19/29</b>	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:0	SEE Marks	50
Total Hours of Pedagogy	02 Hours/Week	Total Marks	100
Credits	01	Exam Hours	60 Minutes / 01 Hour
<p><b>Course objectives:</b></p> <p>The course 21SFH29 will enable the students:</p> <ul style="list-style-type: none"> <li>• To know about Health and wellness (and its Beliefs)</li> <li>• To acquire Good Health &amp; It's balance for positive mind-set</li> <li>• To Build the healthy lifestyles for good health for their better future</li> <li>• To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world</li> <li>• To learn about Avoiding risks and harmful habits in their campus and outside the campus for their bright future</li> <li>• To Prevent and fight against harmful diseases for good health through positive mindset</li> </ul>			
<p><b>Teaching-Learning Process (General Instructions)</b></p> <p>These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.</p> <ul style="list-style-type: none"> <li>✓ Teachers shall adopt suitable pedagogy for effective teaching - learning process. The pedagogy shall involve the combination of different methodologies which suit modern technological tools and software's to meet the present requirements of the Global employment market. <ul style="list-style-type: none"> <li>(i) Direct instructional method ( Low /Old Technology),</li> <li>(ii) Flipped classrooms ( High/advanced Technological tools),</li> <li>(iii) Blended learning ( combination of both),</li> <li>(iv) Enquiry and evaluation based learning,</li> <li>(v) Personalized learning,</li> <li>(vi) Problems based learning through discussion,</li> <li>(vii) Following the method of expeditionary learning Tools and techniques,</li> </ul> </li> <li>✓ Apart from conventional lecture methods, various types of innovative teaching techniques through videos, animation films may be adapted so that the delivered lesson can progress the students In theoretical applied and practical skills in teaching of the concepts of Health and Wellness in general.</li> </ul>			
<p><b>Module-1</b></p> <p><b><u>Good Health and It's balance for positive mindset:</u></b></p> <p>What is Health, Why Health is very important Now? – What influences your Health?, Health and Behaviour, Health beliefs and advertisements, Advantages of good health (Short term and long term benefits), Health and Society, Health and family, Health and Personality - Profession. Health and behaviour, Disparities of health in different vulnerable groups. Health and psychology, Methods to improve good psychological health. Psychological disorders (Stress and Health - Stress management), how to maintain good health, Mindfulness for Spiritual and Intellectual health, Changing health habits for good health. Health and personality.</p>			
<b>Teaching-Learning Process</b>	Chalk and talk method, Power Point presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities & assignments.		
<p><b>Module-2</b></p>			

### **Building of healthy lifestyles for better future:**

Developing a healthy diet for good health, Food and health, Nutritional guidelines for good health and well beingness, Obesity and overweight disorders and its management, Eating disorders - proper exercises for its maintenance (Physical activities for health), Fitness components for health, Wellness and physical function,

#### **Teaching-Learning Process**

Chalk and talk method, PowerPoint presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities & assignments.

### **Module-3**

#### **Creation of Healthy and caring relationships :**

Building communication skills (Listening and speaking), Friends and friendship - education, the value of relationships and communication, Relationships for Better or worsening of life, understanding of basic instincts of life (more than a biology), Changing health behaviours through social engineering,

#### **Teaching-Learning Process**

Chalk and talk method, PowerPoint presentation and Animation videos methods. creating real time stations in classroom discussions. Giving activities and assignments.

### **Module-4**

#### **Avoiding risks and harmful habits :**

Characteristics of health compromising behaviors, Recognizing and avoiding of addictions, How addiction develops and addictive behaviors, Types of addictions, influencing factors for addictions, Differences between addictive people and non addictive people and their behavior with society, Effects and health hazards from addictions Such as..., how to recovery from addictions.

#### **Teaching-Learning Process**

Chalk and talk method, PowerPoint presentation and Animation videos methods. creating real time stations in classroom discussions. Giving activities and assignments.

### **Module-5**

#### **Preventing and fighting against diseases for good health :**

Process of infections and reasons for it, How to protect from different types of transmitted infections such as...,  
Current trends of socio economic impact of reducing your risk of disease, How to reduce risks for good health,  
Reducing risks and coping with chronic conditions, Management of chronic illness for Quality of life,  
Health and Wellness of youth : a challenge for the upcoming future Measuring of health and wealth status.

#### **Teaching-Learning Process**

Chalk and talk method, PowerPoint presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities & assignments.

### **Course outcome (Course Skill Set)**

At the end of the course the student will be able :

CO 1: To understand Health and wellness (and its Beliefs)

CO 2: To acquire Good Health & It's balance for positive mindset

CO 3: To inculcate and develop the healthy lifestyle habits for good health.

CO 4: To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world

CO 5: To adopt the innovative & positive methods to avoid risks from harmful habits in their campus & outside the campus.

CO 6: To positively fight against harmful diseases for good health through positive mindset.

### **Assessment Details (both CIE and SEE)**

methods of CIE need to be defined topic wise i.e.- Tests, MCQ, Quizzes, Seminar or micro project/Course Project, Term Paper)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 35% of maximum marks in SEE and a minimum of 40% of maximum marks in CIE. Semester End Exam (SEE) is conducted for 50 marks ( hours' duration). Based on this grading will be awarded.

The student has to score a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

### **Continuous Internal Evaluation:**

Three Unit Tests each of **20 Marks (duration 01 hour)**

1. First test at the end of 5<sup>th</sup> week of the semester
2. Second test at the end of the 10<sup>th</sup> week of the semester
3. Third test at the end of the 15<sup>th</sup> week of the semester

**(All tests are similar to the SEE pattern i.e question paper pattern is MCQ)**

Two assignments each of **10 Marks**

4. First assignment at the end of 4<sup>th</sup> week of the semester
5. Second assignment at the end of 9<sup>th</sup> week of the semester

Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks(duration 01 hours)**

6. At the end of the 13<sup>th</sup> week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

### **Semester End Examination:**

Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for subject

SEE paper will be set for 50 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is **01 hours**

### **Suggested Learning Resources:**

1. **Health Psychology** (Second edition) by Charles Abraham, Mark Conner, Fiona Jones and Daryl O'Connor – Published by Routledge 711 Third Avenue, New York, NY 10017.
2. **Health Psychology - A Textbook**, FOURTH EDITION by Jane Ogden McGraw Hill Education (India) Private Limited - Open University Press
3. **HEALTH PSYCHOLOGY (Ninth Edition)** by SHELLEY E. TAYLOR - University of California, Los Angeles, McGraw Hill Education (India) Private Limited - Open University Press
4. **Scientific Foundations of Health (Health & Wellness) - General Books** published for university and colleges references by popular authors and published by the reputed publisher.
- 1) **SWAYAM / NPTL/ MOOCS/ We blinks/ Internet sources/ YouTube videos** and other materials / notes

**Activity Based Learning (Suggested Activities in Class)/ Practical Based learning**

- ✓ Contents related activities (Activity-based discussions)
- ✓ For active participation of students, instruct the students to prepare Flowcharts and Handouts
- ✓ Organizing Group wise discussions and Health issues based activities
- ✓ Quizzes and Discussions
- ✓ Seminars and assignments





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**KALPATARU INSTITUTE OF TECHNOLOGY – TIPTUR**  
(Affiliated to Visvesvaraya Technological University & approved by AICTE, New Delhi)  
**DEPARTMENT OF MECHANICAL ENGG.**



Time Table for Odd Semester -2021-22

Sem: V

Room No: ME104

TIME / DAY	09:00 to 10:00 am	10:00 to 11:00 am	11.15: to 12.15: am	12.15: to 01.15: pm	01.15: to 02:15pm	2:15 to 3:15 pm	3:15 to 4:15 pm	4:15 to 5:15 pm
MON	18ME51 SK	18ME52 TSK	18ME53 AK	18ME54 HCR	<b>Lunch Break</b>	18MEL57 FM Lab A1(DNY + ACK) 18MEL58 EC Lab A2 (HCR + DHB)		
TUE	18ME52 TSK	18ME53 AK	18ME54 HCR	18CIV59 BGJ		18MEL57 FM Lab A2(BMV + DNY) 18MEL58 EC Lab A3 (HCR + BC)		
WED	18ME53 AK	18ME54 HCR	18ME55 EKS	18ME56 RHV		18ME52 (Tutorial) TSK	18ME54 (Tutorial) HCR	18ME53 (Tutorial) AK
THU	18ME52 TSK	18ME55 EKS	18ME51 SK	18ME56 RHV		18MEL57 FM Lab A3(MGB + MG) 18MEL58 EC Lab A1 (HCR + ACK)		
FRI	18ME52 TSK	18ME55 EKS	18ME51 SK	18ME56 RHV				
SAT	18ME56 RHV	18ME53 AK	18ME55 EKS	18ME51 SK		Remedial Classes		

Sl.No.	Sub.Code	Title	Staff Name
01	18ME51	Management And Economics	Sandeep K
02	18ME52	Design Of Machine Elements- I	Dr. T.S. Kiran
03	18ME53	Dynamics Of Machines	Anil K
04	18ME54	Turbo Machines	Harikesha C R
05	18ME55	Fluid Power Engineering	Eshwaraiah K S
06	18ME56	Operations Management	Rohith Kumar H V
07	18MEL57	Fluid Mechanics / Machines Lab	BMV, DNY ACK, MG, MGB
08	18MEL58	Energy Conversion Lab	HCR, ACK, BC, AK
09	18CIV59	Environmental Studies	Jayaprakash B G (Civil dept)

  
Coordinator

  
HOD



# Visvesvaraya Technological University

IA / CIE Report May / June / July - 2023 Examination.

KALPATARU INSTITUTE OF TECHNOLOGY, TIPTUR

Branch : ME

Scheme : 2018

Semester : 8

SI NO.	USN	18ME81	18ME824	18MEP83	18MES84	18MEI85	STUDENT SIGNATURE
1	1KI18ME003	35	35	35	70	30	<i>Adh</i>
2	1KI18ME010	28	30	30	69	28	<i>Rohit</i>
3	1KI18ME026	29	31	30	70	28	<i>Vishu</i>
4	1KI18ME031	37	32	30	90	28	<i>Uday</i>
5	1KI19ME001	29	31	30	69	28	
6	1KI19ME003	32	24	25	69	28	
7	1KI19ME004	22	24	25	65	28	
8	1KI19ME006	39	34	38	98	40	<i>Chandan. G. L.</i>
9	1KI19ME007	29	30	25	90	28	<i>ABD</i>
10	1KI19ME008	28	32	32	98	28	
11	1KI19ME009	30	33	25	69	29	<i>Harsha. B.</i>
12	1KI19ME010	38	33	38	98	40	<i>Harsha. B.</i>
13	1KI19ME011	22	24	32	90	28	
14	1KI19ME012	39	35	25	69	28	<i>Joshua. S.</i>
15	1KI19ME013	38	24	37	95	28	<i>Harsha. B.</i>
16	1KI19ME014	27	30	38	99	40	
17	1KI19ME015	27	32	25	69	28	<i>Mangai. M.</i>
18	1KI19ME016	24	24	25	90	28	
19	1KI19ME017	37	30	37	95	28	
20	1KI19ME018	37	33	37	95	28	<i>Harsha. B.</i>
21	1KI19ME019	35	32	37	68	28	<i>Harsha. B.</i>
22	1KI19ME020	39	34	37	68	28	<i>Harsha. B.</i>
23	1KI19ME021	31	32	36	98	40	<i>Harsha. B.</i>
24	1KI19ME022	22	29	25	69	28	<i>Harsha. B.</i>
25	1KI19ME023	39	35	37	98	30	
26	1KI19ME025	33	30	38	95	40	
27	1KI19ME026	37	36	37	95	40	<i>Harsha. B.</i>
28	1KI19ME027	28	31	37	68	28	<i>Harsha. B.</i>
29	1KI19ME028	36	34	37	98	40	
30	1KI19ME029	39	30	37	95	30	<i>Harsha. H.T.</i>
31	1KI19ME030	36	36	36	98	40	
32	1KI19ME031	29	29	37	98	30	<i>Harsha. B.</i>
33	1KI19ME032	37	35	38	95	29	<i>Harsha. B.</i>



SI NO.	USN	18ME81	18ME824	18MEP83	18MES84	18MEI85	STUDENT SIGNATURE
34	1KI19ME033	35	30	38	69	28	Yathu
35	1KI20ME400	35	32	37	69	28	Aad
36	1KI20ME401	40	31	35	69	28	C. J.
37	1KI20ME402	38	32	39	98	30	Dhruv Patil
38	1KI20ME403	37	32	37	98	30	
39	1KI20ME404	37	33	30	98	40	Fernand
40	1KI20ME406	40	36	36	95	30	M. J.
41	1KI20ME407	36	34	37	95	29	Long
42	1KI20ME408	40	35	36	98	30	W.
43	1KI20ME409	37	33	37	98	30	P.
44	1KI20ME410	39	31	37	98	30	
45	1KI20ME411	35	32	37	95	28	J.
46	1KI20ME412	34	35	38	68	30	S.
47	1KI20ME413	30	32	37	90	28	
48	1KI20ME414	30	33	37	68	28	B.
49	1KI20ME415	25	28	30	68	30	
50	1KI20ME416	39	36	37	98	30	Vinay Kumar
--x--	Faculty Signature	rme	K. J.	A. J.	mei	S.	-----xxxxxxx-----

\* - values are either optional subjects or the faculty has not yet entered the marks

TH - Theory part of CIE Marks (IPCC)

PR - Practical part of CIE Marks (IPCC)

T - Total CIE Marks (IPCC)

HOD  
Seal and Signature

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Seal and Signature  
PRINCIPAL  
Kaipataru Institute of Technology  
Tigur - 572 201



KIT-Estd. 1986

Kalpataru Vidya Sanshodhanam Estd. 1981

KALPATARU INSTITUTE OF TECHNOLOGY - TIPTUR  
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## DEPARTMENT OF MECHANICAL ENGG.

Internal Marks Odd Semester 2021- 2022

Semester: 5<sup>th</sup>

Subject: Environmental Studies Lecturer Name: Jaya Prakash T.G.

Sl No	USN	Name of the students	Internal Assessment			IA average	Assignment marks			A average	Total marks
			IA1	IA2	IA3		A1	A2	A3		
01	1KI18ME003	Ananthkumar C T	33	32	25	30					
02	1KI18ME010	Roshan Dev	20	30	28	26					
03	1KI18ME026	Rakshith G G	32	31	29	31					
04	1KI18ME031	Udayraj K B	32	32	29	31					
05	1KI19ME001	Abhishek G	32	32	31	32					
06	1KI19ME003	Akarsh Naga	-	36	29	29					
07	1KI19ME004	Akash G R	33	36	32	33					
08	1KI19ME006	Chandan G L	30	29	33	31					
09	1KI19ME007	Darshan H S	38	31	28	32					
10	1KI19ME008	Dhanurakshith T R	33	27	-	20					
11	1KI19ME009	Harsha B	24	34	28	29					
12	1KI19ME010	Jasim Mohammed M	27	34	32	32					
13	1KI19ME011	Jeevan K J	34	30	-	21					
14	1KI19ME012	Joshua S	26	36	29	30					
15	1KI19ME013	Mahendra P	30	34	-	21					
16	1KI19ME014	Mallikarjun K V	32	29	-	20					
17	1KI19ME015	Manoj M	30	34	-	21					
18	1KI19ME016	Mithun Raj B L	30	34	-	21					
19	1KI19ME017	Mohammed Maaz	20	32	31	27					
20	1KI19ME018	Mohammed Musaib		32	27	20					
21	1KI19ME019	Naveen G N		21	20	19					
22	1KI19ME020	Pramod N S	33	32	32	32					
23	1KI19ME021	Rajath L A	29	32	31	31					
24	1KI19ME022	Rohan M S	31	28	32	30					
25	1KI19ME023	Sagar C	29	34	32	32					
26	1KI19ME024	Sanjay C J	-	-	-	-					
27	1KI19ME025	Shakthi Singh Chib	32	35	27	31					
28	1KI19ME026	Shivakumar M R	35	28	29	31					
29	1KI19ME027	Shubhank M D	33	30	30	31					
30	1KI19ME028	Surya M K	34	35	31	33					
31	1KI19ME029	Uttham H T	32	34	29	32					

SI No	USN	Name of the students	Internal Assessment			IA average	Assignment marks			A average	Total marks
			IA1	IA2	IA3		A1	A2	A3		
32	1KI19ME030	Vikas Patil M S	33	28	29	30					
33	1KI19ME031	Vishwanath S H	31	35	-	22					
34	1KI19ME032	Yashwantha N	23	25	24	26					
35	1KI19ME033	Yathish H M	-	32	30	21					
36	1KI20ME400	Arunkumar B P	35	36	30	34					
37	1KI20ME401	Darshan C	32	31	29	31					
38	1KI20ME402	Deepak R J	28	35	29	31					
39	1KI20ME403	Harsha G N	29	33	33	32					
40	1KI20ME404	Jeevan Kumar P	29	36	33	33					
41	1KI20ME405	Mahamadadnan	-	-	-	-					
42	1KI20ME406	Mallikarjuna C	28	31	32	30					
43	1KI20ME407	Monika M S	28	34	29	30					
44	1KI20ME408	Nagendra M R	24	28	28	27					
45	1KI20ME409	Prajwal P G	33	25	29	29					
46	1KI20ME410	Pramod C S	29	37	33	32					
47	1KI20ME411	Sameer Pasha M Q	33	32	30	32					
48	1KI20ME412	Sanjay J M	30	20	31	27					
49	1KI20ME413	Sanjay N		30	30	20					
50	1KI20ME414	Sharath C S	34	27	31	31					
51	1KI20ME415	Spandana G	31	34	30	32					
52	1KI20ME416	Vinaykumar N M	31	27	28	29					

## INTERNAL MARKS ENTRY

Semester

SubjectCode

Choose Faculty

## IA Entry for 18CIV59 - Environmental Studies

TOTAL  
51SAVED  
51REMAINING  
0

NOTE: Please Click on Save Button Before Going To Next Page of Marks Entry.

Show  entriesSearch: 

Sl.No.	USN	Student Name	Attendance	Marks Scored	Max Marks	Status
1	1K118ME003	ANANTHKUMAR C T	Present	30	40	Frozen
2	1K118ME010	D ROSHAN DEV	Present	26	40	Frozen
3	1K118ME026	RAKSHITH G G	Present	31	40	Frozen
4	1K118ME031	UDAY RAJ K B	Present	31	40	Frozen
5	1K119ME001	ABHISHEK G	Present	32	40	Frozen
6	1K119ME003	AKARSH NAG A	Present	22	40	Frozen
7	1K119ME004	AKASH G R	Present	33	40	Frozen
8	1K119ME006	CHANDAN G L	Present	31	40	Frozen

Sl. No.	Roll No.	Student Name	Attendance	Internal Marks	Final Marks
9	1KI19ME007	DARSHAN H S	Present	32	40
10	1KI19ME008	DHANURAKSHITH T R	Present	20	40
11	1KI19ME009	HARSHA B	Present	29	40
12	1KI19ME010	JASIM MOHAMMED M	Present	32	40
13	1KI19ME011	JEEVAN K J	Present	21	40
14	1KI19ME012	JOSHUA S	Present	30	40
15	1KI19ME013	MAHENDRA P	Present	21	40
16	1KI19ME014	MALLIKARJUN K V	Present	20	40
17	1KI19ME015	MANOJ M	Present	21	40
18	1KI19ME016	MITHUN RAJ B L	Present	21	40
19	1KI19ME017	MOHAMMED MAAZ	Present	27	40
20	1KI19ME018	MOHAMMED MUSAIB	Present	20	40
21	1KI19ME019	NAVEEN G N	Present	19	40
22	1KI19ME020	PRAMOD N S	Present	32	40
23	1KI19ME021	RAJATH L A	Present	31	40
24	1KI19ME022	ROHAN M S	Present	30	40
25	1KI19ME023	SAGAR C	Present	32	40
26	1KI19ME024	SANJAY C J	Absent	0	40
27	1KI19ME025	SHAKTI SINGH CHIB	Present	31	40
28	1KI19ME026	SHIVAKUMAR M R	Present	31	40
29	1KI19ME027	SHUBHANK M D	Present	31	40
30	1KI19ME028	SURYA M K	Present	33	40
31	1KI19ME029	UTTHAM H T	Present	32	40
32	1KI19ME030	VIKAS PATIL M S	Present	30	40
33	1KI19ME031	VISHWANATH S H	Present	22	40
34	1KI19ME032	YASHWANTHA N	Present	26	40
35	1KI19ME033	YATHISH H M	Present	21	40
36	1KI20ME400	ARUNKUMAR B P	Present	34	40
37	1KI20ME401	DARSHAN C	Present	31	40

SL	NAME	NUMERIC VALUE	PRESUMABLE	MARKS OBTAIN	MARKS MARKED	STATUS
35	1KQ20ME402	DEEPAK R J	Present	31	40	Frozen
39	1KQ20ME403	HARSHA G N	Present	32	40	Frozen
40	1KQ20ME404	JEEVAN KUMAR P	Present	33	40	Frozen
41	1KQ20ME406	MALLIKARJUNA C	Present	30	40	Frozen
42	1KQ20ME407	MONIKA M S	Present	30	40	Frozen
43	1KQ20ME408	NAGENDRA M R	Present	27	40	Frozen
44	1KQ20ME409	PRAJWAL P G	Present	29	40	Frozen
45	1KQ20ME410	PRAMOD C S	Present	32	40	Frozen
46	1KQ20ME411	SAMEER PASHA M D	Present	32	40	Frozen
47	1KQ20ME412	SANJAY J M	Present	27	40	Frozen
48	1KQ20ME413	SANJAY N	Present	20	40	Frozen
49	1KQ20ME414	SHARATH C S	Present	31	40	Frozen
50	1KQ20ME415	SPANDANA G	Present	32	40	Frozen
51	1KQ20ME416	VINAY KUMAR N M	Present	29	40	Frozen

Showing 1 to 51 of 51 entries

Previous 1 Next

**NOTE:**

► The values are already Submitted and Frozen!









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Department of Civil Engineering

5<sup>th</sup> Semester First Internal Test NOV-2021

Sub: Environmental studies (18civ59)

DATE:06/12/2021

MaxMarks:40

Note : Each question carries 1 marks

Q.1 Boron, Zinc and Manganese are usually referred to as

- A- Micro materials
- B- Macro materials
- C- Soil Vitamins
- D- MBZ nutrients

Q.2 Which of the following is not the environment effect of industrialization in general?

- A- Solid waste B- Water pollution C- Air pollution D- Economic growth

Q.3 The noise pollution is measured in terms of A- Decibel B- Dobson units C- Hertz D- Candela

Q.4 Which of the following are major environmental issues involved in mining?

- A- Air pollution from dust B- Water pollution C- Soil degradation D- All of the above

Q.5 Incineration of Municipal waste involves

- A- Oxidation B- Deduction C- Redox action D- Disintegration

Q.6 Sustainable development means

- A-Meeting present needs without compromising on the future B-Progress in human well beings
- C-Balance between human needs and the ability of Earth to provide the resources D-All the above

Q.7 The word Tsunami is derived from two Japanese words A-Tsu(big) and nami(flow) B-Tsu(harbour) and nami(wave) C-Tsu (big wave) and nami(wave) D-None of the above

Q.8 The most important remedy to avoid negative impact due to industrialization is

- A-Industry should be closed B-Don't allow new industrial units C-Industry should treat all the waste generated by it before disposal D-Industries should shifted far away from human habitats

Q.9 Green house gases are A-Chloro fluoro carbon B-Oxygen C-Chlorine D-Chloro benzene

Q.10 Taj Mahal at Agra may be damaged by A-Sulphur dioxide B-Chlorine C-Earth quake D-All of these

Q.11 Ozone day is observed on A-January 30 B-April 21 C-September 16 D-December 25

- Q.12 Green house effect is related to  
 A-Green trees on house B-Global warming C-Grass lands D-Greenary in country
- Q.13 ELISA test is used to detect A-Malaria B-AIDS C-Cholera D-Tuberculosis
- Q.14 Karnataka state "pollution control board" was established in the year A-1974 B-1982 C-1986 D-1976
- Q.15 "Earth day" is observed on A-1st December B-5th June C-April 22<sup>nd</sup> D-1st January
- Q.16 Environmental protection Act 1986 deals with A-Air B-Water C-Land D-All of these
- Q.17 Environmental pollution is due to  
 A-Rapid urbanization B-Deforestation C-Afforestation D-A and B
- Q.18 Which of the following are natural sources of air pollution? A-Volcanic eruption B-Solar flare C-Earth quake D-All of these
- Q.19 Lead poisoning may cause  
 A-Reduction in hemoglobin B-Kidney damage C-Mental retardation D-All of these
- Q.20 Noise pollution limits at residential area is A-45 dB B-80 dB C-55 dB D-90 dB
- Q.21 Gas leaked in Bhopal tragedy was  
 cyanate C-Ethyl isocyanate A-Potassium cyanate B-Sodium isothio  
 D-Methyl isocyanate
- Q.22 Mining means A-To conserve & preserve minerals B-To check pollution due to  
 mineral resources C-To extract minerals and ores D-None
- Q.23 E.I.A can be expanded as A-Environment & Industrial Act B-Environment & Impact  
 Activities C-Environment Impact Assessment D-Environmentally Important Activity
- Q.24 E.I.A is related to A-Resource conservation B-Efficient equipment process  
 C- Waste minimization D-All of the above
- Q.25 In order to protect the health of people living along the adjoining areas of roads, one should  
 A-Plant trees alongside of the roads B-Not allow diesel driven vehicles  
 C-Shift them (people) to other places D-None of the above
- Q.26 First Biosphere reserve in India A-Chinnar B-Agastyamala C-Nilgiri  
 D- Eravikulam
- Q.27 The pollution caused by transportation/vehicular activities depends on  
 A-Type of the vehicle' engine B-Age of the vehicle C-Traffic congestion D-All of the above
- Q.28 Sustainable development will not aim at  
 A-Social economic development which optimizes the economic and societal benefits available  
 in the present, without spoiling the likely potential for similar benefits in the future  
 B-Reasonable and equitably distributed level of economic well being that can be perpetuated  
 continually C-Development that meets the needs of the present without compromising the  
 ability of future generations to meet their own needs

D-Maximizing the present day benefits through increased resource consumption

Q.29 Which of the following is a key element of EIA? A-Scoping B-Screening  
C-Identifying and evaluating alternatives D-All the above

Q.30 Eutrophication is A-An improved quality of water in lakes B-A process in carbon cycle  
C-The result to accumulation of plant nutrient in water bodies D-A water purification technique

Q.31 Major purpose of most of the dams around the world is A-Power generation B-Drinking  
water supply C-Flood control D-Irrigation

Q.32 Which of the following is the most environmental friendly agriculture practice? A-Using chemical  
fertilizers B-Using insecticides C-Organic farming D-None of the above

Q.33 The adverse effect of modern agriculture is A-Water pollution B-Soil pollution C-Water  
logging D-All the above

Q.34 Herpetology is a branch of Science which deals with A-Reptiles B-Aves C-Fishes D- Mammals

Q.35 Soil erosion surface soil which contains  
A-Organic matter B-Plant nutrients C-Both a and b D-None

Q.36 Water logging is a phenomenon in which A-Crop patterns are rotated B-Soil root zone  
becomes saturated due to over irrigation C-Erosion of soil occurs D-None of the above

Q.37 The impact of construction of dams  
A-Submerges forest B-Loss of wild life habitat C-Damages downstream ecosystem  
D-All of the above

Q.38 Which of the following statement is false  
A-Soil erosion effects the productivity of agriculture fields  
B-It takes 300 years for one inch of agriculture top soil to form  
C-The amount of erosion depends on soil type, slope, drainage pattern and crop management practices  
D-Soil erosion helps to retain water and nutrients in the root zone

Q.39 Which of the following statement is false

A-Surface runoff carry pesticides into streams  
B-Water percolating downward through agriculture lands carries with it dissolved chemicals  
C-Present agricultural practice does not contaminate water  
D-None of the above

Q.40 Farmers have a tendency to

A-Use optimum quantity of water  
B-To conserve water  
C-To over irrigate their crops  
D-All of the above

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Department of Civil Engineering

5<sup>th</sup> Semester ~~Plan~~ Internal Test NOV-2021

Sub: Environmental studies (18CIV59)

DATE:03/01/2022

MaxMarks:40

Note : Each question carries 1 marks

Q.1 Major causes of deforestation are

- A-Shifting cultivation      B-Fuel requirements      C-Raw materials for industries  
D-All of these

Q.2 Blue baby syndrome (methaemoglobinemia) is caused by the Contamination of water due to

- A-Phosphates      B-Sulphur      C-Arsenic      D-Nitrates

Q.3 India has the largest share of which of the following? A-Manganese B-Mica C-Copper D-Diamond

Q.4 Out of the following nutrients in fertilizer, which one causes minimum waterpollution?

- A-Nitrogen B-Phosphorus C-Potassium D-Organic matter

Q.5 What is the minimum allowable concentration of fluorides in drinking water?

- A-1.0 milligrams per liter      B-1.25 milligram per liter      C-1.50 milligrams per liter  
D-1.75 milligrams per liter

Q.6 Conservation of ammonium to  $\text{NO}_3$  by chemical oxidation is termed as

- A-Mineralization      B-Leaching      C-Nitrification      D-Denitrification

Q.7 Sulphur occurs in soil and rocks in the form of \_\_\_\_\_ A-Oxides of Zn and Fe

- B-Sulphates of Zn and Fe      C-Nitrates of Zn and Fe      D-Sulphides of Zn and Fe

Q.8 Conversion of nitrate into gases of nitrogen is called \_\_\_\_\_ A-Nitrification

- B-Nitrogen fixing      C-Reduction      D-Denitrification

Q.9 Forest rich area in Karnataka is found in \_\_\_\_\_

- A-Western ghats      B-Bandipur  
C-Nagarhole      D-Mangalore

Q.10 Expand GIS

- A-Geographical Information Source      B-Geological Information System  
C-Geographical Information System      D-Graphical Information system

Q.11 Important factor that causes water borne diseases is A-Using contaminated sewage for irrigation

- B-Leaching of untreated Fecal and urinary discharges into water bodies      C-Discharge of industrial waste water  
D-By eating contaminated food

Q.12 Forests are extremely important because they

- A-Provide clean water and clean air      B-Provide habitat for wild life  
and a change from hectic urban life      D-All of the above

C-Recreation

Q.13 Which of the following is not a part of the hydrological cycle

- A-Precipitation      B-Infiltration      C-Transpiration      D-Perspiration

Q.14 Which of the following is considered as an alternate fuel?

- A-CNG      B-Kerosene      C-Coal      D-Petrol

15. Disposal of any kind of electrical and electronic waste is called

- (a) Waste      (b) Domestic waste      (c) Vegetable waste      (d) e-waste

16. Father of green revolution in India

- a) M.S.Swaminathan      b) Harikrishna jain      c) Vandana shiva      d) Dr.B.P.Pal

17. \_\_\_\_\_ day is celebrated as international day for the elimination of violence against Women

- a) 20th Nov      b) 25th Nov      c) 27th Nov      d) 30th Nov

18. How does climate change (global warming) affect human health?

- a) By increasing illnesses such as heat stress, cardiovascular disease and kidney disease  
b) By increasing respiratory illnesses such as asthma and allergies  
c) By increasing insect borne infections such as dengue fever  
d) All of the above

19. PH value of normal rain water

- a) 4.5      b) 5.6      c) 7      d) 8

20. Tsunami is

- a) Volcanic eruption      b) Earthquake in ocean crust      c) Earthquake on land mass  
d) None of the above

21. World health day is celebrated on \_\_\_\_\_ every year

- a) March-7      b) June-7      c) May-7      d) April-7

22. Importance of value based education includes

- a) It gives a proper direction to our youth, It includes a positive attitude in youngsters  
b) It teaches them the distinction between right and wrong  
c) It teaches them to be peace-loving, generous, tolerant, helpful and compassionate  
d) All the above

23. Symptoms of AIDS includes

- a) Regular fever for more than one month, Weight loss and sweating at night  
b) Cough for more than one month and TB attack  
c) Regular decreased count of blood platelets and hemorrhage  
d) All the above

24. Which instrument is fitted in the exhaust pipe of the vehicle to reduce the air Pollution  
 a) Mist Collector      b) Biofilters      c) Air Filter      d) Fuel Max and Thermo reactor
25. Which oil can be used as a substitute for diesel?  
 a) Castor oil      b) Jatropha oil      c) Cotton seed oil      d) Flax seed oil
26. The major component of food is  
 a) Carbohydrates      b) Proteins      c) Lipids      d) All the above
27. World food day is celebrated on  
 a) 10<sup>th</sup> October      b) 12<sup>th</sup> October      c) 14<sup>th</sup> October      d) 16<sup>th</sup> October
28. SARS means  
 a) Severe Air Raised Syndrome  
 b) Severe Acute Respiratory Syndrome  
 c) Severe Acute Respiratory Symptoms  
 d) Severe Air Related Syndrome
29. Tuberculosis is caused by  
 a) Mycobacterium tuberculosis  
 b) Cynobacterium tuberculosis  
 c) Cynobacterium tuberosis  
 d) Mycobacterium tuberosis
30. "Pull Factor" means  
 (a) People move from rural to cities to get better income  
 (b) People move from cities rural to get clean environment  
 (c) People move from rural to cities for availability  
 (d) People move from cities rural due lack of space
31. One billion \_\_\_\_\_ people in the world live in inadequate housing, mostly in slum areas, the majority of which are temporary structures.  
 a) Rural people      b) Urban people      c) Village people      d) Town people
32. Changes in our environment induced by \_\_\_\_\_ in nearly every sphere of life had an influence on the pattern of our health.  
 a) Human activities      b) Animal activities      c) Natural activities      d) Natural disasters
33. Public health depends on sufficient amounts of good quality \_\_\_\_\_ safe drinking \_\_\_\_\_ and adequate \_\_\_\_\_  
 a) Food, Water and Shelter      (b) Water, food and shelter  
 c) Shelter, food and water      (d) Water, shelter and food
34. Unprecedented rainfall triggers epidemics of malaria and \_\_\_\_\_  
 a) Air born disease      (b) water borne diseases      (c) Soil borne diseases      (d) Sun burns

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USN:



**KALPATARU INSTITUTE OF TECHNOLOGY, TIPTUR-572 201**

(Affiliated to Visvesvaraya Technological University, Belgaum & Recognised by A.I.C.T.E, New Delhi)

**Department of Civil Engineering**

**5<sup>th</sup> Semester Third Internal Test Jan-2022**

**Sub: Environmental studies (18CIV59)**

**DATE:25/1/2022**

**MaxMarks:40**

**Note : Each question carries 1 marks**

Q.1 Which of the following gases are main contributors to acid rain?

- a) Carbon dioxide and carbon monoxide
- b) Sulphur dioxide and carbon dioxide
- c) Sulphur dioxide and nitrogen dioxide
- d) Sulphur dioxide and nitrous oxide

Q.2 Which place in India receives the highest annual rainfall?

- a) Mawsynram      b) Cherrapunji      c) Siju      d) Phyllut

Q.3 Who discovered the phenomenon of acid rain?

- a) George Brown
- b) James T. Stewart
- c) Robert Angus Smith
- d) Charles David

Q.4 Which of the following gases is responsible for the yellowing of the Taj Mahal?

- a) Organic carbon
- b) Black carbon
- c) Brown carbon
- d) All of the mentioned

Q.5 What is the pH required for the survival of aquatic animals and plants?

- a) 7      b) 7.5      c) 6.5      d) 4.8

Q.6 The fluoride concentration for prevention of dental caries is \_\_\_\_\_

- a) 1mg/l      b) 2mg/l      c) 3mg/l      d) 4mg/l

Q.7 In which process, the fluoride content of water is raised?

- a) Chlorination      b) Fluoridation      c) Defluoridation      d) Flocculation

Q.8 Which of the following is not used as a fluoride compound?

- a) Sodium fluoride
- b) Sodium silico fluoride
- c) Hydrofluosilicic acid
- d) Sodium fluoro carbonate

Q.9 Which of the following is the pure compound?

- a) Sodium fluoride                      b) Sodium silico fluoride  
c) Hydrofluosilicic acid                d) Sodium fluoro carbonate

Q.10 As far as safer handling is considered, which of the following is used for fluoridation?

- a) Sodium fluoride                      b) Sodium silico fluoride  
c) Hydrofluosilicic acid                d) Sodium fluoro carbonate

Q.11 What happens when water contains 8-20 ppm of fluoride concentration?

- a) Blue baby disease                    b) Crippling fluorosis  
c) Dental fluorosis                      d) Mottling of teeth

Q.12 Which of the following is an example of climate?

- a) An intense thunderstorm in Houston     b) The average temperature in Chicago over the past 50 years  
 c) A hot day in Boston in the fall         d) A foggy day in San Francisco

Q.13 How are warming ocean temperatures impacting whales, fish, & other marine mammals?

- a) They aren't as hungry because it's so hot     b) Warmer water makes them sleepy  
 c) Their migratory patterns are changing    d)  Summer seems longer so fish are schooling less

Q.14 The order of the atmospheric layers, starting from closest to the surface to the top of the atmosphere, is

- (a) Mesosphere, Troposphere, Thermosphere, Stratosphere  
(b) Troposphere, Stratosphere, Mesosphere, Thermosphere  
(c) Thermosphere, Mesosphere, Troposphere, Stratosphere  
(d) Troposphere, Mesosphere, Stratosphere, Thermosphere

Q.15 How much would the sea level rise if all of the Arctic sea ice melted?

- (a) 0 m                      (b) 5 m                      (c) 10 m                      (d) 50 m

Q.16 When did the Earth form?

- (a) 10 billion years ago                      (b) 4.6 billion years ago  
(c) 446 million years ago                      (d) 6,000 years ago

Q.17 What place experiences the greatest seasonal variability in temperature?

- (a) The North Atlantic Ocean                      (b) Central Canada  
(c) Costa Rica, Central America                      (d) Mumbai, India.

Q.18 Cloud burst phenomenon is associated with which type of precipitation?

- a. Convection                                      b. Orographic  
c. Stratiform                                        d. All of the above

Q.19 The ocean thermal energy conversion(OTEC) is uses \_\_\_\_\_



- a) Energy difference                      b) Potential difference  
c) Temperature difference                d) Kinetic difference

Q.20 OTEC is developed in \_\_\_\_\_  
a) 1880                      b) 1926                      c) 1890                      d) 1930

Q.21 The by-product of the ocean thermal energy conversion is \_\_\_\_\_  
a) Hot water                      b) Cold water                      c) Chemicals                      d) Gases

Q.22 Closed cycle systems use the fluid having \_\_\_\_\_  
a) High boiling points                      b) Low boiling points  
c) High viscosity                      d) low viscosity

Q.23 Warm surface sea water is pumped through a \_\_\_\_\_ to vaporise the fluid.  
a) Heat exchanger                      b) Generator  
c) Evaporator                      d) Condenser

Q.24 The heat exchanger \_\_\_\_\_ the vapour into a liquid which is recycled.  
a) Condenses                      b) Heats                      c) Cools                      d) Evaporates

Q.25 Open cycle OTEC uses \_\_\_\_\_ surface water directly to make electricity.  
a) Hot                      b) Warm                      c) Cool                      d) Icy

Q.26 The steam leaves the \_\_\_\_\_  
a) Salts                      b) Aluminium                      c) Copper                      d) Silver

Q.27 The open cycle system produces \_\_\_\_\_ water.  
a) Desalinated                      b) Impure  
c) Contaminated                      d) Chlorinated

Q.28 In \_\_\_\_\_ method the sea water enters a vacuum chamber and flash evaporated.  
a) Closed cycle system  
b) Open cycle system  
c) Hybrid OTEC  
d) Neither closed nor open system

Q.29 Depending on the embodiment \_\_\_\_\_ technique generate power from hydro electric turbine.  
a) Closed cycle                      b) Open cycle                      c) Hybrid                      d) Steam lift pump

Q.30 When was the term 'Sustainable Development' came into existence?

- a) 1987                      b) 1980                      c) 1978                      d) 1992

Q.31 Social, economical and ecological equity is the necessary condition for achieving  
A Social development  
B Economical development  
C Sustainable development  
D Ecological development

Q.32 This is not the effect of transportation:

A Air emission  
C Solid waste generation

B Material consumption  
D Acid mine drainage

Q.33 Underground and open cast is the methods of:

A Agriculture            B Mining  
C Housing                D Transportation

Q.34 Electronic waste is the adverse effect of:

A Industry    B Agriculture            C Housing                D Mining

Q.35 Extraction of mineral and metal from the earth is:

A Agriculture  
B Transportation  
C Mining  
D Sustainable development

Q.36 Sustainable development will not aim at:

A Social economic development which optimise the economic and societal benefits available in the present, without spoiling the likely potential for similar benefits in the future  
B Reasonable and equitable distributed level of economic well being that can be perpetuated continually  
C Development that meets the need of the present without compromising the ability of future generations to meet their own needs  
D Maximising the present day benefits through increased resource consumption

Q.37 Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from:

A 2004            B 2005            C 2009            D 2010

Q.38 Which of the following is not a Biomedical waste?

a) Animal waste            b) Microbiological waste            c) Chemical waste            d) Domestic waste

Q.39 Which of the following is categorized as an incineration waste?

a) Incineration ash  
b) Animal waste  
c) Solid waste  
d) Cytotoxic drugs

Q.40 Which of the following requires special treatment of bacteria?

a) Packaging of waste  
b) Labelling of waste  
c) Transport of waste  
d) Degradation of waste



**KALPATARU INSTITUTE OF TECHNOLOGY, TIPTUR**  
 Department of Mechanical Engineering  
**CALENDAR OF EVENTS FOR 3<sup>rd</sup>, 5<sup>th</sup> & 7<sup>th</sup> Semester**  
**ODD SEMESTERS 2021-22**



Week No.	Month	Mon	Tue	Wed	Thu	Fri	Sat	No. of Working days	EVENTS
01	Oct					1	2	01	01 <sup>st</sup> Oct 2021 Commencement of Odd Semester for 5 <sup>th</sup> and 7 <sup>th</sup> Sem B E, 02 <sup>nd</sup> Oct 2021, Gandhi Jayanthi
02		4	5	6	7	8	9	05	06 <sup>th</sup> Oct 2021 Mahalaya Amavasya
03		11	12	13	14	15	16	04	14 <sup>th</sup> Oct 2021 Ayudha Pooja 15 <sup>th</sup> Oct 2021 Vijaya dashmi
04		18	19	20	21	22	23	04	18 <sup>th</sup> Oct 2020 Commencement of 3 <sup>rd</sup> Semester B E 19 <sup>th</sup> Oct 2021 Eid Milad 20 <sup>th</sup> Oct 2021 Valamiki Jayanthi
05		25	26	27	28	29	30	06	
06	Nov	1	2	3	4	5	6	03	01 <sup>st</sup> Nov 2021 Kannada Rajyotsava 03 <sup>rd</sup> Nov 2021 Deepavali Amavasya/05 <sup>th</sup> Nov 2021 Deepavali
07		8	9	10	11	12	13	06	
08		15	16	17	18	19	20	06	22 <sup>nd</sup> Nov 2021 Kanaka dasa Jayanthi
09		22	23	24	25	26	27	05	23 <sup>rd</sup> to 25 <sup>th</sup> Nov 2021 Test-1 for 5 <sup>th</sup> and 7 <sup>th</sup> Sem B E
10		29	30					02	
11	Dec			1	2	3	4	04	02 <sup>nd</sup> to 04 <sup>th</sup> Dec 2021 Test-1 for 3 <sup>rd</sup> Sem B E
12		6	7	8	9	10	11	06	
13		13	14	15	16	17	18	06	
14		20	21	22	23	24	25	05	25 <sup>th</sup> Dec 2021 Christmas
15		27	28	29	30	31		05	27 <sup>th</sup> to 29 <sup>th</sup> Dec 2021 Test-2 for 5 <sup>th</sup> and 07 <sup>th</sup> Sem B E
16	Jan						1	01	
17		3	4	5	6	7	8	06	06 <sup>th</sup> to 08 <sup>th</sup> Jan 2022 Test-2 for 3 <sup>rd</sup> Sem B E
18		10	11	12	13	14	15	05	14 <sup>th</sup> Jan 2022 Sankranti
19		17	18	19	20	21	22	06	
20		24	25	26	27	28	29	05	26 <sup>th</sup> Jan 2022 Republic Day 27 <sup>th</sup> to 29 <sup>th</sup> Jan 2022 Test-3 for 5 <sup>th</sup> and 7 <sup>th</sup> Sem B E
21	31							01	31 <sup>st</sup> Jan 2022 Last working day for Odd Sem B E
22	Feb		1	2	3	4	5	05	
23		7	8	9	10	11	12	06	
24		14	15	16	17	18	19	06	14 <sup>th</sup> to 16 <sup>th</sup> Feb 2022 Test-3 for 3 <sup>rd</sup> Sem B E 19 <sup>th</sup> Feb 2022 Last Working day for 3 <sup>rd</sup> Sem B E

No. of Working Days (NWD):- 109 days for 5<sup>th</sup> and 7<sup>th</sup> SEM, 99 days for 3<sup>rd</sup> SEM

**Exams Schedule:**

Important dates	3 <sup>rd</sup> Sem B E	5 <sup>th</sup> Sem B E	7 <sup>th</sup> Sem B E
Last Working day	19-02-2022	31-01-2022	31-01-2022
Practical Examinations	21-02-2022 to 04-03-2022	01-02-2022 to 10-02-2022	01-02-2022 to 10-02-2022
Theory Examinations	07-03-2022 to 25-03-2022	11-02-2022 to 25-03-2022	11-02-2022 to 25-03-2022
Commencement of EVEN SEM	04-04-2022	04-04-2022	04-04-2022

I Test	II Test	III Test	9:30 am - 11:00am	2:30 pm - 4:00 pm
<b>5<sup>th</sup> &amp; 7<sup>th</sup> Semester</b>				
23/11/2021	27/12/2021	27/01/2022	18ME51: Management And Economics 18ME71: Control Engineering	18ME52: Design Of Machine Elements- I 18ME72: Computer Aided Design and Manufacturing
24/11/2021	28/12/2021	28/01/2022	18ME53: Dynamics Of Machines 18ME734: Total Quality Management	18ME54: Turbo Machines 18ME741: Additive Manufacturing
25/11/2021	29/12/2021	29/01/2022	18ME55: Fluid Power Engineering 18CV753: Environmental Protection & Management 18CV59: Environmental Studies	18ME56: Operations Management
<b>3<sup>rd</sup> Semester</b>				
02/12/2021	06/01/2022	14/02/2022	18MAT31: Transform calculus, fourier series and Numerical techniques	18ME32: Mechanics of Materials
03/12/2021	07/01/2022	15/02/2022	18ME33: Basic Thermodynamics	18ME34: Materials Science
04/12/2021	08/01/2022	16/02/2022	18ME35A: Metal Cutting and Forming 18KAK39: Aadalitha Kannada	18ME36A: Computer Aided Machine Drawing

B. E. MECHANICAL ENGINEERING				
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)				
SEMESTER – V				
ENVIRONMENTAL STUDIES				
Course Code	18CIV59	CIE Marks	40	
Teaching Hours / Week (L:T:P)	(1:0:0)	SEE Marks	60	
Credits	01	Exam Hours	02	
<b>Module - 1</b>				
Ecosystems (Structure and Function): Forest, Desert, Wetlands, Riverine, Oceanic and Lake. 02 Hrs Biodiversity: Types, Value; Hot-spots; Threats and Conservation of biodiversity, Forest Wealth, and Deforestation.				
<b>Module - 2</b>				
Advances in Energy Systems (Merits, Demerits, Global Status and Applications): Hydrogen, Solar, OTEC, Tidal and Wind. 02 Hrs Natural Resource Management (Concept and case-studies): Disaster Management, Sustainable Mining, Cloud Seeding, and Carbon Trading.				
<b>Module - 3</b>				
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. 02 Hrs Waste Management & Public Health Aspects: Bio-medical Wastes; Solid waste; Hazardous wastes; E-wastes; Industrial and Municipal Sludge.				
<b>Module - 4</b>				
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.				
<b>Module - 5</b>				
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. 03 Hrs 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:				
<ul style="list-style-type: none"> <li>• CO1: Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale,</li> <li>• CO2: Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment.</li> <li>• CO3: Demonstrate ecology knowledge of a complex relationship between biotic and abiotic components.</li> <li>• CO4: Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues.</li> </ul>				
<b>Question paper pattern:</b>				
<ul style="list-style-type: none"> <li>• The Question paper will have 100 objective questions.</li> <li>• Each question will be for 01 marks</li> <li>• Student will have to answer all the questions in an OMR Sheet.</li> <li>• The Duration of Exam will be 2 hours.</li> </ul>				
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 & Piyush Malaviya	Acme Learning Pvt. Ltd. New Delhi.	1 <sup>st</sup> Edition